



# **NOISE MANAGEMENT PLAN**

**March 2021 – October 2021**

**BROWARD COUNTY**

**CONVENTION CENTER**

**1850 - 1950 Eisenhower Boulevard**

**Fort Lauderdale, FL 33316**

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## 1 Description of Work

- Steel Erection, Steel Detailing, Concrete Pours, Civil work, Interior Masonry, MEPF Systems and Finishes at the Convention Center. The work would commence at 7 AM and be completed by 10 PM (15 hours) Monday through Saturday. On Sunday, the work would commence at 10 AM and be completed by 7 PM. The off hours will commence on March 11<sup>th</sup> and continue through October of 2021. *No person shall operate or cause to be operated any equipment used in construction, repair, alteration or demolition work on buildings, structures, streets, alleys, or appurtenances thereto with sound-control devices less effective than those provided on the original equipment prior to 7 AM and after 10 PM.*
- The equipment with the most amount of noise will be utilized during daylight hours only (Reference the Noise and Vibration Predictions below and Appendix 8.10 which shows the noise generated from the construction will reduce to below the ambient noise level adjacent to the local residences due to distance from the construction to the residence). The average duration of steel erection will be approximately 10 – 12 hours Monday through Saturday and approximately 9 hours on Sunday. The Steel erection will take place only during daylight hours and welding/detailing will take place on off hours (no sound control equipment will be utilized prior to 7 AM and after 10 PM).
- See attached estimated schedule for the description of work (Reference Appendix 8.7)

<b>Table 1: Description of Work Schedule</b>		
<b>Subcontractor Work</b>	<b>Daylight to Dusk (Monday – Saturday, Sunday)</b>	<b>Monday – Saturday: 7 AM – 10 PM (15 Hours) Sunday: 10 AM – 7 PM (9 Hours)</b>
Steel Erection	Yes	Only during Daylight
Civil Work	Yes	Yes
Steel Detailing	Yes	Yes
Interior Masonry	Yes	Yes
MEPF Systems	Yes	Yes
Concrete Pours	Yes	Yes
Finishes	Yes	Yes

- Site Plan & Location Map (Reference Appendix 8.1)
  
- Legal Description:
  - 1850 Eisenhower Boulevard:  
PORT EVERGLADES PLAT NO 2 108-31 B POR OF PAR A DESC  
AS:COMM SW COROF NE1/4 OF SE1/4 OF SEC 14-50 42,NLY 289,ELY  
95 TO POB,ELY 220 NLY 792,WLY 220,SLY 411,WLY 15, SLY 110,ELY  
15,SLY 271 TO POB
  
  - 1950 Eisenhower Boulevard:  
PORT EVERGLADES PLAT NO 2 108-31 B PARCEL A LESS POR  
DESC:COMM SW COR OF NE1/4 OF SE1/4 OF SEC 14-50-42,NLY  
289,ELY 95 TO POB, ELY 220,NLY 792,WLY 220,SLY 411, WLY 15,SLY  
110,ELY 15,SLY 271 TO POB,& LESS POR PAR A DESC AS COM NW COR  
PAR A,E 80 TO POB,CONT E 832,S 288.81,W 114.03,N 88.96,W  
475.01,N 29.73,W 235,N 168.61 TO POB
  
- Justification for Work:
  - Safely putting more people to work during COVID-19
  
  - There has been a significant increase in rainfall during 2020 which has impacted the construction schedule by 30+ workdays. The project is estimating that in order to make up the 30+ days, the project will have to work two (2) shifts through the completion of the project. The project completion date is October 15<sup>th</sup>, 2021 and it is estimated that the 2021 Boat Show will start loading around the 10<sup>th</sup> of October.
  
  - The project estimates that the building will be dried in (Building envelope will be completed) no later than June of 2021. This will significantly reduce any noise outside of the project as the majority of the work will be inside the building. The Dry in will start as early as April of 2021 with an anticipated dry in date of June of 2021. The noise level will continue at the same level through the beginning of March and slowly start to decrease through the completion of the dry in of the building. The shortest distance from the work to the nearest residential condo is 580 feet (Reference Appendix 8.5). The distance from the work to the nearest residence should not be any more significant than 17<sup>th</sup> street itself (reference Noise Monitoring Report appendix 8.6).



- The second shift will help accelerate the project.
  - Early morning concrete pours will help alleviate the amount of Construction traffic on SE 17<sup>th</sup> Street during peak traffic hours.
  - The above will reduce the impact of construction on the surrounding residential neighborhoods and businesses by keeping the project within the original completion date.
- Commencement Date and Duration of Work:
- The second shift will commence on March 11<sup>th</sup>, 2021 and continue through October of 2021.
  - Steel Erection, Concrete Pours, Interior Masonry, Civil, MEPF, and Finishes activities will be in accordance with the attached estimated schedule.

## 2 Contractor Contacts

Balfour Beatty Construction – Broward County Convention Center Project Team – Table 2

<b>Table 2: BBC Contact List</b>		
<b>Name</b>	<b>Position</b>	<b>Contact Number</b>
Ron Ferguson	General Superintendent	(407) 713-1877
Chris Baran	Senior Project Manager	(407) 461-4107
Tom Stedem	Senior Project Manager	(863) 640-0298
Jose Rodriguez	Superintendent	(407) 304-9401
Justin Valdes	Assistant Superintendent	(407) 572-5654

## 3 Equipment

- The equipment used for construction work is the quietest reasonably available.
- Equipment that may generate noise during the second shift are as follows:
  - Cranes
  - Concrete Trucks
  - Concrete Pumps
  - Concrete Vibrators
  - Back-up Alarm on Construction Equipment
  - Material Delivery Trucks
- The duration of use of equipment and/or period of work will vary depending on each activity. Noise generated will be intermittent based on specific activity taking place (i.e. – back-up warning alarm from trucks, concrete vibrators, pump trucks, etc...)

#### 4 Noise and Vibration Predictions

- Reference Appendix 8.10 NV5 Signed and Sealed Engineered Calculation showing that the noise generated from the construction project is equal to or less than the surrounding ambient noise. Reference the last paragraph of page 3 and all of the information on page 4 for specifics. The following is the information from the bottom of page 3 and 4:

*In order to determine compliance with the City regulations a calculation of noise at the adjacent properties is necessary. Noise reduces with distance and using a standard calculation noise may be predicted based upon an initial level and distance. The use of the inverse square law allows prediction in that a sound level (intensity) will drop off as distance increases. This law which has been demonstrated by evidence and actual measurement calculates a six (6) decibel drop with a doubling of the distance in feet. Considering the 85-decibel level for the forklift at 570 feet noise would reduce to 64 dBA.*

*The predicted level is presuming no uninterrupted path for the sound and that no existing levels are considered. However, the largest reduction of noise would be the shadowing of any noise at the Convention Center by existing noise from the community and traffic on SE 17th Street.*

*Measured levels from October 31, 2020 through December 16, 2020 show that noise from the adjacent street area and associated community produce levels that do not regularly go below 60-65 decibels up to 70 decibels. This data shows a solid noise level that exists over this period consistently. This may be considered as the “ambient” level of noise. Graphs are attached following the conclusion of this letter that show data from the noise meter for a series of dates which also identify City time frames and working shifts. Also shown are two graphs showing overall noise levels as the one minute maximum levels from October 28 through December 16, 2020. As the noise levels are 60 – 65 decibels at the minimum the 64 dBA generated by the forklift would be obscured by community ambient levels. Also, considering the noise levels occur 24-hours over this range of noise, the 60 dBA daytime and 50 dBA nighttime noise limits of the City cannot be met due to ambient conditions. In our opinion the noise levels projected to the north properties would not be in excess of the noise regulations of the City.*

- Equipment Noise Emission Levels (Lmax Noise (dba) 50 ft):
  - o Concrete Trucks – 85
  - o Concrete Pumps – 82
  - o Concrete Vibrators – 80
  - o Back-up Alarm – 97 – 112
  - o Crane – 85
  
- The aforementioned equipment predicated noise emissions can be reviewed in the Appendices below or on the U.S. Department of Transportation Highway Administration website (Link [HERE](#)).

## 5 Noise and Vibration Control Measures

- We have installed a noise monitoring device located adjacent to the nearest residential condo to demonstrate that the noise generated during the off hours outside of 8 AM to 7 PM are equivalent to the noise generated from 17<sup>th</sup> Street and the surrounding areas. Reference attached GeoSonics report for noise monitoring (Appendix 8.6).
  
- Only the equipment necessary for Concrete pours, Interior Masonry, MEPF Systems, and Finishes will be utilized prior to and after the normal Construction operation hours of 8 AM to 7 PM.
  - o Concrete Truck back-up alarms will be switched to ambient white noise to lessen noise emissions by 18 dBA when safety protocols allow.
  - o On-site traffic patterns will be coordinated to minimize backing up movement.
  - o Deliveries will be sequenced appropriately to reduce the amount of idling Trucks.
  
- We do not anticipate any heavy vibration during the concrete pours and no pile work will be conducted during this time frame.

## 6 Complaint Response

### 6.1 Procedure and recording of complaints

- The Balfour Beatty Construction – Broward County Convention Center Team will be responsible for logging and responding to all complaints
- Any complaints can be made via phone or in writing to:

Balfour Beatty Construction	Balfour Beatty Construction
ATTN: Ron Ferguson	ATTN: Chris Baran
7901 S.W. 6 <sup>th</sup> Court, Ste. 200	7901 S.W. 6 <sup>th</sup> Court, Ste. 200
Plantation, FL 33324	Plantation, FL 33324
(407) 713-1877	(407) 461-4107

### 6.2 Community Notification

- Balfour Beatty Construction will post a Community Notification around the project site on the perimeter fence and with the Condo Association announcement boards in the adjacent condo building. In addition, notifications will be left in mailboxes of adjacent businesses. (Reference Appendix 8.3).
- The project will also utilize the Fort Lauderdale Office of Neighbor Support to ensure maximum outreach.
- Notifications will identify all second shift work and will be posted prior to the commencement of work.
- Reference Appendices for Community Notification Letter and Distribution Area.

## 7 COVID 19

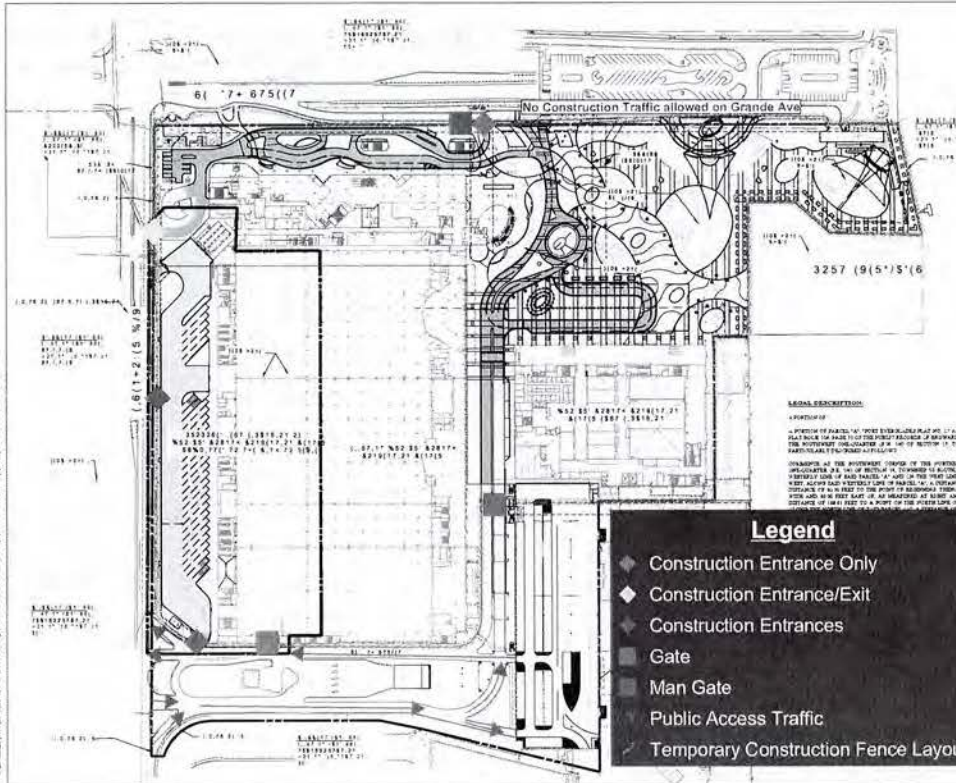
Balfour Beatty Construction is closely monitoring the COVID 19 pandemic and ensuring every measure is being followed in the office and the field to the safety of the workers and the surrounding community. (Reference our COVID 19 Project Protocols in Appendix 8.8).

## 8 Appendices

- 8.1 Site Plan & Location Map
- 8.2 Community Notification
- 8.3 Community Notification Distribution Area
- 8.4 Equipment Predicated Noise Emissions
- 8.5 Distance to Condo Map
- 8.6 Noise Monitoring Report
- 8.7 Construction Estimate Schedule
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# BCCCH - Site Logistics Plan



## Legend

- ◆ Construction Entrance Only
- ◆ Construction Entrance/Exit
- ◆ Construction Entrances
- Gate
- Man Gate
- Public Access Traffic
- Temporary Construction Fence Layout

8.1 Site Plan & Location Map



STANTEC  
 ENGINEERING ARCHITECTURE INTERIOR DESIGN  
 1000 WEST 10TH AVENUE  
 SUITE 1000  
 DENVER, CO 80202  
 TEL: 303.733.1000  
 WWW.STANTEC.COM



NO. 1	DATE	DESCRIPTION
1	11/11/16	ISSUED FOR PERMITS
2	01/11/17	REVISED PER COMMENTS
3	02/14/17	REVISED PER COMMENTS
4	03/14/17	REVISED PER COMMENTS
5	04/11/17	REVISED PER COMMENTS
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97	12/11/24	REVISED PER COMMENTS
98	01/11/25	REVISED PER COMMENTS
99	02/11/25	REVISED PER COMMENTS
100	03/11/25	REVISED PER COMMENTS

**PRELIMINARY  
 NOT FOR  
 CONSTRUCTION**

1000 WEST 10TH AVENUE, SUITE 1000  
 DENVER, CO 80202  
 TEL: 303.733.1000  
 WWW.STANTEC.COM

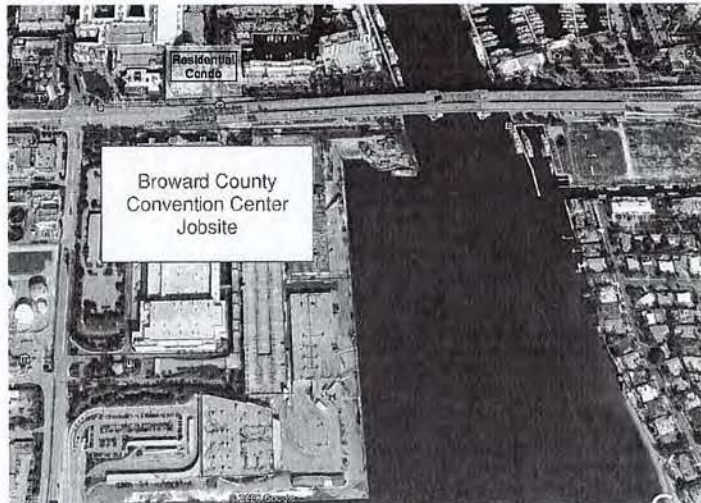
# **\*PUBLIC NOTICE\***

***EARLY MORNING CONCRETE POUR, STEEL  
DETAILING, STEEL ERECTION INTERIOR MASONRY,  
MEPF SYSTEMS, AND FINISHES ADVISORY***

## **BROWARD COUNTY CONVENTION CENTER**

**1850 - 1950 Eisenhower Boulevard Fort Lauderdale, FL 33316**

Please be advised that the Broward County Convention Center at 1850-1950 Eisenhower Boulevard, Fort Lauderdale, FL 33316 will be conducting second shift work Monday – Saturday 7 AM to 10 PM and Sunday 10 AM to 7 PM beginning March 11<sup>th</sup>, 2021 and will continue through October of 2021.

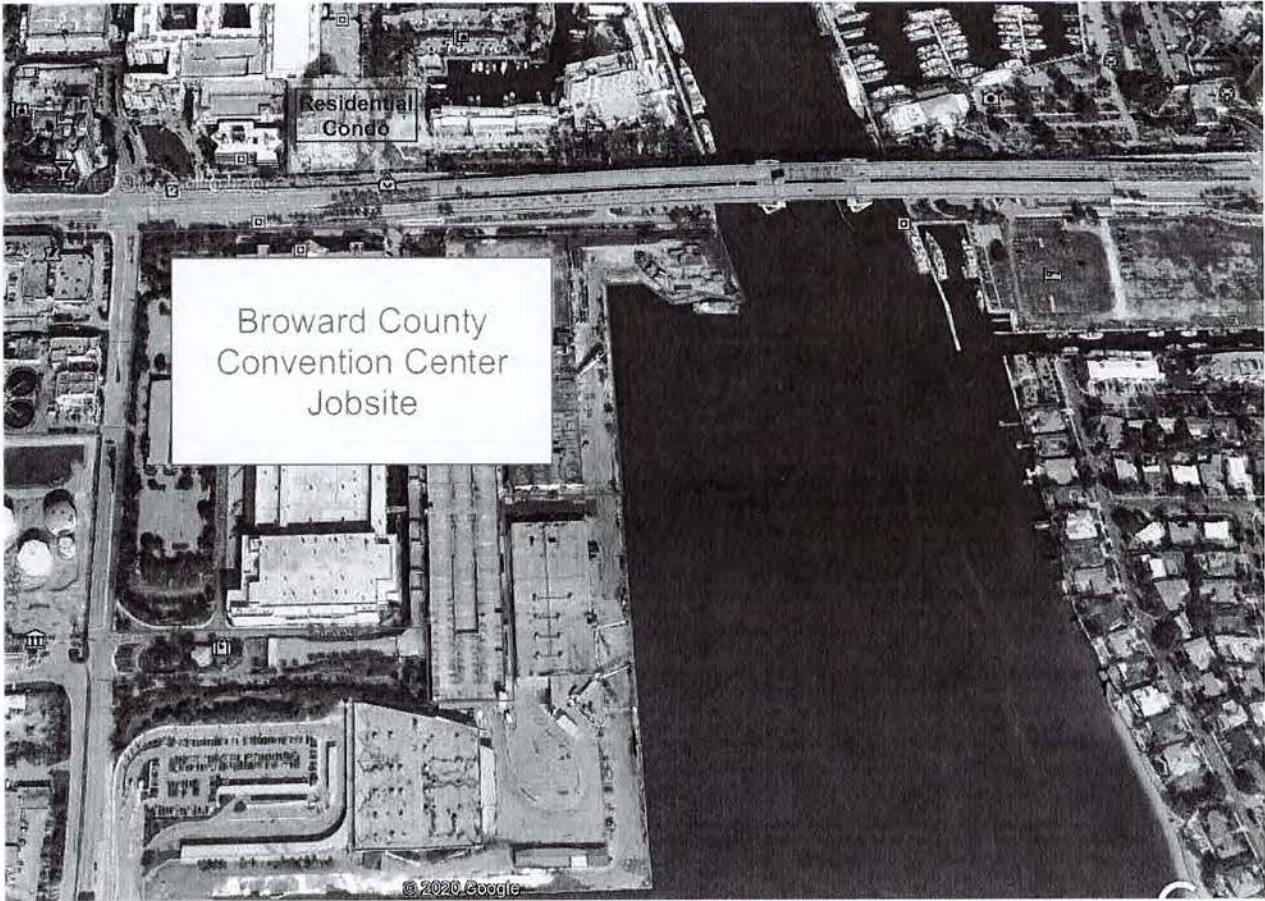


Balfour Beatty Construction

ATTN: Ron Ferguson  
7901 S.W. 6<sup>th</sup> Court, Ste. 200  
Plantation, FL 33324  
(407) 713-1877

ATTN: Chris Baran  
7901 S.W. 6<sup>th</sup> Court, Ste. 200  
Plantation, FL 33324  
(407) 461-4107





**Community Notification Distribution Area**

8.3 Community Notification Distribution Area

# Effective Noise Control During Nighttime Construction

[Workshops](#) > [Reduced Demand](#)

## Introduction

In recent years there have been fundamental changes in the types of projects that Departments of Transportation (DOT) are constructing. Today a significant number of projects are urban widening/rehabilitation work where daylight construction closures of the routes cause unacceptable congestion problems. Therefore, because of the high traffic volumes during the normal workday on these major urban transportation corridors, it is usually only possible to perform construction operations during the nighttime.

Departments of Transportation are writing into the specifications for these projects severe restrictions on when a contractor can execute the work. Typically the work must be performed at night. In turn, these nighttime work requirements precipitated disturbances to adjacent property owners'. When residents complain the path of their complaints is often through their local government. Additionally, the resulting complaints are coming during a climate of national concern about the adverse effects of environmental noise.

In the conduct of their construction and rehabilitation programs agencies struggle with three interested and impacted parties that must be satisfied.

- The driving public both commercial and private
- The community through which the transportation corridor traverses
- The construction contractors

This is a compilation of methods and techniques for mitigating nighttime construction nuisances. Mitigation is a critical requirement for serving the traveling public, for conducting DOT business in a responsible manner, and for preparing valid contract documents.

## Problems

The major nuisances associated with the nighttime construction are noise, vibration, and illumination. Noise problems are normally caused by the operation of heavy equipment and specifically by vehicle and machine backup-alarms, Table 1. Vibration problems are primarily a result of pile driving, blasting operations, or the use of vibratory rollers. While good illumination is necessary for the work to proceed at night and for the safety of the traveling public, proper work zone illumination can be very intrusive to project neighbors. There is also concern by Departments about exposure to possible contractor claims if noise objectives are not properly presented in the contract documents.

A telephone survey of state DOTs found that many require adherence to certain noise (decibel) limits during nighttime construction. In many cases these limits are the consequence of specific local ordinances. Some Departments indicated that they could receive local ordinance waivers rather easily. Other Departments stated that they had jurisdiction over the local municipalities in these matters, but they tried to abide by the local ordinances.

**TABLE 1. Critical Nighttime Construction Noise Generators**

Noise Generator	Percent of DOTs identifying as Cause of Problems*
Back-up Alarms	41%
Slamming Tailgates	27%
Hoe Rams	24%

Milling/Grinding Machines	16%
Earthmoving Equipment	14%
Crushers	6%

\*As rated by the 50 State DOTs

## Sound

The human ear does not judge sound in absolute terms, but instead senses the intensity of how many times greater one sound is to another. A decibel is the basic unit of sound level; it denotes a ratio of intensity to a reference sound. Most sounds that humans are capable of hearing have a decibel (dB) range of 0 to 140. A whisper is about 30 dB, conversational speech 60 dB, and 130 dB is the threshold of physical pain, Fig. 1.

Figure 1. Representative Noise Levels

*Noise levels tested (in increasing decibel level) include: sound studio (20 dB), quiet office (40 dB), conversation (60 dB), noisy restaurant (75 dB), chain saw (120 dB), jet plane (148 dB), and saturn rocket (200 dB).*

Sound and noise are not the same thing, but sound becomes noise when:

- It is too loud
- It is unexpected
- It is uncontrollable
- It occurs unexpectedly
- It has *pure tone components*

Noise is any sound that has the potential to annoy or disturb humans, or cause an adverse psychological or physiological effect on humans. In the case of the general population a 5 dBA change is required before most people realize there is a perceptible sound difference.

The noise levels generated during the construction process vary depending on the type of equipment and the nature of the work being performed. It should be recognized that noise impacts can be severe, especially during nighttime activities, and that in many cases simple noise mitigation strategies will not suffice.

