

Key West Planning Board Meeting Agenda
August 19, 2010 – 6:00 p.m.
City Commission Chamber
Old City Hall, 510 Greene Street



Item 4.b.6.

Conditional Use - 1500 Reynolds Street (RE# 00037160-000100) - A conditional use for a proposed wireless telecommunications facility consisting of nine antennas and associated equipment as a private utility within the Historic Commercial Tourist (HCT) zoning district per Section 122-898(8) of the Land Development Regulations of the Code of Ordinances of the City of Key West, Florida.

**THE CITY OF KEY WEST
PLANNING BOARD
Staff Report**



To: Chairman and Planning Board Members

From: Brendon Cunningham

Through: Amy Kimball-Murley, AICP, Planning Director

Meeting Date: August 19, 2010

Agenda Item: Conditional Use Application for a proposed wireless telecommunications facility consisting of nine antennas and associated equipment shelter as a private utility within the Historic Commercial Tourist (HCT) zoning district per Section 122-898(8) of the Land Development Regulations for property located at 1500 Reynolds Drive (RE # 00037160-000100).

Request: To construct a wireless telecommunications facility with an equipment shelter and nine antennas to be placed on the roof of one of the non-historic buildings in the Casa Marina Hotel complex located at 1500 Reynolds Street

Applicant: SBA Network Services / New Cingular Wireless Services, LLC (AT&T Mobility)

Property Owner: Casa Marina Owner, LLC.

Location: 1500 Reynolds Street (RE# 00037160-000100)

Zoning District: Historic Commercial Tourist (HCT)



Background:

The proposed project is located on an existing non-historic building that currently supports a single-provider wireless facility similar in kind to the one proposed. The existing facility was approved per Planning Board Resolution 2002-008. The property is generally surrounded by residentially zoned properties and on one side by the Atlantic Ocean. This property is located within an historic zoning district and as such requires HARC approval. HARC approval was granted July 13, 2010. The applicant provided a cultural resource survey listing all contributing historic structures within 500 feet of the proposed project.

Request:

Cellular phones are considered an essential public service and as such are defined as a Public and Private Utility per Section 86-9 of the Code. Public and Private Utilities are allowed conditionally in the CG zoning district per Section 122-418(9) of the Code. The purpose of this application is to accommodate the increased use and number of users of cellular services within the community and address the applicant’s described “gap” in cellular service. The applicant is proposing to construct a wireless telecommunications facility that will consist of an equipment shelter and nine antennas on the rooftop of the existing structure.

The proposed facility meets all dimensional requirements regarding setbacks. The existing building coverage and impervious surface ratio will remain the same. However, the height of the antennas and equipment shelter will require a height variance. The variance is part of a separate application that will be reviewed by the Board of Adjustment.

Surrounding Zoning and Uses:

- North:** SF, Residential
- South:** C-OW, Atlantic Ocean
- East:** PS, Astro Park
- West:** HMDR, Residential

Permitted Uses in the HCT Zoning District Per Section 122-897

- (1) Single-family and two-family residential dwellings.
- (2) Multiple-family residential dwellings.
- (3) Group homes with six or less residents as provided in section 122-1246.
- (4) Places of worship.
- (5) Business and professional offices.
- (6) Commercial retail low intensity less than or equal to 5,000 square feet.
- (7) Hotels, motels, and transient lodging.
- (8) Parking lots and facilities.

Conditional Uses Per Section 122-898

- (1) Group homes with seven to 14 residents as provided in section 122-1246.
- (2) Community centers, clubs and lodges.
- (3) Cultural and civic activities.
- (4) Educational institutions and day care.
- (5) Nursing homes, rest homes and convalescent homes.
- (6) Parks and recreation, active and passive.

- (7) Protective services.
- (8) Public and private utilities.
- (9) Bars and lounges accessory to and located within a motel, hotel or other transient facility having at least 20 units.
- (10) Commercial retail low and medium intensity greater than 5,000 square feet.
- (11) Restaurants, excluding drive-through.
- (12) Small recreational power-driven equipment rentals (allowed only as an accessory use to a hotel/motel).

Process:

Development Review Committee:	October 22, 2009 December 18, 2009 March 25, 2010
Historic Architectural Review Commission:	March 23, 2010 July 13, 2010
Planning Board:	August 19, 2010

Conditional Use Review:

Code Sec.122-62 (a) provides, in part, that “a conditional use shall be permitted upon a finding by the Planning Board that the proposed use, application, and, if applicable, development plan comply with the criteria specified in this section, including specific conditions established by the Planning Board and or the City Commission during review of the respective application in order to ensure compliance with the Comprehensive Plan and Land Development Regulations. The same section also specifies that “A conditional use shall be denied if the City determines that the proposed use does not meet the criteria provided in this section and, further, that the proposed conditional use is adverse to the public’s interest.”

Conditional Use Criteria Per Code Sec. 122-62:

(a) Findings:

The Planning Board may find that the application meets the Code purpose of ensuring that “a conditional use shall only be permitted on specific sites where the proposed use may be adequately accommodated without generating adverse impacts on properties and land uses within the immediate vicinity.”

The following criteria form the basis for a finding of compliance:

(b) Characteristics of Use Described:

1) Scale and Intensity:

a. Floor Area Ratio (FAR):

Not applicable; the proposal is for an equipment shelter and antennas, which are similar in impact as roof-top mechanicals (such as air-handling equipment) and thus, are not considered floor area.

b. Traffic Generation:

The facility will be fully automated. Trip generation will be associated with scheduled maintenance, proposed as being one visit per month.

c. Square Feet of Enclosed Building for Each Specific Use:

Not applicable; the shelter is for equipment only and is not habitable space.

d. Proposed Employment:

There will be no onsite employees. The service provider will use existing staff to service the facility as needed.

e. Proposed Number of Service Vehicles:

The wireless provider will service the facility with one team and associated vehicle as needed.

f. Off-Street Parking:

Although this application addresses a change in use, it does not constitute a factor which is expected to increase parking demand per Section 108-571. Further, on site parking is now provided as part of the legally established structure.

2) On or Off-Site Improvements Required and Not Listed in Subsection (b)(1):

a. Utilities:

No utility improvements are expected to be required as a result of the proposed conditional use. Further, Keys Energy Services and the Florida Keys Aqueduct Authority have no objections to the proposed conditional use.

b. Public Facilities:

The addition of the unmanned equipment shelter and the antennas will not increase the need for sewer, water, or stormwater management facilities.

c. Roadway or Signal Improvements:

Not applicable; no additions to roadway or signal improvements are being proposed.

d. Accessory Structures or Facilities:

Not applicable; no improvement needs are generated by the proposed conditional use.

e. Other Unique Facilities/Structures Proposed as Part of On-Site Improvements:

The equipment shelter will be located above flood levels as they are to be placed on the roof of the building.

3) On-Site Amenities Proposed to Enhance the Site and Planned Improvements:

a. Open Space:

No additional open space is proposed.

b. Setbacks from Adjacent Properties:

The property has a legal non-conforming street-side setback. The equipment will be located on the roof and as such is not subject to setback requirements. The antennas and shelter do not further increase the non-conforming street-side setback.

Yard	Allowed	Existing*	Proposed^
Front	5'	180'	455'
Rear	10'	95'	104'
L. Side	5'	90'	112'
R. Side	5'	0'	13'

* Refers to the existing setbacks of the building.

^ Refers to the position of the rooftop facility relative to required setbacks.

c. Screening and Buffers:

The addition of equipment on the roof does not require additional buffers. Typical approaches to visual impacts such as screening and landscaping are not expected to be helpful for a project of this type. In fact, the applicant originally proposed to screen the antennas with material compatible with the building. HARC considered this matter and found that screening the antennas would draw greater attention to their presence. The applicant now proposes locating the antennas without screening to lessen the visual impact as per a recommendation from the State Historic Preservation Office (SHPO).

d. Landscaped Berms Proposed to Mitigate Against Adverse Impacts to Adjacent Sites:

This will be a rooftop facility. Landscaped berms are not proposed and are not considered to be an effective mitigation for this utility.

e. Mitigative Techniques for Abating Smoke, Odor, Noise, and Other Noxious Impacts:

Not applicable; the proposed facility will not produce smoke, odor, noise or other noxious impacts.

c) Criteria for Conditional Use Review and Approval: Applications For a Conditional Use Review Shall Clearly Demonstrate the Following.

1) Land Use Compatibility:

The proposed project is to be located on the rooftop of an existing non-historic building. The facility is considered to be similar in kind to any common rooftop mechanical installation. Portions of the rooftop facility are expected to be visible from nearby properties.

2) Sufficient Site Size, Adequate Site Specifications and Infrastructure to Accommodate the Proposed Use:

The size and shape of the site are adequate to accommodate the proposed scale and intensity of the conditional use requested. No proposed changes to access or internal

circulation are being proposed. The applicant intends to use existing infrastructure on the site.

The applicant will include as a condition of approval a series of general notes with the site plan series accompanying the application. These notes require structural standards for the facility, compliance with federal standards, limits to co-location of service providers, prohibition of accessory structures, safety signage and contact information requirements, prohibition of lighting except as required by the FAA or FCC, prohibitions of interference with public safety signals, limits to noise created by generators in the event of electrical power failure, and requirements for the facility to be automated.

3) Proper Use of Mitigative Techniques:

The proposed facility is to be located on the roof of an existing non-historic building. The height and location of portions of the proposed facility may result in aesthetic impacts. The visual impacts can be mitigated by distance from sensitive uses as well as obscuring structures between the object and the viewer. The applicant has submitted simulations showing how the facility may appear from various locations. However, there is not a practical way to fully mitigate the visual impact from all possible locations in the vicinity.

The applicant has provided structural information for the proposed facility. This analysis was prepared for the facility to reach a height of 62 feet above crown of road; 53 feet is now proposed. The information submitted by the applicant shows the facility with a nominal design for a “3-second gust wind velocity of 150 mph” consistent with Florida Building Code requirements.

4) Hazardous Waste:

No hazardous waste will be generated by the proposed conditional use.

5) Compliance with Applicable Laws and Ordinances:

The applicant will comply with all applicable laws and regulations as a condition of approval, including federal requirements pertaining to air traffic safety, wireless communication facilities, and the National Historic Preservation Act of 1966 as amended.

6) Additional Criteria Applicable to Specific Land Uses. Applicants Shall Demonstrate the Proposed Conditional Use Satisfies the Following Criteria:

a. Land Uses Within a Conservation Area:

Not applicable; the site is not located in a conservation area.

b. Residential Development:

Not applicable; residential development is not proposed.

c. Commercial or Mixed Use Development:

Not applicable; mixed use development is not proposed.

d. Development Within or Adjacent to Historic Districts:

The proposed facility will be located within an historic zoning district. The applicant received HARC approval for the project on July 13, 2010. The applicant has adopted the SHPO recommendation to minimize the visual impact to the surrounding historic resources.

e. Public Facilities or Institutional Development:

Not applicable; while the equipment is considered a utility, no public facilities or institutional developments are proposed.

f. Commercial Structures, Uses and Related Activities Within Tidal Waters:

Not applicable; this site is not located within tidal waters.

g. Adult Entertainment Establishments:

Not applicable; no adult entertainment is being proposed.

Concurrency Facilities and Other Utilities or Service (Section 108-233):

Concurrency management has been previously addressed in this report. The proposed application is in compliance with Chapter 94 of the City Code of Ordinances.

RECOMMENDATION:

The Planning Department, based on the criteria established by the Comprehensive Plan and the Land Development Regulations, recommends the request for conditional use be **approved** with the following conditions:

1. The applicant must receive a height variance from the Board of Adjustment.
2. The site plan package, including general notes, is fully incorporated into this approval and constitutes a condition of approval.
3. The applicant will comply with all applicable laws and regulations as a condition of approval, including federal requirements pertaining to air traffic safety, wireless communication facilities, and Section 106 consultation as required in the National Environmental Protection Act.

**Draft
Resolution**

RESOLUTION NUMBER 2010-

A RESOLUTION OF THE KEY WEST PLANNING BOARD GRANTING A CONDITIONAL USE APPROVAL PER SECTION 122-62 OF THE CODE OF ORDINANCES FOR A WIRELESS TELECOMMUNICATIONS FACILITY AS A PRIVATE UTILITY TO BE LOCATED AT 1500 REYNOLDS STREET (RE# 00037160-000100), IN THE HISTORIC COMMERCIAL TOURIST (HCT) ZONING DISTRICT, UNDER THE LAND DEVELOPMENT REGULATIONS OF THE CITY OF KEY WEST, FLORIDA, PURSUANT TO SECTION 122-898(8) OF THE CODE OF ORDINANCES; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Section 122-898(8) of the Code of Ordinances provides that public and private utilities are allowed as a conditional use within the Historic Commercial Tourist (HCT) zoning district; and

WHEREAS, Section 86-9 of the Code of Ordinances defines public and private utilities as "...use of land which is customary and necessary to the maintenance and operation of essential public services; such as electricity and gas transmissions systems; water distribution, collection and disposal; communication; and similar services and facilities."; and

WHEREAS, wireless telecommunication facilities are considered essential public communications services in the community; and

_____ Chairman

_____ Planning Director

WHEREAS, the subject property is located in the Historic Commercial Tourist (HCT) zoning district; and

WHEREAS, this matter came before the Planning Board at a duly noticed public hearing on August 19, 2010; and

WHEREAS, the Planning Board found that the proposed development complies with the criteria in Section 122-62; and

WHEREAS, the Planning Board determined that granting of the Conditional Use will be in harmony with the general purpose and intent of the Land Development Regulations, and will not be injurious to the neighborhood, or otherwise detrimental to the public welfare; now therefore,

BE IT RESOLVED by the Planning Board of the City of Key West, Florida:

Section 1. That the above recitals are incorporated by reference as if fully set forth herein.

Section 2. That a Conditional Use Application, under the Code of Ordinances of the City of Key West, Florida, is hereby granted as follows: ALLOWING A WIRELESS TELECOMMUNICATIONS FACILITY BE CONSTRUCTED AT 1500 Reynolds Street (RE#

_____ Chairman

_____ Planning Director

00037160-000100), KEY WEST FLORIDA, PER THE ATTACHED PLANS dated July 26,2010

with the following conditions:

1. The applicant must receive a height variance from the Board of Adjustment.
2. The site plan package, including general notes, are fully incorporated into this approval and constitute conditions of approval.
3. The applicant will comply with all applicable laws and regulations as a condition of approval, including federal requirements pertaining to air traffic safety, wireless communication facilities and the National Environmental Protection Act.

Section 3. Full, complete, and final application for all permits required for which this resolution is wholly or partly necessary, shall be submitted in its entirety within 12 months after the date hereof.

Section 4. This Conditional Use approval does not constitute a finding as to ownership or right to possession of the property, and assumes, without finding, the correctness of applicant's assertion of legal authority respecting the property.

Section 5. This Resolution shall go into effect immediately upon its passage and adoption and authentication by the signatures of the presiding officer and the Clerk of the Commission.

Section 6. This Resolution is subject to appeal periods as provided by the City of Key West Code of Ordinances (including the Land Development Regulations). After the City appeal period has expired, this permit or development order will be rendered to the Florida Department of Community

_____ Chairman

_____ Planning Director

Affairs. Pursuant to Chapter 9J-1, F.A.C., this permit or development order is not effective for forty five (45) days after it has been properly rendered to the DCA with all exhibits and applications attached to or incorporated by reference in this approval; that within the forty five (45) day review period the DCA can appeal the permit or development order to the Florida Land and Water Adjudicatory Commission; and that such an appeal stays the effectiveness of the permit until the appeal is resolved by agreement or order.

Read and passed on first reading at a regularly scheduled meeting held August 19, 2010.

Authenticated by the Chairman of the Planning Board and the Planning Director.

Richard Klitenick, Chairman
Key West Planning Board

Date

Attest:

Amy Kimball-Murley, AICP
Planning Director

Date

Filed with the Clerk:

Cheryl Smith, City Clerk

Date

Chairman

Planning Director

Application

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(305) 809-3720



Development Plan & Conditional Use Application

Applications will not be accepted unless complete

Development Plan

Major _____

Minor _____

Conditional Use

X _____

Historic District

Yes X _____

No _____

Please print or type:

- 1) Site Address 1500 Reynolds Street, Key West, Florida 33040
- 2) Name of Applicant SBA Network Services / New Cingular Wireless PCS, LLC (AT&T Mobility)
- 3) Applicant is: Owner _____ Authorized Representative X
(attached Authorization and Verification Forms must be completed)

- 4) Address of Applicant 5900 Broken Sound Parkway NW,
5) Boca Raton, Florida 33487

- 6) Applicant's Phone # 786 351 2928 Email aamoedo@sbsite.com

- 7) **Email Address:** aamoedo@sbsite.com

- 8) Name of Owner, if different than above Casa Marina Owner LLC

- 9) Address of Owner 595 S Federal highway Suite 600, Boca Raton Florida 33432

- 10) Owner Phone # 305 295 3535 Email kspeidel@luxeryesort.com

- 11) Zoning District of Parcel HCT RE# 00037160 000100

- 12) Is Subject Property located within the Historic District? Yes X No _____

If Yes: Date of approval July 13th 2010

HARC approval # H10-01-29

OR: Date of meeting July 13th 2010

- 13) Description of Proposed Development and Use. Please be specific, list existing and proposed buildings and uses, number of dwelling units, parking, restaurant seats, vehicles proposed, etc. If there is more than one use, describe in detail the nature of each use (Give concise description here and use a separate sheet if necessary).. The proposed wireless telecommunication facility is to be located on a lot with a Hotel in the HCT zoning district, located at 1500 Reynolds Street (811 Seminole Street, Key West, Florida) The wireless telecommunication facility will consists of an unmanned shelter with antennas to be painted to blend in with the existing environment, on the roof of the Hotel. The antennas will supply wireless communication for AT&T Mobility which has service deficiencies (documentation is attached from AT&T engineers showing the cell coverage deficiencies in this area). Due to the important role that cellular phones play in contemporary life often serving as the sole communication device this facility is considered an essential public service under the City of Key West Zoning Code. The minimum height necessary for this wireless telecommunication facility to serve AT&T Mobility is 53' 5" above existing grade. Surrounding land uses include SF and HMDR to the North, C-OW to the South, PS to the East and HCT and HNDR to the West. The nearest residential structure is approximately 500



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feet from the location of the equipment shelters and antennas. A series of photographic simulations are attached depicting the impact of the existing equipment shelter and antennas and the proposed equipment shelter and antennas for the AT&T Mobility Wireless Facility. As a Wireless facility already exist on this rooftop the AT&T Mobility proposed unmanned equipment shelters and antennas visual impact will be minimal. Generator plugs will be installed at the existing power vault to be used in the event of extended power outages. No generators for the wireless communication facility or fuel for generators will be stored on site other than in the event of extended power outages.



12) Has subject Property received any variance(s)? Yes No _____

If Yes: Date of approval March 7 2002 Resolution # 02-068

Attach resolution(s). Resolution is Attached.

13) Are there any easements, deed restrictions or other encumbrances on the subject property?

Yes No _____

If Yes, describe and attach relevant documents. Declaration of Affordable Housing Restriction and Release

. See attached Warranty Deed.

- A. For both *Conditional Uses* and *Development Plans*, provide the information requested from the attached **Conditional Use and Development Plan** sheet.
- B. For *Conditional Uses* only, also include the **Conditional Use Criteria** required under Chapter 122, Article III, Sections 122-61 and 122-62 of the Land Development Regulations (see attached copy of criteria).
- C. For *Major Development Plans* only, also provide the **Development Plan Submission Materials** required under Chapter 108, Article II, Division 7, Sections 108-226 through 108-248 of the Land Development Regulations (see attached copy of criteria) and any additional information as determined by the Planning Staff.

Please note, development plan and conditional use approvals are quasi-judicial hearings and it is improper to speak to a Planning Board member or City Commissioner about the project outside of the hearing.

Required Plans and Related Materials for both a Conditional Use and Minor/Major Development Plan

I. Existing Conditions.

- A) Recent Survey of the site by a licensed Surveyor showing all dimensions including distances from property lines, and including:
- 1) Size of site-6.75 Acres
 - 2) Buildings, structures, and parking-The site includes an existing commercial Hotel
 - 3) FEMA Flood Zone-AE 6
 - 4) Topography-Lowest 3.27' and Highest 7.66'
 - 5) Easements-See Attached Warranty Deed
 - 6) Location of Utility Lines (sewer, water, electric, cable) adjacent and extending into the site-See Attached Survey.
- B) Existing size, type and location of trees, hedges, and other features-See Attached Survey.
- C) Existing storm water retention areas and drainage flows-See Attached Survey.

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D) A sketch showing adjacent land uses, buildings, and driveways. -See Attached Survey.

II. **Proposed Development:** Plans at 11" X 17" (10,000 Sq. ft. or less); 24" X 36" if site is over 10,000 sq. ft.

A) Site Plan to scale of with north arrow and dimensions by a licensed architect or engineer.

- 1) Buildings-Unmanned Equipment Shelters With Screened Antennas proposed for roof of building.
- 2) Setbacks-Front & Rear 25', Side 15', Street Side 20' not applicable to this site as this is rooftop installation.
- 3) Parking: Not applicable, unmanned equipment shelters.
 - a. Number, location and size of automobile and bicycle spaces-0 Needed for Unmanned Equipment Shelters
 - b. Handicapped spaces-0 Needed for Unmanned Equipment Shelters
 - c. Curbs or wheel stops around landscaping-Not Applicable
 - d. Type of pavement-Not Applicable
- 4) Driveway dimensions and material-Not Applicable
- 5) Location of Utility Lines (sewer, water, electric, cable) adjacent and extending into the site. See attached survey and proposed site plan including location for utility pole for antennae.
- 6) Location of garbage and recycling-Not applicable for unmanned equipment shelters.
- 7) Signs-No business signs will be associated with the unmanned equipment shelters or utility pole. Only required safety signage will be installed.
- 8) Lighting-No lighting will be associated with the buildings. Only required safety signage will be installed.
- 9) Project Statistics:
 - a. Zoning-Historical Commercial Tourist (HCT)
 - b. Size of site-6.75 Acres
 - c. Number of units (or units and Licenses)-Not applicable.
 - d. If non-residential, floor area & proposed floor area ratio- Not applicable.
 - e. Consumption area of restaurants & bars-Not applicable.
 - f. Open space area and open space ratio.-Not applicable
 - g. Impermeable surface area and impermeable surface ratio-Not applicable
 - h. Number of automobile and bicycle spaces required and proposed-Not applicable for unmanned equipment shelters.



B) Building Elevations

- 1) Drawings of all building from every direction. If the project is in the Historic District please submit HARC approved site plans. See attached plans and elevations.
- 2) Height of building.-Existing Building Roof Deck is 42'.3", Exiting Parapet Wall 45'.8" above Existing Grade. The top of the Proposed Unmanned Equipment Shelters is 53'.5'-0" Top of Proposed AT&T Concealment Screen 53'.5".
- 3) Finished floor elevations and bottom of first horizontal structure- Existing Building is FFE 0'.0". Bottom of Unmanned Equipment Shelter which is the first horizontal structure is 42'-3".
- 4) Height of existing and proposed grades- Not applicable.

C) Drainage Plan: Existing & Proposed retention areas and calculations approved by the City Engineer. See one of the attached commercial and residential use Storm water Retention Forms. Not applicable

D) Landscape Plan: Size, type, location and number of plants to be removed, kept, and installed. The plan must be approved by the City Landscape Coordinator through a letter of approval. If the project is a Major Development Plan a landscape design prepared by a licensed Landscape Architect is required per Section 108-511(b) of the Land Development Regulations. Not applicable.

III. **Solutions Statement.** Aspects of the design that address community issues including but not limited to water pollution from stormwater runoff, potable water conservation, waste disposal, recycling, energy conservation, affordable housing, and impacts on neighbors such as lighting, noise, traffic and parking.

The proposed wireless telecommunications facility will be located in the HCT zoning district of Key West. The parcel is a developed lot with a hotel, the property is 6.75 acres in size. The existing hotel is currently 46'. 3 " with an

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existing wireless facility on the roof. The proposed AT&T Mobility wireless telecommunication facility consists of an unmanned equipment shelters and antennas which will be constructed on the roof of the building. The proposed unmanned equipment shelters, and antennas will have no solid waste or recycling impacts, will not generate traffic, will have no requirements for parking and will not generate noise. A series of photographic simulations are attached depicting an existing unmanned wireless facility and antennas and the proposed AT&T Mobility unmanned wireless facility and antennas. Due to the existing wireless facility and antennas the new proposed AT&T Mobility unmanned equipment shelters, and antennas will have a minimal visual impact.

CONDITIONAL USE CRITERIA



Sec. 122-61. Purpose and intent.

This application is a request for a conditional use permit. Due to the fact that wireless communication antennas facilities are considered a private utility and are subject to approval as a conditional use. AT&T Mobility proposes a wireless telecommunication facility to be located at the site of an existing commercial building that has an existing wireless facility on the roof, located at 1500 Reynolds Street (811 Seminole Street). The wireless telecommunication facility consists of an unmanned equipment shelters and antennas to blend in with the existing environment. The facility will supply wireless communication for AT& T Mobility. Which has service deficiencies in the surrounding area, documentation is attached from AT&T engineers showing the cell coverage deficiencies in this area. Due to the important role that cellular phones play in contemporary life often serving as the sole communication device this facility is considered an essential public facility under the City of Key West Zoning Code. The minimum height necessary for this wireless telecommunication facility to serve AT&T Mobility is 53'.5" above grade. A series of photographic simulations are attached depicting the visual impact of the unmanned equipment shelters and antennas. Due to fact that a wireless facility structures is already in place on the roof the AT&T Mobility proposed unmanned equipment shelters and antennas visual impact will be minimal. AT&T Mobility will require a generator plugs only in the ground floor electrical vault. No generators will be stored on site.

The purpose of this article is to ensure that a conditional use shall only be permitted on specific sites where the proposed use may be adequately accommodated without generating adverse impacts on properties and land uses within the immediate vicinity. This article sets forth provisions and criteria for consideration of conditional uses on specific sites. Conditional uses shall be permitted only upon a finding that the proposed use satisfies this article.

Sec. 122-62. Specific criteria for approval.

- (a) Findings- This proposed conditional use shall comply with all specific conditions established by the Planning Board, City Commission, comprehensive plan and land development regulations. The conditional use application does not adversely impact properties in the vicinity of the site.
- (b) Characteristics of use described. The following characteristics of a proposed conditional use shall be clearly described as part of the conditional use application:
 - (1) Scale and intensity of the proposed conditional use as measured by the following:
 - a. Floor area ratio-FAR of unmanned equipment shelters and antennas does not constitute floor area and; therefore, no increase in FAR is proposed.
 - b. Traffic generation-The unmanned equipment shelters and antennas will require one scheduled maintenance visit per month
 - c. Square feet of enclosed building for each specific use- The unmanned equipment shelters will be 11'-6" width x 20'-0" length x 9' height;
 - d. Proposed employment-There will be no onsite employees and the facility will use existing service provider employees for maintenance.
 - e. Proposed number and type of service vehicles-There will be one standard size pickup truck on site during scheduled monthly maintenance visits.

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- f. Off-street parking-Parking for the periodic service vehicle will be on site
- (2) On- or off-site improvement needs generated by the proposed conditional use and not identified on the list in subsection (b)(1) of this section including the following:
- a. Utilities-No utility improvements are expected or required as a result of the proposed conditional use. The service providers require generator plugs only in the ground floor electrical vault. No generators or fuel for generators will be stored on site. In the event of extended power outages portable generators will be delivered to the site
 - b. Public facilities, especially any improvements required to ensure compliance with concurrency management as provided in chapter 94;- The proposed unmanned equipment shelters and antennas will not increase the needs for sewer, water or storm water. The traffic impacts will be negligible. There will be no additional impervious surface as a result of the unmanned equipment shelters which will be located on the roof of the building.
 - c. Roadway or signalization improvements, or other similar improvements-This is not applicable since there are no changes being proposed to the roadway or signal improvements.
 - d. Accessory structures or facilities; and- This is not applicable since there are no changes being proposed to accessory structures or facilities.
 - e. Other unique facilities/structures proposed as part of site improvements.-Unmanned equipment shelters and antennas will be located on the roof of the structure above flood levels.
- (3) On-site amenities proposed to enhance site and planned improvements. Amenities including mitigation techniques such as:
- a. Open space;- Not applicable as the Unmanned equipment shelter and antennas will be on the roof of the building.
 - b. Setbacks from adjacent properties;-The applicant proposes unmanned equipment shelters on the roof of an existing structure.
 - c. Screening and buffers-Not applicable as the proposed unmanned equipment shelter and antennas will be on the rooftop of the building
 - d. Landscaped Not applicable as the proposed unmanned equipment shelter and antennas will be on the rooftop of the building
 - e. Mitigative techniques for abating smoke, odor, noise, and other noxious impacts.-The proposed facility will not produce smoke, odor, noise or other noxious impacts.
- (c) Criteria for conditional use review and approval. Applications for a conditional use shall clearly demonstrate the following:
- (1) Land use compatibility- Surrounding land uses include SF and HMDR to the North, C-COW to the South, PS to the East and HcT and HMDR to the West. A series of photographic simulations are attached depicting the visual impact of the unmanned equipment shelters and antennas. Due to the existing unmanned equipment shelters and antennas on the roof the AT&T Mobility wireless facility visual impact will be minimal. The equipment shelters and antennas will be located on the roof of the building. AT&T Mobility will require generator plugs only in the ground floor electrical vault. No generators or fuel for generators will be stored on site. The proposed unmanned equipment shelters and antennas will have no solid waste or recycling impacts, will not generate traffic, will have no requirements for parking and will not generate noise.
 - (2) Sufficient site size, adequate site specifications, and infrastructure to accommodate the proposed use.- The existing four story building provides area of sufficient size to accommodate two unmanned equipment shelters and antennas on the roof of the structure. Generator plugs will be required for AT&T Mobility in the existing electrical vault on the property. Electric and telephone service which exist on the property will be needed to service the wireless telecommunications facilities.
 - (3) Proper use of mitigate techniques. The proposed wireless communication facility will be located in a HCT zoning district. The fact that a Variance and Conditional Use was granted in March 7, 2002 for a wireless facility that

DEVELOPMENT PLAN AND CONDITIONAL USE APPLICATION

City of Key West Planning Department
604 Simonton Street, Key West, FL 33040
(305) 809-3720



is on the roof. The requested AT&T Mobility facility will have minimal visual impact to this site.. The nearest residential structure is approximately 500 feet from the existing building. The unmanned equipment shelters and antennas will be located on the roof of an existing four story building which will not impact storm water. Based on the documentation from AT&T engineers detailing the frequency of dropped calls in this area of Key West the increased wireless communication service provided by this facility will improve the general public health, safety and welfare in the community.

- (4) Hazardous waste. No hazardous waste will be generated by or at the proposed wireless telecommunication facility.
- (5) Compliance with applicable laws and ordinances- The applicant will comply with all applicable local, state and federal laws and regulations as a condition of approval including federal requirements pertaining to air traffic safety (FAA), wireless communication facilities (FCC) and the National Historic Preservation Act (NHPA). Please see attached AT&T licenses with FAA and letter of intent to coordinate with FCC and NHPA by AT&T.
- (6) Additional criteria applicable to specific land uses. Applicants for conditional use approval shall demonstrate that the proposed conditional use satisfies the following specific criteria designed to ensure against potential adverse impacts which may be associated with the proposed land use:
 - a. Land uses within a conservation area- Not applicable. No portion of the proposed wireless telecommunication facility will occur in a conservation area.
 - b. Residential development.-Not applicable. No residential uses are proposed.
 - c. Commercial or mixed use development-Not applicable. No commercial or mixed use development are proposed.
 - d. Development within or adjacent to historic district.- The proposed wireless telecommunication facility is located within or adjacent to an historic district.
 - e. Public facilities or institutional development-Not applicable. No public facilities or institutional development are proposed.
 - f. Commercial structures, uses and related activities within tidal waters.-Not applicable. No commercial structures, uses or related activities are proposed within tidal waters.
 - g. Adult entertainment establishments.-Not applicable. No adult entertainment establishments are proposed.

Verification Form

Verification Form

Please note, variances are quasi-judicial hearings and it is improper to speak to a Planning Board or Board of Adjustment Member about the variance outside of the hearing.

This form should be completed by the applicant. Where appropriate, please indicate whether applicant is the owner or a legal representative. If a legal representative, please have the owner(s) complete the following page, "Authorization Form."

I, SBA Network Services/AT&T Mobility, being duly sworn, depose and say
Name(s) of Applicant(s)

that: I am (check one) the Owner Owner's Legal Representative
for the property identified as the subject matter of this application:

811 Seminole Street, Key West, Florida

Street Address and Commonly Used Name (if any)

All of the answers to the above questions, drawings, plans and any other attached data which make up this application, are true and correct to the best of my knowledge and belief and that if not true or correct, are grounds for revocation of any action reliant on said information.

[Signature]

Signature of Owner/Legal Representative

Signature of Joint/Co-owner

Subscribed and sworn to (or affirmed) before me on DEC. 18/09 (date) by

ROBERT RUBENSTEIN (name). He/She is personally known to me or has

presented _____ as identification.

[Signature]

Notary's Signature and Seal

Maria L. D'io

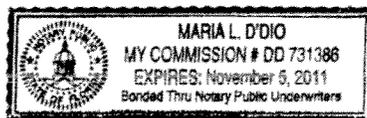
Name of Acknowledger typed, printed or stamped

Notary Public

Title or Rank

731386

Commission Number (if any)



Authorization Form

Authorization Form

Please note, variances are quasi-judicial hearings and it is improper to speak to a Planning Board or Board of Adjustment Member about the variance outside of the hearing.

Please complete this form if someone other than the owner is representing the property owner in this matter.

I, Casa Marina Owner LLC authorize
Please Print Name(s) of Owner(s)

SBA Network Services/AT&T Mobility
Please Print Name of Representative

to be the representative for this application and act on my/our behalf before the Planning Board.



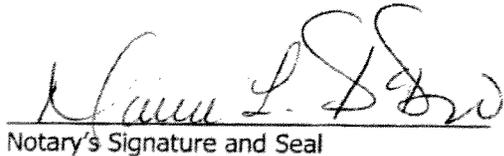
Signature of Owner

Signature of Joint/Co-owner if applicable

Subscribed and sworn to (or affirmed) before me on DEC. 18, 09 (date) by

ROBERT RUBENSTEIN
Please Print Name of Affiant

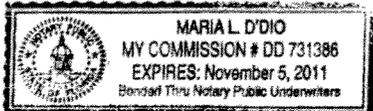
He/She is personally known to me or has presented _____ as identification.


Notary's Signature and Seal

Maria L. D'io Name of Acknowledger printed or stamped

Notary Public Title or Rank

731386 Commission Number (if any)



Property Address: _____

GTP Site ID: _____

GTP Site Name: _____

EXHIBIT A:

Site Schedule: Equipment Description and Site Plans

(SUBJECT TO APPROVAL BY LANDLORD IN ACCORDANCE WITH MASTER LEASE)

Completed and Approved Site Schedule (s) to be Attached

Site Name: South Key West

Site Address: 1500 Reynolds Street

Permitted Subtenant: New Cingular Wireless PCS, LLC a(n) Delaware limited liability company

Subtenant Lease Area: 232 square feet

Location: Rooftop

Description of Equipment:

Frequencies of operation: 835.02-844.98/ 880.02-889.98 MHz , 846.51-848.97/ 891.51-893.97 MHz RX

FCC Call Letters: KNKN793

Expiration: 10/1/2019

Modulation or other Emissions:

[8] Transmitter(s):

Make: Nokia

Model: Ultrasite

Serial number: TBD

ERP Emissions: 200 Watts

[9] Antenna(s):

Make: Kathrein

Model: 742 - 264

Tower: N/A

Height: N/A

Make: N/A

[18] Transmission line(s) or waveguide(s).

[See Attached LE] Antenna mounting bracket (s) and antenna mounting height (attach sketch, as required).

Interference suppression equipment (specify in detail any isolators, filters, intermodulation suppression panel, duplexers, harmonic filters, etc.).

Site user must install a bandpass filter on the output of the transmitter providing a minimum of 40dB attenuation at 896-901 MHz. The filter shall be a TX/RX Model 89-95-90210 or equivalent. All transmitting equipment operating above 130 MHz shall be equipped with an isolator/circulator device providing a minimum of 50db of transmitter to antenna isolation.

Other RF equipment (specify, including lightning and AC surge arrestors)

APPROVED BY LANDLORD:

Print Name:



Robert R. Pennington Date: 12/15/09





Detail by Entity Name

Foreign Limited Liability Company

CASA MARINA OWNER, LLC

Filing Information

Document Number M05000002214
FEI/EIN Number N/A
Date Filed 04/28/2005
State DE
Status ACTIVE
Last Event REINSTATEMENT
Event Date Filed 10/03/2006
Event Effective Date NONE

Principal Address

C/O LXR LUXURY RESORTS/ATN: R.
RUBENSTEIN
595 S. FEDERAL HIGHWAY, SUITE 600
BOCA RATON FL 33432

Changed 08/14/2006

Mailing Address

C/O LXR LUXURY RESORTS/ATN: R.
RUBENSTEIN
595 S. FEDERAL HIGHWAY, SUITE 600
BOCA RATON FL 33432

Changed 08/14/2006

Registered Agent Name & Address

CORPORATION SERVICE COMPANY
1201 HAYS STREET
TALLAHASSEE FL 32301-2525 US

Manager/Member Detail

Name & Address

Title MGR

GRAY, JONATHAN D
595 S. FEDERAL HIGHWAY, SUITE 600
BOCA RATON FL 33432

Title MGR

SUMERS, GARY M
595 S. FEDERAL HIGHWAY, SUITE 600
BOCA RATON FL 33432

Title MGR

STEIN, WILLIAM J
595 S. FEDERAL HIGHWAY, SUITE 600
BOCA RATON FL 33432

Title MGR

MCDONAGH, DENNIS J
595 S. FEDERAL HIGHWAY, SUITE 600
BOCA RATON FL 33432

Title MGR

CAPLAN, KENNETH A
595 S. FEDERAL HIGHWAY, SUITE 600
BOCA RATON FL 33432

Annual Reports

Report Year Filed Date

2007	04/30/2007
2008	04/28/2008
2009	03/20/2009

Deed

TO HAVE AND TO HOLD the Property, together with all and singular the rights and appurtenances thereto in any wise belonging unto Grantee, Grantee's legal representatives, successors and assigns forever and subject to the Permitted Encumbrances, and Grantor does hereby bind itself, its successors and assigns, to WARRANT AND FOREVER DEFEND all and singular the Property unto Grantee, Grantee's legal representatives, successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof.



Exhibit A to General Warranty Deed

Description of Land

Doc# 1517059
Bk# 2115 Pg# 144



Exhibit A

Doc# 1517059
Bk# 2115 Pg# 145

Policy Number: Proforma

Exhibit A-1:

Parcel I:

All that land in the City of Key West, Monroe County, Florida, lying and being situate within a triangle formed by Seminole Avenue, Reynolds Street and the low water mark of the shore known as South Beach, the said triangle embracing Blocks 1, 2, 3, 4, 5 and 6 and the space between them formerly laid out as streets, but heretofore vacated as streets by the City Council of the City of Key West, all shown on the Plat of the KEY WEST INVESTMENT COMPANY'S SUBDIVISION OF PART OF TRACT 17, recorded in Plat Book 1, at page 69 of the Public Records of Monroe County, Florida; and also all the land under water lying in front of and all riparian rights belonging or appurtenant to the said triangle; less, however, that portion of Block 6 which is not included in Parcel II described herein and all of the land under water lying in front of and all riparian rights belonging or appurtenant thereto.

Subject to encroachment by Reynolds Street being more particularly described by metes and bounds as follows:

Commencing at the Northeast corner of Block 4 of KEY WEST INVESTMENT COMPANY'S SUBDIVISION OF PART OF TRACT 17, Key West, Monroe County, Florida and recorded in Plat Book 1, at page 69 of the Public Records of Monroe County, Florida, said corner is also known as the Point of Beginning of the land hereinafter described:

From said Point of Beginning bear South 37°32'30" East for a distance of 706.00 feet, more or less, to the shore line of said plat; thence meander the shoreline of said plat in a Westerly direction to a point which is 10.21 feet measured at right angles to the preceeding course; thence bear North 37°32'30" West for a distance of 678.00 feet, more or less, to a point; thence continue bearing Northwesterly for a distance of 20.00 feet, more or less, to a point on the Southeasterly property line of Seminole Avenue; said point also bearing South 52°00'00" West from the Point of Beginning; thence bear North 52°00'00" East for a distance of 17.81 feet back to the Point of Beginning.

Parcel II:

On the Island of Key West, Monroe County, Florida and being a part of Block 6 of KEY WEST INVESTMENT COMPANY'S SUBDIVISION OF PART OF TRACT 17 as recorded in Plat Book 1, at page 69 of the Public Records of Monroe County, Florida and being more particularly described by metes and bounds as follows:

Begin at a point on the Southeasterly property line of Seminole Avenue at the intersection of the Southwesterly property line of Alberta Street extended on its course Southeasterly; thence Southwesterly along the Southeasterly property line of Seminole Avenue for a distance of 14.83 feet; thence run Southeasterly and parallel with the said Alberta Street for a distance of 67.00 feet, more or less, to the Mean High Tide Line of the Straits of Florida; thence run Easterly along the said Mean High Tide Line for a distance of 18.00 feet, more or less to the Easterly boundary of said Block 6; thence run Northwesterly along the Easterly boundary of said Block 6 for a distance of 78.00 feet, more or less, back to the Point of Beginning; together with all the land under water lying in front of and all riparian rights belonging or appurtenant thereto.

