

Plan Reviews & Approvals Status
B18-106067 ANTENNAE-TOWER-STRUCTURAL

Owner: BROWARD COUNTY, BOARD OF COUNTY COMMISSIONERS
Site Address: 1200 SHERIDAN ST
HOLLYWOOD, FL 33019

Status Dates

Applied: 07/30/2018
Due Date: 07/31/2018
Ready for Issue:
Issued:
Partial C/O Issued:
TEMP C/O Issued:
C/O Issued:
C/C Issued:
Cancelled:
Closed:
Expired:
Last Reopened:

Plan Reviews & Approvals Status
B18-106067 ANTENNAE-TOWER-STRUCTURAL

<u>Reviews</u>	<u>Approved</u>	<u>Date Entered</u>	<u>User Name</u>
BLDG-STRUCTURAL-PLAN REVIEW	NO	8/20/2018	DOMENICO I DE LISO
BLDG-STRUCTURAL-PLAN REVIEW	NO	8/20/2018	Domenico De Liso
BLDG-STRUCTURAL-PLAN REVIEW	NO	8/21/2018	DOMENICO I DE LISO
BLDG-STRUCTURAL-PLAN REVIEW	NO	8/21/2018	Domenico De Liso
ENGINEERING-PLAN REVIEW	NO	8/21/2018	CLARISSA IP
ENGINEERING-PLAN REVIEW	NO	8/21/2018	Clarissa Ip
LANDSCAPE REVIEW	NO	8/21/2018	GUILLERMO SALAZAR
UTILITIES-DRAINAGE-PLAN REVIEW	NO	10/8/2018	WILFORD ZEPHYR
ENGINEERING-LANDSCAPE REVIEW	NO	10/24/2018	GUILLERMO SALAZAR
BLDG-ELECTRICAL-PLAN REVIEW	YES	8/21/2018	ED WEIDLICH
BLDG-ELECTRICAL-PLAN REVIEW	YES	8/21/2018	Ed Weidlich
BLDG-ELECTRICAL-PLAN REVIEW	YES	8/21/2018	ED WEIDLICH
BLDG-ELECTRICAL-PLAN REVIEW	YES	8/21/2018	Ed Weidlich

<u>Approvals & Certifications</u>	<u>Approved</u>	<u>Date</u>	<u>Performed By</u>
Broward County Notice of Commencement		7/30/2018	

<u>Inspection Description</u>	<u>Inspection Discipline</u>	<u>Result</u>	<u>Result Date</u>
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Inspection Results:

Plan Reviews & Approvals Status

B18-106067 ANTENNAE-TOWER-STRUCTURAL

Application Comments

<u>Description</u>	<u>Comments</u>	<u>Date</u>	<u>Entered By</u>
ContractorOverride	USER OVERRIDE:The Following Have Expired For Contractor: LAMBERT BROS. INC State Certification, Liability Insurance, Workmans Compensation, COMMENT:	7/30/2018	FJOSEPH
ContractorOverride	USER OVERRIDE:The Following Have Expired For Contractor: LAMBERT BROS. INC State Certification, Liability Insurance, Workmans Compensation, COMMENT:	7/30/2018	FJOSEPH

PermitScreen Comments

<u>Description</u>	<u>Comments</u>	<u>Date</u>	<u>Entered By</u>
	Approved 8/21/18 submittal and created electrical sub permit Weezer electric Tom Jeffers EC-0001360 954 444 2561 Modular cell site with 400 amp generator. Prewired trailer. Connections to generator and FP&L only. 10000	8/21/2018	EWEIDLICH

PlanReview Comments

<u>Description</u>	<u>Comments</u>	<u>Date</u>	<u>Entered By</u>
	You have received a C/A. C/A--Conditional Approval, which means your electrical plan is o/k but you will still need an electrical contractor to submit a notarized permit application. You will be able to obtain your master permit with this approval, and you can also obtain your sub-electric permit, when you pick up your master permit or later when needed as long as you have a fully executed permit application in the file from the electrical contractor and he is up to date with licenses and required insurances. Conditional Approvals never hold up the issuance of a Master Permit.	8/16/2018	EWEIDLICH
	Approved 7/30/18 submittal with CA for EC application. Modular cell site with 400 amp generator. Prewired trailer. Connections to generator and FP&L only. 8000 ug , ec r f	8/16/2018	EWEIDLICH
		8/20/2018	WZEPHYR

Plan Reviews & Approvals Status

B18-106067 ANTENNAE-TOWER-STRUCTURAL

PlanReview Comments

<u>Description</u>	<u>Comments</u>	<u>Date</u>	<u>Entered By</u>
	Survey show property in flood zone AH5, with Base Flood Elevation (BFE) of 5' NAVD88. Finished floor elevation of the proposed storage building has to be set at 6' NAVD. Revise plan accordingly.		
		8/21/2018	CDIAZ
	1. It is pending an approval from the Commission meeting		
		8/21/2018	EWEIDLICH
	Approved 8/21/18 submittal and created electrical sub permit Weezer electric Tom Jeffers EC-0001360 954 444 2561 Modular cell site with 400 amp generator. Prewired trailer. Connections to generator and FP&L only.		
BLDG-ELECTRICAL-PLAN REVIEW		8/16/2018	EWEIDLICH
	This site is on west side of large lake on hollywood water tower site.		
BLDG-ELECTRICAL-PLAN REVIEW		8/21/2018	FJOSEPH
	submit elect app		
BLDG-STRUCTURAL-PLAN REVIEW		8/20/2018	DDELISO
	1) Provide the Tower and tower Foundation design signed and sealed by an engineer 2) Provide a subsoil investigation report by a geotechnical engineer, clearly identifying the allowable in-place bearing capacity of the building pad for the proposed structure and verify the existing soil conditions - The certified in-place bearing capacity shall meet or exceed the design bearing capacity - FBC 1803 3) Provide a filled in Permit Application, including the contractor's license and the job value 4) Provide a Special Inspector Form signed by the owner and the contractor, and filled in, signed, dated and sealed by the special inspector for Building Structure of unusual size, height, design and critical structural connections. 5) Provide subpermit applications for: - Generator - Equipment storage shelter - Fence		
BLDG-STRUCTURAL-PLAN REVIEW		8/21/2018	FJOSEPH
	submit struct app		
BLDG-STRUCTURAL-PLAN REVIEW		8/21/2018	DDELISO

Plan Reviews & Approvals Status

B18-106067 ANTENNAE-TOWER-STRUCTURAL

PlanReview Comments

<u>Description</u>	<u>Comments</u>	<u>Date</u>	<u>Entered By</u>
	Permit application is on file: 1) Provide the Tower and tower Foundation design signed and sealed by an engineer 2) Provide a subsoil investigation report by a geotechnical engineer, clearly identifying the allowable in-place bearing capacity of the building pad for the proposed structure and verify the existing soil conditions - The certified in-place bearing capacity shall meet or exceed the design bearing capacity - FBC 1803 3) Provide a Special Inspector Form signed by the owner and the contractor, and filled in, signed, dated and sealed by the special inspector for Building Structure of unusual size, height, design and critical structural connections. 4) Provide subpermit applications for: - Generator - Equipment storage shelter - Fence		
ENGINEERING-PLAN REVIEW	Provide signed and sealed engineer's estimate for civil engineering related work.	8/21/2018	CIP
ENGINEERING-PLAN REVIEW	1. Provide signed and sealed engineer's estimate for civil engineering related work. 2. Provide wetlands determination letter or environmental permit from Broward County.	4/8/2019	CIP
LANDSCAPE REVIEW		8/21/2018	GSALAZAR

Plan Reviews & Approvals Status

B18-106067 ANTENNAE-TOWER-STRUCTURAL

PlanReview Comments

<u>Description</u>	<u>Comments</u>	<u>Date</u>	<u>Entered By</u>
	<p>In prior to move forward with Landscape plan review process applicant to submit a landscape plan and documents as follows:</p> <ol style="list-style-type: none">1. Provide information updated tree survey not older than 6 months for existing trees on site on a separate table include: location, species, estimated ht./spread, and /DBH diameter of trunks in inches.2. Provide a detailed tree disposition plan and landscape plan on separate sheets by a registered professional licensed Landscape Architect in the State of Florida that compliments the building architecture and uses, provides for shade, beautifies the site, accentuates site features, and serves as a buffer where appropriate. Provide tabular data chart on plan that identifies City of Hollywood landscape requirements and how they are being met for Perimeter landscape, Species diversity requirements, Interior landscape for at grade parking lots and vehicular use areas, open space, view triangle, planning and development board and historic preservation board and irrigation. Landscape plan should comply with all the requirements according to City of Hollywood Landscape manual, chapter 155.52, Article 9 LDR. Landscape plan set to include and clarify what is been provided as per city code requirements for landscape for project type. As per submitted clarity is required in terms of amount of inches of DBH for trees proposed to be removed and trees not meeting City of Hollywood minimum height or DBH requirements at planting.3. Provide irrigation plans for an automatic underground irrigation system for the project. Irrigation plans shall be prepared, signed and sealed by a registered professional licensed to do such design under State of Florida Statute 481.303(6)(c) or as otherwise prescribed under Florida Statutes.4. Additional comments may be forthcoming at Building permit submittal. <p>According to Chapter 155.52 of the Code of Ordinances and the City of Hollywood Landscape Manual. Shade trees to be installed at a minimum size of 2" DBH/ 12' height. Existing trees meeting this criteria may be used as credit toward total requirement. Palm trees count toward tree requirements on a 3:1 basis, meaning 3 palms equal 1 broadleaf tree. The following palm species are the exception and count 1:1 as trees: Royal Palm, Phoenix sylvestris/Medjool/canariensis, Bismarkia, and Coconut. Minimum height requirements for all palms at planting is 8' of GW or CT.</p> <p>No tree removals without a tree removal sub- permit. Supplemental arborist report might be required as needed to approve any tree removal permit. Applicant to submit a complete Broward County Uniform Building Application and separate application for tree removal and planting sub-permit. Submit approved and signed total final landscape installation estimate from Landscape contractor/installer for two separate sub-permits in separate to comply with existing pending city code tree planting and removal</p> <p>Coordinate meeting with Guillermo Salazar Landscape plan reviewer for any further questions or clarifications at gsalazar@hollywoodfl.org</p>		

Plan Reviews & Approvals Status

B18-106067 ANTENNAE-TOWER-STRUCTURAL

PlanReview Comments

<u>Description</u>	<u>Comments</u>	<u>Date</u>	<u>Entered By</u>
	Review was mistakenly removed. Comment below needs to be addressed prior to Utilities approval.		
	Survey show property in flood zone AH5, with Base Flood Elevation (BFE) of 5' NAVD88. Finished floor elevation of the proposed storage building has to be set at 6' NAVD. Revise plan accordingly.		

System Comments

<u>Description</u>	<u>Comments</u>	<u>Date</u>	<u>Entered By</u>
		7/30/2018	
	Address Change from 4950 SW 40 CT	504231010242	
		8/16/2018	
	Permit Type Change from NEW-MODULAR MANUFACTURED		

Plan Reviews & Approvals Status
B18-106067 ANTENNAE-TOWER-STRUCTURAL

<u>Linked Permits</u>	<u>Status</u>
E18-102087	CREATED

From: Alejandro Gil [<mailto:alex@adlucemcorp.com>]

Sent: Friday, June 7, 2019 5:03 PM

Subject: RE: Building Permit 2018

Hello,

Thank you for the documentation. The CIRC document in particular was very entertaining reading. With respect to the drawings, many of the items I noticed were documented in the permitting feedback. Namely:

- The drawings have conflicting information. In some, the generator is located on a 3 to 6" pad on the ground sitting atop legs to get it above the calculated flood zone. Others have it on the same platform as the shelter. Not clear why the conflicting drawings.
- The two main things I noticed were that the tower still shows it being 300'.
- No foundation drawings
- Shows a 100kw generator rather than a 175kw generator in a subsequent set of drawings.

In terms of the CIRC analysis, here are my observations:

- Page 5
 - Given the size and height of the CIRC building, the area behind the building should experience shadowing regardless of whether or not it is being serviced by the CIRC building or the WLP tower. Gerald, please confirm if you agree.
 - I personally disagree with the need for modifications, but I cannot confirm whether there would be "significant modifications" until we close on the installation strategy. In my opinion, that would only be applicable if you were putting the batteries up on the top floor. If we put those on the lower floor, the load on the boiler room floor would be significantly less, and more accommodating.
 - The construction at the CIRC will not take longer than building a free standing tower. That is patently false given less work is required in the CIRC, and we can have separate teams doing the work on the boiler room, another team building the room for the batteries and generator and then the electrician.
 - Recovery – this comment was particularly amusing. Again, completely untrue. We could keep spare antennas in the building in order to get service back up right away, and to boot the building affords more protection to the equipment than the tower. Plus, the building is not in a flood zone, so the most likely scenario is the teams could be in the building the very next day. The same cannot be said about WLP. I've already shared my thoughts on the recovery at WLP.
- Page 6
 - Raised concrete floor is only one option. I'm sure Gerald can research other alternatives and find a comparably good solution. Especially if we are only putting the P25 BTS and power plant in the boiler room.
 - A helicopter is definitely not necessary, and we believe we can get around the need for a crane. So the crane is a last resort.
- Page 9 (Flood Mitigation)
 - Really enjoyed this one. Particularly amusing. Even if the boiler were to burst, it would not flood the room and submerge the equipment. Worst case, this is a wash along with WLP. Both sites have some element of risk, but the risk of flooding at WLP is without question higher than CIRC.
- Page 11
 - Clearly states that systemwide coverage is comparable to WLP which is what the BCC argued for. We just need to find a solution for propagating signal in the surrounding area under the building. Tall buildings behind CIRC should experience some element of shadowing regardless of which site is selected.
 - New construction increases the risks of shadowing regardless of what site is selected. This is a wash between both sites.

- Both sites would need to get FAA approval, but given the roof already has the really tall spires on them it is less likely to get rejected than a 306' (or 321') tower (depending on which drawing ends up being correct).
- Page 16
 - Bullet 1 doesn't even merit attention. The numbers are absurd.
 - Bullet 2 is purely an assumption. The lease agreement with CIRC needs to be finalized rather than anyone guessing.
 - Bullet 3 makes it clear they know nothing about towers. A tower does not cost \$5k to maintain. Here are all the items required to maintain a tower:
 - Monthly mowing, treatment for weeds and removal of debris. Common for all tower owners.
 - Pest control (especially so close to the water). Common for all tower owners.
 - Given the close proximity to the water, you need to plan on visiting that tower monthly and inspecting it for exposed metal and treatment with cold galvalume and paint. That means a minimum of a 2 man team climbing the tower and performing the inspection and maintenance. For a 2 man tiger team, I charge \$2500 to \$3000 per day for this kind of thing. This should be a day's worth of work every time they visit.
 - On a rooftop site, all costs should be incorporated into the lease. Not sure what additional costs there would be in the CIRC.
- Page 19
 - I disagree. If you are doing recovery on the CIRC, you can send two people to do the work, and they do not need to be tower climbers. All they need to do is grab their tools (and materials), hit the stairwell and walk up to the top story. Only thing on the building that would need attention are the microwave dishes up on the roof and the antennas on the parapet walls. Perhaps some of the coax runs. If we store spares in the building, they could immediately recover it. Especially given the equipment is protected inside the building.
 - Remember, during a recovery, it's about getting the network back up. It's not about making it pretty. The dressing in and repair can take place later. All that matters is getting the system back on the air.
 - Recovery on the WLP tower will require a 4 man team. Assuming the area is not under water, and is accessible with a truck, this would apply. Upon arrival, they need to get all their kit out of the truck and the trailer they will need in order to bring the MW dish and all the materials for installation. Then they have to do a safety precheck, check all harnesses and climbing apparatus, and the climbing ropes to insure nothing is damaged. JHA form and associated documentation needs to be completed, and all parties need to sign. That is a requirement of the industry. That usually takes an hour. Once the guys are rigged and ready to climb, 2 guys go up and 2 stay at the base. If the tower took damage, then they need to be careful as they climb in the event there is equipment in the path of the safety climb. You do not climb a 306 to 320' tower in 5 minutes. It takes time to climb while tying off as you go up the tower. Once they get to the top, they inspect everything to insure that it is safe, assess the damage, radio down what is required and then they rig the tower. Before any work can be done, any and all materials on the tower that are damaged and hanging must be removed to eliminate a safety issue. Then we set up and begin working. Just based on the above, it is safe to say that a rooftop site is faster.
 - Climbing towers is very dangerous. Safety protocols must (and will as far as my people are concerned) be adhered to and followed. Every year people die falling from towers. Circumventing safety is not an option. During a recovery after a storm, the entire environment is dangerous and that is when safety protocols are most critical.

- Last bullet, this is a matter of planning. My suggestion would be to do proper disaster recovery planning and keep the spares on the site. There is room to store materials in CIRC. If you leave anything on the WLP site, it has a probably of being caught up in the storm surge and possibly getting damaged. What can be stored inside the shelter will depend on space, but an 8' MW dish is definitely not going to fit in there; and, without transmission to connect the site to the network, you have no P25 network. Transmission is the backbone.
 - Regarding WLP, the following would apply:
 - Until the waters around the tower recede down low enough for a truck to reach it, and the area to and around the tower is cleared of debris, no work can commence on the tower. You cannot recover the site, if you cannot reach it.
 - Assuming they install all the way at the top of the tower, WLP will also require a crane or helicopter to recover the site, because you need 15 to 20' of head room clearance for a winch to be utilized. A crane is entirely unrealistic immediately after a storm, because a crane operator will not drive their crane into an area that is under water because the weight of the crane will cause it to sink. So only two possible outcomes are on the table:
 1. No recovery can be performed until the storm surge recedes, the area is cleared, dries and is suitable for a crane. Not an option given this is the P25 for first responders.
 2. Use a helicopter to raise the 8' microwave dish from aviat, the 6 25' antennas and the 6 runs of 1 5/8" coax.

That document has both factual and fictional elements. I cannot tell you whether it was intentional or simply they did not know; however, it was a factual misrepresentation of reality. Some of the disadvantages that they applied to CIRC are actually applicable to WLP and not CIRC.

Gerald,

Your thoughts?