Noise generation on most construction projects is the result of equipment operation with diesel engines being the primary generators. Equipment components that generate noise include: the engine, cooling fan, air intake, exhaust, transmission, and tires. In assessing noise generation, construction equipment can be grouped into two categories, stationary and mobile. Equipment noise can also be categorized as being either continuous or impulse in nature. Stationary equipment is considered to operate in one location for one or more days at a time; pumps, generators, compressors, screens, are typical examples of stationary equipment. In addition, pile drivers and pavement breakers are sometimes categorized as stationary equipment. Mobile equipment includes machinery that performs cyclic processes such as: bulldozers, scrapers, loaders, and haul trucks.

## Equipment Noise

Construction equipment is a major noise generator on nearly all nighttime construction projects. The equipment type, specific model, equipment condition and the operation performed influence equipment noise. Equipment manufacturers began attacking machine noise problems in the late '60s and today because of design improvements and technological advances new machines have been quieted to an acceptable level for almost every situation. *Newer equipment is noticeably quieter than older models* due primarily to better engine mufflers, refinements in fan design and improved hydraulic systems. Noise levels as generated by typical equipment are shown in Table 2.



How equipment noise will be perceived is also a function of use duration. On a monitored project in New Jersey the highest noise levels resulted from pile driving; but, because the driving was completed in a short period of time, the activity did not draw any complaints.

One of the conclusions from the U.S. Department of Transportation's 1979 construction equipment noise study was that 88 dBA is a reasonable noise level to expect for *used* equipment with an engine horsepower of 400 or less. It should be noted that the USDOT tests were made in the field under actual operating conditions at road construction sites, mines and quarries.

In 1994 and 1995 Harris Miller Miller & Hanson Inc. performed noise studies for the Central Artery/Tunnel project in Boston. The first study sought to quantify an *average* noise level while the second defined a *typical* noise level. It would seem that a typical value is better to use in developing specifications or project restrictions. That data delineates the most commonly occurring level.

Table 2. Construction Equipment Noise Emission Levels

<b>Equipment</b>	<b>Typical Noise Level (dBA) 50 ft., U. S. Dept. of Trans. study 1979</b>	<b>Average Noise Level (dBA) 50 ft., CA/T Project study 1994</b>	<b>Typical Noise Level (dBA) 50 ft., U. S. Dept. of Trans. study 1995</b>	<b>Lmax Noise (dBA) 50 ft., CA/T Project Spec. 721.560</b>
Air Compressor		85	81	80
Backhoe	84	83	80	80
Chain Saw				85
Compactor	82		82	80
Compressor	90	85		80
Concrete Truck		81		85
Concrete Mixer			85	85
Concrete Pump			82	82
Concrete Vibrator			76	80
Crane, Derrick	86	87	88	85
Crane, Mobile		87	83	85
Dozer	88	84	85	85
Drill Rig		88		85
Dump Truck		84		84
Excavator				85
Generator	84	78	81	82
Gradall		86		85
Grader	83		85	85
Hoe Ram		85		90
Impact Wrench			85	85
Jackhammer*		89	88	85
Loader	87	86	85	80
Paver	80		89	85
Pile Driver, Impact		101	101	95
Pile Driver, Sonic			96	95
Pump	80		85	77

## 8.4 Equipment Predicated Noise Emissions

Rock Drill			98	85
Roller			74	80
Scraper	89		89	85
Slurry Machine		91		82
Slurry Plant				78
Truck	89	85	88	84
Vacuum Excavator				85

\* There are 82 dBA @ 7 meter rated jackhammers (90 lb. class) available. This would be equivalent to 74 dBA @ 50 ft. These are silenced with molded intricate muffler tools.

#### Equipment Noise Control Options

Listed in Table 3 are the major sources of equipment noise that cause complaints. The Table also lists specific methods for controlling the identified noise problem.

Table 3. Construction Equipment Noise Control Options

Noise Source	Control
Backup alarms	Use manually-adjustable alarms
	Use self adjusting alarms
	Use an observer
	Configure traffic pattern to minimize backing movement
Slamming tailgates	Establish truck cleanout staging areas
	Use rubber gaskets
	Decrease speed of closure
	Use bottom dump trucks
Pavement breakers (jackhammers)	Fit with manufacturer approved exhaust muffler
	Prohibit within 200 ft. of a noise sensitive location during nighttime hours
	Enclose with a noise tent
Prolonged idling of equipment	Reduce idling
	Locate equipment away from noise sensitive areas

**Ambient-sensitive self-adjusting backup alarms** increase or decrease their volume based on background noise levels. These alarms work best on smaller equipment such as backhoes and trucks. The alarm self-adjusts to produce a tone that is readily noticeable over ambient noise levels (a minimum increment of 5 decibels is typically considered readily noticeable), but not so loud as to be a constant annoyance to neighbors. The typical alarm adjustment is 82 or 107 dBA. Close attention must be give to the alarm's mounting location on the machine in order to minimize engine noise interference, which can be sensed by the alarm as the ambient noise level. These alarms should be mounted as far to the rear of the machine as possible. An alarm mounted directly behind a machine's radiator will sense the cooling fan's noise and adjust accordingly, Figure 2. Such a mounting will **negate the purpose of the device.**

**Manually**-adjustable alarms are effective in reducing backup alarm noise nuisance but their use requires that each alarm be set at the beginning of each day and night shift. The manual setting feature eliminates the machine mounting location problem of the ambient-sensitive self-adjusting backup alarms. The manually adjustable alarms typically have an 87 and 107 dBA setting range, with the 87 dBA setting used for nighttime operations.

## Noise Mitigation

Of interest in terms of community noise impact is the overall noise resulting from a construction site. The noise of each individual piece of equipment and sometimes the highest noise source is not always the number one priority. Noise control is directed toward modification of a perceived sound field. It strives to change the impact at the receiver so that the sounds conform to a desired level. Mitigation of undesired sounds should consider source control, path control, and receptor control Figure 3.

Figure 2. A Self-Adjusting Backup Alarm Mounted in the Wrong Position

Figure 3. Noise Transfer Situation

*The Noise Transfer Situation shows the relation between sources, such as a pile driver, loader and truck, and their paths, groundborne vibration and direct sound (which includes a reverberant field) to the receiver. The relation is detailed below.*

*The Pile Driver creates a groundborne vibration path to the receiver. The loader and truck create a direct sound (reverberant field) path to the receiver.*

### Source Controls

Source control is the most effective method of eliminating noise problems. It is a cardinal rule that, where possible, noises control should occur at the source. Source controls, which limit noise emissions, are the easiest to oversee on a construction project. Source mitigation reduces the noise problem everywhere not just along a single path or for one receiver. Consequently, a project's noise mitigation strategy should emphasize noise control at the source.

### Require Construction Operations Planning

Restrict the movement of equipment into and through the construction site. Long-term impacts are generated along haul routes when there are large quantities of materials to be moved. Reroute truck traffic away from residential streets. Impose seasonal limitations on construction noise, the spring or fall are critical times in residential areas because windows are usually open at night.

### Example Specifications

*Where practical and feasible, construction sites shall be configured to minimize back-up alarm noise. For example, construction site access should be designed such that delivery trucks move through the site in a circular manner without the need to back up.*

### Require Modern Equipment

Unions recognize construction noise as a hazard to workers and the first of five things suggested to workers to address the problem is that they "Ask contractors to buy quieter equipment when they buy new equipment." DOT specification of equipment noise emission limits forces the use of modern equipment having better engine insulation and mufflers. The emission levels specified should reflect levels that can reasonably be achieved with well-maintained equipment, see Table 3.

### Equipment Restrictions

Restrict the type of equipment used.

### Example Specifications

*The use of impact pile drivers shall be prohibited during evening and nighttime hours.*

*All jackhammers and pavement breakers used on the construction site shall be fitted with manufacturer's approved exhaust mufflers.*

*The use of pneumatic impact equipment (i.e. pavement breakers, jackhammers) shall be prohibited within 200 feet of a noise-sensitive location during nighttime hours.*

*The local power grid shall be used wherever feasible to limit generator noise. No generators larger than 25 KVA shall be used and, where a generator is necessary, it shall have a maximum noise muffling capacity.*

Call the contractor's attention to the back-up alarm noise problem and require measures to address the issue.

By specification direct the use of only power grid connected or solar powered traffic control devices, Figure 4.

Example Specifications

*All variable message/sign boards shall be solar powered or connected to the local power grid.*

Figure 4. Solar Powered Traffic Control Devices

Operate at Minimum Power

Noise emission levels tend to increase with equipment operating power. This is a critical issue with older street sweepers, demolition work using a hoe-ram, and equipment such as vac-trucks, Figure 5. Require that such equipment operate at the lowest possible power levels.

Figure 5. vac-truck working at night

Use Quieter Alternate Equipment

Electric or hydraulic powered equipment is usually quieter than a diesel-powered machine. Encourage contractors to use alternate equipment. Use electric tower cranes, Fig. 6, instead of diesel power mobile cranes

Figure 6. Electric Tower Cranes for Bridge Construction

## **Path Controls**

Alone, source noise controls are frequently inadequate at adequately minimizing noise impacts on abutting sensitive receptors because of the close proximity to residences and businesses in urban areas and because of the very nature of the construction work. Thus, having exhausted all possible mitigation methods of controlling noise at the source, the second line of attack is controlling noise radiation along its transmission path. Noise path barriers should provide a substantial reduction in noise levels, should be cost effective, and should be implementable in a practical manner without limiting accessibility. Barriers can increase a project's visual impact. This visual change can have either a positive or negative impact. Therefore, aesthetic effects must be considered when designing barrier systems.

Path Mitigation Techniques

Once established, only reflection, diffraction insulation or dissipation can modify an airborne sound field. In other words, it is necessary to increase the distance from the source or to use some form of solid object to either destroy part of the sound energy by absorption, or to redirect part of the energy by wave deflection. The three techniques for path mitigation are therefore:

Distance

Reflection

Absorption

Enclose especially Noisy Activities or Stationary Equipment

Enclosures can provide a 10 to 20 dBA sound reduction. Additionally the visual impact of roadwork activities has an affect on how construction sounds are perceived. An important noise mitigation issue, therefore, is the audio-visual sensing factor. Enclosures address both the absolute audio and the visual perception issue, Figure 7.

Example Specifications

*All jackhammers and pavement breakers used at the construction site shall be enclosed with shields, acoustical barrier enclosures, or noise barriers.*

Figure 7. Slurry Plant Enclosure for Audio-Visual and Dust Control

## Conclusions

A significant number of future construction projects will involve urban work. Therefore, it is important that before contracts are advertised and bid that there be an objective assessment as to the magnitude of noise nuisances. Noise problems are normally caused by the operation of heavy equipment. The identification of methods and techniques for mitigating such nuisances is a critical planning requirement for both owners and contractors.

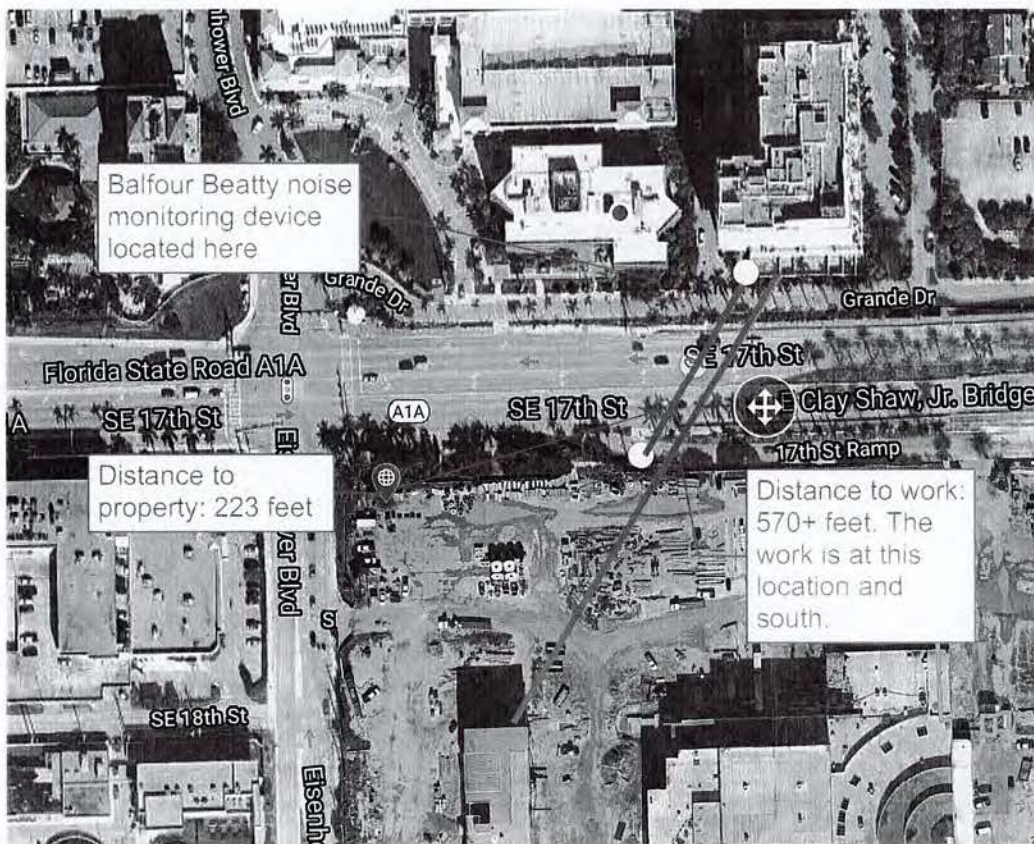
**Source control** is the most effective method of controlling construction noise. Source controls, which limit noise, are the easiest to oversee on a construction project. Mitigation at the source reduces the problem everywhere not just along one single path or for one receiver. The specification of equipment *noise emission limits* forces the use of modern equipment having better engine insulation and mufflers.

**Path Controls** are the second line of attack in controlling noise. Barriers can provide a substantial reduction in the nuisance effect in some cases. The use of barriers should be examined against other possible measures to prove that they are cost effective. Further, aesthetic effects must be considered when designing barrier systems. Path control measures include:

- Move equipment farther away from the receiver
- Enclose especially noisy activities or stationary equipment
- Erect noise barriers or curtains
- Use landscaping as a shield and dissipater



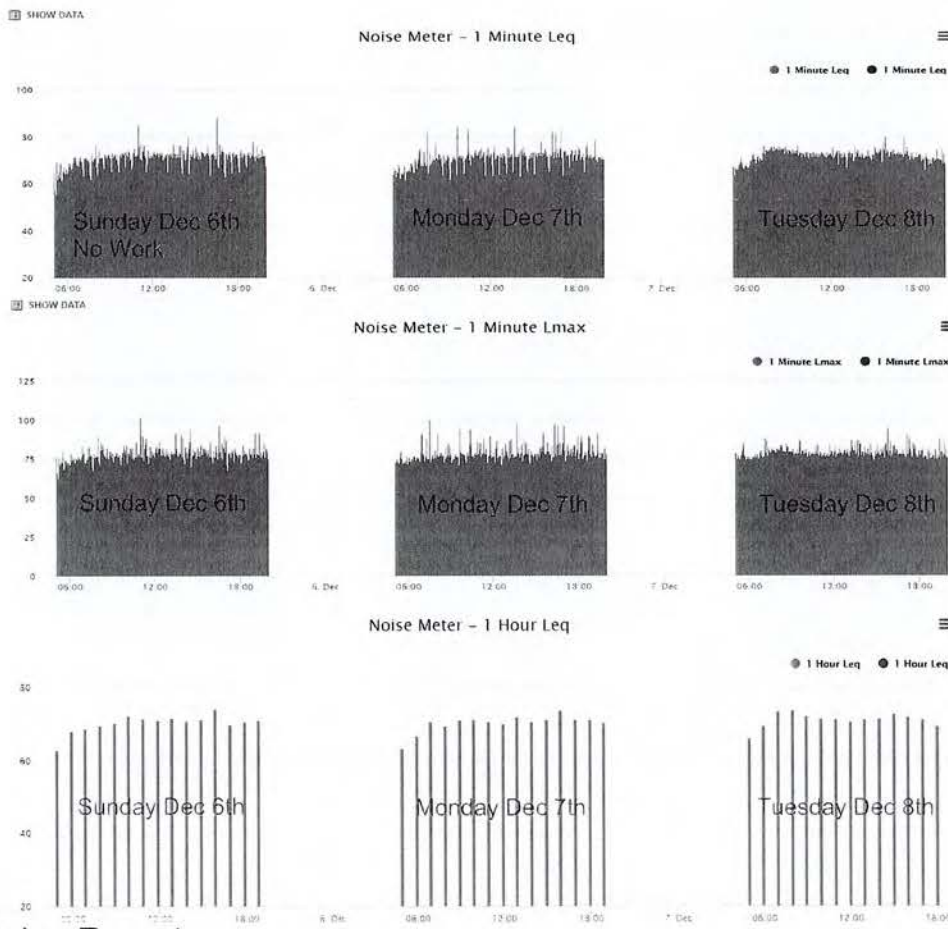
# BCCCH - Distance to Condo



8.5 Distance to Condo Map

**Balfour Beatty**

Start: 12/05/2020 12:00 AM End: 12/09/2020 11:59 PM **SEARCH** **EXPORT**

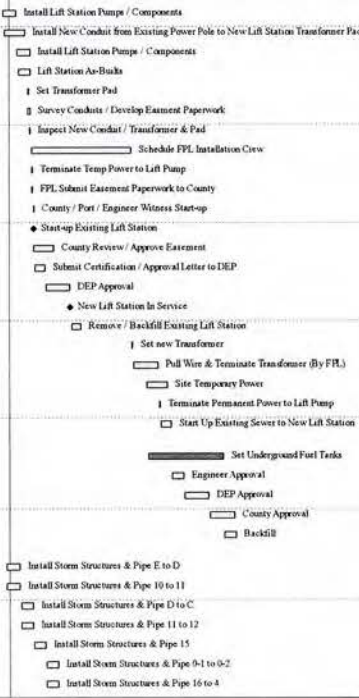


### 8.5 Noise Monitoring Report

# BCCCH - Civil Remaining Work in 2021

Date Date 20-Dec-20  
Print Date 09-Dec-20 14:28

Activity ID	Activity Name	Start	Finish	Orig Dur	Rem Dur	2021																				
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec								
<b>Broward County Convention Center - West Expansion</b>																										
<b>West Expansion</b>																										
GMP No. 1 - Warehouse Demo & Utility Re-Alignment																										
<b>Lift Station</b>																										
WE1-695	Install Lift Station Pumps / Components	28-Dec-20	04-Jan-21	5	5																					
WE1-785	Install New Conduit from Existing Power Pole to New Lift Station Transformer Pad	29-Dec-20	09-Jan-21	10	10																					
WE1-1085	Install Lift Station Pumps / Components	05-Jan-21	12-Jan-21	7	7																					
WE1-1760	Lift Station As-Built	06-Jan-21	12-Jan-21	5	5																					
WE1-875	Set Transformer Pad	11-Jan-21	11-Jan-21	1	1																					
WE1-1380	Survey Conduits / Develop Easement Paperwork	11-Jan-21	12-Jan-21	2	2																					
WE1-895	Inspect New Conduit / Transformer & Pad	12-Jan-21	12-Jan-21	1	1																					
WE1-905	Schedule FPL Installation Crew	13-Jan-21	09-Mar-21	40	40																					
WE1-1350	Terminate Temp Power to Lift Pump	13-Jan-21	13-Jan-21	1	1																					
WE1-1390	FPL Submit Easement Paperwork to County	13-Jan-21	13-Jan-21	1	1																					
WE1-1110	County / Port / Engineer Witness Start-up	14-Jan-21	14-Jan-21	1	1																					
WE1-1120	Start-up Existing Lift Station	14-Jan-21		0	0																					
WE1-1400	County Review / Approve Easement	14-Jan-21	25-Jan-21	10	10																					
WE1-1090	Submit Certification / Approval Letter to DEP	15-Jan-21	20-Jan-21	4	4																					
WE1-1100	DEP Approval	21-Jan-21	05-Feb-21	10	10																					
WE1-955	New Lift Station In Service		05-Feb-21	0	0																					
WE1-640	Remove / Backfill Existing Lift Station	04-Feb-21	09-Feb-21	5	5																					
WE1-790	Set new Transformer	10-Mar-21	10-Mar-21	1	1																					
WE1-915	Pull Wire & Terminate Transformer (By FPL)	11-Mar-21	24-Mar-21	10	10																					
WE1-955	Site Temporary Power	18-Mar-21	29-Mar-21	10	10																					
WE1-945	Terminate Permanent Power to Lift Pump	25-Mar-21	25-Mar-21	1	1																					
WE1-705	Start Up Existing Sewer to New Lift Station	26-Mar-21	31-Mar-21	5	5																					
<b>Sewer</b>																										
WE2-8770	Set Underground Fuel Tanks	19-Jan-21	29-Apr-21	30	30																					
WE1-1130	Engineer Approval	01-Apr-21	07-Apr-21	5	5																					
WE1-1140	DEP Approval	08-Apr-21	21-Apr-21	10	10																					
WE1-1150	County Approval	22-Apr-21	05-May-21	10	10																					
WE2-8810	Backfill	30-Apr-21	06-May-21	5	5																					
<b>Storm</b>																										
WE1-855	Install Storm Structures & Pipe E to D	30-Dec-20	06-Jan-21	5	5																					
WE1-1420	Install Storm Structures & Pipe 10 to 11	30-Dec-20	06-Jan-21	5	5																					
WE1-845	Install Storm Structures & Pipe D to C	07-Jan-21	13-Jan-21	5	5																					
WE1-970	Install Storm Structures & Pipe 11 to 12	07-Jan-21	13-Jan-21	5	5																					
WE1-940	Install Storm Structures & Pipe 15	14-Jan-21	20-Jan-21	5	5																					
WE1-920	Install Storm Structures & Pipe 0-1 to 0-2	21-Jan-21	27-Jan-21	5	5																					
WE1-950	Install Storm Structures & Pipe 16 to 4	21-Jan-21	27-Jan-21	5	5																					



Remaining Level of Effort  
 Actual Level of Effort  
 Actual Work  
 Remaining Work  
 Critical Remaining Work  
 Milestone



