

**LCITY OF FREEPORT
PLANNING COMMISSION
Tuesday, June 25, 2013, 6:00 P.M.
Freeport Police Department, Municipal Court Room,
430 North Brazosport Boulevard
Freeport, Texas**

AGENDA

Edward Garcia, Chairman
Tobey Davenport
Jesse Aguilar, Jr.

Reuben Cuellar
Eddie Virgil

NOTICE is hereby given that the Planning Commission of the City of Freeport, Texas will meet in a regular meeting on **Tuesday, June 25, 2013 at 6:00 P.M.** at the Freeport Police Department Municipal Courtroom, 430 North Brazosport Boulevard, Freeport, Texas to discuss the following:

1. Open Meeting.
2. Invocation.
3. Approval of the Minutes for May 28, 2013.
4. Discuss/consider request by Ms. Vickie Kelley to have a "Slow Children at Play" sign placed on the 300 – 400 Block of West 1st Street, Freeport, Texas.
5. Discuss/consider possible signage options to be placed on Avenue M.
6. Discuss/consider placing "No Parking" signs on Jones Road.
7. Discuss/consider making a recommendation to the City Council to schedule a Joint Public Hearing to grant a Specific-Use Permit to CenterPoint Energy Houston Electric to construct a communication tower and shelter on 1102 FM 1495, known locally as 1102 Pine Street, Freeport, Texas.
8. Discuss/consider making a recommendation to the City Council to schedule a Joint Public Hearing to grant a Specific-Use Permit to CenterPoint Energy Houston Electric to construct a communication tower and shelter on 2304 Skinner, Freeport, Texas.
9. Adjourn.

NOTE: ITEMS NOT NECESSARILY DISCUSSED IN THE ORDER THEY APPEAR ON THE AGENDA. THE PLANNING COMMISSION, AT ITS DISCRETION, MAY TAKE ACTION ON ANY OR ALL OF THE ITEMS LISTED.

I, Melissa Farmer, Building/Permit Department Secretary, City of Freeport, Texas, hereby certify that this Agenda was posted on the official bulletin board/glass door of City Hall facing the rear parking lot of the building with 24-hour access at 200 West 2nd Street, Freeport, Texas on or before Friday, June 21, 2013 at 5:00 P.M.



Melissa Farmer
Building Secretary

COUNTY OF BRAZORIA)(

CITY OF FREEPORT)(

BE IT REMEMBERED that the Planning and Traffic Commission of the City of Freeport, Texas met in a regular meeting on, **Tuesday, May 28, 2013 at 6:00 P.M.** at the Police Department Conference Room, 430 North Brazosport Boulevard, Freeport, Texas to discuss the following:

Planning Commission:

**Edward Garcia – Chairperson
Reuben Cuellar - Absent
Tobey Davenport
Jesse Aguilar, Jr.
Eddie Virgil**

Staff: Melissa Farmer
Kola Olayiwola
Pat Taylor
Lt. Danny Gillchriest

Guest: Vickie Kelley
Eric Hayes
Ashley Virgil
Troy Brimage
Alejandra Bacon
Lila Diehl

Open Meeting.

Mr. Edward Garcia called meeting to order at 6:00 P.M.

Invocation.

Mr. Tobey Davenport opened the meeting with a prayer.

Approval of the Minutes for April 23, 2013 and the Minutes for the Joint Public Hearing on May 6, 2013.

Mr. Tobey Davenport moved to accept the Minutes for April 23, 2013 and the Minutes for the Joint Public Hearing on May 6, 2013, seconded by Ms. Eddie Virgil, unanimous vote for approval.

Discuss/consider request by Ms. Vickie Kelley to have a “Slow Children at Play” sign placed on the 300-400 Block of West 1st Street, Freeport, Texas.

Mr. Eddie Virgil moved to Table Item until the next scheduled meeting for Lt. Danny Gillchriest to do a study on what signage would be appropriate and to do a traffic study, seconded by Mr. Jesse Aguilar, Jr., unanimous vote for approval.

Building Official, Mr. Kola Olayiwola to present findings (staff report) presentation on results of comprehensive inspections on RV/Trailer Park located at 2001 North Brazosport Boulevard.

Mr. Kola Olayiwola presented the Board Members with his findings on the RV/Trailer Park. He stated that as of May 28, 2013, he went and did an inspection and noted that there have been significant improvements and that he would give the RV/Trailer Park a B+ rating.

This Item was not voted on.

Discuss/consider approving request of Mr. Vijay Patel to re-plat Lot 522A1A, B C I C Division 14, J. F. Fields, known locally as 2001 North Brazosport Boulevard, Freeport, Texas.

Mr. Tobey Davenport made a motion to approve the re-plat request, seconded by Ms. Eddie Virgil, unanimous vote for approval.

Discuss/consider approving request of Mr. Troy Brimage and Matt Reue to re-plat A0099 ELI MITCHELL, Tract D1-PT LOT D2, Acres 1,231 & 0.3632 TRS. Freeport, Texas, known locally as 201 South Front Street.

Mr. Kola Olayiwola explained to the Board Members that Lots 4 and 12 have an AT&T cable running through those lots and that until the time that the City received a letter of no objection from AT&T to build on those lots; that Mr. Troy Brimage would not be able to build on those two individual lots.

Ms. Eddie Virgil moved to accept the re-plat with the condition of receiving a letter of no objection from AT&T to build on Lots 4 and 12, seconded by Mr. Jesse Aguilar, Jr., unanimous vote for approval

Discuss/consider making a recommendation to the City Council to schedule a Joint Public Hearing to grant a Specific-Use Permit to Mr. Eric Hayes to construct a RV Park on Brazosport Boulevard, B C I C DIV 14, Lots 92 and 93, Freeport, Texas.

Ms. Eddie Virgil moved to re-agenda this Item until engineered plans are submitted as to showing layout and usage of RV Park, seconded by Mr. Tobey Davenport, unanimous vote for approval.

Adjourn.

Ms. Eddie Virgil moved to adjourn the meeting, seconded by Mr. Jesse Aguilar, Jr., unanimous vote for approval. Meeting adjourned at 6:30 P.M.

These minutes read and approved this _____ day of _____, 2013.

Edward Garcia, Chairman

**CITY OF FREEPORT, TEXAS
REQUEST TO BE PLACED ON A
PLANNING COMMISSION AGENDA**

THE PLANNING COMMISSION MEETS ON THE FOURTH TUESDAY OF EACH MONTH AT 6:00 P.M. IN THE POLICE DEPARTMENT MUNICIPAL COURTROOM, 430 NORTH BRAZOSPORT BLVD. IN ORDER FOR THE COMMISSION TO ACT UPON ANY ITEM, THE ITEM MUST FIRST BE PLACED ON AN OPEN MEETING AGENDA, WHICH MUST BE POSTED CONTINUOUSLY FOR 72-HOURS BEFORE THE MEETING COMMENCES. THE CURRENT ADMINISTRATIVE POLICY IS TO HAVE AGENDA ITEMS IN HAND BY A LEAST SEVEN (7) BUSINESS DAYS PRECEDING THE SCHEDULED MEETING; THIS IS TO ENSURE THAT THE STAFF HAS SUFFICIENT TIME TO RESEARCH MATERIAL RELATING TO THE ITEMS. IN MANY INSTANCES, THE REQUEST(S) CAN BE RESOLVED AT THE STAFF LEVEL WITHOUT THE NEED FOR ANY PLANNING COMMISSION ACTION. ALL REQUESTS WILL FIRST BE DIRECTED TO THE BUILDING DEPARTMENT FOR REVIEW. YOU MAY BE REQUESTED TO MEET WITH THE BUILDING OFFICIAL IN AN EFFORT TO SATISFY YOUR REQUEST. EACH SPEAKER WILL BE GIVEN A CHANCE TO PRESENT HIS OR HER SUBJECT MATTER TO THE PLANNING COMMISSION. (ALL PLATS MUST BE FILED WITH THE CITY PROPERTY MANAGER AT LEAST 14 DAYS PRIOR TO THE MATTER AT WHICH FORMAL APPLICATION FOR THE PLAT APPROVAL IS MADE TO THE PLANNING COMMISSION.)