Best regards,

Alex Gil

AD LUCEM

Mobile - 973.714.5649

Email – alex@adlucemcorp.com

B18-106007

BROWARD COUNTY UNIFORM BUILDING PERMIT APPLICATION

Select One Trade: ☒ Building ☐ Electrical ☐ Plumbing ☐ Mechanical ☐ Other

Application Number:

Application Date:

Job Address: <u>1200 SHERIDAN STREET</u>	Unit:	City: <u>Hollywood</u>
Tax Folio No.:	Flood Zn.:	BFE:
Building Use: Public Safety Communications	Floor Area:	Job Value: \$ 100,000
Construction Type:	Occupancy Group:	
1 Present Use: vacant	Proposed Used: Public Safety Communications	
Description of Work: Construct 300' Self Supporting tower, foundations for 24'x32' shelter and 100 kW Diesel Generator		
<input checked="" type="checkbox"/> New <input type="checkbox"/> Addition <input type="checkbox"/> Repair <input type="checkbox"/> Alteration <input type="checkbox"/> Demolition <input type="checkbox"/> Revision <input type="checkbox"/> Other:		
Legal Description: Section 34, Township 49 South, Range 37 East		
<input type="checkbox"/> Attachment		
2 Property Owner: Broward County		
Phone: 954-205-9779 Email: jdezayas@broward.org		
Owner's Address: 115 S. Andrews Avenue		
City: Fort Lauderdale State: FL Zip: 33301		
Contracting Co.: The W Group		
Phone: 772-421-3523 Email: TomFlynn@twgcontractors.com		
3 Company Address: 1409 SW Albatross Way		
City: Palm City State: FL Zip: 34990		
Qualifier's Name: Tom Flynn		
Owner-Builder: <input checked="" type="checkbox"/> License Number: CGC 1505177		
Architect/Engineer's Name:		
David Shiver		
Phone: 770-421-3400		
Email: David.Shiver@woodplc.com		
Architect/Engineer's Address: 1075 Big Shanty Road NW		
City: Kennesaw State: GA Zip: 30144		
Bonding Company: n/a		
4 Bonding Company Address:		
City: State: Zip:		
Fee Simple Titleholder's name (if other than owner): n/a		
Fee Simple Titleholder's Address (If other than owner):		
City: State: Zip:		
Mortgage Lender's Name: n/a		
Mortgage Lender's Address:		
City: State: Zip:		

Application is hereby made to obtain a permit to do the work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work will be performed to meet the standards of all laws regulating construction in this jurisdiction. I understand that a separate permit must be secured for ELECTRICAL WORK, PLUMBING, SIGNS, WELLS, POOLS, FURNACES, BOILERS, HEATERS, TANKS, and AIR CONDITIONERS, etc.

OWNER'S AFFIDAVIT: I certify that all the foregoing information is accurate and that all work will be done in compliance with all applicable laws regulating construction and zoning.

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMENCEMENT.

X [Signature]
Signature of Property Owner or Agent
STATE OF FLORIDA
COUNTY OF BROWARD

[Signature]
Signature of Qualifier
STATE OF FLORIDA
COUNTY OF BROWARD

Sworn to (or affirmed) and subscribed before me this 31st day of August, 20 18 by

Sworn to (or affirmed) and subscribed before me this 31st day of August, 20 18 by

Notary Public State of Florida
Lisa T Bolden
My Commission FF 976892
Expires 03/30/2020
NOTARY'S SIGNATURE as to Owner or Agent's Signature
Notary Name Lisa T. Bolden
(Print, Type or Stamp Notary's Name)
Personally Known ☒ or Produced Identification ☒
Type of Identification Produced Driver's License

Tom Flynn
(Type / Print Qualifier's Name)
NOTARY'S SIGNATURE as to Qualifier's Signature
Notary Name Lisa T. Bolden
(Print, Type or Stamp Notary's Name)
Personally Known ☒ or Produced Identification ☒
Type of Identification Produced Driver's License

APPROVED BY: _____ Permit Officer Issue Date: _____ Code in Effect: _____

A jurisdiction may use a supplemental page requesting additional information and citing other conditions, please inquire.

Note: If any development work as described in FS 380.04 Sec. 2 a-g is to be performed, a development permit must be obtained prior to the issuance of a building permit.

B18-101-267

BROWARD COUNTY UNIFORM BUILDING PERMIT APPLICATION

Select One Trade: ☐ Building ☒ Electrical ☐ Plumbing ☐ Mechanical ☐ Other

Application Number:

Application Date:

Job Address: 1200 SHERIDAN STREET	Unit:	City: HOLLYWOOD
Tax Folio No.:	Flood Zn.:	BFE:
Building Use: Public Safety Communications	Construction Type:	Job Value: \$ 10,000
1 Present Use: vacant	Proposed Used: Public Safety Communications	Occupancy Group:
Description of Work: Electrical connection to FP&L, back up generator and site grounding		
<input checked="" type="checkbox"/> New <input type="checkbox"/> Addition <input type="checkbox"/> Repair <input type="checkbox"/> Alteration <input type="checkbox"/> Demolition <input type="checkbox"/> Revision <input type="checkbox"/> Other:		
Legal Description: Section 34, Township 49 South, Range 37 East		<input type="checkbox"/> Attachment
2 Property Owner: Broward County Phone: 954-205-9779 Email: jdezas@broward.org		
Owner's Address: 115 S. Andrews Avenue City: Fort Lauderdale State: FL Zip: 33301		
3 Contracting Co.: Weezer Electric Phone: 954-444-2561 Email: weezerelectric@att.net		
Company Address: 271 NW 16th St City: Pompano Beach State: FL Zip: 33060		
Qualifier's Name: Tom Jeffers Owner-BUILDER: <input checked="" type="checkbox"/> License Number: EC-0001360		
4 Architect/Engineer's Name: Jason D Page Phone: 770-421-3400 Email: Jason.Page@woodplc.com		
Architect/Engineer's Address: 1075 Big Shanty Road NW City: Kennesaw State: GA Zip: 30144		
Bonding Company: n/a		
Bonding Company Address: City: State: Zip:		
Fee Simple Titleholder's name (if other than owner): n/a		
Fee Simple Titleholder's Address (If other than owner): City: State: Zip:		
Mortgage Lender's Name: n/a		
Mortgage Lender's Address: City: State: Zip:		

Application is hereby made to obtain a permit to do the work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work will be performed to meet the standards of all laws regulating construction in this jurisdiction. I understand that a separate permit must be secured for ELECTRICAL WORK, PLUMBING, SIGNS, WELLS, POOLS, FURNACES, BOILERS, HEATERS, TANKS, and AIR CONDITIONERS, etc.

OWNER'S AFFIDAVIT: I certify that all the foregoing information is accurate and that all work will be done in compliance with all applicable laws regulating construction and zoning.

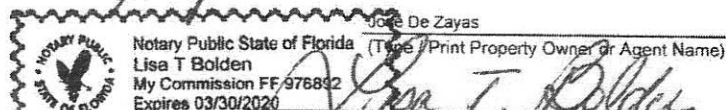
WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMENCEMENT.

X [Signature]
Signature of Property Owner or Agent
STATE OF FLORIDA
COUNTY OF BROWARD

X [Signature]
Signature of Qualifier
STATE OF FLORIDA
COUNTY OF BROWARD

Sworn to (or affirmed) and subscribed before me this 31st day of July, 2018 by

Sworn to (or affirmed) and subscribed before me this 2nd day of August, 2018 by



NOTARY'S SIGNATURE as to Owner or Agent's Signature
Notary Name Lisa T. Bolden
(Print, Type or Stamp Notary's Name)

NOTARY'S SIGNATURE as to Qualifier's Signature
Notary Name Lisa T. Bolden
(Print, Type or Stamp Notary's Name)

Personally Known ☒ or Produced Identification ☒

Personally Known ☒ or Produced Identification ☒

Type of Identification Produced Driver's License

Type of Identification Produced Driver's License

APPROVED BY: _____ Permit Officer Issue Date: _____ Code in Effect: _____

A jurisdiction may use a supplemental page requesting additional information and citing other conditions, please inquire.

Note: If any development work as described in FS 380.04 Sec. 2 a-g is to be performed, a development permit must be obtained prior to the issuance of a building permit.



Letter of Transmittal

To: City of Hollywood
P.O. Box 229045
Hollywood, FL, 33022-9045
Phone: (954)921-3335 • Fax (954)921-3037

Date 8/15/18
Permit Number: 318-106067
E-Mail Address: _____
Project/ Reference: BROWARD Co.

For Review By: (check all applicable spaces)

☐ Planning ☐ Zoning ☐ Engineering ☐ Fire ☐ Water / Sewer ☐ Drainage ☐ Landscape ☐ CRA
Discipline: ☐ Structural ☐ Electrical ☐ Plumbing ☐ Mechanical ☐ Reserve Capacity Changes

From: MIKEL ISAAC
Address: 12101 NW 4 STREET
PLANTATION, FLA.
E-Mail Address: _____
Contact: MIKEL ISAAC
Phone: (305) 796-9695
Fax: () _____

PLANS SUBMITTED: (CHECK ☐)

<input type="checkbox"/> Architectural Sheet # _____	<input type="checkbox"/> Fire Sheet # _____
<input type="checkbox"/> Structural Sheet # _____	<input type="checkbox"/> Zoning Sheet # _____
<input type="checkbox"/> Electrical Sheet # _____	<input type="checkbox"/> Engineering Sheet # _____
<input type="checkbox"/> Mechanical Sheet # _____	<input type="checkbox"/> RCC Sheet # _____
<input type="checkbox"/> Plumbing Sheet # _____	<input type="checkbox"/> Drainage Sheet # _____
<input type="checkbox"/> Water Sheet # _____	<input type="checkbox"/> Sewer Sheet # _____
<input type="checkbox"/> CRA Sheet # _____	<input type="checkbox"/> Landscape Sheet # _____

WE ARE SUBMITTING TO YOU (CHECK ☐)

Via ☒ hand delivery ☐ postal delivery ☐ drop box
☐ special delivery ☐ fax copy

☐ Email
☐ initial (original) set of plans
☐ corrected (non-permitted) plans
☐ revised (permitted) plans
☐ shop drawings:
☐ structural steel
☐ wood trusses
☐ glass/glazing
☐ product approvals
☐ fire protection
☐ other _____

☐ spot survey ☐ pile logs
☐ final survey ☐ condo/ H.O. approval
☐ energy (insulation) certification ☐ turtle glass I.D.
☐ special inspector letter / form ☐ wind loads
☐ soil reports ☐ sub-permit
☐ inspection reports ☐ outside agencies
☐ energy calcs
☐ site plans
☐ other _____

For Departmental Use Only:

Received by: _____ Date: ____/____/____

Special Instructions

APPROVED?

YES ☐ NO ☐ N/A ☐ CA ☐

Reviews Menu

Add New

Remove

Cancel

Update

Approvals

Add Inspections

Add Sub Permits

Linked Permits

Comments

Plans

Print Screen

Exit

Assigned Reviews

Reviews For: B19-103057

Review	Approve	Status Date	Reviewer	Discipline	Reviewer As
▶ ZONING-PLAN REVIEW		05/08/2019		ZONING	
BLDG-ELECTRICAL-PLAN REVIEW	NO	05/29/2019	J STEWART	ELECTRIC	
BLDG-STRUCTURAL-PLAN REVIEW	NO	05/30/2019	DLAMBERT	STRUCTUR	
ENGINEERING-LANDSCAPE REVIEW	NO	05/30/2019	GSALAZAR	LANDSCAPE	
UTILITIES-DRAINAGE-PLAN REVIEW	NO	06/05/2019	WZEPHYR	UTILITIES	

Master Permit Information

Review: BLDG-ELECTRICAL-PLAN REVIEW
Building Type: **Turn Around:** 10 **Due Date:** 5/23/2019
Square Feet: 0 **Bldg Category:** COMMERCIAL
Construction Type: **Number of Floors:** 1 **Number of Units:** 1
Occupancy Class: **Max Assembly Capacity:**
Review Type (for Aging): ☒ Initial ☐ Correction ☐ Revision
Customer Valuation: \$157,000.00
Calculated Valuation: \$0.00
STRUCTUR Reviewer Valuation: \$0.00 ☐ Override
C/O Additional Info: **Automatic Fire Sprinkler** **FLA Building Code:**

Exit

New Comment Existing Comments

userId	Screen	EventDate	description
JSTEWART	PlanReview	05/29/2019	BLDG-ELECTRICAL-PLAN REVIEW
JSTEWART	PlanReview	05/29/2019	BLDG-ELECTRICAL-PLAN REVIEW
DLAMBERT	PlanReview	05/30/2019	BLDG-STRUCTURAL-PLAN REVIEW
GSALAZAR	PlanReview	05/30/2019	ENGINEERING-LANDSCAPE REVIEW
WZEPHYR	PlanReview	06/05/2019	UTILITIES-DRAINAGE-PLAN REVIEW

PLANS FOR BROWARD COUNTY-WEST LAKE PARK
T1 THRU E6
UTILITY COMPANY DOES NOT FURNISH WIRE OR METER
ENCLOSURE, PROVIDE CONDUIT, WIRE SIZES & SPEC'S ON
METER ENCLOSURE(E6)
ALL NEW OR REPLACEMENT GENERATORS NEED TO GO TO BROWARD
COUNTY ENVIRONMENTAL AND CONSUMER PROTECTION AGENCY FOR
APPROVAL BEFORE CITY REVIEW
SHELTER RISER DIAGRAM DOSE NOT MATCH PAGE E6 ONE LINE
DIAGRAM
MORE COMMENTS MAY BE FORTH COMING

Submit minimum criteria for electric review as per BCBRA amendments to Fla. Bldg. Code 107.3.5 B

New Comment Existing Comments

userId	Screen	EventDate	description
JSTEWART	PlanReview	05/29/2019	BLDG-ELECTRICAL-PLAN REVIEW
JSTEWART	PlanReview	05/29/2019	BLDG-ELECTRICAL-PLAN REVIEW
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GSALAZAR	PlanReview	05/30/2019	ENGINEERING-LANDSCAPE REVIEW
WZEPHYR	PlanReview	06/05/2019	UTILITIES-DRAINAGE-PLAN REVIEW

CREATED ELECTRICAL SUB & INSPECTIONS
 FOR EMERGENCY RESPONDERS ANTENNA
 AT WEST LAKE PARK (OFF SHERIDAN ST)
 SHELTER, GENERATOR, TOWER
 WEZZER ELECTRIC INC
 EC0001360
 954-444-2561
 THOMAS P JEFFERS
 \$62,826.00
 APP IN FILE
 5-29-18

New Comment Existing Comments

userId	Screen	EventDate	description
JSTEWART	PlanReview	05/29/2019	BLDG-ELECTRICAL-PLAN REVIEW
JSTEWART	PlanReview	05/29/2019	BLDG-ELECTRICAL-PLAN REVIEW
DLAMBERT	PlanReview	05/30/2019	BLDG-STRUCTURAL-PLAN REVIEW
GSALAZAR	PlanReview	05/30/2019	ENGINEERING-LANDSCAPE REVIEW
WZEPHYR	PlanReview	06/05/2019	UTILITIES-DRAINAGE-PLAN REVIEW

- 1) According to the city flood zone maps this building will be in a flood zone (AE) as noted on sheet C1 site layout. The plans from Thermobond sheet C1 special conditions indicate that the structure is not designed for installation in a flood hazard area
- 2) Sheet S1 why are there 2 floor layout and 2 wall and floor layouts
- 3) Is this building pre assembled or assembled on site
- 4) Provide a (signed and sealed) soil report per 1808.2 2017 FBC, the allowable bearing must meet or exceed the design bearing. Or provide a (sealed) statement of the allowable and the design bearing capacity. Foundations shall be designed so as the allowable soil bearing capacity is not exceeded
- 5) The silt screen, Fence and chain wall will be separate sub permits

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JSTEWART	PlanReview	05/29/2019	BLDG-ELECTRICAL-PLAN REVIEW
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WZEPHYR	PlanReview	06/05/2019	UTILITIES-DRAINAGE-PLAN REVIEW

In prior to move forward with Landscape plan review process applicant to submit a landscape plan and documents as follows:

1. Provide information updated tree survey not older than 6 months for existing trees on site on a separate table include: location, species, estimated ht./spread, and /DBH diameter of trunks in inches.
2. Provide a detailed tree disposition plan and landscape plan on separate sheets by a registered professional licensed Landscape Architect in the State of Florida that compliments the building architecture and uses, provides for shade, beautifies the site, accentuates site features, and serves as a buffer where appropriate. Provide tabular data chart on plan that identifies City of Hollywood landscape requirements and how they are being met for Perimeter landscape. Species diversity requirements, Interior landscape for at grade parking lots and vehicular use areas, open space, view triangle, planning and development board and historic preservation board and irrigation. Landscape plan should comply with all the requirements according to City of Hollywood Landscape manual, chapter 155.52, Article 9

New Comment Existing Comments

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JSTEWART	PlanReview	05/29/2019	BLDG-ELECTRICAL-PLAN REVIEW
JSTEWART	PlanReview	05/29/2019	BLDG-ELECTRICAL-PLAN REVIEW
DLAMBERT	PlanReview	05/30/2019	BLDG-STRUCTURAL-PLAN REVIEW
GSALAZAR	PlanReview	05/30/2019	ENGINEERING-LANDSCAPE REVIEW
WZEPHYR	PlanReview	06/05/2019	UTILITIES-DRAINAGE-PLAN REVIEW

Address Structural review comment regarding construction of this building in a flood zone.

New Comment Existing Comments

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JSTEWART	PlanReview	05/29/2019	BLDG-ELECTRICAL-PLAN REVIEW
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WZEPHYR	PlanReview	06/05/2019	UTILITIES-DRAINAGE-PLAN REVIEW

project type. As per submitted clarity is required in terms of amount of inches of DBH for trees proposed to be removed and trees not meeting City of Hollywood minimum height or DBH requirements at planting.

3. Provide irrigation plans for an automatic underground irrigation system for the project. Irrigation plans shall be prepared, signed and sealed by a registered professional licensed to do such design under State of Florida Statute 481.303(6)(c) or as otherwise prescribed under Florida Statutes.