# BCCCH - Civil Remaining Work in 2021

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Activity ID	Activity Name	Start	Finish	Orig. Dur.	Rem. Dur.	2021																		
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec						
WEI-950	Install Storm Structures & Pipe 14 to 13	28-Jan-21	03-Feb-21	5	5																			
WEI-951	Install Storm Structures & Pipe W-1 to I	25-Feb-21	03-Mar-21	5	5																			
WEI-1060	Install Trench Drains and R-Tanks Outside Area B	04-Mar-21	24-Mar-21	15	15																			
WEI-1070	Install Trench Drains and R-Tanks Outside Area C	25-Mar-21	14-Apr-21	15	15																			
WEI-1080	Install Trench Drains and R-Tanks Outside Area D	15-Apr-21	05-May-21	15	15																			
WEI-1160	Engineering Approval / Drainage	06-May-21	03-Jun-21	20	20																			
WEI-1170	County Inspections / Approval / Drainage	04-Jun-21	01-Jul-21	20	20																			
<b>Domestic Water</b>																								
WEI-870	Install 10" Water Main @ South End in to Lift Station	18-Jan-21	22-Jan-21	5	5																			
WEI-700	Flush / Chlorinate / Bas Testing	19-Jan-21	25-Jan-21	5	5																			
WEI-840	Engineer Approval for Lift Station Water	26-Jan-21	01-Feb-21	5	5																			
WEI-850	DEP Approval for Lift Station Water	02-Feb-21	01-Mar-21	20	20																			
WEI-860	County Approval for Lift Station Water	02-Mar-21	15-Mar-21	10	10																			
WEI-1190	Install 10" Water Main Lift Station to 1st Fire Hydrant	16-Mar-21	20-Mar-21	10	10																			
WEI-1200	Install 10" Water Main 1st to 2nd Fire Hydrant	30-Mar-21	12-Apr-21	10	10																			
WEI-1210	Install 10" Water Main 2nd to 3rd Fire Hydrant	13-Apr-21	26-Apr-21	10	10																			
WEI-1220	Install 10" Water Main 3rd Fire Hydrant to Hotel Meter Vault	27-Apr-21	10-May-21	10	10																			
WEI-1230	Install Water / Fire Stubs for Hotel	11-May-21	24-May-21	10	10																			
WEI-1240	Flush / Chlorinate / Bas Testing	25-May-21	08-Jun-21	10	10																			
WEI-1250	Engineering Approval - Domestic Water	09-Jun-21	15-Jun-21	5	5																			
WEI-1260	DEP Approval - Domestic Water	16-Jun-21	14-Jul-21	30	30																			
WEI-1270	County Approval - Domestic Water	15-Jul-21	28-Jul-21	10	10																			
<b>20th Street</b>																								
<b>Sewer</b>																								
WEI-1095	Backfill Force Main	31-Dec-20	02-Jan-21	2	2																			
WEI-1105	Pressure Test Force Main	31-Dec-20	02-Jan-21	2	2																			
<b>Storm</b>																								
WEI-900	Install Storm Structures & Pipe 0-4 to 0-3 (20th Street)	30-Dec-20	13-Jan-21	10	10																			
WEI-910	Install Storm Structures & Pipe 0-3 to 0-2 (20th Street)	14-Jan-21	20-Jan-21	5	5																			
WEI-885	Install Storm Structures & Pipe W-3 to W-4 (20th Street)	21-Jan-21	04-Feb-21	10	10																			
WEI-950	Install Storm Structures & Pipe W-3 to W-2 (20th Street)	04-Feb-21	17-Feb-21	10	10																			
WEI-660	Install Storm Structures & Pipe W-2 to W-1 (20th Street)	18-Feb-21	24-Feb-21	5	5																			
<b>Domestic Water</b>																								
WEI-680	Cut in Ex. 10" @ South End (20th Street)	04-Jan-21	08-Jan-21	5	5																			
WEI-670	Install Water/Fire supply/Meter Vault West Convention (20th Street)	04-Jan-21	09-Jan-21	6	6																			
WEI-690	Install 10" Water Main @ South End in Street (20th Street)	11-Jan-21	15-Jan-21	5	5																			
<b>Gas</b>																								
WEI-800	New Gas Line	26-Jan-21	22-Feb-21	20	20																			



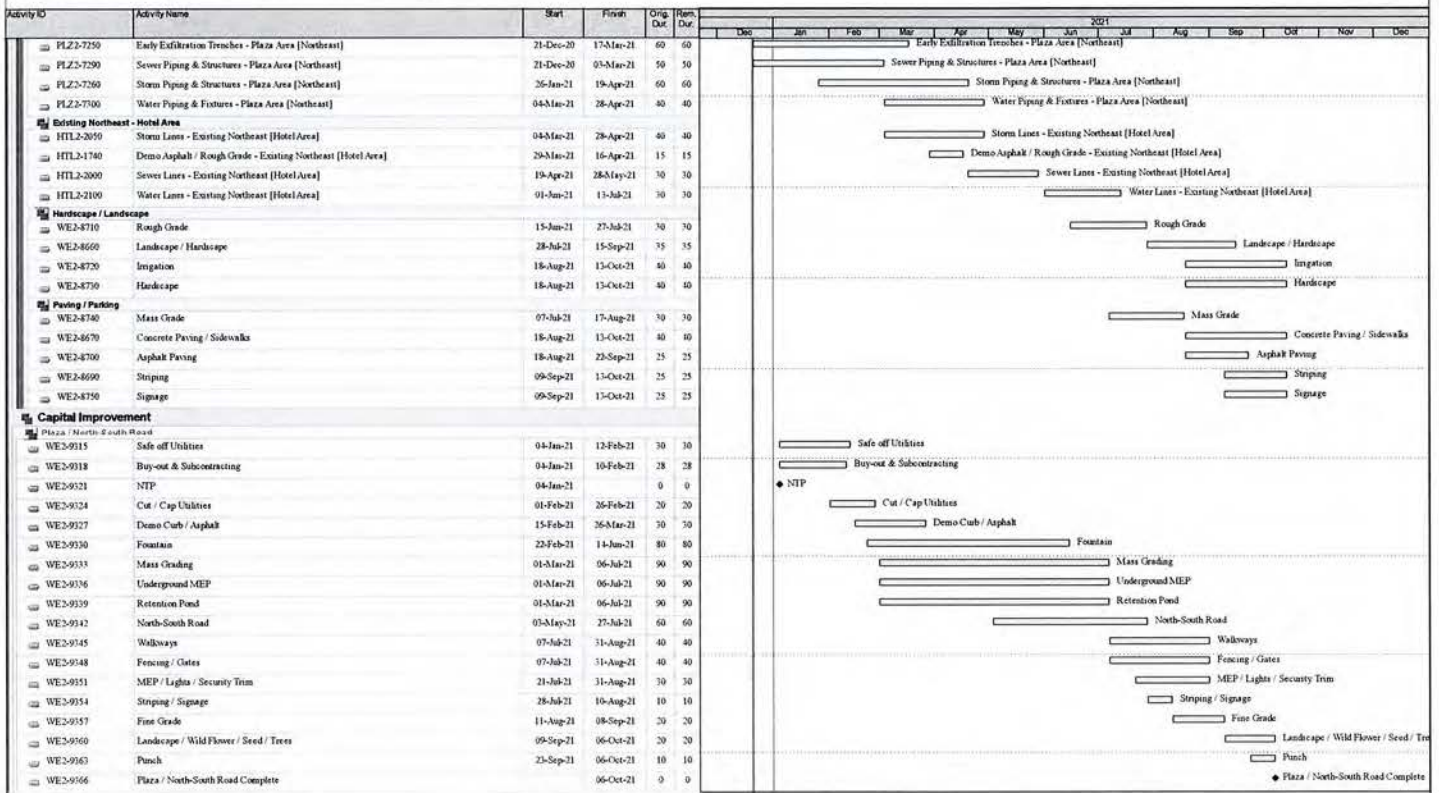
Remaining Level of Effort
  Remaining Work

Actual Level of Effort
  Critical Remaining Work

Actual Work
  Milestone

# BCCCH - Civil Remaining Work in 2021

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Remaining Level of Effort    
  Remaining Work  
 Actual Level of Effort    
  Critical Remaining Work  
 Actual Work    
 ◆ Milestone



# BCCCH - Concrete Remaining Work in 2021

Date Date: 20-Dec-20  
Print Date: 09-Dec-20 14:19

Activity ID	Activity Name	Start	Finish	Orig. Dur.	Rem. Dur.	2021											
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
<b>Broward County Convention Center - West Expansion</b>																	
<b>West Expansion</b>																	
West Expansion Construction Milestones																	
PM-680	CEP Slab Placed		05-Jan-21	0	0	◆ CEP Slab Placed											
PM-610	Start SOG Activities	03-Feb-21		0	0	◆ Start SOG Activities											
<b>GMP No. 2 - West Expansion</b>																	
<b>Construction - West West</b>																	
<b>Area A - Grid Lines WK, WJ, WI</b>																	
<b>W19 - W15</b>																	
Ground Level																	
WE2-7173	Form SOG - Area A Grid Lines W19 - W15 / WK - WJ [Ground Level]	10-Feb-21	16-Feb-21	5	5	□ Form SOG - Area A Grid Lines W19 - W15 / WK - WJ [Ground Level]											
WE2-7175	Place Rebar for SOG - Area A Grid Lines W19 - W15 / WK - WJ [Ground Level]	17-Feb-21	23-Feb-21	5	5	□ Place Rebar for SOG - Area A Grid Lines W19 - W15 / WK - WJ [Ground Level]											
WE2-7177	Pour SOG - Area A Grid Lines W19 - W15 / WK - WJ [Ground Level]	24-Feb-21	24-Feb-21	1	1	┆ Pour SOG - Area A Grid Lines W19 - W15 / WK - WJ [Ground Level]											
<b>W15 - W11</b>																	
Ground Level																	
WE2-7185	Form SOG - Area A Grid Lines W14 - W11 / WK - WJ [Ground Level]	10-Feb-21	16-Feb-21	5	5	□ Form SOG - Area A Grid Lines W14 - W11 / WK - WJ [Ground Level]											
WE2-7187	Place Rebar for SOG - Area A Grid Lines W14 - W11 / WK - WJ [Ground Level]	17-Feb-21	23-Feb-21	5	5	□ Place Rebar for SOG - Area A Grid Lines W14 - W11 / WK - WJ [Ground Level]											
WE2-7189	Pour SOG - Area A Grid Lines W14 - W11 / WK - WJ [Ground Level]	24-Feb-21	24-Feb-21	1	1	┆ Pour SOG - Area A Grid Lines W14 - W11 / WK - WJ [Ground Level]											
<b>Area B - Grid Lines WK, WJ, WI</b>																	
<b>W11 - W10</b>																	
Ground Level																	
WE2-7207	Form SOG - Area B Grid Lines W11 - W10 / WK - WJ [Ground Level]	15-Feb-21	17-Feb-21	3	3	□ Form SOG - Area B Grid Lines W11 - W10 / WK - WJ [Ground Level]											
WE2-7209	Place Rebar for SOG - Area B Grid Lines W11 - W10 / WK - WJ [Ground Level]	18-Feb-21	22-Feb-21	3	3	□ Place Rebar for SOG - Area B Grid Lines W11 - W10 / WK - WJ [Ground Level]											
WE2-7211	Pour SOG - Area B Grid Lines W11 - W10 / WK - WJ [Ground Level]	24-Feb-21	24-Feb-21	1	1	┆ Pour SOG - Area B Grid Lines W11 - W10 / WK - WJ [Ground Level]											
<b>W10 - W9</b>																	
Ground Level																	
WE2-7223	Form SOG - Area B Grid Lines W10 - W9 / WK - WJ [Ground Level]	15-Feb-21	17-Feb-21	3	3	□ Form SOG - Area B Grid Lines W10 - W9 / WK - WJ [Ground Level]											
WE2-7225	Place Rebar for SOG - Area B Grid Lines W10 - W9 / WK - WJ [Ground Level]	18-Feb-21	22-Feb-21	3	3	□ Place Rebar for SOG - Area B Grid Lines W10 - W9 / WK - WJ [Ground Level]											
WE2-7227	Pour SOG - Area B Grid Lines W10 - W9 / WK - WJ [Ground Level]	25-Feb-21	25-Feb-21	1	1	┆ Pour SOG - Area B Grid Lines W10 - W9 / WK - WJ [Ground Level]											
<b>W9 - W8.6</b>																	
Ground Level																	
WE2-7239	Form SOG - Area B Grid Lines W9 - W8.6 / WK - WJ [Ground Level]	15-Feb-21	17-Feb-21	3	3	□ Form SOG - Area B Grid Lines W9 - W8.6 / WK - WJ [Ground Level]											
WE2-7241	Place Rebar for SOG - Area B Grid Lines W9 - W8.6 / WK - WJ [Ground Level]	18-Feb-21	22-Feb-21	3	3	□ Place Rebar for SOG - Area B Grid Lines W9 - W8.6 / WK - WJ [Ground Level]											



Remaining Level of Effort    
  Remaining Work  
 Actual Level of Effort    
  Critical Remaining Work  
 Actual Work    
 ◆ Milestone



# BCCCH - Concrete Remaining Work in 2021

Date Date: 20-Dec-20  
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Activity ID	Activity Name	Start	Finish	Orig. Dur.	Rem. Dur.	2021																	
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec					
<b>Low Roof</b>																							
WE2-14162	Lightweight - Area D Grid Line W4 - W2.8 [Roof]	24-Feb-21	24-Feb-21	1	1																		
WE2-14172	Fireproofing - Area D Grid Line W4 - W2.8 [Roof]	25-Feb-21	03-Mar-21	5	5																		
<b>Construction</b>																							
<b>Foundation</b>																							
<b>Existing Area (E+P+O+H) - Grid Lines W0 - WF</b>																							
Area H - W0 - WF																							
WE2-41171	FRP Shear Wall 6th Lvl - Area H	05-Jan-21	09-Jan-21	5	5																		
<b>Concrete</b>																							
<b>Existing Area (E+P+O+H) - Grid Lines W0 - WF</b>																							
Area F - W0 - WF																							
W11 - W10																							
<b>Level 3</b>																							
WE2-48921	Place Rebar on Deck - Area F Grid Line W11 - W10 [Level 3]	06-Jan-21	12-Jan-21	5	5																		
WE2-48311	Pour Deck - Area F Grid Line W11 - W10 [Level 3]	23-Jan-21	23-Jan-21	1	1																		
<b>W10 - W9</b>																							
<b>Level 3</b>																							
WE2-48941	Frame Deck - Area F Grid Line W10 - W9 [Level 3]	12-Jan-21	18-Jan-21	5	5																		
WE2-48951	Place Rebar on Deck - Area F Grid Line W10 - W9 [Level 3]	15-Jan-21	21-Jan-21	5	5																		
WE2-48351	Pour Deck - Area F Grid Line W10 - W9 [Level 3]	23-Jan-21	23-Jan-21	1	1																		
<b>Area G - W0 - WF</b>																							
<b>Level 3</b>																							
WE2-49121	Frame Deck - Area G Grid Line W8.6 - W8 [Level 3]	21-Jan-21	23-Jan-21	5	5																		
WE2-49131	Place Rebar on Deck - Area G Grid Line W8.6 - W8 [Level 3]	26-Jan-21	01-Feb-21	5	5																		
WE2-48331	Pour Deck - Area G Grid Line W8.6 - W8 [Level 3]	15-Feb-21	15-Feb-21	1	1																		
<b>W8 - W6</b>																							
<b>Level 3</b>																							
WE2-49151	Frame Deck - Area G Grid Line W8 - W6 [Level 3]	02-Feb-21	08-Feb-21	5	5																		
WE2-49161	Place Rebar on Deck - Area G Grid Line W8 - W6 [Level 3]	08-Feb-21	12-Feb-21	5	5																		
WE2-48371	Pour Deck - Area G Grid Line W8 - W6 [Level 3]	15-Feb-21	15-Feb-21	1	1																		
<b>W6 - W5</b>																							
<b>Level 3</b>																							
WE2-49181	Frame Deck - Area G Grid Line W6 - W5 [Level 3]	17-Feb-21	23-Feb-21	5	5																		
WE2-49191	Place Rebar on Deck - Area G Grid Line W6 - W5 [Level 3]	23-Feb-21	26-Feb-21	5	5																		



- ▬ Remaining Level of Effort
- ▬ Actual Level of Effort
- ▬ Actual Work
- ▬ Remaining Work
- ▬ Critical Remaining Work
- ◆ Milestone

# BCCCH - Concrete Remaining Work in 2021

Date Date: 20-Dec-20  
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Activity ID	Activity Name	Start	Finish	Orig. Dur.	Rem. Dur.	2021														
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
WE2-48611	Pour Deck - Area G Grid Line W6 - W5 [Level 3]	25-Mar-21	25-Mar-21	1	1															
<b>Area M - W0 - W6</b>																				
<b>W5 - W4</b>																				
<b>Level 3</b>																				
WE2-49211	Frame Deck - Area H Grid Line W5 - W4 [Level 3]	04-Mar-21	10-Mar-21	5	5															
WE2-49221	Place Rebar on Deck - Area H Grid Line W5 - W4 [Level 3]	09-Mar-21	15-Mar-21	5	5															
WE2-48651	Pour Deck - Area H Grid Line W5 - W4 [Level 3]	25-Mar-21	25-Mar-21	1	1															
<b>W4 - W2.8</b>																				
<b>Level 3</b>																				
WE2-49241	Frame Deck - Area H Grid Line W4 - W2.8 [Level 3]	15-Mar-21	19-Mar-21	5	5															
WE2-49251	Place Rebar on Deck - Area H Grid Line W4 - W2.8 [Level 3]	18-Mar-21	24-Mar-21	5	5															
WE2-48691	Pour Deck - Area H Grid Line W4 - W2.8 [Level 3]	25-Mar-21	25-Mar-21	1	1															
<b>Exhibition Hall - Long Span</b>																				
<b>Area A - W0 - W11</b>																				
<b>W17 - W15</b>																				
<b>Level 3</b>																				
WE2-47323	Place Rebar Deck - Long Span Area A Grid Lines W17 - W15 [Level 3]	04-Jan-21	06-Jan-21	3	3															
WE2-47327	Pour Deck - Long Span Area A Grid Lines W17 - W15 [Level 3]	07-Jan-21	07-Jan-21	1	1															
<b>W15 - W11</b>																				
<b>Level 3</b>																				
WE2-4520	Pour Deck - Long Span Area A Grid Lines W15 - W11 [Level 3]	05-Jan-21	05-Jan-21	1	1															
WE2-4523	Form / Pour Floating Slab - Long Span Area A Grid Lines W15.5 - W14 [Level 3]	07-Jan-21	12-Jan-21	5	5															
WE2-4530	Cure Deck - Long Span Area A Grid Lines W15 - W11 [Level 3]	13-Jan-21	18-Jan-21	6	6															
WE2-4531	Seal Deck - Long Span Area A Grid Lines W15 - W11 [Level 3]	19-Jan-21	19-Jan-21	1	1															
<b>Area B - W0 - W11</b>																				
<b>W11 - W10</b>																				
<b>Level 3 / Roof</b>																				
WE2-48861	Place Rebar Deck - Long Span Area B Grid Line W11 - W10 [Level 3 / Roof]	28-Jan-21	03-Feb-21	5	5															
WE2-48851	Frame Deck - Long Span Area B Grid Line W11 - W10 [Level 3 / Roof]	29-Jan-21	02-Feb-21	3	3															
WE2-4660	Pour Deck - Long Span Area B Grid Line W11 - W10 [Level 3 / Roof]	04-Feb-21	04-Feb-21	1	1															
<b>W10 - W9</b>																				
<b>Level 3 / Roof</b>																				
WE2-48891	Place Rebar Deck - Long Span Area B Grid Line W10 - W9 [Level 3 / Roof]	18-Jan-21	22-Jan-21	5	5															
WE2-48881	Frame Deck - Long Span Area B Grid Line W10 - W9 [Level 3 / Roof]	20-Jan-21	22-Jan-21	3	3															



Remaining Level of Effort    
  Remaining Work  
 Actual Level of Effort    
  Critical Remaining Work  
 Actual Work    
  Milestone



# BCCCH - Concrete Remaining Work in 2021

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Activity ID	Activity Name	Start	Finish	Orig. Dur.	Rem. Dur.	2021											
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
WE2-42881	Pour Deck - Long Span Area B Grid Line W10 - W9 [Level 3 / Roof]	25-Jan-21	25-Jan-21	1	1	1 Pour Deck - Long Span Area B Grid Line W10 - W9 [Level 3 / Roof]											
<b>Area C - W8 - W4</b>																	
<b>W8 - W8</b>																	
<b>Level 3 (Roof)</b>																	
WE2-49941	Place Rebar Deck - Long Span Area C Grid Lines W8.6 - W8 [Level 3 / Roof]	29-Jan-21	04-Feb-21	5	5	Place Rebar Deck - Long Span Area C Grid Lines W8.6 - W8 [Level 3 / Roof]											
WE2-49051	Frame Deck - Long Span Area C Grid Lines W8.6 - W8 [Level 3 / Roof]	02-Feb-21	08-Feb-21	5	5	Frame Deck - Long Span Area C Grid Lines W8.6 - W8 [Level 3 / Roof]											
WE2-4680	Pour Deck - Long Span Area C Grid Lines W8.6 - W8 [Level 3 / Roof]	09-Feb-21	09-Feb-21	1	1	1 Pour Deck - Long Span Area C Grid Lines W8.6 - W8 [Level 3 / Roof]											
<b>W8 - W6</b>																	
<b>Level 3 (Roof)</b>																	
WE2-49071	Place Rebar Deck - Long Span Area C Grid Lines W8 - W6 [Level 3 / Roof]	17-Feb-21	23-Feb-21	5	5	Place Rebar Deck - Long Span Area C Grid Lines W8 - W6 [Level 3 / Roof]											
WE2-49061	Frame Deck - Long Span Area C Grid Lines W8 - W6 [Level 3 / Roof]	19-Feb-21	25-Feb-21	5	5	Frame Deck - Long Span Area C Grid Lines W8 - W6 [Level 3 / Roof]											
WE2-42941	Pour Deck - Long Span Area C Grid Lines W8 - W6 [Level 3 / Roof]	11-Mar-21	11-Mar-21	1	1	1 Pour Deck - Long Span Area C Grid Lines W8 - W6 [Level 3 / Roof]											
<b>W8 - W5</b>																	
<b>Level 3 (Roof)</b>																	
WE2-49101	Place Rebar Deck - Long Span Area C Grid Lines W6 - W5 [Level 3 / Roof]	02-Mar-21	08-Mar-21	5	5	Place Rebar Deck - Long Span Area C Grid Lines W6 - W5 [Level 3 / Roof]											
WE2-49091	Frame Deck - Long Span Area C Grid Lines W6 - W5 [Level 3 / Roof]	04-Mar-21	10-Mar-21	5	5	Frame Deck - Long Span Area C Grid Lines W6 - W5 [Level 3 / Roof]											
WE2-42971	Pour Deck - Long Span Area C Grid Lines W6 - W5 [Level 3 / Roof]	11-Mar-21	11-Mar-21	1	1	1 Pour Deck - Long Span Area C Grid Lines W6 - W5 [Level 3 / Roof]											
<b>Area D - W5 - W4</b>																	
<b>W5 - W4</b>																	
<b>Level 3 (Roof)</b>																	
WE2-49271	Frame Deck - Long Span Area D Grid Line W5 - W4 [Level 3 / Roof]	12-Mar-21	18-Mar-21	5	5	Frame Deck - Long Span Area D Grid Line W5 - W4 [Level 3 / Roof]											
WE2-49281	Place Rebar Deck - Long Span Area D Grid Line W5 - W4 [Level 3 / Roof]	17-Mar-21	23-Mar-21	5	5	Place Rebar Deck - Long Span Area D Grid Line W5 - W4 [Level 3 / Roof]											
WE2-4780	Pour Deck D - Long Span Area D Grid Line W5 - W4 [Level 3 / Roof]	24-Mar-21	24-Mar-21	1	1	1 Pour Deck D - Long Span Area D Grid Line W5 - W4 [Level 3 / Roof]											
<b>W4 - W2.8</b>																	
<b>Level 3</b>																	
WE2-49301	Frame Deck - Long Span Area D Grid Line W4 - W2.8 [Level 3]	29-Apr-21	05-May-21	5	5	Frame Deck - Long Span Area D Grid Line W4 - W2.8 [Level 3]											
WE2-49311	Place Rebar Deck - Long Span Area D Grid Line W4 - W2.8 [Level 3]	04-May-21	10-May-21	5	5	Place Rebar Deck - Long Span Area D Grid Line W4 - W2.8 [Level 3]											
WE2-4840	Pour Deck - Long Span Area D Grid Line W4 - W2.8 [Level 3]	11-May-21	11-May-21	1	1	1 Pour Deck - Long Span Area D Grid Line W4 - W2.8 [Level 3]											
<b>New Loading Dock</b>																	
<b>Area A</b>																	
WE2-46791	FRP SOG - Area A New Loading Dock	19-Jan-21	21-Jan-21	3	3	FRP SOG - Area A New Loading Dock											
<b>Area B</b>																	
WE2-47311	FRP SOG - Area B New Loading Dock	22-Jan-21	26-Jan-21	3	3	FRP SOG - Area B New Loading Dock											
<b>Area C</b>																	