PLEASE PRINT THE FOLLOWIN INFORMATION:

NAME OF PRESENTER/SPEAKER: Vickie Kelley

ORGANIZATION (IF ANY): _____

STREET/MAILING ADDRESS: 327 W. 1st Street

CITY, STATE, ZIP CODE: Freeport Tx 77541

PHONE NUMBER WHERE YOU CAN BE REACHED DURING REGULAR BUSINESS HOURS:
281-380-5243

SUBJECT MATTER OF PRESENTATION (INCLUDING A DESCRIPTION OF COMMISSION ACTION TO BE TAKEN, IF ANY):

Fast traffic 3009 400 Blk. of
min of 22 children living on 3rd & 4th str. West 1st
traffic 50 mph. need sign or speed bump
Children @ play. Sign.

Vickie A Kelley 5-9-13
SIGNATURE DATE

“ALL REQUESTS MUST BE APPROVED BY THE BUILDING OFFICIAL BEFORE BEING PLACED ON A MEETING AGENDA.”

7881

978-250-3528

REC#: 00637119 6/18/2013 9:52 AM
OFF#: 006 TRN#: 011
REF#: 1287

TRN: 106.0000 PERMITS
1103 PM 1495 SUP
MISC PERMITS 150.0000

TENDERED: 150.00 CHECK
APPLIED: 150.00

CHANGE: 0.00

1102 Pine

City of Freeport
Building Department
Phone: 979-233-3526

For Office Use Only

Case Number: _____
Date Filed: _____
P & Z Date: _____
Council Date: _____

**Application for
Specific Use Permit**

1. Address or general location of site: 1102 FM 1495 Freeport, TX 77541

2. Subdivision _____ Block _____ Lots _____ Acres 2.34

3. Current Zoning Classification: Light Industrial 0.622

4. Proposed use of the site (please be specific): Site is currently CenterPoint Energy Substation and CenterPoint is proposing to install communication tower and shelter.

located on 2.34 acres recorded under
0.622 V792/Pg 596
B.C.D.R.

5. Reason for requesting a specific use permit: Communication Tower and Shelter

I hereby certify that I am the owner or duly authorized agent of the owner, for the purposes of this application. The application fee of \$150.00 to cover the cost of this specific use permit application has been paid to the City of Freeport on _____, 20____. I also certify that I have been informed and understand the regulations regarding specific use permits as specified in the Zoning Ordinance of the City of Freeport. I understand it is necessary for me or my authorized agent to be present at both the Planning and Zoning Commission and the City Council public hearings.

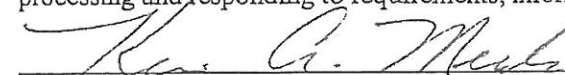
Owner's Signature: Kevin Meals

Owner's Name: CenterPoint Energy Houston Electric, LLC, Kevin Meals, agent & attorney-in-fact

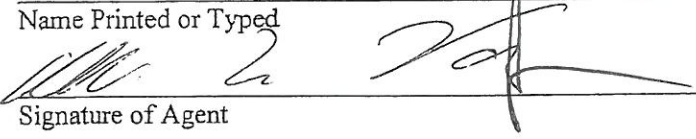
Address: P.O. Box 1700

City, State, Zip: Houston, TX 77251-1700 Phone: (713) 207-6389

In lieu of representing this request myself as owner of the subject property, I hereby authorize the person designated below to act in the capacity as my agent for the application, processing, representation, and/or presentation of this request. The designated agent shall be the principal contact person with the City (and vice versa) in processing and responding to requirements, information or issues relative to this request.


Signature of Owner

Kevin Meals, Agent & Attorney-in-Fact for CenterPoint Energy Houston Electric, LLC
Name Printed or Typed


Signature of Agent

Allen Varner
Name Printed or Typed

Address of Agent: 1111 Louisiana, Houston, TX 77002

Agent's Phone Number: (713) 207-5868



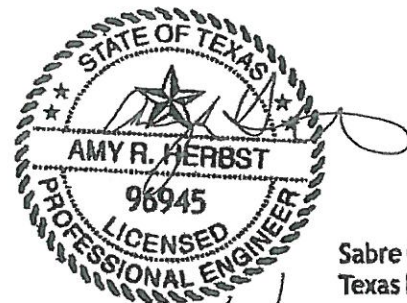
Structural Design Report
150' Monopole
Site: ~~Westchase~~ Substation, TX
Freeport

Prepared for: CENTERPOINT ENERGY INC
by: Sabre Towers & Poles™

Job Number: 75380

February 27, 2013

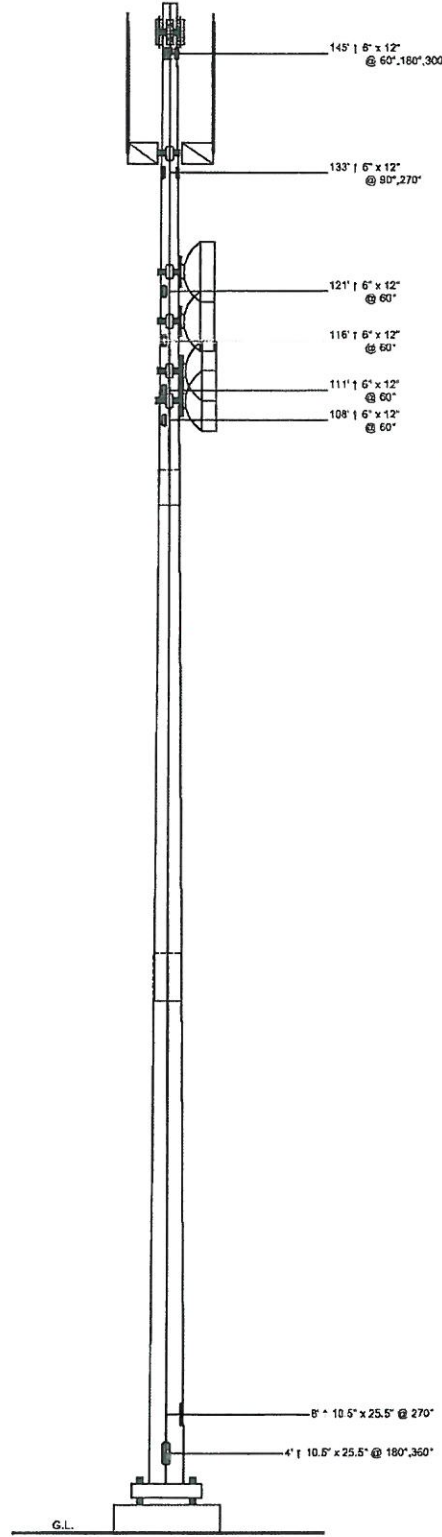
Monopole Profile.....	1
Foundation Design Summary (Option 1).....	2
Foundation Design Summary (Option 2).....	3
Pole Calculations.....	4-9
Foundation Calculations.....	10-23



