Texas Historical Commission staff (AD), 3/31/2009, rev. 5/26/2009, rev. 6/15/2009, rev. 7/7/09
27" x 42" Official Texas Historical Marker with post
Harris County (Job #09HR01) *Subject (Atlas) UTM: 15 296521E 3288554N*
Location: Houston, 2999 South Wayside Drive

FARNSWORTH & CHAMBERS BUILDING

THE FARNSWORTH & CHAMBERS COMPANY TRACES ITS ROOTS TO LOUISIANA, WHEN IN THE LATE 1920s, DUNBAR CHAMBERS WENT TO WORK FOR THE R. P. FARNSWORTH CONSTRUCTION COMPANY. CHAMBERS AND FARNSWORTH'S SON, RICHARD, WERE SENT TO HOUSTON IN 1944 TO OPEN A NEW COMPANY OFFICE, AND THE FIRM THRIVED IN HOUSTON, SPECIALIZING AS BUILDING CONTRACTORS. AFTER THE DEATH OF THE FIRM'S NAMESAKE IN 1948, THE TWO MEN FORMED THE FARNSWORTH & CHAMBERS COMPANY IN 1950.

THE FARNSWORTH & CHAMBERS BUILDING, COMPLETED IN 1957, EXEMPLIFIES POST-WORLD WAR II SUBURBAN DEVELOPMENT ALONG THE NEWLY-CONSTRUCTED GULF FREEWAY (INTERSTATE 45) AND THE TREND FOR NEW CORPORATE HEADQUARTERS OUTSIDE DOWNTOWN HOUSTON. FROM 1962 UNTIL 1964, THE BUILDING SERVED AS THE HEADQUARTERS FOR THE MANNED SPACECRAFT CENTER (MSC) OF THE NEW NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA). IN THE EARLY 1960s, MEMBERS OF THE GRAGG FAMILY PURCHASED THE BUILDING AND SURROUNDING PROPERTY, NOW GRAGG PARK, AND SOLD IT TO THE CITY OF HOUSTON IN DECEMBER 1976. THE CITY'S PARKS AND RECREATION DEPARTMENT HAS OCCUPIED THE BUILDING SINCE 1977.

THE BUILDING WAS DESIGNED BY THE NOTED HOUSTON FIRM OF MACKIE & KAMRATH, WHOSE REGIONAL WORK SHOWS THE INFLUENCE OF FRANK LLOYD WRIGHT; NATIONALLY ACCLAIMED LANDSCAPE ARCHITECT GARRET ECKBO PLANNED THE CENTRAL ATRIUM AND PLANTINGS. BATTERED STONE WALLS AND THE COMPOSITION OF ANGLED AND VERTICAL PLANES MIMIC *TALUD-TABLERO*, THE CONSTRUCTION METHOD SEEN IN PRE-COLUMBIAN, MESOAMERICAN PYRAMID SITES, AND THE BANDS OF HORIZONTAL WINDOWS REFLECT A MODERN APPROACH TO LIGHTING INTERIOR SPACES.

RECORDED TEXAS HISTORIC LANDMARK – 2009

TEXAS HISTORICAL COMMISSION

RECORDED TEXAS HISTORIC LANDMARK MARKERS:
2009 Official Texas Historical Marker
Sponsorship Application Form

Valid October 15, 2008 to January 15, 2009 only

This form constitutes a public request for the Texas Historical Commission (THC) to consider approval of an Official Texas Historical Marker for the topic noted in this application. The THC will review the request and make its determination based on rules and procedures of the program. Filing of the application for sponsorship is for the purpose of providing basic information to be used in the evaluation process. The final determination of eligibility and therefore approval for a state marker will be made by the THC. This form is to be used for Recorded Texas Historic Landmark (building marker) requests only. Please see separate forms for either Historic Texas Cemeteries or subject markers.

Proposed marker topic (official title will be determined by the THC): **Farnsworth & Chambers (Gragg) Building**

County: Harris

Town (nearest county town on current state highway map): **Houston**

Street address of marker site or directions from town noted above: 2999 South Wayside Drive; Houston, TX 77023

Marker Coordinates:
If you know the location coordinates of the proposed marker site, enter them in one of the formats below:
UTM Zone **15** Easting **296521.127** Northing **3288554.154**
Lat: **29º 42' 25.25"** Long: **95º 18' 59.68"** (deg, min, sec or decimal degrees)

Otherwise, give a precise verbal description here (e.g. northwest corner of 3rd and Elm, or FM 1411, 2.6 miles east of McWhorter Creek):

NOTE: Recorded Texas Historic Landmark markers must be placed at the structure being marked.

Recorded Texas Historic Landmark markers definition: Recorded Texas Historic Landmark (RTHL) markers are awarded to structures deemed worthy of preservation for their historical associations and architectural significance. RTHL is a legal designation and comes with a measure of protection; it is the highest honor the state can bestow on a historic structure, and the designation is required for this type of marker. The RTHL designation becomes effective upon approval by the THC. Official Texas Historical Markers signify the RTHL designation, which comes only through application to and approval by the THC and must include public display of an Official Texas Historical Marker. Owners of RTHL-designated structures must give the THC 60 days written notice before any alterations are made to the exterior of the structure. RTHL status is a permanent designation and is not to be removed from the property in the event of a transfer of ownership. Only the THC can remove the designation or recall the marker. The marker must remain with the structure and may not be removed or displayed elsewhere until or unless the THC gives express approval in writing for such action. Once designated as RTHL, properties are subject to provisions of Texas Government Code, Section 442.006(f).

Criteria:

1. **Age:** Structures eligible for the RTHL designation and marker must be at least 50 years old.
2. **Historical significance:** Architectural significance alone is not enough to qualify a structure for the RTHL designation. It must have an equally significant historical association, and that association can come from an event that occurred at the site; through individuals who owned or lived on the property; or, in the case of bridges, industrial plants, schoolhouses and other non-residential properties, through documented significance to the larger community.
3. **Architectural significance:** Structures deemed architecturally significant are outstanding examples of architectural history through design, materials, structural type or construction methods. In all cases, eligible architectural properties must display integrity; that is, the structure should be in a good state of repair, maintain its appearance from its period of significance and be considered an exemplary model of preservation. Architectural significance is often best determined by the relevance of the property to broader contexts, including geography. Any changes over the years should be compatible with original design and reflect compliance with accepted preservation practices, e.g., the *Secretary of the Interior's Standards for Rehabilitation*.
4. **Good state of repair:** Structures not considered by the THC to be in a good state of repair are ineligible for RTHL designation. The THC reserves the sole right to make that determination relative to eligibility for RTHL markers.