4. Additional comments may be forthcoming at Building permit submittal.

According to Chapter 155.52 of the Code of Ordinances and the City of Hollywood Landscape Manual. Shade trees to be installed at a minimum size of 2" DBH/ 12' height. Existing trees meeting this criteria may be used as credit toward total requirement. Palm trees count toward tree requirements on a 3:1 basis, meaning 3 palms equal 1 broadleaf tree. The following palm species are the exception and count 1:1 as trees: Royal Palm, Phoenix

New Comment Existing Comments

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JSTEWART	PlanReview	05/29/2019	BLDG-ELECTRICAL-PLAN REVIEW
JSTEWART	PlanReview	05/29/2019	BLDG-ELECTRICAL-PLAN REVIEW
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GSALAZAR	PlanReview	05/30/2019	ENGINEERING-LANDSCAPE REVIEW
WZEPHYR	PlanReview	06/05/2019	UTILITIES-DRAINAGE-PLAN REVIEW

The following palm species are the exception and count 1:1 as trees: Royal Palm, Phoenix sylvestris/Medjool/canariensis, Bismarkia, and Coconut. Minimum height requirements for all palms at planting is 8' of GW or CT.

No tree removals without a tree removal sub-permit. Supplemental arborist report might be required as needed to approve any tree removal permit. Applicant to submit a complete Broward County Uniform Building Application and separate application for tree removal and planting sub-permit. Submit approved and signed total final landscape installation estimate from Landscape contractor/installer for two separate sub-permits in separate to comply with existing pending city code tree planting and removal

Coordinate meeting with Guillermo Salazar Landscape plan reviewer for any further questions or clarifications at gsalazar@hollywoodfl.org

B18-106067



MOTOROLA SOLUTIONS

BROWARD COUNTY - WEST LAKE PARK

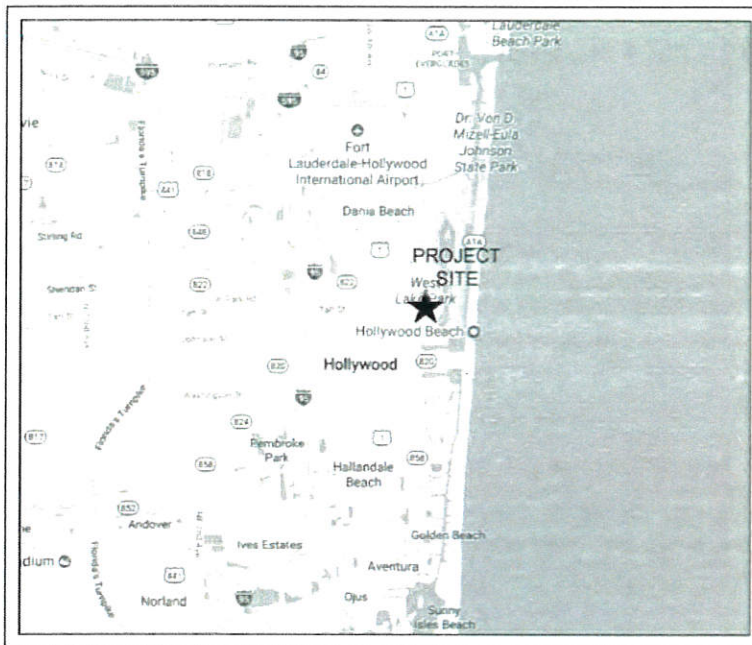
1200 SHERIDAN STREET
HOLLYWOOD, FL 33019

LAT: 26° 01' 45.02" N
LONG: 80° 07' 55.43" W

PROJECT CONTACTS:
PROJECT MANAGER:

BUSTER LERNER
MOTOROLA SOLUTIONS, INC.
(954) 790-8441

PROPOSED 300' SELF SUPPORT TOWER SITE



SITE VICINITY MAP



LOCAL MAP

USE:
UNMANNED TELECOMMUNICATIONS RELAY EQUIPMENT IN A PROPOSED UNMANNED FACILITY.

NOTES:
CONTRACTOR SHALL NOTIFY OWNER FOR ACCESS TO SITE.

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

INDEX OF DRAWINGS

- T1 COVER SHEET
- T2 GENERAL NOTES
- T3 GENERAL NOTES
- SR1 SITE TOPOGRAPHICAL SURVEY
- C1 SITE LAYOUT PLAN
- C2 NOT USED
- C3 ICE BRIDGE DETAILS
- C4 EROSION CONTROL DETAILS
- C5 EROSION CONTROL PLAN
- C6 FENCE DETAILS
- E1 ELECTRICAL SITE PLAN
- E2 GROUNDING PLAN
- E3 GROUNDING DETAILS
- E4 GROUNDING DETAILS
- E5 GROUNDING DETAILS
- E6 ELECTRICAL SINGLE LINE DIAGRAM



MOTOROLA

8000 W. SUNRISE BLVD
PLANTATION, FL 33322

PHONE: (954) 723-5000

BROWARD COUNTY -
WEST LAKE PARK
1200 SHERIDAN STREET
HOLLYWOOD, FL 33019

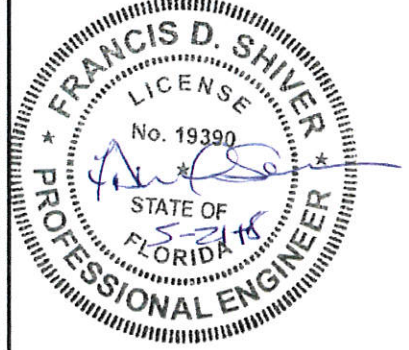
AMEC FOSTER WHEELER PROJECT NO: 6166-17-0575	
DRAWN: J.B. GILMER	CHECKED: F.D. SHIVER
APPROVED: F.D. SHIVER	DATE: 06/01/17



amec
foster
wheeler

AMEC FOSTER WHEELER
ENVIRONMENT AND INFRASTRUCTURE, INC.
1075 BIG SHANTY DRIVE, N.W., SUITE 100
KENNESAW, GA 30144
PHONE (770) 421-3400 FAX (770) 421-3486

NO.	DATE	REVISION
A	07/26/17	LEASE EXHIBIT
B	09/27/17	ISSUED FOR PRELIMINARY
C	01/04/18	LEASE EXHIBIT
D	05/21/18	ISSUED FOR PERMITTING



SHEET NO. & NAME

T1
COVER SHEET

T2
GENERAL NOTES

1.10. PERMITS

THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. THE CONTRACTOR SHALL MEET ALL OF THE REGULATORY REQUIREMENTS OF THE JURISDICTION GOVERNING CONSTRUCTION.

1.11. SITE INSPECTION BY MOTOROLA

THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY FOR ARRANGING WITH MOTOROLA FOR AN INSPECTION PRIOR TO COVERING UP ALL WORK THAT WILL BE COVERED IN FINISHED CONDITION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MANAGE THE SEQUENCE OF WORK AND REQUEST THE INSPECTIONS IN A TIMELY MANNER. THE CONTRACTOR SHALL NOT REQUEST AN INSPECTION UNLESS ALL OF THE RELATED WORK HAS BEEN COMPLETED. WORK SHALL NOT PROCEED TO THE NEXT STEP UNTIL THE PREVIOUS STEP HAS BEEN INSPECTED AND APPROVED BY THE LOCAL INSPECTORS AND THE MOTOROLA REPRESENTATIVE. THE PRESENCE OF THE OWNER OR MOTOROLA REPRESENTATIVE ON THE JOB SITE IN NO WAY RELIEVES THE CONTRACTOR OF THE ASSOCIATED RESPONSIBILITIES OF THE JOB. ANY WORK WHICH DOES NOT MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS WILL BE CORRECTED OR REMOVED SOLELY AT THE CONTRACTOR'S EXPENSE.

THE FOLLOWING INFORMATION IS INCLUDED AS A GUIDE TO THE CONTRACTOR TO ASSIST IN DETERMINING THE TYPE AND FREQUENCY OF INSPECTIONS. THE LISTED INSPECTIONS REPRESENT THOSE REQUIRED FOR SMALL OR SIMPLE PROJECTS. LARGE OR COMPLEX PROJECTS MAY REQUIRE ADDITIONAL INSPECTIONS DEPENDING ON THE SEQUENCE OF WORK.

- * FOUNDATIONS EXCAVATION AND REBAR: TO BE MADE AFTER TRENCHES ARE EXCAVATED AND FORMS ERECTED, REINFORCEMENT PLACED, COMPACTION TESTED, SOIL TREATED, VAPOR BARRIER PLACED, AND ESSENTIALLY READY FOR CONCRETE PLACEMENT
- * GROUNDING: TO BE MADE AFTER THE BELOW GROUND CADWELD CONNECTIONS HAVE BEEN COMPLETED, PRIOR TO COVERING UP THE TRENCHES
- * ELECTRICAL WORK WITHIN WALLS: TO BE MADE AFTER THE ROOF, FRAMING, FIREBLOCKING AND BRACING IS IN PLACE PRIOR TO THE INSTALLATION OF INSULATION OR WALL/CEILING MEMBRANES.

AS A GENERAL RULE, THE CONTRACTOR SHALL PROVIDE ADVANCE NOTICE TO MOTOROLA FOR INSPECTION OF ALL WORK PRIOR TO CONCEALMENT. THE CONTRACTOR HAS RESPONSIBILITIES RELATIVE TO ALL TYPES OF INSPECTIONS AND IS RESPONSIBLE FOR CONTACTING ALL OF THE INSPECTING ENTITIES TO DETERMINE HIS RESPONSIBILITIES. ALL OF THESE INSPECTING ENTITIES HAVE UNIQUE AND SEPARATE RESPONSIBILITIES. ONE INSPECTION FROM AN ENTITY WILL NOT SUBSTITUTE FOR AN INSPECTION FROM ANOTHER ENTITY.

1.12. SAFETY

THE CONTRACTOR, HIS EMPLOYEES, ANY SUB-CONTRACTORS, VENDORS, THEIR RESPECTIVE EMPLOYEES AND CONTRACTOR'S VISITORS SHALL COMPLY WITH ALL SAFETY STANDARDS, ACCIDENT PREVENTION REGULATIONS AND ENVIRONMENTAL REGULATIONS PROMULGATED BY FEDERAL, STATE OR LOCAL AUTHORITIES HAVING JURISDICTION AND SHALL AT ALL TIMES CONDUCT ALL OPERATIONS UNDER THE CONTRACT IN A MANNER TO AVOID THE RISK OF BODILY HARM TO ANY PERSONS AND THE RISK OF DAMAGE TO ANY PROPERTY, EQUIPMENT OR MATERIAL. SUCH PARTIES SHALL ALSO COMPLY WITH ANY SAFETY PROGRAMS AND/OR RULES PROMULGATED BY OWNER AND/OR MOTOROLA.

1.13. ELECTRO MAGNETIC EMISSIONS

THE CONTRACTOR SHALL ACKNOWLEDGE ALL OR PORTIONS OF THE WORK MAY INVOLVE POSSIBLE EXPOSURE OF CONTRACTOR, SUB-CONTRACTORS, AND THEIR RESPECTIVE EMPLOYEES, AGENTS, INVITEES, LICENSEES AND OTHER VISITORS TO THE JOBSITE AND/OR MOTOROLA PREMISES TO ELECTRO-MAGNETIC ENERGY ("EME") WHILE PERFORMING WORK UNDER THIS CONTRACT, ESPECIALLY IF WORK IS PERFORMED ON EXISTING ANTENNA TOWERS OR BUILDING TOPS WHERE ANTENNAS ARE LOCATED. THE CONTRACTOR REPRESENTS THAT CONTRACTOR, SUBCONTRACTORS, AND ALL OF THEIR RESPECTIVE EMPLOYEES, AGENTS, INVITEES, LICENSEES, AND OTHER AUTHORIZED REPRESENTATIVES WHO ARE PERFORMING SERVICES UNDER THIS AGREEMENT WILL COMPLY WITH ALL ANSI AND ANY OTHER APPLICABLE EME STANDARDS, RULES OR REGULATIONS, INCLUDING, BUT NOT LIMITED TO THOSE RULES OR REGULATIONS IMPOSED OR SUGGESTED BY MOTOROLA, IF ANY.

THE CONTRACTOR SHALL ADHERE TO ALL OSHA RULES, REGULATIONS AND ADOPTED POLICIES. ALL CONTRACTOR PERSONNEL SHALL HAVE UNDERGONE ELECTROMAGNETIC ENERGY (EME) TRAINING FOR PERSONNEL WORKING IN THE VICINITY OF ACTIVE ANTENNAS. AS SUCH IT IS RECOMMENDED THAT RF MONITORS BE USED BY THE TOWER PERSONNEL TO MONITOR EXPOSURE LEVELS. IF EME LEVELS AT THE SITE EXCEED THE MAXIMUM PERMISSIBLE EXPOSURE LIMITS, THE CONTRACTOR SHALL COORDINATE WITH THE INDIVIDUALS RESPONSIBLE FOR USE OF THE TRANSMITTER TO MAKE SURE THAT THE EQUIPMENT IS DEACTIVATED BEFORE WORK CAN BE RESUMED, WITHOUT CAUSING A SERIOUS DISRUPTION OF THE SERVICE.

1.14. SITE CLEANUP

THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, VEGETATION, AND RUBBISH, AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. WHENEVER THE WORK-SITE IS LEFT UNATTENDED, THE CONTRACTOR SHALL BLOCK THE OPENING WITH WARNING TAPE TO DISCOURAGE TRESPASSING. THE PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE AT THE CONCLUSION OF SITE WORK.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR LANDSCAPE GRADING AND SEEDING OF THE DISTURBED SOIL. THE CONTRACTOR SHALL USE LOCAL GRASS SEED TO STABILIZE SOIL AND SHALL COVER DISTURBED AREAS WITH HAY MULCH TO REDUCE RUNOFF OF SEDIMENT TO DOWNSTREAM AREAS. THE CONTRACTOR SHALL RESTORE THE SITE TO ITS ORIGINAL CONDITION. ALL SLOPES AND DISTURBED AREAS NOT RECEIVING AGGREGATE SURFACING ARE TO BE PREPARED AND BROADCAST SEEDS AND FERTILIZED FOR EROSION PROTECTION. SEEDING FOR AREAS DISTURBED SHALL BE ESTABLISHED SEASONALLY AS REQUIRED BY LOCAL CODES.

THE CONTRACTOR SHALL EXERCISE ALL CARE TO AVOID DAMAGE OR INTERRUPTION OF EXISTING UNDERGROUND OR OVERHEAD ELECTRIC SERVICES, UNDERGROUND GROUNDING AND FUEL LINES, EQUIPMENT AND BUILDINGS ON THE SITE, PLUS OFF SITE SERVICES, BURIED OR OVERHEAD, SURROUNDING THE EXISTING OR EXPANDED COMPOUND. ANY PROPERTY DAMAGE CAUSED BY THE CONTRACTOR OR HIS OPERATIONS SHALL BE CORRECTED AND/OR RESTORED TO THE SATISFACTION OF THE PROPERTY OWNER(S) AND MOTOROLA AT NO ADDITIONAL COST TO THE PROPERTY OWNER OR MOTOROLA.

1.15. FACILITY STARTUP & COMMISSIONING

THE CONTRACTOR AND/OR SUB-CONTRACTORS SHALL DEMONSTRATE TO MOTOROLA THAT ALL SYSTEMS AND SUB-SYSTEMS INSTALLED UNDER THIS CONTRACT, OPERATE PROPERLY PRIOR TO THE FINAL ACCEPTANCE INSPECTION. PROVIDE THE OPERATIONS AND MAINTENANCE MANUALS AT THIS TIME.

1.16. AS-BUILT DRAWINGS

THE CONTRACTOR SHALL KEEP UP-TO-DATE MARKED-UP PRINTS OF THE PROJECT DRAWINGS. UPON COMPLETION OF WORK AT THE SITE, THE CONTRACTOR SHALL REVIEW THE COMPLETED AS-BUILT DRAWINGS, AND ASCERTAIN THAT ALL DATA FURNISHED ON THE DRAWINGS IS ACCURATE AND TRULY REPRESENTS THE WORK AS ACTUALLY INSTALLED. MARKINGS INDICATING CHANGES TO THE DRAWINGS SHALL BE RED OR GREEN AND CLEARLY VISIBLE. TWO (2) SETS OF "AS-BUILT" DRAWINGS SHALL BE FURNISHED TO THE MOTOROLA REPRESENTATIVE AT THE COMPLETION OF THE PROJECT. THESE DRAWINGS SHALL ALSO SHOW THE FOLLOWING:

- * MODIFICATIONS TO SITE LAYOUT.
- * GROUNDING SYSTEM LAYOUT.
- * UNDERGROUND FUEL LINE RUN.
- * UNDERGROUND TELCO CABLE RUN.
- * UNDERGROUND ELECTRICAL RUN.

WHERE THE CONTRACTOR IS RESPONSIBLE FOR SUPPLYING THE SITE EQUIPMENT (SHELTER, ISOLATION TRANSFORMER, GENERATOR, ETC.) THAT REQUIRES PERIODIC MAINTENANCE, THE CONTRACTOR SHALL INCLUDE ALL OPERATION AND MAINTENANCE MANUALS AND ALL AS-BUILT DRAWINGS WHICH FULLY DESCRIBE THE ACTUAL INSTALLED EQUIPMENT.

1.17. TEST PROCEDURES AND RESULTS

THE CONTRACTOR IS REQUIRED TO SUBMIT THE RESULTS OF ALL TESTS REQUIRED BY THE PROJECT SPECIFICATIONS AND DRAWINGS THAT FALL WITHIN HIS SCOPE OF WORK TO THE MOTOROLA REPRESENTATIVE WITHIN FIVE (5) DAYS OF THE TEST. THE CONTRACTOR IS REQUIRED TO SUBMIT TEST PROCEDURES NINETY (90) DAYS PRIOR TO THE TESTS BEING CONDUCTED. IN GENERAL, THE CONTRACTOR SHALL SUBMIT THE FOLLOWING TEST RESULTS:

- * CONCRETE COMPRESSION TEST FOR ALL CONCRETE WORK.
- * TIME DOMAIN REFLECTOMETER (TDR) / SWEEP TEST FOR ANTENNA AND TRANSMISSION LINE INSTALLATION WORK.
- * FUEL LINE LEAKAGE TEST FOR FUEL TANK AND PIPING INSTALLATION WORK.
- * SLUMP TEST FOR CONCRETE WORK.
- * GROUNDING RESISTANCE TEST FOR GROUNDING WORK.
- * ANY OTHER TEST THAT MAY BE REQUIRED.