Parcel III:

A concrete dock or pier situated on the following described property:

A parcel of submerged land lying in the Straits of Florida adjacent to Block 6 of the KEY WEST INVESTMENT COMPANY'S SUBDIVISION OF PART OF TRACT 17 as recorded in Plat Book 1, at page 69 of



the Public Records of Monroe County, Florida and being more particularly described by metes and bounds as follows:

Commencing at a point on the Southeasterly property line of said Seminole Avenue at the intersection of the Southwesterly property line of Alberta Street extended on its course Southeasterly; thence run Southeasterly along the Easterly boundary of said Block 6 for a distance of 78.00 feet, more or less, to the Mean High Water Line of the Straits of Florida and the Point of Beginning of the parcel of land herein being described: Thence continue Southeasterly along the extension of the Easterly boundary of said Block 6 for a distance of 106.00 feet; thence run Southerly along a line deflected $41^{\circ}09'30''$ to the right for a distance of 270.00 feet; thence at right angles in a Westerly direction for a distance of 25.00 feet; thence at right angles in a Northerly direction for a distance of 262.00 feet; thence run Northwesterly along a line deflected $41^{\circ}09'30''$ to the left for a distance of 115.00 feet, more or less, to the Mean High Tide Line of the Straits of Florida; thence run Easterly along the said Mean High Tide Line a distance of 28.00 feet, more or less, back to the Point of Beginning.

Parcel IV:

On the island of Key West, Florida being Lots 1 through 16, inclusive, all being in Block Seven (7) as shown on the plat of the Key West Investment Company's Subdivision of part of Tract Seventeen (17), recorded in Plat Book Number 1, page 69, of the Public Records of Monroe County, Florida.

Doc# 1517059
Bk# 2115 Pg# 146



Exhibit B to General Warranty Deed

Permitted Encumbrances

All matters of record affecting the Property which are valid and subsisting.

MONROE COUNTY
OFFICIAL RECORDS

Wyndham Resorts Casa Marina
Key West, FL
012665-0348 WEST 5722675 v1



Previous Approval

**PLANNING BOARD RESOLUTION
No. 2002-008**

A RESOLUTION OF THE CITY OF KEY WEST PLANNING BOARD APPROVING A CONDITIONAL USE APPLICATION FOR PROPERTY LOCATED IN THE HCT (HISTORIC COMMERCIAL TOURIST) ZONING DISTRICT AT 1500 REYNOLDS STREET (CASA MARINA RE#00037160-000100) FOR THE PLACEMENT OF ROOF TOP ANTENNAE AND EQUIPMENT FOR WIRELESS COMMUNICATIONS SERVICES; PROVIDING FOR CONDITIONS; PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, on January 3, 2002, the owner of the Wyndham Casa Marina Hotel at 1500 Reynolds Street by and through its agent, General Manager Michael Proimos, designating April Boswell of Commnet Wireless, Inc. as applicant, filed an Application for a Conditional Use for the placement of antennae for wireless communications and an equipment shed on the roof of the Wyndham Casa Marina Hotel; and

WHEREAS, such use is considered to be a private utility which is a conditional use in the HCT (Historic Commercial Tourist) zoning district necessitating approval by the Planning Board pursuant to Article VI, Section 2-6.2 of the Land Development Regulations of the City of Key West; and

WHEREAS, the application is for the installation of nine, 116 inch x 2.6 inch, wireless, communication antennae and an equipment shed on the hotel rooftop; and

WHEREAS, the application was reviewed by the Development Review Committee on January 3, 2002 with the following comments:

DRC COMMENTS (DRC Meeting of 01-03-02)

April Boswell, applicant, was present.

1. Ty Symroski, City Planner:
Communication infrastructure is critical after a storm event, therefore strong equipment, \geq 200 mph, is critical.
2. Roland Flowers, City Engineer:
Building to these wind load standards is critical.
3. Owen Trepanier, Senior Planner:
This project demonstrates that communication infrastructure can be built to withstand 200 mph wind loads.

4. Jim Malcolm, Bicycle-Pedestrian Coordinator:
Placement of antennae on existing structures, rather than building new towers is good for the community.
5. April Boswell, Applicant:
These are the only two sites needed to provide total coverage wireless telephone service in Key West.
6. Dale Z. Finigan, CES - Director of Engineering (written comments):
Existing voltage available is 277/480V customer needs to service off of existing transformer vault room. Coordinate location of meeting with CES and submit electrical requirements with completed project review form.

WHEREAS, this application was duly noticed for the Planning Board meeting of February 21, 2002 with 59 notices mailed to owners within 300 feet, 1 returned with an objection, 1 with no objection, and one with a question about interference with other wireless communication and television; and

WHEREAS, the representative of the owner, April Boswell, was present at the meeting and assured the Board that there would be no interference with other wireless or hardwired communication equipment; and

WHEREAS, Senior Planner Owen Trepanier by memo of February 12, 2002 given to the Planning Board recommended that the antennae and attachments withstand a sustained windload of 200 miles per hour or greater, and Ms. Boswell stated that she agreed with this condition and that the engineering for the project was designed to meet this requirement; and

WHEREAS, the following drawings were provided with the staff report to the Board:

Plans	By	Date	Revised	Pg #	Received
Title Page	LS	11-30-01		T1	12-19-01
Shelter/Site Plan	LS	11-30-01		Z1	12-19-01
Elevations	LS	11-30-01		Z2	12-19-01

WHEREAS, such construction is subject to a height variance by the Board of Adjustment which application was filed and is to be heard on March 6, 2002; and

WHEREAS, no members of the public desired to speak on this matter;

NOW THEREFORE, BE IT RESOLVED, by the Planning Board of the City of Key West, Florida:

Section 1. That the Application for a Conditional Use at 1500 Reynolds Street for the installation of nine (9) 116 inch by 2.6 inch wireless

PCS Broadband Licenses

ULS License

PCS Broadband License - KNLG485 - New Cingular Wireless PCS, LLC

PA This license has pending applications: 0003228752, 0003222629, 0003188409, 0003163951, 0003147753, 0003140643, 0003139870, 0003139869, 0003139863, 0003139795, 0003127893, 0003126154, 0003125201, 0003125058, 0003123691, 0003120141, 0003119675, 0002795722, 0003090855, 0003090786, 0002909898, 0002892276, 0002884759, 0002881244, 0002881153, 0002881127, 0002844122, 0002839028, 0002824653, 0002795959, 0002795949, 0002795915, 0002795847, 0002795839, 0002795828, 0002795806

Call Sign	KNLG485	Radio Service	CW - PCS Broadband
Status	Active	Auth Type	Regular

Market

Market	BTA293 - Miami-Ft. Lauderdale, FL	Channel Block	D
Submarket	0	Associated Frequencies (MHz)	001865.00000000-001870.00000000 001945.00000000-001950.00000000

Dates

Grant	06/12/2007	Expiration	04/28/2017
Effective	06/12/2007	Cancellation	

Buildout Deadlines

1st	04/28/2002	2nd	
-----	------------	-----	--

Notification Dates

1st	01/29/2002	2nd	
-----	------------	-----	--

Licensee



FRN	0003291192	Type	Limited Liability Company	
Licensee				
New Cingular Wireless PCS, LLC 5601 LEGACY DRIVE, MS: A-3 PLANO, TX 75024 ATTN FCC GROUP		P:(469)229-7533 F:(469)229-7295		
Contact				
AT&T MOBILITY LLC KELLYE ABERNATHY 5601 LEGACY DRIVE, MS: A-3 PLANO, TX 75024		P:(469)229-7422 F:(469)229-7297		
Ownership and Qualifications				
Radio Service Type	Mobile			
Regulatory Status	Common Carrier	Interconnected	Yes	
Alien Ownership The Applicant answered "No" to each of the Alien Ownership questions.				
Basic Qualifications The Applicant answered "No" to each of the Basic Qualification questions.				
Tribal Land Bidding Credits This license did not have tribal land bidding credits.				
Demographics				
Race				
Ethnicity		Gender		



ULS License

PCS Broadband License - WPVC979 - New Cingular Wireless PCS, LLC

Call Sign	WPVC979	Radio Service	CW - PCS Broadband
Status	Active	Auth Type	Regular
Market			
Market	MTA015 - Miami-Fort Lauderdale	Channel Block	A
Submarket	9	Associated Frequencies (MHz)	001850.00000000- 001865.00000000 001930.00000000- 001945.00000000
Dates			
Grant	07/07/2005	Expiration	06/23/2015
Effective	10/04/2006	Cancellation	
Buildout Deadlines			
1st	06/23/2000	2nd	06/23/2005
Notification Dates			
1st	06/20/2000	2nd	04/19/2005
Licensee			
FRN	0003291192	Type	Limited Liability Company
Licensee			
New Cingular Wireless PCS, LLC 5601 LEGACY DRIVE, MS: A-3 PLANO, TX 75024 ATTN FCC GROUP		P:(469)229-7422 F:(469)229-7297 E:KELLYE.E.ABERNATHY@CINGULAR.COM	
Contact			
Cingular Wireless LLC Kellye E Abernathy Ms. 5601 LEGACY DRIVE, MS: A-3 PLANO, TX 75024		P:(469)229-7422 F:(469)229-7297 E:KELLYE.E.ABERNATHY@CINGULAR.COM	



Ownership and Qualifications

Radio Service Type: Mobile

Regulatory Status: Common Carrier Interconnected: Yes

Alien Ownership

The Applicant answered "No" to each of the Alien Ownership questions.

Basic Qualifications

The Applicant answered "No" to each of the Basic Qualification questions.

Tribal Land Bidding Credits

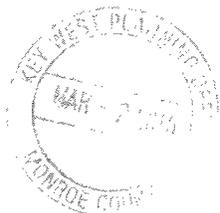
This license did not have tribal land bidding credits.

Demographics

Race:

Ethnicity:

Gender:



ULS License

Cellular License - KNKN793 - NEW CINGULAR WIRELESS PCS, LLC

PA This license has pending applications: 0003977124

Call Sign	KNKN793	Radio Service	CL - Cellular
Status	Active	Auth Type	Regular

Market

Market	CMA370 - Florida 11 - Monroe	Channel Block	B
Submarket	0	Phase	2

Dates

Grant	10/06/2009	Expiration	10/01/2019
Effective	10/06/2009	Cancellation	

Five Year Buildout Date

09/20/1995

Control Points

1 1841 NW 22ND STREET, FORT LAUDERDALE, FL
P: (954)486-1717

Licensee

FRN	0003291192	Type	Limited Liability Company
-----	------------	------	---------------------------

Licensee

NEW CINGULAR WIRELESS PCS, LLC 5601 LEGACY DRIVE, MS: A-3 PLANO, TX 75024 ATTN KELLYE E. ABERNATHY	P:(469)229-7422 F:(469)229-7297 E:KELLYE.E.ABERNATHY@CINGULAR.COM
---	---

Contact

AT&T MOBILITY LLC KELLYE E ABERNATHY 5601 LEGACY DRIVE MS A-3 PLANO, TX 75025	P:(469)229-7422 F:(469)229-7297 E:KA8805@ATT.COM
--	--

Ownership and Qualifications

Radio Service Type	Mobile		
Regulatory Status	Common Carrier	Interconnected	Yes

Alien Ownership

The Applicant answered "No" to each of the Alien Ownership questions.

Basic Qualifications

The Applicant answered "No" to each of the Basic Qualification questions.

Demographics

Race		Gender	
Ethnicity			





**Dropped Call Analysis
&
Proposed Improvement**



AT&T Mobility
5201 Congress Avenue
Boca Raton, FL 33487

RE: Dropped call analysis in support of need for new AT&T site at or near the location of the proposed rooftop build at 811 Seminole St. in Key West, FL.

Summary:

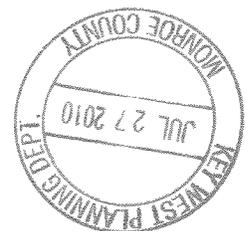
An analysis of dropped calls on the AT&T network was performed to provide additional justification of the need for a new wireless facility in the vicinity of the proposed rooftop build at 811 Seminole St. In order to perform this study, the Beta and Gamma sector of the AT&T facility located at Simonton and Southard St. were selected, as these two sectors currently attempt to serve more than 95% of the area in question. Using these two sectors, switch data reports were run to determine the number of dropped calls per month using an average of the last four months of data. The dropped numbers were grouped by band and technology as shown below:

Sector/ Technology	Avg # dropped calls/ Month
Southard St tower Beta GSM	520
Southard St tower Beta UMTS	1750
Southard St tower Gamma GSM	295
Southard St tower Gamma UMTS	1020

The total number of dropped calls/ month on average is 3585. Because of the location of the proposed rooftop near the center of the weakest coverage area and average usage density relative to the serving areas of the two sectors, it is predicted that approximately 40% of the dropped calls on these two sectors occur within the coverage area of the proposed site. Even using a more conservative 30% figure, more than 1000 dropped calls a month have the potential to be remedied by the introduction of a new facility in the vicinity of the proposed rooftop.

Sincerely,

Maiko Llanes, PE
RF Design Engineer
AT&T Mobility





AT&T Mobility
5201 Congress Avenue
Boca Raton, FL 33487

RE: Documentation in support of need for new AT&T site at or near the location of the proposed rooftop build at 811 Seminole St. in Key West, FL.

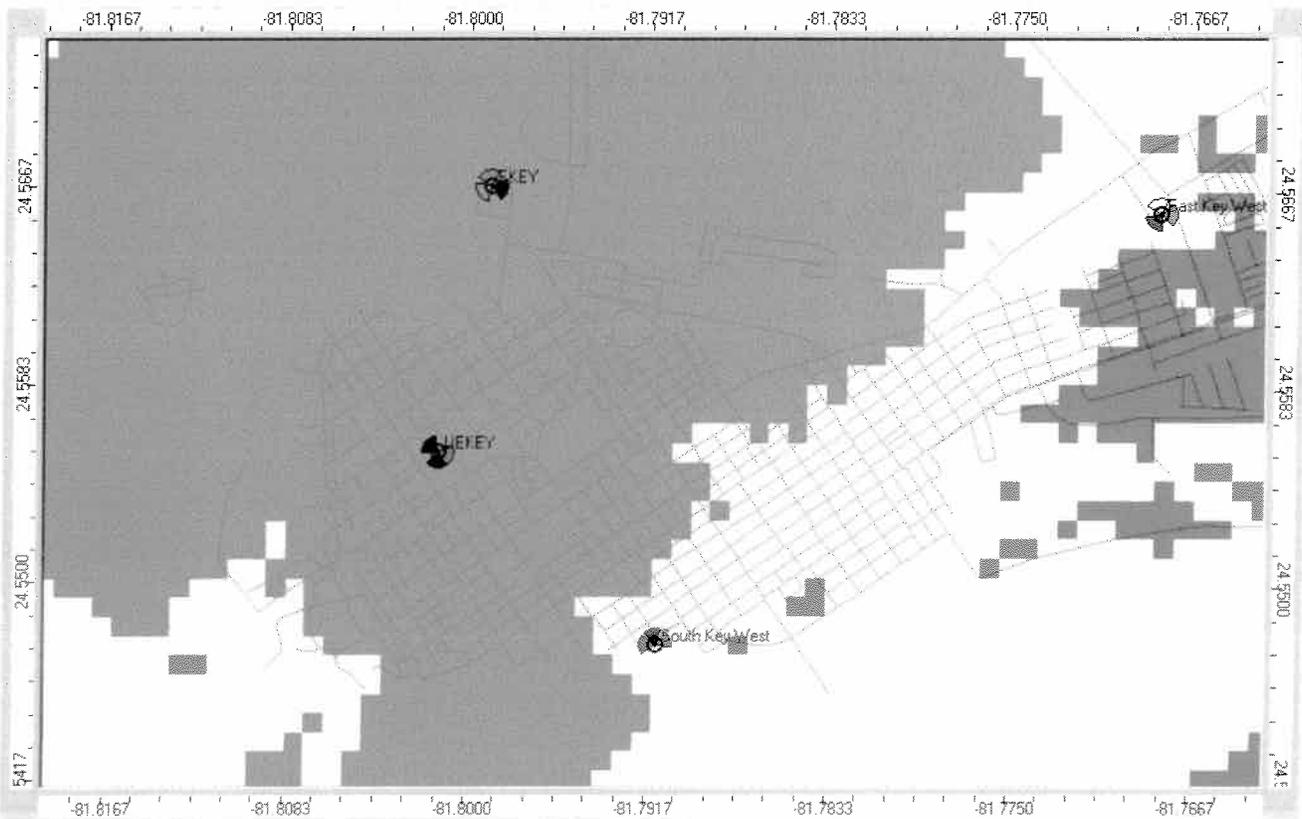
Summary

AT&T has an existing and ongoing need for a new facility in the Southern portion of the city of Key West to improve coverage and service experience for our customers in the vicinity. Data collection, in-building testing and customer feedback have indicated that AT&T's coverage needs improvement in the vicinity of the Casa Marina Resort, including the southern end of Duval St and the residential areas between the resort and Key West High School. The proposed rooftop build at 811 Seminole St. is in the correct location to meet AT&T's needs in the area of interest.

Below are two maps showing AT&T's current coverage on the island and a simulation of the coverage provided by the proposed tower.

Existing coverage:

- Green = good outdoor and indoor service
- Yellow = useable outdoor, marginal indoor service
- Red = marginal outdoor, poor to no indoor service

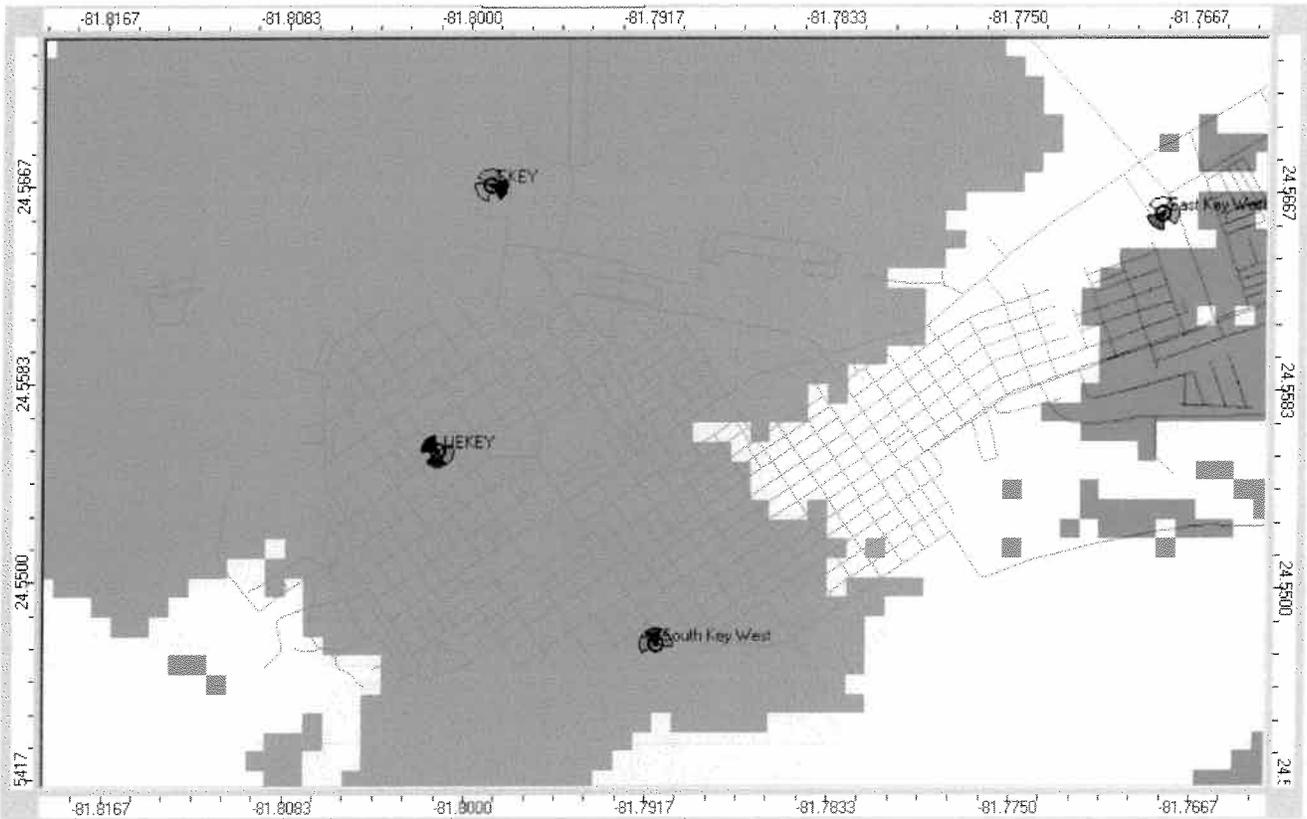




AT&T Mobility
5201 Congress Avenue
Boca Raton, FL 33487

Coverage with proposed site:

Green = good outdoor and indoor service
Yellow = useable outdoor, marginal indoor service
Red = marginal outdoor, poor to no indoor service



Sincerely,

Maiko Llanes, PE
RF Design Engineer
AT&T Mobility



Existing FAA Certification

ADVANCED LAND SURVEYING AND MAPPING, INC.

GPS and Geospatial Survey Services

FAA 1A CERTIFICATION
Project No: 100-0090



Date: November 20, 2008

RF: AT&T Mobility South Key West (Casa Marina) Site
Location: 617 Seminole Avenue
Key West, Florida 33040

Site Summary:

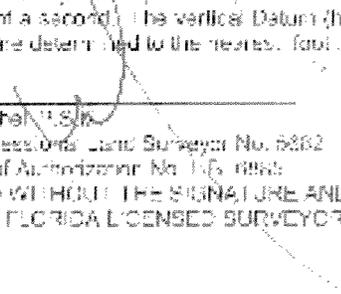
N.A.D. 83(1980)

Latitude: 24°32'51.480" North
Longitude: 81°47'28.046" West

N.A.V.D. 1988

Ground Elevation: 2.68' or (0.81m) Above Mean Sea Level
Mean Roof Elevation: 45.2'± or (13.78m) Above Mean Sea Level
42.52'± or (12.96m) Above Ground Level
Highest Aperture: 58.2'± or (17.73m) Above Mean Sea Level
Top of Cell Antenna: 55.5'± or (16.92m) Above Ground Level

I certify that the Latitude of 24°32'51.480" North and Longitude of 81°47'28.046" West are accurate to within 40.3' or (12.314m) horizontally and that the site elevation of 2.68' or (0.81m) AMSL is accurate to within 4'-3" or (0.914m) vertically. The horizontal Datum (coordinates) are in terms of the North American Datum of 1983 (NAD83) and expressed as degrees, minutes and seconds, to the nearest tenth or hundredth of a second. The vertical Datum (heights) are in terms of the North American Vertical Datum of 1988 and are determined to the nearest foot.


Kurt R. Mitchell, L.S.M.
Florida Professional Land Surveyor No. 5282
Certificate of Authorization No. 15-0888
NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED
SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER

Plot No. 100-0090
Drawing No. GPS-0008

Phone: (305) 596-1701
Fax: (305) 596-6079

ADVANCED LAND SURVEYING AND MAPPING, INC.

GPS And Conventional Survey Services

FAA 1A CERTIFICATION Project No: 199-0090

Date: November 05, 2009

RE: **AT&T Mobility South Key West (Casa Marina) Site**
Located at : 811 Seminole Avenue
Key West, Florida 33040



Site Summary:

N.A.D. 83(1990)

Latitude: **24°32'51.480"** North

Longitude: **81°47'28.046"** West

N.A.V.D. 1988

Ground Elevation: **2.68'** or **(0.81m)** Above Mean Sea Level

Main Roof Elevation: **45.2'+/-** or **(13.78m)** Above Mean Sea Level

42.52'+/- or **(12.96m)** Above Ground Level

Highest Appurtenance: **58.2'+/-** or **(17.73m)** Above Mean Sea Level

Top of Cell Antenna **55.5'+/-** or **(16.92m)** Above Ground Level

I certify that the Latitude of **24°32'51.480"** North and Longitude of **81°47'28.046"** West are accurate to within **+/- 3'** or **(0.914m)** horizontally and that the site elevation of **2.68'** or **(0.81m)** AMSL is accurate to within **+/- 3'** or **(0.914m)** vertically. The horizontal Datum (coordinates) are in terms of the North American Datum of 1983, (NAD-83), and expressed as degrees, minutes and seconds, to the nearest tenth or hundredth of a second. The vertical Datum (heights) are in terms of the North American Vertical Datum of 1988, and are determined to the nearest foot.

Kirk B. Mitchell P.S.M.
Florida Professional Land Surveyor No. 5682
Certificate of Authorization No. L.B. 6885

NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED
SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

P.O. Box 560698
Orlando, FL 32856-0698

Phone: (407) 509-2305
Fax: (407) 233-0579



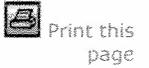
Logged in as - BROMMER, ANITA (Market)

GUARDIAN

LOGOUT CONTACT US FAQ REG WEBSITE

PENDING REQ FORMS TABLES REPORTS ADMIN

REQUEST SEARCH SITE DATA SEARCH RENEWAL/BUILD OUT 90-DAY SEARCH



GUARDIAN FORMS

AT&T Mobility Preconstruction Review Form

Site Status Unique Structure Id - 204049

Form Status: Assigned

State: FLORIDA

County: Monroe

Region: SOUTHEAST

View Available Call Signs

Site ID: 105608 (Field owned by Network)

Site Name: South Key West (Field owned by Network)

Fixed Asset Code: 10134222 (Field owned by Network)

TCNS ID:

Vendor Site ID:

Vendor Name: SELECT

Ground Elevation: 3 [Feet]

Structure Height: 43 [Feet]

Overall Height: 56 [Feet]

FAA Approved Height: [Feet]

Structure Type: BUILDING (Explain if other):

Tower NEPA:

Antenna NEPA:

["C" means demonstration of tower compliance]

["C" means cleared for antenna modification or collocation]

Is this an Environmentally Sensitive Site? SELECT

Structure Marking/Lighting: SELECT

Is the Antenna Structure Leased or Owned? Leased

Tower Registration #:

NAD83 Latitude: 24-32-51.5 [XX-XX-XX.X]

NAD83 Longitude: 81-47-28.0 [XXX-XX-XX.X or XX-XX-XX.X]

Nad 27/Nad 83 Conversion



Site Address Section

Address: 811 Seminoe Avenue (Field owned by Network) City: Key West (Field owned by Network)

Zip Code: 33040 [XXXXX or XXXXX-XXXX](Field owned by Network)

Structure Owner Information

Owner Contact Name: Casa Marina Owner Contact Number: 306-296-3535 [XXX-XXX-XXXX]

Owner Address: 1500 Reynold Street Owner City: Key West

Owner State:

Owner Zip code:

[XXXXX or XXXXX-XXXX]

Preconstruction Section

Type of Request:

Is this a temporary or permanent site?

Is this Structure Existing or Proposed?

Antenna Tip Height: [Feet]

Is Crane used for Construction?

Proposed Temporary Construction Height: [Feet]

Survey:

(Explain if other):

Structure Height Verification:

(Explain if other):

AM Detune Required?

(If Yes, was it detuned?)

Is this an in-building radiator site?

Will all antennas be wholly contained in the building? (no outside antennas)



Is Quiet Zone Notification Required?

- Radio Astronomy Observatory, Virginia, Naval Radio Research Observatory, West Virginia, Arecibo Observatory, Puerto Rico and the Table Mountain Radio Receiving Zone of the Research Laboratories of the Department of Commerce, Colorado.

Law 30001 Florida proposed prohibition on location, operation of FAA filing or operation of towers, etc. on or around international air traffic routes, highest operating classes, etc.

Network Comments:

[Max 1500

Characters]

FAA Section

Existing FAA determination for the structure:

Need New FAA Filing?

Proposed New Marking/lighting:

If Existing Structure, Current Marking & Lighting at the site:

FAA Height: [Feet]

Tower Registration Section

Need New Tower Registration?

Existing Tower Registration #:

Source to Determine Tower Registration Status: (Check all that apply)

Airspace Report: (Select one)

FCC Tower Check: (Select one)

Consultant Report or FCC 20' Rule

>200'

[View Documents](#)

[View In Progress Documents](#)

Attachment:

105608

Document Category:

- Survey
- Height
- AIRSPACE
- FAA Determination
- Miscellaneous document (Antenna height, MW data, TOPO, MOA)
- AM Study
- TOWAIR
- ASR
- NEPA
- Others (FCC Group only)

Attached files:

Documents

- 105608_Survey.pdf
- 105608_AIRSPACE.pdf
- 105608_AIRSPACE_V1.pdf
- 105608_AM_Study.pdf



Certification

The undersigned certifies that the answers contained herein are truthful and accurate to the best of the undersigned's knowledge.

Certified By: *[Signature]*

Title: *[Signature]*

Date Submitted: **01/05/2010**

Submit To:

CANCEL

plreg1m2 - Version - 3.12.2.0

* Federal Airways & Airspace *
* Summary Report *

Airspace Specialist: Cingular User

File: SOUTHKEYWEST

Location: Key West, FL
Distance: 1.4 Statute Miles
Direction: 43° (true bearing)

Latitude: 24°-32'-51.5" Longitude:
81°-47'-28.0"

SITE ELEVATION AMSL..... 3 ft.
STRUCTURE HEIGHT.....65 ft.
OVERALL HEIGHT AMSL.....68 ft.



NOTICE CRITERIA

- FAR 77.13(a)(1): NNR (DNE 200 ft AGL)
- FAR 77.13(a)(2): NNR (DNE Notice Slope)
- FAR 77.13(a)(3): NNR (Not a Traverse Way)
- FAR 77.13(a)(4): PNR (Circling Approach Area)
- FAR 77.13(a)(4): NNR FAR 77.13(a)(4) Notice Criteria for EYW
- FAR 77.13(a)(4): NNR FAR 77.13(a)(4) Notice Criteria for NQX
- FAR 77.13(a)(5): NNR (Off Airport Construction)

NR = Notice Required
NNR = Notice Not Required
PNR = Possible Notice Required (depends upon actual IFR

procedure)

Notice to the FAA is not required at the analyzed location and height.

OBSTRUCTION STANDARDS

- FAR 77.23(a)(1): DNE 500 ft AGL
- FAR 77.23(a)(2): DNE - Airport Surface
- FAR 77.25(a): DNE - Horizontal Surface
- FAR 77.25(b): DNE - Conical Surface
- FAR 77.25(c): DNE - Primary Surface
- FAR 77.25(d): DNE - Approach Surface
- FAR 77.25(e): DNE - Transitional Surface

VFR TRAFFIC PATTERN AIRSPACE FOR: EYW: KEY WEST INTL

Type: A RD: 8650.072 RE: 3
FAR 77.23(a)(1): DNE
FAR 77.23(a)(2): DNE - Height Less Than 200 feet AGL.
VFR Horizontal Surface: DNE
VFR Conical Surface: DNE
VFR Approach Slope: DNE
VFR Transitional Slope: DNE

The structure is within VFR - Traffic Pattern Airspace Climb/Descent Area.

Structures exceeding the greater of 350' AGL, 77.23(a)(2), or VFR horizontal and conical surfaces will receive a hazard determination from the

FAA.

Maximum AMSL of Climb/Descent Area is 353 feet.

VFR TRAFFIC PATTERN AIRSPACE FOR: NQX: KEY WEST NAS /BOCA CHICA FIE

Type: A RD: 31576.33 RE: 3.9

FAR 77.23(a)(1): DNE

FAR 77.23(a)(2): DNE - Height Less Than 200 feet AGL.

VFR Horizontal Surface: DNE

VFR Conical Surface: DNE

VFR Approach Slope: DNE

VFR Transitional Slope: DNE

TERPS DEPARTURE PROCEDURE (FAA Order 8260.3, Volume 4)

FAR 77.23(a)(3) Departure Surface Criteria (40:1)

DNE Departure Surface

MINIMUM OBSTACLE CLEARANCE ALTITUDE (MOCA)

FAR 77.23(a)(4) MOCA Altitude Enroute Criteria

The Maximum Height Permitted is 14000 ft AMSL



PRIVATE LANDING FACILITIES

FACIL	BEARING	RANGE	DELTA
ARP FAA IDENT TYP NAME	To FACIL	IN NM	
ELEVATION IFR			
7FA0 HEL FLORIDA KEYS MEMORIAL HOSPIT	49.82	3.36	+63
No Impact to Private Landing Facility			
Structure is beyond notice limit by 15416 feet.			

AIR NAVIGATION ELECTRONIC FACILITIES

FAC	ST	DIST	DELTA					
IDNT	TYPE	AT	FREQ	VECTOR	(ft)	ELEVA	ST	LOCATION
ANGLE	-----							
0.00	FIS	NDB		ON 0332.	80.87	1589	NA	FL FISH HOOK
-.06	EYW	ATCT		ON	78.73	12041	-12	FL KEY WEST INTL
.23	EYW	VORTAC		ON 0113.5	347.39	14243	+58	FL KEY WEST

FCC AM PROOF-OF-PERFORMANCE

NOT REQUIRED: Structure is not near a FCC licensed AM radio station Proof-of-Performance is not required. Please review AM Station Report for details.

Nearest AM Station: WKIZ @ 4892 meters.

Airspace® Summary Version 2010.1

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02-22-2010
15:18:59

Structural Analysis



engineering and constructing a better tomorrow

April 14, 2010

City of Key West
Community Development
1400 Kennedy drive
Key West, FL 33040

Re: Structural Evaluation Letter
AT&T Site Name: South Key West (Casa Marina)
Site Address: 811 Seminole Street
Key West, FL 33040
MACTEC Job No.: 6788-09-1916 (41)



On behalf of its client, AT&T Mobility, MACTEC Engineering and Consulting, Inc. (MACTEC) is submitting this letter to confirm the design at the subject site conforms with the current Florida Building Code (FBC) requirements.

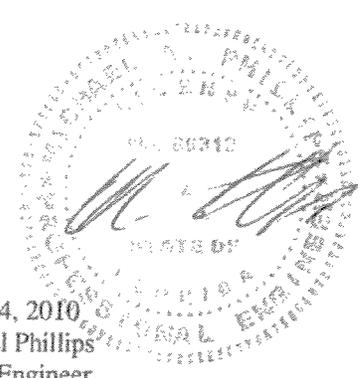
All structural elements of the proposed design at the subject site have been designed in accordance with the 2007 edition of the FBC, with 2009 amendments, for design pressures generated by nominal design 3-second gust wind velocity of 150 mph.

Should you have any questions or wish to discuss any aspect of this letter, please do not hesitate to contact either of the undersigned.

Sincerely,

MACTEC ENGINEERING AND CONSULTING, INC.


Jonathan Garcia
Staff Engineer II



April 14, 2010
Michael Phillips
Senior Engineer



SOUTH KEY WEST (CASA MARINA)



MACTEC Project No. 6788-09-1916 (41)

STRUCTURAL CALCULATIONS

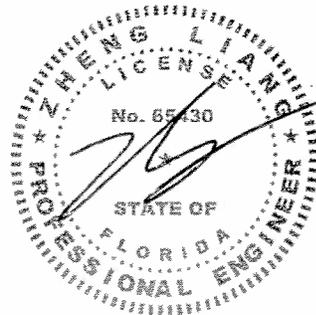
For

SOUTH KEY WEST
(CAS MARINA)
811 SEMINOLE STREET, KEY WEST, FL 33040
05/25/2010

Reviewed by: Armando Alvarez, P.E.
Principal Engineer
MACTEC Engineering and Consulting, Inc.
5845 NW 158th Street
Miami Lakes, FL 33014

A handwritten signature in black ink, appearing to read "Armando Alvarez".

Prepared by: Zheng Liang, P.E.
Senior Engineer
Florida No. 65430 (exp. 02/28/2011)
MACTEC Engineering and Consulting, Inc.
5845 NW 158th Street
Miami Lakes, FL 3301



May 25, 2010



Job Summary:

AT&T requested that we perform a structural design of a new rooftop equipment platform to be located at 811 Seminole Street in Key West, Florida. It is our understanding that AT&T wishes to install new telecommunications equipment on the proposed platform, as depicted in construction drawings that we have prepared.

We based our analysis on information obtained during our site visits, published catalog information, documentation provided by AT&T. Our analysis was performed in accordance with the Florida Building Code, 2007 Edition with 2009 Amendments, with minimum design criteria shown below. We utilized RISA-3D software, which was developed for the design and analysis of such structural systems, to determine whether the proposed equipment platform could adequately sustain the proposed gravity and wind loads applied to it. We used hand calculations to design the member connections and the anchoring to the existing concrete columns and walls. Refer to the attached drawing for additional information.