# BCCCH - Concrete Remaining Work in 2021

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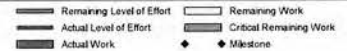
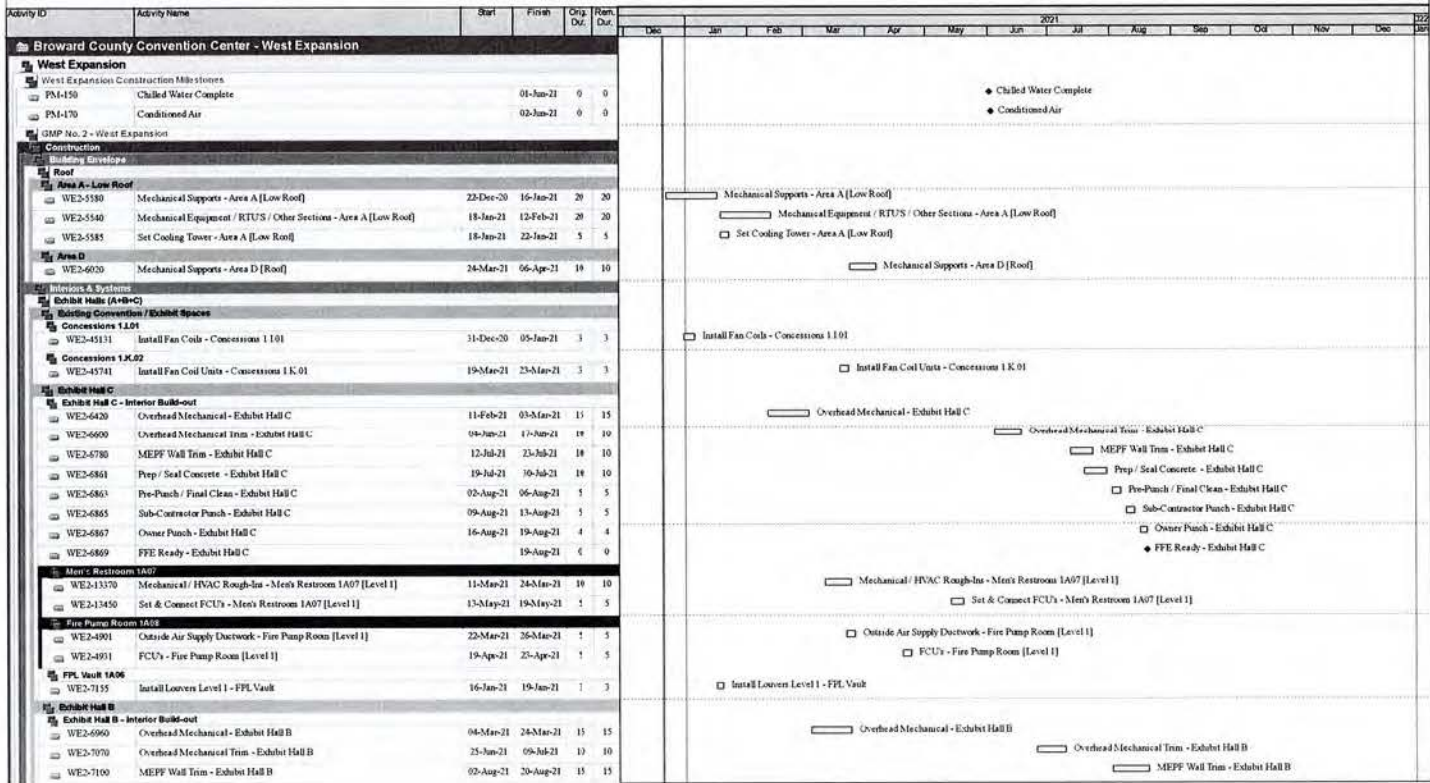
Activity ID	Activity Name	Start	Finish	Orig. Dur.	Rem. Dur.	2021													
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
WE2-47471	FRP SOG - Area C New Loading Dock	27-Jan-21	29-Jan-21	3	3														
<b>Area D</b>																			
WE2-47631	FRP SOG - Area D New Loading Dock	01-Feb-21	03-Feb-21	3	3														
<b>Interior Systems</b>																			
<b>Exhibit Hall (A+B+C)</b>																			
<b>Existing Concession / Exhibit Space</b>																			
<b>Concessions 1 K.01</b>																			
WE2-45281	FRP-1 Walls - Concessions 1 K.01	08-Jan-21	13-Jan-21	4	4														
<b>Concessions 1 K.02</b>																			
WE2-45901	FRP-1 - Concessions 1 K.01	08-Apr-21	13-Apr-21	4	4														
<b>Exhibit Hall C</b>																			
<b>Exhibit Hall C - Underground &amp; SOG</b>																			
WE2-43341	FRP SOG - Exhibit Hall C	06-May-21	26-May-21	15	15														
<b>Exhibit Hall C - Interior Build-out</b>																			
<b>Fire Pump Room 1A06</b>																			
WE2-4811	FRP Hourkeeping Pads - Fire Pump Room [Level 1]	15-Feb-21	15-Feb-21	5	5														
<b>FPL Vault 1A06</b>																			
WE2-7627	Pour Ramp - FPL Vault Ramp	06-Jan-21	06-Jan-21	1	1														
WE2-7359	Form Slab - FPL Vault	07-Jan-21	08-Jan-21	2	2														
WE2-7361	Place Rebar - FPL Vault	09-Jan-21	14-Jan-21	5	5														
WE2-7363	Pour Slab - FPL Vault	15-Jan-21	15-Jan-21	1	1														
<b>Exhibit Hall B</b>																			
<b>Exhibit Hall B - Underground &amp; SOG</b>																			
WE2-7385	FRP SOG - Exhibit Hall B	27-May-21	17-Jun-21	15	15														
<b>Exhibit Hall A</b>																			
<b>Exhibit Hall A - Underground &amp; SOG</b>																			
WE2-7407	FRP SOG - Exhibit Hall A	18-Jun-21	09-Jul-21	15	15														
<b>CEP</b>																			
<b>Generator Room (3A,70)</b>																			
WE2-5255	FRP Hourkeeping Pads - Generator Room	04-Jan-21	05-Jan-21	2	2														
<b>Switchgear Room (3A,09) (3A,10) (3A,11)</b>																			
WE2-5429	Layout Hourkeeping Pads - Switchgear Room	12-Jan-21	18-Jan-21	5	5														
WE2-5445	FRP Hourkeeping Pads - Switchgear Room	26-Jan-21	01-Feb-21	5	5														
<b>Chiller Room</b>																			
WE2-5135	Layout / FRP Hourkeeping Pads - Chiller Room	04-Feb-21	09-Feb-21	5	5														



Remaining Level of Effort
  Remaining Work  
 Actual Level of Effort
  Critical Remaining Work  
 Actual Work
  Milestone

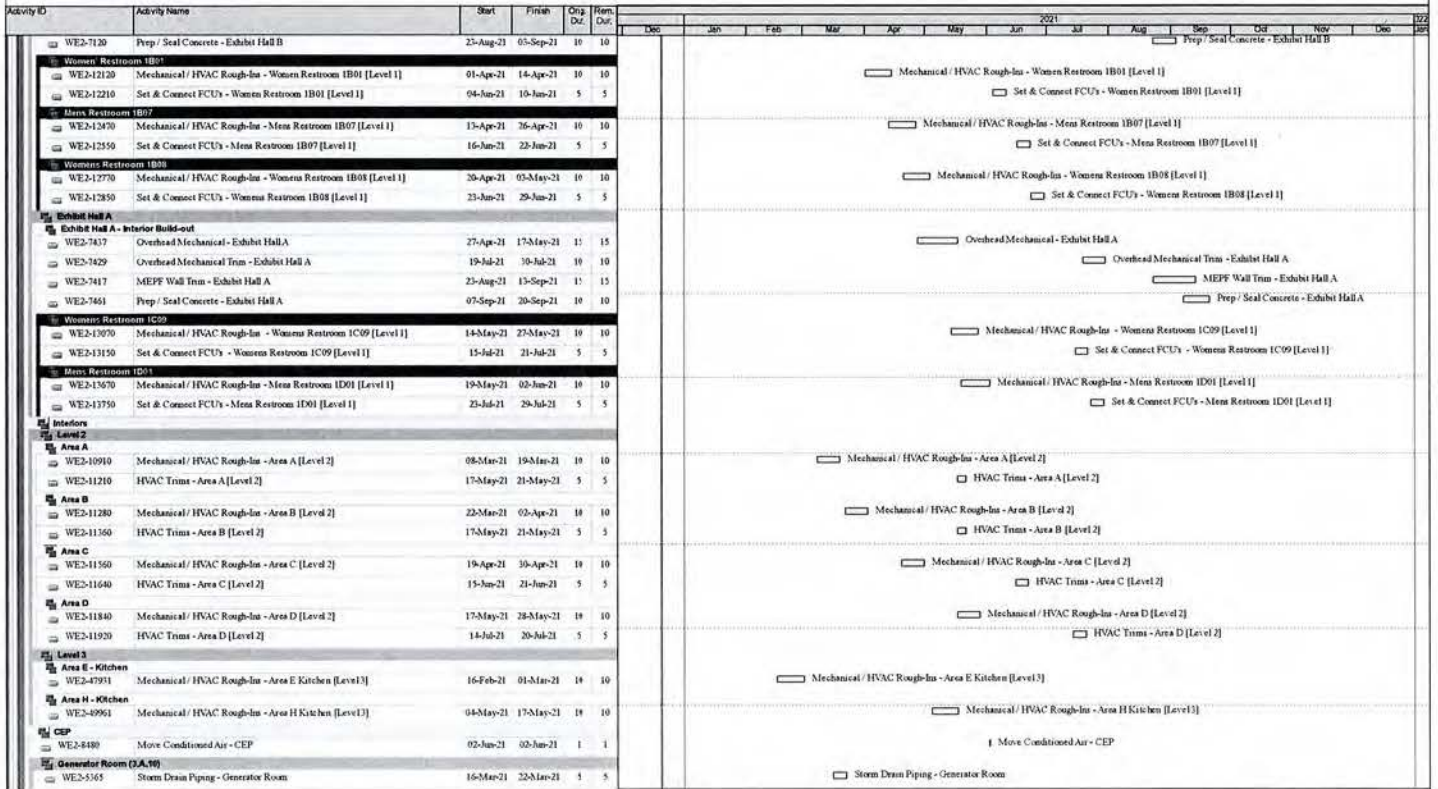
# BCCCH - Mechanical 2021 Work

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# BCCCH - Mechanical 2021 Work

Date Date: 20-Dec-20  
Print Date: 09-Dec-20 17:21



Remaining Level of Effort  
 Actual Level of Effort  
 Actual Work  
 Remaining Work  
 Critical Remaining Work  
 Milestone



# BCCCH - Mechanical 2021 Work

Date Date: 20-Dec-20  
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Activity ID	Activity Name	Start	Finish	Orig. Dur.	Rem. Dur.	2021												
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
WE2-5355	Outside Air Supply Ductwork - Generator Room	18-Mar-21	24-Mar-21	5	5													
WE2-5415	Chilled Water Lines & FCUs - Generator Room	30-Apr-21	05-May-21	5	5													
<b>Chiller Room</b>																		
WE2-5045	Hang CW / CHW Headers - Chiller Room	04-Feb-21	26-Feb-21	20	20													
WE2-5155	Set Chillers - Pumps / Expansion Tank - Chiller Room	27-Feb-21	04-Mar-21	5	5													
WE2-5165	Tie UP Chillers & Pumps, CHW, & CW - Chiller Room	05-Mar-21	22-Mar-21	15	15													
WE2-5145	Install Chem Treatment Open & Closed Loop - Chiller Room	05-Mar-21	10-Mar-21	5	5													
WE2-5623	Set Condensate Collection System - Chiller Room	25-Mar-21	02-Apr-21	10	10													
WE2-5075	Rough-in Domestic Water / Rain Water - Chiller Room	03-Apr-21	14-Apr-21	10	10													
WE2-5115	Install Ductwork - Chiller Room	03-Apr-21	14-Apr-21	10	10													
WE2-5175	Test CHW & CW - Chiller Room	03-Apr-21	08-Apr-21	5	5													
WE2-5185	Insulate Overhead Pipe - Chiller Room	09-Apr-21	26-Apr-21	15	15													
WE2-5195	Mount & Pipe VFD's Pipe Chiller Drive - Chiller Room	09-Apr-21	26-Apr-21	15	15													
WE2-7465	Insulate Ductwork - Chiller Room	15-Apr-21	26-Apr-21	10	10													
WE2-5205	Insulate Pump Volutes Chiller Head Drops to Chillers & Pump - Chiller Room	27-Apr-21	15-May-21	15	15													



Remaining Level of Effort      Remaining Work  
 Actual Level of Effort      Critical Remaining Work  
 Actual Work      Milestone

# BCCCH - Fire Protection Remaining Work in 2021

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Activity ID	Activity Name	Start	Finish	Orig. Dur.	Rem. Dur.	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Broward County Convention Center - West Expansion</b>																		
<b>West Expansion</b>																		
GMP No. 2 - West Expansion																		
<b>Construction</b>																		
<b>Interiors &amp; Systems</b>																		
<b>Exhibit Hall C (A+B+C)</b>																		
<b>Exhibit Hall C - Interior Build-out</b>																		
WE2-6440	Overhead Fire Sprinkler - Exhibit Hall C	11-Mar-21	24-Mar-21	10	10													
<input type="checkbox"/> Overhead Fire Sprinkler - Exhibit Hall C																		
<b>Men's Restroom 1A07</b>																		
WE2-13359	Fire Sprinkler Rough-In - Men's Restroom 1A07 [Level 1]	25-Feb-21	10-Mar-21	10	10													
<input type="checkbox"/> Fire Sprinkler Rough-In - Men's Restroom 1A07 [Level 1]																		
WE2-13580	Fire Sprinkler Trim - Men's Restroom 1A07 [Level 1]	11-Jun-21	17-Jun-21	5	5													
<input type="checkbox"/> Fire Sprinkler Trim - Men's Restroom 1A07 [Level 1]																		
<b>Fire Pump Room 1A08</b>																		
WE2-4941	Set Fire Pump - Fire Pump Room [Level 1]	22-Feb-21	26-Feb-21	5	5													
<input type="checkbox"/> Set Fire Pump - Fire Pump Room [Level 1]																		
WE2-4902	Set Jockey Pump - Fire Pump Room [Level 1]	01-Mar-21	05-Mar-21	5	5													
<input type="checkbox"/> Set Jockey Pump - Fire Pump Room [Level 1]																		
WE2-4921	Install 8" Fire Pump Exhaust - Level 1 & 2 - Fire Pump Room [Level 1]	06-Apr-21	12-Apr-21	5	5													
<input type="checkbox"/> Install 8" Fire Pump Exhaust - Level 1 & 2 - Fire Pump Room [Level 1]																		
<b>Exhibit Hall B</b>																		
<b>Exhibit Hall B - Interior Build-out</b>																		
WE2-6990	Overhead Fire Sprinkler - Exhibit Hall B	01-Apr-21	14-Apr-21	10	10													
<input type="checkbox"/> Overhead Fire Sprinkler - Exhibit Hall B																		
<b>Women Restroom 1B01</b>																		
WE2-12100	Fire Sprinkler Rough-In - Women Restroom 1B01 [Level 1]	18-Mar-21	31-Mar-21	10	10													
<input type="checkbox"/> Fire Sprinkler Rough-In - Women Restroom 1B01 [Level 1]																		
WE2-12200	Fire Sprinkler Trim - Women Restroom 1B01 [Level 1]	02-Jul-21	09-Jul-21	5	5													
<input type="checkbox"/> Fire Sprinkler Trim - Women Restroom 1B01 [Level 1]																		
<b>Men's Restroom 1B07</b>																		
WE2-12450	Fire Sprinkler Rough-In - Men's Restroom 1B07 [Level 1]	30-Mar-21	12-Apr-21	10	10													
<input type="checkbox"/> Fire Sprinkler Rough-In - Men's Restroom 1B07 [Level 1]																		
WE2-12630	Fire Sprinkler Trim - Men's Restroom 1B07 [Level 1]	15-Jul-21	21-Jul-21	5	5													
<input type="checkbox"/> Fire Sprinkler Trim - Men's Restroom 1B07 [Level 1]																		
<b>Women's Restroom 1B08</b>																		
WE2-12750	Fire Sprinkler Rough-In - Women Restroom 1B08 [Level 1]	06-Apr-21	19-Apr-21	10	10													
<input type="checkbox"/> Fire Sprinkler Rough-In - Women Restroom 1B08 [Level 1]																		
WE2-12950	Fire Sprinkler Trim - Women Restroom 1B08 [Level 1]	22-Jul-21	28-Jul-21	5	5													
<input type="checkbox"/> Fire Sprinkler Trim - Women Restroom 1B08 [Level 1]																		
<b>Exhibit Hall A</b>																		
<b>Exhibit Hall A - Interior Build-out</b>																		
WE2-7439	Overhead Fire Sprinkler - Exhibit Hall A	25-May-21	08-Jun-21	10	10													
<input type="checkbox"/> Overhead Fire Sprinkler - Exhibit Hall A																		
<b>Women's Restroom 1C09</b>																		
WE2-13059	Fire Sprinkler Rough-In - Women Restroom 1C09 [Level 1]	30-Apr-21	13-May-21	10	10													
<input type="checkbox"/> Fire Sprinkler Rough-In - Women Restroom 1C09 [Level 1]																		
WE2-13280	Fire Sprinkler Trim - Women Restroom 1C09 [Level 1]	12-Aug-21	18-Aug-21	5	5													
<input type="checkbox"/> Fire Sprinkler Trim - Women Restroom 1C09 [Level 1]																		
<b>Men's Restroom 1D01</b>																		
WE2-13659	Fire Sprinkler Rough-In - Men's Restroom 1D01 [Level 1]	05-May-21	18-May-21	10	10													
<input type="checkbox"/> Fire Sprinkler Rough-In - Men's Restroom 1D01 [Level 1]																		
WE2-13880	Fire Sprinkler Trim - Men's Restroom 1D01 [Level 1]	20-Aug-21	26-Aug-21	5	5													
<input type="checkbox"/> Fire Sprinkler Trim - Men's Restroom 1D01 [Level 1]																		
<b>Interiors</b>																		
<b>Level 2</b>																		
<b>Area A</b>																		
WE2-10890	Fire Sprinkler Rough-In - Area A [Level 2]	22-Feb-21	05-Mar-21	10	10													
<input type="checkbox"/> Fire Sprinkler Rough-In - Area A [Level 2]																		
WE2-11080	Fire Sprinkler Trim - Area A [Level 2]	24-May-21	28-May-21	5	5													
<input type="checkbox"/> Fire Sprinkler Trim - Area A [Level 2]																		
<b>Area B</b>																		
WE2-11260	Fire Sprinkler Rough-In - Area B [Level 2]	08-Mar-21	09-Mar-21	10	10													
<input type="checkbox"/> Fire Sprinkler Rough-In - Area B [Level 2]																		
WE2-11380	Fire Sprinkler Trim - Area B [Level 2]	24-May-21	28-May-21	5	5													
<input type="checkbox"/> Fire Sprinkler Trim - Area B [Level 2]																		
<b>Area C</b>																		
WE2-11540	Fire Sprinkler Rough-In - Area C [Level 2]	05-Apr-21	16-Apr-21	10	10													
<input type="checkbox"/> Fire Sprinkler Rough-In - Area C [Level 2]																		

Balfour Beatty



Remaining Level of Effort      Remaining Work  
 Actual Level of Effort      Critical Remaining Work  
 Actual Work                      Milestone

# BCCCH - Fire Protection Remaining Work in 2021

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Activity ID	Activity Name	Start	Finish	Orig. Dur.	Rem. Dur.	2021																		
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec						
WE2-11660	Fire Sprinkler Trim - Area C [Level 2]	22-Jun-21	28-Jun-21	5	5																			
<b>Area D</b>																								
WE2-11820	Fire Sprinkler Rough-In - Area D [Level 2]	03-May-21	14-May-21	10	10																			
WE2-11940	Fire Sprinkler Trim - Area D [Level 2]	21-Jul-21	27-Jul-21	5	5																			
<b>Level 3</b>																								
<b>Area E - Kitchen</b>																								
WE2-47911	Fire Sprinkler Rough-In - Area E Kitchen [Level 3]	02-Feb-21	15-Feb-21	10	10																			
WE2-48141	Fire Sprinkler Trim - Area E Kitchen [Level 3]	04-Jun-21	10-Jun-21	5	5																			
<b>Area H - Kitchen</b>																								
WE2-49941	Fire Sprinkler Rough-In - Area H Kitchen [Level 3]	20-Apr-21	03-May-21	10	10																			
WE2-7129	Fire Sprinkler Trim - Area H Kitchen [Level 3]	23-Aug-21	27-Aug-21	5	5																			
<b>CEP</b>																								
<b>Generator Room (3.A.10)</b>																								
WE2-5405	Install 3" Fire Pump Exhaust - Generator Room	13-Apr-21	14-Apr-21	2	2																			
<b>Chiller Room</b>																								
WE2-5055	Rough-in FP - Chiller Room	25-May-21	02-Apr-21	10	10																			
WE2-7467	Start-up Chillers / Pumps - Chiller Room	14-May-21	19-May-21	5	5																			
WE2-7469	Circulate / Treat / Flash Chilled Water - Chiller Room	20-May-21	01-Jun-21	10	10																			
<b>Test / Commissioning</b>																								
WE2-7471	Commission Chillers - Chiller Room	02-Jun-21	07-Jul-21	25	25																			

# BCCCH - Electrical 2021 Work

Data Date: 20-Dec-20  
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Activity ID	Activity Name	Start	Finish	Orig. Dur.	Rem. Dur.	2021																		
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec						
<b>Broward County Convention Center - West Expansion</b>																								
<b>West Expansion</b>																								
GMP No. 1 - Warehouse Demo & Utility Re-Alignment																								
<b>Lin Station</b>																								
WE1-785	Install New Conduit from Existing Power Pole to New Lift Station Transformer	29-Dec-20	09-Jan-21	10	10																			
WE1-875	Set Transformer Pad	11-Jan-21	11-Jan-21	1	1																			
WE1-1380	Survey Conduits / Develop Easement Paperwork	11-Jan-21	12-Jan-21	2	2																			
WE1-1390	FPL Submit Easement Paperwork to County	13-Jan-21	15-Jan-21	1	1																			
WE1-1400	County Review / Approve Easement	14-Jan-21	25-Jan-21	10	10																			
WE1-955	Site Temporary Power	18-Mar-21	29-Mar-21	10	10																			
GMP No. 2 - West Expansion																								
<b>Construction</b>																								
<b>Structure</b>																								
<b>Existing Area (ENF+OW) - Grid Lines W0 - W9</b>																								
<b>Area F - W0 - W9</b>																								
<b>W0 - W9</b>																								
<b>Level 1</b>																								
WE2-48911	Layout Metal Deck - Area F Grid Line W0 - W9 [Level 1]	31-Dec-20	04-Jan-21	2	2																			
WE2-48331	Metal Deck Electrical Rough-in - Area F Grid Line W0 - W9 [Level 1]	04-Jan-21	11-Jan-21	6	6																			
<b>Area G - W0 - W9</b>																								
<b>W0 - W9</b>																								
<b>Level 3</b>																								
WE2-49111	Layout MEP Metal Deck - Area G Grid Line W0 - W9 [Level 3]	12-Jan-21	13-Jan-21	2	2																			
WE2-48511	Metal Deck Electrical Rough-in - Area G Grid Line W0 - W9 [Level 3]	13-Jan-21	20-Jan-21	6	6																			
<b>Area H - W0 - W9</b>																								
<b>W0 - W9</b>																								
<b>Level 3</b>																								
WE2-49141	Layout MEP Metal Deck - Area G Grid Line W0 - W9 [Level 3]	25-Jan-21	26-Jan-21	2	2																			
WE2-48551	Metal Deck Electrical Rough-in - Area G Grid Line W0 - W9 [Level 3]	26-Jan-21	01-Feb-21	6	6																			
<b>Area I - W0 - W9</b>																								
<b>W0 - W9</b>																								
<b>Level 3</b>																								
WE2-49171	Layout MEP Metal Deck - Area G Grid Line W0 - W9 [Level 3]	08-Feb-21	09-Feb-21	2	2																			
WE2-48591	Metal Deck Electrical Rough-in - Area G Grid Line W0 - W9 [Level 3]	09-Feb-21	16-Feb-21	6	6																			
<b>Area J - W0 - W9</b>																								
<b>W0 - W9</b>																								
<b>Level 3</b>																								
WE2-49201	Layout MEPs - Area H Grid Line W0 - W9 [Level 3]	23-Feb-21	24-Feb-21	2	2																			
WE2-48631	Metal Deck Electrical Rough-in - Area H Grid Line W0 - W9 [Level 3]	24-Feb-21	05-Mar-21	6	6																			
<b>Area K - W0 - W9</b>																								
<b>W0 - W9</b>																								
<b>Level 3</b>																								
WE2-49231	Layout MEPs - Area H Grid Line W0 - W9 [Level 3]	04-Mar-21	05-Mar-21	2	2																			
WE2-48671	Metal Deck Electrical Rough-in - Area H Grid Line W0 - W9 [Level 3]	05-Mar-21	12-Mar-21	6	6																			
<b>Exhibition Hall - Long Span</b>																								
<b>Area A - W0 - W11</b>																								
<b>W0 - W11</b>																								
<b>Level 1</b>																								
WE2-4500	Metal Deck Electrical Rough-in - Long Span Area A Grid Lines W0 - W11 [Level 1]	30-Dec-20	02-Jan-21	1	3																			
<b>Area B - W0 - W11</b>																								
<b>W0 - W11</b>																								
<b>Level 1 (Roof)</b>																								