1.18. CONTRACT CLOSEOUT

THE MOTOROLA REPRESENTATIVE WILL PROVIDE A CERTIFICATE OF COMPLETION AND APPROVE FINAL PAYMENT WHEN ALL PUNCH-LIST ITEMS HAVE BEEN CORRECTED AND ALL SYSTEMS ARE ACCEPTABLE. AFTER FINAL PAYMENT, CONTRACTOR WILL SIGN A RELEASE OF LIEN.

1.19. WARRANTY

ALL WORK PERFORMED BY THE CONTRACTOR IN COMPLETING THE SCOPE IDENTIFIED ON THE DRAWINGS SHALL BE GUARANTEED BY THE CONTRACTOR FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL COMPLETION OF THE PROJECT. THIS GUARANTEE SHALL COVER ALL MATERIALS, EQUIPMENT OR WORKMANSHIP WHICH IN THE OPINION OF MOTOROLA IS RENDERED DEFECTIVE OR INFERIOR OR NOT IN ACCORDANCE WITH THE TERMS OF THE CONTRACT DURING THE GUARANTEE PERIOD. IF, WITHIN THE GUARANTEE PERIOD, REPAIRS OR CHANGES ARE REQUIRED TO CORRECT THE GUARANTEE WORK, THEN UPON RECEIPT OF NOTICE, THE CONTRACTOR SHALL PROMPTLY AND WITHOUT EXPENSE TO MOTOROLA OR COUNTY, PROCEED TO:

- * PLACE IN SATISFACTORY CONDITION ALL OF SUCH GUARANTEED WORK AND CORRECT ALL DEFECTS THEREIN.
- * MAKE GOOD ALL DAMAGES TO THE STRUCTURE OR SITE OR EQUIPMENT OR CONTENTS THEREOF, WHICH, IN THE OPINION OF THE MOTOROLA, IS THE RESULT OF THE USE OF MATERIALS, EQUIPMENT, OR WORKMANSHIP WHICH ARE INFERIOR, DEFECTIVE, OR NOT IN ACCORDANCE WITH THE TERMS OF THE CONTRACT;
- * MAKE GOOD ANY WORK, MATERIALS OR EQUIPMENT, AND ADJACENT STRUCTURES DISTURBED IN FULFILLING THE GUARANTEE.



MOTOROLA

8000 W. SUNRISE BLVD
PLANTATION, FL 33322

PHONE: (954) 723-5000

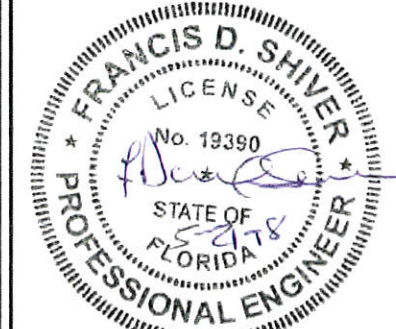
**BROWARD COUNTY -
WEST LAKE PARK
1200 SHERIDAN STREET
HOLLYWOOD, FL 33019**

AMEC FOSTER WHEELER PROJECT NO: 6166-17-0575
DRAWN: J.B. GILMER CHECKED: F.D. SHIVER
APPROVED: F.D. SHIVER DATE: 06/01/17



**amec
foster
wheeler**
AMEC FOSTER WHEELER
ENVIRONMENT AND INFRASTRUCTURE, INC.
1075 BIG SHANTY DRIVE, N.W. SUITE 100
KENNESAW, GA 30144
PHONE (770) 421-3400 FAX (770) 421-3486

NO.	DATE	REVISION
A	07/26/17	LEASE EXHIBIT
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D	05/21/18	ISSUED FOR PERMITTING



SHEET NO. & NAME

**T3
GENERAL NOTES**

Description Lease Area

A PORTION OF THE NORTHEAST ONE-QUARTER (NE 1/4) OF THE SOUTHWEST ONE-QUARTER (SW 1/4) OF THE NORTHWEST ONE-QUARTER (NW 1/4) OF SECTION 11, TOWNSHIP 51 SOUTH, RANGE 42 EAST, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS

COMMENCING AT THE SOUTHWEST CORNER OF NORTHWEST ONE-QUARTER (NW 1/4) OF SAID SECTION 11; THENCE NORTH 88°06'10" EAST ALONG THE SOUTH LINE OF THE NORTHWEST ONE-QUARTER (NW 1/4) OF SAID SECTION 11, A DISTANCE OF 830.59 FEET; THENCE NORTH 01°13'56" EAST, A DISTANCE OF 971.19 FEET; THENCE NORTH 88°02'39" EAST, A DISTANCE OF 75.00 FEET TO THE POINT OF BEGINNING; THENCE NORTH 23°59'49" EAST, A DISTANCE OF 75.00 FEET; THENCE SOUTH 66°00'11" EAST, A DISTANCE OF 80.00 FEET; THENCE SOUTH 23°59'49" WEST, A DISTANCE OF 79.45 FEET; THENCE NORTH 47°40'07" WEST, A DISTANCE OF 55.88 FEET; THENCE SOUTH 88°02'39" WEST, A DISTANCE OF 29.98 FEET TO THE POINT OF BEGINNING.

SAID LANDS SITUATE, LYING AND BEING IN BROWARD COUNTY, FLORIDA; CONTAINING 5,593 SQUARE FEET OF 0.1264 ACRES MORE OR LESS.

Found
1/2" Iron Rod & Cap
Stamped: LB 6680

N88°06'10"E 830.59'
South Line of the NW 1/4

Commencing
SW corner of NW 1/4
Section 11

S 88°00'05" W 30.53' (M)
S88°02'39"E 29.98' (D)

Point of Beginning
Found
5/8" Iron Rod & Cap
(Illegible)
fence 0.3' S

Found
5/8" Iron Rod & Cap
Stamped: LB 6448

A portion of the Northeast one-quarter of the
Southwest one-quarter of the Northwest one-quarter
of Section 11, Township 51 South, Range 42 East

Proposed Equipment

Proposed Shelter

Trees and underbrush

N 47°39'51" W 55.42' (M)
N47°40'07"E 55.88' (D)

Found
5/8" Iron Rod & Cap
(Illegible)
fence 0.3' SW

Set Project Control
90d Nail
No ID
N 617642.77
E 941170.14
Elevation 2.94

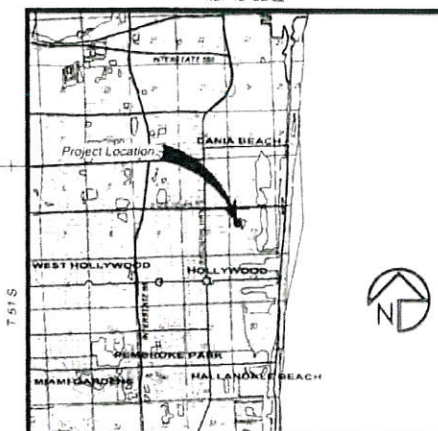
Set Project Control
5/8" Iron Rod & Cap
Stamped: AMECFW TRAVERSE
N 617286.80
E 941257.74
Elevation 0.80

Found
5/8" Iron Rod & Cap
Stamped: LB 6448

Proposed Tower
(center)
N 617241.13
E 941177.12
Ground Elevation 2.5
Latitude N 26° 01' 45.02"
Longitude W 80° 07' 55.43"

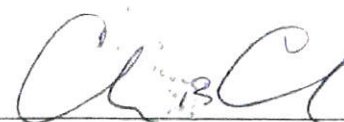
Legend	
(D)	= Description
(M)	= Measured
R XX E	= Range XX East
+100.0'	= Spot Elevation
T XX S	= Township XX South
-4'-	= Contour Line

LOCATION MAP



SURVEYOR'S NOTES

1. This map of survey is not valid without the signature and the original raised seal of the signing Florida licensed surveyor and mapper.
2. This map of survey identifies the boundary of the lease parcel, features within the survey limits shown hereon, as specified by the client.
3. Bearings, coordinates and elevations shown hereon are relative to the Florida State Plane Coordinate System, East Zone (0901), North American Datum of 1983, 2011 adjustment and the North American Vertical Datum of 1988 (NAVD 88) based on Global Positioning System (GPS) measurements to National Geodetic Survey (NGS) Continuously Operating Reference Stations (CORS) network.
4. Dimensions shown hereon contain horizontal ground distances and are based upon field measurements utilizing the United States Survey Foot, unless indicated otherwise.
5. Lands shown hereon were not abstracted by this firm for matters of record, such as easements, right of way, ownership or other instruments of record.
6. The field data acquisition phase of this survey was completed on July 19, 2017, as documented in AmecFW field book 1313, Pages 42-46.
7. This survey does not address the identification or location of jurisdictional wetlands or sovereign lands that may or may not lie within or adjacent to the lands surveyed.
8. According to Federal Emergency Management Agency Flood Insurance Rate Map, Broward County Florida, Map Number 12011 C 0569 H, Effective date: August 18, 2014, the property described hereon is located in Zone AH (EL5) Special Flood Hazard area subject to inundation by the 1% annual chance flood (Base Flood Elevations determined).
9. Certified to and for the exclusive use of MOTOROLA.


CHARLES B. GARDINER

FLORIDA PROFESSIONAL SURVEYOR AND MAPPER
LICENSE NO. LS 5046

Section 11, Township 51 South, Range 42 East, Broward County, Florida

NO.	DATE	REVISION
1	10/25/2017	Added Note # 8, updated site address



AMEC FOSTER WHEELER
ENVIRONMENT & INFRASTRUCTURE INC.
75 East Amelia Street, Suite 200
Orlando, FL 32801, USA
Phone: (407) 522-7570
Fax: (407) 522-7576
Certificate of Authorization Number LB-000-7937

CLIENT:



MOTOROLA SOLUTIONS

8000 WEST SUNRISE BLVD
PLANTATION, FLORIDA 33322

PHONE: (954) 723-5000

BROWARD COUNTY - WEST LAKE PARK
1200 SHERIDAN STREET
HOLLYWOOD, FL 33019

AMEC PROJECT NO: 6166170536
DRAWN BY: M. RAMOS
CHECKED BY: C.B. GARDINER
APPROVED BY: DATE: 01/18/2017

Map of
Boundary and Topographic
Survey

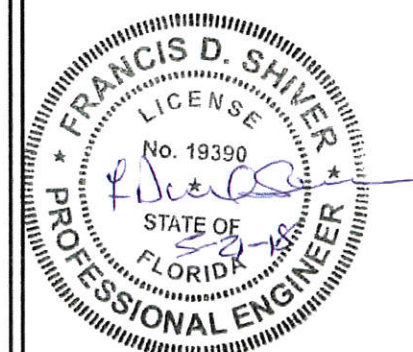


PHONE: (954) 723-5000

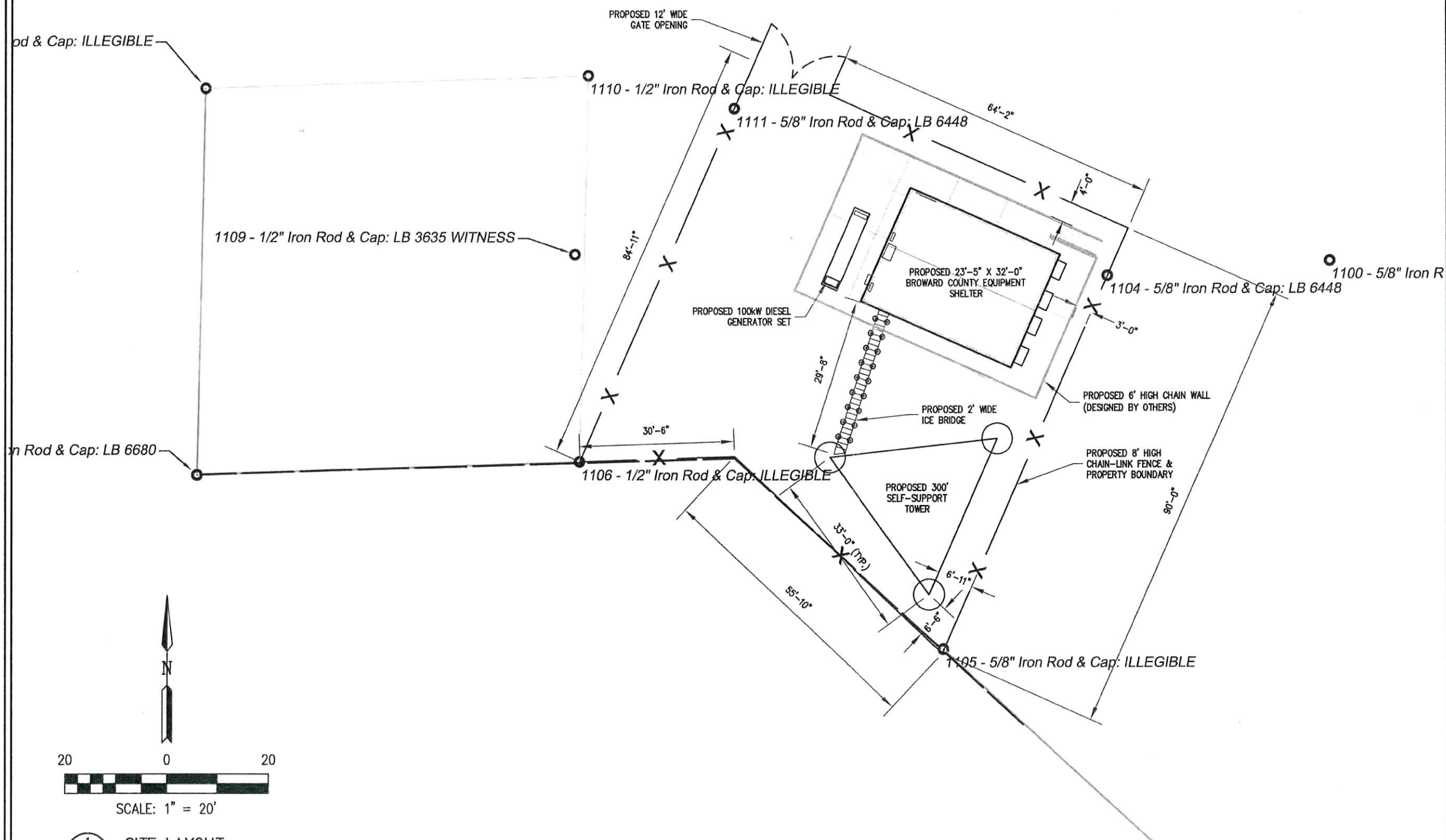
APPROVED: F.D. SHIVER	DATE: 06/01/17
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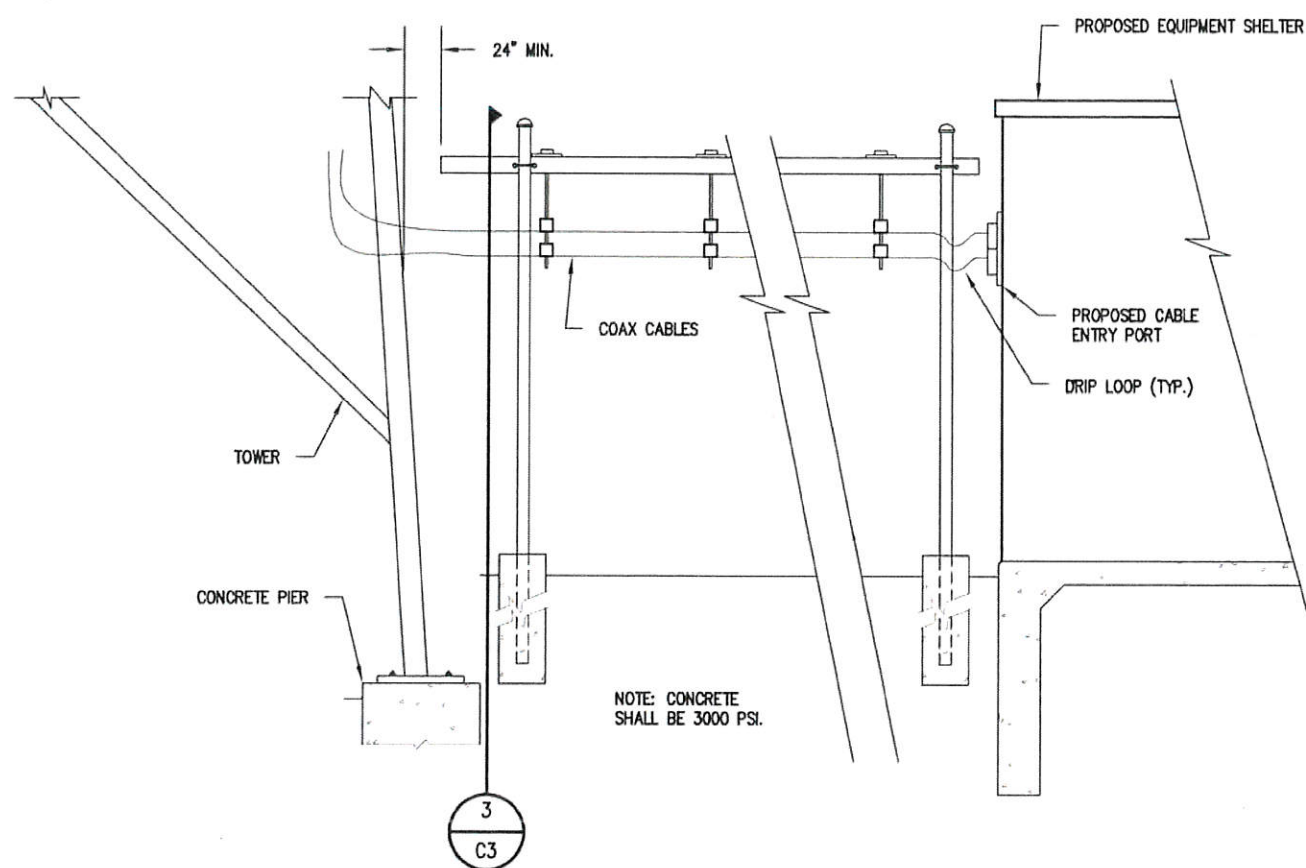
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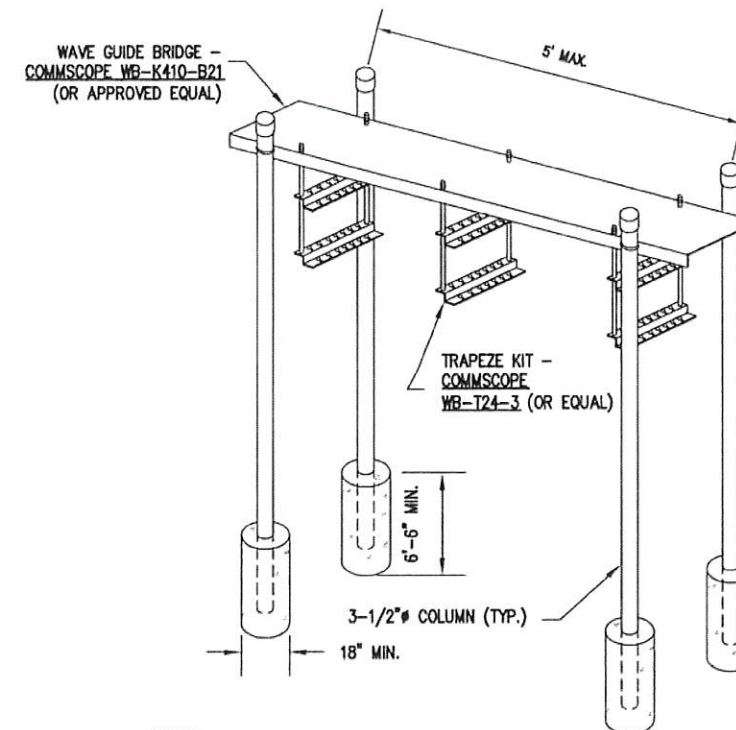
C1 SITE LAYOUT