DESIGN CRITERIA:

V = 150 mph
Exp. C
Cat. II

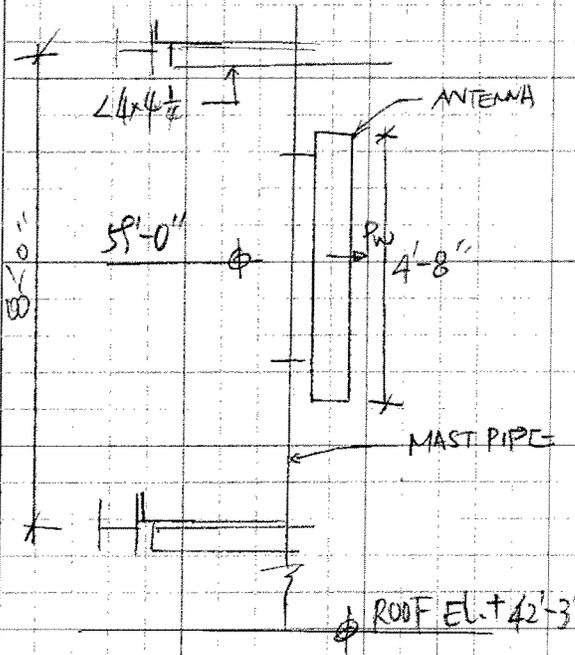
MACTEC

MACTEC Engineering and Consulting, Inc.
5845 NW 158th Street
Miami Lakes, FL 33014

JOB NO. 6788-09-1916 SHEET 1 OF 41
PHASE _____ TASK 41
JOB NAME South Key West
BY ZL DATE 5/17/2010
CHECKED BY _____ DATE _____

SCREEN WALL & FRAMING

$V = 150 \text{ mph}$ EXP C I=0
SEE WIND LOAD SPREAD SHEET FOR
EQUIPMENT & SCREEN WALL WIND LOADS



KATHREIN 742 264

$H = 4'-8''$ $W = 1'$ $D = 0.5'$

$P_{WIND} = 66 \text{ lbs}$

MAST PIPE

$$M_w = 66 \frac{8}{4} = 1.322 \text{ lb-ft}$$

USE P20X

$$M_a = 1.68 \text{ K-FT} > 1.3 \text{ K-FT OK}$$

$$V_a = 66 / 2 = 330 \text{ lbs}$$

ANGLE $2 \times 4 \times 4 \times \frac{1}{4}$ $L = 10'$

$$M_w = 66 \times \frac{10}{4} + 66 \times 0.5 = 1983 \text{ lb-ft} = 23.8 \text{ K-IN}$$

$$V_w = 3(66 \text{ lbs}) / 2 = 1.0 \text{ KIPS (USE } 1 \frac{3}{4} \text{ AB25-X BOLTS)}$$

$$M_e = \frac{0.66(29000)4^4(0.25)}{(10 \times 12)^2} \left(\sqrt{1 + 0.70 \left(\frac{120 \times 0.25}{3^2} \right)^2} - 1 \right) = 17.9 \text{ K-IN}$$

$$M_y = 0.8 F_y S_y = 0.8(36)(1.083) = 29 \text{ K-IN}$$

$$M_n = (1.92 - 1.17 \sqrt{\frac{29}{179}})(29) = 42 \text{ K-IN}$$

$$\frac{M_n}{\phi} = \frac{42}{1.67} = 25.2 \text{ K-IN} > 23.8 \text{ K-IN OK}$$

SEE RISA MODEL FOR FRP FRAMING

Wind Load on Screen Wall

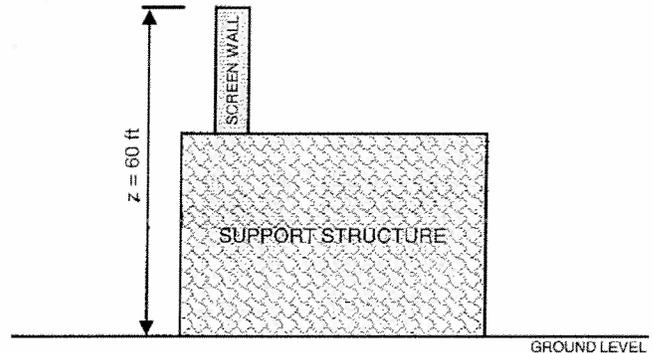
In Accordance With ASCE 7-05

Design Criteria

Wind Velocity, $V = 150$ mph
 Exposure = C
 Building Category = II (ASCE Table 1-1)
 $z = 60$ ft (Wall Height Above Ground)

Design Parameters

$Z_g = 900$ (ASCE Table 6-2)
 $\alpha = 9.5$ (ASCE Table 6-2)
 $GC_p = 1.6, -1.0$ (ASCE Figure 6-17)
 $GC_{pi} = 0.00$ (ASCE Figure 6-5)
 $GC_{pn} = 1.5, -1.0$ (ASCE Section 6.5.12.2.4.)
 $I = 1.00$ (Importance Factor, I from ASCE Table 6-1)
 $K_z = 1.14$ (Coefficient from ASCE Table 6-3)
 $K_{zt} = 1.0$ (Topographic Factor from ASCE Figure 6-4)
 $K_d = 0.85$ (Directionality Factor from ASCE Table 6-4)



Velocity Pressure

$$q_z = 0.00256(V^2)(I)(K_z)(K_{zt})(K_d) \quad (\text{ASCE EQ. 6-15})$$

$$q_z = 55.6 \text{ psf}$$

Wind Load

Main Wind Force Resisting System (MWFRS)

$$p_p = q_z(GC_{pn}) \quad (\text{ASCE EQ. 6-20})$$

$$p_p = 83 \text{ psf} \quad (\text{Windward Pressure})$$

$$p_p = -56 \text{ psf} \quad (\text{Leeward Pressure})$$

MWFRS

	Windward	Leeward
Tributary Width = 3.5 ft	→ 292	or -195 plf on Supports
Tributary Width = 4.5 ft	→ 375	or -250 plf on Supports
Tributary Width = 4 ft	→ 334	or -222 plf on Supports
Tributary Width = 8 ft	→ 667	or -445 plf on Supports

Components and Cladding (C&C)

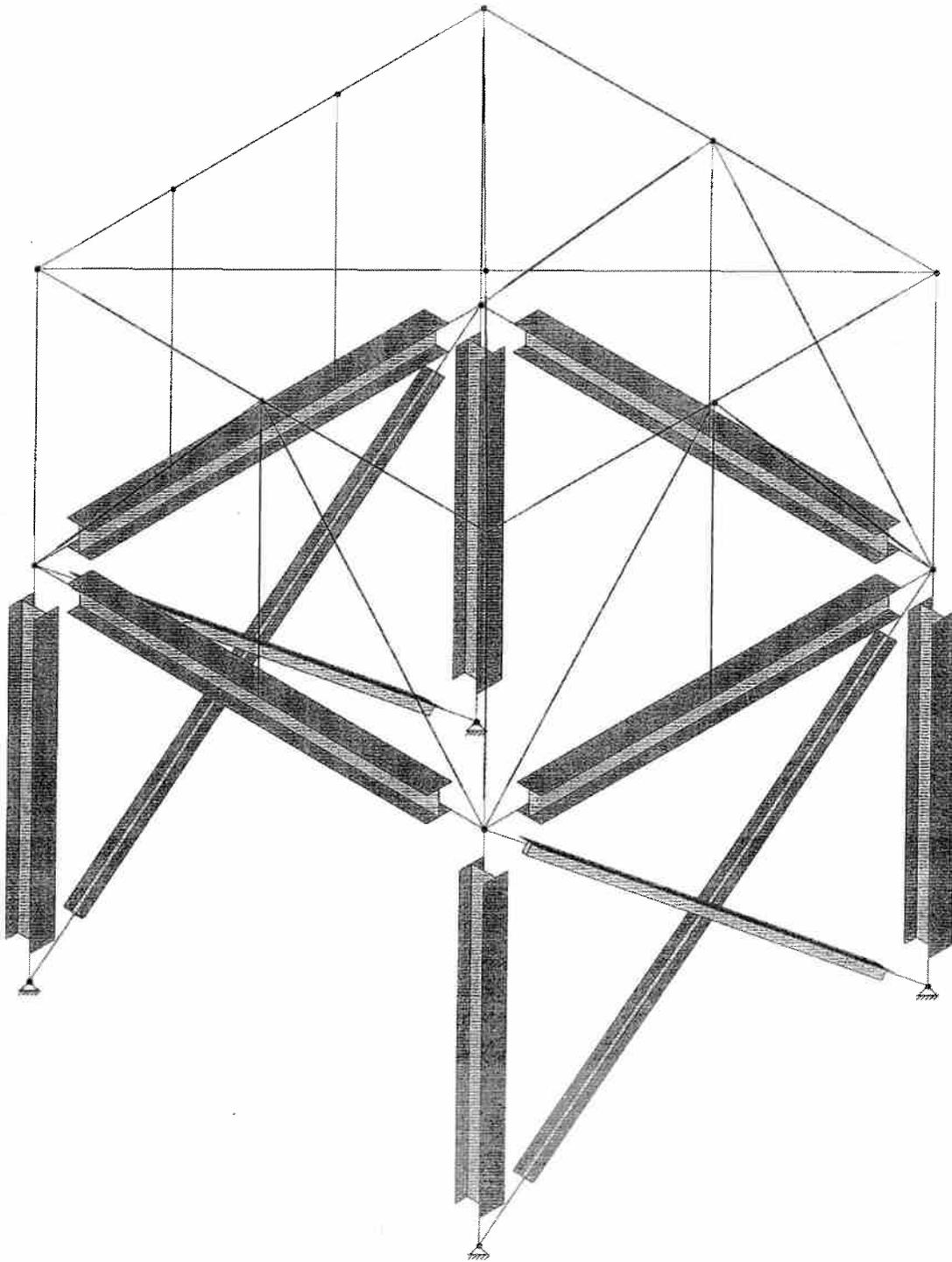
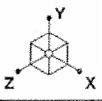
$$p = q_z(GC_p - GC_{pi}) \quad (\text{ASCE EQ. 6-24})$$

$$p = 89 \text{ psf} \quad (\text{Windward Pressure})$$

$$p = -56 \text{ psf} \quad (\text{Leeward Pressure})$$

C & C

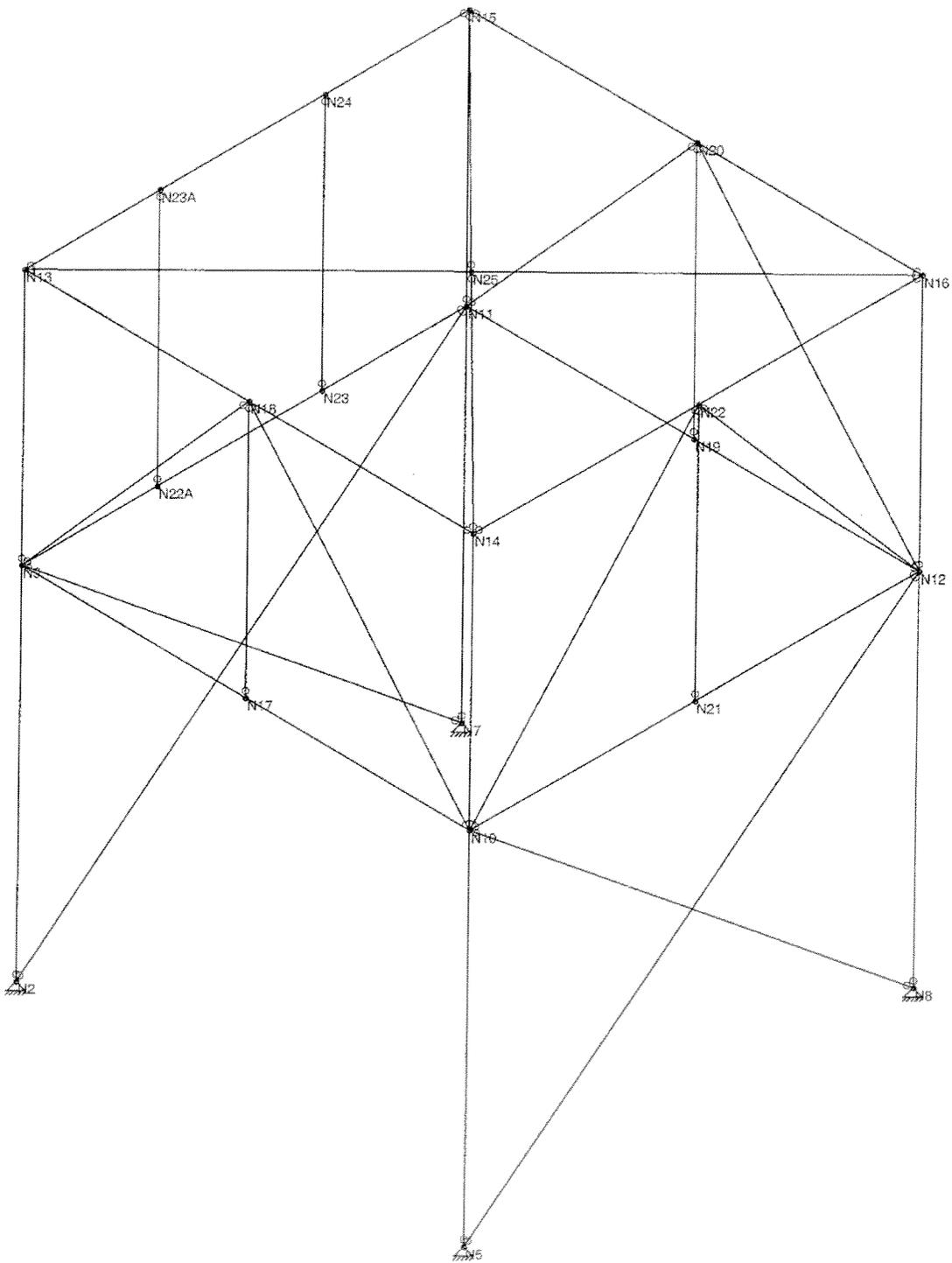
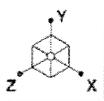
Tributary Width = 1 ft	→ 89	or -56 plf on Supports
Tributary Width = 2 ft	→ 178	or -111 plf on Supports
Tributary Width = 4 ft	→ 356	or -222 plf on Supports
Tributary Width = 8 ft	→ 712	or -445 plf on Supports



Solution: Envelope

MACTEC
ZL/AA
6788-09-1916 (41)

SK - 1
May 26, 2010 at 12:07 PM
South Key West - Screen Walls (fr...



Solution: Envelope

MACTEC

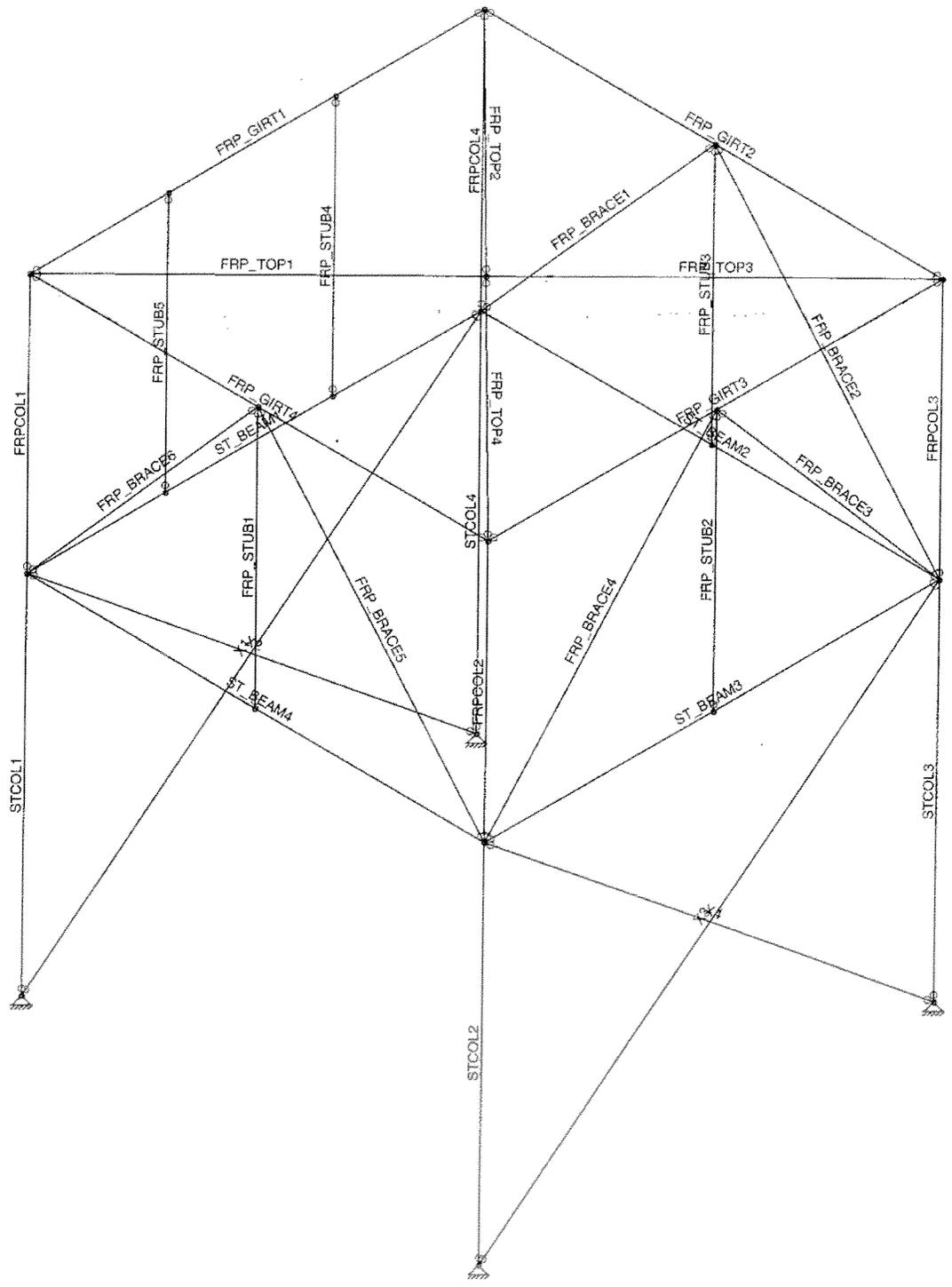
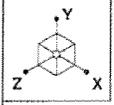
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6788-09-1916 (41)

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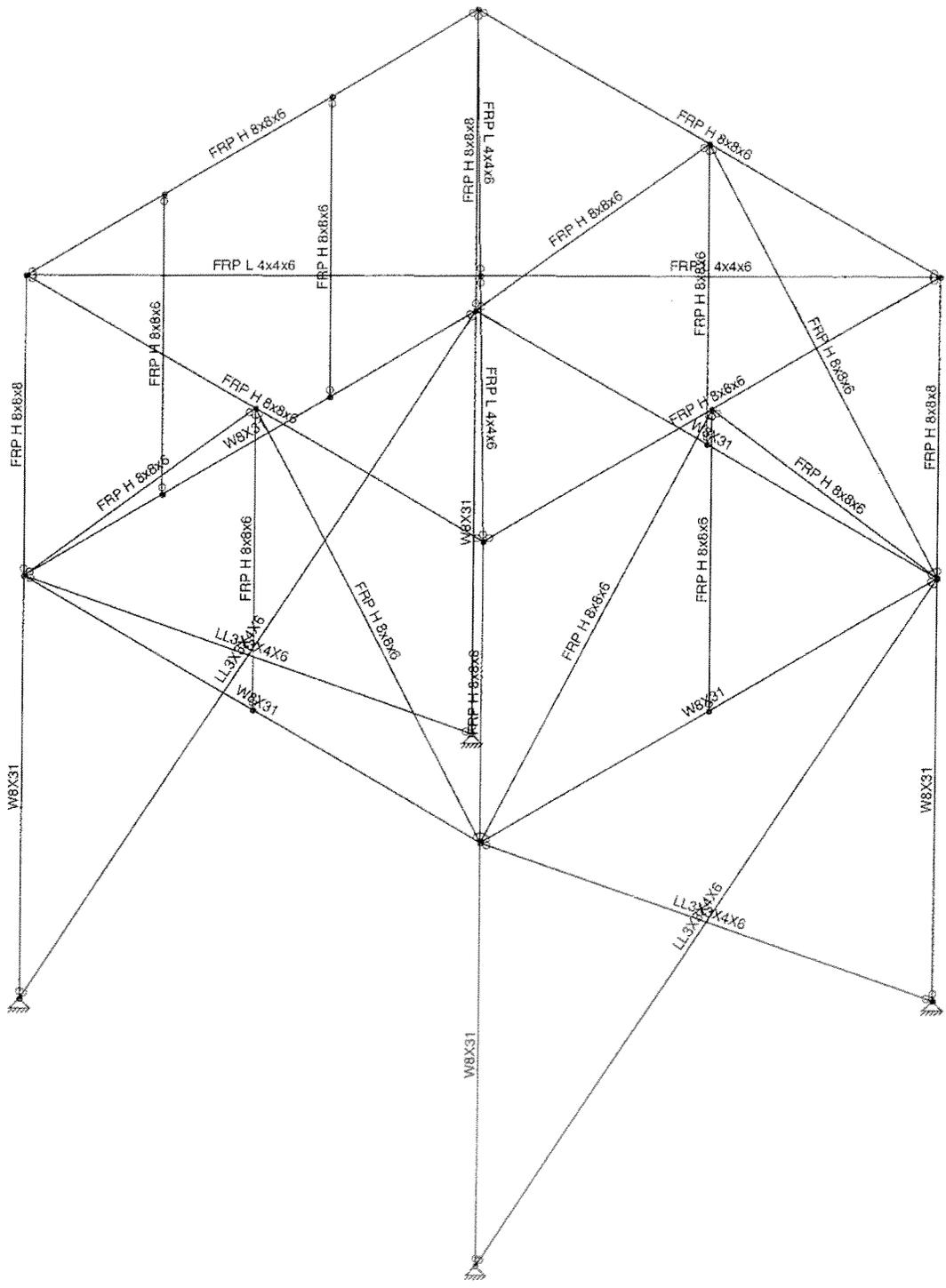
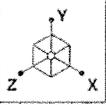
South Key West - Screen Walls (fr...



Solution: Envelope

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 ZL/AA
 6788-09-1916 (41)

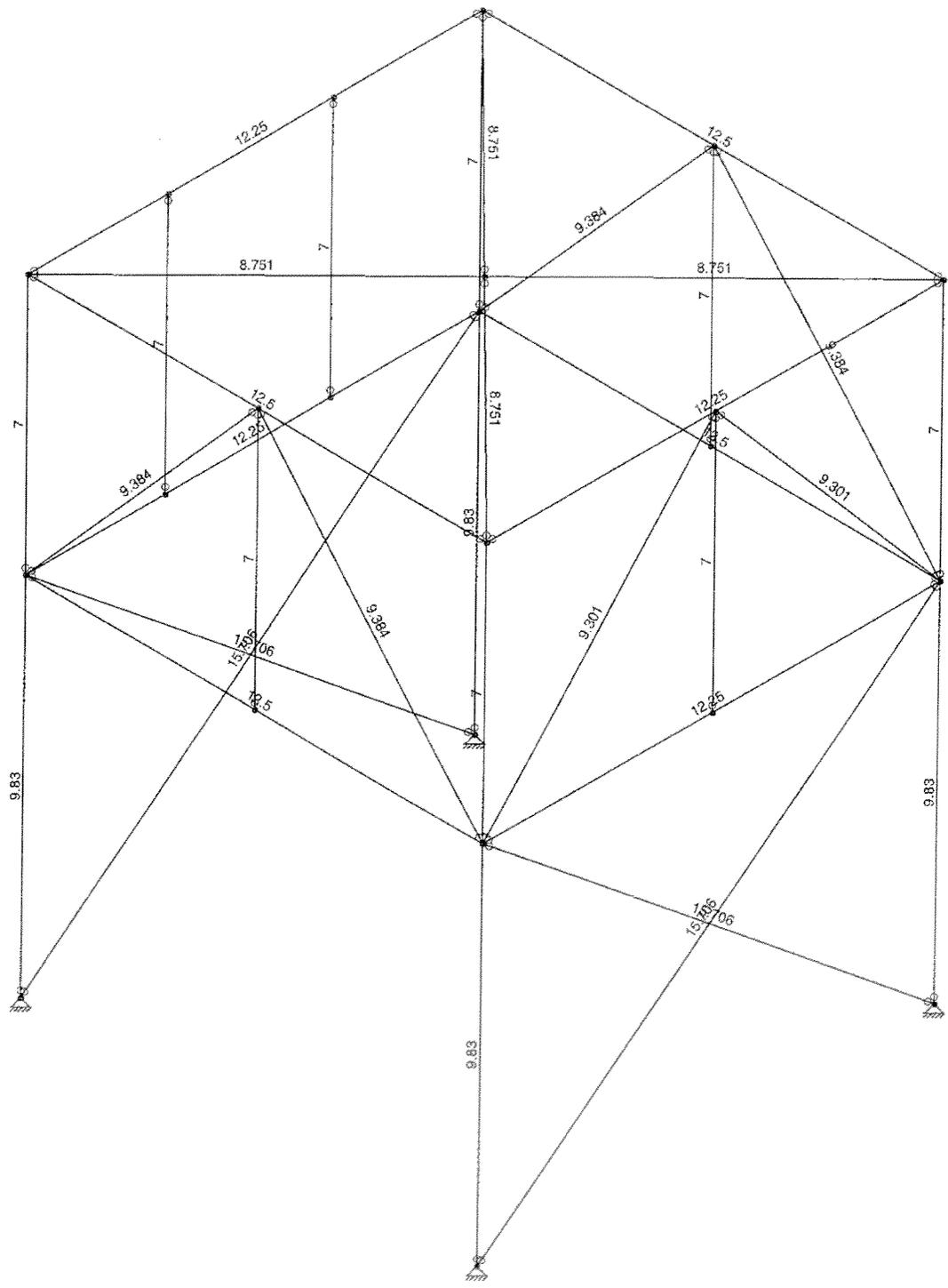
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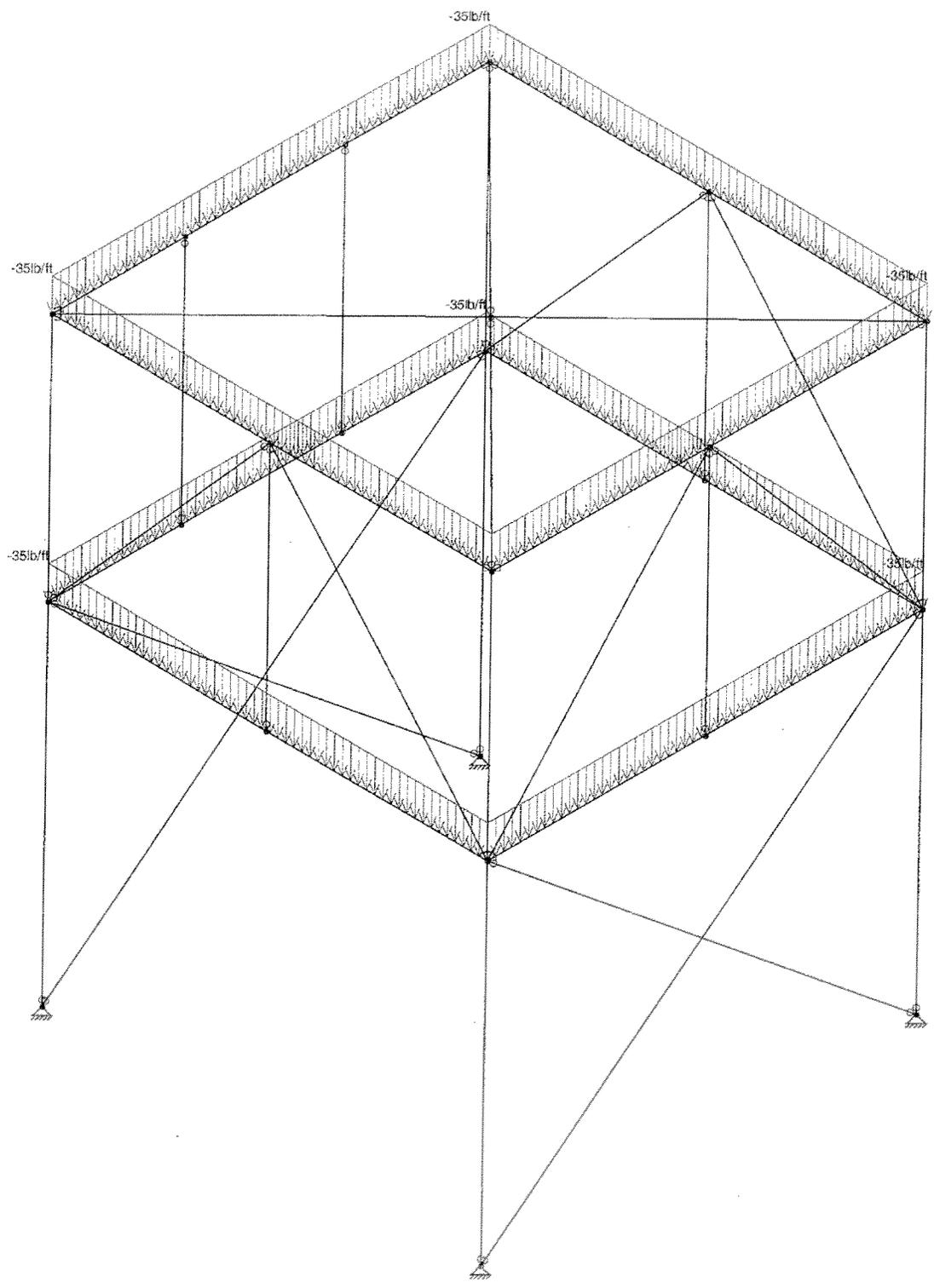
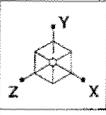
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 ZL/AA
 6788-09-1916 (41)

SK - 4
 May 26, 2010 at 12:08 PM
 South Key West - Screen Walls (fr...



Member Length (ft) Displayed
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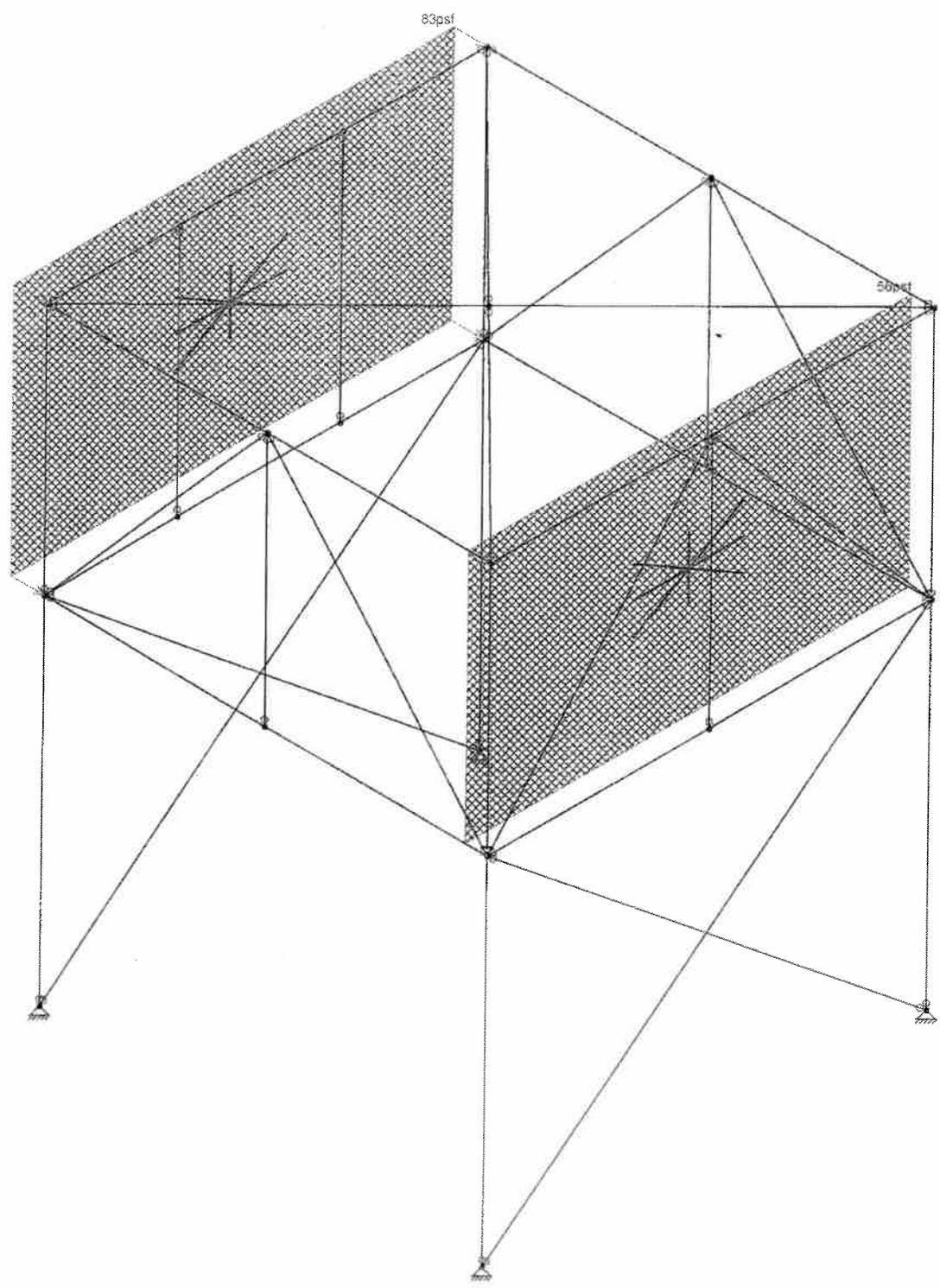
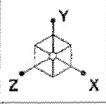
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ZL/AA		May 26, 2010 at 12:08 PM
6788-09-1916 (41)		South Key West - Screen Walls (fr...



Loads: BLC 1, Dead Load
Solution: Envelope

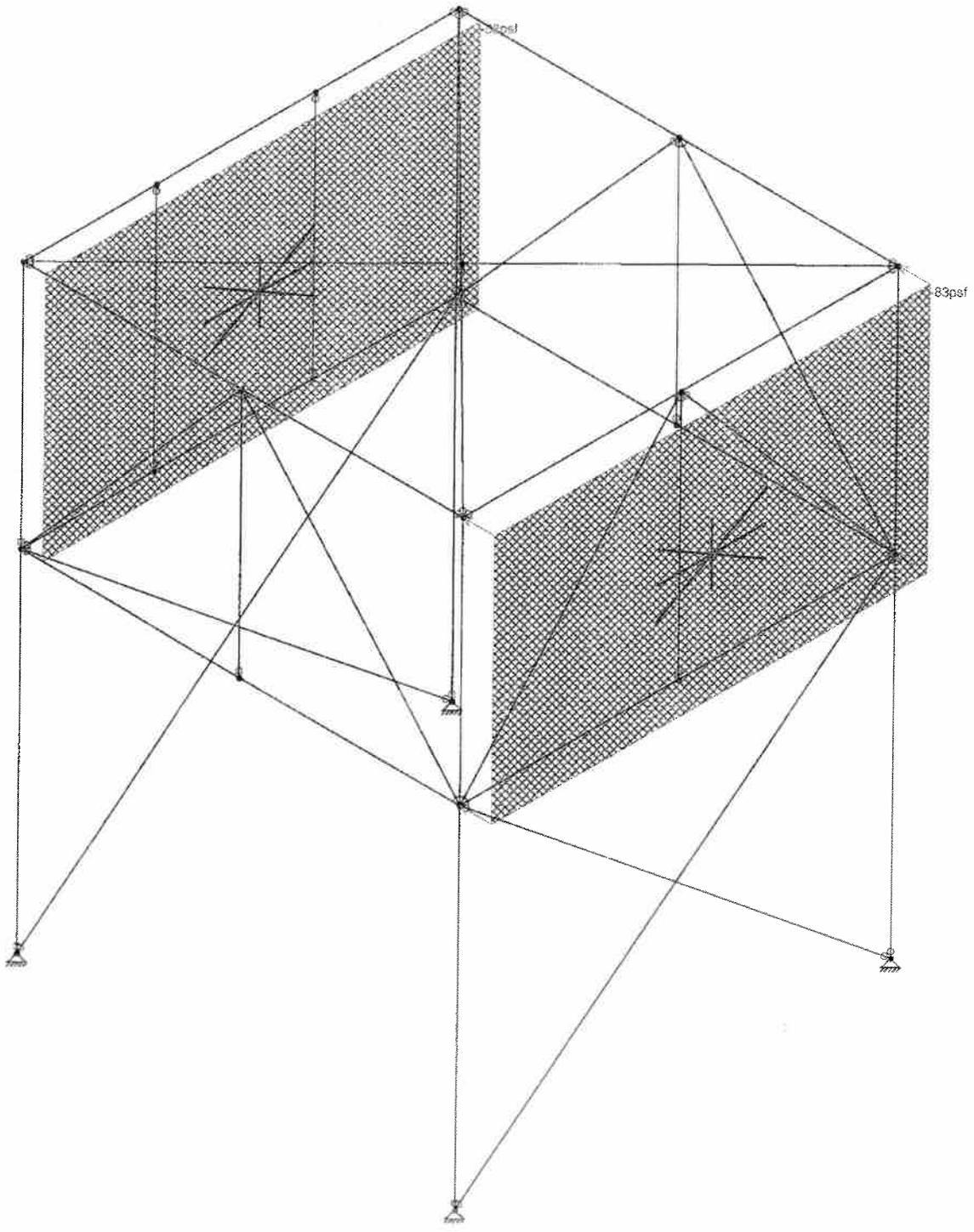
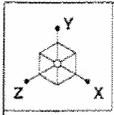
MACTEC
ZL/AA
6788-09-1916 (41)

SK - 6
May 26, 2010 at 12:09 PM
South Key West - Screen Walls (fr...



Loads: BLC 3, +WLX
Solution: Envelope

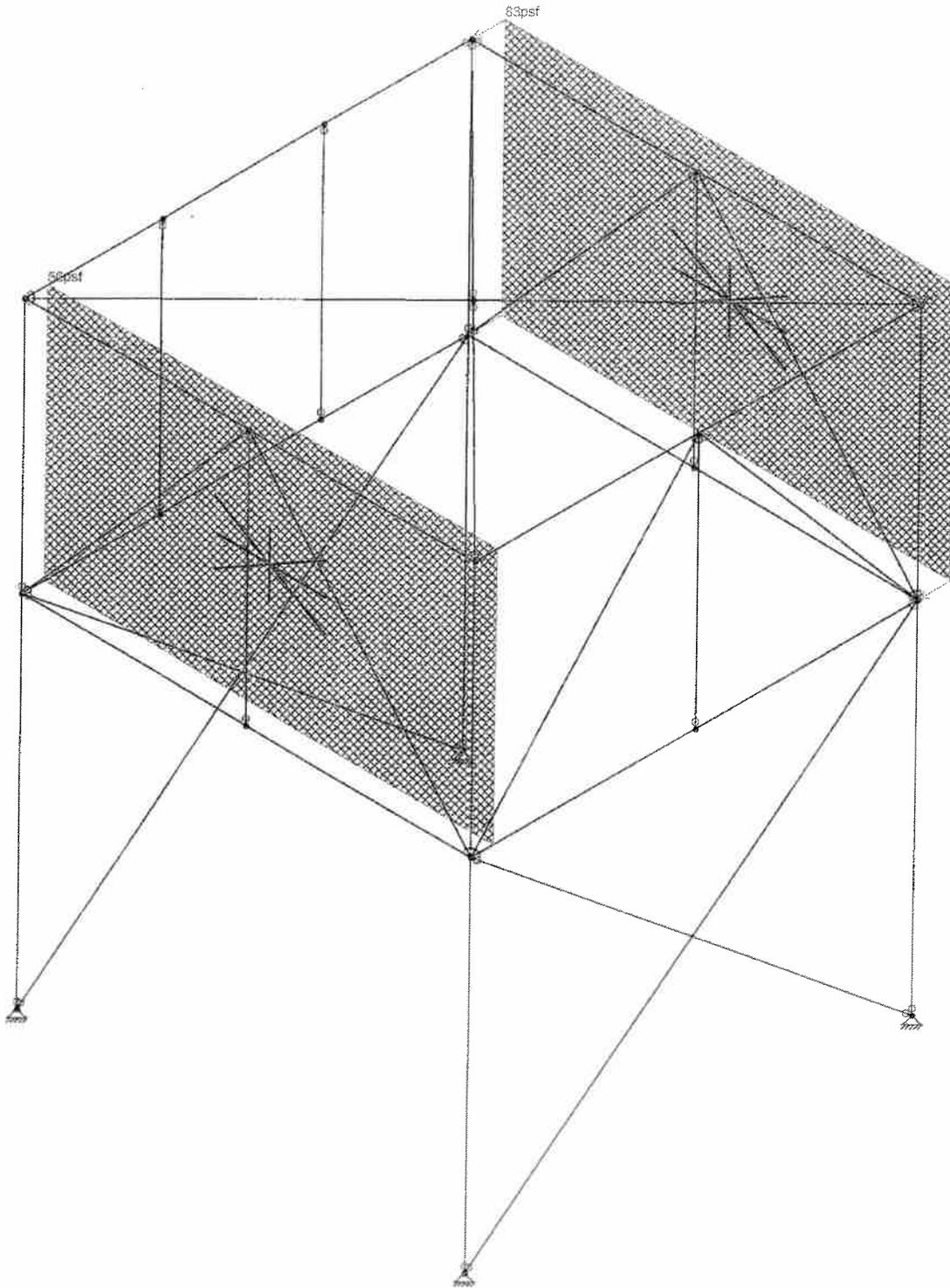
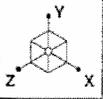
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ZL/AA	May 26, 2010 at 12:09 PM
6788-09-1916 (41)	South Key West - Screen Walls (fr...



Loads: BLC 4, -WLX
Solution: Envelope

MACTEC
ZL/AA
6788-09-1916 (41)

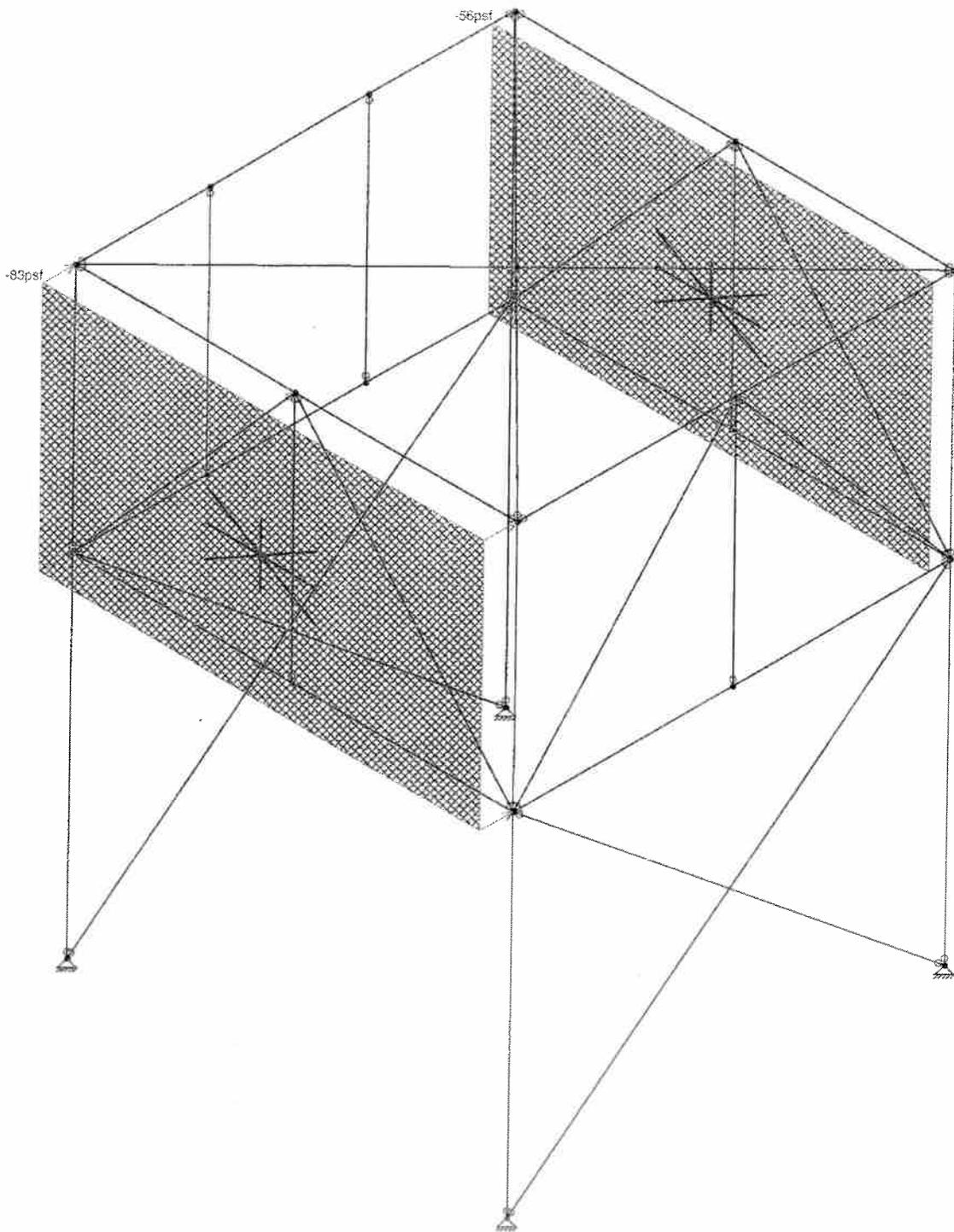
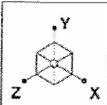
SK - 8
May 26, 2010 at 12:09 PM
South Key West - Screen Walls (fr...



Loads: BLC 5, +WLZ
Solution: Envelope

MACTEC
ZL/AA
6788-09-1916 (41)

SK - 9
May 26, 2010 at 12:09 PM
South Key West - Screen Walls (fr...