Special National Register considerations for RTHL marker applications: If a structure has been individually listed in the National Register of Historic Places (NRHP) under either Criterion A or B **and** Criterion C (Architecture), the historical text compiled as part of the National Register nomination process may be submitted as part of the marker process, provided it includes the required reference notes and other documentation. Acceptance of the National Register information for the purposes of the marker process will be up to the sole determination of the THC. Listing in the NRHP does not guarantee approval for an RTHL marker. See the THC web site at http://www.thc.state.tx.us/markerdesigs/madnrcrit.html for National Register criteria.

☐ Check this box if the property is individually listed in the NRHP.

APPLICATION REQUIREMENTS

Any individual, group or county historical commission (CHC) may apply to the THC to request an Official Texas Historical Marker for what it deems a worthy topic. Only complete marker applications that contain all the required elements and are submitted online as required can be accepted or processed by the THC (for RTHL markers, the required elements are: sponsorship application form; narrative history; documentation; legal description of the property; site plan; floorplan; historic photograph; and current photographs clearly showing each side of the structure).

- Completed applications must be duly reviewed, verified and approved by the county historical commission (CHC) in the county in which the marker will be placed.
- The sponsorship application form, narrative history and documentation must be submitted as Microsoft Word or Word-compatible documents and sent via email attachments to the THC by no later than January 15, 2008.
- Required font style and type size are a Times variant and 12-point.
- Narrative histories must be typed in a double-spaced (or 1.5-spaced) format and include separate sections on context, overview, significance and documentation.
- The narrative history must include documentation in the form of reference notes, which can be either footnotes or endnotes. Documentation associated with applications should be broad-based and demonstrate a survey of all available resources, both primary and secondary.
- Upon notification of the successful preliminary review of required elements by the THC, a non-refundable application fee of $100 is required. The fee shall be submitted to the THC within ten working days of application receipt notification.

APPROVAL BY COUNTY HISTORICAL COMMISSION
The duly appointed marker representative (chair or marker chair) noted below for the county historical commission will be the sole contact with the THC for this marker application. To ensure accuracy, consistency and efficiency, all information from and to the THC relative to the application—and throughout the review and production processes—will be via direct communication with the CHC representative. All other inquiries (calls, emails, letters) to the THC will be referred to the CHC representative for response. By filling out the information below and filing the application with the THC, the CHC representative is providing the THC with notice that the application and documentation have been reviewed and verified by the CHC and that the material meets all current requirements of the Official Texas Historical Marker program.

As chair or duly appointed marker chair, I certify the following:
xx Representatives of the CHC have met or talked with the potential marker sponsor and discussed the marker program policies as outlined on the THC web site. CHC members have reviewed the history and documentation for accuracy and made corrections or notes as necessary. It is the determination of the CHC that the topic, history and documentation meet criteria for eligibility.

CHC comments or concerns about this application, if any: NA

Name of CHC contact (chair or marker chair)**:** Janet K. Wagner

Mailing address: P O Box 7985 **City, Zip:** Houston, Texas 77270-7985

Daytime phone (with area code)**:** 713.961.4688 **Email address** (required)**:** jkwco@yahoo.com

PERMISSION OF PROPERTY OWNER FOR MARKER PLACEMENT

Property owner: City of Houston, Joe Turner, Director Parks and Recreation Department

Address: 601 Sawyer **City, state, zip:** Houston, Texas 77007

Phone: (713) 865-4505 **Email address:** joe.turner@cityofhouston.net

Legal Description of the property (metes and bounds, lot and block, etc.): Lot 12D, Subdivision ABST 51 L Moore, City of Houston, Harris County, Texas.

Upon receipt of the application, the THC will provide the owner with a letter that outlines the legal responsibility of ownership under the Recorded Texas Historic Landmark statute. The letter must be signed by the owner and returned to the THC before the evaluation can be completed.

NOTE: The property owner will not receive any additional copies of correspondence from the THC. All other correspondence—notice of receipt, request for additional information, payment notice, inscription, shipping notice, etc.—will be sent via email to the CHC representative, who is encouraged to share the information with all interested parties as necessary. Given the large volume of applications processed annually and the need for centralized communication, all inquiries about applications in process will be referred to the CHC for response. The CHC is the sole liaison to the THC on all marker application matters.

SPONSORSHIP PAYMENT INFORMATION
Prospective sponsors please note the following:

- Payment must be received in full within 45 days of the official approval notice and must be accompanied by the THC payment form. The THC is unable to process partial payments or to delay payment due to processing procedures of the sponsor. Applications not paid in the time frame required may, at the sole discretion of the THC, be cancelled or postponed.
- Payment does not constitute ownership of a marker; Recorded Texas Historic Landmark markers and other Official Texas Historical Markers are the property of the State of Texas.
- If, at any time during the marker process, sponsorship is withdrawn, a refund can be processed, but the THC will retain the application fee of $100.
- The Official Texas Historical Marker Program provides no means of recognizing sponsors or property owners through marker text, incising or supplemental plaques.

Marker sponsor (may be individual or organization): SWCA Environmental Consultants

Contact person (if applicable): Jay Hrivnatz

Mailing address: 7255 Langtry, Suite 100 **City, zip:** Houston, Texas 77040

Email address (required): jhrivnatz@swca.com **Phone:** 713-934-9900

SHIPPING INSTRUCTIONS
In order to facilitate delivery of the marker, neither post office box numbers nor rural route numbers can be accepted. To avoid additional shipping charges or delays, use a business street address (open 8 a.m.—5 p.m., Monday through Friday).

Name: Jay Hrivnatz, SWCA Environmental Consultants

Street address: 7255 Langtry, Suite 100 **City, zip:** Houston, Texas 77040

Daytime phone (required)**:** 713-934-9900 **Email** (required)**:** jhrivnatz@swca.com

TYPE AND SIZE OF RECORDED TEXAS HISTORIC LANDMARK MARKERS
As part of its review process, the THC will determine the appropriate size marker and provide options, if any, for the approved topic based on its own review criteria, including, but not exclusive of, historical significance, replication of information in other THC markers, relevance to the Statewide Preservation Plan and the amount of available documented information provided in the application narrative. In making its determination, however, the THC will also take into account the preference of the CHC, as noted below.

The sponsor/CHC prefers the following size marker:
☒ 27” x 42” RTHL marker with post ($1500)
☐ 27” X 42” RTHL marker without post* ($1500)
☐ 18” x 28” RTHL marker with post ($1000)
☐ 18” x 28” RTHL marker without post* ($1000)
☐ RTHL medallion and 16” x 12” plaque with post ($750)
☐ RTHL medallion and 16” x 12” plaque without post* ($750)

*For an RTHL marker without post, indicate to what surface material it will be mounted:
☐ wood
☐ masonry

☐ metal
☐ other (specify)

SUBMITTING THE APPLICATION (via email required)
When the CHC has determined the application is complete, the history has been verified and the topic meets the requirements of the Official Texas Historical Marker Program, the materials should be forwarded to the THC via email at the following address: markerapplication@thc.state.tx.us.