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# BCCCH - Electrical 2021 Work

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Activity ID	Activity Name	Start	Finish	Orig. Dur	Rem. Dur	2021													
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
WE2-44841	Layout MEP Metal Deck - Long Span Area B Gnd Line W11 - W10 [Level 3 / R]	26-Jan-21	26-Jan-21	1	1														
WE2-44441	Metal Deck Electrical Rough-in - Long Span Area B Gnd Line W11 - W10 [Level 3 / Roof]	27-Jan-21	02-Feb-21	5	5														
<b>Area C - W6 - W9</b>																			
<b>Level 3 (Roof)</b>																			
WE2-48871	Layout Metal Deck MEP - Long Span Area B Gnd Line W10 - W9 [Level 3 / R]	13-Jan-21	13-Jan-21	1	1														
WE2-44471	Metal Deck Electrical Rough-in - Long Span Area B Gnd Line W10 - W9 [Level 3 / Roof]	14-Jan-21	20-Jan-21	5	5														
<b>Area C - W6 - W8</b>																			
<b>Level 3 (Roof)</b>																			
WE2-49211	Layout MEP Metal Deck - Long Span Area C Gnd Lines W6 - W8 [Level 3 / R]	26-Jan-21	26-Jan-21	1	1														
WE2-44511	Metal Deck Electrical Rough-in - Long Span Area C Gnd Lines W6 - W8 [Level 3 / Roof]	27-Jan-21	02-Feb-21	5	5														
<b>Area C - W6 - W5</b>																			
<b>Level 3 (Roof)</b>																			
WE2-49491	Layout MEP Metal Deck - Long Span Area C Gnd Lines W6 - W5 [Level 3 / R]	11-Feb-21	11-Feb-21	1	1														
WE2-44511	Metal Deck Electrical Rough-in - Long Span Area C Gnd Lines W6 - W5 [Level 3 / Roof]	12-Feb-21	19-Feb-21	6	6														
<b>Area C - W6 - W4</b>																			
<b>Level 3 (Roof)</b>																			
WE2-49491	Layout MEP Metal Deck - Long Span Area C Gnd Lines W6 - W4 [Level 3 / R]	24-Feb-21	24-Feb-21	1	1														
WE2-44591	Metal Deck Electrical Rough-in - Long Span Area C Gnd Lines W6 - W4 [Level 3 / Roof]	25-Feb-21	04-Mar-21	6	6														
<b>Area D - W4 - W3</b>																			
<b>Level 3 (Roof)</b>																			
WE2-49261	Layout MEPs - Long Span Area D Gnd Line W3 - W4 [Level 3 / Roof]	05-Mar-21	06-Mar-21	2	2														
WE2-44621	Metal Deck Electrical Rough-in - Long Span Area D Gnd Lines W3 - W4 [Level 3 / Roof]	04-Mar-21	11-Mar-21	6	6														
<b>Area D - W4 - W2.8</b>																			
<b>Level 3 (Roof)</b>																			
WE2-49291	Layout MEPs - Long Span Area D Gnd Line W4 - W2.8 [Level 3]	20-Apr-21	21-Apr-21	2	2														
WE2-44651	Metal Deck Electrical Rough-in - Long Span Area D Gnd Line W4 - W2.8 [Level 3]	21-Apr-21	28-Apr-21	6	6														
<b>Building Envelope</b>																			
<b>Roof</b>																			
<b>Area A - Low Roof</b>																			
WE2-5680	Electrical To Equipment - Area A [Low Roof]	15-Feb-21	12-Mar-21	29	20														
WE2-5700	Lightning Protection - Area A [Low Roof]	25-Feb-21	24-Mar-21	29	20														
<b>Area B</b>																			
WE2-5820	Electrical To Equipment - Area B [Roof]	21-Apr-21	11-May-21	11	15														
WE2-5840	Lightning Protection - Area B [Roof]	21-Apr-21	11-May-21	11	15														
<b>Area C</b>																			
WE2-6200	Electrical To Equipment - Area C [Roof]	12-May-21	02-Jun-21	11	15														
WE2-6220	Lightning Protection - Area C [Roof]	12-May-21	02-Jun-21	11	15														
<b>Area D</b>																			
WE2-6240	Electrical To Equipment - Area D [Roof]	01-Jun-21	23-Jun-21	11	15														
WE2-6260	Lightning Protection - Area D [Roof]	01-Jun-21	23-Jun-21	11	15														
<b>Integrations &amp; Systems</b>																			
<b>Exhibit Halls (A+B+C)</b>																			
<b>Existing Convention / Exhibit Spaces</b>																			
<b>Concessions 1.101</b>																			
WE2-45191	Test Fire Alarm - Concessions 1.101	10-Apr-21	06-May-21	1	5														
<b>Concessions 1.K02</b>																			
<b>Test Fire Alarm - Concessions 1.101</b>																			

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Activity ID	Activity Name	Start	Finish	Orig. Dur.	Rem. Dur.	2021													
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
WE2-4600	Test Fire Alarm - Concessions 1.K.01	09-Jun-21	15-Jun-21	5	5														
<b>Exhibit Hall C - Underground &amp; SOG</b>																			
WE2-4311	Underground Electrical Rough-in - Exhibit Hall C	15-Apr-21	28-Apr-21	14	10														
<b>Exhibit Hall C - Interior Build-out</b>																			
WE2-6280	Hangers - Exhibit Hall C	30-Dec-20	06-Jan-21	5	5														
WE2-6500	Overhead Electrical - Exhibit Hall C	25-Feb-21	17-Mar-21	11	15														
WE2-6540	Overhead Fire Alarm Trns / Devices - Exhibit Hall C	04-Jun-21	01-Jul-21	28	20														
WE2-6560	Overhead Electrical Trim / Lighting - Exhibit Hall C	04-Jun-21	01-Jul-21	28	20														
<b>Men's Restroom 1A07</b>																			
WE2-1536	Fire Alarm Rough-In - Men's Restroom 1A07 [Level 1]	18-Mar-21	31-Mar-21	14	10														
WE2-1590	Electrical Fixtures / Devices / Trns - Men's Restroom 1A07 [Level 1]	15-Jun-21	21-Jun-21	5	5														
WE2-1600	Fire Alarm Trns - Men's Restroom 1A07 [Level 1]	18-Jun-21	24-Jun-21	5	5														
<b>Fire Pump Room 1A08</b>																			
WE2-4821	Install Overhead Supports / Hangers (MEP) - Fire Pump Room [Level 1]	30-Dec-20	06-Jan-21	5	5														
WE2-4831	Electrical Rough / Equipment Tie-in - Fire Pump Room [Level 1]	15-Feb-21	05-Mar-21	13	15														
WE2-4851	Pull / Terminate Cable - Fire Pump Room [Level 1]	08-Mar-21	19-Mar-21	12	10														
WE2-4871	Overhead Fire Alarm Trns / Devices - Fire Pump Room [Level 1]	22-Mar-21	26-Mar-21	5	5														
WE2-4891	Lighting / Electrical Trns - Fire Pump Room [Level 1]	24-Mar-21	30-Mar-21	5	5														
<b>PPL Vault 1A06</b>																			
WE2-8381	Install Primary Power Ductbank	21-Dec-20	21-Jan-21	21	25														
<b>Exhibit Hall B - Underground &amp; SOG</b>																			
WE2-7570	Underground Electrical Rough-in - Exhibit Hall B	06-May-21	19-May-21	14	10														
<b>Exhibit Hall B - Interior Build-out</b>																			
WE2-6890	Hangers - Exhibit Hall B	07-Jan-21	13-Jan-21	5	5														
WE2-6970	Overhead Electrical - Exhibit Hall B	18-Mar-21	07-Apr-21	11	15														
WE2-7010	Electrical @ Floor Boxes / Covers - Exhibit Hall B	18-Jun-21	01-Jul-21	14	10														
WE2-7050	Overhead Fire Alarm Trns / Devices - Exhibit Hall B	25-Jun-21	23-Jul-21	28	20														
WE2-7060	Overhead Electrical Trim / Lighting - Exhibit Hall B	25-Jun-21	23-Jul-21	28	20														
<b>Women Restroom 1B01</b>																			
WE2-1210	Fire Alarm Rough-In - Women Restroom 1B01 [Level 1]	09-Apr-21	21-Apr-21	12	10														
WE2-1250	Electrical Fixtures / Devices / Trns - Women Restroom 1B01 [Level 1]	07-Jul-21	13-Jul-21	5	5														
WE2-1210	Fire Alarm Trns - Women Restroom 1B01 [Level 1]	12-Jul-21	16-Jul-21	5	5														
<b>Men's Restroom 1B07</b>																			
WE2-1240	Fire Alarm Rough-In - Men's Restroom 1B07 [Level 1]	20-Apr-21	03-May-21	14	10														
WE2-1260	Electrical Fixtures / Devices / Trns - Men's Restroom 1B07 [Level 1]	19-Jul-21	23-Jul-21	5	5														
WE2-1260	Fire Alarm Trns - Men's Restroom 1B07 [Level 1]	22-Jul-21	28-Jul-21	5	5														
<b>Women Restroom 1B08</b>																			
WE2-1290	Fire Alarm Rough-In - Women Restroom 1B08 [Level 1]	27-Apr-21	10-May-21	14	10														
WE2-1290	Electrical Fixtures / Devices / Trns - Women Restroom 1B08 [Level 1]	26-Jul-21	30-Jul-21	5	5														
WE2-1260	Fire Alarm Trns - Women Restroom 1B08 [Level 1]	29-Jul-21	04-Aug-21	5	5														
<b>Exhibit Hall A - Underground &amp; SOG</b>																			



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Activity ID	Activity Name	Start	Finish	Orig. Dur.	Rem. Dur.	2021													
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
WE2-7401	Underground Electrical Rough-in - Exhibit Hall A	27-May-21	10-Jun-21	10	10														
<b>Exhibit Hall A - Interior Build-out</b>																			
WE2-7449	Hangers - Exhibit Hall A	16-Mar-21	22-Mar-21	5	5														
WE2-7435	Overhead Electrical - Exhibit Hall A	11-May-21	01-Jun-21	11	15														
WE2-7457	Electrical @ Floor Boxes / Covers - Exhibit Hall A	12-Jul-21	23-Jul-21	10	10														
WE2-7425	Overhead Fire Alarm Trim / Devices - Exhibit Hall A	19-Jul-21	13-Aug-21	20	20														
WE2-7427	Overhead Electrical Trim / Lighting - Exhibit Hall A	19-Jul-21	13-Aug-21	20	20														
<b>Women's Restroom IC09</b>																			
WE2-13080	Fire Alarm Rough-In - Women's Restroom IC09 [Level 1]	21-May-21	04-Jun-21	10	10														
WE2-13250	Electrical Fixtures / Devices / Trims - Women's Restroom IC09 [Level 1]	16-Aug-21	20-Aug-21	5	5														
WE2-13300	Fire Alarm Trims - Women's Restroom IC09 [Level 1]	19-Aug-21	25-Aug-21	5	5														
<b>Men's Restroom ID01</b>																			
WE2-13689	Fire Alarm Rough-In - Men's Restroom ID01 [Level 1]	26-May-21	09-Jun-21	10	10														
WE2-13890	Electrical Fixtures / Devices / Trims - Men's Restroom ID01 [Level 1]	24-Aug-21	30-Aug-21	5	5														
WE2-13900	Fire Alarm Trims - Men's Restroom ID01 [Level 1]	27-Aug-21	02-Sep-21	5	5														
<b>Intense</b>																			
<b>Level 2</b>																			
<b>Area A</b>																			
WE2-10920	Fire Alarm Rough-In - Area A [Level 2]	01-Mar-21	12-Mar-21	10	10														
WE2-11090	Electrical Fixtures / Devices / Trims - Area A [Level 2]	26-May-21	02-Jun-21	5	5														
WE2-11100	Fire Alarm Trims - Area A [Level 2]	01-Jun-21	07-Jun-21	5	5														
<b>Area B</b>																			
WE2-11270	Fire Alarm Rough-In - Area B [Level 2]	15-Mar-21	26-Mar-21	10	10														
WE2-11390	Electrical Fixtures / Devices / Trims - Area B [Level 2]	26-May-21	02-Jun-21	5	5														
WE2-11400	Fire Alarm Trims - Area B [Level 2]	01-Jun-21	07-Jun-21	5	5														
<b>Area C</b>																			
WE2-11550	Fire Alarm Rough-In - Area C [Level 2]	12-Apr-21	23-Apr-21	10	10														
WE2-11670	Electrical Fixtures / Devices / Trims - Area C [Level 2]	24-Jun-21	30-Jun-21	5	5														
WE2-11680	Fire Alarm Trims - Area C [Level 2]	29-Jun-21	06-Jul-21	5	5														
<b>Area D</b>																			
WE2-11830	Fire Alarm Rough-In - Area D [Level 2]	19-May-21	21-May-21	10	10														
WE2-11950	Electrical Fixtures / Devices / Trims - Area D [Level 2]	25-Jul-21	29-Jul-21	5	5														
WE2-11960	Fire Alarm Trims - Area D [Level 2]	28-Jul-21	03-Aug-21	5	5														
<b>Level 3</b>																			
<b>Area E - Kitchen</b>																			
WE2-47041	Fire Alarm Rough-In - Area E Kitchen [Level 3]	23-Feb-21	06-Mar-21	10	10														
WE2-48151	Electrical Fixtures / Devices / Trims - Area E Kitchen [Level 3]	11-Jun-21	17-Jun-21	5	5														
WE2-48161	Fire Alarm Trims - Area E Kitchen [Level 3]	11-Jun-21	17-Jun-21	5	5														
<b>Area H - Kitchen</b>																			
WE2-49071	Fire Alarm Rough-In - Area H Kitchen [Level 3]	11-May-21	24-May-21	10	10														
WE2-7131	Electrical Fixtures / Devices / Trims - Area H Kitchen [Level 3]	30-Aug-21	03-Sep-21	5	5														
WE2-7133	Fire Alarm Trims - Area H Kitchen [Level 3]	30-Aug-21	03-Sep-21	5	5														
<b>CEP</b>																			
<b>Generator Room (3A,10)</b>																			



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Activity ID	Activity Name	Start	Finish	Orig. Dur.	Rem. Dur.	2021																				
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec								
WE2-5266	Set Emergency Generator	06-Jan-21	07-Jan-21	2	2																					
WE2-5265	Emergency Generator Day Tanks / All Floor Mounted Elect. Equip - Generator Room	06-Jan-21	28-Jan-21	11	15																					
WE2-5245	Install Overhead Supports / Hangers (MEP) - Generator Room	12-Jan-21	18-Jan-21	5	5																					
WE2-5255	Electrical Rough / Equipment Tie-in - Generator Room	29-Jan-21	18-Feb-21	11	15																					
WE2-5315	Pull / Terminate MV Cable - Generator Room	02-Mar-21	15-Mar-21	14	10																					
WE2-5295	Install Gen. Shields & Dampers - Generator Room	04-Mar-21	17-Mar-21	14	10																					
WE2-5325	Install Mufflers & Pipe - Generator Room	11-Mar-21	31-Mar-21	11	15																					
WE2-5335	Insulate Mufflers & Piping - Generator Room	16-Mar-21	05-Apr-21	11	15																					
WE2-5345	Control Wiring - Generator Room	16-Mar-21	15-Apr-21	20	20																					
WE2-8000	Overhead Fire Alarm Trim / Devices - Generator Room	16-Mar-21	22-Mar-21	5	5																					
WE2-5375	Lighting / Electrical Trims - Generator Room	18-Mar-21	24-Mar-21	5	5																					
WE2-5305	Fuel Oil Piping - Generator Room	02-Apr-21	22-Apr-21	11	15																					
WE2-5385	Batteries / Battery Chargers - Generator Room	13-Apr-21	19-Apr-21	5	5																					
WE2-5395	Test Fuel Oil Piping - Generator Room	23-Apr-21	29-Apr-21	5	5																					
<b>Switchgear Room (A.A.06) (A.A.07) (A.A.11)</b>																										
WE2-5435	Install Overhead Supports / Hangers (MEP) - Switchgear Room	19-Jan-21	25-Jan-21	5	5																					
WE2-5455	Set MV Gear - Switchgear Room	02-Feb-21	08-Feb-21	5	5																					
WE2-5465	Set Paralleling Gear & ATs - Switchgear Room	02-Feb-21	08-Feb-21	5	5																					
WE2-5475	Set Substations 1SSOH-L1 / 2SSOH-L1 / 4SSOH-L1 - Switchgear Room	02-Feb-21	08-Feb-21	5	5																					
WE2-5485	Set all 480v Distribution Equipment - Switchgear Room	02-Feb-21	08-Feb-21	5	5																					
WE2-5495	Hook up Gear - Switchgear Room	09-Feb-21	23-Feb-21	14	10																					
WE2-5505	Install Conduit (Ceiling of 2nd Floor) MV Gear To AT & Substations - Switchgear Room	23-Feb-21	08-Mar-21	10	10																					
WE2-5515	Pull / Terminate MV Cable - Switchgear Room	23-Feb-21	01-Mar-21	5	5																					
WE2-5525	Install in Room Conduit - Switchgear Room	23-Feb-21	08-Mar-21	10	10																					
WE2-5535	Pull / Terminate LV Cable - Switchgear Room	09-Mar-21	15-Mar-21	5	5																					
WE2-5555	Lighting / Electrical Trims - Switchgear Room	09-Mar-21	15-Mar-21	5	5																					
WE2-8790	Overhead Fire Alarm Trim / Devices - Switchgear Room	09-Mar-21	15-Mar-21	5	5																					
WE2-5545	Control Conduit & Wiring - Switchgear Room	16-Mar-21	05-Apr-21	15	15																					
WE2-5565	Breaker Testing - Switchgear Room	06-Apr-21	19-Apr-21	10	10																					
WE2-7477	Critical Systems Pre-Power Inspections - Switchgear Room	07-May-21	13-May-21	5	5																					
WE2-7479	Permanent Power - Switchgear Room		13-May-21	0	0																					
<b>Chiller Room</b>																										
WE2-7159	Install Overhead Supports / Hangers (MEP) - Chiller Room	20-Jan-21	25-Jan-21	5	5																					
WE2-5215	BMS Rough-in - Chiller Room	15-Apr-21	26-Apr-21	10	10																					
WE2-5215	Lighting / Electrical Trim - Chiller Room	15-Apr-21	01-May-21	15	15																					
WE2-8440	Fire Alarm Trim / Devices - Chiller Room	03-May-21	13-May-21	10	10																					
<b>Test / Commissioning</b>																										
WE2-7495	Start-up Fire Pump - Fire Pump	19-Apr-21	23-Apr-21	5	5																					
WE2-7499	Test / Inspect Fire Flows - Fire Pump	26-Apr-21	30-Apr-21	5	5																					
WE2-7481	Factory Start-up - Generator Room	30-Apr-21	06-May-21	5	5																					



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Activity ID	Activity Name	Start	Finish	Orig Dur	Rem Dur	2021																	
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec					
WE2-7483	Load Bank Testing	07-May-21	20-May-21	10	10																		
WE2-7485	Paralleling Gear - Generator Room	21-May-21	04-Jun-21	10	10																		
WE2-7487	Verify Emergency Panel Circuitry - Generator	07-Jun-21	02-Jul-21	20	20																		
WE2-7489	Final Checkout ATS - Generator	06-Jul-21	12-Jul-21	5	5																		
WE2-8520	Final Test & Balance	08-Jul-21	30-Sep-21	60	60																		
WE2-8560	Fire Alarm Testing	12-Jul-21	03-Sep-21	40	40																		
WE2-8600	Dimmer Testing	13-Jul-21	07-Sep-21	40	40																		
WE2-7491	Loss of Power Testing - Generator	13-Jul-21	02-Aug-21	15	15																		
WE2-7505	Test Smoke Control Fans / Dampers Existing Convention Center	13-Jul-21	09-Aug-21	20	20																		
WE2-7501	Test / Inspect On Lost of Power - Fire Pump	27-Jul-21	02-Aug-21	5	5																		
WE2-7493	Final Emergency Power Inspections	03-Aug-21	23-Aug-21	15	15																		
WE2-7497	Test / Inspect Fire Sprinkler Flow & Tamper Switches	03-Aug-21	09-Aug-21	5	5																		
WE2-8580	Test Smoke Control Fans / Dampers West Expansion	10-Aug-21	07-Sep-21	20	20																		
WE2-7503	Final Fire Alarm Inspections	07-Sep-21	27-Sep-21	15	15																		
WE2-7507	Program / Pre-Test Smoke Control Panel	14-Sep-21	04-Oct-21	15	15																		
WE2-7509	Smoke Control Special Inspection	05-Oct-21	11-Oct-21	5	5																		



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Actual Work	Milestone

# BCCCH - Masonry Remaining Work in 2021

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Activity ID	Activity Name	Start	Finish	Orig. Dur.	Rem. Dur.	2021																		
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec						
<b>Broward County Convention Center - West Expansion</b>																								
<b>West Expansion</b>																								
GMP No. 2 - West Expansion																								
Construction																								
Interior Systems																								
Exhibit Halls (A+B+C)																								
<b>Exhibit Hall C</b>																								
Exhibit Hall C - Interior Build-out																								
WE2-648I	Masonry - Exhibit Hall C	28-Jan-21	10-Feb-21	10	10																			
<b>Exhibit Hall B</b>																								
Exhibit Hall B - Interior Build-out																								
WE2-699D	Masonry - Exhibit Hall B	18-Feb-21	03-Mar-21	10	10																			
<b>Exhibit Hall A</b>																								
Exhibit Hall A - Interior Build-out																								
WE2-745I	Masonry - Exhibit Hall A	15-Apr-21	26-Apr-21	10	10																			
<b>CEP</b>																								
WE2-812D	Masonry - Interior Walls - CEP	04-Feb-21	03-Mar-21	20	20																			

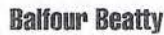


Remaining Level of Effort      Remaining Work  
 Actual Level of Effort      Critical Remaining Work  
 Actual Work      Milestone