Loads: BLC 6, -WLZ
Solution: Envelope

MACTEC

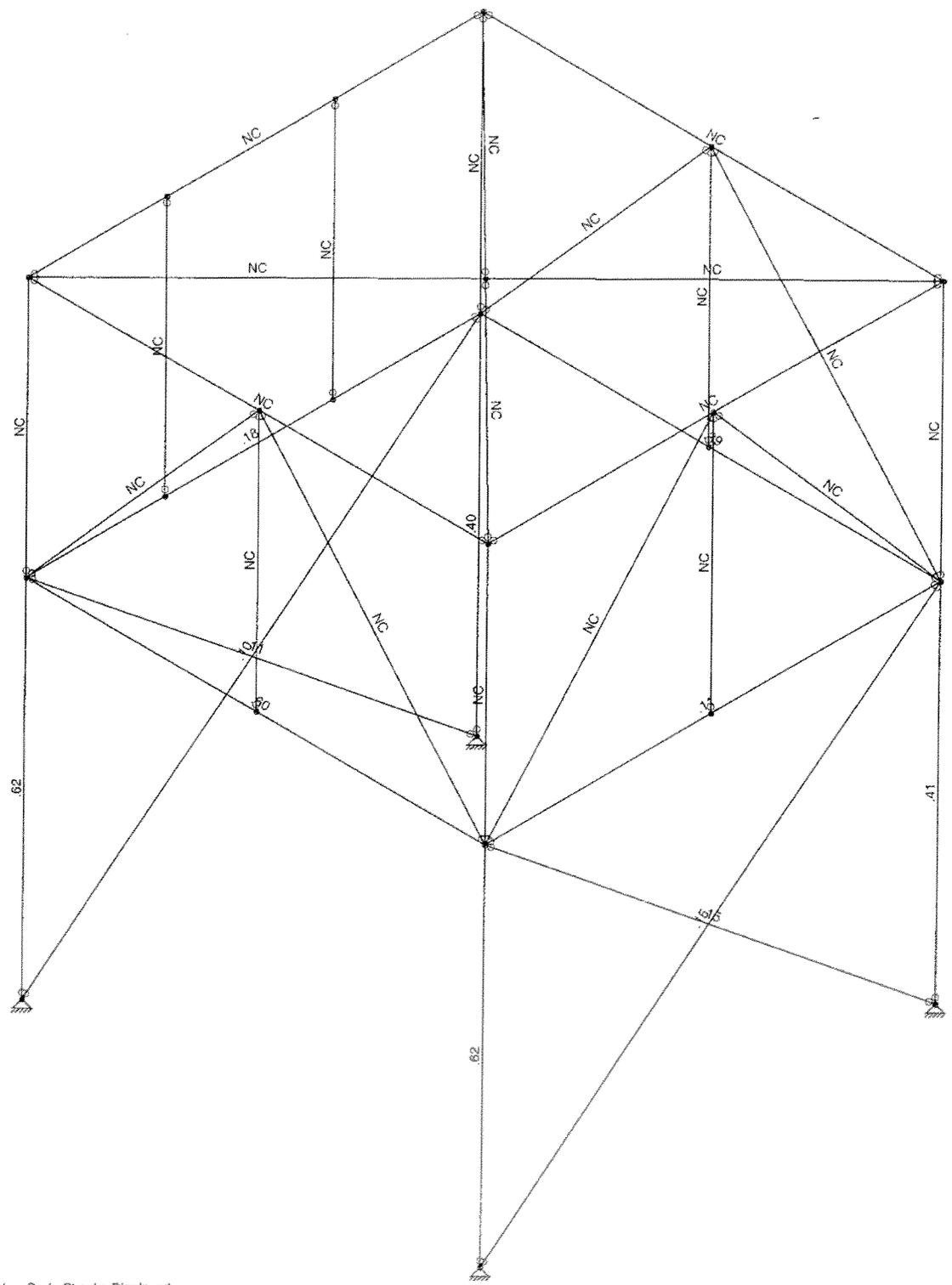
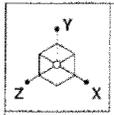
ZL/AA

6788-09-1916 (41)

SK - 10

May 26, 2010 at 12:09 PM

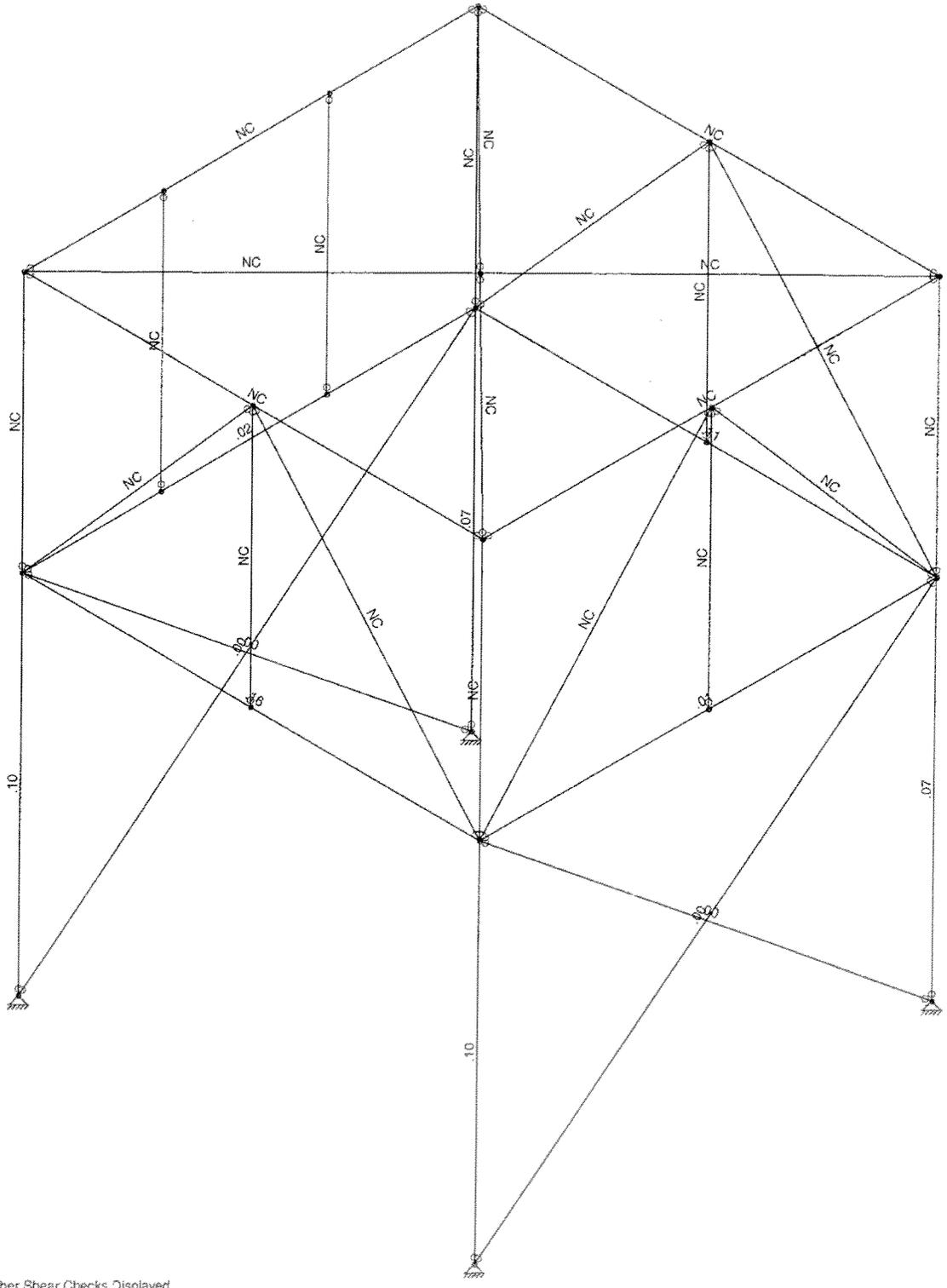
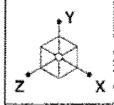
South Key West - Screen Walls (fr...



Member Code Checks Displayed
Solution: Envelope

MACTEC
ZL/AA
6788-09-1916 (41)

SK - 11
May 26, 2010 at 12:09 PM
South Key West - Screen Walls (fr...



Member Shear Checks Displayed
Solution: Envelope

MACTEC
ZL/AA
6788-09-1916 (41)

SK - 12
May 26, 2010 at 12:10 PM
South Key West - Screen Walls (fr...

Company : MACTEC
 Designer : ZL/AA
 Job Number : 6788-09-1916 (41)

May 26, 2010
 12:12 PM
 Checked By: _____

Global

Display Sections for Member Calcs	5
Max Internal Sections for Member Calcs	97
Include Shear Deformation	Yes
Include Warping	Yes
Area Load Mesh (in^2)	144
Merge Tolerance (in)	.12
P-Delta Analysis Tolerance	0.50%
Vertical Axis	Y

Hot Rolled Steel Code	AISC : ASD 13th
Cold Formed Steel Code	AISI 01: ASD
Wood Code	NDS 2005: ASD
Wood Temperature	< 100F
Concrete Code	ACI 2005
Masonry Code	MSJC 05/IBC 06 ASD

Number of Shear Regions	4
Region Spacing Increment (in)	4
Biaxial Column Method	PCA Load Contour
Parme Beta Factor (PCA)	.65
Concrete Stress Block	Rectangular
Use Cracked Sections	Yes
Bad Framing Warnings	No
Unused Force Warnings	Yes

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area (Me...	Surface (...)
1	Dead Load	DL		-1				8	
2	Live Load	LL							
3	+WLX	WL+X						2	
4	-WLX	WL-X						2	
5	+WLZ	WL+Z						2	
6	-WLZ	WL-X						2	
7	Lr	RLL							
8	BLC 3 Transient Area...	None						115	
9	BLC 4 Transient Area...	None						115	
10	BLC 6 Transient Area...	None						120	
11	BLC 5 Transient Area...	None						120	

Load Combinations

	Description	Sol.	PD.	SR.	BLC Fact.							
1	1.4DL		Y		DL	1.4						
2	1.2DL + 1.6LL + 0.5LR		Y		DL	1.2	LL	1.6	RLL	5		
3	1.2DL + 1.6LR + 0.5LL		Y		DL	1.2	RLL	1.6	LL	5		
4	1.2DL + 1.6LR + 0.8WLX		Y		DL	1.2	RLL	1.6	WL	8		
5	1.2DL + 1.6LR - 0.8WLX		Y		DL	1.2	RLL	1.6	WL	8		
6	1.2DL + 1.6LR + 0.8WLZ		Y		DL	1.2	RLL	1.6	WL	8		
7	1.2DL + 1.6LR - 0.8WLZ		Y		DL	1.2	RLL	1.6	WL	8		
8	1.2DL + 1.6WLX + 1.0LL + 0.5...		Y		DL	1.2	WL	1.6	LL	1	RLL	5
9	1.2DL - 1.6WLX + 1.0LL + 0.5...		Y		DL	1.2	WL	1.6	LL	1	RLL	5
10	1.2DL + 1.6WLZ + 1.0LL + 0.5...		Y		DL	1.2	WL	1.6	LL	1	RLL	5
11	1.2DL - 1.6WLZ + 1.0LL + 0.5...		Y		DL	1.2	WL	1.6	LL	1	RLL	5
12	0.9DL + 1.6WLX		Y		DL	.9	WL	1.6				
13	0.9DL - 1.6WLX		Y		DL	.9	WL	1.6				
14	0.9DL + 1.6WLZ		Y		DL	.9	WL	1.6				

Company : MACTEC
 Designer : ZUAA
 Job Number : 6788-09-1916 (41)

May 26, 2010
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 Checked By: _____

Member Distributed Loads (BLC 8 : BLC 3 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude lb/ft...	End Magnitude lb/ft.d.	Start Location ft.%	End Location ft.%
12	FRP STUB4	X	158.867	158.867	.7	1.4
13	FRP STUB4	X	397.168	397.168	1.4	2.1
14	FRP STUB4	X	238.301	238.301	2.1	2.8
15	FRP STUB4	X	476.602	476.602	2.8	3.5
16	FRP STUB4	X	476.602	476.602	3.5	4.2
17	FRP STUB4	X	238.301	238.301	4.2	4.9
18	FRP STUB4	X	397.168	397.168	4.9	5.6
19	FRP STUB5	X	79.434	79.434	0	.7
20	FRP STUB5	X	79.434	79.434	.7	1.4
21	FRP STUB5	X	397.168	397.168	1.4	2.1
22	FRP STUB5	X	238.301	238.301	2.1	2.8
23	FRP STUB5	X	476.602	476.602	2.8	3.5
24	FRPCOL4	X	79.434	79.434	.7	1.4
25	FRPCOL4	X	158.867	158.867	1.4	2.1
26	FRPCOL4	X	79.434	79.434	2.1	2.8
27	FRPCOL4	X	158.867	158.867	2.8	3.5
28	FRPCOL4	X	158.867	158.867	3.5	4.2
29	FRPCOL4	X	79.434	79.434	4.2	4.9
30	FRPCOL4	X	158.867	158.867	4.9	5.6
31	FRPCOL4	X	79.434	79.434	5.6	6.3
32	FRPCOL4	X	79.434	79.434	6.3	7
33	FRP GIRT1	X	45.391	45.391	0	1.225
34	FRP GIRT1	X	90.781	90.781	2.45	3.675
35	FRP GIRT1	X	136.172	136.172	4.9	6.125
36	FRP GIRT1	X	181.563	181.563	6.125	7.35
37	FRP GIRT1	X	45.391	45.391	8.575	9.8
38	FRP GIRT1	X	90.781	90.781	9.8	11.025
39	FRP GIRT1	X	90.781	90.781	11.025	12.25
40	FRP STUB4	X	79.434	79.434	5.6	6.3
41	FRP STUB4	X	158.867	158.867	6.3	7
42	FRP STUB5	X	476.602	476.602	3.5	4.2
43	FRP STUB5	X	238.301	238.301	4.2	4.9
44	FRP STUB5	X	397.168	397.168	4.9	5.6
45	FRP STUB5	X	79.434	79.434	5.6	6.3
46	FRP STUB5	X	158.867	158.867	6.3	7
47	FRPCOL1	X	79.434	79.434	0	.7
48	FRPCOL1	X	79.434	79.434	.7	1.4
49	FRPCOL1	X	158.867	158.867	1.4	2.1
50	FRPCOL1	X	79.434	79.434	2.1	2.8
51	FRPCOL1	X	158.867	158.867	2.8	3.5
52	FRPCOL1	X	158.867	158.867	3.5	4.2
53	FRPCOL1	X	79.434	79.434	4.2	4.9
54	FRPCOL1	X	158.867	158.867	4.9	5.6
55	FRPCOL1	X	79.434	79.434	5.6	6.3
56	FRP_GIRT3	X	61.25	61.25	1.225	2.45
57	ST BEAM3	X	30.625	30.625	1.225	2.45
58	ST BEAM3	X	91.875	91.875	2.45	3.675
59	ST BEAM3	X	61.25	61.25	3.675	4.9
60	ST BEAM3	X	30.625	30.625	4.9	6.125
61	ST BEAM3	X	61.25	61.25	6.125	7.35
62	ST BEAM3	X	61.25	61.25	7.35	8.575
63	ST BEAM3	X	91.875	91.875	8.575	9.8
64	ST BEAM3	X	30.625	30.625	9.8	11.025
65	ST BEAM3	X	30.625	30.625	11.025	12.25
66	FRP BRACE4	X	121	121	1.86	2.79
67	FRP BRACE4	X	242	242	3.721	4.651
68	FRP BRACE3	X	40.333	40.333	0	.93

Company : MACTEC
 Designer : ZL/AA
 Job Number : 6788-09-1916 (41)

May 26, 2010
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 Checked By: _____

Member Distributed Loads (BLC 8 : BLC 3 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft.]	End Magnitude[lb/ft.d.]	Start Location[ft.%]	End Location[ft.%]	
69	FRP BRACE3	X	121	121	93	1.86
70	FRP BRACE3	X	121	121	1.86	2.79
71	FRP BRACE3	X	121	121	2.79	3.721
72	FRP BRACE3	X	201.667	201.667	3.721	4.651
73	FRP BRACE3	X	201.667	201.667	4.651	5.581
74	FRP BRACE3	X	121	121	5.581	6.511
75	FRP STUB2	X	53.594	53.594	0	7
76	FRP STUB2	X	107.188	107.188	.7	1.4
77	FRP STUB2	X	214.375	214.375	1.4	2.1
78	FRP STUB2	X	107.188	107.188	2.1	2.8
79	FRP STUB2	X	214.375	214.375	2.8	3.5
80	FRP STUB2	X	214.375	214.375	3.5	4.2
81	FRPCOL3	X	53.594	53.594	1.4	2.1
82	FRPCOL3	X	107.188	107.188	2.8	3.5
83	FRPCOL3	X	107.188	107.188	3.5	4.2
84	FRPCOL3	X	53.594	53.594	4.2	4.9
85	FRPCOL3	X	107.188	107.188	4.9	5.6
86	FRPCOL3	X	53.594	53.594	5.6	6.3
87	FRPCOL3	X	53.594	53.594	6.3	7
88	FRP GIRT3	X	30.625	30.625	0	1.225
89	FRP GIRT3	X	91.875	91.875	2.45	3.675
90	FRP GIRT3	X	30.625	30.625	3.675	4.9
91	FRP GIRT3	X	30.625	30.625	6.125	7.35
92	FRP GIRT3	X	30.625	30.625	7.35	8.575
93	FRP GIRT3	X	91.875	91.875	8.575	9.8
94	FRP GIRT3	X	61.25	61.25	9.8	11.025
95	FRP GIRT3	X	61.25	61.25	11.025	12.25
96	FRP BRACE4	X	40.333	40.333	0	.93
97	FRP BRACE4	X	40.333	40.333	.93	1.86
98	FRP BRACE4	X	80.667	80.667	2.79	3.721
99	FRP BRACE4	X	242	242	4.651	5.581
100	FRP BRACE4	X	80.667	80.667	5.581	6.511
101	FRP BRACE4	X	121	121	6.511	7.441
102	FRP BRACE4	X	40.333	40.333	7.441	8.371
103	FRP BRACE4	X	40.333	40.333	8.371	9.301
104	FRP BRACE3	X	121	121	6.511	7.441
105	FRP BRACE3	X	121	121	7.441	8.371
106	FRP BRACE3	X	40.333	40.333	8.371	9.301
107	FRP STUB2	X	53.594	53.594	4.2	4.9
108	FRP STUB2	X	107.188	107.188	4.9	5.6
109	FRPCOL2	X	53.594	53.594	1.4	2.1
110	FRPCOL2	X	53.594	53.594	2.1	2.8
111	FRPCOL2	X	107.188	107.188	2.8	3.5
112	FRPCOL2	X	107.188	107.188	3.5	4.2
113	FRPCOL2	X	53.594	53.594	4.2	4.9
114	FRPCOL2	X	107.188	107.188	4.9	5.6
115	FRPCOL2	X	53.594	53.594	5.6	6.3

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads)

Member Label	Direction	Start Magnitude[lb/ft.]	End Magnitude[lb/ft.d.]	Start Location[ft.%]	End Location[ft.%]	
1	FRP GIRT1	X	-61.25	-61.25	1.225	2.45
2	ST_BEAM1	X	-61.25	-61.25	0	1.225
3	ST_BEAM1	X	-61.25	-61.25	1.225	2.45
4	ST_BEAM1	X	-61.25	-61.25	2.45	3.675
5	ST_BEAM1	X	-91.875	-91.875	4.9	6.125
6	ST_BEAM1	X	-91.875	-91.875	6.125	7.35
7	ST_BEAM1	X	-30.625	-30.625	7.35	8.575

Company : MACTEC
Designer : ZL/AA
Job Number : 6788-09-1916 (41)

May 26, 2010
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Checked By:

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude(lb/ft)	End Magnitude(lb/ft)	Start Location(ft,%)	End Location(ft,%)
8	ST BEAM1	X	-61.25	-61.25	8.575	9.8
9	ST BEAM1	X	-61.25	-61.25	9.8	11.025
10	ST BEAM1	X	-30.625	-30.625	11.025	12.25
11	FRP STUB4	X	-53.594	-53.594	0	.7
12	FRP STUB4	X	-107.188	-107.188	.7	1.4
13	FRP STUB4	X	-267.969	-267.969	1.4	2.1
14	FRP STUB4	X	-160.781	-160.781	2.1	2.8
15	FRP STUB4	X	-321.563	-321.563	2.8	3.5
16	FRP STUB4	X	-321.563	-321.563	3.5	4.2
17	FRP STUB4	X	-160.781	-160.781	4.2	4.9
18	FRP STUB4	X	-267.969	-267.969	4.9	5.6
19	FRP STUB5	X	-53.594	-53.594	0	.7
20	FRP STUB5	X	-53.594	-53.594	.7	1.4
21	FRP STUB5	X	-267.969	-267.969	1.4	2.1
22	FRP STUB5	X	-160.781	-160.781	2.1	2.8
23	FRP STUB5	X	321.563	-321.563	2.8	3.5
24	FRPCOL4	X	-53.594	-53.594	.7	1.4
25	FRPCOL4	X	-107.188	-107.188	1.4	2.1
26	FRPCOL4	X	-53.594	-53.594	2.1	2.8
27	FRPCOL4	X	-107.188	-107.188	2.8	3.5
28	FRPCOL4	X	-107.188	-107.188	3.5	4.2
29	FRPCOL4	X	-53.594	-53.594	4.2	4.9
30	FRPCOL4	X	-107.188	-107.188	4.9	5.6
31	FRPCOL4	X	-53.594	-53.594	5.6	6.3
32	FRPCOL4	X	-53.594	-53.594	6.3	7
33	FRP GIRT1	X	-30.625	-30.625	0	1.225
34	FRP GIRT1	X	-61.25	-61.25	2.45	3.675
35	FRP GIRT1	X	-91.875	-91.875	4.9	6.125
36	FRP GIRT1	X	-122.5	-122.5	6.125	7.35
37	FRP GIRT1	X	-30.625	-30.625	8.575	9.8
38	FRP GIRT1	X	-61.25	-61.25	9.8	11.025
39	FRP GIRT1	X	-61.25	-61.25	11.025	12.25
40	FRP STUB4	X	-53.594	-53.594	5.6	6.3
41	FRP STUB4	X	-107.188	-107.188	6.3	7
42	FRP STUB5	X	-321.563	-321.563	3.5	4.2
43	FRP STUB5	X	-160.781	-160.781	4.2	4.9
44	FRP STUB5	X	-267.969	-267.969	4.9	5.6
45	FRP STUB5	X	-53.594	-53.594	5.6	6.3
46	FRP STUB5	X	-107.188	-107.188	6.3	7
47	FRPCOL1	X	-53.594	-53.594	0	.7
48	FRPCOL1	X	-53.594	-53.594	.7	1.4
49	FRPCOL1	X	-107.188	-107.188	1.4	2.1
50	FRPCOL1	X	-53.594	-53.594	2.1	2.8
51	FRPCOL1	X	-107.188	-107.188	2.8	3.5
52	FRPCOL1	X	-107.188	-107.188	3.5	4.2
53	FRPCOL1	X	-53.594	-53.594	4.2	4.9
54	FRPCOL1	X	-107.188	-107.188	4.9	5.6
55	FRPCOL1	X	-53.594	-53.594	5.6	6.3
56	FRP_GIRT3	X	-90.781	-90.781	1.225	2.45
57	ST BEAM3	X	-45.391	-45.391	1.225	2.45
58	ST BEAM3	X	-136.172	-136.172	2.45	3.675
59	ST BEAM3	X	-90.781	-90.781	3.675	4.9
60	ST BEAM3	X	-45.391	-45.391	4.9	6.125
61	ST BEAM3	X	-90.781	-90.781	6.125	7.35
62	ST BEAM3	X	-90.781	-90.781	7.35	8.575
63	ST BEAM3	X	-136.172	-136.172	8.575	9.8
64	ST BEAM3	X	-45.391	-45.391	9.8	11.025

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft.]	End Magnitude[lb/ft.d.]	Start Location[ft.%]	End Location[ft.%]	
65	ST BEAM3	X	-45.391	-45.391	11.025	12.25
66	FRP BRACE4	X	-179.34	-179.34	1.86	2.79
67	FRP BRACE4	X	-358.679	-358.679	3.721	4.651
68	FRP BRACE3	X	-59.78	-59.78	0	.93
69	FRP BRACE3	X	-179.34	-179.34	.93	1.86
70	FRP BRACE3	X	-179.34	-179.34	1.86	2.79
71	FRP BRACE3	X	-179.34	-179.34	2.79	3.721
72	FRP BRACE3	X	-298.899	-298.899	3.721	4.651
73	FRP BRACE3	X	-298.899	-298.899	4.651	5.581
74	FRP BRACE3	X	-179.34	-179.34	5.581	6.511
75	FRP STUB2	X	-79.434	-79.434	0	.7
76	FRP STUB2	X	-158.867	-158.867	.7	1.4
77	FRP STUB2	X	-317.734	-317.734	1.4	2.1
78	FRP STUB2	X	-158.867	-158.867	2.1	2.8
79	FRP STUB2	X	-317.734	-317.734	2.8	3.5
80	FRP STUB2	X	-317.734	-317.734	3.5	4.2
81	FRPCOL3	X	-79.434	-79.434	1.4	2.1
82	FRPCOL3	X	-158.867	-158.867	2.8	3.5
83	FRPCOL3	X	-158.867	-158.867	3.5	4.2
84	FRPCOL3	X	-79.434	-79.434	4.2	4.9
85	FRPCOL3	X	-158.867	-158.867	4.9	5.6
86	FRPCOL3	X	-79.434	-79.434	5.6	6.3
87	FRPCOL3	X	-79.434	-79.434	6.3	7
88	FRP GIRT3	X	-45.391	-45.391	0	1.225
89	FRP GIRT3	X	-136.172	-136.172	2.45	3.675
90	FRP GIRT3	X	-45.391	-45.391	3.675	4.9
91	FRP GIRT3	X	-45.391	-45.391	6.125	7.35
92	FRP GIRT3	X	-45.391	-45.391	7.35	8.575
93	FRP GIRT3	X	-136.172	-136.172	8.575	9.8
94	FRP GIRT3	X	-90.781	-90.781	9.8	11.025
95	FRP GIRT3	X	-90.781	-90.781	11.025	12.25
96	FRP BRACE4	X	-59.78	-59.78	0	.93
97	FRP BRACE4	X	-59.78	-59.78	.93	1.86
98	FRP BRACE4	X	-119.56	-119.56	2.79	3.721
99	FRP BRACE4	X	-358.679	-358.679	4.651	5.581
100	FRP BRACE4	X	-119.56	-119.56	5.581	6.511
101	FRP BRACE4	X	-179.34	-179.34	6.511	7.441
102	FRP BRACE4	X	-59.78	-59.78	7.441	8.371
103	FRP BRACE4	X	-59.78	-59.78	8.371	9.301
104	FRP BRACE3	X	-179.34	-179.34	6.511	7.441
105	FRP BRACE3	X	-179.34	-179.34	7.441	8.371
106	FRP BRACE3	X	-59.78	-59.78	8.371	9.301
107	FRP STUB2	X	-79.434	-79.434	4.2	4.9
108	FRP STUB2	X	-158.867	-158.867	4.9	5.6
109	FRPCOL2	X	-79.434	-79.434	1.4	2.1
110	FRPCOL2	X	-79.434	-79.434	2.1	2.8
111	FRPCOL2	X	-158.867	-158.867	2.8	3.5
112	FRPCOL2	X	-158.867	-158.867	3.5	4.2
113	FRPCOL2	X	-79.434	-79.434	4.2	4.9
114	FRPCOL2	X	-158.867	-158.867	4.9	5.6
115	FRPCOL2	X	-79.434	-79.434	5.6	6.3

Member Distributed Loads (BLC 10 : BLC 6 Transient Area Loads)

Member Label	Direction	Start Magnitude[lb/ft.]	End Magnitude[lb/ft.d.]	Start Location[ft.%]	End Location[ft.%]	
1	FRP GIRT2	Z	-30.625	-30.625	0	1.25
2	FRP GIRT2	Z	-61.25	-61.25	1.25	2.5
3	FRP GIRT2	Z	-91.875	-91.875	2.5	3.75

Member Distributed Loads (BLC 10 : BLC 6 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude lb/ft.	End Magnitude lb/ft.d.	Start Location ft.%	End Location ft.%
4	FRP GIRT2	Z	-30.625	-30.625	3.75 5
5	FRP GIRT2	Z	-30.625	-30.625	6.25 7.5
6	FRP GIRT2	Z	-30.625	-30.625	7.5 8.75
7	FRP GIRT2	Z	-91.875	-91.875	8.75 10
8	FRP GIRT2	Z	-61.25	-61.25	10 11.25
9	FRP GIRT2	Z	-61.25	-61.25	11.25 12.5
10	FRP BRACE2	Z	-40.793	-40.793	0 938
11	FRP BRACE2	Z	-40.793	-40.793	938 1.877
12	FRP BRACE2	Z	-122.38	-122.38	1.877 2.815
13	FRP BRACE2	Z	-81.587	-81.587	2.815 3.754
14	FRP BRACE2	Z	-244.761	-244.761	3.754 4.692
15	FRP BRACE2	Z	-244.761	-244.761	4.692 5.63
16	FRP BRACE2	Z	-81.587	-81.587	5.63 6.569
17	FRP BRACE2	Z	-122.38	-122.38	6.569 7.507
18	FRP BRACE2	Z	-40.793	-40.793	7.507 8.446
19	FRP BRACE2	Z	-40.793	-40.793	8.446 9.384
20	FRP BRACE1	Z	-163.174	-163.174	5.63 6.569
21	FRP BRACE1	Z	-81.587	-81.587	6.569 7.507
22	FRP BRACE1	Z	-122.38	-122.38	7.507 8.446
23	FRP BRACE1	Z	-40.793	-40.793	8.446 9.384
24	FRP STUB3	Z	-218.75	-218.75	2.8 3.5
25	FRP STUB3	Z	-218.75	-218.75	3.5 4.2
26	FRP STUB3	Z	-54.688	-54.688	4.2 4.9
27	FRP STUB3	Z	-109.375	-109.375	4.9 5.6
28	FRPCOL3	Z	-54.688	-54.688	1.4 2.1
29	FRPCOL3	Z	-54.688	-54.688	2.1 2.8
30	FRPCOL3	Z	-109.375	-109.375	2.8 3.5
31	FRPCOL3	Z	-109.375	-109.375	3.5 4.2
32	FRPCOL3	Z	-54.688	-54.688	4.2 4.9
33	FRPCOL3	Z	-109.375	-109.375	4.9 5.6
34	FRPCOL3	Z	-54.688	-54.688	5.6 6.3
35	ST BEAM2	Z	-30.625	-30.625	1.25 2.5
36	ST BEAM2	Z	-91.875	-91.875	2.5 3.75
37	ST BEAM2	Z	-61.25	-61.25	3.75 5
38	ST BEAM2	Z	-30.625	-30.625	5 6.25
39	ST BEAM2	Z	-61.25	-61.25	6.25 7.5
40	ST BEAM2	Z	-61.25	-61.25	7.5 8.75
41	ST BEAM2	Z	-91.875	-91.875	8.75 10
42	ST BEAM2	Z	-30.625	-30.625	10 11.25
43	ST BEAM2	Z	-30.625	-30.625	11.25 12.5
44	FRP BRACE1	Z	-40.793	-40.793	0 938
45	FRP BRACE1	Z	-122.38	-122.38	938 1.877
46	FRP BRACE1	Z	-81.587	-81.587	1.877 2.815
47	FRP BRACE1	Z	-163.174	-163.174	2.815 3.754
48	FRP BRACE1	Z	-203.967	-203.967	3.754 4.692
49	FRP BRACE1	Z	-203.967	-203.967	4.692 5.63
50	FRP STUB3	Z	-54.688	-54.688	0 7
51	FRP STUB3	Z	-109.375	-109.375	7 1.4
52	FRP STUB3	Z	-218.75	-218.75	1.4 2.1
53	FRP STUB3	Z	-109.375	-109.375	2.1 2.8
54	FRPCOL4	Z	-54.688	-54.688	1.4 2.1
55	FRPCOL4	Z	-109.375	-109.375	2.8 3.5
56	FRPCOL4	Z	-109.375	-109.375	3.5 4.2
57	FRPCOL4	Z	-54.688	-54.688	4.2 4.9
58	FRPCOL4	Z	-109.375	-109.375	4.9 5.6
59	FRPCOL4	Z	-54.688	-54.688	5.6 6.3
60	FRPCOL4	Z	-54.688	-54.688	6.3 7

Member Distributed Loads (BLC 10 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft.	End Magnitude[lb/ft.d.	Start Location[ft.%]	End Location[ft.%]
61	FRP_GIRT4	Z	-45.391	-45.391	0	1.25
62	FRP_GIRT4	Z	-90.781	-90.781	1.25	2.5
63	FRP_GIRT4	Z	-136.172	-136.172	2.5	3.75
64	FRP_GIRT4	Z	-45.391	-45.391	3.75	5
65	FRP_GIRT4	Z	-45.391	-45.391	6.25	7.5
66	FRP_GIRT4	Z	-45.391	-45.391	7.5	8.75
67	FRP_GIRT4	Z	-136.172	-136.172	8.75	10
68	FRP_GIRT4	Z	-90.781	-90.781	10	11.25
69	FRP_GIRT4	Z	-90.781	-90.781	11.25	12.5
70	FRP_BRACE6	Z	-241.847	-241.847	5.63	6.569
71	FRP_BRACE6	Z	-120.923	-120.923	6.569	7.507
72	FRP_BRACE6	Z	-181.385	-181.385	7.507	8.446
73	FRP_BRACE6	Z	-60.462	-60.462	8.446	9.384
74	FRP_BRACE5	Z	-60.462	-60.462	0	.938
75	FRP_BRACE5	Z	-60.462	-60.462	.938	1.877
76	FRP_BRACE5	Z	-181.385	-181.385	1.877	2.815
77	FRP_BRACE5	Z	-120.923	-120.923	2.815	3.754
78	FRP_BRACE5	Z	-362.77	-362.77	3.754	4.692
79	FRP_BRACE5	Z	-362.77	-362.77	4.692	5.63
80	FRP_BRACE5	Z	-120.923	-120.923	5.63	6.569
81	FRP_BRACE5	Z	-181.385	-181.385	6.569	7.507
82	FRP_BRACE5	Z	-60.462	-60.462	7.507	8.446
83	FRP_BRACE5	Z	-60.462	-60.462	8.446	9.384
84	FRP_STUB1	Z	-324.219	-324.219	2.8	3.5
85	FRP_STUB1	Z	-324.219	-324.219	3.5	4.2
86	FRP_STUB1	Z	-81.055	-81.055	4.2	4.9
87	FRP_STUB1	Z	-162.109	-162.109	4.9	5.6
88	FRPCOL2	Z	-81.055	-81.055	1.4	2.1
89	FRPCOL2	Z	-81.055	-81.055	2.1	2.8
90	FRPCOL2	Z	-162.109	-162.109	2.8	3.5
91	FRPCOL2	Z	-162.109	-162.109	3.5	4.2
92	FRPCOL2	Z	-81.055	-81.055	4.2	4.9
93	FRPCOL2	Z	-162.109	-162.109	4.9	5.6
94	FRPCOL2	Z	-81.055	-81.055	5.6	6.3
95	ST_BEAM4	Z	-45.391	-45.391	1.25	2.5
96	ST_BEAM4	Z	-136.172	-136.172	2.5	3.75
97	ST_BEAM4	Z	-90.781	-90.781	3.75	5
98	ST_BEAM4	Z	-45.391	-45.391	5	6.25
99	ST_BEAM4	Z	-90.781	-90.781	6.25	7.5
100	ST_BEAM4	Z	-90.781	-90.781	7.5	8.75
101	ST_BEAM4	Z	-136.172	-136.172	8.75	10
102	ST_BEAM4	Z	-45.391	-45.391	10	11.25
103	ST_BEAM4	Z	-45.391	-45.391	11.25	12.5
104	FRP_BRACE6	Z	-60.462	-60.462	0	.938
105	FRP_BRACE6	Z	-181.385	-181.385	.938	1.877
106	FRP_BRACE6	Z	-120.923	-120.923	1.877	2.815
107	FRP_BRACE6	Z	-241.847	-241.847	2.815	3.754
108	FRP_BRACE6	Z	-302.309	-302.309	3.754	4.692
109	FRP_BRACE6	Z	-302.309	-302.309	4.692	5.63
110	FRP_STUB1	Z	-81.055	-81.055	0	.7
111	FRP_STUB1	Z	-162.109	-162.109	.7	1.4
112	FRP_STUB1	Z	-324.219	-324.219	1.4	2.1
113	FRP_STUB1	Z	-162.109	-162.109	2.1	2.8
114	FRPCOL1	Z	-81.055	-81.055	1.4	2.1
115	FRPCOL1	Z	-162.109	-162.109	2.8	3.5
116	FRPCOL1	Z	-162.109	-162.109	3.5	4.2
117	FRPCOL1	Z	-81.055	-81.055	4.2	4.9

Member Distributed Loads (BLC 10 : BLC 6 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft.d...	Start Location[ft.%]	End Location[ft.%]
118 FRPCOL1	Z	-162.109	-162.109	4.9	5.6
119 FRPCOL1	Z	-81.055	-81.055	5.6	6.3
120 FRPCOL1	Z	-81.055	-81.055	6.3	7

Member Distributed Loads (BLC 11 : BLC 5 Transient Area Loads)

Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft.d...	Start Location[ft.%]	End Location[ft.%]
1 FRP GIRT2	Z	45.391	45.391	0	1.25
2 FRP GIRT2	Z	90.781	90.781	1.25	2.5
3 FRP GIRT2	Z	136.172	136.172	2.5	3.75
4 FRP GIRT2	Z	45.391	45.391	3.75	5
5 FRP GIRT2	Z	45.391	45.391	6.25	7.5
6 FRP GIRT2	Z	45.391	45.391	7.5	8.75
7 FRP GIRT2	Z	136.172	136.172	8.75	10
8 FRP GIRT2	Z	90.781	90.781	10	11.25
9 FRP GIRT2	Z	90.781	90.781	11.25	12.5
10 FRP BRACE2	Z	60.462	60.462	0	.938
11 FRP BRACE2	Z	60.462	60.462	.938	1.877
12 FRP BRACE2	Z	181.385	181.385	1.877	2.815
13 FRP BRACE2	Z	120.923	120.923	2.815	3.754
14 FRP BRACE2	Z	362.77	362.77	3.754	4.692
15 FRP BRACE2	Z	362.77	362.77	4.692	5.63
16 FRP BRACE2	Z	120.923	120.923	5.63	6.569
17 FRP BRACE2	Z	181.385	181.385	6.569	7.507
18 FRP BRACE2	Z	60.462	60.462	7.507	8.446
19 FRP BRACE2	Z	60.462	60.462	8.446	9.384
20 FRP BRACE1	Z	241.847	241.847	5.63	6.569
21 FRP BRACE1	Z	120.923	120.923	6.569	7.507
22 FRP BRACE1	Z	181.385	181.385	7.507	8.446
23 FRP BRACE1	Z	60.462	60.462	8.446	9.384
24 FRP STUB3	Z	324.219	324.219	2.8	3.5
25 FRP STUB3	Z	324.219	324.219	3.5	4.2
26 FRP STUB3	Z	81.055	81.055	4.2	4.9
27 FRP STUB3	Z	162.109	162.109	4.9	5.6
28 FRPCOL3	Z	81.055	81.055	1.4	2.1
29 FRPCOL3	Z	81.055	81.055	2.1	2.8
30 FRPCOL3	Z	162.109	162.109	2.8	3.5
31 FRPCOL3	Z	162.109	162.109	3.5	4.2
32 FRPCOL3	Z	81.055	81.055	4.2	4.9
33 FRPCOL3	Z	162.109	162.109	4.9	5.6
34 FRPCOL3	Z	81.055	81.055	5.6	6.3
35 ST BEAM2	Z	45.391	45.391	1.25	2.5
36 ST BEAM2	Z	136.172	136.172	2.5	3.75
37 ST BEAM2	Z	90.781	90.781	3.75	5
38 ST BEAM2	Z	45.391	45.391	5	6.25
39 ST BEAM2	Z	90.781	90.781	6.25	7.5
40 ST BEAM2	Z	90.781	90.781	7.5	8.75
41 ST BEAM2	Z	136.172	136.172	8.75	10
42 ST BEAM2	Z	45.391	45.391	10	11.25
43 ST BEAM2	Z	45.391	45.391	11.25	12.5
44 FRP BRACE1	Z	60.462	60.462	0	.938
45 FRP BRACE1	Z	181.385	181.385	.938	1.877
46 FRP BRACE1	Z	120.923	120.923	1.877	2.815
47 FRP BRACE1	Z	241.847	241.847	2.815	3.754
48 FRP BRACE1	Z	302.309	302.309	3.754	4.692
49 FRP BRACE1	Z	302.309	302.309	4.692	5.63
50 FRP STUB3	Z	81.055	81.055	0	.7
51 FRP STUB3	Z	162.109	162.109	.7	1.4