- The CHC or marker chair should send an email containing the following attachments (see attachment function under file menu or toolbox on your computer):
  - This application form
  - The narrative history (including documentation)
  - Legal description of the property
  - Detailed floor plan for each floor of the structure
  - Detailed site plan of the property
  - At least one historic photograph
  - Current photographs clearly showing each side of the structure

RECORDS RETENTION BY CHC: The CHC must retain hard copies of the application as well as an online version, at least for the duration of the marker process. The THC is not responsible for lost applications, for incomplete applications or for applications not properly filed according to the program requirements. For additional information about any aspect of the Official Texas Historical Marker Program, see the Markers page on the THC web site (http://www.thc.state.tx.us/markerdesigs/madmark.html).

SITE NAME: Farnsworth & Chambers Building (historic name); Gragg Building (current name)

LOCATION: 2999 S. Wayside Dr., Houston, Texas 77023-6016

LEGAL DESCRIPTION: Lot 12D, Subdivision ABST 51 L Moore, City of Houston, Harris County, Texas.

PREPARED BY: Jay Hrivnatz and Anna Mod of SWCA Environmental Consultants

I. CONTEXT

Houston met wartime demands for materiel in the early 1940s with the expansion of industry along the Ship Channel. The resulting infrastructure, factories, plants and warehouses were easily adapted to suit peacetime enterprises. Developers sought to fill the housing void by constructing affordable single-family residences in southeast Houston in proximity to jobs.[1] Postwar home buying was relatively easy, requiring only a small down payment and financing through the Federal Housing Authority or the Department of Veteran's Affairs.[2] In 1948 a 3.7 mile section of Houston's first freeway, Interstate 45, linked the Houston's Central Business District to Telephone Road connecting the southeastern suburbs to additional employment opportunities downtown.[3]

Petrochemical production in Texas City was crucial to the war effort. Like the Houston Ship Channel, the framework was in place for postwar economic prosperity. At that time, planners

recognized that communities between Houston and Galveston would swell and eventually create a continuous urban corridor between the two cities.[4] And by 1952, Interstate 45—known locally as the Gulf Freeway—was completed, connecting many of the inland communities housing refinery workers and terminating in Galveston.[5]

The Farnsworth & Chambers Company traces its roots back to Louisiana. In the late 1920s Dunbar Chambers went to work for the R.P. Farnsworth Construction Company as a mason's helper after attending Louisiana State University. He was quick to rise in the company and in 1944 was sent to Houston with R.P. Chambers' son, Richard, to start a new office. On the whole, the R.P. Farnsworth Construction Company handled many facets of construction including underground work, but at the time of the company's namesake's death in 1948, Richard Farnsworth and Dunbar Chambers decided to focus on their strength as building contractors. Within two years, Richard Farnsworth bought out his shares of the company and partnered with Dunbar to form the Farnsworth & Chambers Company.[6]

When Mr. Farnsworth and Mr. Chambers established themselves in Houston at the end of WWII, an office at 3018 Leeland Street was considered suburban.[7] This address was located on the more industrialized eastern side of downtown which paralleled the ship channel. It was only blocks from where Interstate 45 would be constructed. The relocation of commercial and industrial business on a suburban track following the expanding industry along the shipchannel would be a trend in Houston for years to come.

Visibility also played a role in locating a new business next to a freeway. In 1953, the Schlumberger Well Surveying Corporation selected architects MacKie and Kamrath to design their headquarters adjacent to the newly constructed Gulf Freeway less than two miles from the future Farnsworth & Chambers building location at 2999 South Wayside Drive.[8] When Richard Farnsworth and Dunbar Chambers commissioned the design of their South Wayside headquarters in 1954, they were among Houston's biggest contractors. Their main competitors were Bellows and Brown & Root. They had established themselves as leading regional constructors of hospitals, schools, underground utilities and roads. They extended their reach into Central America with roadway construction projects and the building of the San Pedro Sula Airport in Honduras.[9] In short, they deemed themselves worthy of a building that would embody their success.

II. OVERVIEW

Farnsworth & Chambers was a Houston-based construction company that worked regionally in the southwest and Louisiana, and Central America. The company employed and trained many young men who went on to start their own large construction companies. Al Jensen, a Rice alumnus, worked for Farnsworth & Chambers after graduation and co-founded H. A. Lott, Inc., a Houston-based construction company whose significant buildings include the Astrodome, The Summit (Compaq Center, now Lakewood Church) and San Antonio's Riverwalk. James D. "Doug" Pitcock Jr., a 1949 Texas A&M graduate of Texas A&M began his career as a purchasing agent for Farnsworth & Chambers and by 1955 he became a co-founder, partner, president and CEO of Williams Brothers Construction, a company he guided into becoming one

of the largest highway construction firms in the country.[10] Gerald Lyda joined Farnsworth & Chambers in 1947 when the firm was constructing the University of Texas Memorial Stadium. Lyda was mentored by H. A. Lott at Farnsworth & Chambers and in 1960 he co-founded Darragh & Lyda, Inc. who partnered with Lott's firm to build four of the most notable buildings for the 1968 HemisFair in San Antonio. Lyda's company became one of the largest general contracting firms in Texas whose projects include the Alamodome, Fiesta Texas, the Westin Riverwalk Hotel and Diamond Shamrock's corporate headquarters.[11]

Farnsworth & Chambers' work is found on higher-education campuses throughout the southwest and Louisiana. Tulane University in New Orleans has three including the University Center (1959, Curtis and Davis, Architects), Robert Sharp Hall (1960, Koch and Wilson, Diboll, Kessels, Architects), and the Patterson House (1953, Koch and Wilson, Architects). Austin College in Sherman, Texas' the Jackson Technology Center (1951, Peyton G. Cooper, Architect) and the University of New Mexico's Student Union in Albuquerque (1959, Meem, Holien, Buckley and Associates, Architects) are both part of the Farnsworth & Chambers legacy.[12]

It was Farnsworth & Chambers that hired local the Houston architectural firm MacKie & Kamrath to design their headquarters building at 3601 Brock Avenue. Although they maintained an office for 11 years southeast of downtown at 3018 Leeland Street, the move reflects the development preference in the late 1950s for a suburban corporate setting in close proximity to a freeway as opposed to a location downtown. The building is located approximately 4.5 miles southeast of downtown Houston in a post WWII suburban area whose development was encouraged by the completion of the Gulf Freeway in 1952. The building opened in 1957 and the

Brock Avenue address was later changed to 2999 South Wayside after the connection of that street to the Gulf Freeway.