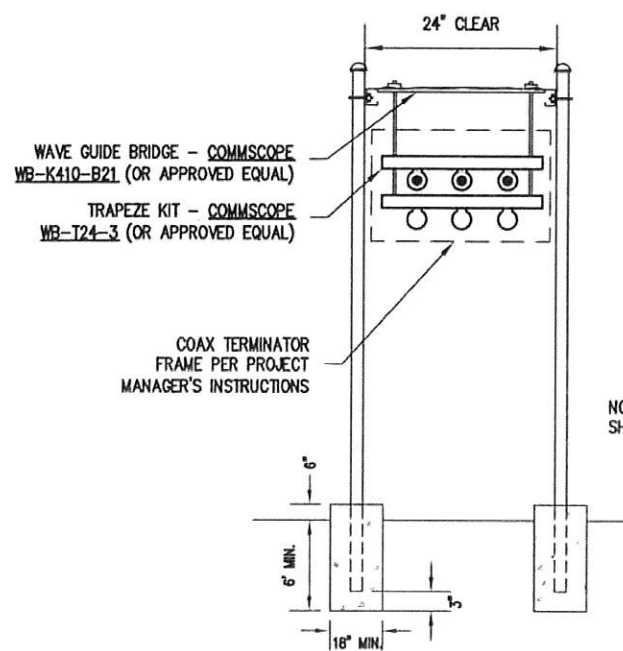
1 SITE LAYOUT
C1 SCALE: 1" = 20'-0"



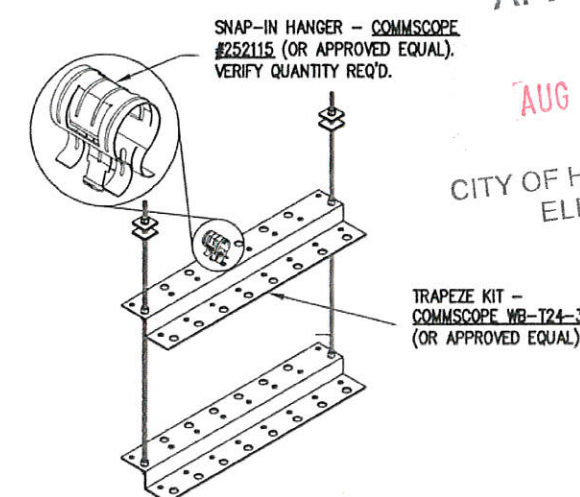
1 ICE BRIDGE ELEVATION (SIDE)
SCALE: N.T.S.



2 ICE BRIDGE DETAIL
SCALE: N.T.S.



3 ICE BRIDGE ELEVATION (FRONT)
SCALE: N.T.S.



4 TRAPEZE KIT DETAIL
SCALE: N.T.S.



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AMEC FOSTER WHEELER PROJECT NO: 6166-17-0575
DRAWN: J.B. GILMER CHECKED: F.D. SHIVER
APPROVED: F.D. SHIVER DATE: 06/01/17



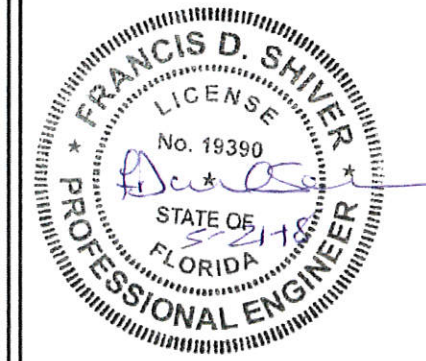
amec foster wheeler
AMEC FOSTER WHEELER ENVIRONMENT AND INFRASTRUCTURE, INC.
1075 BIG SHANTY DRIVE, N.W., SUITE 100
KENNESAW, GA 30144
PHONE (770) 421-3400 FAX (770) 421-3486

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APPROVED

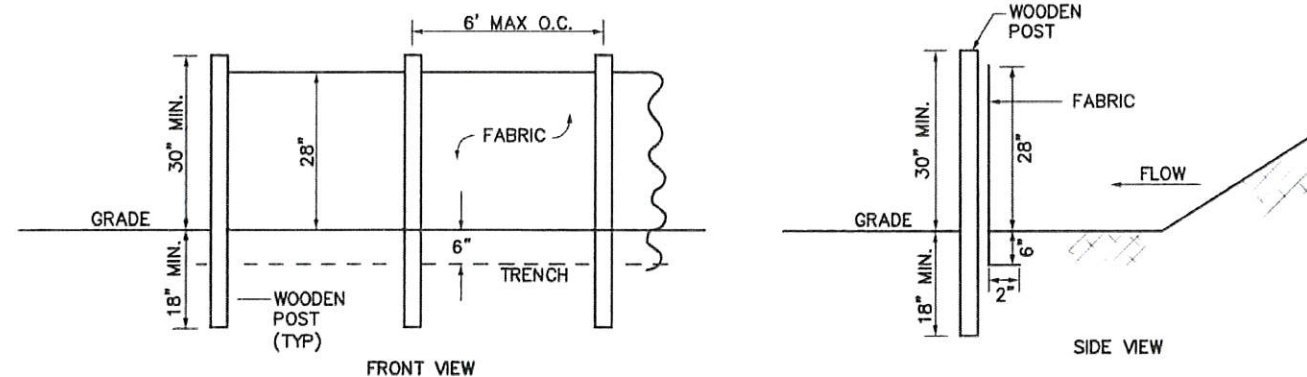
AUG 16 2018

CITY OF HOLLYWOOD FL.
ELECTRICAL

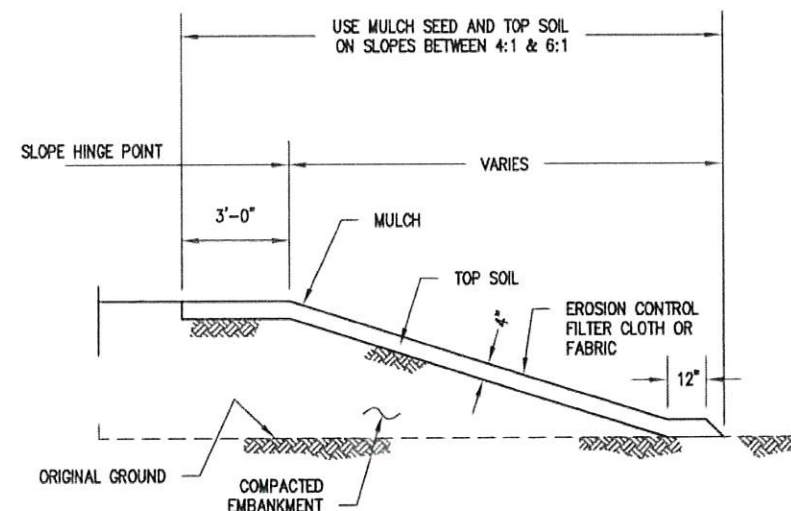


SHEET NO. & NAME

C3
ICE BRIDGE DETAILS



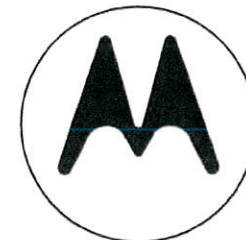
1 SILT FENCE DETAIL - Sd1 TYPE A
C4 SCALE: N.T.S.



2 SLOPE EROSION CONTROL (SEED)
C4 SCALE: N.T.S.

SOIL EROSION CONTROL NOTES:

- ALL UNDERGROUND UTILITY STRUCTURES SHALL BE PROTECTED BY HAY BALE FILTERS, UNTIL GRAVEL/PAVEMENT HAS BEEN INSTALLED, OR UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED.
- CONTRACTOR SHALL INSPECT THE SILTATION FENCES AND DIVERSION DITCHES PERIODICALLY AND MAINTAIN OR REPLACE AS NECESSARY, OR AS DIRECTED BY ENGINEER.
- ALL OTHER SOIL EROSION CONTROL DEVICES AND MEASURES DEEMED NECESSARY BY THE ENGINEER SHALL BE IMPLEMENTED IMMEDIATELY UPON NOTIFICATION OF THE CONTRACTOR.
- INSTALL STONE/GRAVEL CONSTRUCTION ENTRANCE TO THE SITE, WITH MINIMUM THICKNESS OF 6 INCHES PRIOR TO ANY WORK ON THE SITE. PERFORM PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, OR AS DIRECTED BY ENGINEER.
- MUD SHALL BE CLEANED OFF OF THE STREET DAILY OR AS DIRECTED BY THE ENGINEER.
- INSPECTION OF THE SITE SHALL BE AT LEAST ONCE A WEEK AND AFTER ANY SIGNIFICANT RAINFALL TO INSURE THE SOIL EROSION CONTROL MEASURES ARE WORKING PROPERLY.
- IF ANY STOCKPILES ARE CONSTRUCTED, THEY SHALL HAVE AN 18-INCH DEEP TRENCH AROUND THE PERIMETER TO ACT AS A SEDIMENT TRAP, WITH SAID TRAP TO BE CLEANED PERIODICALLY AS REQUIRED.
- STREETS ADJACENT TO THE SITE SHALL BE KEPT FREE OF DIRT, MUD AND DEBRIS.
- MINIMIZE BARE EARTH SURFACES DURING CONSTRUCTION.
- ALL DISTURBED AREAS SHALL BE SEEDED OR SODDED AS SOON AS IS PRACTICABLE.
- WHENEVER DURING CONSTRUCTION OPERATIONS ANY LOOSE MATERIALS ARE DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, OR DITCHES SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THIS LOOSE MATERIAL SHALL BE REMOVED.
- ALL SEDIMENT WILL BE PREVENTED FROM ENTERING ANY EXISTING STORM DRAINAGE SYSTEMS BY THE USE OF SAND BAGS, INTERCEPTOR DIKES OR OTHER APPROVED FUNCTIONAL METHODS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING SEDIMENT RESULTING FROM THIS PROJECT FROM STORM SEWERS AND DRAINAGE STRUCTURES.



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BROWARD COUNTY -
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HOLLYWOOD, FL 33019

AMEC FOSTER WHEELER PROJECT NO: 6166-17-0575

DRAWN: J.B. GILMER CHECKED: F.D. SHIVER

APPROVED: F.D. SHIVER DATE: 06/01/17



amec
foster
wheeler

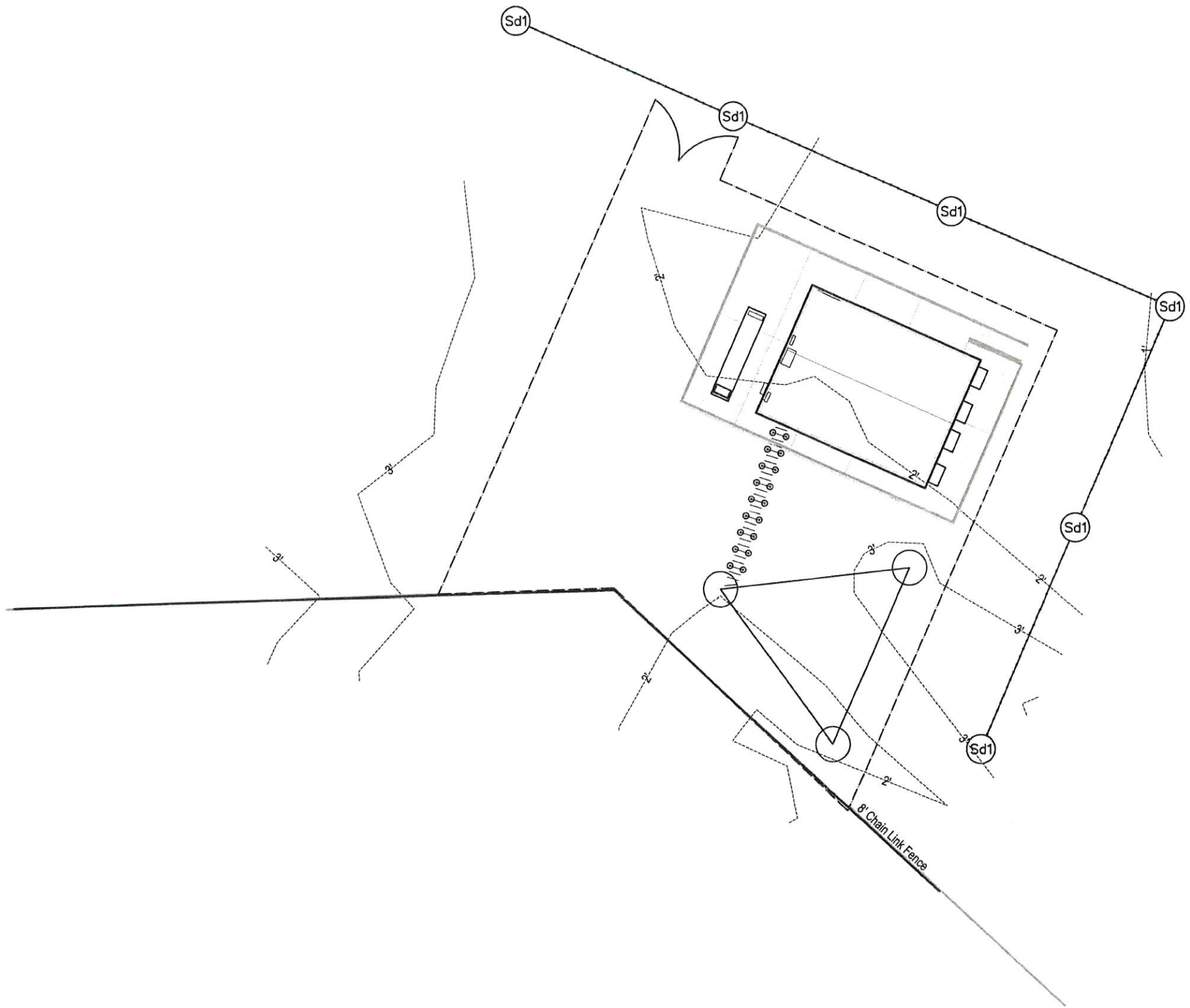
AMEC FOSTER WHEELER
ENVIRONMENT AND INFRASTRUCTURE, INC.
1075 BIG SHANTY DRIVE, N.W., SUITE 100
KENNESAW, GA 30144
PHONE (770) 421-3400 FAX (770) 421-3486

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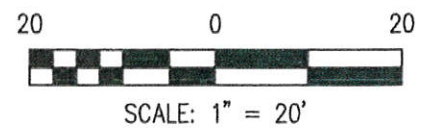


SHEET NO. & NAME

C4
EROSION CONTROL
DETAILS



1
C5 EROSION CONTROL PLAN
SCALE: 1" = 20'-0"



Sd1 SEDIMENT BARRIER - TO PREVENT SEDIMENT CARRIED BY SHEET FLOW FROM LEAVING SITE AND ENTERING NATURAL DRAINAGE WAYS OR STORM DRAINAGE SYSTEMS. SEE DETAIL 1, SHEET C4.