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Member Distributed Loads (BLC 11 : BLC 5 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft]	End Magnitude[lb/ft]	Start Location[ft.%]	End Location[ft.%]
52	FRP_STUB3	Z	324.219	324.219	1.4 2.1
53	FRP_STUB3	Z	162.109	162.109	2.1 2.8
54	FRPCOL4	Z	81.055	81.055	1.4 2.1
55	FRPCOL4	Z	162.109	162.109	2.8 3.5
56	FRPCOL4	Z	162.109	162.109	3.5 4.2
57	FRPCOL4	Z	81.055	81.055	4.2 4.9
58	FRPCOL4	Z	162.109	162.109	4.9 5.6
59	FRPCOL4	Z	81.055	81.055	5.6 6.3
60	FRPCOL4	Z	81.055	81.055	6.3 7
61	FRP_GIRT4	Z	30.625	30.625	0 1.25
62	FRP_GIRT4	Z	61.25	61.25	1.25 2.5
63	FRP_GIRT4	Z	91.875	91.875	2.5 3.75
64	FRP_GIRT4	Z	30.625	30.625	3.75 5
65	FRP_GIRT4	Z	30.625	30.625	6.25 7.5
66	FRP_GIRT4	Z	30.625	30.625	7.5 8.75
67	FRP_GIRT4	Z	91.875	91.875	8.75 10
68	FRP_GIRT4	Z	61.25	61.25	10 11.25
69	FRP_GIRT4	Z	61.25	61.25	11.25 12.5
70	FRP_BRACE6	Z	163.174	163.174	5.63 6.569
71	FRP_BRACE6	Z	81.587	81.587	6.569 7.507
72	FRP_BRACE6	Z	122.38	122.38	7.507 8.446
73	FRP_BRACE6	Z	40.793	40.793	8.446 9.384
74	FRP_BRACE5	Z	40.793	40.793	0 938
75	FRP_BRACE5	Z	40.793	40.793	938 1.877
76	FRP_BRACE5	Z	122.38	122.38	1.877 2.815
77	FRP_BRACE5	Z	81.587	81.587	2.815 3.754
78	FRP_BRACE5	Z	244.761	244.761	3.754 4.692
79	FRP_BRACE5	Z	244.761	244.761	4.692 5.63
80	FRP_BRACE5	Z	81.587	81.587	5.63 6.569
81	FRP_BRACE5	Z	122.38	122.38	6.569 7.507
82	FRP_BRACE5	Z	40.793	40.793	7.507 8.446
83	FRP_BRACE5	Z	40.793	40.793	8.446 9.384
84	FRP_STUB1	Z	218.75	218.75	2.8 3.5
85	FRP_STUB1	Z	218.75	218.75	3.5 4.2
86	FRP_STUB1	Z	54.688	54.688	4.2 4.9
87	FRP_STUB1	Z	109.375	109.375	4.9 5.6
88	FRPCOL2	Z	54.688	54.688	1.4 2.1
89	FRPCOL2	Z	54.688	54.688	2.1 2.8
90	FRPCOL2	Z	109.375	109.375	2.8 3.5
91	FRPCOL2	Z	109.375	109.375	3.5 4.2
92	FRPCOL2	Z	54.688	54.688	4.2 4.9
93	FRPCOL2	Z	109.375	109.375	4.9 5.6
94	FRPCOL2	Z	54.688	54.688	5.6 6.3
95	ST_BEAM4	Z	30.625	30.625	1.25 2.5
96	ST_BEAM4	Z	91.875	91.875	2.5 3.75
97	ST_BEAM4	Z	61.25	61.25	3.75 5
98	ST_BEAM4	Z	30.625	30.625	5 6.25
99	ST_BEAM4	Z	61.25	61.25	6.25 7.5
100	ST_BEAM4	Z	61.25	61.25	7.5 8.75
101	ST_BEAM4	Z	91.875	91.875	8.75 10
102	ST_BEAM4	Z	30.625	30.625	10 11.25
103	ST_BEAM4	Z	30.625	30.625	11.25 12.5
104	FRP_BRACE6	Z	40.793	40.793	0 938
105	FRP_BRACE6	Z	122.38	122.38	938 1.877
106	FRP_BRACE6	Z	81.587	81.587	1.877 2.815
107	FRP_BRACE6	Z	163.174	163.174	2.815 3.754
108	FRP_BRACE6	Z	203.967	203.967	3.754 4.692

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Member Distributed Loads (BLC 11 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft.]	End Magnitude[lb/ft.d.]	Start Location[ft.%,]	End Location[ft.%,]
109	FRP BRACE6	Z	203.967	203.967	4.692	5.63
110	FRP STUB1	Z	54.688	54.688	0	7
111	FRP STUB1	Z	109.375	109.375	7	1.4
112	FRP STUB1	Z	218.75	218.75	1.4	2.1
113	FRP STUB1	Z	109.375	109.375	2.1	2.8
114	FRPCOL1	Z	54.688	54.688	1.4	2.1
115	FRPCOL1	Z	109.375	109.375	2.8	3.5
116	FRPCOL1	Z	109.375	109.375	3.5	4.2
117	FRPCOL1	Z	54.688	54.688	4.2	4.9
118	FRPCOL1	Z	109.375	109.375	4.9	5.6
119	FRPCOL1	Z	54.688	54.688	5.6	6.3
120	FRPCOL1	Z	54.688	54.688	6.3	7

Member Area Loads (BLC 3 : +WLX)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	N15	N11	N9	N13	X	Two Way	83
2	N16	N12	N10	N14	X	Two Way	56

Member Area Loads (BLC 4 : -WLX)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	N15	N11	N9	N13	X	Two Way	-56
2	N16	N12	N10	N14	X	Two Way	-83

Member Area Loads (BLC 5 : +WLZ)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	N15	N16	N12	N11	Z	Two Way	83
2	N13	N14	N10	N9	Z	Two Way	56

Member Area Loads (BLC 6 : -WLZ)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	N15	N16	N12	N11	Z	Two Way	-56
2	N13	N14	N10	N9	Z	Two Way	-83

Envelope Member Section Forces

	Member	Sec	Axial[lb]	LC	y Shear[lb]	LC	z Shear	LC Torqu	LC y-y Mome	LC z-z Moment[lb-i	LC	
1	STCOL1	1	m... 10824.949	26	3414.615	29	.247	27	0	24	0	24
2			min -5951.461	42	-4613.424	26	-255	26	0	24	0	24
3		2	m... 10748.601	26	3414.615	29	.247	27	0	24	7.297	27
4			min -5951.461	42	-4613.424	26	-255	26	0	24	-7.514	26
5		3	m... 10672.253	26	3414.615	29	.247	27	0	24	14.595	27
6			min -5951.461	42	-4613.424	26	-255	26	0	24	-15.028	26
7		4	m... 10595.904	26	3414.615	29	.247	27	0	24	21.892	27
8			min -5951.461	42	-4613.424	26	-255	26	0	24	-22.541	26
9		5	m... 10519.556	26	3414.615	29	.247	27	0	24	29.189	27
10			min -5951.461	42	-4613.424	26	-255	26	0	24	-30.055	26
11	STCOL4	1	m... 5506.082	32	2967.704	42	.249	27	0	24	0	24
12			min -5896.364	42	-2259.339	32	-.249	26	0	24	0	24
13		2	m... 5460.273	32	2967.704	42	.249	27	0	24	7.338	27
14			min -5896.364	42	-2259.339	32	-.249	26	0	24	-7.342	26
15		3	m... 5414.464	32	2967.704	42	.249	27	0	24	14.675	27
16			min -5896.364	42	-2259.339	32	-.249	26	0	24	-14.684	26
17		4	m... 5368.655	32	2967.704	42	.249	27	0	24	22.013	27
18			min -5896.364	42	-2259.339	32	-.249	26	0	24	-22.026	26

Envelope Member Section Forces (Continued)

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z She	LC Torqu	LC y-y Mome	LC z-z Moment[lb-i	LC	
19	5	m.	5322.846	32	2967.704	42	249	27 0	24 29.35	27 266511.57	32	
20		min	-5896.364	42	-2259.339	32	-249	26 0	24 -29.369	26 -350070.328	42	
21	STCOL3	1	m.	7808.812	25	3024.389	25	.166	26 0	24 0	24 0	24
22		min	-10229.764	35	-2217.026	32	-.162	27 0	24 0	24 0	24 0	24
23		2	m.	7732.464	25	3024.389	25	.166	26 0	24 4.896	26 65380.109	32
24		min	-10275.573	35	-2217.026	32	-.162	27 0	24 -4.765	27 -89189.233	25	
25		3	m.	7656.116	25	3024.389	25	.166	26 0	24 9.793	26 130760.218	32
26		min	-10321.381	35	-2217.026	32	-.162	27 0	24 -9.53	27 -178378.465	25	
27		4	m.	7579.768	25	3024.389	25	.166	26 0	24 14.689	26 196140.327	32
28		min	-10367.19	35	-2217.026	32	-.162	27 0	24 -14.296	27 -267567.698	25	
29		5	m.	7503.42	25	3024.389	25	.166	26 0	24 19.586	26 261520.436	32
30		min	-10412.999	35	-2217.026	32	-.162	27 0	24 -19.061	27 -356756.931	25	
31	STCOL2	1	m.	14072.129	29	3457.237	29	.167	26 0	24 0	24 0	24
32		min	-17298.786	43	-4541.941	26	-.165	27 0	24 0	24 0	24 0	24
33		2	m.	14026.32	29	3457.237	29	.167	26 0	24 4.926	26 133941.838	26
34		min	-17298.786	43	-4541.941	26	-.165	27 0	24 -4.868	27 -101953.917	29	
35		3	m.	13980.511	29	3457.237	29	.167	26 0	24 9.851	26 267883.675	26
36		min	-17298.786	43	-4541.941	26	-.165	27 0	24 -9.737	27 -203907.834	29	
37		4	m.	13934.702	29	3457.237	29	.167	26 0	24 14.777	26 401825.513	26
38		min	-17298.786	43	-4541.941	26	-.165	27 0	24 -14.605	27 -305861.751	29	
39		5	m.	13888.894	29	3457.237	29	.167	26 0	24 19.702	26 535767.35	26
40		min	-17298.786	43	-4541.941	26	-.165	27 0	24 -19.474	27 -407815.668	29	
41	FRP_GIRT2	1	m.	1747.322	25	1475.879	27	99.535	27 22.843	27 0	24 0	24
42		min	-1609.847	27	-985.77	26	-.03	43 -22.704	26 0	24 0	24 0	24
43		2	m.	1747.322	25	1220.556	27	0	41 22.843	27 1277.347	27 34454.184	26
44		min	-1609.847	27	-813.505	26	-31.445	26 -22.704	26 -1.12	43 -51622.001	27 0	27
45		3	m.	1747.322	25	1078.711	27	162.39	26 22.843	27 0	41 62193.908	26
46		min	-1609.847	27	-717.802	26	-97.446	34 -22.704	26 -2358.388	26 -93276.211	27 0	27
47		4	m.	1548.418	27	813.94	26	31.445	26 12.554	27 1277.347	27 34757.599	26
48		min	-1223.034	25	-1220.987	27	0	41 -12.921	26 -1.12	43 -52063.704	27 0	27
49		5	m.	1548.418	27	1024.486	26	.03	43 12.554	27 0	24 0	24
50		min	-1223.034	25	-1533.048	27	-99.535	27 -12.921	26 0	24 0	24 0	24
51	FRP_GIRT3	1	m.	3328.005	27	1427.788	26	97.972	25 2.257	42 0	24 0	24
52		min	-2823.853	26	-962.037	25	-.123	43 -3.599	26 0	24 0	24 0	24
53		2	m.	3328.005	27	1177.572	26	.075	42 2.257	42 1242.468	25 32942.154	25
54		min	-2823.853	26	-793.217	25	-30.553	26 -3.599	26 -4.522	43 -48895.193	26 0	26
55		3	m.	3328.005	27	1038.563	26	158.8...	27 2.466	32 5.526	42 59404.421	25
56		min	-27.631	25	-699.428	25	-158.8...	26 -3.599	26 -2245.621	26 -88186.268	26 0	26
57		4	m.	3297.519	26	793.215	25	30.553	26 2.466	32 1242.468	25 33217.819	25
58		min	-2791.651	27	-1177.449	26	-.075	42 -2.467	42 -4.522	43 -49299.371	26 0	26
59		5	m.	3297.519	26	999.551	25	123	43 2.466	32 0	24 0	24
60		min	-2791.651	27	-1483.268	26	97.972	25 -2.467	42 0	24 0	24 0	24
61	FRP_GIRT1	1	m.	383.462	32	940.142	26	80.536	27 823	27 0	24 0	24
62		min	-27.58	25	-1388.557	25	0	41 -.85	26 0	24 0	24 0	24
63		2	m.	383.462	32	790.079	26	0	43 823	27 601.587	27 47555.4	25
64		min	-27.58	25	-1166.143	25	-47.979	26 -.85	26 0	41 -32206.264	26 0	26
65		3	m.	383.453	32	8.583	25	6.194	26 823	27 1127.796	27 63063.781	25
66		min	-27.572	42	-5.903	26	0	41 -.85	26 0	41 -42702.988	26 0	26
67		4	m.	383.443	32	1201.74	25	52.494	27 823	27 435.871	26 48352.891	25
68		min	-27.572	42	-814.145	26	-.001	43 -.85	26 0	41 -32746.113	26 0	26
69		5	m.	383.443	32	1451.956	25	0	41 823	27 0	24 0	24
70		min	-27.572	42	-982.966	26	-76.026	26 -.85	26 0	24 0	24 0	24
71	FRP_GIRT4	1	m.	2447.271	29	965.368	27	99.539	27 22.537	27 0	24 0	24
72		min	-2868.26	26	-1497.698	26	-.028	42 -23.019	26 0	24 0	24 0	24
73		2	m.	2447.271	29	793.103	27	0	41 22.537	27 1277.482	27 52440.208	26
74		min	-2868.26	26	-1242.375	26	-31.439	25 -23.019	26 -1.032	42 -33689.1	27 0	27
75		3	m.	3294.533	26	697.399	27	162.3...	25 22.537	27 0	41 94912.894	26

Company : MACTEC
 Designer : ZL/AA
 Job Number : 6788-09-1916 (41)

May 26, 2010
 12:12 PM
 Checked By: _____

Envelope Member Section Forces (Continued)

Member	Sec		Axial[lb]	LC	v Shear[lb]	LC	z Shear[lb]	LC Torqu.	LC v-y Mome.	LC z-z Moment[lb-i.	LC			
76		min	-1578.206	27	-1100.53	26	-97.441	33	-23.019	26	-2357.949	25	-60663.495	27
77		4	m...3294.533	26	1242.81	26	31.439	25	12.822	27	1277.482	27	52882.045	26
78		min	-2115.279	29	-793.534	27	0	41	-12.666	26	-1.032	42	-33992.392	27
79		5	m...3294.533	26	1554.87	26	0.28	42	12.822	27	0	24	0	24
80		min	-2115.279	29	-1004.081	27	-99.539	27	-12.666	26	0	24	0	24
81	ST BEAM1	1	m...538.624	42	628.401	25	1425...	42	132.95	27	0	24	0	24
82		min	-457.808	26	0	43	-959.4	43	-133.8	26	0	24	0	24
83		2	m...538.624	42	426.07	25	1147...	42	132.95	27	47268.645	42	0.16	43
84		min	-457.808	26	0	43	-771.8	43	-133.8	26	-31812.291	43	-19375.727	25
85		3	m...538.624	42	0	41	11.426	43	132.95	27	62356.936	42	.037	43
86		min	-453.194	26	-7.176	26	-17.029	42	-133.8	26	-41970.377	43	-25432.392	27
87		4	m...538.624	42	.001	43	800.3...	43	132.95	27	48414.842	42	.045	43
88		min	-448.757	26	-432.681	27	-1189...	42	-133.8	26	-32584.422	43	-19618.735	27
89		5	m...538.624	42	.001	43	950.4...	43	132.95	27	0	24	0	24
90		min	-448.757	26	-635.013	27	-1411...	42	-133.8	26	0	24	0	24
91	ST BEAM4	1	m...223.523	42	7508.339	26	762.8...	26	18.245	26	12.818	27	544065.628	26
92		min	-303.806	27	-5216.954	29	-514.9...	27	-17.745	27	-13.227	26	-402688.089	29
93		2	m...223.523	42	7301.878	26	620.9...	26	18.245	26	27422.77	26	267192.296	43
94		min	-303.806	27	-5340.83	29	-419.2...	27	-17.745	27	-18509.342	27	-204729.649	29
95		3	m...223.524	42	7300.578	26	365.6...	26	18.245	26	44858.644	26	73.01	42
96		min	-303.806	27	-5464.706	29	-247.01	27	-17.745	27	-30284.432	27	-3619.654	27
97		4	m...223.524	42	7125.715	43	418.7...	27	18.245	26	27847.226	26	200472.784	29
98		min	-303.716	27	-5464.568	29	-620.5...	26	-17.745	27	-18797.156	27	-273475.792	26
99		5	m...223.524	42	7125.715	43	552.7...	27	18.245	26	2.619	42	407716.777	29
100		min	-303.716	27	-5588.445	29	-819.1...	26	-17.745	27	-6.202	27	-535634.077	26
101	ST BEAM2	1	m...254.291	43	3705.438	32	515.4...	26	17.841	26	13.129	27	266512.109	32
102		min	-302.157	27	-4668.488	42	-762.5...	27	-17.628	27	-12.911	26	-350071.366	42
103		2	m...254.291	43	3581.561	32	419.76	26	17.841	26	18527.42	26	129880.883	32
104		min	-302.157	27	-4668.488	42	-620.7...	27	-17.628	27	-27413.362	27	-179833.808	25
105		3	m...254.291	43	3582.725	32	247.4...	26	17.841	26	30320.68	26	80.079	43
106		min	-302.247	27	-4804.368	25	-365.4...	27	-17.628	27	-44839.731	27	-3618.968	27
107		4	m...254.291	43	3458.848	32	620.2...	27	17.841	26	18816.801	26	175016.793	42
108		min	-302.247	27	-4803.956	25	-419.2...	26	-17.628	27	-27839.342	27	-134134.469	32
109		5	m...254.291	43	3334.972	32	818.8...	27	17.841	26	9.377	26	356755.584	25
110		min	-302.247	27	-5010.417	25	-553.2...	26	-17.628	27	-6.071	29	-261518.594	32
111	ST BEAM3	1	m...853.26	43	249.462	25	502.7...	25	132.9	27	0	24	0	24
112		min	-1003.331	25	-3.592	43	-747.6...	26	-133.9	26	0	24	0	24
113		2	m...853.26	43	47.131	25	408.9...	25	132.9	27	17718.252	25	132.021	43
114		min	-1003.331	25	-3.592	43	-608.6...	26	-133.9	26	-26352.23	26	-5449.903	25
115		3	m...853.26	43	160.956	26	240.1...	25	132.9	27	28956.65	25	264.042	43
116		min	-1003.331	25	-158.768	27	-358.4...	26	-133.9	26	-43101.215	26	-3464.129	25
117		4	m...853.255	43	3.592	43	608.6...	26	132.9	27	17994.008	25	132.021	43
118		min	-1003.331	25	-47.131	25	-408.9...	25	-133.9	26	-26761.352	26	-5449.903	25
119		5	m...853.255	43	3.592	43	803.2...	26	132.9	27	0	24	0	24
120		min	-1003.331	25	249.462	25	-540.2...	25	-133.9	26	0	24	0	24
121	FRP BRACE6	1	m...5080.328	26	21.57	26	851.0...	26	17.732	26	0	24	0	24
122		min	-3152.294	29	0	41	-574.2...	27	-17.184	27	0	24	0	24
123		2	m...5068.249	26	10.785	26	567.3...	26	17.732	26	20605.476	26	0	41
124		min	-3159.541	29	0	41	-382.8...	27	-17.184	27	-13902.49	27	-455.433	26
125		3	m...5056.17	26	0	24	0	24	17.732	26	29710.221	26	0	41
126		min	-3166.789	29	0	24	0	24	-17.184	27	-20045.45	27	-607.244	26
127		4	m...5044.091	26	0	41	382.8...	27	17.732	26	20605.476	26	0	41
128		min	-3174.036	29	-10.785	25	-567.3...	26	-17.184	27	-13902.49	27	-455.433	26
129		5	m...5032.011	26	0	41	574.2...	27	17.732	26	0	24	0	24
130		min	-3181.284	29	-21.57	25	-851.0...	26	-17.184	27	0	24	0	24
131	FRP BRACE5	1	m...3698.196	29	21.57	25	497.6...	27	2.187	26	0	24	0	24
132		min	-4600.957	43	0	41	-737.5...	26	-2.596	27	0	24	0	24

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Envelope Member Section Forces (Continued)

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC Torque[lb-ft]	LC y-y Moment[lb-ft]	LC z-z Moment[lb-ft]	LC				
133	2	m..	3690.949	29	10.785	25	363.6...	27	2.187	26	12555.349	27	0	41	
134		min	-4600.957	43	0	41	-539.0...	26	-2.596	27	-18608.821	26	-455.433	25	
135	3	m..	3683.701	29	0	24	0	24	2.187	26	18752.195	27	0	41	
136		min	-4600.957	43	0	24	0	24	-2.596	27	-27793.432	26	-607.244	25	
137	4	m..	3676.454	29	0	41	539.0...	26	2.187	26	12555.349	27	0	41	
138		min	-4600.957	43	-10.785	24	-363.6...	27	-2.596	27	-18608.821	26	-455.433	25	
139	5	m..	3669.206	29	0	41	737.5...	26	2.187	26	0	24	0	24	
140		min	-4600.957	43	-21.57	24	-497.6...	27	-2.596	27	0	24	0	24	
141	FRP_BRACE2	1	m..	2685.946	25	21.57	26	737.5...	27	2.62	26	0	24	0	24
142		min	-2090.079	35	0	41	-497.6...	26	-2.152	27	0	24	0	24	
143	2	m..	2673.867	25	10.785	26	539.0...	27	2.62	26	18608.821	27	0	41	
144		min	-2097.327	35	0	41	-363.6...	26	-2.152	27	-12555.349	26	-455.433	26	
145	3	m..	2661.788	25	0	24	0	24	2.62	26	27793.432	27	0	41	
146		min	-2104.574	35	0	24	0	24	-2.152	27	-18752.195	26	-607.244	26	
147	4	m..	2649.709	25	0	41	363.6...	26	2.62	26	18608.821	27	0	41	
148		min	-2111.822	35	-10.785	25	-539.0...	27	-2.152	27	-12555.349	26	-455.433	26	
149	5	m..	2637.63	25	0	41	497.6...	26	2.62	26	0	24	0	24	
150		min	-2119.069	35	-21.57	25	-737.5...	27	-2.152	27	0	24	0	24	
151	FRP_BRACE1	1	m..	2824.39	27	21.57	27	574.2...	26	17.309	26	0	24	0	24
152		min	-2225.644	42	0	41	-851.0...	27	-17.6	27	0	24	0	24	
153	2	m..	2812.311	27	10.785	27	382.8...	26	17.309	26	13902.49	26	0	41	
154		min	-2225.644	42	0	41	-567.3...	27	-17.6	27	-20605.476	27	-455.433	27	
155	3	m..	2800.232	27	0	24	0	24	17.309	26	20045.45	26	0	41	
156		min	-2225.644	42	0	24	0	24	-17.6	27	-29710.221	27	-607.244	27	
157	4	m..	2788.153	27	0	41	567.3...	27	17.309	26	13902.49	26	0	41	
158		min	-2225.644	42	-10.785	26	-382.8...	26	-17.6	27	-20605.476	27	-455.433	27	
159	5	m..	2776.073	27	0	41	851.0...	27	17.309	26	0	24	0	24	
160		min	-2225.644	42	-21.57	26	-574.2...	26	-17.6	27	0	24	0	24	
161	FRP_BRACE4	1	m..	5166.038	27	21.138	26	722.8...	26	3.509	42	0	24	0	24
162		min	-4614.722	43	0	41	-487.7...	25	-5.667	27	0	24	0	24	
163	2	m..	5153.958	27	10.569	26	528.2...	26	3.509	42	18075.766	26	0	41	
164		min	-4614.722	43	0	41	-356.3...	25	-5.667	27	-12195.697	25	-442.387	26	
165	3	m..	5141.879	27	0	24	0	24	3.509	42	26997.281	26	0	41	
166		min	-4614.722	43	0	24	0	24	-5.667	27	-18215.033	25	-589.849	26	
167	4	m..	5129.8	27	0	41	356.3...	25	3.509	42	18075.766	26	0	41	
168		min	-4614.722	43	-10.569	24	-528.2...	26	-5.667	27	-12195.697	25	-442.387	26	
169	5	m..	5117.721	27	0	41	487.7...	25	3.509	42	0	24	0	24	
170		min	-4614.722	43	-21.138	24	-722.8...	26	-5.667	27	0	24	0	24	
171	FRP_BRACE3	1	m..	5170.427	26	21.138	24	562.7...	25	9.862	26	0	24	0	24
172		min	-4322.841	35	0	41	-834.0...	26	-6.467	29	0	24	0	24	
173	2	m..	5158.348	26	10.569	24	356.3...	25	9.862	26	13451.907	25	0	41	
174		min	-4330.089	35	0	41	-528.2...	26	-6.467	29	-19937.647	26	-442.387	24	
175	3	m..	5146.269	26	0	24	0	24	9.862	26	19052.506	25	0	41	
176		min	-4337.336	35	0	24	0	24	-6.467	29	-28238.535	26	-589.849	24	
177	4	m..	5134.189	26	0	41	528.2...	26	9.862	26	13451.907	25	0	41	
178		min	-4344.584	35	-10.569	27	-356.3...	25	-6.467	29	-19937.647	26	-442.387	24	
179	5	m..	5122.11	26	0	41	834.0...	26	9.862	26	0	24	0	24	
180		min	-4351.831	35	-21.138	27	-562.7...	25	-6.467	29	0	24	0	24	
181	FRP_STUB2	1	m..	4.343	42	442.684	25	0	24	873	26	0	24	0	24
182		min	-321.983	26	-656.121	26	0	24	-824	27	0	24	0	24	
183	2	m..	4.343	42	255.106	25	0	24	873	26	0	24	11676.738	26	
184		min	-334.062	26	-378.104	26	0	24	-824	27	0	24	-7878.281	25	
185	3	m..	4.343	42	66.724	26	0	24	873	26	0	24	15179.76	26	
186		min	-346.141	26	-45.019	25	0	24	-824	27	0	24	-10241.766	25	
187	4	m..	4.343	42	400.345	26	0	24	873	26	0	24	9458.158	26	
188		min	-358.22	26	-270.113	25	0	24	-824	27	0	24	-6381.408	25	
189	5	m..	4.343	42	455.949	26	0	24	873	26	0	24	0	24	

Envelope Member Section Forces (Continued)

Member	Sec		Axial(lb)	LC	y Shear(lb)	LC	z She	LC Torqu	LC y-y Mome	LC z-z Moment(lb-ft)	LC				
190		min	-370.299	26	-307.628	25	0	24	-824.27	0	24	0	24		
191	FRP_STUB1	1	m...	0	41	669.512	26	0	24	17.741	26	0	24	24	
192		min	-207.242	25	-451.719	27	0	24	-17.611	27	0	24	0	24	
193		2	m...	0	41	385.82	26	0	24	17.741	26	0	24	8039.062	27
194		min	-219.321	25	-260.312	27	0	24	-17.611	27	0	24	-11915.039	26	
195		3	m...	0	41	45.938	27	0	24	17.741	26	0	24	10450.781	27
196		min	-231.4	25	-68.086	26	0	24	-17.611	27	0	24	-15489.551	26	
197		4	m...	0	41	275.625	27	0	24	17.741	26	0	24	6511.641	27
198		min	-243.479	25	-408.516	26	0	24	-17.611	27	0	24	-9651.182	26	
199		5	m...	0	41	313.906	27	0	24	17.741	26	0	24	0	24
200		min	-255.558	25	-465.254	26	0	24	-17.611	27	0	24	0	24	
201	FRP_STUB3	1	m...	0	41	451.719	26	0	24	17.745	26	0	24	0	24
202		min	-207.533	26	-669.512	35	0	24	-17.597	27	0	24	0	24	
203		2	m...	0	41	260.312	26	0	24	17.745	26	0	24	11915.039	35
204		min	-219.612	26	-385.82	35	0	24	-17.597	27	0	24	-8039.062	26	
205		3	m...	0	41	68.086	27	0	24	17.745	26	0	24	15489.551	35
206		min	-231.692	26	-45.938	26	0	24	-17.597	27	0	24	-10450.781	26	
207		4	m...	0	41	408.516	27	0	24	17.745	26	0	24	9651.182	35
208		min	-243.771	26	-275.625	26	0	24	-17.597	27	0	24	-6511.641	26	
209		5	m...	0	41	465.254	27	0	24	17.745	26	0	24	0	24
210		min	-255.85	26	-313.906	26	0	24	-17.597	27	0	24	0	24	
211	X1	1	m...	2198.289	27	60.025	27	0	24	0	24	0	24	0	24
212		min	-1201.248	43	0	41	0	24	0	24	0	24	0	24	24
213		2	m...	2174.206	27	30.013	27	0	24	0	24	0	24	0	41
214		min	-1201.248	43	0	41	0	24	0	24	0	24	-2121.251	27	
215		3	m...	2150.122	27	0	24	0	24	0	24	0	24	0	41
216		min	-1201.248	43	0	24	0	24	0	24	0	24	-2828.334	27	
217		4	m...	2126.038	27	0	41	0	24	0	24	0	24	0	41
218		min	-1201.248	43	-30.013	26	0	24	0	24	0	24	-2121.251	27	
219		5	m...	2101.955	27	0	41	0	24	0	24	0	24	0	24
220		min	-1201.248	43	-60.025	26	0	24	0	24	0	24	0	24	24
221	X2	1	m...	2747.49	26	60.025	25	0	24	0	24	0	24	0	24
222		min	-1905.742	29	0	41	0	24	0	24	0	24	0	24	24
223		2	m...	2771.574	26	30.013	25	0	24	0	24	0	24	0	41
224		min	-1891.292	29	0	41	0	24	0	24	0	24	-2121.251	25	
225		3	m...	2795.657	26	0	24	0	24	0	24	0	24	0	41
226		min	-1876.842	29	0	24	0	24	0	24	0	24	-2828.334	25	
227		4	m...	2819.741	26	0	41	0	24	0	24	0	24	0	41
228		min	-1862.392	29	-30.013	26	0	24	0	24	0	24	-2121.251	25	
229		5	m...	2843.824	26	0	41	0	24	0	24	0	24	0	24
230		min	-1847.942	29	-60.025	26	0	24	0	24	0	24	0	24	24
231	X3	1	m...	6010.05	27	60.025	26	0	24	0	24	0	24	0	24
232		min	-6554.29	43	0	41	0	24	0	24	0	24	0	24	24
233		2	m...	6034.133	27	30.013	26	0	24	0	24	0	24	0	41
234		min	-6554.29	43	0	41	0	24	0	24	0	24	-2121.251	26	
235		3	m...	6058.217	27	0	24	0	24	0	24	0	24	0	41
236		min	-6554.29	43	0	24	0	24	0	24	0	24	-2828.334	26	
237		4	m...	6082.3	27	0	41	0	24	0	24	0	24	0	41
238		min	-6554.29	43	-30.013	27	0	24	0	24	0	24	-2121.251	26	
239		5	m...	6106.384	27	0	41	0	24	0	24	0	24	0	24
240		min	-6554.29	43	-60.025	27	0	24	0	24	0	24	0	24	24
241	X4	1	m...	5458.447	26	60.025	26	0	24	0	24	0	24	0	24
242		min	-5694.827	35	0	41	0	24	0	24	0	24	0	24	24
243		2	m...	5434.363	26	30.013	26	0	24	0	24	0	24	0	41
244		min	-5709.277	35	0	41	0	24	0	24	0	24	-2121.251	26	
245		3	m...	5410.279	26	0	24	0	24	0	24	0	24	0	41
246		min	-5723.727	35	0	24	0	24	0	24	0	24	-2828.334	26	

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Envelope Member Section Forces (Continued)

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear	LC Torqu	LC y-y Mome	LC z-z Moment[lb-i	LC
247	4	m...	5386.196	26	0	41	0	24 0	24 0	24 0	41
248		min	-5738.177	35	-30.013	27	0	24 0	24 0	24 -2121.251	26
249	5	m...	5362.112	26	0	41	0	24 0	24 0	24 0	24
250		min	-5752.628	35	-60.025	27	0	24 0	24 0	24 0	24
251	FRP STUB4	1	m...	230.98	26	939.699	25	0	24 7.663	26 0	24
252		min	0	42	-634.014	26	0	24 -10.069	25 0	24 0	24
253		2	m...	218.901	26	633.88	25	0	24 7.663	26 0	24
254		min	0	42	-427.678	26	0	24 -10.069	25 0	24 -11856.813	26
255		3	m...	206.822	26	3.752	26	0	24 7.663	26 0	24
256		min	0	42	-5.56	25	0	24 -10.069	25 0	24 -17573.491	25
257		4	m...	194.743	26	435.181	26	0	24 7.663	26 0	24
258		min	0	42	-645.001	25	0	24 -10.069	25 0	24 16701.956	26
259		5	m...	182.663	26	641.517	26	0	24 7.663	26 0	24
260		min	0	42	-950.82	25	0	24 -10.069	25 0	24 -24754.685	25
261	FRP TOP1	1	m...	2296.11	26	31.268	26	0	32 2.895	27 0	24
262		min	-2143.557	27	-311	43	-.005	26 -2.89	26 0	24 0	24
263		2	m...	2296.11	26	26.316	26	0	32 2.895	27 .005	32
264		min	-2143.557	27	-311	43	-.005	26 -2.89	26 -.138	26 -755.859	26
265		3	m...	2296.11	26	21.363	26	0	32 2.895	27 .01	32
266		min	-2143.557	27	-311	43	-.005	26 -2.89	26 -.276	26 -1381.707	26
267		4	m...	2296.11	26	16.411	26	0	32 2.895	27 .015	32
268		min	-2143.557	27	-311	43	-.005	26 -2.89	26 -.414	26 -1877.544	26
269		5	m...	2296.11	26	11.459	26	0	32 2.895	27 .02	32
270		min	-2143.557	27	-311	43	-.005	26 -2.89	26 -.552	26 -2243.37	26
271	FRP TOP3	1	m...	2296.11	26	.248	43	.005	26 3.005	27 .02	32
272		min	-2143.551	27	-11.522	26	0	32 -3.024	26 -.552	26 -2250.011	26
273		2	m...	2296.11	26	.248	43	.005	26 3.005	27 .015	32
274		min	-2143.551	27	-16.474	26	0	32 -3.024	26 -.414	26 -1882.525	26
275		3	m...	2296.11	26	.248	43	.005	26 3.005	27 .01	32
276		min	-2143.551	27	-21.426	26	0	32 -3.024	26 -.276	26 -1385.028	26
277		4	m...	2296.11	26	.248	43	.005	26 3.005	27 .005	32
278		min	-2143.551	27	-26.379	26	0	32 -3.024	26 -.138	26 -757.519	26
279		5	m...	2296.11	26	.248	43	.005	26 3.005	27 0	24
280		min	-2143.551	27	-31.331	26	0	32 -3.024	26 0	24 0	24
281	FRP TOP2	1	m...	2224.876	27	9.905	24	0	24 5.611	27 0	24
282		min	-2135.988	26	0	41	0	24 -6.213	26 0	24 0	24
283		2	m...	2224.876	27	4.952	24	0	24 5.611	27 0	24
284		min	-2135.988	26	0	41	0	24 -6.213	26 0	24 -195.017	24
285		3	m...	2224.876	27	0	24	0	24 5.611	27 0	24
286		min	-2135.988	26	0	24	0	24 -6.213	26 0	24 -260.022	24
287		4	m...	2224.876	27	0	41	0	24 5.611	27 0	24
288		min	-2135.988	26	-4.952	25	0	24 -6.213	26 0	24 -195.017	24
289		5	m...	2224.876	27	0	41	0	24 5.611	27 0	24
290		min	-2135.988	26	-9.905	25	0	24 -6.213	26 0	24 0	24
291	FRP TOP4	1	m...	2224.867	27	9.905	25	0	24 .43	43 0	24
292		min	-2135.987	26	0	41	0	24 -.416	42 0	24 0	24
293		2	m...	2224.867	27	4.952	25	0	24 .43	43 0	24
294		min	-2135.987	26	0	41	0	24 -.416	42 0	24 -195.017	25
295		3	m...	2224.867	27	0	24	0	24 .43	43 0	24
296		min	-2135.987	26	0	24	0	24 -.416	42 0	24 -260.022	25
297		4	m...	2224.867	27	0	41	0	24 .43	43 0	24
298		min	-2135.987	26	-4.952	24	0	24 -.416	42 0	24 -195.017	25
299		5	m...	2224.867	27	0	41	0	24 .43	43 0	24
300		min	-2135.987	26	-9.905	24	0	24 -.416	42 0	24 0	24
301	FRP STUB5	1	m...	223.442	27	892.436	25	0	24 11.097	25 0	24
302		min	-.002	43	-602.126	26	0	24 -6.701	26 0	24 0	24
303		2	m...	211.363	27	642.221	25	0	24 11.097	25 0	24

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Envelope Member Section Forces (Continued)

Member	Sec		Axial[lb]	LC	v Shear[lb]	LC	z She	LC Torqu	LC y-y Mome	LC z-z Moment[lb-i	LC				
304		min	-002	43	-433.305	26	0	24	-6.701	26	0	24	-17048.038	25	
305	3	m...	199.284	27	2.78	25	0	24	11.097	25	0	24	16465.608	26	
306		min	-002	43	-1.876	26	0	24	-6.701	26	0	24	-24404.383	25	
307	4	m...	187.205	27	429.554	26	0	24	11.097	25	0	24	11581.073	26	
308		min	-002	43	-636.66	25	0	24	-6.701	26	0	24	-17164.805	25	
309	5	m...	175.126	27	635.89	26	0	24	11.097	25	0	24	0	24	
310		min	-002	43	-942.48	25	0	24	-6.701	26	0	24	0	24	
311	FRPCOL1	1	m...	292.751	27	215.904	26	260.7	26	0	24	0	24	0	24
312		min	-415	43	-145.762	27	-386.4	42	0	24	0	24	0	24	
313	2	m...	276.819	27	187.535	26	148.2	26	0	24	4451.947	26	3020.8	27	
314		min	-415	43	-126.621	27	-219.6	42	0	24	-6597.335	42	-4474.41	26	
315	3	m...	260.887	27	45.689	26	2.781	25	0	24	6067.713	26	4996.521	27	
316		min	-415	43	-30.918	27	1.842	43	0	24	-8991.044	42	-7399.866	26	
317	4	m...	244.954	27	122.209	35	225.1	25	0	24	4374.601	26	3957.594	27	
318		min	-415	43	-181.268	43	-151.9	43	0	24	-6480.523	42	-5857.181	26	
319	5	m...	229.022	27	237.053	35	336.4	25	0	24	2.873	26	24.605	27	
320		min	-415	43	-351.483	43	-226.9	43	0	24	-2.849	27	-25.083	26	
321	FRPCOL2	1	m...	294.717	26	249.504	43	244.6	43	0	24	0	24	0	24
322		min	-928	43	-168.285	35	-165.0	25	0	24	0	24	0	24	
323	2	m...	278.785	26	221.134	43	216.8	43	0	24	5078.749	43	3493.782	35	
324		min	-928	43	-149.144	35	-146.2	25	0	24	-3426.368	25	-5180.001	43	
325	3	m...	262.852	26	22.55	43	22.211	43	0	24	7938.918	43	5460.142	35	
326		min	-928	43	-15.16	35	-14.974	25	0	24	-5355.862	25	-8096.144	43	
327	4	m...	246.92	26	137.966	27	135.0	42	0	24	5953.24	43	4090.291	35	
328		min	-928	43	-204.405	26	-200.2	26	0	24	-4015.869	25	-6067.547	43	
329	5	m...	230.988	26	214.529	27	210.12	42	0	24	2.758	42	12.359	26	
330		min	-928	43	-317.882	26	-311.41	26	0	24	-2.765	32	-12.921	27	
331	FRPCOL3	1	m...	314.422	27	168.261	43	211.2	43	0	24	0	24	0	24
332		min	-522	43	-249.475	35	-142.5	25	0	24	0	24	0	24	
333	2	m...	298.49	27	149.12	43	183.4	43	0	24	4377.369	43	5179.389	35	
334		min	-522	43	-221.105	35	-123.7	25	0	24	-2953.822	25	-3493.28	43	
335	3	m...	282.558	27	15.136	43	44.416	43	0	24	7236.761	43	8094.922	35	
336		min	-522	43	-22.521	35	-29.987	25	0	24	-4883.468	25	-5459.137	43	
337	4	m...	266.625	27	204.433	27	120.0	42	0	24	5717.377	43	6065.712	35	
338		min	-522	43	-137.992	26	-177.9	26	0	24	-3858.758	25	-4088.784	43	
339	5	m...	250.693	27	317.909	27	232.6	42	0	24	3.636	29	15.081	26	
340		min	-522	43	-214.555	26	-344.81	26	0	24	-5.716	26	-14.7	27	
341	FRPCOL4	1	m...	277.991	26	145.792	26	226.9	43	0	24	0	24	0	24
342		min	-253	43	-215.925	27	-336.3	25	0	24	0	24	0	24	
343	2	m...	262.058	26	126.651	26	151.8	43	0	24	4371.163	43	4474.852	27	
344		min	-253	43	-187.556	27	-225.1	25	0	24	-6480.442	25	-3021.434	26	
345	3	m...	246.126	26	30.948	26	1.815	43	0	24	6063.711	43	7400.749	27	
346		min	-253	43	-45.71	27	-2.773	25	0	24	-8990.793	25	-4997.789	26	
347	4	m...	230.194	26	181.245	35	219.6	42	0	24	4447.38	43	5858.507	27	
348		min	-253	43	-122.182	43	-148.2	26	0	24	-6596.914	25	-3959.497	26	
349	5	m...	214.261	26	351.46	35	386.4	42	0	24	4.75	27	26.85	27	
350		min	-253	43	-237.025	43	-260.7	26	0	24	-5.199	26	-27.141	26	

Envelope AISC 13th ASD Steel Code Checks

Member	Shape	Code Check	Loc[ft]	LC Shear	Loc[ft]	Dir	LC Pnc/o	Pnt/om	Mnyy/o	Mnzz/o	Cb	Eqn			
1	STCOL1	W8X31	623	9.83	26	101	0	y	26	212808	273353	421575	909329	1	H1-1b
2	STCOL4	W8X31	396	9.83	42	065	0	y	42	212808	273353	421575	909329	1	H1-1b
3	STCOL3	W8X31	410	9.83	25	066	0	y	25	212808	273353	421575	909329	1	H1-1b
4	STCOL2	W8X31	620	9.83	43	100	0	y	26	212808	273353	421575	909329	1	H1-1b
5	ST BEAM1	W8X31	177	5.997	25	019	12.25	y	26	185293	273353	421575	909329	1	H1-1b
6	ST BEAM4	W8X31	599	0	26	165	0	y	26	182346	273353	421575	909329	2	H1-1b

Company : MACTEC
 Designer : ZL/AA
 Job Number : 6788-09-1916 (41)

May 26, 2010
 12:12 PM
 Checked By: _____

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Envelope AISC 13th ASD Steel Code Checks (Continued)