# BCCCH - Plumbing Remaining Work in 2021

Data Date: 20-Dec-20  
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Activity ID	Activity Name	Start	Finish	Orig. Dur.	Rem. Dur.	2021																			
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec							
<b>Broward County Convention Center - West Expansion</b>																									
<b>West Expansion</b>																									
<b>GMP No. 2 - West Expansion</b>																									
<b>Construction - West West</b>																									
<b>Structure</b>																									
<b>Area A - Grid Lines WK, WL, WI</b>																									
<b>W19-W15</b>																									
	WE2-7513	Shallow Underground Plumbing - Area A Grid Lines W19 - W15 / WK - WJ (Ground Level)	27-Jan-21	02-Feb-21	5	5																			
<b>W18-W11</b>																									
	WE2-7181	Deep Underground Plumbing - Area A Grid Lines W14 - W11 / WK - WJ (Ground Level)	11-Jan-21	19-Jan-21	7	7																			
	WE2-7201	Shallow Underground Plumbing - Area A Grid Lines W14 - W11 / WK - WJ (Ground Level)	27-Jan-21	02-Feb-21	5	5																			
<b>Area B - Grid Lines WK, WL, WI</b>																									
<b>W11-W10</b>																									
	WE2-7217	Shallow Underground Plumbing - Area B Grid Lines W11 - W10 / WK - WJ (Ground Level)	03-Feb-21	09-Feb-21	5	5																			
<b>W10-W9</b>																									
	WE2-7233	Shallow Underground Plumbing - Area B Grid Lines W10 - W9 / WK - WJ (Ground Level)	03-Feb-21	09-Feb-21	5	5																			
<b>W9-W8.6</b>																									
	WE2-7235	Deep Underground Plumbing - Area B Grid Lines W9 - W8.6 / WK - WJ (Ground Level)	07-Jan-21	13-Jan-21	5	5																			
	WE2-7249	Shallow Underground Plumbing - Area B Grid Lines W9 - W8.6 / WK - WJ (Ground Level)	03-Feb-21	09-Feb-21	5	5																			
<b>Area C - Grid Lines WK, WL, WI</b>																									
<b>W8.6-W8</b>																									
	WE2-7265	Shallow Underground Plumbing - Area C Grid Lines W8.6 - W8 / WK - WJ (Ground Level)	10-Feb-21	16-Feb-21	5	5																			
<b>W8-W6</b>																									
	WE2-7281	Shallow Underground Plumbing - Area C Grid Lines W8 - W6 / WK - WJ (Ground Level)	10-Feb-21	16-Feb-21	5	5																			
<b>W6-W5</b>																									
	WE2-7297	Shallow Underground Plumbing - Area C Grid Lines W6 - W5 / WK - WJ (Ground Level)	10-Feb-21	16-Feb-21	5	5																			
<b>Area D - Grid Lines WK, WL, WI</b>																									
<b>W5-W4</b>																									
	WE2-7313	Shallow Underground Plumbing - Area D Grid Lines W5 - W4 / WK - WJ (Ground Level)	17-Feb-21	23-Feb-21	5	5																			
<b>W4-W2.8</b>																									
	WE2-7329	Shallow Underground Plumbing - Area D Grid Lines W4 - W2.8 / WK - WJ (Ground Level)	17-Feb-21	23-Feb-21	5	5																			
<b>Low Roof</b>																									
	WE2-14159	Form Deck - Area D Grid Line W4 - W2.8 (Roof)	23-Feb-21	23-Feb-21	1	1																			
<b>Construction</b>																									
<b>Structure</b>																									
<b>Existing Area (E+P+O+M) - Grid Lines W0 - WF</b>																									
<b>Area F - W0 - WF</b>																									
<b>W10 - W9</b>																									
	WE2-14341	Metal Deck Plumbing Rough-in - Area F Grid Line W10 - W9 (Level 3)	07-Jan-21	14-Jan-21	6	6																			
<b>Area G - W0 - WF</b>																									
<b>W0 - W8</b>																									



- Remaining Level of Effort
- Remaining Work
- Actual Level of Effort
- Critical Remaining Work
- Actual Work
- Milestone

# BCCCH - Plumbing Remaining Work in 2021

Data Date: 20-Dec-20  
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Activity ID	Activity Name	Start	Finish	Orig. Dur.	Rem. Dur.	2021													
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
<b>Level 3</b>						<input type="checkbox"/> Metal Deck Plumbing Rough-in - Area G Grid Line W8 6 - W8 [Level 3]													
<b>W8 - W6</b>																			
<b>Level 3</b>						<input type="checkbox"/> Metal Deck Plumbing Rough-in - Area G Grid Line W8 - W6 [Level 3]													
<b>W6 - W5</b>																			
<b>Level 3</b>						<input type="checkbox"/> Metal Deck Plumbing Rough-in - Area G Grid Line W5 - W5 [Level 3]													
<b>W5 - W4</b>																			
<b>Level 3</b>						<input type="checkbox"/> Metal Deck Plumbing Rough-in - Area H Grid Line W5 - W4 [Level 3]													
<b>W4 - W2.8</b>																			
<b>Level 3</b>						<input type="checkbox"/> Metal Deck Plumbing Rough-in - Area H Grid Line W4 - W2.8 [Level 3]													
<b>Exhibition Hall - Long Span</b>																			
<b>Area D - W4 - W4</b>																			
<b>Level 3 (Roof)</b>						<input type="checkbox"/> Metal Deck Plumbing Rough-in - Long Span Area D Grid Line W5 - W4 [Level 3 / Roof]													
<b>W4 - W2.8</b>																			
<b>Level 3</b>						<input type="checkbox"/> Metal Deck Plumbing Rough-in - Long Span Area D Grid Line W4 - W2.8 [Level 3]													
<b>Interiors &amp; Systems</b>																			
<b>Exhibit Hall (A+B+C)</b>																			
<b>Exhibit Hall C - Underground &amp; SOG</b>																			
<b>WE2-4321</b> Underground Plumbing Rough-in - Exhibit Hall C						22-Apr-21	28-Apr-21	5	5										
<b>Exhibit Hall C - Interior Build-out</b>																			
<b>WE2-6480</b> Overhead Plumbing - Exhibit Hall C						28-Jan-21	05-Mar-21	25	25										
<b>WE2-6385</b> MEFF Insulation - Exhibit Hall C						27-May-21	17-Jun-21	15	15										
<b>Men's Restroom 1A07</b>																			
<b>WE2-13360</b> Plumbing Rough-In - Men's Restroom 1A07 [Level 1]						04-Mar-21	17-Mar-21	10	10										
<b>WE2-13490</b> Plumbing Fixtures - Men's Restroom 1A07 [Level 1]						27-May-21	03-Jun-21	5	5										
<b>Exhibit Hall B</b>																			
<b>Exhibit Hall B - Underground &amp; SOG</b>																			
<b>WE2-7181</b> Underground Plumbing Rough-in - Exhibit Hall B						17-May-21	19-May-21	5	5										
<b>Exhibit Hall B - Interior Build-out</b>																			
<b>WE2-6910</b> Overhead Plumbing - Exhibit Hall B						18-Feb-21	24-Mar-21	25	25										
<b>WE2-7020</b> Plumbing @ Floor Boxes - Exhibit Hall B						18-Jun-21	01-Jul-21	10	10										
<b>WE2-7040</b> MEFF Insulation - Exhibit Hall B						18-Jun-21	09-Jul-21	15	15										
<b>Women's Restroom 1B01</b>																			
<b>WE2-12110</b> Plumbing Rough-In - Women Restroom 1B01 [Level 1]						25-Mar-21	07-Apr-21	10	10										
<b>WE2-12250</b> Plumbing Fixtures - Women Restroom 1B01 [Level 1]						18-Jun-21	24-Jun-21	5	5										
<b>Men's Restroom 1B07</b>																			
<b>WE2-12460</b> Plumbing Rough-In - Men's Restroom 1B07 [Level 1]						06-Apr-21	19-Apr-21	10	10										
<b>WE2-12590</b> Plumbing Fixtures - Men's Restroom 1B07 [Level 1]						30-Jun-21	07-Jul-21	5	5										
<b>Women's Restroom 1B08</b>																			
<b>WE2-12760</b> Plumbing Rough-In - Women Restroom 1B08 [Level 1]						13-Apr-21	26-Apr-21	10	10										



Remaining Level of Effort     Remaining Work  
 Actual Level of Effort     Critical Remaining Work  
 Actual Work     Milestone



# BCCCH - Plumbing Remaining Work in 2021

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Activity ID	Activity Name	Start	Finish	Orig. Dur.	Rem. Dur.	2021																		
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec						
WE2-12890	Plumbing Fixtures - Womens Restroom 1B08 [Level 1]	08-Jul-21	14-Jul-21	5	5																			
<b>Exhibit Hall A</b>																								
<b>Exhibit Hall A - Underground &amp; SOG</b>																								
WE2-7403	Underground Plumbing Rough-in - Exhibit Hall A	04-Jun-21	10-Jun-21	5	5																			
<b>Exhibit Hall A - Interior Build-out</b>																								
WE2-7433	Overhead Plumbing - Exhibit Hall A	13-Apr-21	17-May-21	25	25																			
WE2-7435	Plumbing @ Floor Boxes - Exhibit Hall A	12-Jul-21	23-Jul-21	10	10																			
WE2-7439	MEFP Insulation - Exhibit Hall A	12-Jul-21	30-Jul-21	15	15																			
<b>Womens Restroom 1C09</b>																								
WE2-13060	Plumbing Rough-In - Womens Restroom 1C09 [Level 1]	07-May-21	20-May-21	10	10																			
WE2-13190	Plumbing Fixtures - Womens Restroom 1C09 [Level 1]	29-Jul-21	04-Aug-21	5	5																			
<b>Mens Restroom 1D01</b>																								
WE2-13660	Plumbing Rough-In - Mens Restroom 1D01 [Level 1]	12-May-21	25-May-21	10	10																			
WE2-13790	Plumbing Fixtures - Mens Restroom 1D01 [Level 1]	06-Aug-21	12-Aug-21	5	5																			
<b>Interiors</b>																								
<b>Level 3</b>																								
<b>Area E - Kitchen</b>																								
WE2-47921	Plumbing Rough-In - Area E Kitchen [Level 3]	09-Feb-21	22-Feb-21	10	10																			
WE2-48051	Plumbing Fixtures - Area E Kitchen [Level 3]	20-May-21	26-May-21	5	5																			
<b>Area H - Kitchen</b>																								
WE2-49951	Plumbing Rough-In - Area H Kitchen [Level 3]	27-Apr-21	10-May-21	10	10																			
WE2-7111	Plumbing Fixtures - Area H Kitchen [Level 3]	09-Aug-21	13-Aug-21	5	5																			
<b>CEP</b>																								
<b>Chiller Room</b>																								
WE2-5615	Set / Pipe Air Compressor System - Chiller Room	05-Mar-21	22-Mar-21	15	15																			



Remaining Level of Effort      Remaining Work  
 Actual Level of Effort      Critical Remaining Work  
 Actual Work      Milestone

# BCCCH - Structural Steel Remaining Work in 2021

Data Date: 20-Dec-20  
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Activity ID	Activity Name	Start	Finish	Orig. Dur.	Rem. Dur.	2021											
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
<b>Broward County Convention Center - West Expansion</b>																	
<b>West Expansion</b>																	
West Expansion Construction Milestones																	
PM-690	Structural Steel Complete		26-Mar-21	0	0	● Structural Steel Complete											
<b>GMP No. 2 - West Expansion</b>																	
<b>Construction - West West</b>																	
<b>Structure</b>																	
<b>Area D - Grid Lines WK, W2, W4</b>																	
<b>WS - W4</b>																	
<b>W4.2 - W4 (Low Roof)</b>																	
WE2-3233	Metal Deck - Area D Grid Line W2 - W4 [Roof]	17-Feb-21	18-Feb-21	2	2	■ Metal Deck - Area D Grid Line W2 - W4 [Roof]											
<b>W4 - W2.8</b>																	
<b>Low Roof</b>																	
WE2-14156	Metal Deck - Area D Grid Line W4 - W2.8 [Roof]	19-Feb-21	22-Feb-21	2	2	□ Metal Deck - Area D Grid Line W4 - W2.8 [Roof]											
<b>Construction</b>																	
<b>Structure</b>																	
<b>Existing Area (E-F+G+H) - Grid Lines W6 - W8</b>																	
<b>Area G - W6 - W8</b>																	
<b>Level 3</b>																	
WE2-14847	New Structural Steel Truss 129 / 128 Assembly - Area G Grid Line W8.6 - W8 [Level 3]	04-Jan-21	04-Jan-21	1	1	I New Structural Steel Truss 129 / 128 Assembly - Area G Grid Line W8.6 - W8 [Level 3]											
WE2-14849	New Structural Steel Truss 129 / 128 Erection - Area G Grid Line W8.6 - W8 [Level 3]	05-Jan-21	05-Jan-21	1	1	I New Structural Steel Truss 129 / 128 Erection - Area G Grid Line W8.6 - W8 [Level 3]											
WF2-14850	New Structural Steel Seq #26 Framing / Detailing - Area G Grid Line W8.6 - W8 [Level 3]	06-Jan-21	07-Jan-21	2	2	■ New Structural Steel Seq #26 Framing / Detailing - Area G Grid Line W8.6 - W8 [Level 3]											
WE2-14851	Metal Deck Level 3 - Area G Grid Line W8.6 - W8 [Level 3]	08-Jan-21	11-Jan-21	3	3	□ Metal Deck Level 3 - Area G Grid Line W8.6 - W8 [Level 3]											
<b>W8 - W6</b>																	
<b>Level 3</b>																	
WE2-14857	New Structural Steel Truss 130 / 131 Assembly - Area G Grid Line W8 - W6 [Level 3]	16-Jan-21	16-Jan-21	1	1	I New Structural Steel Truss 130 / 131 Assembly - Area G Grid Line W8 - W6 [Level 3]											
WE2-14859	New Structural Steel Truss 130 / 131 Erection - Area G Grid Line W8 - W6 [Level 3]	18-Jan-21	18-Jan-21	1	1	I New Structural Steel Truss 130 / 131 Erection - Area G Grid Line W8 - W6 [Level 3]											
WF2-14870	New Structural Steel Seq #27 Framing / Detailing - Area G Grid Line W8 - W6 [Level 3]	19-Jan-21	20-Jan-21	2	2	■ New Structural Steel Seq #27 Framing / Detailing - Area G Grid Line W8 - W6 [Level 3]											
WE2-14841	Metal Deck - Area G Grid Line W8 - W6 [Level 3]	21-Jan-21	23-Jan-21	3	3	□ Metal Deck - Area G Grid Line W8 - W6 [Level 3]											
<b>W6 - W5</b>																	
<b>Level 3</b>																	
WE2-14857	New Structural Steel Truss 132 / 133 Assembly - Area G Grid Line W6 - W5 [Level 3]	26-Jan-21	26-Jan-21	1	1	I New Structural Steel Truss 132 / 133 Assembly - Area G Grid Line W6 - W5 [Level 3]											
WE2-14859	New Structural Steel Truss 132 / 133 Erection - Area G Grid Line W6 - W5 [Level 3]	27-Jan-21	27-Jan-21	1	1	I New Structural Steel Truss 132 / 133 Erection - Area G Grid Line W6 - W5 [Level 3]											
WE2-14890	New Structural Steel Seq #28 Framing / Detailing - Area G Grid Line W6 - W5 [Level 3]	28-Jan-21	29-Jan-21	2	2	■ New Structural Steel Seq #28 Framing / Detailing - Area G Grid Line W6 - W5 [Level 3]											
WE2-45381	Metal Deck - Area G Grid Line W6 - W5 [Level 3]	30-Jan-21	02-Feb-21	3	3	□ Metal Deck - Area G Grid Line W6 - W5 [Level 3]											
<b>Roof</b>																	



Remaining Level of Effort  
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# BCCCH - Structural Steel Remaining Work in 2021

Date Date: 20-Dec-20  
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Activity ID	Activity Name	Start	Finish	Orig. Dur.	Rem. Dur.	2021																					
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec									
WE2-14900	New Structural Steel Seq #29 Framing / Detailing - Area G Grid Line W5 - W5 [Roof]	30-Jan-21	01-Feb-21	2	2																						
WE2-48471	Metal Deck - Area G Grid Line W5 - W5 [Roof]	05-Feb-21	05-Feb-21	3	3																						
<b>Area H - W6 - WF</b>																											
<b>W5 - W6</b>																											
<b>Level 3</b>																											
WE2-14670	New Structural Steel Truss 134 / 135 Assembly - Area H Grid Line W5 - W4 [Level 3]	11-Feb-21	11-Feb-21	1	1																						
WE2-14671	New Structural Steel Truss 134 / 135 Erection - Area H Grid Line W5 - W4 [Level 3]	12-Feb-21	12-Feb-21	1	1																						
WE2-14680	New Structural Steel Seq #30 Framing / Detailing - Area H Grid Line W5 - W4 [Level 3]	15-Feb-21	15-Feb-21	2	2																						
WE2-48621	Metal Deck - Area H Grid Line W5 - W4 [Level 3]	16-Feb-21	18-Feb-21	3	3																						
<b>Roof</b>																											
WE2-14650	New Structural Steel Seq #31 Framing / Detailing - Area H Grid Line W5 - W4 [Roof]	16-Feb-21	17-Feb-21	2	2																						
WE2-48481	Metal Deck Roof - Area H Grid Line W5 - W4 [Roof]	19-Feb-21	25-Feb-21	3	3																						
<b>W4 - W2.8</b>																											
<b>Level 3</b>																											
WE2-14700	New Structural Steel Truss 136 / 137 Assembly - Area H Grid Line W4 - W2.8 [Level 3]	20-Feb-21	20-Feb-21	1	1																						
WE2-14701	New Structural Steel Truss 136 / 137 Erection - Area H Grid Line W4 - W2.8 [Level 3]	22-Feb-21	22-Feb-21	1	1																						
WE2-48710	New Structural Steel Seq #32 Framing / Detailing - Area H Grid Line W4 - W2.8 [Level 3]	23-Feb-21	24-Feb-21	2	2																						
WE2-48661	Metal Deck - Area H Grid Line W4 - W2.8 [Level 3]	25-Feb-21	25-Feb-21	3	3																						
<b>Roof</b>																											
WE2-14720	New Structural Steel Seq #33 Framing / Detailing - Area H Grid Line W4 - W2.8 [Roof]	25-Feb-21	26-Feb-21	2	2																						
WE2-48491	Metal Deck - Area H Grid Line W4 - W2.8 [Roof]	01-Mar-21	03-Mar-21	3	3																						
<b>Exhibition Hall - Long Span</b>																											
<b>Area B - W8 - W9</b>																											
<b>W8 - W9</b>																											
<b>Level 3 (Roof)</b>																											
WE2-4452	Encase Col WH1 WH15 - Long Span Area B Grid Line W11 - W10 [Level 3 / Roof]	05-Jan-21	11-Jan-21	5	5																						
WE2-47121	Encase Col WH1 WH12 - Long Span Area B Grid Line W11 - W10 [Level 3 / Roof]	12-Jan-21	18-Jan-21	5	5																						
WE2-4560	Metal Deck - Long Span Area B Grid Line W11 - W10 [Level 3 / Roof]	19-Jan-21	25-Jan-21	5	5																						
<b>W10 - W9</b>																											
<b>Level 3 (Roof)</b>																											
WE2-47781	New Structural Steel Seq #51 Framing / Detailing - Long Span Area B Grid Line W10 - W9 [Level 3 / Roof]	04-Jan-21	06-Jan-21	3	3																						
WE2-42861	Metal Deck - Long Span Area B Grid Line W10 - W9 [Level 3 / Roof]	07-Jan-21	13-Jan-21	5	5																						

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Remaining Level of Effort  
 Actual Level of Effort  
 Actual Work
 
  Remaining Work  
  Critical Remaining Work  
◆ Milestone

# BCCCH - Structural Steel Remaining Work in 2021

Data Date: 20-Dec-20  
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Activity ID	Activity Name	Start	Finish	Orig. Dur.	Rem. Dur.	2021																		
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec						
<b>Area C- WH - WH</b>																								
<b>WH - W8</b>																								
<b>Level 3 (Roof)</b>																								
WE2-4611	New Structural Steel Truss 108-2/108-3/158 - 161 Assembly - Long Span Area C Grid Lines W8.6 - W8 [Level 3 / Roof]	04-Jan-21	08-Jan-21	5	5																			
WE2-4613	New Structural Steel Truss 108-2/108-3/161 Erection - Long Span Area C Grid Lines W8.6 - W8 [Level 3 / Roof]	09-Jan-21	09-Jan-21	1	1																			
WE2-4615	New Structural Steel Truss 158 - 160 Erection - Long Span Area C Grid Lines W8.6 - W8 [Level 3 / Roof]	11-Jan-21	11-Jan-21	1	1																			
WE2-4620	New Structural Steel Seq #52 Framing - Long Span Area C Grid Lines W8.6 - W8 [Level 3 / Roof]	12-Jan-21	14-Jan-21	3	3																			
WE2-4782	New Structural Steel Seq #53 Framing - Long Span Area C Grid Lines W8.6 - W8 [Level 3 / Roof]	15-Jan-21	19-Jan-21	3	3																			
WE2-47151	Encase Col WH W18 - Long Span Area C Grid Lines W8.6 - W8 [Level 3 / Roof]	19-Jan-21	25-Jan-21	5	5																			
WE2-4640	Metal Deck Roof - Long Span Area C Grid Lines W8.6 - W8 [Level 3 / Roof]	20-Jan-21	25-Jan-21	5	5																			
WE2-47161	Encase Col WH W15 - Long Span Area C Grid Lines W8.6 - W8 [Level 3 / Roof]	26-Jan-21	01-Feb-21	5	5																			
WE2-47171	Encase Col WH W12 - Long Span Area C Grid Lines W8.6 - W8 [Level 3 / Roof]	02-Feb-21	08-Feb-21	5	5																			
<b>WH - W6</b>																								
<b>Level 3 (Roof)</b>																								
WE2-14467	New Structural Steel Truss 110-2/110-3/162 - 165 Assembly - Long Span Area C Grid Lines W8 - W6 [Level 3 / Roof]	15-Jan-21	20-Jan-21	5	5																			
WE2-14469	New Structural Steel Truss 110-2/110-3/165 Erection - Long Span Area C Grid Lines W8 - W6 [Level 3 / Roof]	21-Jan-21	21-Jan-21	1	1																			
WE2-4189	Structural Steel Seq 48 thru 54 & 24 thru 27 Visual Inspection	22-Jan-21	22-Jan-21	1	1																			
WE2-14471	New Structural Steel Truss 162 - 164 Erection - Long Span Area C Grid Lines W8 - W6 [Level 3 / Roof]	22-Jan-21	22-Jan-21	1	1																			
WE2-14590	New Structural Steel Seq #54 - Long Span Area C Grid Lines W8 - W6 [Level 3 / Roof]	23-Jan-21	26-Jan-21	3	3																			
WE2-4781	New Structural Steel Seq #55 - Long Span Area C Grid Lines W8 - W6 [Level 3 / Roof]	27-Jan-21	29-Jan-21	3	3																			
WE2-42921	Metal Deck - Long Span Area C Grid Lines W8 - W6 [Level 3 / Roof]	30-Jan-21	10-Feb-21	10	10																			
<b>WH - W5</b>																								
<b>Level 3 (Roof)</b>																								
WE2-14565	New Structural Steel Truss 112-2/3, 113-2/3, 166 - 169 Assembly - Long Span Area C Grid Lines W6 - W5 [Level 3 / Roof]	27-Jan-21	01-Feb-21	5	5																			
WE2-14567	New Structural Steel Truss 112-2 / 112-3 Erection - Long Span Area C Grid Lines W6 - W5 [Level 3 / Roof]	02-Feb-21	02-Feb-21	1	1																			
WE2-14569	New Structural Steel Truss 113-1 / 113-2 / 169 Erection - Long Span Area C Grid Lines W6 - W5 [Level 3 / Roof]	05-Feb-21	05-Feb-21	1	1																			
WE2-14571	New Structural Steel Truss 166 - 168 Erection - Long Span Area C Grid Lines W6 - W5 [Level 3 / Roof]	04-Feb-21	04-Feb-21	1	1																			
WE2-14610	New Structural Steel Seq #56 Framing / Detailing - Long Span Area C Grid Lines W6 - W5 [Level 3 / Roof]	05-Feb-21	08-Feb-21	3	3																			