2/27/13

Sabre Communications Corporation
Texas Registration Number F-4365

Section	1	2	3
Length (ft)	50'-0"	53'-0"	53'-3"
Number Of Sides	18	18	18
Thickness (in)	3/16"	1/4"	5/16"
Lap Splice (ft)	A	4'-0"	4'-0"
Top Diameter (in)	16"	24.44"	33.08"
Bottom Diameter (in)	25.47"	34.47"	43.06"
Tapar (in/ft)		0.1075	0.1075
Grade		A572-05	A572-05
Weight (lbs)	2443	4487	8288



Designed Appurtenance Loading

Elev	Description	Tx-Line
147	Flush Mount (Monopole Only)	
147	(3) 28in x 7in x 4in Panel Antennas	(3) 7/8"
141.5	(2) 13' x 3in Omni Whip Antennas	(2) 1 5/8"
135	(2) 3ft Sidearms	
123	(1) Dish Mount (Monopole Only) - Pipe Mount (up to 6' Dish)	
123	(1) 6' H.P. Dish	(1) EW52
118	(1) Dish Mount (Monopole Only) - Pipe Mount (up to 6' Dish)	
118	(1) 6' H.P. Dish	(1) EW52
113	(1) Dish Mount (Monopole Only) - Pipe Mount (up to 6' Dish)	
113	(1) 6' H.P. Dish	(1) EW52
110	(1) Dish Mount (Monopole Only) - Pipe Mount (up to 6' Dish)	
110	(1) 6' H.P. Dish	(1) EW52

Load Case Reactions

Description	Axial (kips)	Shear (kips)	Moment (ft-k)	Deflection (ft)	Sway (deg)
3s Gusted Wind	21.6	26.1	2476	14.7	9.52
3s Gusted Wind 0.9 Dead	16.5	28.1	2452	14.5	9.38
3s Gusted Wind&Ice	28.8	2	175	1	0.67
Service Loads	17	4.4	413	2.5	1.58

Base Plate Dimensions

Shape	Width	Thickness	Bolt Circle	Bolt Qty	Bolt Diameter
Square	48.25"	2.25"	49"	12	2.25"

Anchor Bolt Dimensions

Length	Diameter	Hole Diameter	Weight	Type	Finish
84"	2.25"	2.625"	1721	A615-75	Galv-16"

Material List

Display	Value
A	3' - 6"

Notes

- 1) Antenna Feed Lines Run Inside Pole
- 2) All dimensions are above ground level, unless otherwise specified.
- 3) Weights shown are estimates. Final weights may vary.
- 4) The Monopole was designed for a basic wind speed of 110 mph with 0" of radial ice, and 30 mph with 1/2" of radial ice, in accordance with ANSI/TIA-222-G-2 (2009), Structure Class II, Exposure Category C, Topographic Category 1.
- 5) Full Height Step Bolts

Sabre Industries
Towers and Poles

Sabre Communications Corporation
2101 Murray Street
P.O. Box 658
Sioux City, IA 51102-0658
Phone: (713) 258-6693
Fax: (713) 534-6250

Job: 75380
 Customer: CENTERPOINT ENERGY INC
 Site Name: ~~Wendover~~ Substation, TX
 Description: 150' Monopole
 Date: 2/27/2013 By: JLG

Information contained herein is the sole property of Sabre Communications Corporation, constitutes a trade secret as defined by Iowa Code Ch. 550 and shall not be reproduced, copied or used in whole or part for any purpose whatsoever without the prior written consent of Sabre Communications Corporation.

Customer: CENTERPOINT ENERGY INC

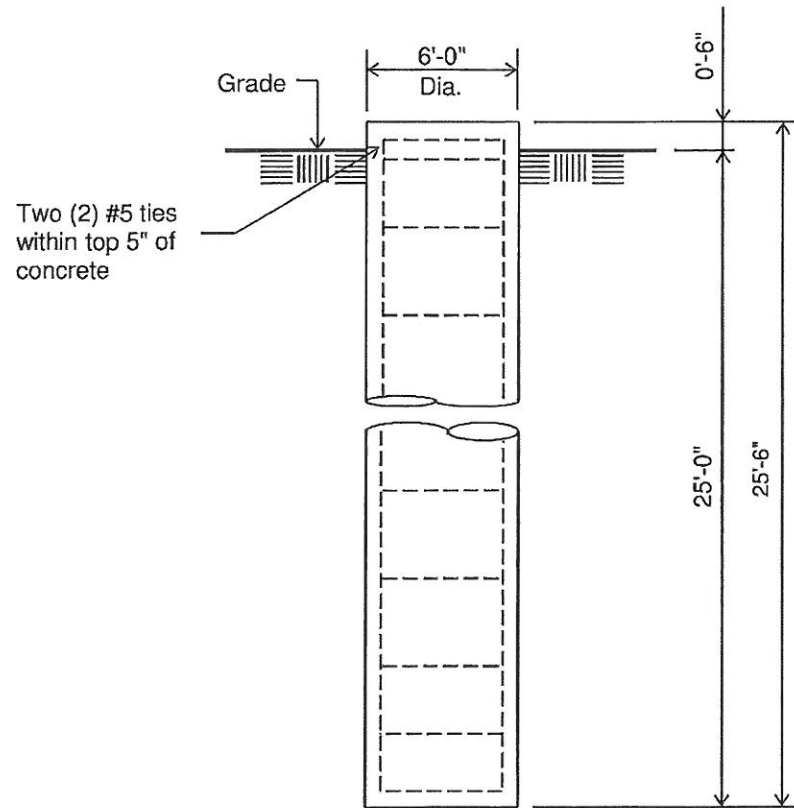
Site: Westhase Substation, TX

Freeport

150' Monopole at

110 mph Wind with no ice and 30 mph Wind with 0.5 in. Ice per ANSI/TIA-222-G.

Antenna Loading per Page 1



ELEVATION VIEW

(26.7 Cu. Yds. each)

(1 REQUIRED; NOT TO SCALE)

Notes:

- 1). Concrete shall have a minimum 28-day compressive strength of 4000 PSI, in accordance with ACI 318-05.
- 2). Rebars to conform to ASTM specification A615 Grade 60.
- 3). All rebar to have a minimum of 3" concrete cover.
- 4). All exposed concrete corners to be chamfered 3/4".
- 5). The foundation design is based on the geotechnical report by Geotech Engineering and Testing Servicing, Project # 12-866E, Dated 12/6/12.
- 6). See the geotechnical report for drilled pier installation requirements, if specified.
- 7). The foundation is based on the following factored loads:
Moment (kip-ft) = 2475.83
Axial (kips) = 21.61
Shear (kips) = 26.13

Rebar Schedule per Pier	
Pier	(28) #8 vertical rebar w/#5 ties, two within top 5" of pier then 12" C/C

8). This is a design drawing only. Please see final construction drawings for all installation details.