Member	Shape	Code Check	Loc[ft]	LC Shear	Loc[ft]	Dir	LC Pnc/o	Pnt/om	Mnyy/o	Mnzz/o	Cb	Eqn			
7	ST BEAM2	W8X31	392	12.5	25	110	12.5	y	25	182346	273353	421575	909329	2	H1-1b
8	ST BEAM3	W8X31	107	6.125	26	012	12.25	z	26	185293	273353	421575	909329	1	H1-1b
9	X1	LL3X3X4X6	101	7.853	27	003	0	y	27	36151	62083	68898	39797	1	H1-1b
10	X2	LL3X3X4X6	110	7.853	26	003	15.7	y	26	36151	62083	68898	39797	1	H1-1b
11	X3	LL3X3X4X6	155	7.853	27	003	0	y	26	36151	62083	68898	39797	1	H1-1b
12	X4	LL3X3X4X6	146	7.853	26	003	0	y	26	36151	62083	68898	39797	1	H1-1b

Envelope Joint Reactions

Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-in]	LC	MY [lb-in]	LC	MZ [lb-in]	LC	
1	N2	max	4420.131	26	10285.975	26	936.012	43	0	24	0	24	0	24
2		min	-3490.424	29	-6383.593	42	-1676.7	27	0	24	0	24	0	24
3	N5	max	4870.088	43	17250.556	29	5118.987	43	0	24	0	24	0	24
4		min	-3250.575	29	-21400.035	43	-4719.8	27	0	24	0	24	0	24
5	N7	max	2206.896	32	6530.935	26	2179.859	26	0	24	0	24	0	24
6		min	-3043.182	42	-6328.708	42	-1463.7	29	0	24	0	24	0	24
7	N8	max	2249.976	32	10796.852	26	4216.597	26	0	24	0	24	0	24
8		min	-2925.876	25	-13765.008	35	-4468.6	35	0	24	0	24	0	24
9	Totals:	max	11919.25	26	8144.992	26	12162.5	34						
10		min	-11919.25	25	0	42	-12162.5	27						



MACTEC Engineering and Consulting, Inc.
5845 NW 158th Street
Miami Lakes, FL 33014

JOB NO. 6788-09-1916 SHEET 34 OF
PHASE TASK 41
JOB NAME SOUTH KEY WEST
BY ZL DATE 5/17/2010
CHECKED BY DATE

FROM RISA MODEL

FRP GIRT $H8 \times 8 \times \frac{1}{2}$ $L_{max} = 12.25'$ $M_{max} = 7.8 \text{ K-FT}$

ACCORDING TO BEDFORD PLASTIC, INC DESIGN GUIDE (REV 6/07) $W_{allow} = 90.1 \text{ K-FT}$
OK

FRP BRACE

$H8 \times 8 \times \frac{3}{8}$ $L_{max} = 10'$ $P_{max} = 6 \text{ KIPS}$
 $P_{allow} = 17.68 \text{ KIPS}$ OK

FRP STUD

$H8 \times 8 \times \frac{3}{8}$ $L_{max} = 18.5'$ $P_{max} = 16 \text{ KIPS}$ $M_{max} = 2 \text{ K-FT}$
 $M_{allow} = 8.7 \text{ K-FT}$ OK

FRP COL $H8 \times 8 \times \frac{11}{2}$ $L_{max} = 8'$ $P_{max} = 1 \text{ KIPS}$
 $P_{allow} = 38 \text{ K}$ OK

FRP TOP BRACE $L6 \times 6 \times \frac{3}{8}$ $L = 18.5'$ $P_{max} = 3 \text{ K}$
 $P_{allow} = 3858 \text{ LBS}$, OK

FRP Girt to Col Connections

In Accordance With Bedford Plastics, Inc. Design Guide (Rev 6/07)

Loads and Dimensions

$V = 1428$ lbs (MAX Beam Reaction, Service)

$P = 3328$ lbs

Rod $\phi = 1$ in (FRP Threaded Rod Diameter)

$P_{ULT} = 8200$ lbs / Rod (Ultimate Tensile Strength)

$P_{ALL} = 2050$ lbs / Rod (Allowable Tensile Strength)

$V_{ULT} = 24000$ lbs / Rod (Ultimate Double Shear Strength)

$V_{ALL} = 6000$ lbs / Rod (Allowable Double Shear Strength)

$d = 3.5$ in (MAX Distance Between Rods)

$e = 2.0$ in (Connection Eccentricity)

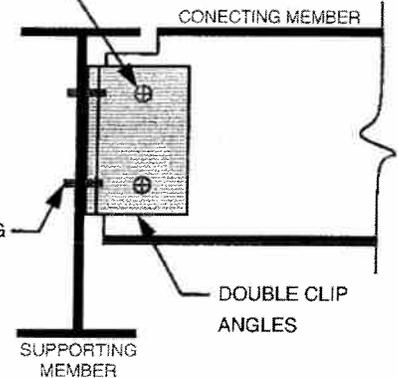
Angle = L3x3 (FRP Angle Size)

Thickness = 3/8 in (FRP Angle Thickness)

Length = 6.5 in (FRP Angle Length)

THREADED RODS AT CONNECTING MEMBER, TYPICAL OF 2

THREADED RODS AT SUPPORTING MEMBER, TYPICAL OF 4



Check: FRP Threaded Rods in Connecting Member

$V_{MAX} = V / 2$ Rods
= 1811 lbs / Rod

$\left(\frac{V_{MAX}}{V_{ALL}} \right) = 0.30 \leq 1.0$ **OK**

Check: FRP Threaded Rods in Supporting Member

$P_{MAX} = V \cdot e / d / 2$ rods + P / All rods
= 1240 lbs / Rod

$V_{MAX} = V / 4$ Rods
= 357

$\left(\frac{P_{MAX}}{P_{ALL}} \right)^{5/3} + \left(\frac{V_{MAX}}{V_{ALL}} \right)^{5/3} = 0.44 \leq 1.0$ **OK**

Check: Clip Angles

$V_{MAX} = V / 2$ Angles
= 1811 lbs / Angle

$V_{ALL} = A_n \cdot f_v$
= 2294 lbs / Angle

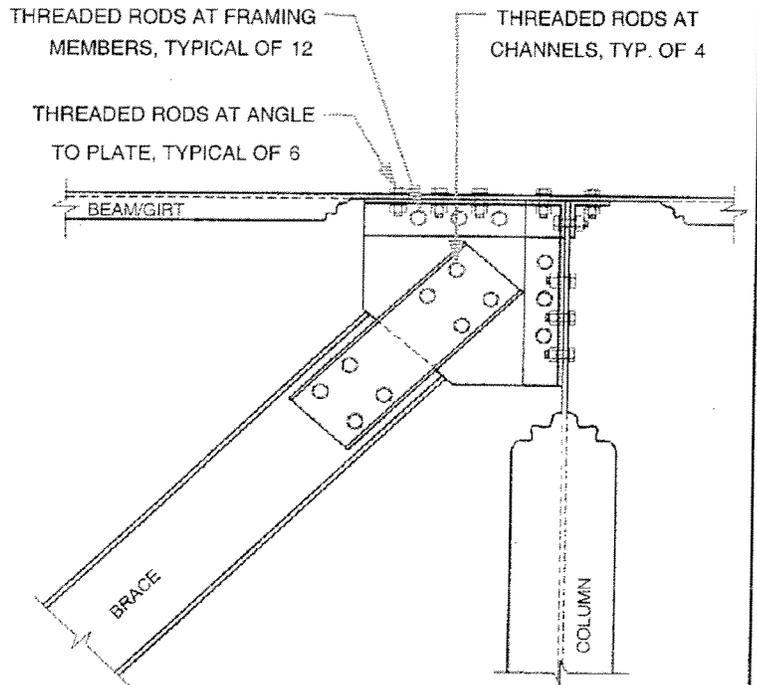
$V_{MAX} \leq V_{ALL}$ **OK** 78.9% Stressed

FRP Brace Connection (TYP)

In Accordance With Bedford Plastics, Inc. Design Guide (Rev 6/07)

Loads and Dimensions

- $P = 6,000$ lbs (MAX Brace Reaction, Service)
Rod $\phi = 5/8$ in (FRP Threaded Rod Diameter)
 $P_{ULT} = 3600$ lbs / Rod (Ultimate Tensile Strength)
 $P_{ALL} = 900$ lbs / Rod (Allowable Tensile Strength)
 $V_{ULT} = 10000$ lbs / Rod (Ultimate Double Shear Strength)
 $V_{ALL} = 2500$ lbs / Rod (Allowable Double Shear Strength)



Check: FRP Threaded Rods @ Clip Angles

$$P_{MAX} = P \cdot ((2)^{0.5} / 2) / 12 \text{ Rods}$$

$$= 354 \text{ lbs / Rod}$$

$$V_{MAX} = P \cdot ((2)^{0.5} / 2) / 6 \text{ Rods}$$

$$= 707 \text{ lbs / Rod}$$

$$\left(\frac{P_{MAX}}{P_{ALL}} \right)^{5/3} + \left(\frac{V_{MAX}}{V_{ALL}} \right)^{5/3} = 0.33 \leq 1.0 \quad \text{OK}$$

Check: FRP Threaded Rods @ Channels

$$V_{MAX} = P \cdot ((2)^{0.5} / 2) / 4 \text{ Rods}$$

$$= 1061 \text{ lbs / Rod}$$

$$\left(\frac{V_{MAX}}{V_{ALL}} \right)^{5/3} = 0.24 \leq 1.0 \quad \text{OK}$$

Check: FRP Connection Channel

FRP C6x1 5/8x1/4

$$P_{MAX} = P / 2 \text{ Channels}$$

$$= 3000 \text{ lbs / Channel}$$

$$P_{ALL} = A_n \cdot F_u / 4$$

$$= 13631 \text{ lbs / Channel}$$

$$P_{MAX} \leq P_{ALL} \quad \text{OK} \quad 22\% \text{ Stressed}$$

Check: FRP Plate and Clip Angles

FRP 3/4" Plate and FRP L3x3x3/8

The critical section area of the FRP Plate and the critical section area of the FRP Clip Angles both exceed that of the FRP Connection Channels. Therefore, by inspection, these elements have adequate capacity to resist the maximum brace

loads. **OK**



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STEEL & FRP CONNECTION

A. FRP H $8 \times 8 \times \frac{3}{8}$ BRACE TO STEEL PLATE $8 \times 8 \times \frac{1}{2}$
 $P_r = 5.5 \text{ K}$ (PER RISA 3D ASD)

USE (2) $\frac{3}{4}$ " A325-x BOLTS $V_a = 2 \times 13.3 = 26 \text{ K} > P_r$ OK

PLATE $8 \times 8 \times \frac{1}{2}$ & $6 \times 7 \times \frac{1}{2}$

$$F_y A_g = 36 \times 6 \times \frac{1}{2} = 108 \text{ K} \leftarrow \text{CONTROL}$$

$$F_u A_e = 58 \times (6 - 2(\frac{3}{4} + \frac{1}{8})) \times \frac{1}{2} = 123 \text{ K}$$

Block SHEAR

$$0.6 F_u A_{nv} + U_{bs} F_u A_{nt}$$

$$= 0.6(58) \left(2 - \frac{1}{2} \left(\frac{3}{4} + \frac{1}{8} \right) \right) \frac{1}{2} + (1)(58) \left(6 - \left(\frac{3}{4} + \frac{1}{8} \right) \frac{1}{2} - \frac{1}{2} \right) 0.5$$

$$= 0.6(58) 1.5625 \times 0.5 + 58 \times 4 \times 0.5$$

$$= 143 \text{ K}$$

$$0.6 F_y A_{gv} + U_{bs} F_u A_{nt}$$

$$= 0.6(36) \left(\frac{1}{2} \right) \times 2 + 58 \times 4 \times 0.5 = 117.6 \text{ K}$$

$$\frac{R_n}{2} = \frac{108}{2} = 54 \text{ K} > P_r \text{ OK}$$

WELDING $\frac{1}{4}$ " BOTH SIDES

$$\frac{R_n}{2} = \frac{0.6(70)(0.25)(0.707) 8}{2} = 29 \text{ K} > P_r \text{ OK}$$

B. FRP COL TO STEEL COL.

$$P_r = 1 \text{ K} \quad V_r = 1 \text{ K}$$

COMPARED W/ A. SAME BOLTS & PLATES WILL HAVE ENOUGH CAP.

C MOMENT FRAME CONNECTION AT ST. BM & ST. COL

$V_r = 8K$ $M_r = 50 K-FT$

FOR SHEAR, USE SINGLE PLATE CONN. PL 6x4x3/8 w/ 1/4 WELDING & TWO 3/4" BOLTS

$R_n/2 = 20.4K > 8K$ OK

FOR MOMENT $P_r = \frac{M_r}{arm} = \frac{50}{8/12} = 75K$

USE PL 10x8x1" & (6) 3/4" ϕ w/ 3/8" WELDING

BOLT $\frac{R_n}{2} 6 \times 13.3 = 79.8 KIP > 75K$, OK

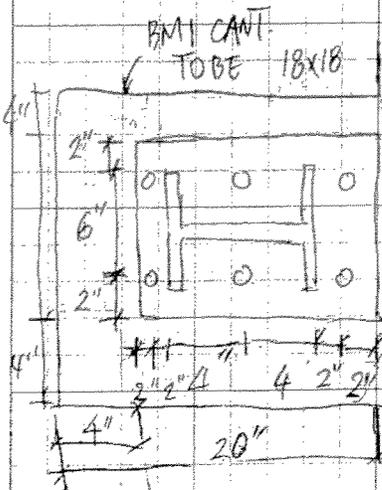
PL $\frac{R_n}{2} = 54 \times 1/2 = 108K > 75K$ OK

WELDING $\frac{R_n}{2} = 29(2) \frac{3/8}{4} = 87K > 75K$ OK

D ST BRACE 2L 3x3x1/4 & STEEL PL 8x8x1/2

$P_r = 7K$

USE 8x8x1/2 PL & (2) 3/4" ϕ BOLTS



E BASE PLATE

$V_{max} = 4.5K$
 $T_{max} = 21K$

USE 1/4" WELDING & (6) STAINLESS STEEL 1" ϕ HIT HARD BUT 3 w/ 9" EMB

WELDING $\frac{R_n}{2} = \frac{0.6(70)(0.25)(0.707) 8 \times 2}{2} = 60K$ OK

ANCHORS $T_{allow} = \frac{352}{4} \times 0.6 \times 0.8 = 4.22K$

$V_{allow} = \frac{21.2}{4} \times 0.93 \times 0.51 = 2.5K$

$\left(\frac{21}{4.22 \times 6}\right)^{5/3} + \left(\frac{4.5}{2.5(6)}\right)^{5/3} = 0.87 < 1$ OK



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BASE PLATE # 16x10

$$P = 21 \text{ K (ASD)}$$

$$P_a = \frac{0.85 f_c A}{\phi} = \frac{0.85 \times 4 \times 16 \times 10}{2.5} = 218 \text{ K OK}$$

$$m = \frac{N - 0.95d}{2} = \frac{16 - 0.95(8)}{2} = 4.2$$

$$n = \frac{b - 0.8bf}{2} = \frac{16 - 0.8(8)}{2} = 4.8$$

$$X = \frac{4dbf}{(d+bf)^2} \frac{\phi P}{P_a} = \frac{4(8)(8)}{16^2} \frac{2.5(21)}{218} = 0.24$$

$$\lambda = \frac{2\sqrt{X}}{1 + \sqrt{1-X}} = 0.52 < 1$$

$$\lambda n' = 0.52 \sqrt{\frac{8 \times 8}{4}} = 1.05$$

$$l = 4.8$$

$$t_{min} = 4.8 \sqrt{\frac{2 \times 2.5 \times 21}{(36)(10)(1.6)}} = 0.64'' \text{ USE } 1'' \text{ PLATE}$$

Wind Load - Shelter

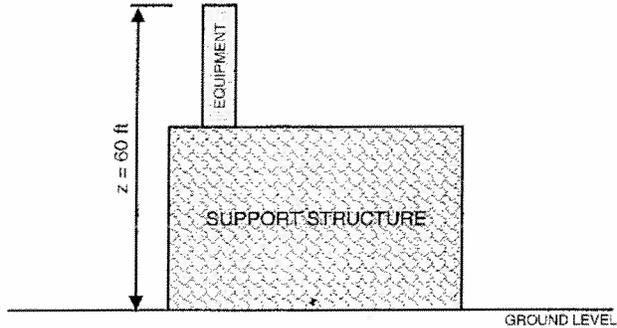
In Accordance With ASCE 7-05

Design Criteria

Wind Velocity, $V = 150$ mph
Exposure = C
Building Category = II (ASCE Table 1-1)

Equipment

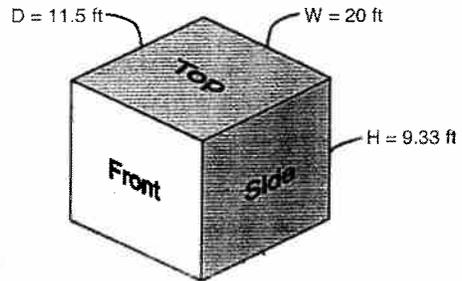
$H = 9.33$ ft (Equipment Height Dimension)
 $W = 20$ ft (Equipment Width Dimension)
 $D = 11.5$ ft (Equipment Depth Dimension)
Round? N (Equipment is Round or Not)
 $z = 60$ ft (Equipment Height Above Ground)



Design Parameters

$Z_g = 900$ (ASCE Table 6-2) $Z_{min} = 15$ (ASCE Table 6-2) $Z = 36$ (Effective Height) $Q = 0.95$ (ASCE EQ. 6-6)
 $\alpha = 9.5$ (ASCE Table 6-2) $\epsilon = 0.2$ (ASCE Table 6-2) $L_z = 509$ (ASCE EQ. 6-7)
 $l = 500$ (ASCE Table 6-2) $Z_{BAR} = 36$ (ASCE 6.5.8.1) $I_z = 0.2$ (ASCE EQ. 6-5)
 $c = 0.2$ (ASCE Table 6-2)

$I = 1.00$ (Importance Factor, I from ASCE Table 6-1)
 $G = 0.90$ (Gust Factor, ASCE EQ. 6-4)
 $K_z = 1.137$ (Coefficient from ASCE Table 6-3)
 $K_{zt} = 1.0$ (Topographic Factor from ASCE Figure 6-4)
 $K_d = 0.85$ (Directionality Factor from ASCE Table 6-4)



Velocity Pressure

$$q_z = 0.00256(V^2)(I)(K_z)(K_{zt})(K_d) \quad (\text{ASCE EQ. 6-15})$$

$$q_z = 55.6 \text{ psf}$$

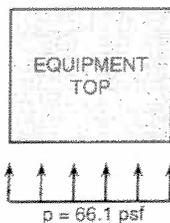
Wind Load

Case 1: Wind at Front

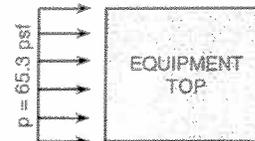
$H/D = 2.144$
 $C_f = 1.3$ (ASCE 6.5.11.3)
 $A_f = 186.6$

Increased Factor = 1.9
 $FORCE_{FRONT} = 23,431$ lbs (Total Lateral Force)
 $WL_{FRONT-H} = 585.8$ plf (Shear Load per Side)
 $WL_{FRONT-V} = 475.2$ plf (Vertical Load per Side)

Case 1: Wind at Front



Case 2: Wind at Side



Case 2: Wind at Side

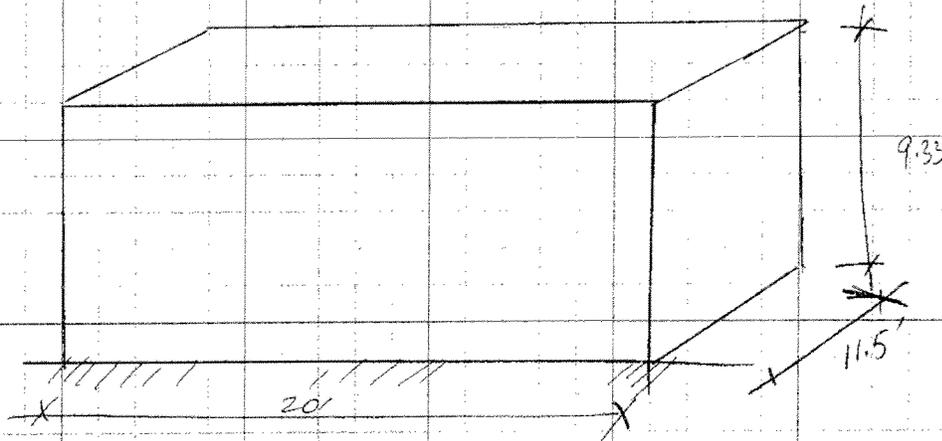
$H/D = 1.233$
 $C_f = 1.3$ (ASCE 6.5.11.3)
 $A_f = 107.3$

Increased Factor = 1.9
 $FORCE_{SIDE-V} = 13318$ lbs (Total Lateral Force)
 $WL_{SIDE-H} = 579$ plf (Shear Load per Side)
 $WL_{SIDE-V} = 270.1$ plf (Vertical Load per Side)



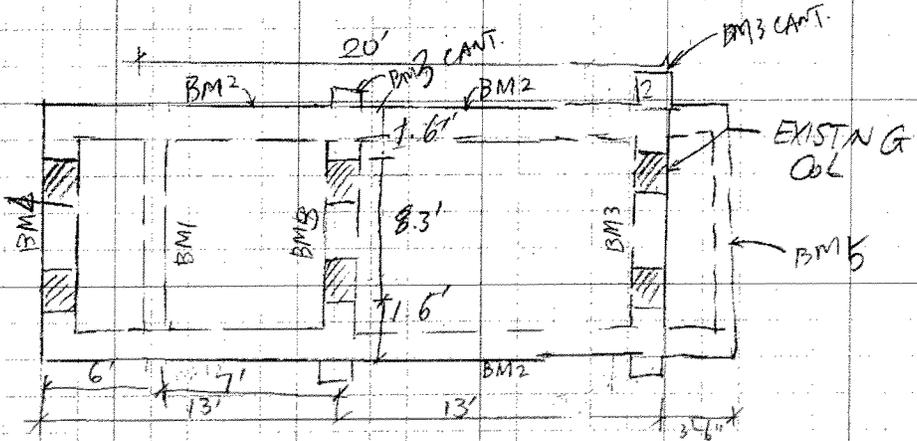
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$W_L = 45,000 \text{ lbs}$

SHELTER SUPPORT DESIGN



BM1: $L = 11.5'$
 $DL = (10 \text{ PSF}) \left(\frac{11.5}{2} \right) = 60 \text{ plf}$
 $LL = \frac{45,000 \text{ lbs}}{20(11.5)} \left(\frac{11.5}{2} \right) + (30 \text{ PSF}) \frac{11.5}{2} = 1330 \text{ plf}$
 $W_v = 270 \text{ plf}$
 $W_{\text{HORB}} = 580 \text{ plf (HORB. LOADING)}$

ASSUME $10 \times 8 \text{ BM}$

$$M_D = \left(150 \frac{10(18)}{144} + 60 \right) \frac{11.5^2}{8} + 150 \frac{4}{12 \times 12} \times \frac{11.5^2}{8} = 9.5$$

$$M_L = \frac{1330(11.5)^2}{8} = 27 \text{ K-FT}$$

$$M_U = 55 \text{ K-FT} \leftarrow \text{CONTROL}$$

$$V_U = 1.2 \times 57.5 \times \frac{11.5}{2} + 1.6 \times 1600 \times \frac{11.5}{2} = 19 \text{ K}$$



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$$f_c = 4 \text{ ksi}; \quad c = 2" \quad f_y = 60 \text{ ksi}$$

$$\phi V_c = 0.75 \cdot 2 \cdot \sqrt{4000} \cdot (10) \cdot (15.5) = 147 \text{ K}$$

$$\frac{A_v}{s} = \frac{V_u - \phi V_c}{\phi f_y d} = \frac{(19 - 147)(12)}{0.75(60)(15.5)} = 0.16 \text{ in}^2/\text{ft} \quad \text{USE } \#4 @ 6"$$

$$R_n = \frac{M_u}{\phi b d^2} = \frac{55(1200)}{0.9(10)(15.5)^2} = 310 \text{ psi}$$

$$\rho = \frac{0.85 f_c}{f_y} \left(1 - \sqrt{1 - \frac{2 R_n}{0.85 f_c}} \right) = 0.0055 > (\rho_{\min} = 0.0033)$$

$$A_s = \rho b d = 0.0055(10)(15.5) = 0.85 \quad \text{USE } 2 \#8 \quad (10 \times 18 \text{ BM})$$

DOWELS USE HILTI HIT-HY 150 MAX ADHESIVE ANCHOR SYSTEM
w/ #5 REINFORCING BARS

$$\text{ASSUME } T_u = 270 \text{ PLF} \quad V_u = 580 \text{ PLF}$$

USE #6 w/ 3 1/2" EMBED TOTAL LENGTH 9 1/2" @ 2'-0"

FOR CONN. BTW EXISTING ROOF SLAB AND REBARS

$$\phi N_{sa} = 0.65(27.8) = 18 \text{ K} <$$

$$\phi N_{cbg} = 0.65(24) \sqrt{4000} (3.5) = 6.46 \text{ K}$$

$$\phi N_{ag} = 0.65(10.45) \cdot 3.14 \left(\frac{5}{8} \right) (3.5) = 4.6 \text{ K} \leftarrow \text{CONTROL} > 0.27 \times 2' = 0.54 \text{ K OK}$$

$$\phi V_{sa} = 0.6(16.74) = 10 \text{ K} > 0.58(2) = 1.16 \text{ K OK}$$

$$\frac{0.54}{4.6} + \frac{1.16}{10} = 0.24 < \text{OK}$$



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BM 2 L = 13' $P_D = 575 \times \frac{11.5}{5} = 3.3K$ $P_L = 1600 \times \frac{11.5}{2} = 9.2K$
 $DL = 60 + 150 \frac{10 \times 18}{144} + 50 \times \frac{4}{12} \times \frac{20}{2} = 750 PLF$
 $LL = 1330 PLF$
 $W = 475 PLF$

$W_{HORIZ} = 590 PLF$ (HORIZ. LOADING)

$M_D = 0.75 \frac{12.2^2}{8} + 3.3 \times \frac{7 \times 5.2}{12.2} = 24K$

$M_L = 1.80 \frac{12.2^2}{8} + (9.2) \frac{7 \times 5.2}{12.2} = 61K$

$M_u = 128K-FT$

$V_D = 0.75 \frac{12.2}{2} + 3.3 \times \frac{7}{12.2} = 6.35K$

$V_L = (1.8) \frac{12.2}{2} + (9.2) \frac{7}{12.2} = 16.3K$

$V_u = 34K$

$\phi V_c = 0.75 \times 2 \sqrt{4000} (10) (15.63) = 14.83K$

$\frac{A_v}{s} = \frac{(34 - 14.83)(12)}{0.75(60)(15.63)} = 0.281 \text{ in}^2/\text{ft}$ USE #4 @ 6"

$R_n = \frac{128(12000)}{0.9(10)(15.63)^2} = 722 \text{ psi}$

$\rho = \frac{0.85(4)}{60} \left(1 - \sqrt{1 - \frac{2 \times 720}{0.85(4000)}} \right) = 0.014 > \rho_{min}$

$A_s = 0.014(10)(15.63) = 2.19 \text{ in}^2$ USE 3#8 (10x18 BM)

$P_D = 125 \times 0.75 \times 12.2 + 3.3 \times 0.69 = 14K$

BMS CANT. L = 3.3' $P_L = 125 \times 1.8 \times 12.2 + 9.2 \times 0.69 = 34K$ $P_{L2} = 21K$ (FROM RISA)

$M_D = 14 \times 1.2 + 150 \times \frac{18 \times 18}{144} \times \frac{3.3^2}{2000} = 19K$

$M_L = 34 \times 1.2 + 21 \times \left(\frac{1.8}{2} + 1.6 \right) = 89K$

$M_u = 165K-FT$

$V_D = 14 + 1.2 = 16K$ $V_L = 34 + 21 = 56K$ $V_u = 110K$

$\phi V_c = 0.75(2) \sqrt{4000} (18) (15.63) = 27K$

$\frac{A_v}{s} = \frac{(110 - 27)(12)}{0.75(60)(15.63)} = 1.42 \text{ in}^2/\text{ft}$ USE #4 @ 4" 3 LEGS

$R_n = \frac{165(12000)}{0.9(18)(15.63)^2} = 500$



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$$\rho = 0.01 > \rho_{min} = 0.0033$$

$$A_s = 0.01(18)(15.63) = 2.55 \text{ IN}^2 \quad \text{USE 4\#B}$$

BM4 $M_D = 14 \times 1.6 + 150 \frac{10 \times 17}{144} \times 1.6^2 / 2000 = 23 \text{ K}$

$$M_L = 34 \times 1.6 = 54.4 \text{ K}$$

$$M_u = 115 \text{ K-FT}$$

$$V_D = 14 + 12 = 16 \text{ K} \quad V_L = 34 \text{ K} \quad V_u = 74 \text{ K}$$

$$\frac{A_u}{s} = \frac{(74-34)(12)}{0.75(60)(14.63)} = 0.73 \text{ IN}^2/\text{FT} \quad \text{USE \#4@6"}$$

$$A_s = 0.014(10)(14.63) = 2.0 \text{ IN}^2 \quad \text{USE 3\#B}$$

BM5 $M_D = (150 \times \frac{4}{12} \times 4 + 150 \times \frac{8 \times 18}{144}) 11.5^2 / 8 = 5.8 \text{ K-FT}$

$$M_L = 30 \times 4 \times 11.5^2 / 8 = 2 \text{ K-FT} \quad M_u = 10 \text{ K-FT}$$

$$V_D = 350 \times 11.5 / 2 = 2 \text{ K}$$

$$V_L = 120 \times 11.5 / 2 = 0.7 \text{ K}$$

$$V_u = 4 \text{ K}$$

USE BM 8x17 2\#8 T & B \#3@7" STRIPS

Kwik Bolt 3 Expansion Anchor 4.3.5

Table 9 - Stainless Steel Kwik Bolt 3 Ultimate Loads in Normal-Weight Concrete¹

Anchor Diameter in. (mm)	Embedment Depth in. (mm)	$f'_c = 2000$ psi (13.8 MPa)		$f'_c = 3000$ psi (20.7 MPa)		$f'_c = 4000$ psi (27.6 MPa)		$f'_c = 6000$ psi (41.4 MPa)	
		Tension lb (kN)	Shear lb (kN)						
1/4 (6.4)	1-1/8 (29)	980 (4.4)	2240 (10.0)	1205 (5.4)	2530 (11.3)	1430 (6.4)	2725 (12.1)	1755 (7.8)	3020 (13.4)
	2 (51)	2035 (9.1)	2530 (11.3)	2340 (10.4)		2640 (11.7)	3020 (13.4)	3415 (15.2)	
	3 (76)	2580 (11.5)		2810 (12.5)		3040 (13.5)			
3/8 (9.5)	1-5/8 (41)	2275 (10.1)	3300 (14.7)	2505 (11.1)	4175 (18.6)	2735 (12.2)	5045 (22.4)	3560 (15.8)	6015 (26.8)
	2-1/2 (64)	4825 (21.5)	5900 (26.2)	5365 (23.9)	5900 (26.2)	5905 (26.3)	5954 (26.5)	7270 (32.3)	5954 (26.5)
	3-1/2 (89)	6075 (27.0)		6575 (29.2)		7075 (31.5)		7625 (33.9)	
1/2 (12.7)	2-1/4 (57)	3805 (16.9)	7030 (31.3)	4620 (20.6)	7980 (35.5)	5435 (24.2)	8930 (39.7)	6080 (27.0)	10285 (45.7)
	3-1/2 (89)	5415 (24.1)	11290 (50.2)	7410 (33.0)	11290 (50.2)	9405 (41.8)	11410 (50.8)	9950 (44.3)	11410 (50.8)
	4-3/4 (121)	7460 (33.2)		8435 (37.5)				11200 (49.8)	
5/8 (15.9)	2-3/4 (70)	6185 (27.5)	10790 (48.0)	6580 (29.3)	13075 (58.2)	6975 (31.0)	15360 (68.3)	8760 (39.0)	17355 (77.2)
	4 (102)	9205 (40.9)	17355 (77.2)	10870 (48.4)	17355 (77.2)	12530 (55.7)	17355 (77.2)	16490 (73.4)	
	5-1/2 (140)	13040 (58.0)		14560 (64.8)		16080 (71.5)		23475 (104.4)	
3/4 (19.1)	3-1/4 (83)	5800 (25.8)	14790 (65.8)	7300 (32.5)	15980 (71.1)	8800 (39.1)	21160 (94.1)	9800 (43.6)	21160 (94.1)
	4-3/4 (121)	9400 (41.8)	20750 (92.3)	11950 (53.2)	20750 (92.3)	14500 (64.5)		17500 (77.8)	
	8 (203)	11000 (48.9)		14000 (62.3)	17000 (75.6)	19200 (85.4)			
1 (25.4)	4-1/2 (114)	11700 (52.0)	22800 (101.4)	14500 (64.5)	25400 (113.0)	17300 (77.0)	28000 (124.6)	18000 (80.1)	28000 (124.6)
	6 (152)	16500 (73.4)	28000 (124.6)	21750 (96.7)	28000 (124.6)	27000 (120.1)		27500 (122.3)	
	9 (229)	21000 (93.4)		28100 (125.0)		35200 (156.6)			

¹ Intermediate load values for other concrete strengths and embedments can be calculated by linear interpolation.

Kwik Bolt 3 Expansion Anchor 4.3.5

Influence of Edge Distance and Anchor Spacing on Anchor Performance

Load Adjustment Factors for 5/8 in. Diameter Anchors									
Adjustment Factor 5/8 in.	Spacing Tension f_{AN}	Edge Distance Tension, f_{EN}		Spacing Shear f_{AS}		Edge Distance Shear			
		2-3/4	≥4	2-3/4	≥4	2-3/4	≥4	2-3/4	≥2-3/4
Embedment Depth, in.	2-3/4	≥4	2-3/4	≥4	2-3/4	≥4	2-3/4	≥2-3/4	≥2-3/4
Spacing (in.)	2-3/4	0.60	0.80	0.90					
	3-1/2	0.69	0.87	0.92					
	4	0.75	0.60	0.92	0.80	0.94	0.90		
	4-1/4	0.77	0.62	0.95	0.82	0.94	0.91	0.52	0.61
	4-3/4	0.83	0.66	1.00	0.85	0.96	0.92	0.58	0.66
	5-1/2	0.92	0.72	0.90	0.90	0.98	0.93	0.67	0.73
	6	0.98	0.76	0.93	0.99	0.94	0.73	0.78	0.91
	6-1/4	1.00	0.78	0.95	1.00	0.95	0.76	0.81	0.92
	7		0.84	1.00		0.96	0.85	0.88	0.95
	7-1/2		0.88			0.97	0.91	0.93	0.97
	7-3/4		0.90			0.98	0.94	0.95	0.98
	8-1/2		0.96			0.99	1.00	1.00	1.00
	9		1.00						

Load Adjustment Factors for 3/4 in. Diameter Anchors									
Adjustment Factor 3/4 in.	Spacing Tension f_{AN}	Edge Distance Tension, f_{EN}		Spacing Shear f_{AS}		Edge Distance Shear			
		3-1/4	≥4-3/4	3-1/4	≥4-3/4	3-1/4	≥4-3/4	3-1/4	≥3-1/4
Embedment Depth, in.	3-1/4	≥4-3/4	3-1/4	≥4-3/4	3-1/4	≥4-3/4	3-1/4	≥3-1/4	≥3-1/4
Spacing (in.)	3-3/8	0.61	0.81	0.90					
	4	0.67	0.86	0.92					
	5	0.77	0.62	0.94	0.81	0.94	0.90	0.51	0.61
	5-3/4	0.85	0.67	1.00	0.86	0.96	0.92	0.59	0.67
	6-1/4	0.90	0.70	0.88	0.97	0.93	0.64	0.71	0.86
	6-1/2	0.92	0.72	0.90	0.98	0.93	0.67	0.73	0.89
	7	0.97	0.75	0.93	0.99	0.94	0.72	0.77	0.90
	7-1/2	1.00	0.79	0.95	1.00	0.95	0.77	0.82	0.92
	8-1/4		0.84	1.00		0.96	0.85	0.88	0.95
	9		0.89			0.97	0.92	0.94	0.97
	9-3/4		0.94			0.98	1.00	1.00	1.00
	10-1/4		0.97			0.99			
	10-3/4		1.00			1.00			

Load Adjustment Factors for 1 in. Diameter Anchors									
Adjustment Factor 1 in.	Spacing Tension f_{AN}	Edge Distance Tension, f_{EN}		Spacing Shear f_{AS}		Edge Distance Shear			
		4-1/2	≥6	4-1/2	≥6	4-1/2	≥6	4-1/2	≥4-1/2
Embedment Depth, in.	4-1/2	≥6	4-1/2	≥6	4-1/2	≥6	4-1/2	≥4-1/2	≥4-1/2
Spacing (in.)	4-1/2	0.60	0.80	0.90					
	6	0.71	0.60	0.89	0.80	0.93	0.90		
	7	0.78	0.65	0.95	0.84	0.94	0.91	0.52	0.61
	8	0.85	0.71	1.00	0.89	0.96	0.93	0.59	0.67
	9	0.92	0.76	0.93	0.98	0.94	0.67	0.73	0.89
	9-3/4	0.97	0.80	0.97	0.99	0.95	0.72	0.78	0.91
	10-1/4	1.00	0.83	0.99	1.00	0.96	0.76	0.81	0.92
	11-1/4		0.88	1.00		0.97	0.83	0.87	0.94
	11-5/8		0.90			0.98	0.86	0.89	0.95
	12-1/2		0.95			0.99	0.93	0.94	0.97
	13		0.97			0.99	0.96	0.97	0.99
	13-1/2		1.00			1.00	1.00	1.00	1.00
	14-3/4								

Standard Anchor Embedments (in.)		
5/8	h_{min}	2-3/4
	h_{nom}	4
	h_{deep}	5-1/2
3/4	h_{min}	3-1/4
	h_{nom}	4-3/4
	h_{deep}	6-1/2 ¹
1	h_{min}	4-1/2
	h_{nom}	6
	h_{deep}	9

1 Embedment depth shown reflects embedment for carbon steel anchor, deep embedment depth for stainless steel anchor is 8 inch.

Note: Tables apply for listed embedment depths. Reduction factors for other embedment depths must be calculated using equations below.

Spacing — Tension	
$h_{min} \leq h_{act} \leq h_{nom}$	$h_{act} \geq h_{nom}$
$f_{AN} = \frac{s/h_{act} + 0.88}{3.13}$	$f_{AN} = \frac{s/h_{nom} + 0.88}{3.13}$

Edge Distance — Tension	
$h_{min} \leq h_{act} \leq h_{nom}$	$h_{act} \geq h_{nom}$
$f_{EN} = \frac{c/h_{act} + 2}{3.75}$	$f_{EN} = \frac{c/h_{nom} + 2}{3.75}$

Spacing — Shear	
$h_{min} \leq h_{act} \leq h_{nom}$	$h_{act} \geq h_{nom}$
$f_{AS} = \frac{s/h_{act} + 10.25}{12.5}$	$f_{AS} = \frac{s/h_{nom} + 10.25}{12.5}$

Edge Distance — Shear	
$h_{act} \geq h_{min}$	
perpendicular toward edge	
$f_{EN1} = \frac{c}{3h_{min}}$	
parallel to edge	
$f_{EN2} = \frac{c/h_{min} + 0.75}{3.75}$	
perpendicular away from edge	
$f_{EN3} = \frac{c/h_{min} + 5.82}{8.82}$	

Note: Edge distance and anchor spacing for all light-weight and sand-lightweight concrete are obtained by dividing the normal-weight dimensions by 0.75 and 0.85, respectively.



engineering and constructing a better tomorrow

April 14, 2010

City of Key West
Community Development
1400 Kennedy drive
Key West, FL 33040

Re: Structural Evaluation Letter
AT&T Site Name: South Key West (Casa Marina)
Site Address: 811 Seminole Street
Key West, FL 33040
MACTEC Job No.: 6788-09-1916 (41)

On behalf of its client, AT&T Mobility, MACTEC Engineering and Consulting, Inc. (MACTEC) is submitting this letter to confirm the design at the subject site conforms with the current Florida Building Code (FBC) requirements.

All structural elements of the proposed design at the subject site have been designed in accordance with the 2007 edition of the FBC, with 2009 amendments, for design pressures generated by nominal design 3-second gust wind velocity of 150 mph.

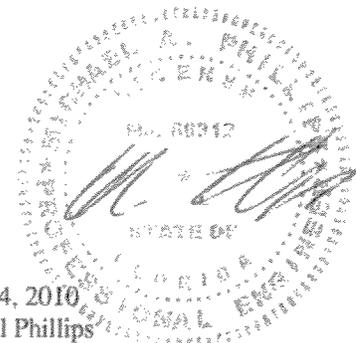
Should you have any questions or wish to discuss any aspect of this letter, please do not hesitate to contact either of the undersigned.

Sincerely,

MACTEC ENGINEERING AND CONSULTING, INC.



Jonathan Garcia
Staff Engineer II



April 14, 2010
Michael Phillips
Senior Engineer

Cultural Resource Survey

CULTURAL RESOURCE SURVEY
PROPOSED ANTENNA COLLOCATION
SITE NAME: SOUTH KEY WEST
ADDRESS: 811 SEMINOLE STREET
KEY WEST, MONROE COUNTY, FLORIDA

Terracon Project No. 49107507



PREPARED FOR:

Nsoro Mas Tec, LLC
Atlanta, Georgia



PREPARED BY:

Terracon
Atlanta, Georgia

March 15, 2010



INTRODUCTION

On behalf of SBA Networks and Nsoro Mas Tec, Terracon has conducted a Cultural Resources Survey of the proposed antenna collocation site located on the roof of a building at 811 Seminole Street in Key West, Monroe County, Florida (Figure 1). The proposed antenna collocation site is located on a building on the grounds of the Casa Marina Resort Hotel. The hotel consists of seven adjacent buildings reportedly constructed in 1901, 1916, 1978, 1979, and 1986. The parent tract borders the ocean to the south and includes a restaurant, a bar, two pools, paved parking areas, and a small watercraft rental, as well as paved pathways and landscaped areas throughout the property.