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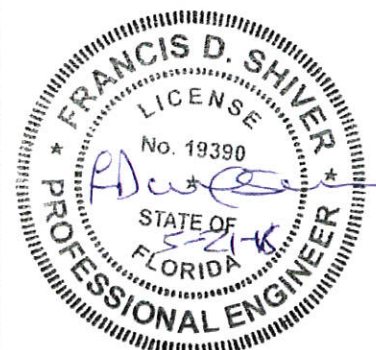
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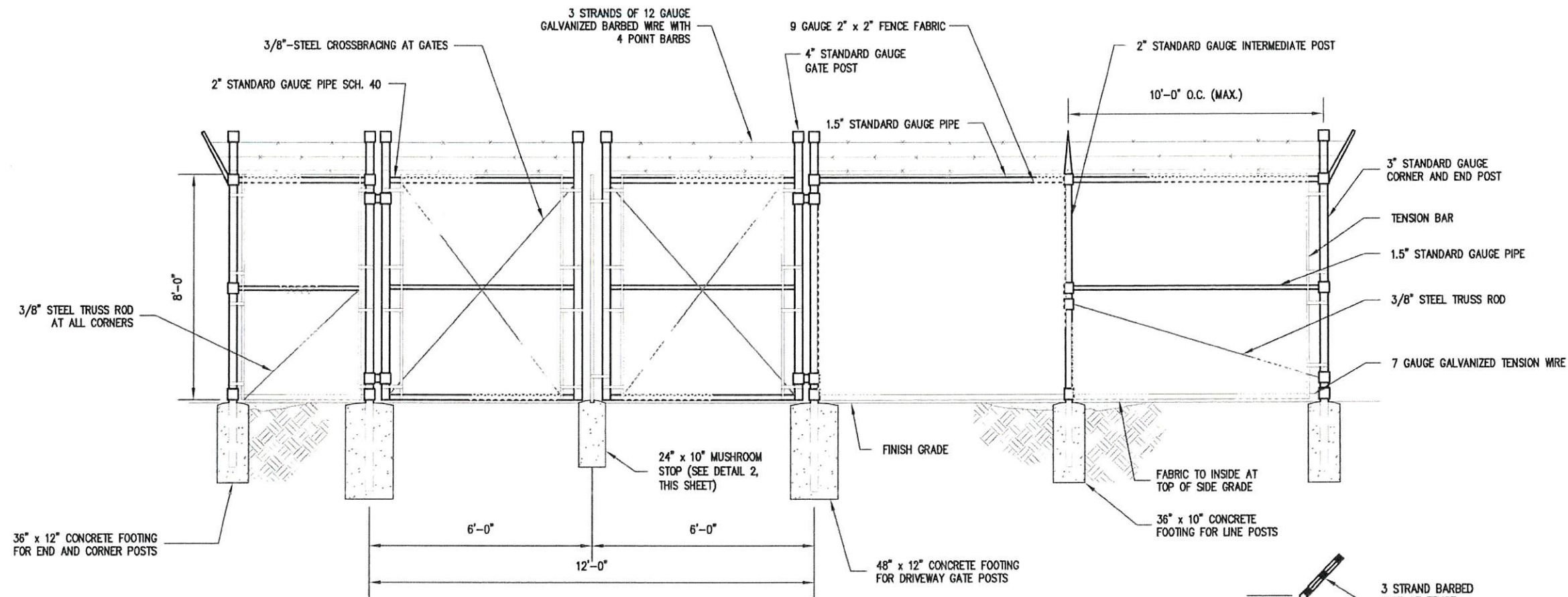
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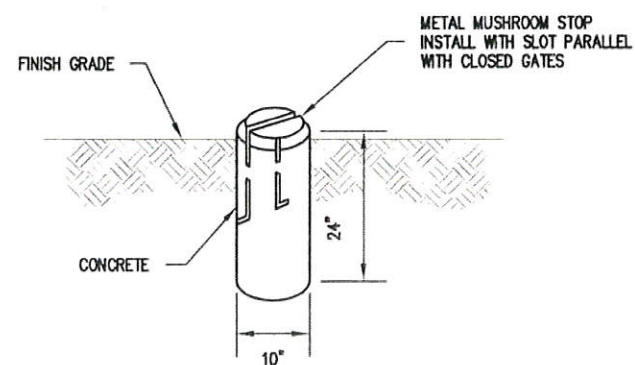


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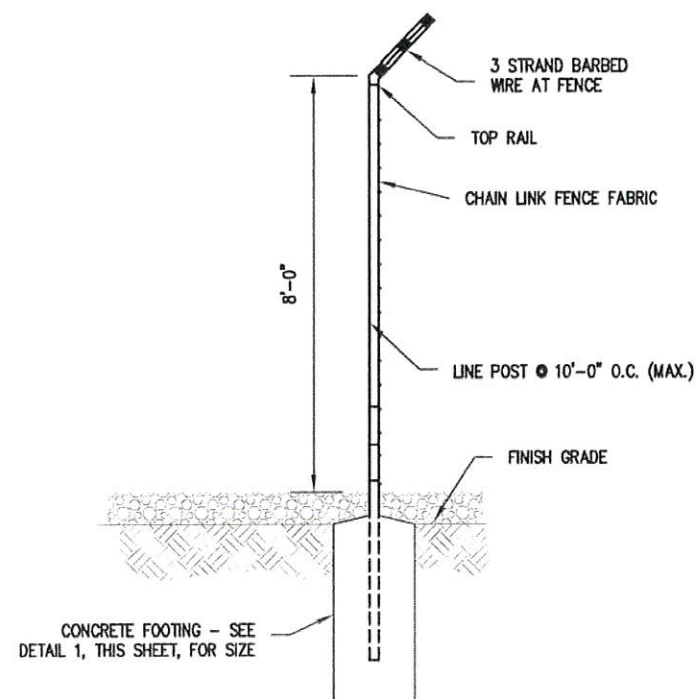
C5
EROSION CONTROL
PLAN



1 CHAIN LINK FENCE AND GATE ELEVATION
SCALE: N.T.S.



2 MUSHROOM STOP
SCALE: N.T.S.



3 FENCE/BARBED WIRE ARM DETAIL
SCALE: N.T.S.



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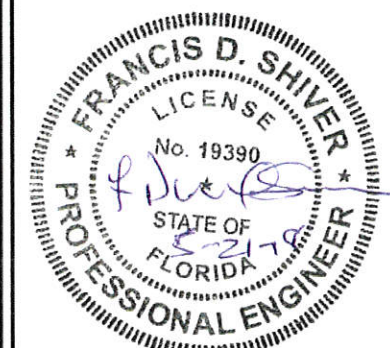
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wheeler

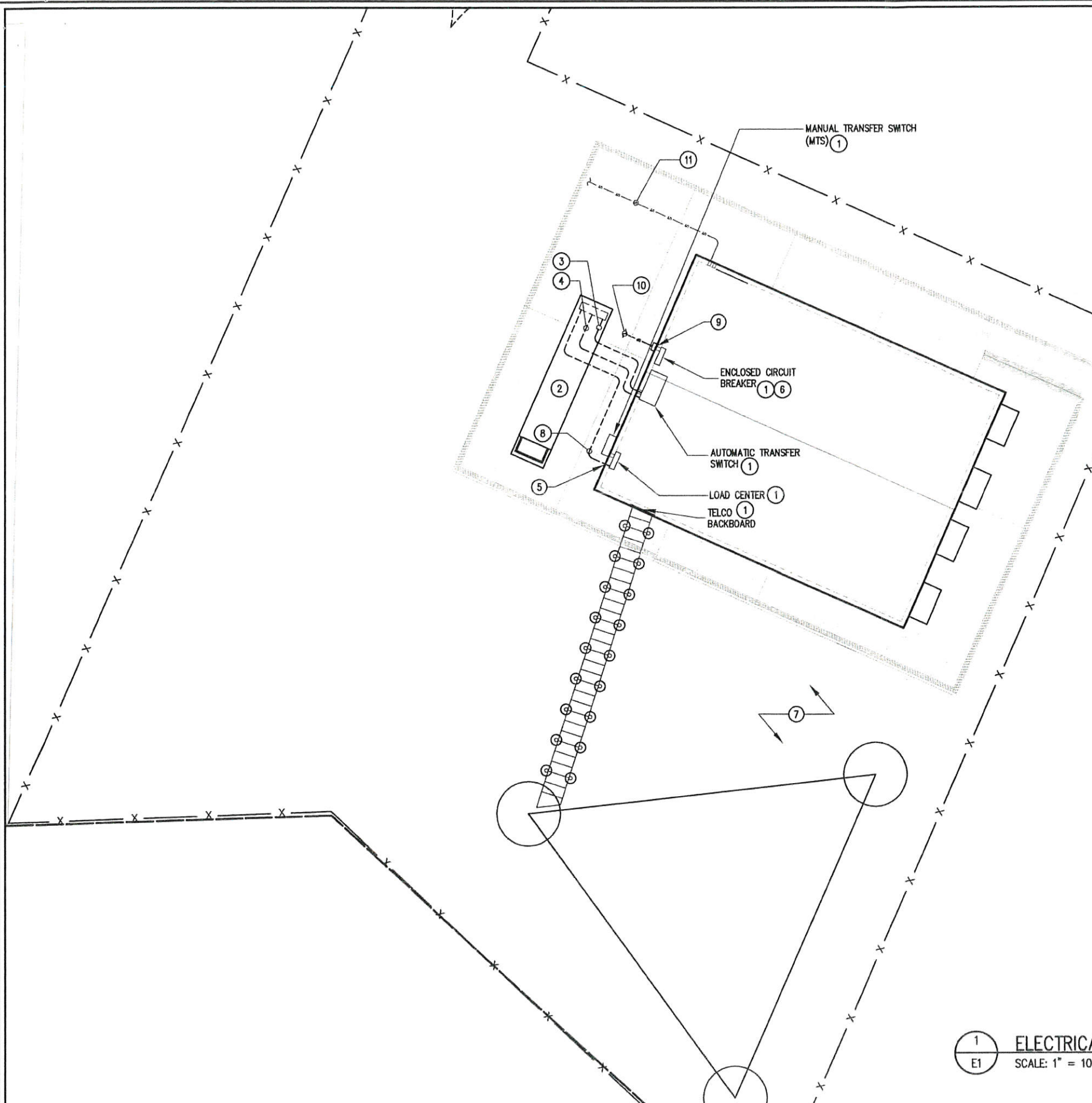
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SHEET NO. & NAME

C6
FENCE DETAILS



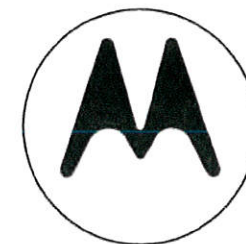
FLAG NOTES THIS SHEET: (XX)

1. ELECTRICAL/TELCO DISTRIBUTION EQUIPMENT PROVIDED WITH EQUIPMENT SHELTER.
2. CLIENT SPECIFIED AND PROVIDED GENERATOR AND SUB-BASE FUEL TANK. COORDINATE OVERCURRENT PROTECTION WITH MANUFACTURER. REFER TO SHEET E6 FOR ADDITIONAL INFORMATION.
3. PROVIDE AND EXTEND (1) 1" RGS CONDUIT FROM PROPOSED GENERATOR TO PROPOSED MOTOROLA EQUIPMENT SHELTER ATS FOR EXTENSION OF GENERATOR CONTROL/ALARM SIGNAL WIRING. COORDINATE THE QUANTITY/SIZE OF CONTROL WIRING WITH ACTUAL DEVICES FURNISHED WITH THE GENERATOR.
4. PROVIDE CONDUIT AND CONDUCTORS FOR GENERATOR SERVICE FROM PROPOSED GENERATOR TO AUTOMATIC TRANSFER SWITCH IN PROPOSED EQUIPMENT SHELTER VIA 4" EQUIPMENT SHELTER PENETRATION. FIELD VERIFY AND COORDINATE EXACT LOCATION OF SHELTER PENETRATION. REFER TO SHEET E6 FOR ADDITIONAL INFORMATION.
5. PROVIDE A 12" SQUARE WEATHERPROOF JUNCTION BOX, HOFFMAN #A-12126GSC (OR APPROVED EQUAL), MOUNTED ON THE EXTERIOR OF THE SHELTER OVER THE 2" CONDUIT PENETRATION (COORDINATE EXACT LOCATION WITH SHELTER) FOR ROUTING OF BATTERY CHARGER/WATER JACKET HEATER WIRING INTO THE PANELBOARD.
6. SERVICE ENTRANCE RATED ENCLOSED CIRCUIT BREAKER (FURNISHED WITH SHELTER). REFER TO SHEET E6 FOR ADDITIONAL INFORMATION.
7. ANY DEVIATIONS FROM THE WIRING/CONDUIT WORK SHOWN DUE TO A PARTICULAR MANUFACTURER'S REQUIREMENTS SHALL BE MADE AT NO COST TO MOTOROLA. COORDINATE WITH SHELTER MANUFACTURER PRIOR TO SEALING ALL UNUSED EQUIPMENT SHELTER PENETRATIONS.
8. PROVIDE AND EXTEND CONDUIT FROM PROPOSED GENERATOR TO PROPOSED EQUIPMENT SHELTER LOADCENTER VIA WEATHERPROOF JUNCTION BOX FOR EXTENSION OF WATER JACKET HEATER AND BATTERY CHARGER CIRCUIT WIRING. COORDINATE THE EXACT QUANTITY/SIZE OF CONDUCTORS WITH GENERATOR SUPPLIER. REFER TO SHEET E6 FOR ADDITIONAL INFORMATION.
9. PROPOSED UTILITY METER; ELECTRIC UTILITY METER PROVIDED BY UTILITY COMPANY. COORDINATE WITH UTILITY COMPANY. SEE SHEET E6.
10. CONTRACTOR TO PROVIDE AND EXTEND CONDUIT BELOW FINISHED GRADE BETWEEN PROPOSED UTILITY METER MOUNTED ON EXTERIOR OF PROPOSED EQUIPMENT SHELTER AND UTILITY DEMARCATION POINT. COORDINATE CONNECTION REQUIREMENTS WITH UTILITY COMPANY. FIELD VERIFY EXACT LOCATION OF PAD-MOUNTED TRANSFORMER. SEE DETAIL 2/E3.
11. PROVIDE (2) 3" EMPTY PVC CONDUITS WITH NYLON PULL STRING AND ENDCAP BELOW FINISHED GRADE BETWEEN PROPOSED TELCO BACKBOARD (FURNISHED WITH SHELTER) AND TELCO PULLBOX. COORDINATE CONNECTIONS REQUIREMENTS WITH LOCAL TELCO PROVIDER. SEE DETAIL 2/E3.

APPROVED

AUG 16 2018

CITY OF HOLLYWOOD FL.
ELECTRICAL



MOTOROLA

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PLANTATION, FL 33322

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BROWARD COUNTY -
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AMEC FOSTER WHEELER PROJECT NO: 6166-17-0575

DRAWN: J.B. GILMER CHECKED: F.D. SHIVER
APPROVED: F.D. SHIVER DATE: 06/01/17



amec
foster
wheeler

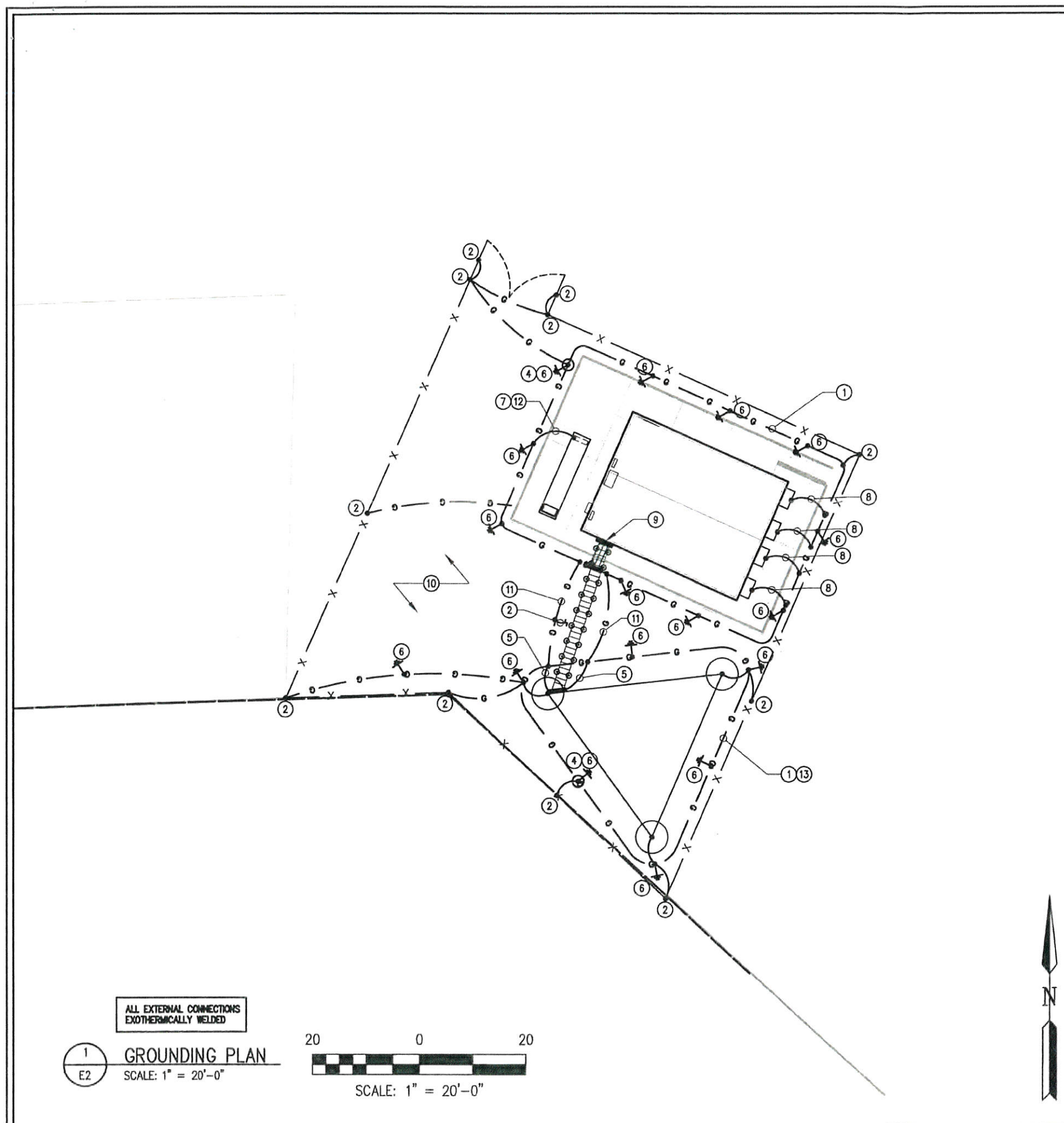
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SHEET NO. & NAME

E1
ELECTRICAL PLAN
AND NOTES

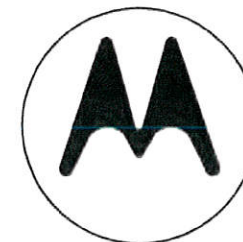


FLAG NOTES THIS SHEET: (XX)