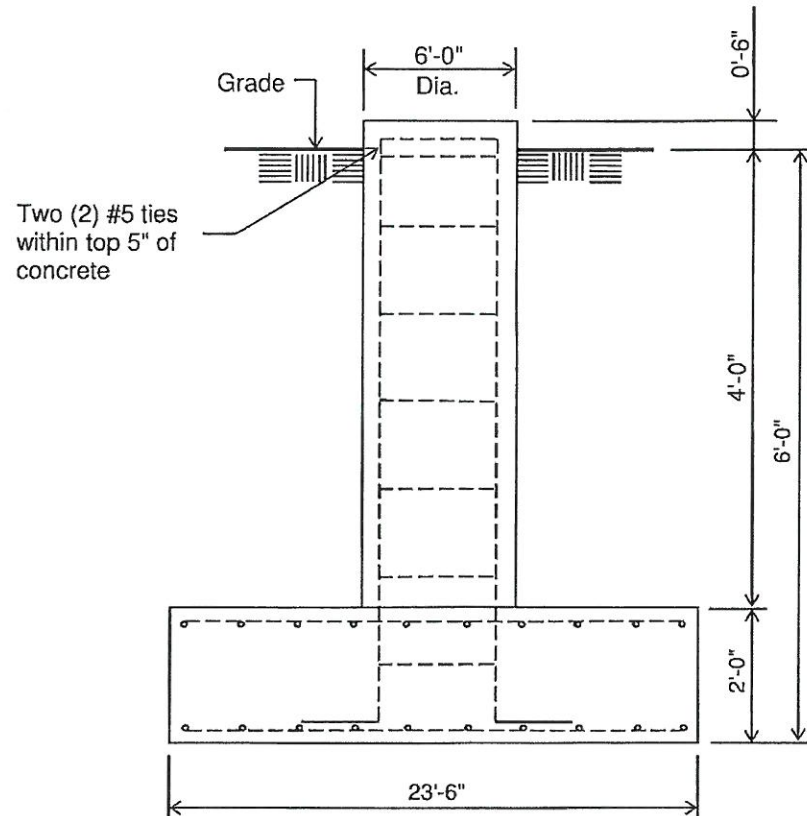
Customer: CENTERPOINT ENERGY INC

Site: Westbase Substation, TX

Free Port

150' Monopole at

110 mph Wind with no ice and 30 mph Wind with 0.5 in. Ice per ANSI/TIA-222-G.
Antenna Loading per Page 1



ELEVATION VIEW

(45.62 Cu. Yds. each)

(1 REQUIRED; NOT TO SCALE)

Notes:

- 1). Concrete shall have a minimum 28-day compressive strength of 4000 PSI, in accordance with ACI 318-05
- 2). Rebar to conform to ASTM specification A615 Grade 60.
- 3). All rebar to have a minimum of 3" concrete cover.
- 4). All exposed concrete corners to be chamfered 3/4".
- 5). The foundation design is based on the geotechnical report by Geotech Engineering and Testing Servicing, Project # 12-866E, Dated 12/6/12.
- 6). See the geotechnical report for compaction requirements, if specified.
- 7). The foundation is based on the following factored loads:
Moment (kip-ft) = 2475.83
Axial (kips) = 21.61
Shear (kips) = 26.13

Rebar Schedule per Pad and Pier	
Pier	(26) #8 vertical rebar w/hooks at bottom w/#5 ties, two within top 5" of top of pier then 12" C/C
Pad	(24) #8 horizontal rebar evenly spaced each way top and bottom (96 Total)

8). This is a design drawing only. Please see final construction drawings for all installation details.

JNO. G. McNEEL SURVEY A-335

8.094 Ac.
Vol. 1176 Pg. 911 D.R.

FREEPORT SUBSTATION

CENTERPOINT ENERGY
(f.k.a. Houston Lighting
& Power Co.)
Vol. 205 Pg. 195 D.R.
2.34 Ac.

Vol. 475 Pg. 341 D.R.
1.69 Ac.

Vol. 792 Pg. 596 D.R.
0.622 Ac.

PINE STREET

[S15°05'45"W] (541.00')

[S15°05'45"W] (132.12')

[S74°54'15"E] (375.00')

W-80'

N-77'

N-S

E-W

E-W

E-236'

0+00

N-S

S-129'

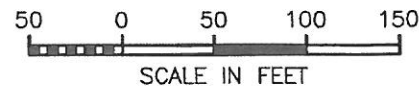
Fence

SEE
DETAIL

150' Monopole
North: 13,543,969.94'
East: 3,135,975.85'
Lat.: 28° 56' 23.95"
Long.: 95° 20' 56.81"
Ground Elev.: 0.2'
Top of Tower: 150.2'

10'x12' HUT
North: 13,543,960.48'
East: 3,135,991.65'
Ground Elev.: 0.10'

Vol. 412 Pg. 505 D.R.
309' x 600'



GRID COORDINATES AND BEARINGS REFER TO THE TEXAS COORDINATE SYSTEM OF 1983, SOUTH CENTRAL ZONE, DEFINED IN THE TEXAS NATURAL RESOURCES CODE, SECTION 21.071, et seq, AND ARE BASED ON THE HOUSTON VRS NETWORK.

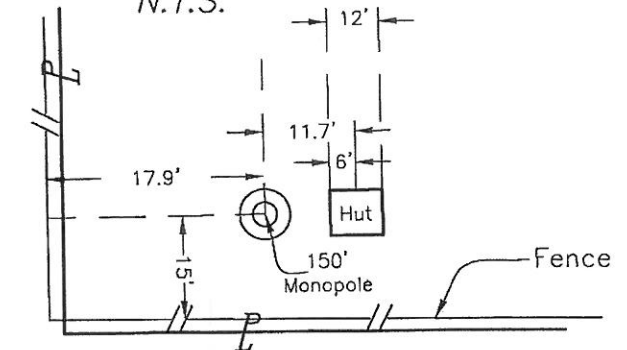
ALL DISTANCES SHOWN HEREON ARE GRID DISTANCES IN U.S. SURVEY FEET AND MAY BE CONVERTED TO SURFACE DISTANCES BY MULTIPLYING BY THE SCALE FACTOR 1.00013.

ELEVATIONS ARE BASED ON AN RTK SURVEY WHERE THE RESULTS WERE ADJUSTED UP 0.15' TO MATCH THE NATIONAL GEODETIC SURVEY CONTROL MARK, STAMPED "E 53 1918", PID "AM0062", AND WITH A PUBLISHED ELEVATION OF 6.90'.

THIS PROPERTY LIES WITHIN ZONE X, THE UNSHADED AREA AS SHOWN ON FIRM MAP NUMBER 48039C0780I, PANEL 0780 DATED NOVEMBER 1993.

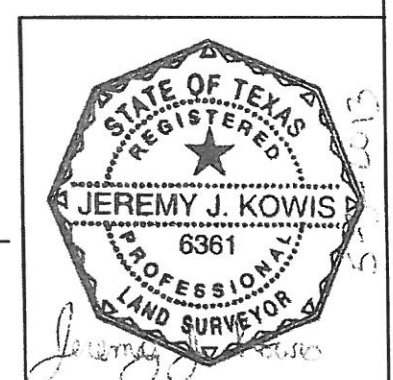
DETAIL

N.T.S.