The antenna collocation site is located on the rooftop of a building reportedly constructed in the late-1970s. The building is five stories tall with a below-ground basement. According to the site plans provided, AT&T plans to construct an equipment building within the proposed rooftop lease area to which nine antennas will be mounted.

The proposed antenna collocation would be located at approximately 24° 32' 51.4" latitude and 81° 47' 28.4" longitude with a ground elevation of 3.9 feet amsl. The topography surrounding the proposed antenna collocation site is flat. The site and its topographic environment are shown on the United States Geological Survey (USGS) Key West 7.5 Minute Series Topographic Map dated 1971 (see attached).

VISUAL EFFECTS

An APE for visual effects for this project was determined to be the immediate location surrounding the roof of the building (Figure 1). The determination of the APE was based on information contained in the Nationwide Programmatic Agreement of 2001 and the general topography in the vicinity of the proposed antenna collocation.

A records review of the Florida Master Site File was conducted by the staff of the Florida State Historic Preservation Office (SHPO) to determine the location of known historic sites. In addition, Terracon consulted the National Register Information Systems web site to identify resources listed in the National Register of Historic Places (NRHP). The records review indicated that the proposed antenna collocation is located within the Key West Historic District. In addition, the Casa Marina Resort Hotel on which the collocation antenna will be placed is a contributing resource to the Key West Historic District. The antenna will be located on the roof of a c. 1978 hotel building. According to site plans provided by the client, a concealment screen, painted the same color as the hotel, will be constructed around the antennas.



HISTORIC PROPERTIES IDENTIFIED IN THE APE FOR VISUAL EFFECTS

Based on research at the Florida State Historic Preservation Office, there are thousands of historic standing structures in Monroe County. In addition, there are eight NRHP-listed districts in Monroe County. Of those listed, one historic district, the Key West Historic District, is located within the boundaries of the project APE.

This district is shown on the attached figure and discussed below. Relevant photographs are keyed on the attached figure.

Key West Historic District

The Key West Historic District is comprised of 4,000 acres and 187 buildings. It was added to the NRHP in 1971. A boundary increase in 1983 added 5,400 acres and 2,385 buildings. Architectural styles within the district include late Victorian and late 19th and 20th century Revivals. Historically the district resources have been used for commerce and trade, industry, and residential purposes.

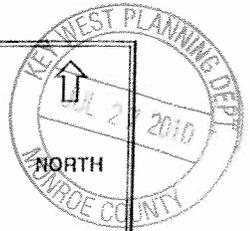
EFFECTS ON IDENTIFIED PROPERTIES

Key West Historic District

While the proposed antenna collocation is located within the Key West Historic District (Photograph 10), it will be placed on an equipment building on the roof of a c. 1978 building located on the grounds of the Casa Marina Resort Hotel. Mature non-deciduous vegetation will block the rooftop collocation from many areas within the district. In addition, the low profile of the collocation antennas will not impact the district viewshed. According to site plans provided by the client, a concealment screen, painted the same color as the hotel, will be constructed around the antennas. No adverse effect is anticipated.

ATTACHMENTS

- USGS 7.5-Minute Topographic Map showing APE for visual effects
- Site Diagram showing the APE for direct effects
- Historic properties identified in the APE for visual effects
- Photographic key



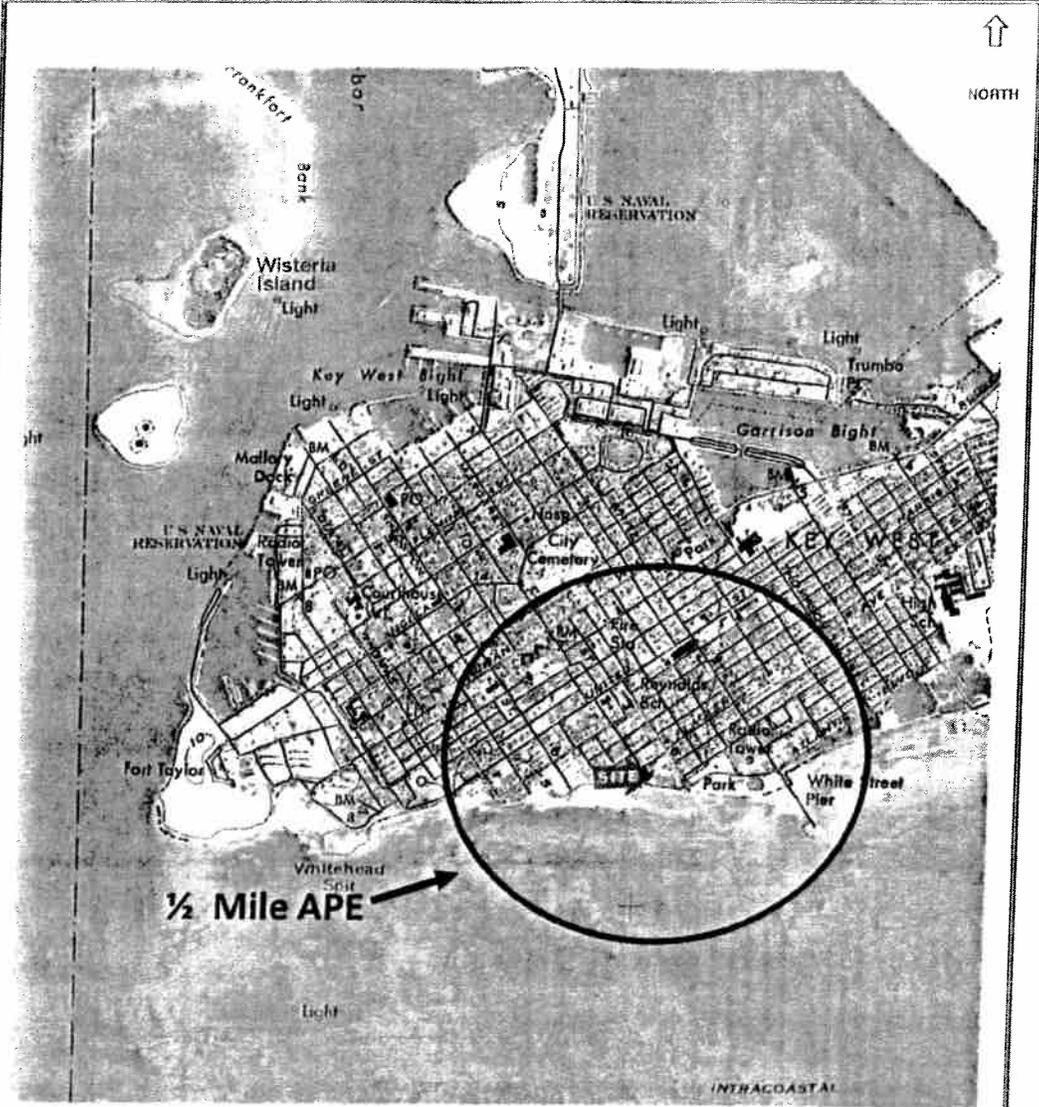
Source: USGS 7.5 minute topographic quadrangle, Key West, FL

TOPOGRAPHIC MAP

Dated: 1971
SCALE: 1" = 2000'



South Key West
Key West, FL
Project No. 49107507



Source: USGS 7.5 minute topographic quadrangle, Key West, FL

<p>TOPOGRAPHIC MAP Dated: 1971 SCALE: 1" = 2000'</p>		<p>South Key West Key West, FL Project No. 49107507</p>
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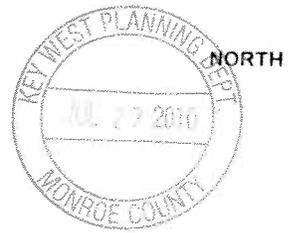


 Key West Historic District

AERIAL SHOWING HISTORIC
RESOURCES

Terracon

South Key West
Key West, Monroe County, Florida



 Key West Historic District

AERIAL SHOWING HISTORIC RESOURCES

Terracon

South Key West
Key West, Monroe County, Florida



NORTH



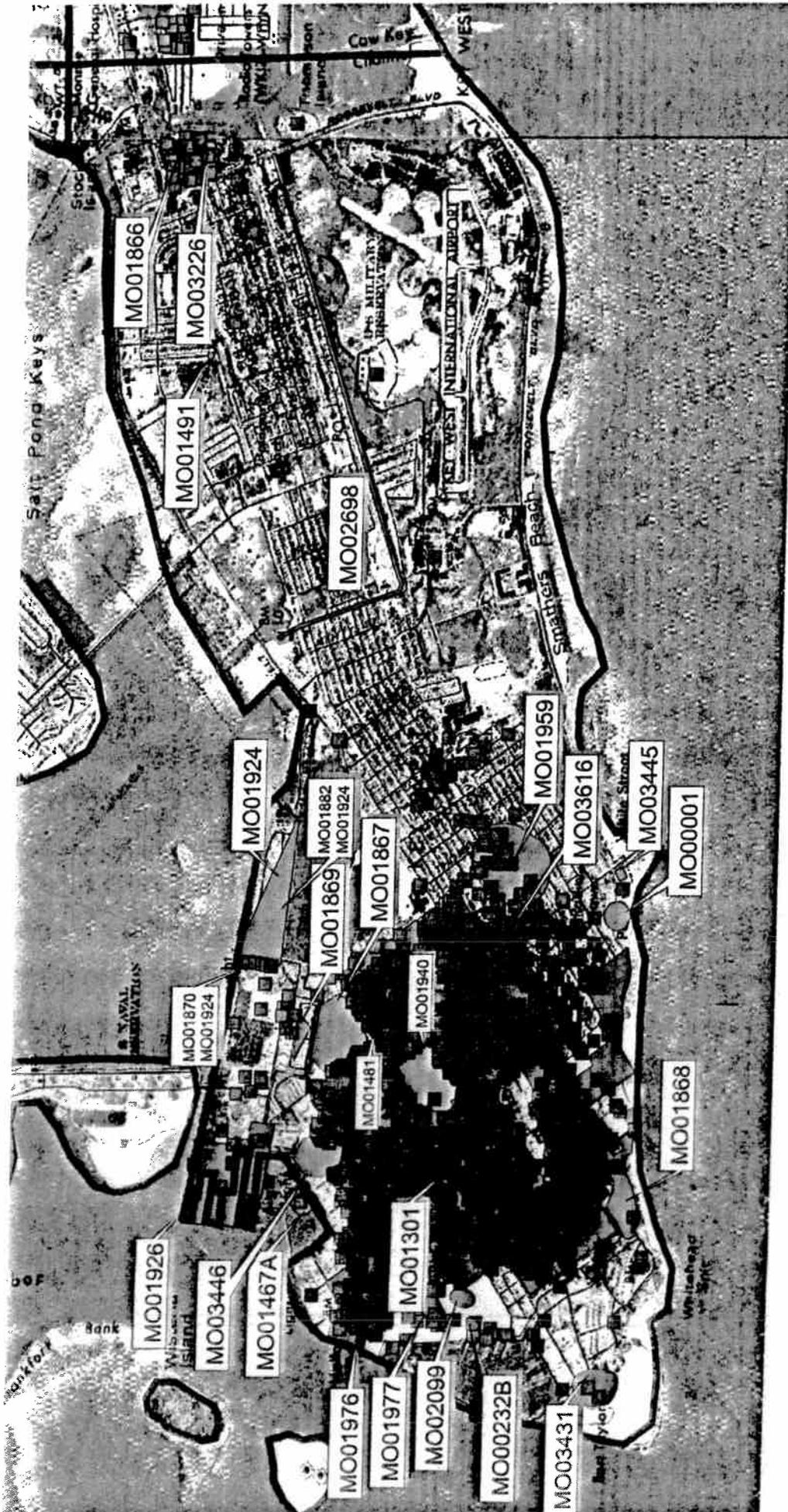
Source: Google Maps

 *Boundary of Historic District*

AERIAL SHOWING HISTORIC RESOURCES

Terracon

South Key West
Key West, Monroe County, Florida



THIS DRAWING IS THE PROPERTY OF MACTEC CONSULTING & CONSTRUCTION, INC. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM. WITHOUT THE WRITTEN PERMISSION OF THE OWNER.

at&t

MACTEC
CONSULTING & CONSTRUCTION, INC.

1105 LANTANA DRIVE
CORPUS CHRISTI, TX 78401
361.844.3388
361.844.3388
FAX: 361.844.1176

CONTRACT NO. 03-04-00-1918 (01)

NO.	DATE	FOR	DESCRIPTION
0	11/13/08	FOR REVIEW	
1	01/14/09	FOR REVIEW	
2	02/10/09	FOR REVIEW	
3	03/10/09	FOR REVIEW	
4	04/10/09	FOR REVIEW	
5	05/10/09	FOR REVIEW	
6	06/10/09	FOR REVIEW	
7	07/10/09	FOR REVIEW	
8	08/10/09	FOR REVIEW	
9	09/10/09	FOR REVIEW	
10	10/10/09	FOR REVIEW	
11	11/10/09	FOR REVIEW	
12	12/10/09	FOR REVIEW	
13	01/10/10	FOR REVIEW	
14	02/10/10	FOR REVIEW	
15	03/10/10	FOR REVIEW	
16	04/10/10	FOR REVIEW	
17	05/10/10	FOR REVIEW	
18	06/10/10	FOR REVIEW	
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92	08/10/16	FOR REVIEW	
93	09/10/16	FOR REVIEW	
94	10/10/16	FOR REVIEW	
95	11/10/16	FOR REVIEW	
96	12/10/16	FOR REVIEW	
97	01/10/17	FOR REVIEW	
98	02/10/17	FOR REVIEW	
99	03/10/17	FOR REVIEW	
100	04/10/17	FOR REVIEW	

CHECKED BY: M. AMBET

SOUTH KEY WEST
(CASA MARINA)

811 MARINA STREET
KEY WEST, FL 33543

SHEET NAME
PROSOLUTION
PHOTO LOCATIONS

SHEET NUMBER
PS0



PSL & PSL LOCATION
APPROXIMATELY 350 FEET NORTH
OF BUILDING LOCATION

ESS & PSL LOCATION
APPROXIMATELY 200 FEET WEST
OF BUILDING LOCATION

ESS & PSL LOCATION
APPROXIMATELY 150 FEET EAST
OF BUILDING LOCATION



**State Historic Preservation Office
Division of Historical Resources
Review for Compliance**



FLORIDA DEPARTMENT OF STATE

Kurt S. Browning

Secretary of State

DIVISION OF HISTORICAL RESOURCES

Ms. Joanne Bryan
Terracon Consultants, Inc.
2855 Premiere Parkway, Suite C
Duluth, Georgia 30097

April 28, 2010

RE: DHR Project File No.: 2010-1822
Federal Communication Commission
Proposed Antenna Collocation on the Casa Marina Resort Hotel
Terracon Project No.: 49107507
811 Seminole Avenue
Key West, Monroe County

Dear Ms. Bryan:

Our office reviewed the referenced project for possible impact to historic properties listed, or eligible for listing, in the National Register of Historic Places (NRHP). The review was conducted in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, 36 CFR Part 800: Protection of Historic Properties, and the National Environmental Policy Act of 1969, as amended.

As you are aware the Casa Marina Hotel property is located in the Key West Historic District, listed in the NRHP originally in 1971 and expanded in 1982. In addition, the historic Casa Marina Hotel is a contributing property in the district, as well as being individually eligible for listing NRHP. Based on the information provided in your March 2010/April 2010 documentation, it is the opinion of this office that the proposed undertaking will have no effect directly and no adverse effect visually on historic properties.

However, to minimize the visual impact to the surrounding historic resources, we strongly recommend that the antenna structure not be placed on top of the equipment shelter and instead the antennas be moved to the sides of the shelter, or be a separate structure beside the shelter. This will put the height of the proposed collocation in the same horizontal line with other structures already on the roof. If doing this will require that the antennas to be placed along the building parapet edge, they should be placed along the water-side of the roof parapet; if on that side the fins could be slightly taller and still not visible from the street-side. If mounted on the equipment shelter, the fins could extend slightly higher than the roof line and be barely visible from the street level.

500 S. Bronough Street • Tallahassee, FL 32399-0250 • <http://www.flheritage.com>

Director's Office
(850) 245-6300 • FAX: 245-6436

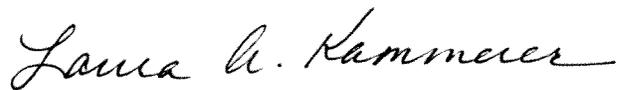
Archaeological Research
(850) 245-6444 • FAX: 245-6452

Historic Preservation
(850) 245-6333 • FAX: 245-6437

Ms. Joanne Bryan
SHPO/DHR Project File No. 2010-1822
April 28, 2010
Page 2

If you have any questions concerning our comments, please contact Samantha Earnest, Historic Preservationist, by electronic mail swearnest@dos.state.fl.us, or at 850-245-6333 or 800-847-7278.

Sincerely,

A handwritten signature in cursive script that reads "Laura A. Kammerer".

Laura A. Kammerer
Deputy State Historic Preservation Officer
For Review and Compliance

PC: Ms. Enid Torregrosa, City of Key West – Certified Local Government

HARC Approval



City Of Key West
Planning Department
Historic Preservation Division
3140 Flagler Avenue
Key West, Florida 33040

July 16, 2010

Mr. Alfredo Amoedo
SBA Network Service/
AT&T Mobility
5900 Broken Sound Parkway N
Boca Raton, Florida 33487

RE: ADDING ANTENNAS FOR AT&T MOBILITY FOR AN EXISTING
ROOF TOP CELL SITE
FOR: #1500 REYNOLDS AVENUE - HARC APPLICATION # H10-01-89
KEY WEST HISTORIC DISTRICT

Dear Mr. Amoedo:

This letter is to notify you that the Key West Historic Architecture Review Commission **approved** the application for the above mentioned project on the public hearing held on Tuesday, July 13, 2010. The Commission decision was based on the documents submitted and your presentation.

You may now apply for the necessary permits. Should you have any questions, please do not hesitate to contact me at your convenience.

On behalf of the Historic Architectural Review Commission of our City, thank you for your interest in the preservation of Key West historic heritage.

Sincerely:

A handwritten signature in black ink, appearing to read "Enid Torregrosa", is written over a horizontal line.

Enid Torregrosa, MSHP
Historic Preservation Planner
City Of Key West
3140 Flagler Avenue
Key West, Florida 33040

305.809.3973

etorregr@keywestcity.com

DRC
Minutes & Comments

Members had no comments.

Mrs. Kimball-Murley requested that the applicant provide a structural safety assessment. She then stated that one criteria for the variance is if minimum height sought is necessary to accomplish this need relative to the structure. She then reminded the applicant about maintaining good neighbor policy.

The following member of the public spoke on the matter:

Rick Richter, 104 Palmetto Drive

- f. Conditional Use – 1500 Reynolds (RE# 00037160-000100) – A conditional use for proposed wireless antenna mount on rooftop equipment shelter in the HCT zoning district per Section 122-898 of the Land Development Regulations of the Code of Ordinances of the City of Key West, Florida.**

Mr. Cunningham gave an overview of the conditional use request.

Mr. Averette inquired about the utility closet. Mr. Amoedo stated that fuel and generators would not be stored in the utility closet.

Mrs. Wittenberg had no comments.

Ms. Torregrosa requested that the applicant indicate on their application that they are within the historic district. She then clarified that there is no previous HARC approval number but a resolution number. The applicant stated that he assumed there was a previous HARC approval due to a resolution number.

The applicant informed members that he had consulted with an environmentalist on this project.

Mr. Bowman had no comments.

Mr. Torrence stated this will improve radio capabilities.

Mr Woodson stated the tower must meet the 100mph wind load.

Mrs. Kimball-Murley inquired about the fall radius. Mr. Amoedo stated it is not a tower it is an antenna.

The following member of the public spoke on the matter:

Rick Richter, 104 Palmetto Drive

Mrs. Cowart stated that Keys Energy had no objections.

- g. Variance – 1500 Reynolds (RE# 00037160-000100) – A variance request for height of 27 ft. above the allowed 35 ft. with a total height of 62 ft. for a proposed wireless antenna mount on a rooftop equipment shelter in the HCT zoning district per Section 122-900 of the Land Development Regulations of the Code of Ordinances of the City of Key West, Florida.**

Mr. Cunningham gave an overview of the variance request.

Members had no comments.

The following member of the public spoke on the matter:

Rick Richter, 104 Palmetto Drive

5. New Business

Minutes of the Development Review Committee

Meeting of December 18, 2009

Nicole Malo, Planner, convened a meeting of the Development Review Committee of the City of Key West at 10:09 AM, December 18, 2009. The meeting was held at Old City Hall, in the antechamber at 510 Greene Street, Key West.

1. Roll Call

Present for the Roll Call were:

Nicole Male, Planner I
(sitting in for Amy Kimball-Murley)
Gary Bowman, General Services Director
Diane Nicklaus, Building Representative

John Mallott, Fire Department
Cynthia Domenech-Coogle, Landscape Coordinator
Enid Torregrosa, HARC Planner
John Wilkins, ADA Coordinator

Planning Staff:

Brendon Cunningham

Ashley Monnier

Comments received from:

FKAA

Keys Energy

2. Approval of Agenda

A motion to approve the agenda was made by Mr. Wilkins and seconded by Ms. Torregrosa.

Motion carried by unanimous voice vote.

SO ORDERED.

3. Approval of Minutes

a. November 20, 2009

A motion to approve the November 20, 2009, DRC meeting minutes was made by Mr. Wilkins and seconded by Mrs. Nicklaus.

Motion carried by unanimous voice vote.

SO ORDERED.

4. Old Business

a. Conditional Use – 1500 Reynolds (RE# 00037160-000100) – A conditional use for proposed antenna mount on rooftop equipment shelter in the HCT zoning district per Section 122-898 of the Land Development Regulations of the Code of Ordinances of the City of Key West, Florida.

Mr. Cunningham informed members that the applicant has not provided additional information that was requested. Since this location falls under the historic district, Mr. Cunningham suggested the applicant pursue HARC approval.

Members moved that the item be tabled since there is no new information and the applicant is not present. *(Please note: The applicant, Alfredo Amoedo, submitted a request to table via email on December 16, 2009).*

- b. Variance – 1500 Reynolds (RE# 00037160-000100) – A variance request for height for proposed antenna mount on rooftop equipment shelter in the HCT zoning district per Section 122-900 of the Land Development Regulations of the Code of Ordinances of the City of Key West, Florida.**

Members moved that the item be tabled since there is no new information and the applicant is not present. *(Please note: The applicant, Alfredo Amoedo, submitted a request to table via email on December 16, 2009).*

5. New Business

- a. Vacation of City Property – A portion of Gecko Lane, abutting 309 Caraballo Lane (RE# 00000350-000000) for use by the owner of same per Sections 90-587, 90-588 & 90-589 of the Land Development Regulations of the Code of Ordinances of the City of Key West, Florida.**

Mr. Bowman stated that he has not been to the site; however, he does not foresee an issue as long as utilities are not impacted, (i.e., water, sewer, electric).

Mr. Mallott had no comments.

Ms. Torregrosa stated that the applicant will need to seek HARC approval if they remove, relocate or replace a fence.

Mrs. Nicklaus stated that the Building Department had no comments.

Mrs. Nicklaus read the following comments from:

Florida Keys Aqueduct Authority – The FKAA has no objection for use by the owner of same per Section 90-587, 90-588 and 90-589 of the Land Development Regulations of the Code of Ordinances of the City of Key West, Florida.

Keys Energy Services – had no objections.

Mr. Wilkins had no ADA comments. He added that the original intent of the lane was to provide access to the property that was land locked. However, now that the same owner owns that cottage, Mr. Wilkins is requesting that the owner consolidate the real estate number. This will ensure that if at a future date the property is divided, they will need to come forth through the same process and seek an easement. Additionally, Mr. Wilkins is requesting the legal department review the request since it is his understanding that the City does not vacate property but instead grant easements.

Mrs. Domenech-Coogle stated she has not made a site visit; however, from the pictures it appears that there are some plants in that easement, and in vacating the easement, the City would be giving up some valuable plants. Per our Ordinance, there is an opportunity to purchase the plants from the City. Mrs. Domenech-Coogle requested that the legal department let her know if that is an option per the Ordinance.

Mr. Cunningham stated that the original application was submitted in 2006. He then gave an overview of the application. He stated that we do not have an accurate survey and the applicant is claiming that the width is 6 feet. However, it appears to be 10-11 feet per the plat map. At the time the application was first submitted, the applicant built a fence on what appears to be City property and the portion of the property they want vacated was fenced in by the applicant. He added that the application was denied in 2006 since there was no accurate survey to indicate exactly what the City would be vacating.

- a. **After-the-Fact Variances – 1831 Harris Avenue (RE 00049510-000000)** – An After-the-Fact Variance for a side yard setback in the Single Family zoning district per Section 122-238 (6) a. (2) of the Land Development Regulations of the Code of Ordinances of the City of Key West, Florida.

The applicant's representative, Manny Garcia, reviewed the after-the-fact request with committee members.

Mrs. Cowart noted that Keys Energy provided a written statement that they have no objections on this project.

Mrs. Cowart then read comments from the Landscape Coordinator, Cynthia Domenech-Coogle:
Appropriately, prior to an addition being built within the drip line of trees application should be made with the Tree Commission staff for compliance with Tree Protection Ordinance. Inspection of building footprint area should be determined to ensure no damage to root systems and tree. In this case, as after-the-fact, staff will need to gain access to determine if damage has occurred as addition was built within the drip line of a large Poinciana tree.

Mr. Averette stated that he was unable to gain access. However, Mike Davila met with Mr. Garcia and viewed property. Mr. Davila would not have originally recommended approval; however, since it is an after-the-fact, the Fire Department can access from 3 different directions, posing no life safety issue.

Ms. Torregrosa had no comments.

Mrs. Nicklaus stated that Building has been holding the file until the after-the-fact variance was approved.

Mr. Wilkins had no comments but did ask applicant for clarification on the drip line. Applicant stated that the drip line is an extension from the roof.

Ms. Malo requested that the applicant meet with Mr. Bowman regarding stormwater.

Applicant stated that they will apply for a lawful unit determination since the structure was built before 1990.

Mrs. Kimball-Murley requested that setback dimensions be listed on the plans.

There were no public comments.

5. **New Business**

- a. **Conditional Use – 1500 Reynolds (RE Number 00037160-000100)** – A conditional use for proposed antenna mount on rooftop equipment shelter in the HCT zoning district per Section 122-898 of the Land Development Regulations of the Code of Ordinances of the City of Key West, Florida.

The applicant, Alfredo Amoedo, reviewed the conditional use request with committee members.

Mrs. Cowart noted that Keys Energy provided a written statement that they have no objections on this project.

Mr. Averette, Ms. Torregrosa, Mr. Wilkins and Mrs. Nicklaus had no comments.

Mr. Corriveau informed the applicant that we will need a verification and authorization form. Mr. Amoedo informed staff that since he is an agent for AT&T, the process may take a while.

Mr. Corriveau asked that the applicant coordinate with HARC and with the Landscape Coordinator. He informed the applicant that the application should state if this request is providing an essential public service. He also requested that the dimensions for the equipment be listed on the plans.

There were no public comments.

- b. Variance – 1500 Reynolds (RE Number 00037160-000100) – A variance request for height for proposed antenna mount on rooftop equipment shelter in the HCT zoning district per Section 122-900 of the Land Development Regulations of the Code of Ordinances of the City of Key West, Florida.**

The applicant, Alfredo Amoedo, reviewed the variance request with committee members.

Mr. Averette, Mr. Wilkins and Mrs. Nicklaus had no comments.

Mrs. Cowart noted that Keys Energy provided a written statement that they have no objections on this project.

Mrs. Cowart then read comments from the Landscape Coordinator, Cynthia Domenech-Coogle:

The above said property will not be changing the footprint of the existing building therefore Landscape and Tree Commission approvals are not required.

Ms. Torregrosa informed the applicant that the HARC approval in the packet was for the building and not for the antenna. Any additional changes will require HARC approval. Therefore, the applicant will need to submit a new HARC application. Ms. Torregrosa requested that the applicant provide a radius drawing of 250' showing potential effects on historical buildings.

Mr. Corriveau advised applicant that he needs to demonstrate the minimum variance needed to accomplish service.

Mrs. Kimball-Murley stated that there are very tough criteria's and it is difficult to meet them all. She recommended that the applicant meet good neighbor policy. She added that staff would like to participate if any public meetings are held. Mrs. Kimball-Murley stated that the Planning Department provides applicants with a 300' mailing radius when requested to assist in communicating with the public.

Mr. Corriveau informed members that this tower will not co-locate, meaning AT&T will be the only provider.

There were no public comments.

- c. Development Agreement – 2319-2401 North Roosevelt Avenue (RE Numbers 00001990-000000, 00002000-000000, 00002080-0001000 and 00002260-000000) – A Development Agreement for an approved Major Development Plan and Conditional Use for a mixed use (transient and residential) project known as Banana Bay in the General Commercial (CG) Zoning District pursuant to Chapter 90, Article IX, Development Agreements of the Land Development Regulations of the Code of Ordinances of the City of Key West, Florida.**

The applicant, Ginny Stones, gave committee members an overview of the development agreement. The original development agreement was approved in 2006 and extension followed in 2007. The 2007 approval did not list several conditions on site plans.

Affordable Housing Information

Prepared by and Return To:
Larry R. Erskine, Esq.
P.O. Box 1409
Key West, FL 33041-1409
(305) 809-3770

Doc# 1743312
Bk# 2414 Pg# 19

**CORRECTED, AMENDED AND RESTATED DECLARATION OF AFFORDABLE
HOUSING RESTRICTIONS AND RELEASE**

This Corrected, Amended and Restated Declaration of Affordable Housing Restrictions and Release (hereinafter "**Declaration**") is made and entered into this 5th day of MAY, 2009, by Casa Marina Owner, LLC, a Delaware limited liability company authorized to conduct business in the State of Florida (hereinafter "**Declarant**"), whose principal mailing address is 595 S. Federal Highway, Suite 600, Boca Raton, Florida, 33432.

WHEREAS, the Declarant previously entered into that certain Declaration of Affordable Housing Restrictions dated October 9, 2007 (the "**Original Declaration**"), which Original Declaration was recorded on October 17, 2007, in the Office Records of Monroe County as Document No. 1667164, Book No. 2326, Page No. 1954.

WHEREAS, the Original Declaration erroneously described the real property to be subjected to the restrictions of the Original Declaration as follows (the "**Original Property**"):

On the island of Key West, Florida, being Lots 1 through 16, inclusive, all being in Block Seven (7) as shown on the plat of the Key West Investment Company's Subdivision of part of Tract Seventeen (17), recorded in Plat Book Number 1, page 69, of the Public Records of Monroe County, Florida.

WHEREAS, the real property which the Declarant intended to subject to the restrictions of the Original Declaration is more particularly described as follows (the "**Property**"):

On the island of Key West, Florida, being Lots 13, 14, and 15, all being in Block Seven (7) as shown on the plat of the Key West Investment Company's Subdivision of part of Tract Seventeen (17), recorded in Plat Book Number 1, page 69 of the Public Records of Monroe County, Florida.

WHEREAS, the Property represents a portion of the Original Property which has been encumbered by the Original Declaration.

WHEREAS, it is the intention of the Declarant and the City of Key West (hereinafter, the "**City**") that only that portion of the Original Property which constitutes the Property be subject to (a) regulation pursuant to Sections 122-1465 through 122-1500 of the Code of Ordinances of the City of Key West, Florida, as amended from time to time ("**Work Force Housing Ordinance**"), and (b) any other regulations and limitations placed on the Property to



establish and maintain the affordability of the Property for persons with incomes within a specified range;

WHEREAS, the Declarant, with the consent of the City, desires to release the portion of the Original Property which does not constitute the Property (the “**Released Property**”) from the limitations and restrictions of the Original Declaration and to amend, restate and affirm the limitations and restrictions placed on the Property pursuant to the Original Declaration on the terms set forth in this Declaration;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Declarant hereby amends and restates the Original Declaration in its entirety as follows:

I. DEFINITIONS

A. “Declarant” shall mean the owner of the Property and any subsequent purchaser, devisee, transferee, grantee or holder of title of the Property or any portion of the Property.

B. “Transfer” means any sale, assignment or transfer, voluntary, involuntary or by operation of law (whether by deed, contract of sale, gift, devise, bequest, trustee’s sale, deed in lieu of foreclosure, or otherwise) of any interest in the Property, including but not limited to, a fee simple interest, a joint tenancy interest, a life estate, a leasehold interest, or an interest evidenced by a land contract by which possession of the Property is transferred and Declarant retains title.

C. “Transferee” shall mean an individual, or individuals, who receive a Transfer of the Property from the Declarant.

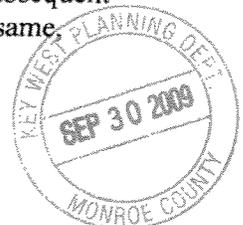
All other terms shall have the same meaning given to them in the City’s Work Force Housing Ordinance.

II. TERM AND ENFORCEABILITY

A. This Declaration shall run with the Property and bind the Declarant, his or her heirs, legal representatives, executors, successors in interest and assigns, for a period of fifty (50) years from the effective date of this Declaration. At any time during the final year of the restriction, the City, at its sole discretion, may act by Resolution to renew this Declaration for an additional 50-year term.

B. The Property is held and hereafter shall be held, conveyed, encumbered, used, rented, leased and occupied subject to these covenants, conditions, restrictions and limitations. All of the herein-stated covenants, conditions, restrictions and limitations are intended to constitute both equitable servitudes and covenants running with the land.

C. Any transferee or purchaser of the Property, or of any portion of or interest in the Property, by the acceptance of a deed therefore, whether from Declarant or from any subsequent purchaser of the Property, or by the signing of a contract or agreement to purchase the same,



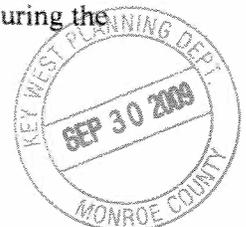
shall, by the acceptance of such deed or by the signing of such contract or agreement, be deemed to have consented to and accepted the covenants, conditions, restrictions and limitations set forth herein.

D. In order to preserve through this Declaration the affordability of the Property for persons with incomes within a specified range, the Declarant hereby grants and assigns to the City the right to monitor and enforce compliance with this Declaration. Declarant otherwise reserves the rights necessary to implement the provisions of this Declaration.

III. OCCUPANCY, LEASING AND USE OF THE PROPERTY

A. The improvements located on the subject Property shall be operated, managed and otherwise administered as affordable work force housing and such other uses incidental to residential use as may be permitted by local zoning and land use regulations.

1. Occupancy shall be restricted to households or persons who derive at least 70 percent of its or his/her total income from gainful employment in Monroe County.
2. At the time the subject unit is leased, the total income of the eligible household or persons shall not exceed 100 percent of the median household income for Monroe County (adjusted for family size). During the occupancy of the rental unit, the household's income may increase to an amount not to exceed 140 percent of the median household income for Monroe County (adjusted for family size). In such event, the tenant's occupancy shall terminate at the end of the existing lease term.
3. The monthly rent for the rental unit, not including utilities, shall not exceed 30 percent of that amount which represents 100 percent of the monthly median household income of Monroe County (adjusted for family size).
4. Eligibility is based on proof of legal residence in Monroe County for at least one consecutive year.
5. Priority shall be given to families of four or more members for larger sized affordable work force housing units.
6. The income of eligible households shall be determined by counting only the first and highest paid 40 hours of employment per week of each unrelated adult. For a household containing adults related by marriage or a domestic partnership registered with the City, only the highest 60 hours of combined employment shall be counted. The income of dependents regardless of age shall not be counted in calculating a household's income.
7. In the event that a tenant's income shall exceed the maximum allowable income under this section and such shall occur for the first time during the



last three months of a tenancy, then the landlord and tenant may extend a lease for a period of one year at the affordable rate.

8. The board of adjustment may review a household's income and unique circumstances to determine eligibility and conformance with the intent of this ordinance to assure that people in need are not excluded and people without need are not included.

B. Notwithstanding anything in this Agreement to the contrary, the first floor of the improvements located on the Property shall not be subject to the limitations and restrictions set forth in Section III(A) above, and the Declarant shall be permitted to use, operate and maintain the first floor of such improvements in any manner permitted by applicable law (including any applicable zoning regulations).

IV. DEFAULTS AND REMEDIES: ASSIGNMENT OF RENTS

A. Upon any violation of the provisions of this Declaration the City may declare a default under this Declaration by delivering written notice thereof to the Declarant. After providing written notice of default, the City may apply to a court of competent jurisdiction for specific performance of the Declaration, for an injunction prohibiting a proposed sale or transfer in violation of this Declaration, for a declaration that a prohibited transfer is void, or for any such other relief as may be appropriate.

B. Assignment of Rents: Declarant hereby assigns to City the right to receive the rents due or collected from the operation and leasing of the Property or any portion thereof (other than the first floor of the improvements located thereon) during the entire period the Property is occupied in violation of any of the terms of this Declaration.

C. The remedies stated herein shall not be exclusive, but shall be cumulative to all other remedies and rights the parties may lawfully exercise.

V. REQUIREMENTS FOR WRITTEN REPORTS FROM DECLARANT

Declarant shall provide a written report to the City each year on October 1, or on such other date as specified by the City in writing, which includes a statement that Declarant has complied with all provisions of this Declaration, or includes Declarant's explanation of any violation of any provision of this Declaration. The report shall be submitted within thirty (30) days of the specified date to the City, or to such other person or address designated by the City. Failure to report in a timely manner, or any misrepresentations on the report, shall constitute a default under this Declaration.

VI. GENERAL PROVISIONS

A. The City may assign its rights and delegate its duties hereunder in writing without the consent of Declarant. Upon such assignment the City shall notify the Declarant.

B. If any action is brought to enforce the terms of this Declaration, the prevailing party shall be entitled to reasonable attorneys' fees and costs.



C. If any one or more of the provisions contained in this Declaration shall for any reason be held to be invalid, illegal or unenforceable in any respect, then such provision or provisions shall be deemed severable from the remaining provisions contained in this Declaration, and this Declaration shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein.

D. The terms of this Declaration shall be interpreted under the laws of the State of Florida and venue shall lie in Monroe County, Florida.

E. All notices required herein shall be sent by certified mail, return receipt requested, to the Declarant at the address of the Property and to the City or its designee at P.O. Box 1409, Key West, Florida, 33041, or such other address that the City may subsequently provide in writing to the Declarant.

VII. RELEASE; RESTATEMENT

A. The Released Property, which is more particularly described as follows, is hereby released from the restrictions, limitations and other terms and conditions of the the Original Declaration, and the Original Declaration shall be of no further force or effect with respect to such Released Property:

On the island of Key West, Florida, being Lots 1 through 12 and Lot 16, all being in Block Seven (7) as shown on the plat of the Key West Investment Company's Subdivision of part of Tract Seventeen (17), recorded in Plat Book Number 1, page 69, of the Public Records of Monroe County, Florida.

B. The terms and conditions of this Declaration supersede, amend, restate and replace the terms and conditions of the Original Declaration in its entirety.



IN WITNESS WHEREOF, the Declarant has executed this Declaration as of the date first written above.

Doc# 1743312
Bk# 2414 Pg# 24

DECLARANT:

Alia

Casa Marina Owner, LLC

Witness

Name: Alison Ando

By: David Hirsh

Name: David Hirsh

Witness

Name: Bill Allegretti

Title: Managing Director and Vice President

STATE OF NEW YORK
COUNTY OF NEW YORK

Sworn to or affirmed and subscribed before me this 31 day of October, 2008, by David Hirsh, as Managing Director and VP of Casa Marina Owner, LLC, who is personally know to me or has produced _____ as identification.

Douglas V. Summa

NOTARY SEAL:

DOUGLAS V. SUMMA
NOTARY PUBLIC, State of New York
No. 01506133067
Qualified in New York County
Commission Expires Sept. 6, 2009



For purposes of acknowledging and agreeing to the terms of the attached Declaration, including the release described in Section VII thereof:

Maria Ratchiff

Witness

Name: Maria Ratchiff

Portia Navarro

Witness

Name: Portia Navarro

City of Key West

By: [Signature]
Name: MORGAN MCPHERSON
Title: Mayor

Doc# 1743312
Bk# 2414 Pg# 25

State of Florida
County of Monroe

The foregoing instrument was acknowledged this 5th day of May, 2009, by Morgan McPherson, as the Mayor of City of Key West, who is personally known to me or who has produced personally known as identification.

Vivian Perez

NOTARY PUBLIC VIVIAN PEREZ
Commission # DD 863517
Expires April 9, 2013
Bonded Thru Troy Fain Insurance 800-385-7019

MONROE COUNTY
OFFICIAL RECORDS

KEY WEST PLANNING DEPT
SEP 30 2009
MONROE COUNTY

Prepared by and Return to:
Larry R. Erskine, Esq.
P.O. Box 1409
Key West, FL 33041-1409
(305) 809-3770

Doc# 1667164
Bk# 2326 Pg# 1954

DECLARATION OF AFFORDABLE HOUSING RESTRICTIONS

This Declaration of Affordable Housing Restrictions (hereinafter "Declaration") is made and entered into this 9th day of October, 2007, by Casa Marina Owner, LLC, a Delaware limited liability company authorized to conduct business in the State of Florida (hereinafter "Declarant"), whose principal mailing address is 595 S. Federal Highway, Suite 600, Boca Raton, Florida, 33432.