Remaining Level of Effort  
 Actual Level of Effort  
 Actual Work  
 Remaining Work  
 Critical Remaining Work  
 Milestone



# BCCCH - Structural Steel Remaining Work in 2021

Date Date: 20-Dec-20  
Print Date: 09-Dec-20 14:17

Activity ID	Activity Name	Start	Finish	Orig. Dur.	Rem. Dur.	2021																				
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec								
WE2-47801	New Structural Steel Seq #57 Framing / Detailing - Long Span Area C Grid Lines W5 - W5 [Level 3 / Roof]	09-Feb-21	11-Feb-21	3	3																					
WE2-42951	Metal Deck Roof C - Long Span Area C Grid Lines W5 - W5 [Level 3 / Roof]	12-Feb-21	23-Feb-21	10	10																					
<b>Area D - W1 - W4</b>																										
<b>Level 3 (Roof)</b>																										
WE2-47201	Encase Col WH W18 - Long Span Area D Grid Line W5 - W4 [Level 3 / Roof]	09-Feb-21	15-Feb-21	5	5																					
WE2-47202	New Structural Steel Truss 115-2/3, 170 - 175 Assembly - Long Span Area D Grid Line W5 - W4 [Level 3 / Roof]	10-Feb-21	15-Feb-21	5	5																					
WE2-47211	Encase Col WH W15 - Long Span Area D Grid Line W5 - W4 [Level 3 / Roof]	16-Feb-21	22-Feb-21	5	5																					
WE2-47212	New Structural Steel Truss 115-2 / 115-3 / 175 Erection - Long Span Area D Grid Line W5 - W4 [Level 3 / Roof]	16-Feb-21	16-Feb-21	1	1																					
WE2-47213	New Structural Steel Truss 170 - 175 Erection - Long Span Area D Grid Line W5 - W4 [Level 3 / Roof]	17-Feb-21	17-Feb-21	1	1																					
WE2-4700	New Structural Steel Seq #58 Framing / Detailing - Long Span Area D Grid Line W5 - W4 [Level 3 / Roof]	18-Feb-21	20-Feb-21	3	3																					
WE2-4783	New Structural Steel Seq #59 Framing / Detailing - Long Span Area D Grid Line W5 - W4 [Level 3 / Roof]	23-Feb-21	24-Feb-21	3	3																					
WE2-47221	Encase Col WH W12 - Long Span Area D Grid Line W5 - W4 [Level 3 / Roof]	25-Feb-21	01-Mar-21	5	5																					
WE2-4740	Metal Deck - Long Span Area D Grid Line W5 - W4 [Level 3 / Roof]	25-Feb-21	02-Mar-21	5	5																					
WE2-47231	Encase Col WH W15 - Long Span Area D Grid Line W5 - W4 [Level 3 / Roof]	02-Mar-21	08-Mar-21	5	5																					
WE2-47241	Encase Col WH W12 - Long Span Area D Grid Line W5 - W4 [Level 3 / Roof]	09-Mar-21	15-Mar-21	5	5																					
<b>W4 - W2.8</b>																										
<b>Level 3</b>																										
WE2-53341	New Structural Steel Truss 174 - 177 Assembly - Long Span Area D Grid Line W4 - W2.8 [Level 3]	23-Feb-21	26-Feb-21	4	4																					
WE2-53351	New Structural Steel Truss 174 - 177 Erection - Long Span Area D Grid Line W4 - W2.8 [Level 3]	01-Mar-21	01-Mar-21	1	1																					
WE2-4786	New Structural Steel Seq #60 Framing / Detailing - Long Span Area D Grid Line W4 - W2.8 [Level 3]	02-Mar-21	08-Mar-21	5	5																					
WE2-4787	New Structural Steel Seq #61 Framing / Detailing - Long Span Area D Grid Line W4 - W2.8 [Level 3]	09-Mar-21	15-Mar-21	5	5																					
WE2-44041	Metal Deck - Long Span Area D Grid Line W4 - W2.8 [Level 3]	25-Mar-21	07-Apr-21	10	10																					
<b>Roof</b>																										
WE2-14650	New Structural Steel Seq #62 Framing / Detailing - Long Span Area D Grid Line W4 - W2.8 [Low Roof]	16-Mar-21	20-Mar-21	5	5																					
WE2-4720	New Structural Steel Seq #63 Framing / Detailing - Long Span Area D Grid Line W4 - W2.8 [Low Roof]	22-Mar-21	26-Mar-21	5	5																					
WE2-7143	Structural Steel Seq 56 thru 63 & 28 thru 33 Visual Inspection	26-Mar-21	26-Mar-21	1	1																					
WE2-4800	Metal Deck - Long Span Area D Grid Line W4 - W2.8 [Low Roof]	08-Apr-21	19-Apr-21	10	10																					



▬ Remaining Level of Effort
▬ Actual Level of Effort
▬ Actual Work
▭ Remaining Work
◻ Critical Remaining Work
◆ Milestone

# BCCCH - Structural Steel Remaining Work in 2021

Data Date: 20-Dec-20  
Print Date: 09-Dec-20 14:17

Activity ID	Activity Name	Start	Finish	Orig. Dur.	Rem. Dur.	2021											
						Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
<b>New Loading Dock</b>																	
<b>Area A</b>																	
WE-2-45821	Install Steel Columns - Area A New Loading Dock	12-Feb-21	15-Feb-21	2	2	<input type="checkbox"/> Install Steel Columns - Area A New Loading Dock											
<b>Capital Improvement</b>																	
<b>Existing Building NE Corner Stair Tower</b>																	
<b>Buyout and Reassignment</b>																	
<b>Procurement</b>																	
<b>Structural Steel</b>																	
WE-2-9145	Structural Steel (Beams, Columns, & Steel Plates) - A/E Approval	13-Jan-21	26-Jan-21	10	10	<input type="checkbox"/> Structural Steel (Beams, Columns, & Steel Plates) - A/E Approval											
WE-2-9148	Structural Steel (Beams, Columns, & Steel Plates) - Fab & Deliver	27-Jan-21	23-Mar-21	40	40	<input type="checkbox"/> Structural Steel (Beams, Columns, & Steel Plates) - Fab & Deliver											
<b>Construction</b>																	
<b>Roof Decking and Structure</b>																	
WE-2-9228	Steel Decking and Columns	24-Mar-21	20-Apr-21	20	20	<input type="checkbox"/> Steel Decking and Columns											

# UPDATED COVID-19 PLAN FOR BCCCH OFFICE AND FIELD

Date Modified: 12/10/2020

COVID Plan Captain: Lisa Falso

## GUIDELINES FOR OFFICE

This plan is effective immediately for all Balfour Beatty employees working at the BCCCH project office located at 1799 SE 17<sup>th</sup> Street. Any employees with constraints such as childcare, family members with underlying conditions, etc. that are being affected by COVID-19 must contact John Parker to discuss any potential concerns.

The following is the guide moving forward for the foreseeable future:

### Office Hygiene

Due to Covid-19 there will be a continued effort to improve the overall hygiene of the BCCCH office and the project site.

Balfour Beatty will perform office cleanings consistent, to the greatest degree possible, with the CDC guidelines: <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/cleaning-disinfection.html>

1. In addition to the CDC guidelines Balfour Beatty has employed a full-time cleaning person (Sharonda Neil) to sanitize all door handles, surfaces, desk, etc. Please accommodate Sharonda and thank her daily!
2. Wash your hands with soap and water or use hand sanitizer, especially after touching used items or surfaces. This must be done when you enter the building.
3. Avoid touching your face
4. Sneeze or cough into a tissue, or the inside of your elbow
5. Disinfect frequently used items and surfaces as much as possible
6. Continue using face coverings while in public, and particularly when using mass transit
7. Restrooms
  - a. Personnel are required to wear face covering when entering restrooms
  - b. All Employees and Guests must wash their hands when leaving the restroom
  - c. Waste cans will be no touch and will be located in and out of restrooms
  - d. Waste to be removed throughout the day
8. Restrict **COMMON AREAS** (Breakroom 2-person limit) to be used for heating up food, putting food in the fridge, and/or getting coffee/water/soda. There will be no consumption of food in the kitchen.

### **People Who Feel Sick Must Stay at Home**

1. DO NOT GO TO WORK – contact your manager
2. If you go to the doctor please self-quarantine in accordance with the doctor's and/or CDC recommendations

12/10/20

### Office Personnel - Social Distancing Requirements

- You must follow Social Distancing guidelines as outlined in the CDC.
- In order to Social Distance in the office please:
  - Do not enter another employee's office.
  - Stand outside door.
  - No more than 1 person in the hallway outside an office at a time.
- All employees will wear **PROTECTIVE** cloth face coverings/face mask when work requires less than 6 feet of separation and when walking through the office. This includes all public spaces.
- Personal accountability for cleaning and disinfecting high touch surfaces
  - Each employee will be provided a bottle of hand sanitizer at desk
  - Hand sanitizer will be located on each side of all doors
  - We will have trash cans on either side of all doors
  - Disinfectants will be available in each area of the office for your use
- We will be spacing all workstations in open areas to ensure 6' or more of separation
- For the foreseeable future we will be utilizing **TELEWORK**, Microsoft Team site, GoToMeetings for all project team meetings and for any meetings with 10 or more individuals (when meeting outside of the TELEWORK mask must be worn)
- Minimize **NON-ESSENTIAL** Travel. If you do have to travel, please advise your supervisor prior to travel.
- When transporting between the office and field make sure that you sanitize the vehicle and face coverings must be worn in accordance with CDC.
- **VISITORS should be discouraged from entering office, if required, individuals** must sign in and follow the same guidelines as written in this plan. All Visitors must schedule an appointment. No walk-ins allowed.
- Everyone is encouraged to bring their food and eat at their desk.

### Logistics:

Reference attached plan. There is a dedicated access point exclusively for ingress/egress to/from the office to support social distancing as recommended by the CDC.

Please note that all doors are to remain locked and you must always carry your key card access with you at all times. We are installing an AI Phone at the reception desk glass door. This will allow Lisa to communicate with and control access at the glass door.

No guests are allowed in the building without prior communication with Lisa Falso.

NOTE ALL EMPLOYEES AND GUEST MUST BE SCANNED BY THE THERMAL IMAGING CAMERA LOCATED AT THE OFFICE LOBBY EVERY TIME THEY ENTER THE OFFICE. IF ANYONE IS SCANNED AND IDENTIFIED AS HAVING AN ABNORMAL TEMPERATURE (AS NOTED BY THE THERMAL IMAGING CAMERA) WILL BE ASKED TO LEAVE THE OFFICE AND NOT RETURN UNTIL THEY HAVE RECEIVED A RELEASE FROM A DOCTOR.

- We have taken into consideration corridors for one-way travel to minimize interaction with others. Foot traffic in the office shall be one way. See map below for routes and direction of travel. We will post signs to indicate direction of travel through the office.
- Stairwells are one-way, signage will be posted

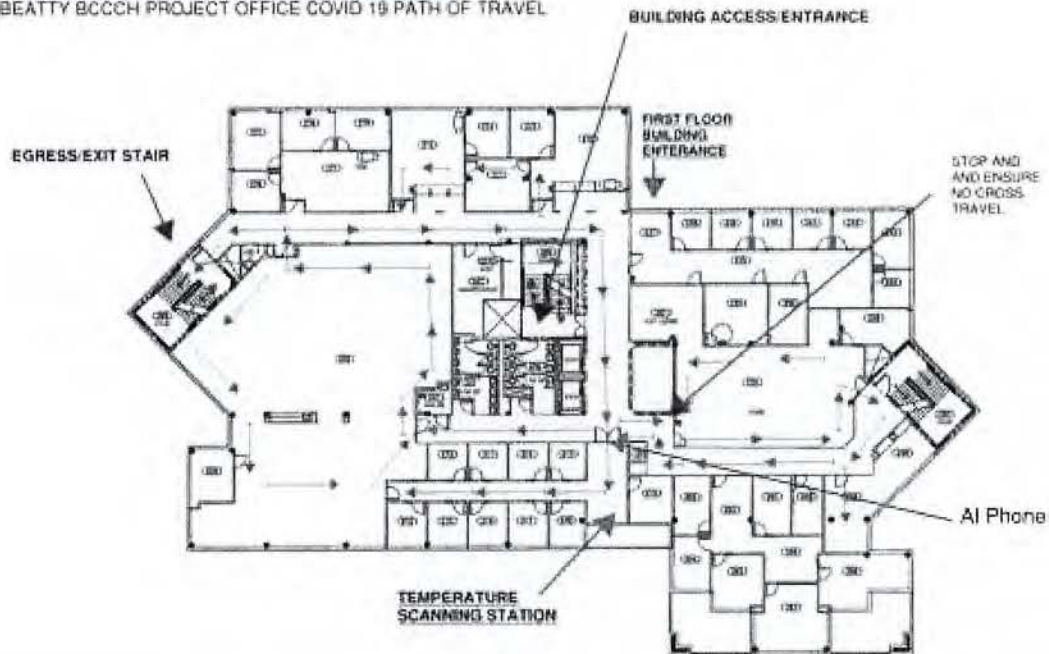
12/10/20



- We are encouraging everyone to utilize the stairs if possible. If not, only one person per elevator

**AS A BACKUP PLAN ALL EMPLOYEES NEED TO HAVE A WORKSTATION AT THE OFFICE AND THEIR HOME. BBC WILL PROVIDE MONITORS FOR YOUR OFFICE AT HOME IF NEEDED. ALL MONITORS MUST BE RETURNED TO BBC AFTER THE COVID 19 IS OVER.**

SUITE 203A 1799 SE 17TH STREET, FORT LAUDERDALE 33316  
BALFOUR BEATTY BCCCH PROJECT OFFICE COVID 19 PATH OF TRAVEL



### GUIDELINES FOR FIELD

1. All team members must communicate the plan daily
2. Checks are completed at the gate, entrance to the work, during morning safety huddles and periodic checks through the work day.
3. Plan must be updated based on the progress of the work/change conditions.
4. Constant recommunication of the plan / plan updates

### **Items to check daily in the field:**

1. Signage at the gates, fence and within the project limits showing social distancing
2. We have a person at each entrance that stops every person to visually inspect to ensure they are not showing any of the main signs of the COVID-19 (fatigue, cough, breathlessness, etc..) and to educate them in English and Spanish what social distancing is. If someone shows any signs of COVID-19 per the CDC they are not allowed to enter the site.
3. Ensure team members walk around all day making sure that everyone is staying 6' away. There are some instances where the individuals do to safety reason do have to be within 6' but limited to actual need. Subs are to identify who on the teams are working near each other to track should one of them become symptoms

12/10/20

## 8.8 COVID 19 Project Protocols

**COVID-19 PLAN** Version 1

CAM # 21-0292  
Exhibit 1  
Page 53 of 69

4. Cleaning team members must clean all surfaces non-stop all day (toilets, tables, handles, gates, etc)
5. All morning meeting are to be handled separately to ensure there are no large groups of people in one area. The individual groups stay at least 6 feet away from each other.
6. Document daily with pictures to show the separation
7. The helicopter flies over once a day to take pictures of the site to verify social distancing is happening. Ensure we are reviewing the pictures for social distancing
8. All AHJ's have assigned parking to ensure there is separation around them and they have clear access to the site without interacting with the workers
9. If someone is identified to be sick/potentially sick we will immediately stop work in the area and disinfect the tools, equipment and area the worker was working. Anyone working near the worker will be asked to leave and self-quarantine and must provide a note from a doctor before they return.
10. Every subcontractor must have a COVID-19 plan and monitor their plan
11. Leadership must walk once a week with the prime subs to ensure we are working together to address any concerns
12. We have added a safety person to the site for another set of eyes and to ensure we are working safely
13. We have increased the servicing schedule of the port-o-lets and hand wash stations to daily
14. Lunch and break areas are set-up to adhere to the 6ft separation
15. Self-serve from lunch truck has been eliminated. Designated person distributes contents.



12/10/20

## 8.8 COVID 19 Project Protocols

**COVID-19 PLAN** | Version |

CAM # 21-0292

Exhibit 1

Page 54 of 69



All Delivery Drivers Must Be Temperature Checked and Advised Of COVID-19 Protocols



All Workers Must Be Temperature Checked and Advised Of COVID-19 Protocols at the Site Gate and Building Entrance.



All Workers Must Be Temperature Checked Utilizing the Thermal Imaging Camera and Advised Of COVID-19 Protocols at the Building Entrance.



12/10/20

## 8.8 COVID 19 Project Protocols

**COVID-19 PLAN** Version 1

CAM # 21-0292  
Exhibit 1  
Page 55 of 69





December 17, 2020

Mr. Thomas Stedem  
Senior Project Manager  
Balfour Beatty  
1799 SE 17th Street  
Fort Lauderdale, Florida 33316

Re: Report of Noise Level Estimation – Additional Hours  
Broward County Convention Center  
1950 Eisenhower Boulevard  
Fort Lauderdale, Florida  
Project 16698  
Proposal 20-0911

Dear Mr. Stedem:

NV5 Inc. submits this letter in fulfillment of the requested scope of service. NV5 has been providing Noise Monitoring Summary reports. This report provides a summary of the information collected since the previous report.

The project site is located at 1950 Eisenhower Boulevard. In October 2020, a monitoring unit was placed at the southeast corner of the building at 1799 SE 17<sup>th</sup> Street, Fort Lauderdale, FL.

Noise Monitoring starting in October, 2020 and is currently ongoing. This report addresses the information recorded from October 31, 2020 to December 15, 2020.

#### **PURPOSE**

The purpose of our services on this project were to: provide a review of noise levels that could be expected at adjacent condominium property line north of the convention center for construction at hours outside of those outlined within the City of Fort Lauderdale noise regulations.

#### **NOISE MONITORING EQUIPMENT**

NV5, in conjunction with Geosonics, provided noise monitoring equipment to the project. For this project a Re:mote Noise Level Meter operated at the southeast corner of the building at 1799 SE 17<sup>th</sup> Street, Fort Lauderdale, FL. Normally a noise limit is provided. We understand that a specific limit for noise was not provided for this project.

#### **Remote Equipment**

NV5 provided Re:mote Noise Level Meter monitoring equipment to the project. The monitoring units run daily providing the summary records that are transmitted and reported daily to an online site. The unit

transmits the data to us daily and we review the day's noise levels and cite the maximum value recorded each day.

The reports online summarize the noise levels a day at a time from the instrument location. They are histogram format or vertical bars of the vibration levels recorded during the day.

**REVIEW OF NOISE MONITORING DATA**

Based on the attached report, noise limits of the City of Ft. Lauderdale that are represented by 60 dBA during day time hours and 50 dBA during night time hours, can't be met due to the fact that the noise from the adjacent street and associated community produce levels in the range of 60-70 dBA. These levels were recorded during the above mentioned period consistently and we highly recommends these levels to be considered as acceptable ambient levels of noise for this project only.

Attached to this letter is the summary of the Re:mote noise data collected for the time period of October 31, 2020 through December 15, 2020 and estimates that the noise levels during extended hours projected to the north properties would not be in excess of the noise regulations of the City.

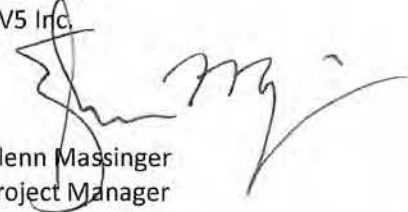
Complete copies of the data for each day have been available online.

**CLOSURE**

We appreciate the opportunity to be of service. In the event you have questions about information in this report, please contact the undersigned.

Sincerely,  
NV5 Inc.

Glenn Massinger  
Project Manager



Eric J. Stern, P.E.  
Vice President  
Florida Registration No. 57604

Attachments: Re:mote Unit Noise Summary Report (11 pages)  
2 Copies to Addressee via U.S. Mail  
Copy to NV5 File





December 18, 2020

Glenn Massinger, Project Manager  
NV5  
14486 Commerce Way  
Miami Lakes FL 33016

Suite 4  
6900 S. W. 21<sup>st</sup> Court  
Davie, FL 33317

Phone 954.424.2101  
Fax 954.424.2104

Re: Broward Convention Center – Noise Level Estimation – Additional Hours

Dear Mr. Massinger:

Per your request I am providing a review of noise levels that could be expected at the adjacent condominium property line to the north of the convention center for construction at hours outside of those outlined within the City of Fort Lauderdale noise regulations. Construction is currently operating at hours of 8:00 am to 7:00 pm. Due to time requirements on the project the proposed working hours will be 7:00 am to 10:00 pm the following day. As noise level monitoring has been completed with a Re:mote™ Noise Level Meter operated at the southeast corner of the building at 1799 SE 17<sup>th</sup> Street, Fort Lauderdale, FL this letter covers our opinion on the noise levels expected.

Noise is measured at ground level at the “receiving land use” property line according to the Fort Lauderdale Noise Code. With the unit in its existing location it is on the ground level with a microphone approximately 4 – 5’ off the ground consistent with how noise is to be measured. The noise is measured in a line consistent with the property line / building area of the structures north of SW 17<sup>th</sup> Street. The levels measured at this point would be consistent with those for comparison to the City code. The noise levels measured from the installation on October 31 through December 15 have been considered.

The extended hours that would be used in the upcoming work would be primarily for steel erection located at the northwest corner of the site extending south and parallel with the existing convention center. The closest area to the condominium to the north is approximately 570 feet. Associated with this work would be the use of a forklift that generates 85 dBA at a distance of 50 feet. This level is the estimated maximum and calculated at the closest point of the operation. As this is mobile equipment the peak level only occurs when the forklift would be in that closest area. At other times since the project would work south to north the levels would be consistently lower.

In order to determine compliance with the City regulations a calculation of noise at the adjacent properties is necessary. Noise reduces with distance and using a standard calculation noise may be predicted based upon an initial level and



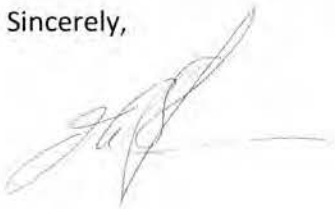
distance. The use of the inverse square law allows predication in that a sound level (intensity) will drop off as distance increases. This law which has been demonstrated by evidence and actual measurement calculates a six (6) decibel drop with a doubling of the distance in feet. Considering the 85 decibel level for the forklift at 570 feet noise would reduce to 64 dBA.

The predicted level is presuming no uninterrupted path for the sound and that no existing levels are considered. In this case the elevated section of the SE 17<sup>th</sup> Street Bridge over the Intracoastal Waterway would provide shielding and reduced noise at the property line. However, the largest reduction of noise would be the shadowing of any noise at the Convention Center by existing noise from the community and traffic on SE 17<sup>th</sup> Street.

Measured levels from October 31, 2020 through December 16, 2020 show that noise from the adjacent street area and associated community produce levels that do not regularly go below 60-65 decibels up to 70 decibels. This data shows a solid noise level that exists over this period consistently. This may be considered as the "ambient" level of noise. Graphs are attached following the conclusion of this letter that show data from the noise meter for a series of dates which also identify City time frames and working shifts. Also shown are two graphs showing overall noise levels as the one minute maximum levels from October 28 through December 16, 2020. As the noise levels are 60 – 65 decibels at the minimum the 64 dBA generated by the forklift would be obscured by community ambient levels. Also, considering the noise levels occur 24-hours over this range of noise, the 60 dBA daytime and 50 dBA nighttime noise limits of the City cannot be met due to ambient conditions. In our opinion the noise levels projected to the north properties would not be in excess of the noise regulations of the City.