LEGEND

- = Found 5/8" IR
- = Found 1/2" IR
- [] = Calculated
- () = Call



REV.1: JOB NO.	BY:	DATE:	REV.2: JOB NO.	BY:	DATE:
EASEMENT - PERMIT			CenterPoint Energy		
COUNTY: BRAZORIA		LAST PLOT DATE: 5/3/2013	SURVEYING & MAPPING		
DATE: MAY 3, 2013		DRAWN BY: JJK	P.O. Box 1700 Houston, TX 77251-1700		
SCALE: 1" = 100'		MAP NO: 5523C	(713) 207-2222		
FILE NO. - BOOK: B2013		JOB NO: 63949683	SKETCH NO. 13-0274		
		CHECKED BY: JLG			

7001
7001
979-261-2000

INCL: 00000000 6.000000 9.000000
DEPT: 015 TERM: 001
RFD: 1200

0000 000000 110000
2000 000000 0000
0000 000000 000000

0000 0000 0000 0000
0000 0000 0000 0000

CANCEL 0.00

City of Freeport
Building Department
Phone: 979-233-3526

For Office Use Only

Case Number: _____
Date Filed: _____
P & Z Date: _____
Council Date: _____

Application for
Specific Use Permit

1. Address or general location of site: 2304 Skinner, Freeport, TX 77541

2. Subdivision Trinity of Valence Block 127-689 Lots See below Acres _____

3. Current Zoning Classification: Single Family Residential

4. Proposed use of the site (please be specific): Site is currently CenterPoint Energy Substation and CenterPoint is proposing to install communication tower and shelter.

Priority recorded under V463/109; V470/299; V470/300; V474/427; V474/428; V478/213; V646/624; V697/126; V724/527 BCDR

5. Reason for requesting a specific use permit: Communication Tower and Shelter

I hereby certify that I am the owner or duly authorized agent of the owner, for the purposes of this application. The application fee of \$150.00 to cover the cost of this specific use permit application has been paid to the City of Freeport on _____, 20____. I also certify that I have been informed and understand the regulations regarding specific use permits as specified in the Zoning Ordinance of the City of Freeport. I understand it is necessary for me or my authorized agent to be present at both the Planning and Zoning Commission and the City Council public hearings.

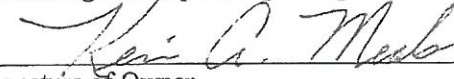
Owner's Signature: 

Owner's Name: CenterPoint Energy Houston Electric, LLC, Kevin Meals, agent & attorney-in-fact

Address: P.O. Box 1700

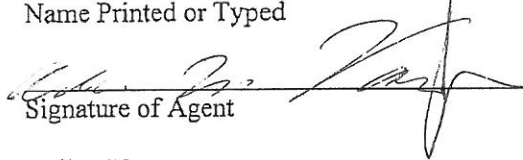
City, State, Zip: Houston, TX 77251-1700 Phone: (713) 207-6389

In lieu of representing this request myself as owner of the subject property, I hereby authorize the person designated below to act in the capacity as my agent for the application, processing, representation, and/or presentation of this request. The designated agent shall be the principal contact person with the City (and vice versa) in processing and responding to requirements, information or issues relative to this request.



Signature of Owner

Kevin Meals, Agent & Attorney-in-Fact for CenterPoint Energy Houston Electric, LLC
Name Printed or Typed



Signature of Agent

Allen Varner
Name Printed or Typed

Address of Agent: 1111 Louisiana, Houston, TX 77002

Agent's Phone Number: (713) 207-5868



Structural Design Report

180' S3R Series SD Self-Supporting Tower

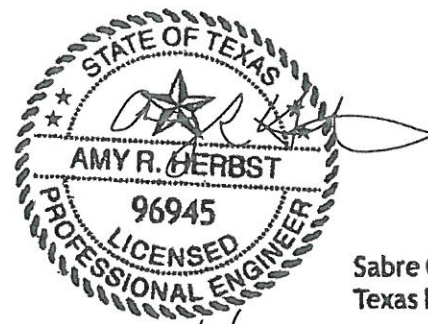
Site: ~~Hill~~ Substation, TX
Velasco

Prepared for: Centerpoint Energy, Inc.
by: Sabre Towers & Poles™

Job Number: 66080

September 7, 2012

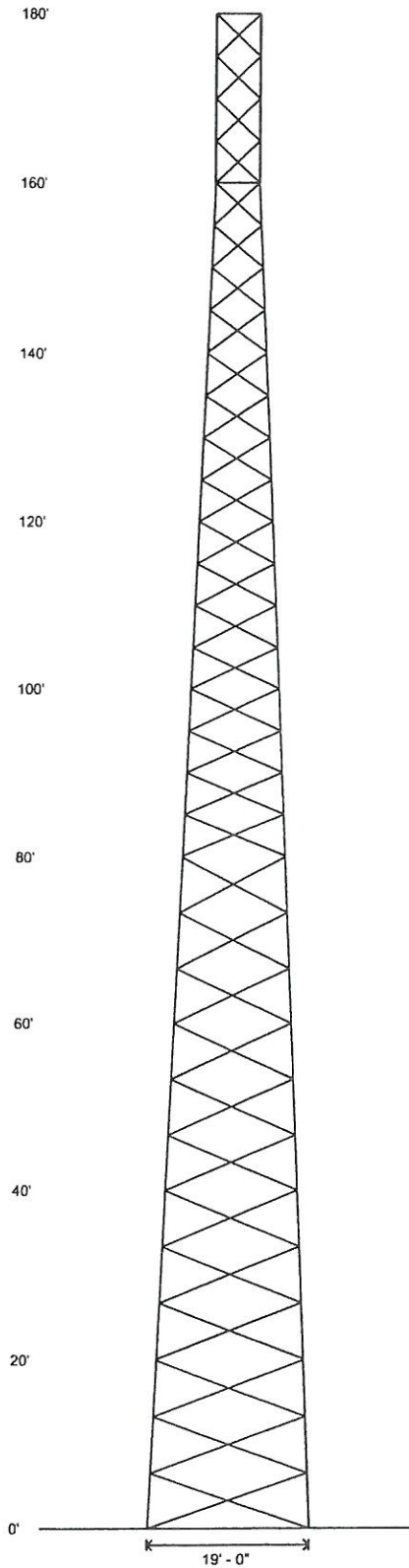
Tower Profile.....	1
Foundation Design Summary (Option 1).....	2
Foundation Design Summary (Option 2).....	3
Maximum Leg Loads.....	4
Maximum Diagonal Loads.....	5
Maximum Foundation Loads.....	6
Calculations.....	7-19



Sabre Communications Corporation
Texas Registration Number F-4365

9/7/12

Legs	4.0 S.R.	3.75 S.R.	3.5 S.R.	3.0 S.R.	2.75 S.R.	2.5 S.R.	2.25 S.R.	1.75 S.R.
Diagonals	L 3 1/2 X 3 1/2 X 1/4	L 3 X 3 X 1/4	L 3 X 3 X 3/16	L 2 1/2 X 2 1/2 X 1/4	L 2 1/2 X 2 1/2 X 3/16	L 2 X 2 X 1/4	L 2 X 2 X 3/16	L 2 X 2 X 1/8
Horizontals								
Brace Bolts			NONE					
Top Face Width	(1) 3/4"	(1) 3/4"				(1) 5/8"		
Panel Count/Height	17.25'	13.75'	12'	10.25'	8.5'	6.75'	5'	
Section Weight	5096	4173	3328	2918	2270	1907	1502	982