The Farnsworth & Chambers building is a one-story, reinforced concrete commercial building with a strong horizontal emphasis reminiscent of Frank Lloyd Wright's Taliesin West in Scottsdale, Arizona. Designed by the Houston architectural firm MacKie & Kamrath, the building had defined layers of materials that all enforce its horizontality. The lower battered concrete wall splays out to meet the ground. Above is an angled vertical mass clad with narrowly coursed mint-colored stone. This construction composition of angled and vertical planes mimics *talud and tablero* the method of construction, commonly seen in pre-Hispanic pyramid sites in Central Mexico. Copper flashing overhangs the flat roof and parapet and creates a strong horizontal band at the roof level with another horizontal band of unpainted concrete below. A ribbon of steel casement windows runs below the large overhanging eaves historically clad with rough sawn cypress boards. The *talud and tablero* angled walls interrupt the ribbon windows where they rise to full height on the building ends and provide visual "anchors."

The grid plan, composed of two parallel north-to-south and two east-to-west corridors intersecting at right angles, radiates out from an interior open-air atrium whose landscaping was designed by noted American landscape architect Garret Eckbo. The primary façade faces west onto South Wayside Drive and includes a semi-circular driveway and porte cochere.

The building layout allowed the firm to separate its departments by function and allowed for natural light into interior spaces. Administrative functions, including the offices of Richard

Farnsworth and Dunbar Chambers, symbolically occupied the central core of the building and their purchasing and leasable spaces were located in the southern two wings. Estimating and accounting took up the wings that protruded to the east, and the northernmost extension of the building was occupied by heavy engineering. The executive offices of Farnsworth & Chambers were located on opposing north-south hallways.[13]

MacKie & Kamrath provided ample fenestration in public areas that emphasizes the building's connection to the outdoors. The main entrance, the dining areas and the primary interior corridors have plate glass window walls and aluminum framed glass doors. Office areas have a ribbon of steel casement and fixed windows at eyelevel.

Many of the interior wall surfaces are wood paneling as was fashionable at the time of construction. Rubber tiles comprised the floor coverings in the hallways while offices contained asphalt floor tiles. Higher-end materials were used in more notable spaces as noted in the slate tile flooring in Mr. Chambers' office and the adjoining large conference room. Restroom and kitchen floors are terrazzo. Mr. Farnsworth had the sole carpeted floor in the building.

Acoustic ceiling tiles with recessed can lighting can be found throughout the building. Most interior doors are wooden with metal louvers that served as return air ducts. Additional return air vents, disguised as wooden wall sculptures, are at the junction of the crossing both east/west axes on the north/south corridor. Doors to the exterior are aluminum narrow framed glass doors with aluminum pulls.

MacKie and Kamrath was one of the first firms in Houston to design modernist buildings and their designs quickly attained national recognition. Karl Fred Kamrath (1911-1988) was born in Enid, Oklahoma and Frederick James MacKie, Jr. (1905-1984) was born in Cheyenne, Wyoming. Both graduated from the University of Texas in the early 1930s and found his way to the architectural proving ground of Chicago after graduation. Kamrath first worked for architects Pereira and Pereira, then The Interior Studios of Marshall Field & Company and the Architectural Decorating Company. MacKie worked for Graham, Anderson, Probst and White, one of the nation's largest firms, before joining the Architectural Decorating Company where he was reunited with Karl Kamrath. They were unhappy there, and, after discovering that Houston had not been hit as severely as other cities by the Great Depression, they returned to Texas in 1937 to establish their own firm.[14] [15]

Examples of the firm's early work include a house for Kamrath's family (1939), the City of Houston Fire Alarm Building (1939, demolished), the Covington and Kivlin houses (1941, 1942), and San Felipe Courts (1942, 1944, listed on National Register 1988) a large federal housing project near downtown Houston. Kamrath was following the ideals of Frank Lloyd Wright prior to their 1946 meeting. The firm's subsequent work as seen in the Farnsworth & Chambers building further exemplifies their following of Wright's Usonian architectural ideals.[16] The Farnsworth & Chambers building is a clear example of the influence of Wrights' horizontal emphasis as exemplified at Taliesin West in Scottsdale, Arizona.

MacKie and Kamrath's major buildings in Houston and Texas include Phyllis Wheatly High School (1948), Temple Emanu-El (1949, with Lenard R. Gabert), the Dow Chemical Company

complex, Freeport (1953), the Schlumberger Well surveying corporation complex (1953), Humble Research Center located at Buffalo Speedway and Alabama (1954), St. John the Divine Church (1954, with H. A. Salisbury), the University of Texas M.D. Anderson Hospital and Tumor Institute (1954, with Schmidt, Garden, and Eriksen, altered), the Champlin Oil Company Building, Fort Worth (1956), the Commercial Standard Insurance Company Building, Fort Worth (1956), Memorial Drive Presbyterian Church, Bunker Hill Village (1957, 1974), Temple Rodef Shalom, Waco (1962), the Pasadena State Bank Building, Pasadena (1962, with Doughtie and Porterfield), The Science and Research Building, University of Houston (1968), the Big Three Industries Building (1974), and the University of Texas School of Public Health Building, Houston (1975).[17]

Landscape architect Garret Eckbo (1910-2000) designed the central atrium and plantings at the Farnsworth & Chambers building. Born in New York, Eckbo was brought up in California and studied landscape architecture at UC Berkely. After graduation he won a scholarship to study at the Harvard Graduate School of Design (GSD) where he, influenced by Bauhaus founder Walter Gropius who taught at the GSD, found himself disenchanted with Beaux-Arts formalism. In 1938 Eckbo returned to California and designed hundreds of gardens. His first book *Landscape for Living* (1950) influenced the popularity of the modern garden in the state. He became chairman of the Berkeley Department of Landscape Architecture in 1963 and founded the EDAW practice (Eckbo Dean Austin and Williams) in 1964 and undertook a wide range of large-scale landscape architecture projects (campuses, malls, shopping centers, and regional plans).[18] Eckbo also taught at the School of Architecture at the University of Southern California from 1948-1956.

Perhaps the most significant part of the Farnsworth & Chambers building's history is its use as the headquarters for the Manned Spacecraft Center (MSC) in Houston while the Clear Lake campus was being designed and constructed. The National Aeronautics and Space Administration (NASA) had several satellite offices in the vicinity of South Wayside for personnel and laboratories, yet its headquarters for the MSC and Mercury Program were in the Farnsworth & Chambers building from 1962-1964.[19] Authorized in 1958, the Manned Spacecraft Center's Project Mercury sought to "[develop] more sophisticated spacecraft which will carry trained scientific observers into orbit around the earth and on interplanetary flights."[20] Mercury astronauts including Scott Carpenter, Gordon Cooper, John Glenn, Gus Grissom, Wally Schirra, Alan Shepard and Deke Slayton as well as project director Robert Rowe Gilruth maintained offices at the building