1. PROVIDE A #2/0 AWG STRANDED, BARE, TINNED COPPER GROUND RING. ALL EXTERIOR GROUNDING CONDUCTORS SHALL BE BURIED A MINIMUM OF 30" BELOW GRADE (OR 6" BELOW FROST LINE, WHICHEVER IS GREATER). THE GROUND RING SHALL BE INSTALLED 3'-0" AWAY FROM FOUNDATIONS (MINIMUM UNLESS SHOWN OTHERWISE ON DRAWINGS). WHERE REQUIRED DUE TO SOIL CONDITIONS AND THE PRESENCE OF ROCK, THE ROUTING OF THE GROUND RING MAY BE ADJUSTED (WITH APPROVAL FROM THE MOTOROLA REPRESENTATIVE). ALL BONDS TO THE BURIED GROUND RING SHALL BE WITH EXOTHERMIC WELDS.
2. BOND FENCE AND WAVEGUIDE POSTS TO BURIED GROUND RING. EXOTHERMICALLY WELD A #2/0 AWG STRANDED, BARE, TINNED COPPER GROUND CONDUCTOR TO THE EXISTING FENCE POST AT 12" ABOVE GRADE AND BOND TO THE BURIED GROUND RING. PROVIDE CONDUCTOR LENGTH AS REQUIRED TO MAKE CONNECTION. BOND FENCE POST TO FENCE GATE AS SHOWN USING A WELDING CABLE GROUNDING STRAP (IF APPLICABLE). SEE DETAILS 1/E5 AND 2/E5.
3. NOT USED.
4. PROVIDE 6" DIAMETER PVC INSPECTION SLEEVE WITH WATERTIGHT REMOVABLE COVER IN LOCATION SHOWN. SEE GROUND ROD INSPECTION WELL DETAIL 1/E3, FOR TYPICAL GROUND RING INSPECTION SLEEVE. NOTE: INSPECTION SLEEVE CAN BE USED AS A TEST WELL FOR GROUND WATER LEVEL INSPECTION AND GROUND RESISTANCE TESTING.
5. INSTALL GROUNDING CONDUCTOR(S) FROM THE BURIED GROUND RING FOR CONNECTION TO THE GROUND BAR AT BOTTOM OF TOWER. VERIFY EXACT LOCATION OF GROUNDING BAR AND PROPER CONDUCTOR LENGTH. EXOTHERMICALLY WELD (2) #2/0 AWG STRANDED, BARE, TINNED COPPER GROUNDING CONDUCTOR (LENGTH AS REQUIRED) TO THE GROUND BAR. GROUNDING CONDUCTORS MUST BE HELD AWAY FROM TOWER BY USING STAND-OFFS OR ROUTING THE CONDUCTORS IN FLEXIBLE PVC CONDUIT. COORDINATE LOCATION WITH MOTOROLA CONSTRUCTION MANAGER. SEE GROUND BAR DETAIL 2/E4.
6. INSTALL 3/4" x 10'-0" LONG COPPERCLAD STEEL GROUND RODS. SPACING BETWEEN RODS NOT TO EXCEED 20'-0" (NON-LINEAR). TYPICAL FOR ALL GROUND RODS SHOWN, UNLESS NOTED OTHERWISE. IF ROCK IS ENCOUNTERED, GROUND ROD MAY BE INSTALLED WITH A MAXIMUM VARIATION OF 30' FROM VERTICAL AND CONTRACTOR SHALL BE PREPARED TO CORE DRILL TO INSTALL GROUND RODS AND BACKFILL WITH GROUND ENHANCEMENT MATERIAL.
7. BOND NEW GENERATOR FRAME GROUND CONDUCTOR TO EQUIPMENT SHELTER EXTERIOR GROUND RING. EXOTHERMICALLY WELD A #2/0 AWG STRANDED BARE TINNED COPPER TO GROUND RING AND ATTACH TO GENERATOR FRAME USING COMPRESSION LUG.
8. EXOTHERMICALLY WELD #2/0 AWG STRANDED, BARE, TINNED COPPER GROUND CONDUCTORS FOR A/C UNITS (PROVIDED WITH SHELTER) TO EQUIPMENT SHELTER GROUND RING.
9. BOND SHELTER GROUNDING SYSTEM (SEE DETAIL 4/E3 & 1/E4) TO SHELTER BURIED GROUND RING.
10. A FALL-OF-POTENTIAL TEST SHALL BE PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH MOTOROLA SPECIFICATION R56.
A.) PERFORM THREE TESTS AT EACH SITE.
B.) CONTRACTOR SHALL PROVIDE A WRITTEN REPORT ON FORMS PROVIDED WITHIN THE MOTOROLA SPECIFICATION R56 CONSISTING OF THE FOLLOWING: SITE NAME, ADDRESS AND IDENTIFICATION NUMBER, DESCRIPTION OF SITE SOIL AND MOISTURE CONDITION, DESCRIPTION OF WEATHER, MODEL NUMBER OF TESTING EQUIPMENT, DATE OF LAST CALIBRATION, SITE SKETCH SHOWING LOCATION OF TEST PROBES, AND ALL FIELD DATA COLLECTED (READINGS, RANGE, TEST, MILLIAMPS, ETC.).
C.) CONTRACTOR SHALL NOTIFY THE MOTOROLA REPRESENTATIVE IF THERE ARE ANY DIFFICULTIES PERFORMING SYSTEM RESISTANCE TESTS OR IF MEASUREMENTS ARE ABOVE 10 OHMS. THE NFRSA REPRESENTATIVE SHALL PROVIDE INSTRUCTION TO THE CONTRACTOR TO INSTALL ADDITIONAL GROUNDING MEASURES TO MEET THE 10 OHM REQUIREMENT.
11. BOND EQUIPMENT SHELTER GROUND RING TO PROPOSED TOWER GROUND RING WITH #2/0 AWG STRANDED BARE TINNED COPPER GROUND CONDUCTOR. TYPICAL FOR TWO LOCATIONS.
12. FUEL TANKS INSTALLED OUTSIDE OF THE BUILDING, WITHIN 6'-0" OF THE BUILDING, SHALL BE BONDED TO THE NEAREST PRACTICAL LOCATION ON THE GROUNDING ELECTRODE SYSTEM. FUEL TANKS INSTALLED MORE THAN 6'-0" AWAY FROM THE BUILDING, SHELTER, EQUIPMENT HOUSING, OR CABINET GROUNDING ELECTRODE SYSTEM SHALL BE BONDED TO THE SHELTER GROUND RING AND HAVE AN ADDITIONAL GROUND ROD INSTALLED NEAR THE GENERATOR AND BONDED TO THE GENERATOR FRAME.
13. PROPOSED TOWER GROUND RING. IF TOWER BASE WIDTH IS SUCH THAT THE SPACING BETWEEN GROUND RODS IS GREATER THAN 20'-0", THEN ADDITIONAL GROUND RODS SHALL BE USED TO REDUCE THE SPACING OF GROUND RODS TO 20'-0". A #2/0 AWG BARE STRANDED TINNED COPPER CONDUCTOR SHALL BE BROUGHT FROM EACH GROUND ROD (WHICH IS ADJACENT TO THE TOWER LEG) TO THE TOWER PLATE AND/OR LEG ITSELF AND ATTACHED VIA AN EXOTHERMIC PROCESS (CADWELD OR EQUIVALENT), UNLESS MANUFACTURER SPECIFICATIONS WILL NOT PERMIT. IN SUCH CASES, ALTERNATE PLANS SHALL BE RESEARCHED AND IMPLEMENTED.

GROUNDING LEGEND

- EXOTHERMICALLY WELDED CONNECTION
- ⊙ INSPECTION SLEEVE/TEST WELL
- ⚡ GROUND ROD
- BCW BARE COPPER WIRE
- AWG AMERICAN WIRE GAUGE



MOTOROLA

8000 W. SUNRISE BLVD
PLANTATION, FL 33322

PHONE: (954) 723-5000

BROWARD COUNTY -
WEST LAKE PARK
1200 SHERIDAN STREET
HOLLYWOOD, FL 33019

AMEC FOSTER WHEELER PROJECT NO: 6166-17-0575

DRAWN: J. GILMER CHECKED: J.D. PAGE

APPROVED: J.D. PAGE DATE: 06/01/17



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wheeler

AMEC FOSTER WHEELER
ENVIRONMENT AND INFRASTRUCTURE, INC.
1075 BIG SHANTY DRIVE, N.W., SUITE 100
KENNESAW, GA 30144
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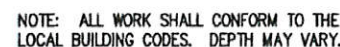
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B	09/27/17	ISSUED FOR PRELIMINARY
C	01/04/18	LEASE EXHIBIT
D	05/21/18	ISSUED FOR PERMITTING



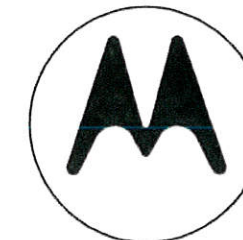
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E2

AUG 16 2018
CITY OF HOLLYWOOD
ELECTRICAL PLAN AND NOTES



E3 GROUNDING DETAILS



MOTOROLA

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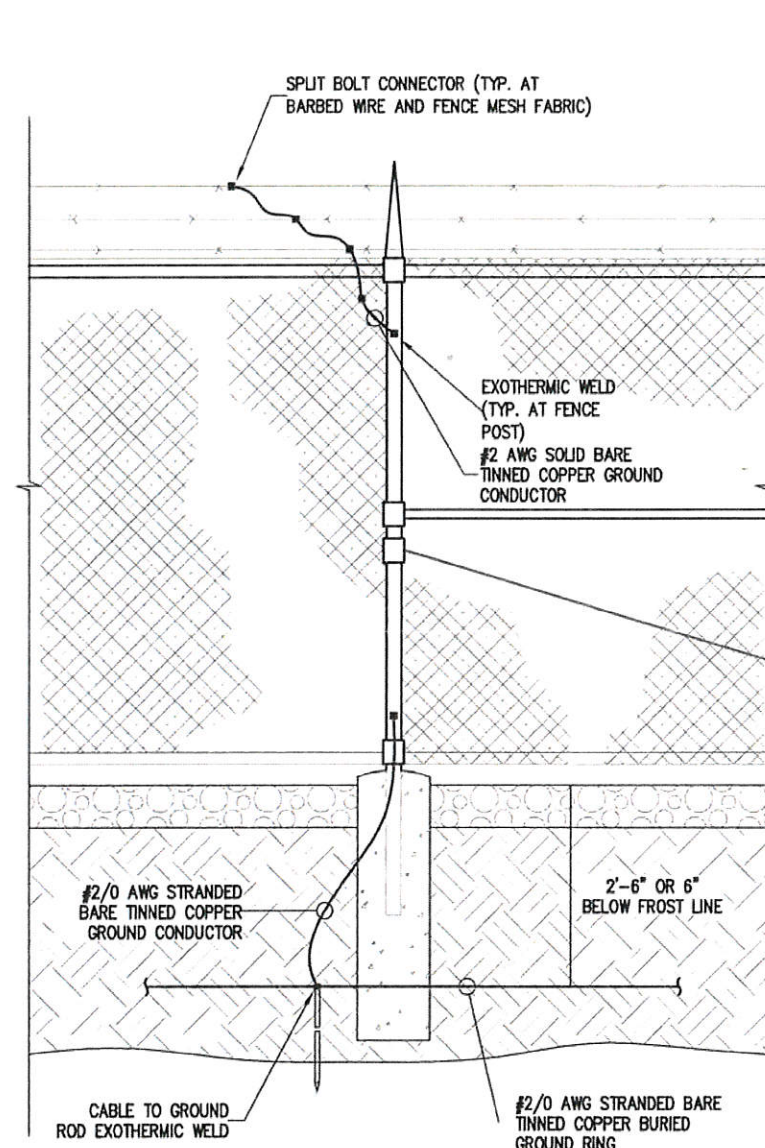
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B	09/28/17	ISSUED FOR PRELIMINARY
C	02/05/18	RE-ISSUED FOR PRELIMINARY
D	02/28/18	RE-ISSUED FOR PRELIMINARY
E	05/21/18	ISSUED FOR PERMITTING



5/21/18

SHEET NO. & NAME

E5
GROUNDING DETAILS

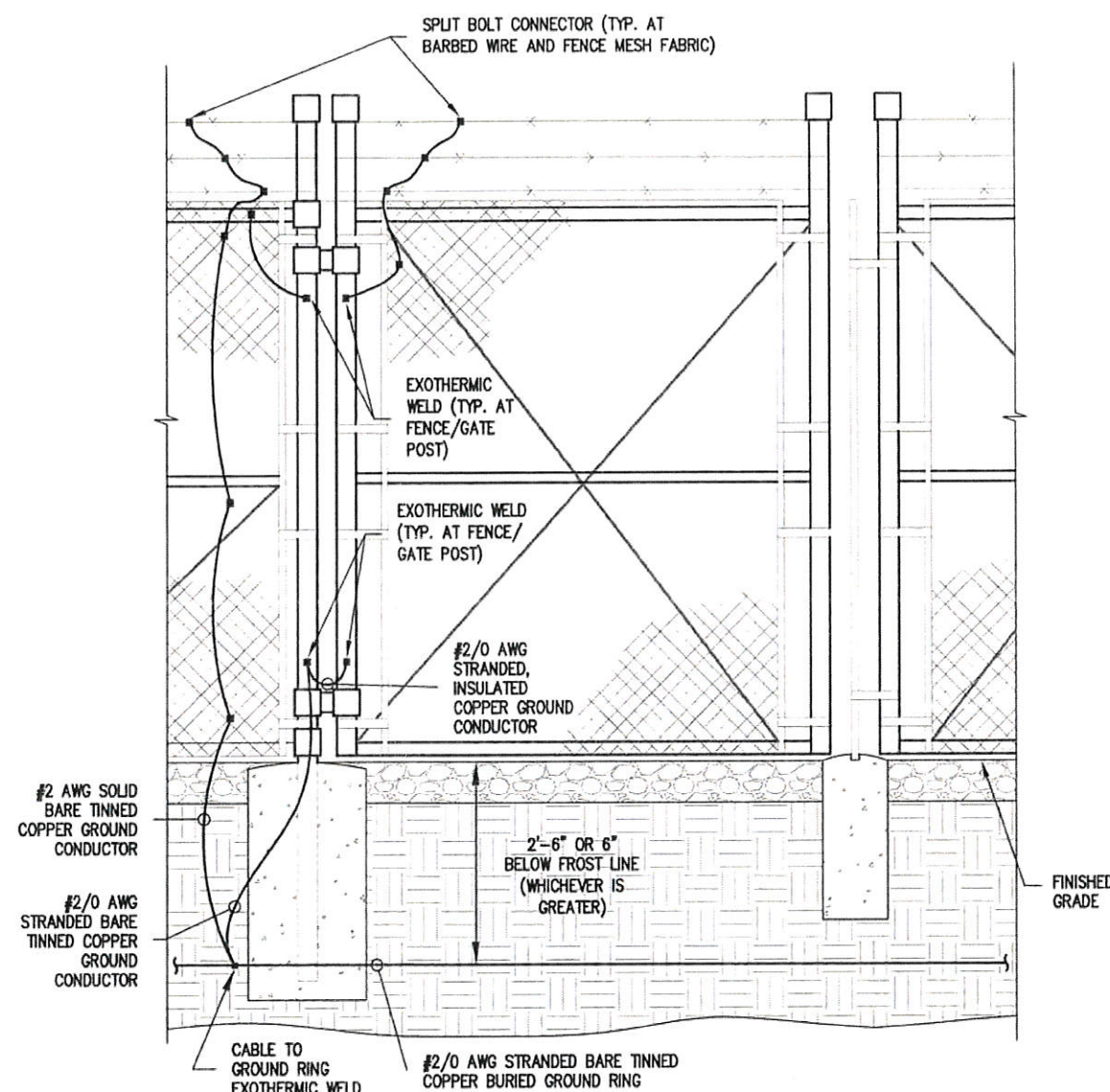


VERTICAL POST CONNECTED TO RING

NOTES:

1. EACH CORNER FENCE POST SHALL BE BONDED TO THE NEAREST LOCATION OF THE BUILDING GROUND RING USING #2/0 AWG OR LARGER BARE, TINNED COPPER CONDUCTORS. THE GROUNDING CONDUCTORS SHALL BE BURIED TO THE SAME DEPTH AS THE BUILDING GROUND RING.
2. THE FENCE FABRIC NEAR EACH CORNER BONDING POINT SHALL BE BONDED TO THE BUILDING GROUND RING. THE FENCE FABRIC SHALL BE MADE IN AT LEAST THREE POINT DOWN THE FENCE FABRIC.

1 FENCE GROUNDING DETAIL
E5 SCALE: N.T.S.



VERTICAL FENCE/GATE POST BONDED TO GROUND RING

NOTES:

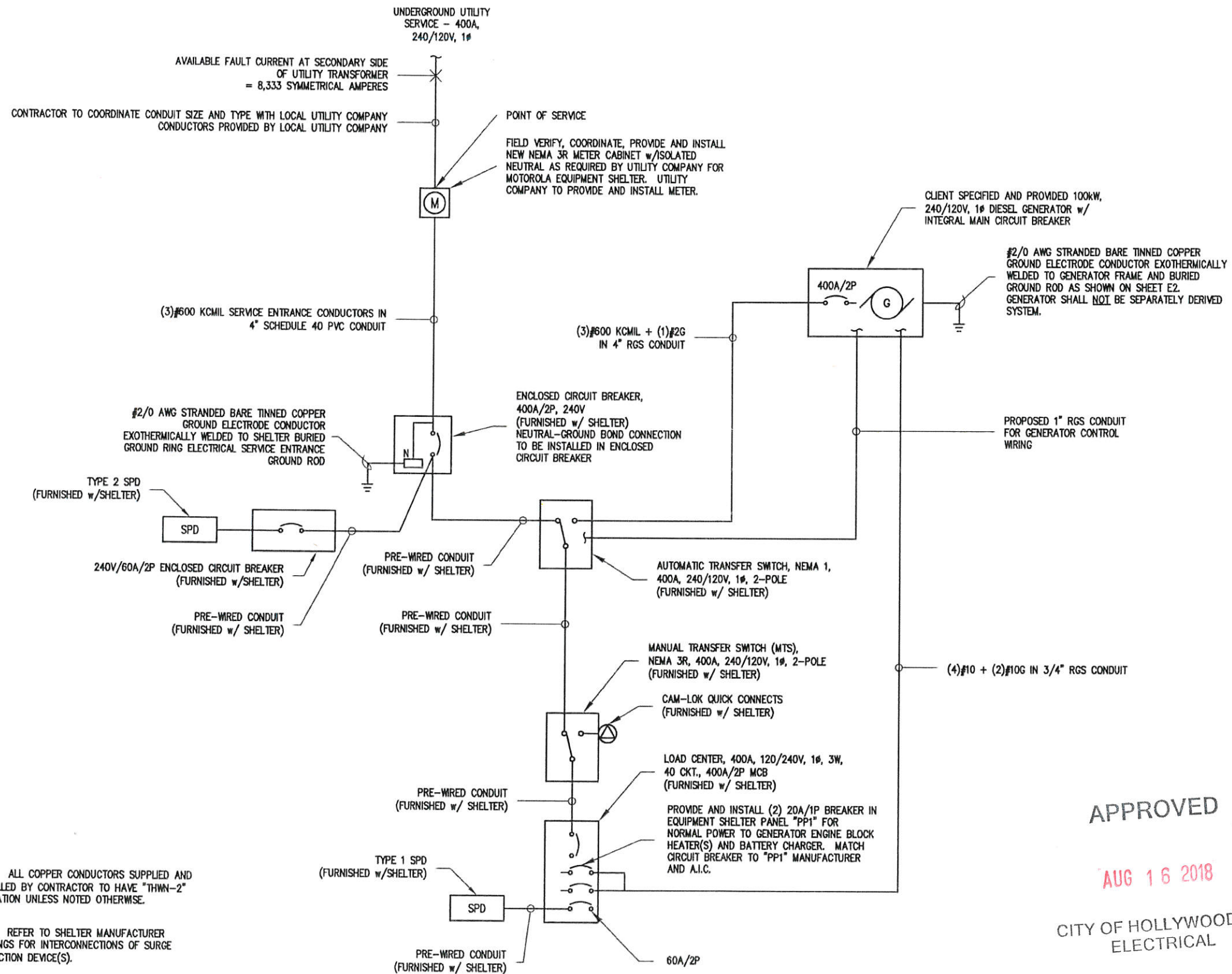
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2. THE FENCE FABRIC NEAR EACH CORNER BONDING POINT SHALL BE BONDED TO THE BUILDING GROUND RING. THE FENCE FABRIC SHALL BE MADE IN AT LEAST THREE POINT DOWN THE FENCE FABRIC.
3. ALL GATE POSTS SHALL BE BONDED TO THE NEAREST LOCATION OF THE BUILDING GROUND RING USING #2 AWG OR LARGER BARE, TINNED COPPER CONDUCTORS.