Designed Appurtenance Loading

Elev	Description	Tx-Line
177	(3) Flush Mount	
177	(3) 28in x 7in x 4in Panel Antennas	(3) 7/8"
170	Leg Dish Mount	
170	Leg Dish Mount	
170	(1) 8' H.P. Dish	(1) EW63
170	(1) 8' H.P. Dish	(1) EW52
156.5	(1) 13' x 3in Omni Whip Antenna	
151	Leg Dish Mount	
151	(1) 8' H.P. Dish	(1) EW63
150	3ft Sidearm	
150		(1) 1 5/8"
140	Leg Dish Mount	
140	Leg Dish Mount	
140	(1) 6' H.P. Dish	(1) EW63
140	(1) 6' H.P. Dish	(1) EW52
131.5	(1) 13' x 3in Omni Whip Antenna	
125	3ft Sidearm	
125		(1) 1 5/8"
121	Leg Dish Mount	
121	(1) 6' H.P. Dish	(1) EW63

Base Reactions

Total Foundation		Individual Footing	
Shear (kips)	57.67	Shear (kips)	33.89
Axial (kips)	67.55	Compression (kips)	357
Moment (ft-kips)	5682	Uplift (kips)	323
Torsion (ft-kips)	23.08		

Material List

Display	Value
A	L 2 X 2 X 3/16
B	L 2 X 2 X 1/8

Notes

- 1) All legs are 50 ksi.
- 2) All braces are 36 ksi.
- 3) All brace bolts are A325-X.
- 4) The tower model is S3R Series SD.
- 5) Transmission lines are to be attached to standard 8 hole waveguide ladders with stackable hangers.
- 6) Azimuths are relative (not based on true north).
- 7) Foundation loads shown are maximums.
- 8) (6) 1 1/4" dia. F1554 grade 105 anchor bolts per leg. Minimum 45.5" embedment from top of concrete to top of nut.
- 9) All unequal angles are oriented with the short leg vertical.
- 10) Weights shown are estimates. Final weights may vary.
- 11) This tower was designed for a basic wind speed of 120 mph with 0" of radial ice, and 30 mph with 1/2" of radial ice, in accordance with ANSI/TIA-222-G, Structure Class II, Exposure Category C, Topographic Category 1.
- 12) The foundation loads shown are factored loads.

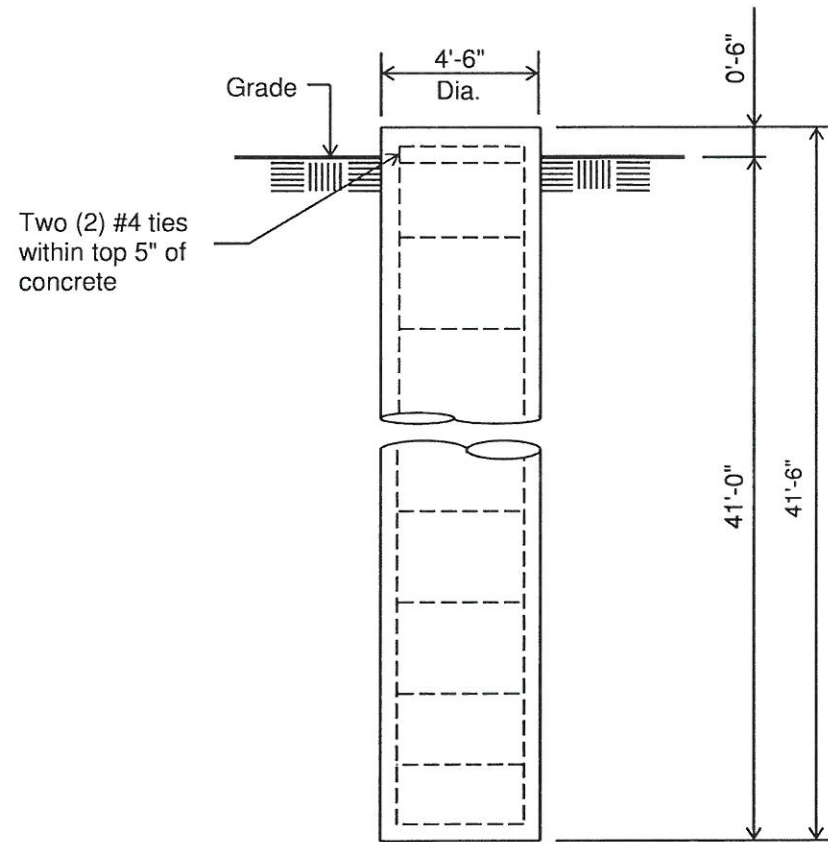
	Sabre Communications Corporation 2101 Murray Street P.O. Box 658 Sioux City, IA 51102-0658 Phone: (712) 256-6690 Fax: (712) 256-8250	Job: 66080 Customer: Centerpoint Energy, Inc. Site Name: H... Substation, TX Description: 180' S3R Date: 9/7/2012 By: ARH
	<small>Information contained herein is the sole property of Sabre Communications Corporation, constitutes a trade secret as defined by Iowa Code Ch. 350 and shall not be reproduced, copied or used in whole or part for any purpose whatsoever without the prior written consent of Sabre Communications Corporation.</small>	

Customer: Centerpoint Energy, Inc.

Site: Hillie Substation, TX

Verasco

180 ft. Model S3R Series SD Self Supporting Tower At
120 mph Wind with no ice and 30 mph Wind with 0.5 in. Ice per ANSI/TIA-222-G.
Antenna Loading per Page 1



Notes:

- 1). Concrete shall have a minimum 28-day compressive strength of 4000 PSI, in accordance with ACI 318-05.
- 2). Rebars to conform to ASTM specification A615 Grade 60.
- 3). All rebar to have a minimum of 3" concrete cover.
- 4). All exposed concrete corners to be chamfered 3/4".
- 5). The foundation design is based on the geotechnical report by Geotech Engineering and Testing, Project # 12-531E, Dated 8/21/12
- 6). See the geotechnical report for drilled pier installation requirements, if specified.
- 7). The foundation is based on the following factored loads:
Factored uplift (kips) = 322.93
Factored download (kips) = 356.89
Factored shear (kips) = 33.89
- 8). This is a design drawing only. Please see final construction drawings for all installation details.

ELEVATION VIEW

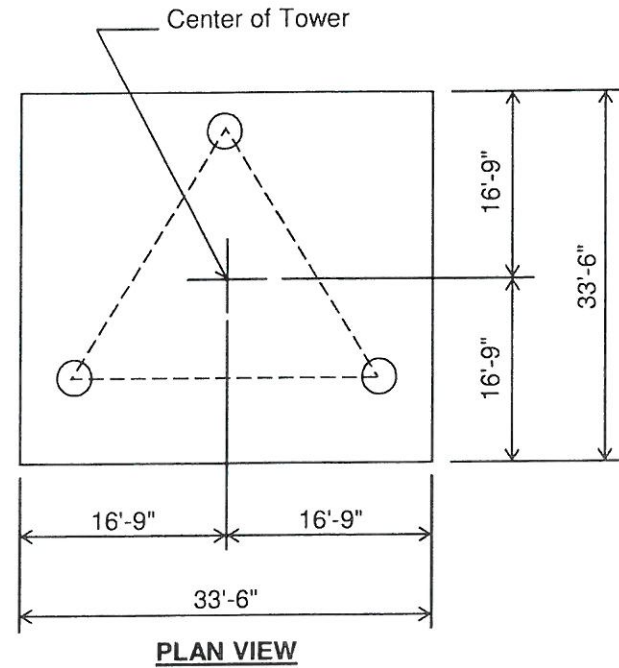
(24.45 Cu. Yds. each)
(3 REQUIRED; NOT TO SCALE)

Rebar Schedule per Pier	
Pier	(20) #7 vertical rebar w/#4 ties, two (2) within top 5" of pier then 12" C/C

Customer: Centerpoint Energy, Inc.