The political maneuvering necessary to bring the MSC to Houston was largely orchestrated by Albert Thomas (1898-1966), a fifteen-term Congressman from Houston and Harris County's Eighth District. Houston was among several other contenders including Jacksonville, Florida (Green Cove Springs Naval Station); Tampa, Florida (MacDill Air Force Base); Baton Rouge, Louisiana; Shreveport, Louisiana (Barksdale Air Force Base); Victoria, Texas (FAA Airport); Corpus Christi, Texas (Naval Air Station); San Diego, California (Camp Elliott); and San Francisco, (California Benicia Ordnance Depot.)[21]

Specific site criteria were developed to facilitate the search. "The site required access to water transportation by large barges, a moderate climate, availability of all-weather commercial jet

service, a well established industrial complex with supporting technical facilities and labor, close proximity to a culturally attractive community in the vicinity of an institution of higher education, a strong electric utility and water supply, at least 1,000 acres of land, and certain specified cost parameters."[22] Houston actually came in second place to MacDill Air Force Base in Tampa because the Air Force planned to close its Strategic Air Command operations there. In third place was the Benicia Ordnance Depot in the San Francisco Bay Area. Before a decision and public announcement was made, the Air Force decided not to close McDill and thus Houston moved to first place.The needed 1,000 acres of land was committed by Rice University and was once part of the estate of James Marion West (1871-1941) a Houston banker and publisher.

Oil drilling magnate Lee Oscar Gragg purchased the Farnsworth & Chambers building 1961 as a real estate investment, yet his firm, W.D. York and Gragg Drilling, never occupied the building. Mr. Gragg completed a ten-year run of land acquisition in the building vicinity in 1970. The Stran Steel Corporation and National Steel Corporation occupied the building from 1970-1974. Other tenants during the years 1960-1977 include Cactus Petroleum, Inc., Cactus Transport and F&C Equipment. In 1976 the City of Houston purchased what would come to be known as "the Gragg Building," a name still in use today.

The City of Houston Parks and Recreation Department moved into the building on South Wayside in 1977. Prior to this move, the city department had various sections of its operations in scattered remote locations. When the department moved into the building, it marked the first time all sections were housed in one central location. Oilman L. O. Gragg donated the 15.67 acres of land surrounding the building, with the provision that five acres be reserved as a green area to be named Gragg Park.

The Farnsworth & Chambers Building is currently unoccupied and is undergoing a sensitive rehabilitation led by Harrison Kornberg Architects of Houston. The exterior rehabilitation is in compliance with the Secretary of the Interior's Standards for the Rehabilitation of Historic Buildings. Hazardous materials abatement was completed during the summer of 2008 and construction is anticipated to begin in October, 2008 with a proposed completion date of October, 2009. The project team has reviewed the plans with the City of Houston Preservation Officer Randy Pace and Elizabeth Butman of the Texas Historical Commission. Subsequent to RTHL listing, the project will be submitted formally for review by Texas Historical Commission in compliance with the RTHL designation.

III. SIGNIFICANCE

The Farnsworth & Chambers building, completed in 1958, is a tangible example of post-WWII suburban development along the newly constructed Gulf Freeway (Interstate 45) and the trend for new corporate headquarters outside of downtown Houston. The building was first the headquarters for Farnsworth & Chambers, a major construction company that trained many young men who went on to establish large construction firms in their own right and built significant buildings statewide. From 1962-1964 the building served as headquarters for the Manned Spacecraft Center (MSC) of the National Aeronautical and Space Administration (NASA). The building is architecturally significant as an outstanding example of the work of Houston architects MacKie & Kamrath, Houston's mid-century proponents of the design and theories of Frank Lloyd Wright. The Farnsworth & Chambers building is a one-story, reinforced concrete commercial building with a strong horizontal emphasis reminiscent of Frank Lloyd Wright's Taliesin West in Scottsdale, Arizona. The Farnsworth & Chambers Building's lower

battered concrete wall splays out to meet the ground. Above is an angled vertical mass clad with narrowly coursed mint-colored stone. This construction composition of angled and vertical planes mimics *talud and tablero* the method of construction, commonly seen in pre-Hispanic pyramid sites in Central Mexico. MacKie and Kamrath masterfully integrated the building into its landscape with the help of noted California modern landscape architect Garret Eckbo. The communal interior courtyard blurs the boundary between indoor and outdoor space, providing a fitting setting for future tenant, the City of Houston Parks and Recreation Department.

IV. DOCUMENTATION

[1] Houston City Planning Commission. *Comprehensive Plan – Houston Urban Area. Background for Plan 1c: Population, Land Use and Growth.* 1958, p. 13.

[2] Ibid, p. 22.

[3] City of Houston Department of Traffic and Transportation. *Economic Evaluation of the Gulf Freeway, Houston, Texas.* July, 1949, p. 4.

[4] Planning Commission, p. 52-54.

[5] McComb, David. Houston: A History. Austin: University of Texas Press, 1981. p. 124.

[6] Chambers, Dunbar. Telephone interviewed by Jay Hrivnatz and Anna Mod, October 1, 2008.

[7] *Houston City Directory* "Farnsworth & Chambers Co." (Houston: R.L. Polk & Co., 1946-1957).

[8] *Schlumberger*, s.v. "HISTORY" www.slb.com/content/about/history.asp (accessed September 19, 2008).

[9] Chambers, Dunbar. Telephone interviewed by Jay Hrivnatz and Anna Mod, October 1, 2008.
[10] Texas A&M University, s.v. "ENGINEERING NEWS, 1791, 4 APRIL 2008," (accessed September 19, 2008).

[11] La Escalera Ranch, s.v. "THE LEGACY [of Gerald Lyda]," http://www.escalera.us/legacy.html (accessed September 19, 2008).

[12] Tulane University, s.v. "Alumni/Potpourri of History/VII: Buildings" http://alumni.tulane.edu/potpourri/index.html (accessed March 10, 2006).

[13] MacKie and Kamrath Architectural Drawings for Office Building for Farnsworth & Chambers, October 29, 1954. Drawn by A.E.H., Checked and stamped by F. MacKie, Jr.

[14] *Handbook of Texas Online*, s.v. "KAMRATH, KARL FRED," http://www.tsha.utexas.edu/handbook/online/articles/KK/fka15.html (accessed March 10, 2006).

[15] Miller, Scott Reagan, "The Architecture of MacKie and Kamrath" (Thesis, Rice University, 1993), p. 46-54.

[16] Handbook: Kamrath

[17] Ibid.

[18] *Garden Visit: The Garden and Landscape Guide, s*.v. "GARRET ECKBO". http://www.gardenvisit.com/got/18/eckbo.htm (accessed March 10, 2006).

[19] *Houston Magazine*, "Houston Welcomes MSC", August, 1962.

[20] National Aeronautical and Space Administration, *Manned Spacecraft Center Bulletin*, Winter 1962.

[21] *Houston Post*, "NASA Center: Houston Met all Requirements, But Envy Dies Hard," March 11, 1962.