This Declaration applies to the real property located at 811 Seminole Street, in Key West, Florida, which is more particularly described as follows:

On the island of Key West, Florida, being Lots 1 through 16, inclusive, all being in Block Seven (7) as shown on the plat of the Key West Investment Company's Subdivision of part of Tract Seventeen (17), recorded in Plat Book Number 1, page 69, of the Public Records of Monroe County, Florida.

WHEREAS, the Property is subject to regulation pursuant to Sections 122-1465 through 122-1500 of the Code of Ordinances of the City of Key West, Florida, as amended from time to time ("Work Force Housing Ordinance"), which ordinance establishes affordable housing categories to facilitate the development of housing designed to meet the needs of people employed by the local economy, establishes eligibility requirements for occupants of work force housing, and restricts the sales price of the Property and requires that the Property be sold at a price substantially less than fair market value to a purchaser within a specific income range; and

WHEREAS, Declarant as well as subsequent purchasers and tenants will benefit from the limitations and regulations placed on the Property by operation of this Declaration; and,

WHEREAS, the intent of the City of Key West (hereinafter "City") in imposing reasonable regulations on the Property is to establish and maintain the affordability of the Property for persons with incomes within a specified range; and

WHEREAS, the intent of Declarant is to preserve through this Declaration the affordability of the Property and to assign to the City the right to enforce compliance with this Declaration; and



NOW, THEREFORE, the Declarant agrees that the Property shall be held and conveyed subject to the following affordable housing restrictions, covenants and conditions, which shall run with the Property and be binding on all parties having any right, title or interest in the Property or any part thereof, their heirs, successors and assigns for the entire term of this Declaration.

I. DEFINITIONS

- A. "Declarant" shall mean the owner of the Property and any subsequent purchaser, devisee, transferee, grantee or holder of title of the Property or any portion of the Property.
- B. "Transfer" means any sale, assignment or transfer, voluntary, involuntary or by operation of law (whether by deed, contract of sale, gift, devise, bequest, trustee's sale, deed in lieu of foreclosure, or otherwise) of any interest in the Property, including but not limited to, a fee simple interest, a joint tenancy interest, a life estate, a leasehold interest, or an interest evidenced by a land contract by which possession of the Property is transferred and Declarant retains title.
- C. "Transferee" shall mean an individual, or individuals, who receive a Transfer of the Property from the Declarant.

All other terms shall have the same meaning given to them in the City's Work Force Housing Ordinance.

II. TERM AND ENFORCEABILITY

A. This Declaration shall run with the Property and bind the Declarant, his or her heirs, legal representatives, executors, successors in interest and assigns, for a period of fifty (50) years from the effective date of this Declaration. At any time during the final year of the restriction, the City, at its sole discretion, may act by Resolution to renew this Declaration for an additional 50-year term.

B. The Property is held and hereafter shall be held, conveyed, encumbered, used, rented, leased and occupied subject to these covenants, conditions, restrictions and limitations. All of the herein-stated covenants, conditions, restrictions and limitations are intended to constitute both equitable servitudes and covenants running with the land.

C. Any transferee or purchaser of the Property, or of any portion of or interest in the Property, by the acceptance of a deed therefore, whether from Declarant or from any subsequent purchaser of the Property, or by the signing of a



contract or agreement to purchase the same, shall, by the acceptance of such deed or by the signing of such contract or agreement, be deemed to have consented to and accepted the covenants, conditions, restrictions and limitations set forth herein.

D. In order to preserve through this Declaration the affordability of the Property for persons with incomes within a specified range, the Declarant hereby grants and assigns to the City the right to monitor and enforce compliance with this Declaration. Declarant otherwise reserves the rights necessary to implement the provisions of this Declaration.

III. OCCUPANCY, LEASING AND USE OF THE PROPERTY

A. The subject property shall be operated, managed and otherwise administered as affordable work force housing and such other uses incidental to residential use as may be permitted by local zoning and land use regulations.

1. Occupancy shall be restricted to households or persons who derive at least 70 percent of its or his/her total income from gainful employment in Monroe County.

2. At the time the subject unit is leased, the total income of the eligible household or persons shall not exceed 100 percent of the median household income for Monroe County (adjusted for family size). During the occupancy of the rental unit, the household's income may increase to an amount not to exceed 140 percent of the median household income for Monroe County (adjusted for family size). In such event, the tenant's occupancy shall terminate at the end of the existing lease term.

3. The monthly rent for the rental unit, not including utilities, shall not exceed 30 percent of that amount which represents 100 percent of the monthly median household income of Monroe County (adjusted for family size).

4. Eligibility is based on proof of legal residence in Monroe County for at least one consecutive year.

5. Priority shall be given to families of four or more members for larger sized affordable work force housing units.



6. The income of eligible households shall be determined by counting only the first and highest paid 40 hours of employment per week of each unrelated adult. For a household containing adults related by marriage or a domestic partnership registered with the City, only the highest 60 hours of combined employment shall be counted. The income of dependents regardless of age shall not be counted in calculating a household's income.

7. In the event that a tenant's income shall exceed the maximum allowable income under this section and such shall occur for the first time during the last three months of a tenancy, then the landlord and tenant may extend a lease for a period of one year at the affordable rate.

8. The board of adjustment may review a household's income and unique circumstances to determine eligibility and conformance with the intent of this ordinance to assure that people in need are not excluded and people without need are not included.

IV. DEFAULTS AND REMEDIES: ASSIGNMENT OF RENTS

A. Upon any violation of the provisions of this Declaration the City may declare a default under this Declaration by delivering written notice thereof to the Declarant. After providing written notice of default, the City may apply to a court of competent jurisdiction for specific performance of the Declaration, for an injunction prohibiting a proposed sale or transfer in violation of this Declaration, for a declaration that a prohibited transfer is void, or for any such other relief as may be appropriate.

B. Assignment of rents: Declarant hereby assigns to City the right to receive the rents due or collected during the entire period the Property is occupied in violation of any of the terms of this Declaration.

C. The remedies stated herein shall not be exclusive, but shall be cumulative to all other remedies and rights the parties may lawfully exercise.

V. REQUIREMENTS FOR WRITTEN REPORTS FROM DECLARANT

Declarant shall provide a written report to the City each year on October 1, or on such other date as specified by the City in writing, which includes a statement that Declarant has complied with all provisions of this Declaration, or includes Declarant's explanation of any violation of any provision of this Declaration. The



report shall be submitted within thirty (30) days of the specified date to the City, or to such other person or address designated by the City. Failure to provide a report in a timely manner, or any misrepresentations on the report, shall constitute a default under this Declaration.

VI. GENERAL PROVISIONS

A. The City may assign its rights and delegate its duties hereunder in writing without the consent of Declarant. Upon such assignment the City shall notify the Declarant.

B. If any action is brought to enforce the terms of this Declaration, the prevailing party shall be entitled to reasonable attorneys' fees and costs.

C. If any one or more of the provisions contained in this Declaration shall for any reason be held to be invalid, illegal or unenforceable in any respect, then such provision or provisions shall be deemed severable from the remaining provisions contained in this Declaration, and this Declaration shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein.

D. The terms of this Declaration shall be interpreted under the laws of the State of Florida and venue shall lie in Monroe County, Florida.

E. All notices required herein shall be sent by certified mail, return receipt requested, to the Declarant at the address of the Property and to the City or its designee at P.O Box 1409, Key west. Florida, 33041, or such other address that the City may subsequently provide in writing to the Declarant.

IN WITNESS WHEREOF, the Declarant has executed this Declaration as of the date written below.

DECLARANT: CASA MARINA OWNER, LLC

By: _____

Dennis J. McDonagh, its Manager

10-09-07

Date



STATE OF ~~FLORIDA~~ *New York*
COUNTY OF ~~MONROE~~ *New York*

Sworn to or affirmed and subscribed before me this 9th day of October, 2007, by Dennis J. McDonagh, as Manager of Casa Marina Owner, LLC, who is personally known to me or has produced _____ as identification.

NOTARY SEAL:

Melissa Herrand
NOTARY PUBLIC

MELISSA HERRAND
Notary Public, State of New York
No. 30-4814420
Qualified in Nassau County
Commission Expires 5-9-2011

MONROE COUNTY
OFFICIAL RECORDS



Property Appraiser Information

Ervin A. Higgs, CFA
Property Appraiser
Monroe County, Florida

office (305) 292-3420
fax (305) 292-3501

Property Record View

Alternate Key: 8735677 Parcel ID: 00037160-000100

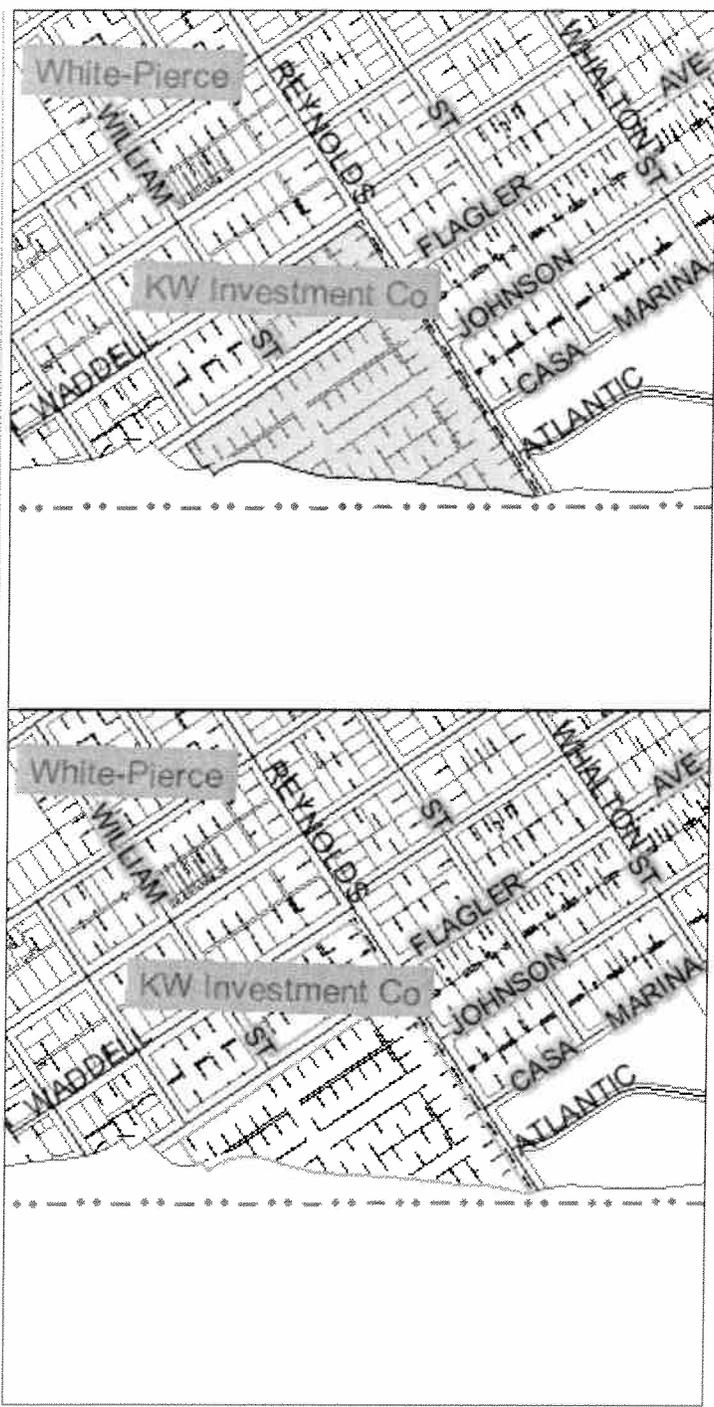
Ownership Details

Mailing Address:
CASA MARINA OWNER LLC
811 SEMINOLE ST
KEY WEST, FL 33040

Property Details

PC Code: 39 - HOTELS,MOTELS
Millage Group: 10KW
Affordable Housing: No
Section-
Township- 05-68-25
Range:
Property 1500 REYNOLDS ST KEY WEST
Location: 811 SEMINOLE ST KEY WEST
Subdivision: Key West Investment Co's Sub
Legal KW KW INVESTMENT CO SUB PB1-69 SQRS 1 THRU 5 & PT SQR 6 & SQR 7 TR 17 G6-103 G37-65/67 G70-508/9
Description: OR175-144/45 OR214-88/89 OR274-337/38 OR332-35 OR387-997/99 OR388-826/28 OR399-599/600 OR427-61/62
OR534-1098 OR660-860/887 OR695-8/9OR1033-627/632 OR1033-633/648 OR1033-649/664
OR1350-357/368(LEASE) OR1350-385/91-C OR1359-745/774(LEASE) OR1436-592/597OR1436-598/608
OR1437-275/278Q/C OR1624-743/763(LEASE) OR1624-764/779(LEASE) OR1701-931/932Q/C OR2115-141/147
OR2326-1954/1959(REST) OR2414-19/25(REST)

Parcel Map



Land Details

Land Use Code	Frontage	Depth	Land Area
100W - COMMERCIAL WATERFRON	0	0	6.66 AC
100D - COMMERCIAL DRY	0	0	1.91 AC

Building Summary

Number of Buildings: 7

Number of Commercial Buildings: 7
 Total Living Area: 183188
 Year Built: 1901

Building 1 Details

Building Type	Condition <u>E</u>	Quality Grade 450
Effective Age 16	Perimeter 918	Depreciation % 20
Year Built 1901	Special Arch 0	Grnd Floor Area 11,610
Functional Obs 0	Economic Obs 0	

Inclusions:

Roof Type	Roof Cover	Foundation
Heat 1	Heat 2	Bedrooms 0
Heat Src 1	Heat Src 2	

Extra Features:

2 Fix Bath 0	Vacuum 0
3 Fix Bath 0	Garbage Disposal 0
4 Fix Bath 0	Compactor 0
5 Fix Bath 0	Security 0
6 Fix Bath 0	Intercom 0
7 Fix Bath 0	Fireplaces 0
Extra Fix 9	Dishwasher 0



Sections:

Nbr	Type	Ext Wall	# Stories	Year Built	Attic	A/C	Basement %	Finished Basement %	Area
1	FLA		1	1986					3,870

2	<u>FLA</u>	1	1986	3,870
3	<u>FLA</u>	1	1986	3,870

Interior Finish:

Section Nbr	Interior Finish Nbr	Type	Area %	Sprinkler	A/C
	15708	WAREHOUSE/MARINA A	100	N	N
	15709	WAREHOUSE/MARINA A	100	N	N
	15710	WAREHOUSE/MARINA A	100	N	N

Exterior Wall:

Interior Finish Nbr	Type	Area %
5411	MIN WOOD SIDING	100

Building 2 Details

Building Type	Condition <u>E</u>	Quality Grade 450
Effective Age 14	Perimeter 1,213	Depreciation % 15
Year Built 1916	Special Arch 0	Grnd Floor Area 92,058
Functional Obs 0	Economic Obs 0	

Inclusions:

Roof Type	Roof Cover	Foundation
Heat 1	Heat 2	Bedrooms 0
Heat Src 1	Heat Src 2	

Extra Features:

2 Fix Bath 0	Vacuum 0
3 Fix Bath 0	Garbage Disposal 0
4 Fix Bath 0	Compactor 0
5 Fix Bath 0	Security 0
6 Fix Bath 0	Intercom 0
7 Fix Bath 0	Fireplaces 0
Extra Fix 0	Dishwasher 0

No sketch available to display

Sections:

Nbr	Type	Ext Wall	# Stories	Year Built	Attic	A/C	Basement %	Finished Basement %	Area
1	<u>FLA</u>		1	1915					92,058
2	<u>CPF</u>		1	1915					405
3	<u>OPF</u>		1	1915					7,084

Interior Finish:

Section Nbr	Interior Finish Nbr	Type	Area %	Sprinkler	A/C
	15711	HOTELS/MOTEL A	100	Y	Y
	15712	CPF	100	N	N
	15713	OPF	100	N	N

Exterior Wall:

Interior Finish Nbr	Type	Area %
5412	REIN CONCRETE	100

Building 3 Details

Building Type
 Effective Age 14
 Year Built 1979
 Functional Obs 0

Condition E
 Perimeter 760
 Special Arch 0
 Economic Obs 0

Quality Grade 450
 Depreciation % 15
 Grnd Floor Area 13,704

Inclusions:

Roof Type
Heat 1
Heat Src 1

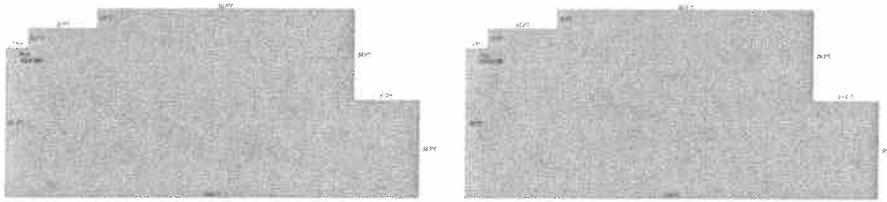
Roof Cover
Heat 2
Heat Src 2

Foundation
Bedrooms 0

Extra Features:

2 Fix Bath 0
3 Fix Bath 0
4 Fix Bath 0
5 Fix Bath 0
6 Fix Bath 0
7 Fix Bath 0
Extra Fix 0

Vacuum 0
Garbage Disposal 0
Compactor 0
Security 0
Intercom 0
Fireplaces 0
Dishwasher 0



Sections:

Nbr	Type	Ext Wall	# Stories	Year Built	Attic	A/C	Basement %	Finished Basement %	Area
1	FLA		1	1978					6,852
2	FLA		1	1978					6,852

Interior Finish:

Section Nbr	Interior Finish Nbr	Type	Area %	Sprinkler	A/C
	15714	HOTELS/MOTEL A	100	Y	Y
	15715	HOTELS/MOTEL A	100	Y	Y

Exterior Wall:

Interior Finish Nbr	Type	Area %
5413	C.B.S.	100

Building 4 Details

Building Type	Condition <u>E</u>	Quality Grade 450
Effective Age 14	Perimeter 1,045	Depreciation % 15
Year Built 1979	Special Arch 0	Grnd Floor Area 52,446
Functional Obs 0	Economic Obs 0	

Inclusions:

Roof Type	Roof Cover	Foundation
Heat 1	Heat 2	Bedrooms 0
Heat Src 1	Heat Src 2	

Extra Features:

2 Fix Bath	0	Vacuum	0
3 Fix Bath	160	Garbage Disposal	0
4 Fix Bath	0	Compactor	0
5 Fix Bath	0	Security	0
6 Fix Bath	0	Intercom	0
7 Fix Bath	0	Fireplaces	0
Extra Fix	0	Dishwasher	0

No sketch available to display

Sections:

Nbr	Type	Ext Wall	# Stories	Year Built	Attic	A/C	Basement %	Finished Basement %	Area
1	<u>SBU</u>		1	1978					5,495
2	<u>SBF</u>		1	1978					5,863
3	<u>FLA</u>		1	1978					1,232
4	<u>OUF</u>		1	1978					30,006
5	<u>EPB</u>		1	1978					1,800

6	<u>FLA</u>	1	1978	51,214
7	<u>PTO</u>	1	1978	13,433

Interior Finish:

Section Nbr	Interior Finish Nbr	Type	Area %	Sprinkler	A/C
	15716	SBU	100	N	N
	15717	SBF	100	N	N
	15718	OFF BLDG 1 STY-A	100	Y	Y
	15719	OUF	100	N	N
	15720	EPB	100	N	Y
	15721	HOTELS/MOTEL A	100	Y	Y
	15722	PTO	100	N	N

Exterior Wall:

Interior Finish Nbr	Type	Area %
5414	C.B.S.	100

Building 5 Details

Building Type
 Effective Age 14
 Year Built 1986
 Functional Obs 0

Condition E
 Perimeter 638
 Special Arch 0
 Economic Obs 0

Quality Grade 450
 Depreciation % 15
 Grnd Floor Area 6,972

Inclusions:

Roof Type
 Heat 1
 Heat Src 1

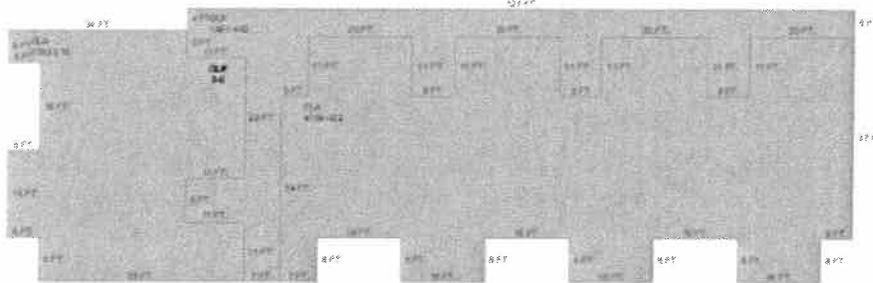
Roof Cover
 Heat 2
 Heat Src 2

Foundation
 Bedrooms 0

Extra Features:

2 Fix Bath 0
 3 Fix Bath 0
 4 Fix Bath 0
 5 Fix Bath 0
 6 Fix Bath 0
 7 Fix Bath 0
 Extra Fix 252

Vacuum 0
 Garbage Disposal 0
 Compactor 0
 Security 0
 Intercom 0
 Fireplaces 0
 Dishwasher 0



Sections:

Nbr	Type	Ext Wall	# Stories	Year Built	Attic	A/C	Basement %	Finished Basement %	Area
1	FLA		3	1986					1,783
2	OUF		1	1985					1,401
3	FLA		1	1985					4,154
4	FLA		1	1986					1,035
5	OUF		1	1986					2,760
6	OUF		1	1986					2,802

Interior Finish:

Section Nbr	Interior Finish Nbr	Type	Area %	Sprinkler	A/C
	15723	HOTELS/MOTEL A	100	Y	Y
	15724	OUF	100	N	N
	15725	HOTELS/MOTEL A	100	Y	Y
	15726	HOTELS/MOTEL A	100	Y	Y
	15727	OUF	100	N	N
	15728	OUF	100	N	N

Exterior Wall:

Interior Finish Nbr	Type	Area %
5415	CUSTOM	100

6	FLA	1	1986	441
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Interior Finish:

Section Nbr	Interior Finish Nbr	Type	Area %	Sprinkler	A/C
	15729	HOTELS/MOTEL A	100	Y	Y
	15730	HOTELS/MOTEL A	100	Y	Y
	15731	OUF	100	N	N
	15732	OUF	100	N	N
	15733	OUF	100	N	N
	15734	HOTELS/MOTEL A	100	Y	Y

Exterior Wall:

Interior Finish Nbr	Type	Area %
5416	CUSTOM	100

Building 7 Details

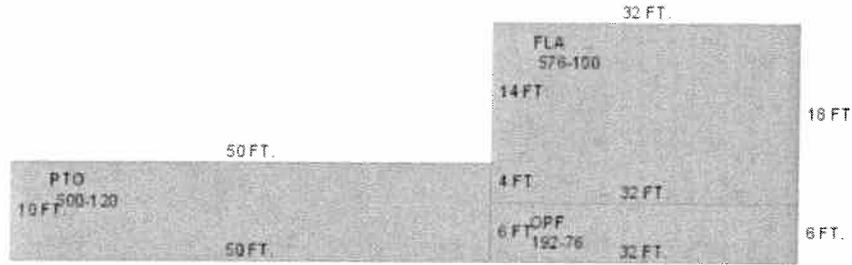
Building Type	Condition <u>E</u>	Quality Grade 450
Effective Age 14	Perimeter 100	Depreciation % 15
Year Built 1979	Special Arch 0	Grnd Floor Area 576
Functional Obs 0	Economic Obs 0	

Inclusions:

Roof Type	Roof Cover	Foundation
Heat 1	Heat 2	Bedrooms 0
Heat Src 1	Heat Src 2	

Extra Features:

2 Fix Bath 0	Vacuum 0
3 Fix Bath 0	Garbage Disposal 0
4 Fix Bath 0	Compactor 0
5 Fix Bath 0	Security 0
6 Fix Bath 0	Intercom 0
7 Fix Bath 0	Fireplaces 0
Extra Fix 0	Dishwasher 0



Sections:

Nbr	Type	Ext Wall	# Stories	Year Built	Attic	A/C	Basement %	Finished Basement %	Area
1	FLA		1	1978					576
2	OPF		1	1978					192
3	PTO		1	1978					500

Interior Finish:

Section Nbr	Interior Finish Nbr	Type	Area %	Sprinkler	A/C
	15735	1 STY STORE-A	100	Y	Y
	15736	OPF	100	N	N
	15737	PTO	100	N	N

Exterior Wall:

Interior Finish Nbr	Type	Area %
5417	C.B.S.	100

Misc Improvement Details

Nbr	Type	# Units	Length	Width	Year Built	Roll Year	Grade	Life
1	DK4:WOOD DOCKS	3,840 SF	240	16	2000	2001	5	40
2	DK3:CONCRETE DOCK	2,338 SF	167	14	1979	1980	5	60
3	DK4:WOOD DOCKS	1,650 SF	150	11	2000	2001	5	40

4	TK2:TIKI	509 SF	0	0	1979	1980	4	40
5	AP2:ASPHALT PAVING	49,200 SF	0	0	1979	1980	2	25
6	RW2:RETAINING WALL	720 SF	180	4	1979	1980	3	50
7	PT2:BRICK PATIO	2,762 SF	0	0	1979	1980	5	50
8	PT2:BRICK PATIO	13,662 SF	0	0	1979	1980	2	50
9	AP2:ASPHALT PAVING	19,311 SF	0	0	1979	1980	2	25
10	PT3:PATIO	962 SF	0	0	1985	1986	2	50
11	PT3:PATIO	440 SF	0	0	1969	1970	2	50
12	RW2:RETAINING WALL	136 SF	68	2	1969	1970	4	50
13	AP2:ASPHALT PAVING	34,240 SF	0	0	1985	1986	2	25
14	PO6:COMM POOL	1,000 SF	0	0	1979	1980	1	50
15	HT2:HOT TUB	1 UT	0	0	1979	1980	5	50
16	CL2:CH LINK FENCE	256 SF	0	0	1993	1994	3	30
18	WD2:WOOD DECK	3,900 SF	0	0	1995	1996	2	40
19	CL2:CH LINK FENCE	360 SF	60	6	1989	1990	1	30
20	PT3:PATIO	765 SF	51	15	2000	2001	2	50
21	DK4:WOOD DOCKS	676 SF	26	26	2000	2001	5	40
23	TK2:TIKI	94 SF	0	0	2000	2001	5	40
24	FN2:FENCES	988 SF	247	4	2001	2002	4	30
25	FN2:FENCES	122 SF	0	0	2001	2002	2	30
26	BL2:BOAT LIFT	1 UT	0	0	2003	2004	2	20
27	WD2:WOOD DECK	200 SF	20	10	2003	2004	2	40

Appraiser Notes

2003-01-10 (241) 314 HOTEL ROOMS

DR-219 ATTACHED TO OR2115-141/147 STATES THE SALES PRICE IS \$107,500,000, BUT THE DOCUMENTARY STAMPS ON DEED CALCULATE THE SALES PRICE TO \$104,316,200 TPP 8538421 - WYNDHAM MARRIOTT CASA MARINA TPP 8695128 - THE MESSAGE STUDIO INC TPP 8930010 - HEARTLAND CASH NETWORK LLC FOR ATM @ CASA MARINA

TPP 8538421 - WYNDHAM MARRIOTT CASA MARINA TPP 8695128 - THE MESSAGE STUDIO INC TPP 8930010 - HEARTLAND CASH NETWORK LLC FOR ATM @ CASA MARINA

Building Permits

Bldg Number	Date Issued	Date Completed	Amount	Description	Notes
1	01-3978	12/14/2001	09/18/2002	22,000 Commercial	AWNING
2	02-0322	04/11/2002	09/18/2002	50,000 Commercial	SIDEWALK & DUCT
3	02-0635	04/22/2002	09/18/2002	99,800 Commercial	ANTENNAS
4	03-1400	04/21/2003	01/01/2004	61,000 Commercial	NEW ELECTRIC
5	02-1549	06/14/2002	09/18/2003	2,125 Commercial	INSTALLED NEW AWNING
6	03-3169	09/12/2003	09/18/2003	5,500 Commercial	REPLACED LIGHT FIXTURES

7	03-3425	09/25/2003	10/02/2003	1,800	Commercial	INSTALLED NEW CEILING WOR
8	03-2912	09/24/2003	10/02/2003	25,900	Commercial	INSTALLED 15 PITCH PANS
9	03-2406	09/26/2003	10/02/2003	20,350	Commercial	REPLACED PARTS A/C
10	03-2285	10/01/2003	10/08/2003	16,230	Commercial	INSTALLED NEW DECK 200SF
11	03-3806	11/03/2004	11/10/2003	21,000	Commercial	REPAIRED DECKING
12	03-3721	10/31/2003	11/08/2003	7,500	Commercial	REPAIRED ROOF DECK
13	04-2422	07/21/2004		27,000	Commercial	REPLACE HALLWAY DOORS
14	05-3349	08/14/2005		19,000	Commercial	REPAIR EXTERIOR LIGHTING IN COMMON AREAS,ALSO FANS
15	06-6161	11/21/2006		4,000	Commercial	DEMO 4469 SF OF WOOD FLOORING IN BAR AND RESTAURANT AREA
16	06-6162	11/27/2006		88,000	Commercial	DEMO 14,500 SF OF INTERIOR PUBLIC SPACE.THIS WILL INCLUDE BUILD BACK OF MENTIONED WORK
17	06-3951	01/16/2007		355,955	Commercial	REMOVE OLD ROOF. REPLACE 5 WOOD FIBER OVER ISO SET IN HOT ASPHALT
18	07-0280	03/20/2007		22,000	Commercial	REPLACE PLUMBING AT FLAGLER
19	07-4803	10/22/2007		2,000	Commercial	INSTALL IRRIGATION SYSTEM
20	07-4822	10/24/2007		7,500	Commercial	COVER DUCT FIRST FLOOR DRYWALL & METAL STUDS

Parcel Value History

Certified Roll Values.

[View Taxes for this Parcel.](#)

Roll Year	Total Bldg Value	Total Misc Improvement Value	Total Land Value	Total Just (Market) Value	Total Assessed Value	School Exempt Value	School Taxable Value
2009	30,372,154	478,775	20,659,724	23,181,570	23,181,570	0	23,181,570
2008	30,388,565	493,423	34,432,873	60,000,000	60,000,000	0	60,000,000
2007	25,926,075	497,417	34,432,873	69,316,439	69,316,439	0	69,316,439
2006	25,926,075	335,472	44,563,750	74,743,668	74,743,668	0	74,743,668
2005	26,229,701	343,222	21,556,600	45,887,445	45,887,445	0	45,887,445
2004	26,814,915	505,548	21,556,600	45,887,445	45,887,445	0	45,887,445
2003	26,814,915	514,362	19,316,380	53,082,953	53,082,953	0	53,082,953
2002	26,814,915	528,119	19,316,380	53,082,953	53,082,953	0	53,082,953
2001	32,146,185	531,828	13,521,466	53,082,953	53,082,953	0	53,082,953
2000	32,051,273	161,846	11,026,169	47,461,104	47,461,104	0	47,461,104
1999	34,776,245	167,609	11,026,169	44,949,658	44,949,658	0	44,949,658
1998	23,184,164	172,915	11,026,169	44,949,658	44,949,658	0	44,949,658
1997	23,547,698	178,888	10,503,815	42,351,368	42,351,368	0	42,351,368
1996	0	168,380	10,503,815	10,672,195	10,672,195	0	10,672,195
1995	0	173,890	10,503,815	10,677,705	10,677,705	0	10,677,705
1994	0	180,785	10,503,815	10,684,600	10,684,600	0	10,684,600
1993	0	189,061	10,503,815	10,692,876	10,692,876	0	10,692,876

1992	0	197,041	10,503,815	10,700,856	10,700,856	0	10,700,856
1991	0	205,530	10,503,815	10,709,345	10,709,345	0	10,709,345
1990	0	213,299	9,350,374	9,563,673	9,563,673	0	9,563,673
1989	0	221,786	9,285,080	9,506,866	9,506,866	0	9,506,866
1988	0	156,967	8,762,726	8,919,693	8,919,693	0	8,919,693

Parcel Sales History

NOTE: Sales do not generally show up in our computer system until about two to three months after the date of sale. If a recent sale does not show up in this list, please allow more time for the sale record to be processed. Thank you for your patience and understanding.

Sale Date	Official Records Book/Page	Price	Instrument	Qualification
5/10/2005	2115 / 141	104,316,200	<u>WD</u>	<u>Q</u>
12/1/1996	1436 / 0592	54,346,000	<u>WD</u>	<u>O</u>
11/1/1987	1033 / 640	9,500,000	<u>WD</u>	<u>M</u>

This page has been visited 75,644 times.

Monroe County Property Appraiser
 Ervin A. Higgs, CFA
 P.O. Box 1176
 Key West, FL 33041-1176

Public Notices
(radius map & mailing list)

Public Notice

The Key West Planning Board will hold a public hearing at 6:00 p.m., August 19, 2010, at Old City Hall, 510 Greene Street, Key West, Florida, (Behind Sloppy Joe's Bar). The purpose of the hearing will be to consider a request for:

Conditional Use - 1500 Reynolds Street (RE# 00037160-000100) - A conditional use for a proposed wireless telecommunications facility consisting of nine antennas and associated equipment as a private utility within the Historic Commercial Tourist (HCT) zoning district per Section 122-898(8) of the Land Development Regulations of the Code of Ordinances of the City of Key West, Florida.

If you wish to see the application or have any questions, you may visit the Planning Department during regular office hours at 3140 Flagler Avenue call 809-3720 or visit our website at www.keywestcity.com .

YOU ARE WITHIN 300 FEET OF THE SUBJECT PROPERTY

The City of Key West Planning Board will be holding a Public Hearing:

Request: **Conditional Use - 1500 Reynolds Street (RE# 00037160-000100)** - A conditional use for a proposed wireless telecommunications facility consisting of nine antennas and associated equipment as a private utility within the Historic Commercial Tourist (HCT) zoning district per Section 122-898(8) of the Land Development Regulations of the Code of Ordinances of the City of Key West, Florida.

Applicant: SBA Network Services Inc. / AT&T Mobility **Owner:** Casa Marina Owner, LLC

Project Location: 1500 Reynolds Street **Date of Hearing:** Thursday, August 19, 2010

Time of Hearing: 6:00 PM **Location of Hearing:** Old City Hall – City Commission Chambers, 510 Greene St

Interested parties may appear at the public hearing(s) and be heard with respect to the applications. A copy of the corresponding application is available from the City of Key West Planning Department located at 3140 Flagler Avenue, Key West, Florida, Monday through Friday between the hours of 8:00 am and 5:00 pm. **Packets can be viewed online at www.keywestcity.com. Click on Department, select Planning, then Planning Board Agenda Packets. Please note that staff reports may not be available for review until the week of the meeting.**

Please provide written comments to the Planning Department, PO Box 1409, Key West, FL 33041-1409 , by FAX (305) 809-3978 or by email ccowart@keywestcity.com .

Pursuant to Section 286.0105, Florida Statutes, if a person decides to appeal any decision made by the Planning Commission or the City Commission with respect to any matter considered at such hearing or meeting, one will need a record of the proceedings and for such purpose that person may need to ensure that a verbatim record of the proceedings is made; such record includes the testimony and evidence upon which the appeal is to be based.

ADA ASSISTANCE: If you are a person with a disability who needs special accommodations in order to participate in this proceeding, please contact the ADA Coordinator at 305-809-3951 between the hours of 8:00 a.m. and 5:00 p.m., or information on access available to individuals with disabilities. To request materials in accessible format, a sign language interpreter or other assistance (5 days advance notice required), please call 305-809-1000 for assistance.

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1500 Reynolds

- Legend
- theBuffer
 - theBufferTarget
 - Real Estate Number
 - Parcel Lot Text
 - Block Text
 - Hooks/Leads
 - Lot Lines
 - Easements
 - Road Centerlines
 - Water Names
 - Parcels
 - Shoreline
 - Section Lines

PALMIS

Monroe County Property Appraiser
500 Whitehead Street
Key West, FL

DISCLAIMER: The Monroe County Property Appraiser's office maintains data on property within the County solely for the purpose of fulfilling its responsibility to secure a just valuation for ad valorem tax purposes of all property within the County. The Monroe County Property Appraiser's office cannot guarantee its accuracy for any other purpose. Likewise, data provided regarding one tax year may not be applicable in prior or subsequent years. By requesting such data, you hereby understand and agree that the data is intended for *ad valorem tax purposes only* and should not be relied on for any other purpose.

Date Created: August 9, 2010 12:04 PM



Scale: 1 inch = 50 feet

RYAN TIMOTHY J
1007 SIMONTON ST
KEY WEST, FL 33040

UNITY OF THE KEYS INC
1011 VIRGINIA ST
KEY WEST, FL 33040

KEENAN MICHAEL E AND NOLA M
1075 DUVAL ST UNIT C-21
KEY WEST, FL 33040

BUCHLER THOMAS GUSTAV
110 W 90TH ST
NEW YORK, NY 10024

DOMANSKI KENNETH JOSEPH AND
MARGARET DIETZ
1107 KEY PLAZA
KEY WEST, FL 33040

HOUSING AUTHORITY OF THE CITY
OF KEY WEST FLORIDA
1400 KENNEDY DR
KEY WEST, FL 33040

CUNNINGHAM DAVID A
1410 JOHNSON ST
KEY WEST, FL 33040

ERIK DEBOER LIVING TRUST DTD
12/21/94
1411 PINE ST
KEY WEST, FL 33040

ZENSINGER DAVID AND MARCIA
1419 REYNOLDS ST
KEY WEST, FL 33040

KARCH JAMES AND STEPHANIE
1421 REYNOLDS ST
KEY WEST, FL 33040

RUSSELL CHARLES E AND
MARGARET ANN
1433 REYNOLDS
KEY WEST, FL 33040

WILLIAMS PORTIA E TRUST
1535 HOLLY OAKS LAKE RD WEST
JACKSONVILLE, FL 32225

BEHMKE MICHAEL R AND MEGAN K
201 FRONT ST
KEY WEST, FL 33040

HAMMOND JOHN B AND KAREN B
2200 LAKE ANGELUS SHRS
LAKE ANGELUS, MI 48326

COOPER J DAVID
2627 S BAYSHORE DR
MIAMI, FL 33133

HONORARY CONCH INC THE
270 MADISON AVE
NEW YORK, NY 10016

COONS JOE E AND ELIZABETH
3120 WALL ST
LEXINGTON, KY 40513

ALLEN MARJORIE H ESTATE
3228 NW 57TH TER
GAINSEVILLE, FL 32606

LUKEN CLAIRE S TRUSTEE
3400 N LAKE SHORE DR
CHICAGO, IL 60657

BRE/FL DEVELOPMENT LLC
345 PARK AVE
NEW YORK, NY 10154

WHITTAKER MARY
47 COLBURN RD
WELLESLEY, MA 02481

SPOTTSWOOD PARTNERS II LTD
500 FLEMING ST
KEY WEST, FL 33040

COCONUT BEACH RESORT OWNERS
ASSOC INC
500 FLEMING ST
KEY WEST, FL 33040

COCONUT BEACH DEVELOPMENT
CORP
500 FLEMING ST
KEY WEST, FL 33040

SPOTTSWOOD JOHN M JR &
SPOTTSWOOD WILLIAM B &
500 FLEMING STREET
KEY WEST, FL 33040

REIMER TIMOTHY S
500 SOUTH 33RD ST
WEST DES MOINES, IA 50265

MONROE COUNTY
500 WHITEHEAD ST
KEY WEST, FL 33040

SPOTTSWOOD JOHN M JR AND TERRI
M
522 CAROLINE ST
KEY WEST, FL 33040

LOUIE'S BACK YARD INC
700 WADDELL AVE
KEY WEST, FL 33040

KERR GREGORY T
722 ASHE ST
KEY WEST, FL 33040

MILLER GAIL ANN TRUSTEE
728 POORHOUSE LANE
KEY WEST, FL 33040

JOHNSON FAMILY TRUST 08/20/93
7729 HARBOUR BLVD
MIRAMAR, FL 33023

BAXTER DAVID N AND PHYLLIS A
800 WASHINGTON ST
KEY WEST, FL 33040

CASA MARINA OWNER LLC
811 SEMINOLE ST
KEY WEST, FL 33040

FAMULARO JOSEPH J 1997 TRUST
12/14/97
822 WASHINGTON ST
KEY WEST, FL 33040

KAUFELT DAVID A AND LYNN H
900 FLAGLER AVE
KEY WEST, FL 33040

BUCKHEIM RICHARD A
900 JOHNSON ST
KEY WEST, FL 33040

CURTIS LINDA WESTEN
900 WASHINGTON ST
KEY WEST, FL 33040

TRAMMELL JANE W TRUST 7/15/1992
901 JOHNSON ST
KEY WEST, FL 33040

LUJAN LAUREN L
903 CASA MARINA CT
KEY WEST, FL 33040

GILDEA PAUL F
904 WASHINGTON ST
KEY WEST, FL 33040

SAMAHA FOUAD AND EVAGELIA
905 VON PHISTER ST
KEY WEST, FL 33040

VINCENT RICHARD C
906 VON PHISTER ST
KEY WEST, FL 33040

HASKINS LINDA R
908 FLAGLER AVE
KEY WEST, FL 33040

CATHEY BROOKS H
908 WASHINGTON ST
KEY WEST, FL 33040

SEMICH J WILLIAM
915 JOHNSON ST
KEY WEST, FL 33040

WESCHLER KENNETH JAY
915 VON PHISTER ST
KEY WEST, FL 33040

MARCUS BARBARA
927 S WINDSOR BLVD
LOS ANGELES, CA 90019

SINGH PRITAM
PO BOX 2039
KEY WEST, FL 33045

CARTER LAWRENCE
PO BOX 906
KEY WEST, FL 33040