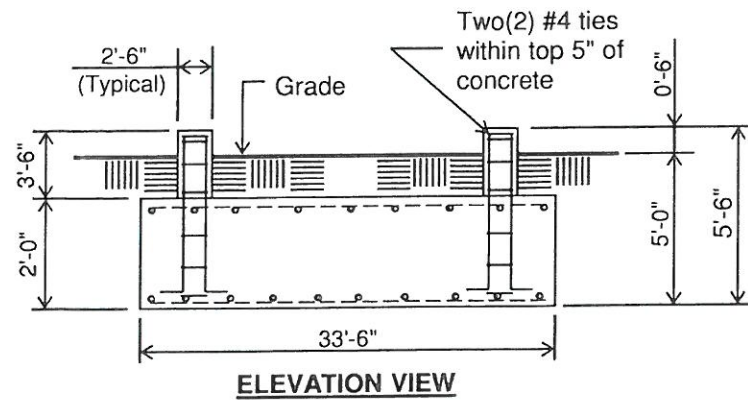
Site: ~~Hill~~ Substation, TX
Velasco

180 ft. Model S3R Series SD Self Supporting Tower At
120 mph Wind with no ice and 30 mph Wind with 0.5 in. Ice per ANSI/TIA-222-G.
Antenna Loading per Page 1



Notes:

- 1). Concrete shall have a minimum 28-day compressive strength of 4000 PSI, in accordance with ACI 318-05.
- 2). Rebar to conform to ASTM specification A615 Grade 60.
- 3). All rebar to have a minimum of 3" concrete cover.
- 4). All exposed concrete corners to be chamfered 3/4".
- 5). The foundation design is based on the geotechnical report by Geotech Engineering and Testing, Project # 12-531E, Dated 8/21/12



ELEVATION VIEW
(85.04 Cu. Yds.)
(1 REQD.; NOT TO SCALE)

- 6). See the geotechnical report for compaction requirements, if specified.

- 7). The foundation is based on the following factored loads:
Factored download (kips) = 35.49
Factored overturn (kip-ft) = 5681.76
Factored shear (kips) = 57.67

- 8). This is a design drawing only. Please see final construction drawings for all installation details.

Rebar Schedule per Mat and per Pier	
Pier	(10) #9 vertical rebar w/hooks at bottom w/#4 Rebar ties, two (2) within top 5" of pier then 12" C/C
Mat	(54) #7 horizontal rebar evenly spaced each way top and bottom. (216 total)

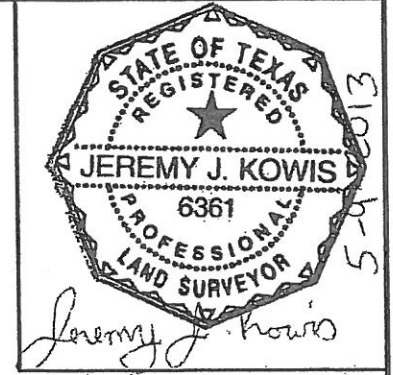
**THE DOW
CHEMICAL COMPANY**
Vol. 417, Pg. 85
Vol. 515, Pg. 207
Vol. 541, Pg. 273

GRID COORDINATES AND BEARINGS REFER TO THE TEXAS COORDINATE SYSTEM OF 1983, SOUTH CENTRAL ZONE, DEFINED IN THE TEXAS NATURAL RESOURCES CODE, SECTION 21.071, et seq, AND ARE BASED ON THE HOUSTON VRS NETWORK.

ALL DISTANCES SHOWN HEREON ARE SURFACE DISTANCES IN U.S. SURVEY FEET AND MAY BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE SCALE FACTOR 0.999882353.

ELEVATIONS ARE BASED ON AN RTK SURVEY AND REFERENCE MONUMENT: (MIDWAY AZ MK); PID# AM0021, WITH A PUBLISHED ELEVATION OF 0.9'.

THIS PROPERTY LINES WITHIN ZONE X, AS SHOWN ON FIRM MAP NUMBER 48039C0780 I, PANNEL 780, DATED NOVEMBER 17, 1993



LEGEND

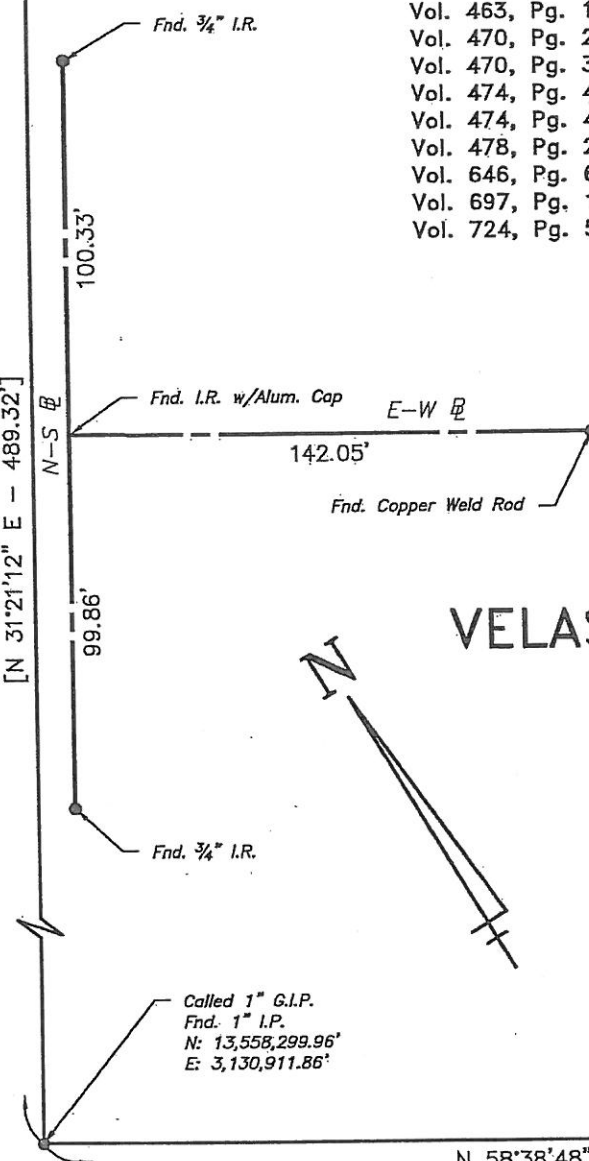
[] = Calculated
// // = Chain Link Fence

CENTERPOINT ENERGY

- Vol. 463, Pg. 109
- Vol. 470, Pg. 299
- Vol. 470, Pg. 300
- Vol. 474, Pg. 427
- Vol. 474, Pg. 428
- Vol. 478, Pg. 213
- Vol. 646, Pg. 624
- Vol. 697, Pg. 126
- Vol. 724, Pg. 527

SKINNER STREET

[N 31°21'12" E - 489.32']



VELASCO SUBSTATION

N 58°38'48" W - 303.86'

AVENUE R

ALEXANDER CALVIT LEAGUE A-49



BLOCK 689

BLOCK 688

Vol. 452, Pg. 69

V.E.D.R.