[22] Dethloff, Henry C. Suddenly Tomorrow Came: A History of the Johnson Space Center. Washington D. C.: United States Government Printing, 1994.

SITE NAME: Farnsworth & Chambers Building (historic name); Gragg Building (current name)
LOCATION: 2999 S. Wayside Dr., Houston, Texas 77023-6016
LEGAL DESCRIPTION: Lot 12D, Subdivision ABST 51 L Moore, City of Houston, Harris County, Texas.
PREPARED BY: Jay Hrivnatz and Anna Mod of SWCA Environmental Consultants

I. CONTEXT

Houston met wartime demands for materiel in the early 1940s with the expansion of industry along the Ship Channel. The resulting infrastructure, factories, plants and warehouses were easily adapted to suit peacetime enterprises. Developers sought to fill the housing void by constructing affordable single-family residences in southeast Houston in proximity to jobs.[1] Postwar home buying was relatively easy, requiring only a small down payment and financing through the Federal Housing Authority or the Veterans Administration.[2] In 1948 a 3.7-mile section of Houston's first freeway, Interstate 45, linked Houston's Central Business District to Telephone Road, connecting the southeastern suburbs to additional employment opportunities downtown.[3]

Petrochemical production in Texas City was crucial to the war effort. Like the Houston Ship Channel, the framework was in place for postwar economic prosperity. At that time, planners recognized that communities between Houston and Galveston would swell and eventually create a continuous urban corridor between the two cities.[4] And by 1952, Interstate 45—known locally as the Gulf Freeway—was completed, connecting many of the inland communities housing refinery workers and terminating in Galveston.[5]

The Farnsworth & Chambers Company traces its roots back to Louisiana. In the late 1920s Dunbar Chambers went to work for the R.P. Farnsworth Construction Company as a mason's helper after attending Louisiana State University. He was quick to rise in the company and in 1944 was sent to Houston with R.P. Chambers' son, Richard, to start a new office. On the whole, the R.P. Farnsworth Construction Company handled many facets of construction including underground work, but at the time of the company's namesake's death in 1948, Richard

Farnsworth and Dunbar Chambers decided to focus on their strength as building contractors. Within two years, Richard Farnsworth bought out his shares of the company and partnered with Dunbar to form the Farnsworth & Chambers Company.[6]

When Mr. Farnsworth and Mr. Chambers established themselves in Houston at the end of WWII, an office at 3018 Leeland Street was considered suburban.[7] This address was located on the more industrialized eastern side of downtown, which paralleled the ship channel. It was only blocks from where Interstate 45 would be constructed. The relocation of commercial and industrial business on a suburban track following the expanding industry along the ship channel would be a trend in Houston for years to come.

Visibility also played a role in locating a new business next to a freeway. In 1953, the Schlumberger Well Surveying Corporation selected architects MacKie and Kamrath to design their headquarters adjacent to the newly constructed Gulf Freeway less than two miles from the future Farnsworth & Chambers building location at 2999 South Wayside Drive.[8] When Richard Farnsworth and Dunbar Chambers commissioned the design of their South Wayside headquarters in 1954, they were among Houston's biggest contractors. Their main competitors were Bellows and Brown & Root. They had established themselves as leading regional constructors of hospitals, schools, underground utilities and roads. They extended their reach into Central America with roadway construction projects and the building of the San Pedro Sula Airport in Honduras.[9] In short, they deemed themselves worthy of a building that would embody their success.

II. OVERVIEW

Farnsworth & Chambers was a Houston-based construction company that worked regionally in the southwest and Louisiana, and Central America. The company employed and trained many young men who went on to start their own large construction companies. Al Jensen, a Rice alumnus, worked for Farnsworth & Chambers after graduation and co-founded H. A. Lott, Inc., a Houston-based construction company whose significant buildings include the Astrodome, The Summit (Compaq Center, now Lakewood Church) and San Antonio's Riverwalk. James D. "Doug" Pitcock Jr., a 1949 graduate of Texas A&M, began his career as a purchasing agent for Farnsworth & Chambers and by 1955 he became a co-founder, partner, president and CEO of Williams Brothers Construction, a company he guided into becoming one of the largest highway construction firms in the country.[10] Gerald Lyda joined Farnsworth & Chambers in 1947 when the firm was constructing the University of Texas Memorial Stadium. Lyda was mentored by H. A. Lott at Farnsworth & Chambers and in 1960 he co-founded Darragh & Lyda, Inc. who partnered with Lott's firm to build four of the most notable buildings for the 1968 HemisFair in San Antonio. Lyda's company became one of the largest general contracting firms in Texas, whose projects include the Alamodome, Fiesta Texas, the Westin Riverwalk Hotel and Diamond Shamrock's corporate headquarters.[11]

Farnsworth & Chambers' work is found on higher-education campuses throughout the southwest and Louisiana. Tulane University in New Orleans has three, including the University Center (1959, Curtis and Davis, Architects), Robert Sharp Hall (1960, Koch and Wilson, Diboll, Kessels, Architects), and the Patterson House (1953, Koch and Wilson, Architects). Austin College in Sherman, Texas' the Jackson Technology Center (1951, Peyton G. Cooper, Architect) and the University of New Mexico's Student Union in Albuquerque (1959, Meem, Holien, Buckley and Associates, Architects) are both part of the Farnsworth & Chambers legacy.[12]

It was Farnsworth & Chambers that hired local the Houston architectural firm MacKie & Kamrath to design their headquarters building at 3601 Brock Avenue. Although they maintained an office for 11 years southeast of downtown at 3018 Leeland Street, the move reflects the development preference in the late 1950s for a suburban corporate setting in close proximity to a freeway as opposed to a location downtown. The building is located approximately 4.5 miles

southeast of downtown Houston in a post-WWII suburban area whose development was encouraged by the completion of the Gulf Freeway in 1952. The building opened in 1957 and the Brock Avenue address was later changed to 2999 South Wayside after the connection of that street to the Gulf Freeway.

The Farnsworth & Chambers building is a one-story, reinforced concrete commercial building with a strong horizontal emphasis reminiscent of Frank Lloyd Wright's Taliesin West in Scottsdale, Arizona. Designed by the Houston architectural firm MacKie & Kamrath, the building has defined layers of materials that all enforce its horizontality. The lower battered concrete wall splays out to meet the ground. Above is an angled vertical mass clad with narrowly coursed mint-colored stone. This construction composition of angled and vertical planes mimics the *talud and tablero* method of construction, commonly seen in pre-Hispanic pyramid sites in Central Mexico. Copper flashing overhangs the flat roof and parapet and creates a strong horizontal band at the roof level with another horizontal band of unpainted concrete below. A ribbon of steel casement windows runs below the large overhanging eaves historically clad with rough sawn cypress boards. The *talud and tablero* angled walls interrupt the ribbon windows where they rise to full height on the building ends and provide visual "anchors."