2 GATE GROUNDING DETAIL
E5 SCALE: N.T.S.

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AUG 16 2018

CITY OF HOLLYWOOD FL.
ELECTRICAL



NOTE: ALL COPPER CONDUCTORS SUPPLIED AND INSTALLED BY CONTRACTOR TO HAVE "THWN-2" INSULATION UNLESS NOTED OTHERWISE.

NOTE: REFER TO SHELTER MANUFACTURER DRAWINGS FOR INTERCONNECTIONS OF SURGE PROTECTION DEVICE(S).

1 ELECTRICAL SINGLE LINE DIAGRAM
E6 SCALE: N.T.S.

APPROVED

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CITY OF HOLLYWOOD FL.
ELECTRICAL



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AMEC FOSTER WHEELER PROJECT NO: 6166-17-0575
DRAWN: J.B. GILMER CHECKED: F.D. SHIVER
APPROVED: F.D. SHIVER DATE: 06/01/17



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5/21/18

SHEET NO. & NAME

E6
ELECTRICAL SINGLE
LINE DIAGRAM

Pomphrey
19-00000145

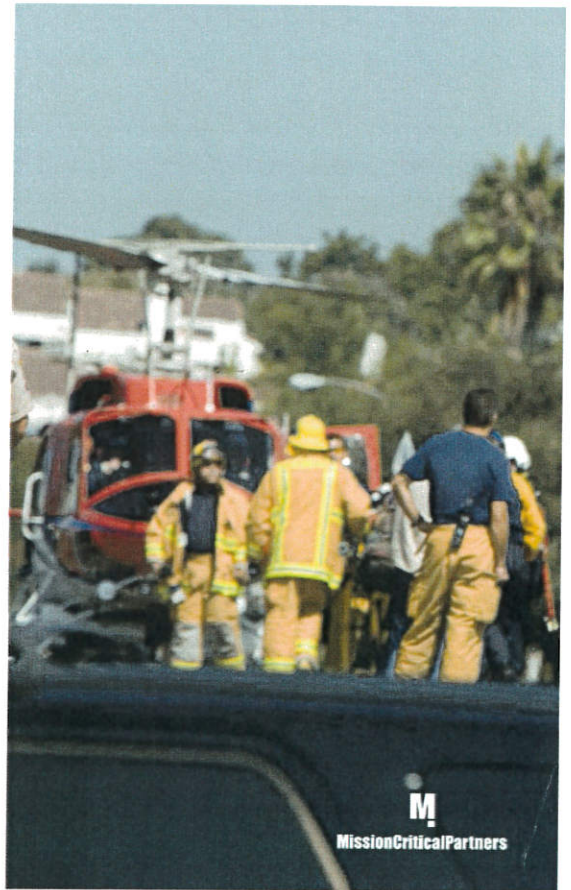


CIRC Feasibility Study Summary for BCBOCC

APRIL 9, 2019

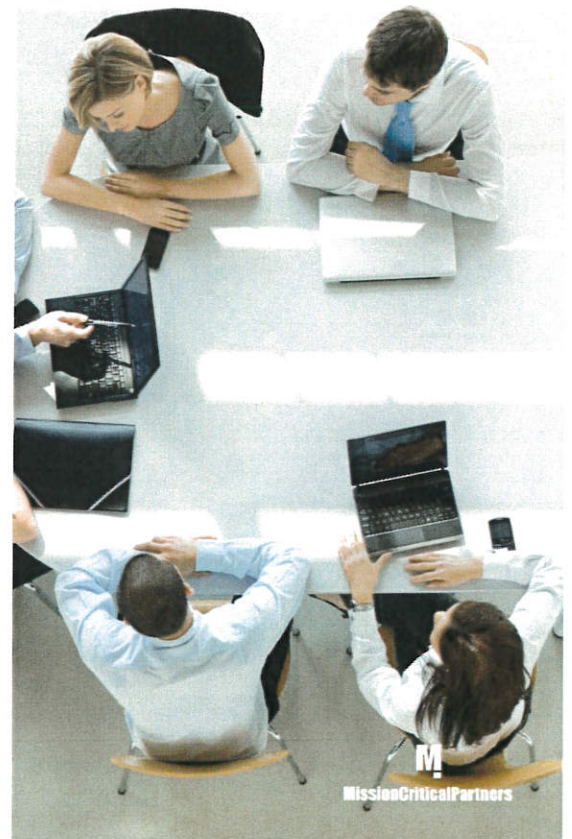
Study Contributors

- Motorola Solutions Inc. (MSI) – Prime radio vendor
 - Jeff Erhardt: Project Manager
- KCI Technologies (KCI) – Motorola infrastructure design subcontractor
 - Eric Kohl: Senior Associate
- Mission Critical Partners, LLC (MCP) – County's technical consultant
 - Nick Falgiatore: Senior Technology Specialist



Tasks Conducted

- Physical inspection
- Floor loading analysis
- Antenna mounting analysis
- X-ray of floors in riser closets
- Federal filings (FAA, NEPA, SHPO)
- Microwave path studies
- Design drawings



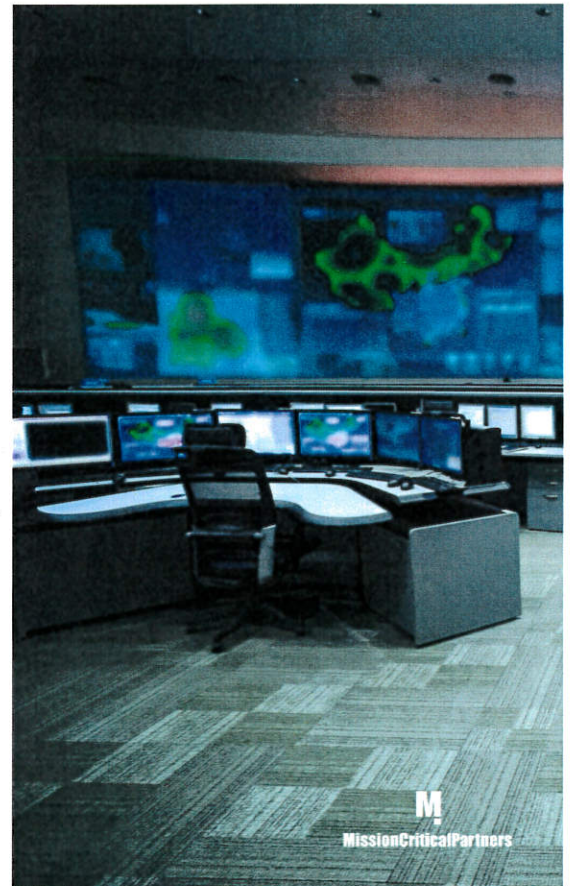
Design Considerations

- Buildout of an equipment room inside the existing boiler room on the rooftop
- Mount of antennas along an inner parapet wall on the rooftop and at the corners of the building
- Installation of a generator and concrete enclosure on the fourth floor of the garage
- Route of power from the ground floor of the garage to the generator and to the rooftop



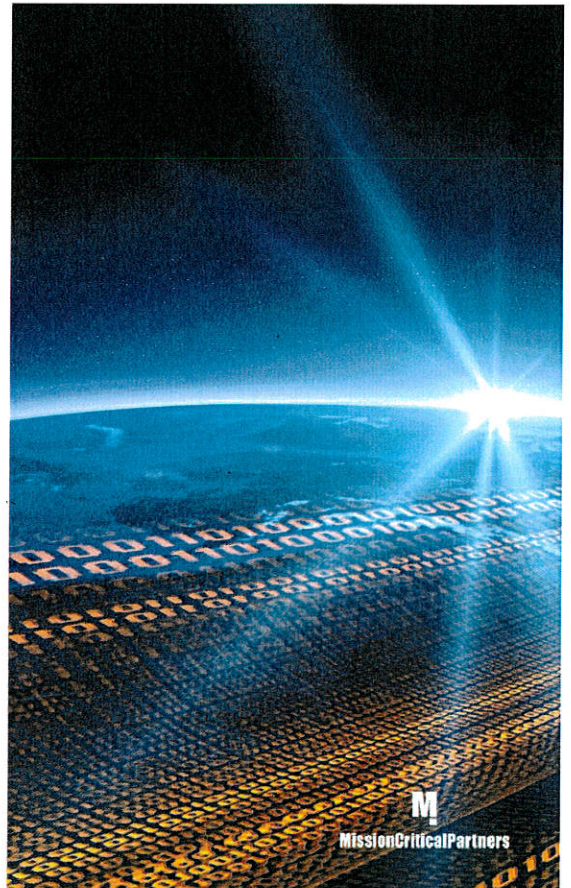
Study Summary

- Construction at the CIRC will require significant building structural modifications
- Coverage will be reduced in the immediate vicinity due to shadowing from the building and may be further impacted by future construction
- Construction at the CIRC will be significantly more expensive in both capital and sustainment costs compared to a free-standing tower
- Construction at the CIRC will take longer than a free-standing tower, pushing project completion into Q3 2020 (Calendar Year)
- Restoration of service following equipment outages at the CIRC will take longer compared to a free-standing tower



Design Challenges

- Ability to drain water underneath the location where the equipment room will be constructed
 - The floor will not support equipment room with associated equipment with raised concrete pad
- Routing of cables from the ground floor to the rooftop
 - Core drilling required through existing telecommunication closets
- Transportation of building materials and equipment to the rooftop
 - High-rise crane and/or helicopter required







Flood Mitigation

- The floor will not support raising the equipment room to allow sufficient drainage without building structural modifications
 - Drain located under proposed equipment location
 - Rust stains identified on the floor
 - Draining required for HVAC
- The location of the equipment room is not in an environmentally controlled area with the potential for flooding or water entry
 - Leak from the boilers
 - Water entry through vents
- Any options for raising the equipment room will require significant structural enhancements to the building, greatly increasing costs and schedule delays
 - Subject to approval by the building owner
- Construction without drainage solutions presents risks of equipment room being flooded

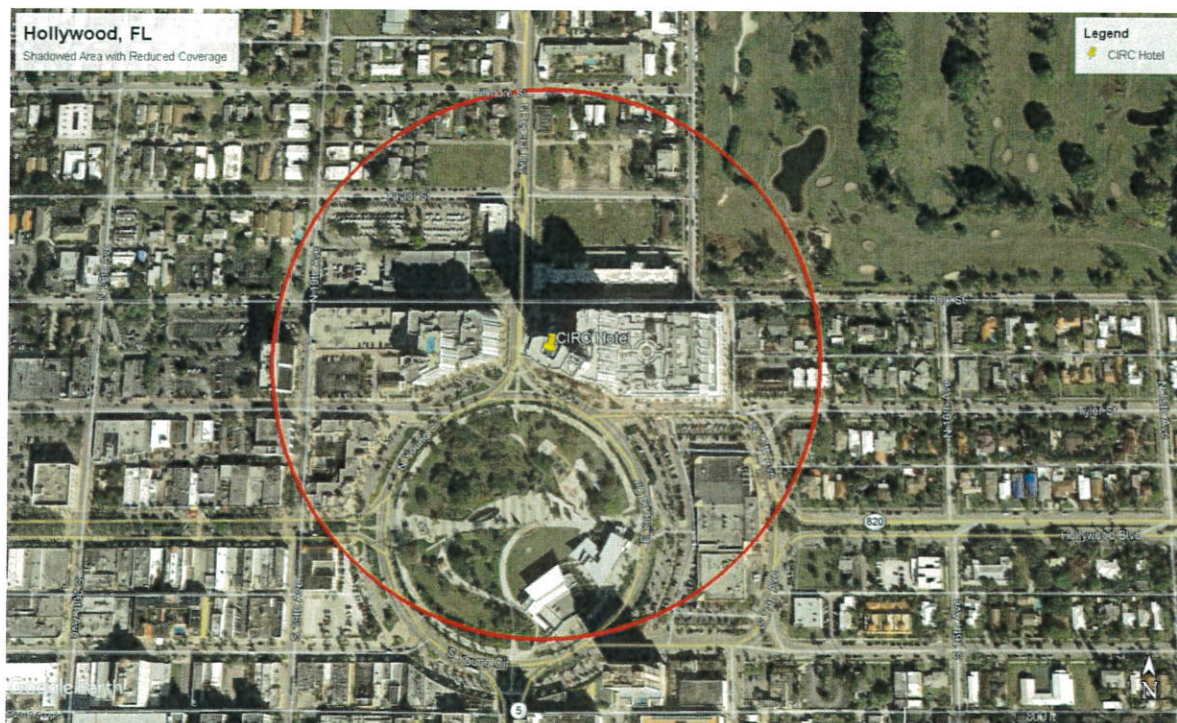




Coverage Impacts

- Systemwide coverage initially evaluated to be comparable to a tower in West Lake Park
- Coverage in the immediate vicinity of the CIRC will be reduced due to shadowing from the building
- Shadowing may be worsened if the FAA does not approve antenna heights above the top of the building, requiring lower placement of antennas
- Construction of tall buildings in the immediate vicinity of the CIRC will impair coverage
- Computer modeling does not consider building shadowing or structural obstructions





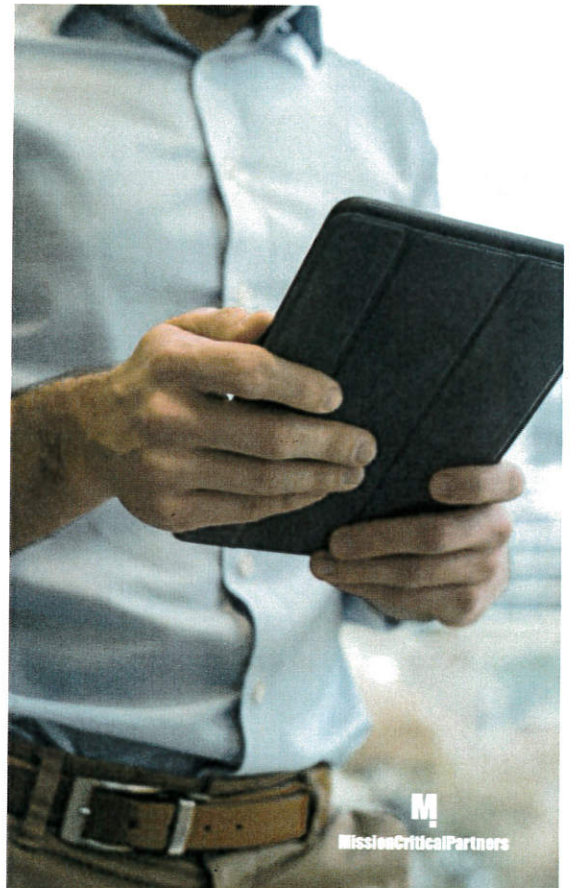






Cost Analysis

- Construction costs at the CIRC estimated between \$2.1 million (installation via crane) and \$2.8 million (installation via helicopter)
 - Construction costs only
 - Does not include building structural enhancements
 - Does not include schedule delay costs
- Lease costs at the CIRC have not yet been negotiated, but are estimated to fall between \$5,200 per month and \$6,200 per month based on lease payments at existing condo locations
 - Costs estimated with a 3% CPI increase
- Cost of a free-standing tower is \$750,000, with \$5,000 in annual maintenance costs
 - Construction costs only
- Approximate lifespan of a radio tower is 50 years



Cost of Ownership Comparison

Cumulative Cost of Ownership	CIRC (\$5,200 / month)	CIRC (\$6,200 / month)	Free-standing Tower
Capital Costs (initial installation)	\$2,450,000 (average)	\$2,450,000 (average)	\$750,000
Year 5	\$2,781,290	\$2,846,210	\$776,546
Year 10	\$3,165,346	\$3,305,526	\$807,319
Year 15	\$3,610,572	\$3,838,000	\$842,995
Year 20	\$4,126,711	\$4,455,282	\$884,352
Year 25	\$4,725,058	\$5,170,882	\$932,296
Year 30	\$5,418,706	\$6,000,458	\$987,877
Year 35	\$6,222,834	\$6,962,164	\$1,052,310
Year 40	\$7,155,039	\$8,077,045	\$1,127,006
Year 45	\$8,235,719	\$9,369,498	\$1,213,599
Year 50	\$9,488,525	\$10,867,805	\$1,313,984

CIRC Implementation Schedule

Milestone	Completion Date
Feasibility Study with Proposed Design Delivered	March 29, 2019
Lease Executed	June 1, 2019
Construction Permits Received	August 1, 2019
Construction Begins	August 1, 2019
*Construction Complete	March 1, 2020
Radio Equipment Installation Complete	May 1, 2020
System Testing Complete	September 1, 2020
System Ready for Cutover	September 1, 2020

2 months?

June 1
Dec 1

*Does not include building structural modifications

Maintenance Impact

- It will take technicians longer to access radio equipment on the rooftop when compared to a free-standing tower
 - Key access, elevator, stairwell, long route on the rooftop
- In the event replacement equipment is needed, heavy equipment will need to be carried by hand
- Equipment that cannot be carried by hand or antenna replacements will require crane or helicopter