[145.00']
[N 31°21'12" E]

[N 38°36'59" W - 721.46']

[N 58°38'48" W - 374.00']

Fence Corner Post

Sta: 0+00.00
Sta: 0+10.00
Sta: 0+22.00
Sta: 0+38.50

10' x 12' HUT
N: 13,558,310.24'
E: 3,131,459.13'
Ground Elev.: 4.2'

180' Antenna
N: 13,558,298.68' NAD 83
E: 3,131,446.34'
Lat: 28° 58' 47.42" NAD 83
Long: 95° 21' 42.68"
Ground Elev.: 4.2'
Top of Tower Elev.: 184.2'

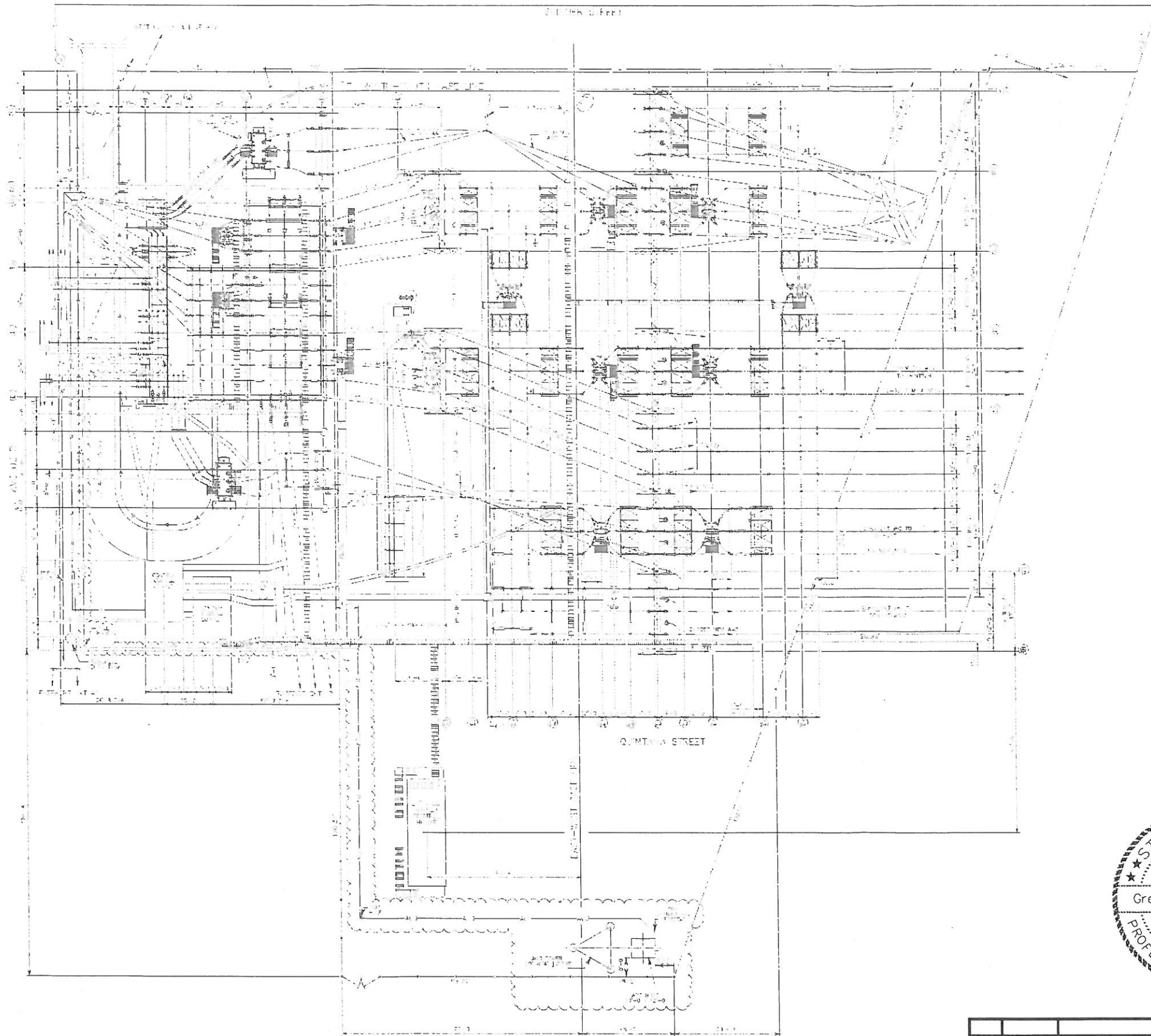
97.21'

NORTH 10TH STREET (Closed)

BLOCK 687

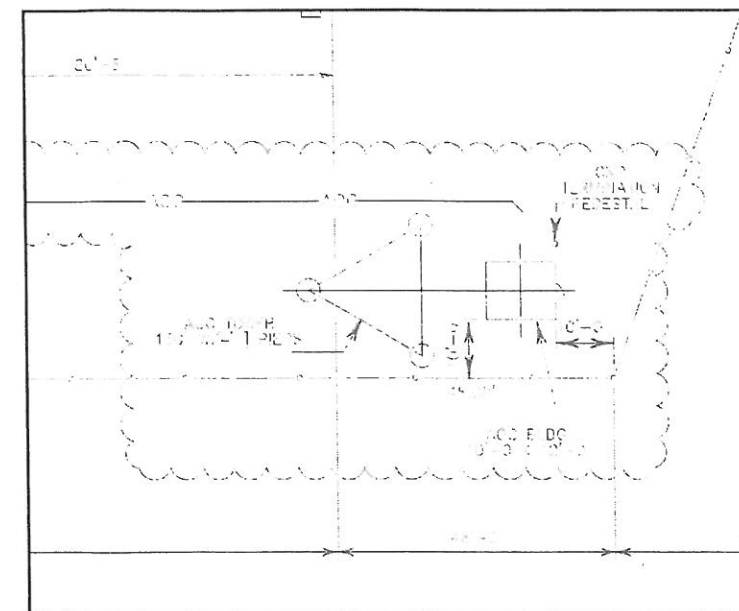
REV.1: JOB NO.	BY:	DATE:	REV.2: JOB NO.	BY:	DATE:
EASEMENT -					
COUNTY: BRAZORIA		LAST PLOT DATE: 05-08-2013	CenterPoint Energy		
DATE: 05-08-2013		DRAWN BY: WJD	SURVEYING & MAPPING		
SCALE: 1" = 50'		MAP NO: 5424B	P.O. Box 1700 Houston, TX 77251-1700		
FILE NO. - BOOK: 2013		JOB NO: 65267200	(713) 207-7777		
		CHECKED BY: JJK	SKETCH NO. 13-0287		

Velasco Substation



Site Plan

2304 Skinner St
Freeport, TX 77541



- LEGEND
- DRAINAGE
 - W-W- WATER LINE
 - S-S- SEWER LINE
 - F-F-F- FENCE
 - C-C-C- CURB
 - D-D-D- DRIVE
 - L-L-L- LIGHT
 - G-G-G- GAS
 - E-E-E- ELECTRICAL
 - P-P-P- PAVEMENT
 - B-B-B- BOUNDARY
 - A-A-A- ADJ. LINE (2-1/2" RW)



CENTERPOINT ENERGY
HOUSTON, TEXAS

VELASCO SUBSTATION
SITE PLAN LAYOUT

DRAWN BY: P. GARCIA	DATE: 06-14-13
CHECKED BY: S. PEARSON	DATE:
APPROVED BY: T. WOODARD	DRAWING NAME
SCALE: 1" = 50'	FILE: VELASCO.DWG

No.	Date	REVISION	BY	CHKD	CORR.APPV.

SHT 00 OF 00 SHTS