The grid plan, composed of two parallel north-to-south and two east-to-west corridors intersecting at right angles, radiates out from an interior open-air atrium whose landscaping was designed by noted American landscape architect Garret Eckbo. The primary façade faces west onto South Wayside Drive and includes a semi-circular driveway and porte cochere.

The building layout allowed the firm to separate its departments by function and allowed for natural light into interior spaces. Administrative functions, including the offices of Richard Farnsworth and Dunbar Chambers, symbolically occupied the central core of the building and their purchasing and leasable spaces were located in the southern two wings. Estimating and accounting took up the wings that protruded to the east, and the northernmost extension of the building was occupied by heavy engineering. The executive offices of Farnsworth & Chambers were located on opposing north-south hallways.[13]

MacKie & Kamrath provided ample fenestration in public areas that emphasizes the building's connection to the outdoors. The main entrance, the dining areas and the primary interior corridors have plate glass window walls and aluminum framed glass doors. Office areas have a ribbon of steel casement and fixed windows at eye level.

Many of the interior wall surfaces are wood paneling as was fashionable at the time of construction. Rubber tiles comprised the floor coverings in the hallways while offices contained asphalt floor tiles. Higher-end materials were used in more notable spaces as noted in the slate tile flooring in Mr. Chambers' office and the adjoining large conference room. Restroom and kitchen floors are terrazzo. Mr. Farnsworth had the sole carpeted floor in the building.

Acoustic ceiling tiles with recessed can lighting can be found throughout the building. Most interior doors are wooden with metal louvers that serve as return air ducts. Additional return air vents, disguised as wooden wall sculptures, are at the junction of the crossing both east/west axes on the north/south corridor. Doors to the exterior are aluminum narrow framed glass doors with aluminum pulls.

MacKie and Kamrath was one of the first firms in Houston to design modernist buildings and their designs quickly attained national recognition. Karl Fred Kamrath (1911-1988) was born in Enid, Oklahoma and Frederick James MacKie, Jr. (1905-1984) was born in Cheyenne, Wyoming. Both graduated from the University of Texas in the early 1930s and found their way to the architectural proving ground of Chicago after graduation. Kamrath first worked for architects Pereira and Pereira, then The Interior Studios of Marshall Field & Company and the Architectural Decorating Company. MacKie worked for Graham, Anderson, Probst and White, one of the nation's largest firms, before joining the Architectural Decorating Company where he was reunited with Karl Kamrath. They were unhappy there, and, after discovering that Houston had not been hit as severely as other cities by the Great Depression, they returned to Texas in 1937 to establish their own firm.[14] [15]

Examples of the firm's early work include a house for Kamrath's family (1939), the City of Houston Fire Alarm Building (1939, demolished), the Covington and Kivlin houses (1941,

1942), and San Felipe Courts (1942, 1944, listed on National Register 1988, a large federal housing project near downtown Houston). Kamrath was following the ideals of Frank Lloyd Wright prior to their 1946 meeting. The firm's subsequent work as seen in the Farnsworth & Chambers building further exemplifies their following of Wright's Usonian architectural ideals.[16] The Farnsworth & Chambers building is a clear example of the influence of Wright's horizontal emphasis, as exemplified at Taliesin West in Scottsdale, Arizona.

MacKie and Kamrath's major buildings in Houston and Texas include Phyllis Wheatly High School (1948), Temple Emanu-El (1949, with Lenard R. Gabert), the Dow Chemical Company complex, Freeport (1953), the Schlumberger Well surveying corporation complex (1953), Humble Research Center located at Buffalo Speedway and Alabama (1954), St. John the Divine Church (1954, with H. A. Salisbury), the University of Texas M.D. Anderson Hospital and Tumor Institute (1954, with Schmidt, Garden, and Eriksen, altered), the Champlin Oil Company Building, Fort Worth (1956), the Commercial Standard Insurance Company Building, Fort Worth (1956), Memorial Drive Presbyterian Church, Bunker Hill Village (1957, 1974), Temple Rodef Shalom, Waco (1962), the Pasadena State Bank Building, Pasadena (1962, with Doughtie and Porterfield), The Science and Research Building, University of Houston (1968), the Big Three Industries Building (1974), and the University of Texas School of Public Health Building, Houston (1975).[17]

Landscape architect Garret Eckbo (1910-2000) designed the central atrium and plantings at the Farnsworth & Chambers building. Born in New York, Eckbo was brought up in California and studied landscape architecture at UC Berkeley. After graduation he won a scholarship to study at the Harvard Graduate School of Design (GSD) where he, influenced by Bauhaus founder Walter Gropius who taught at the GSD, found himself disenchanted with Beaux-Arts formalism. In 1938 Eckbo returned to California and designed hundreds of gardens. His first book, *Landscape for Living* (1950), influenced the popularity of the modern garden in the state. He became chairman of the Berkeley Department of Landscape Architecture in 1963 and founded the EDAW practice (Eckbo Dean Austin and Williams) in 1964 and undertook a wide range of large-scale landscape architecture projects (campuses, malls, shopping centers, and regional plans).[18] Eckbo also taught at the School of Architecture at the University of Southern California from 1948-1956.

Perhaps the most significant part of the Farnsworth & Chambers building's history is its use as the headquarters for the Manned Spacecraft Center (MSC) in Houston while the Clear Lake campus was being designed and constructed. The National Aeronautics and Space Administration (NASA) had several satellite offices in the vicinity of South Wayside for personnel and laboratories, yet its headquarters for the MSC and Mercury Program were in the Farnsworth & Chambers building from 1962-1964.[19] Authorized in 1958, the Manned Spacecraft Center's Project Mercury sought to "[develop] more sophisticated spacecraft which will carry trained scientific observers into orbit around the earth and on interplanetary flights."[20] Mercury astronauts including Scott Carpenter, Gordon Cooper, John Glenn, Gus Grissom, Wally Schirra, Alan Shepard and Deke Slayton as well as project director Robert Rowe Gilruth maintained offices at the building.

The political maneuvering necessary to bring the MSC to Houston was largely orchestrated by Albert Thomas (1898-1966), a fifteen-term Congressman from Houston and Harris County's Eighth District. Houston was among several other contenders including Jacksonville, Florida (Green Cove Springs Naval Station); Tampa, Florida (MacDill Air Force Base); Baton Rouge, Louisiana; Shreveport, Louisiana (Barksdale Air Force Base); Victoria, Texas (FAA Airport); Corpus Christi, Texas (Naval Air Station); San Diego, California (Camp Elliott); and San Francisco, California (Benicia Ordnance Depot).[21]

Specific site criteria were developed to facilitate the search. "The site required access to water transportation by large barges, a moderate climate, availability of all-weather commercial jet service, a well established industrial complex with supporting technical facilities and labor, close proximity to a culturally attractive community in the vicinity of an institution of higher education, a strong electric utility and water supply, at least 1,000 acres of land, and certain specified cost parameters."[22] Houston actually came in second place to MacDill Air Force Base in Tampa because the Air Force planned to close its Strategic Air Command operations there. In third place was the Benicia Ordnance Depot in the San Francisco Bay Area. Before a decision and public announcement was made, the Air Force decided not to close McDill and thus Houston moved to first place. The needed 1,000 acres of land was committed by Rice University and was once part of the estate of James Marion West (1871-1941), a Houston banker and publisher.

Oil drilling magnate Oscar Lee Gragg (1902-1992)[23] purchased the Farnsworth & Chambers building in 1961 as a real estate investment, yet his firm, W.D. York and Gragg Drilling, never occupied the building. Mr. Gragg completed a ten-year run of land acquisition in the building vicinity in 1970. The Stran Steel Corporation and National Steel Corporation occupied the building from 1970-1974. Other tenants during the years 1960-1977 include Cactus Petroleum, Inc., Cactus Transport and F&C Equipment. In 1976 the City of Houston purchased what would come to be known as "the Gragg Building," a name still in use today.

The City of Houston Parks and Recreation Department moved into the building on South Wayside in 1977. Prior to this move, the city department had various sections of its operations in scattered remote locations. When the department moved into the building, it marked the first time all sections were housed in one central location. Oilman O. L. Gragg donated the 15.67 acres of land surrounding the building, with the provision that five acres be reserved as a green area to be named Gragg Park.

The Farnsworth & Chambers Building is currently unoccupied and is undergoing a sensitive rehabilitation led by Harrison Kornberg Architects of Houston. The exterior rehabilitation is in compliance with the Secretary of the Interior's Standards for the Rehabilitation of Historic Buildings. Hazardous materials abatement was completed during the summer of 2008 and construction is anticipated to begin in October 2008 with a proposed completion date of October 2009. The project team has reviewed the plans with City of Houston Preservation Officer Randy Pace and Elizabeth Butman of the Texas Historical Commission. Subsequent to RTHL listing, the project will be submitted formally for review by Texas Historical Commission in compliance with the RTHL designation.

III. SIGNIFICANCE

The Farnsworth & Chambers building, completed in 1957, is a tangible example of post-WWII suburban development along the newly constructed Gulf Freeway (Interstate 45) and the trend for new corporate headquarters outside downtown Houston. The building was first the headquarters for Farnsworth & Chambers, a major construction company that trained many young men who went on to establish large construction firms in their own right and built significant buildings statewide. From 1962-1964 the building served as headquarters for the Manned Spacecraft Center (MSC) of the National Aeronautical and Space Administration (NASA). The building is architecturally significant as an outstanding example of the work of Houston architects MacKie & Kamrath, Houston's mid-century proponents of the design and theories of Frank Lloyd Wright. The Farnsworth & Chambers building is a one-story, reinforced concrete commercial building with a strong horizontal emphasis reminiscent of Frank Lloyd Wright's Taliesin West in Scottsdale, Arizona. The Farnsworth & Chambers Building's lower battered concrete wall splays out to meet the ground. Above is an angled vertical mass clad with narrowly coursed mint-colored stone. This construction composition of angled and vertical planes mimics the *talud and tablero* method of construction, commonly seen in pre-Hispanic pyramid sites in Central Mexico. MacKie and Kamrath masterfully integrated the building into its landscape with the help of noted California modern landscape architect Garret Eckbo. The communal interior courtyard blurs the boundary between indoor and outdoor space, providing a fitting setting for future tenant, the City of Houston Parks and Recreation Department.

IV. DOCUMENTATION

---

[1] Houston City Planning Commission. *Comprehensive Plan – Houston Urban Area. Background for Plan 1c: Population, Land Use and Growth.* 1958, p. 13.

[2] Ibid, p. 22.

[3] City of Houston Department of Traffic and Transportation. *Economic Evaluation of the Gulf Freeway, Houston, Texas.* July, 1949, p. 4.

[4] Planning Commission, p. 52-54.

[5] McComb, David. Houston: A History. Austin: University of Texas Press, 1981. p. 124.

[6] Chambers, Dunbar Jr. Telephone interviewed by Jay Hrivnatz and Anna Mod, October 1, 2008.

[7] *Houston City Directory* "Farnsworth & Chambers Co." (Houston: R.L. Polk & Co., 1946-1957).

[8] *Schlumberger*, s.v. "HISTORY" www.slb.com/content/about/history.asp (accessed September 19, 2008).

[9] Chambers, Dunbar Jr. Telephone interviewed by Jay Hrivnatz and Anna Mod, October 1, 2008.

[10] Texas A&M University, s.v. "ENGINEERING NEWS, 1791, 4 APRIL 2008," (accessed September 19, 2008).

[11] La Escalera Ranch, s.v. "THE LEGACY [of Gerald Lyda]," http://www.escalera.us/legacy.html (accessed September 19, 2008).

[12] Tulane University, s.v. "Alumni/Potpourri of History/VII: Buildings" http://alumni.tulane.edu/potpourri/index.html (accessed March 10, 2006).

[13] MacKie and Kamrath Architectural Drawings for Office Building for Farnsworth & Chambers, October 29, 1954. Drawn by A.E.H., Checked and stamped by F. MacKie, Jr.

[14] *Handbook of Texas Online*, s.v. "KAMRATH, KARL FRED," http://www.tsha.utexas.edu/handbook/online/articles/KK/fka15.html (accessed March 10, 2006).

[15] Miller, Scott Reagan, "The Architecture of MacKie and Kamrath" (Thesis, Rice University, 1993), p. 46-54.

[16] Handbook: Kamrath

[17] Ibid.

[18] *Garden Visit: The Garden and Landscape Guide*, s.v. "GARRET ECKBO". http://www.gardenvisit.com/got/18/eckbo.htm (accessed March 10, 2006).

[19] *Houston Magazine*, "Houston Welcomes MSC", August, 1962.

[20] National Aeronautical and Space Administration, *Manned Spacecraft Center Bulletin*, Winter 1962.

[21] *Houston Post*, "NASA Center: Houston Met all Requirements, But Envy Dies Hard," March 11, 1962.

[22] Dethloff, Henry C. Suddenly Tomorrow Came: A History of the Johnson Space Center. Washington D. C.: United States Government Printing, 1994.

[23] Social Security Death Index, http://ssdi.rootsweb.ancestry.com/cgi-bin/ssdi.cgi. Also, records of Oakwood Cemetery, Leon County, TX, www.rootsweb.ancestry.com/~txleon/cemeteries/oakwood/oakwoodgi (both accessed May 12, 2009).


houston
PARKS
& recreation
department
Houston Parks and Recreation Department
2999 South Wayside Drive


MANNED SPACECRAFT CENTER
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
HEADQUARTERS


NASA