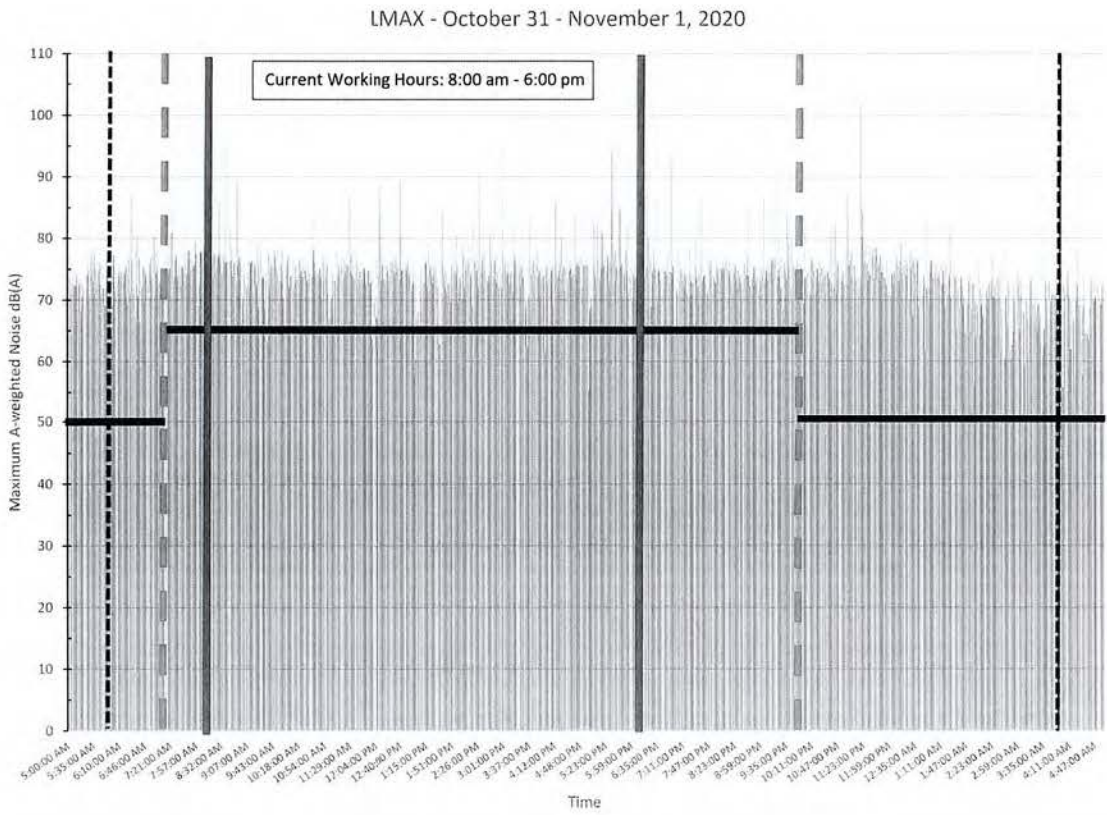
If you have any questions please feel free to contact me.

Sincerely,



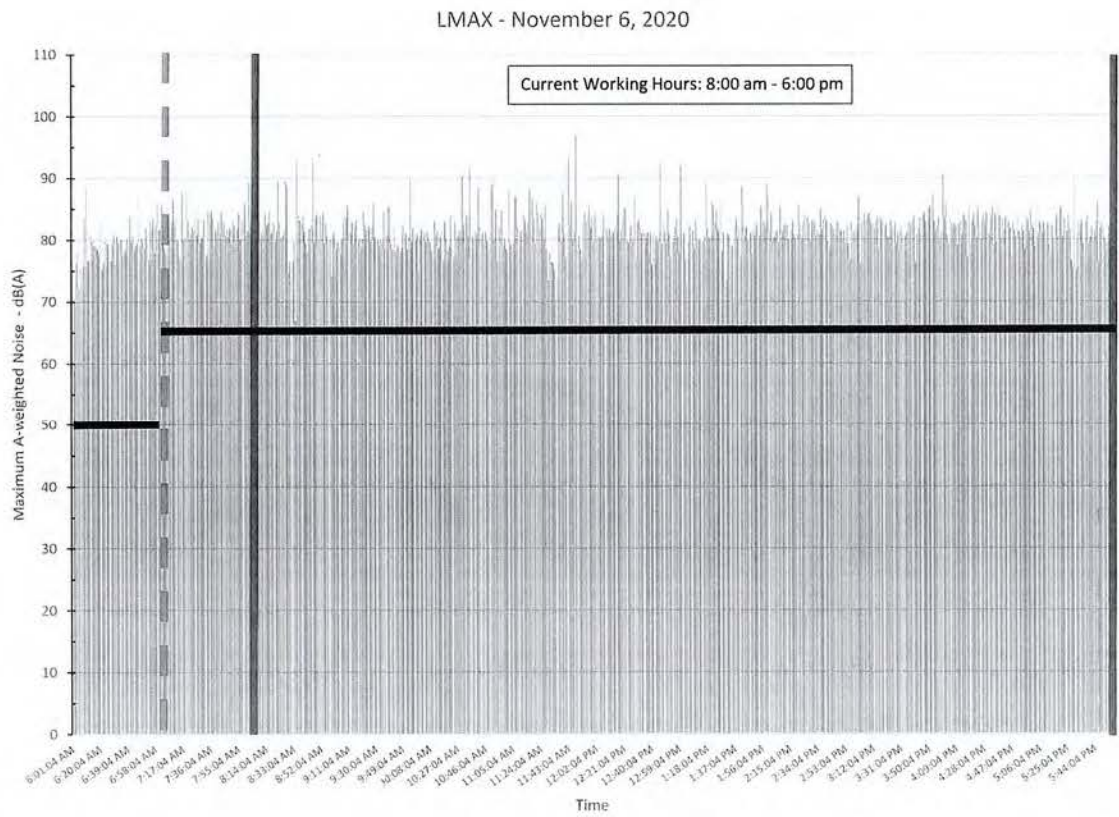
Jeffrey A. Straw  
Vice President and Area Manager





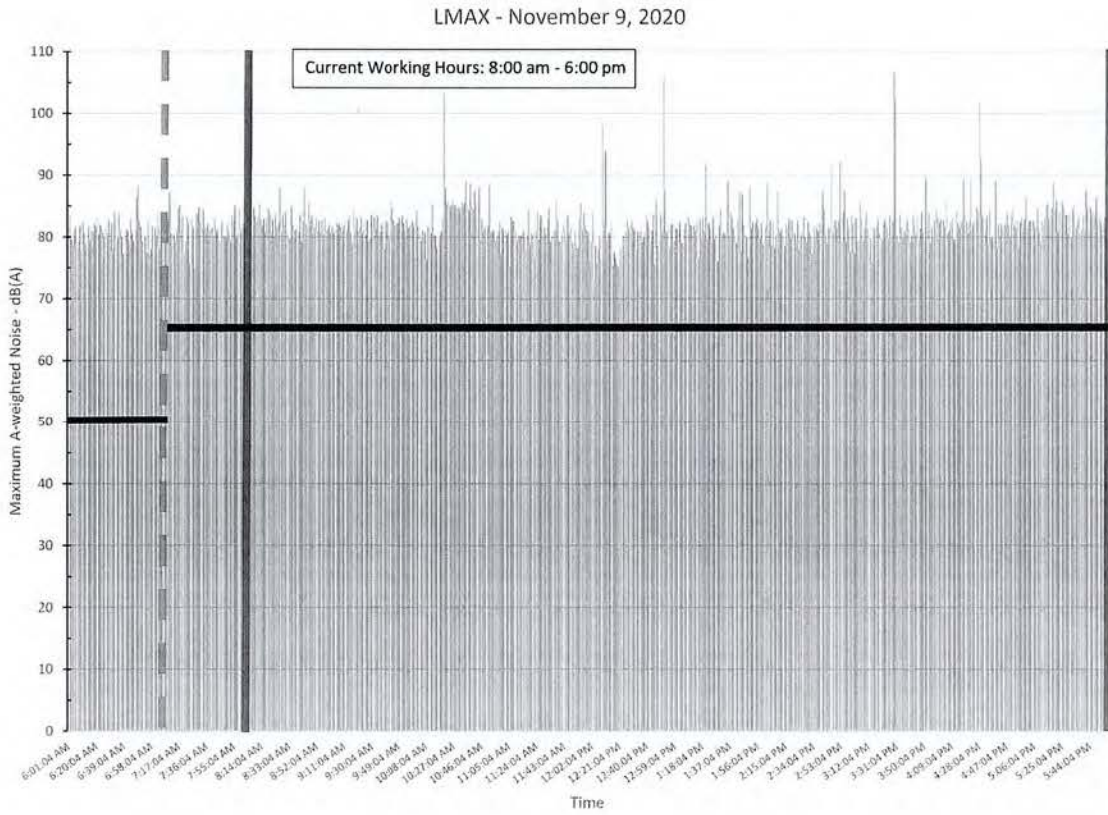
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Page 3 of 11

### 8.10 NV5 Signed and Sealed Engineered Calculation



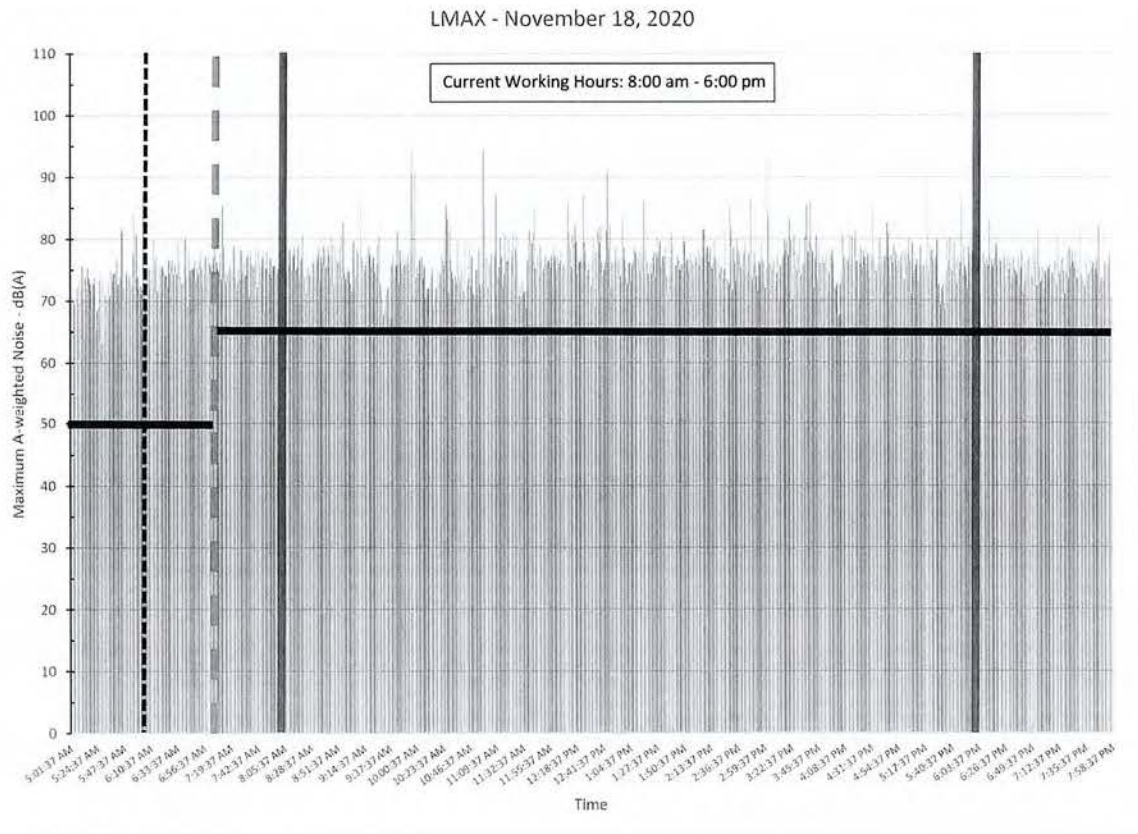
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### 8.10 NV5 Signed and Sealed Engineered Calculation



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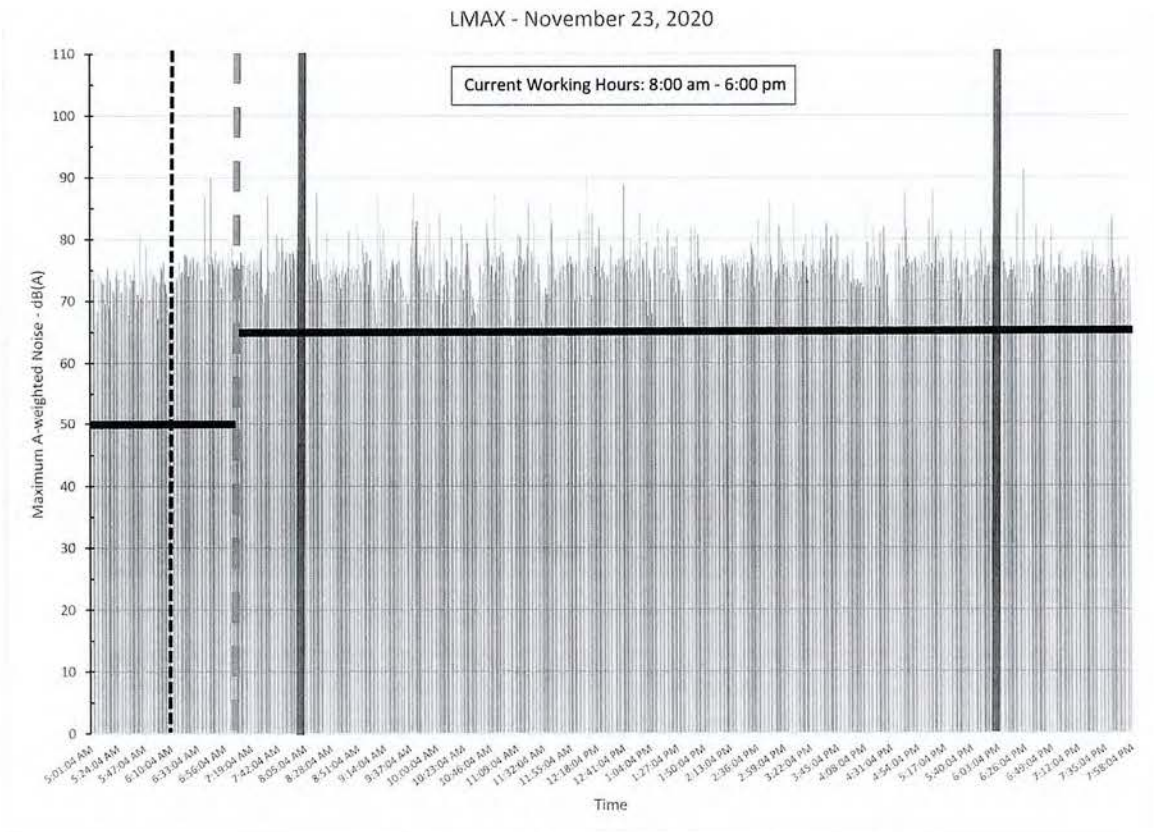
### 8.10 NV5 Signed and Sealed Engineered Calculation



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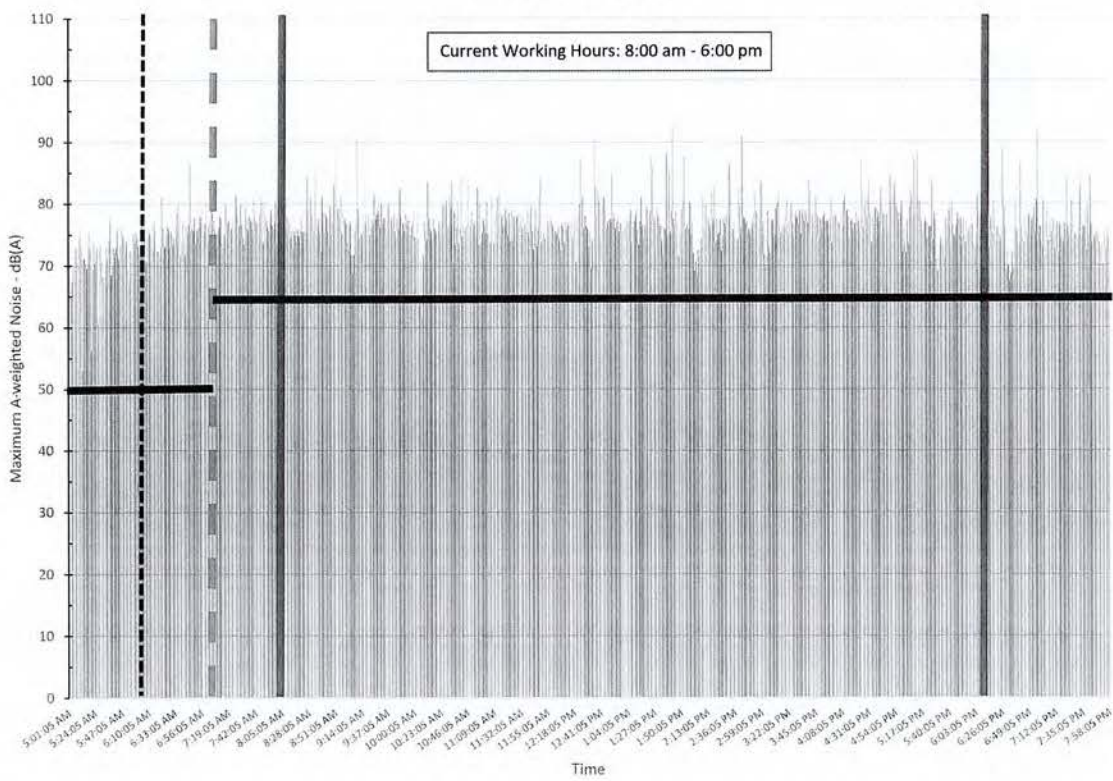
### 8.10 NV5 Signed and Sealed Engineered Calculation



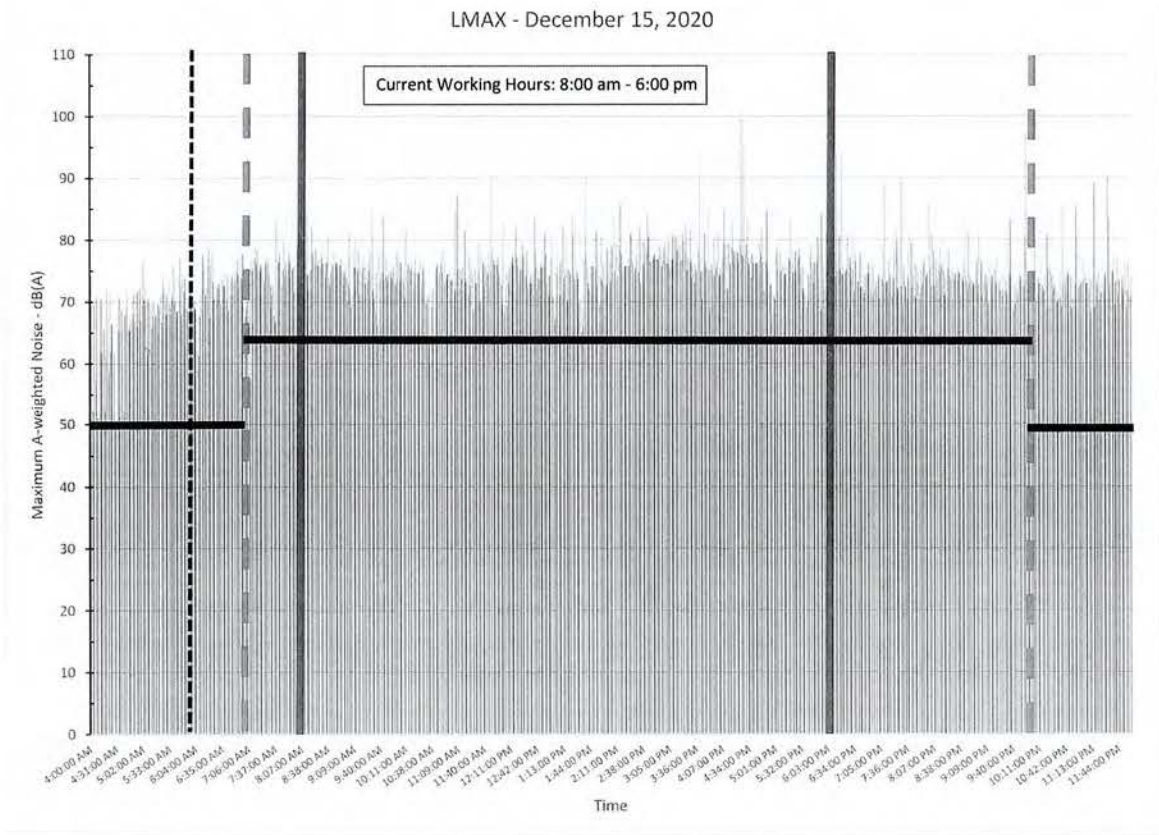


### 8.10 NV5 Signed and Sealed Engineered Calculation

LMAX - December 3, 2020

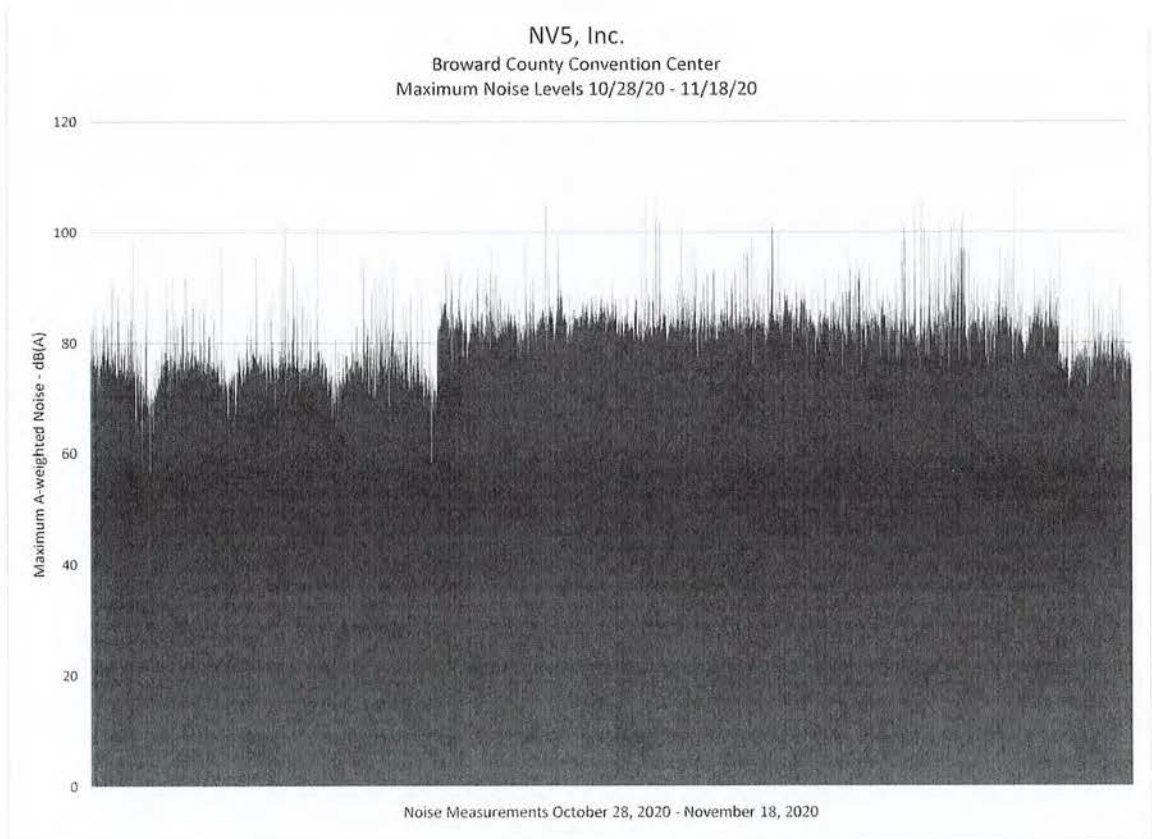


### 8.10 NV5 Signed and Sealed Engineered Calculation



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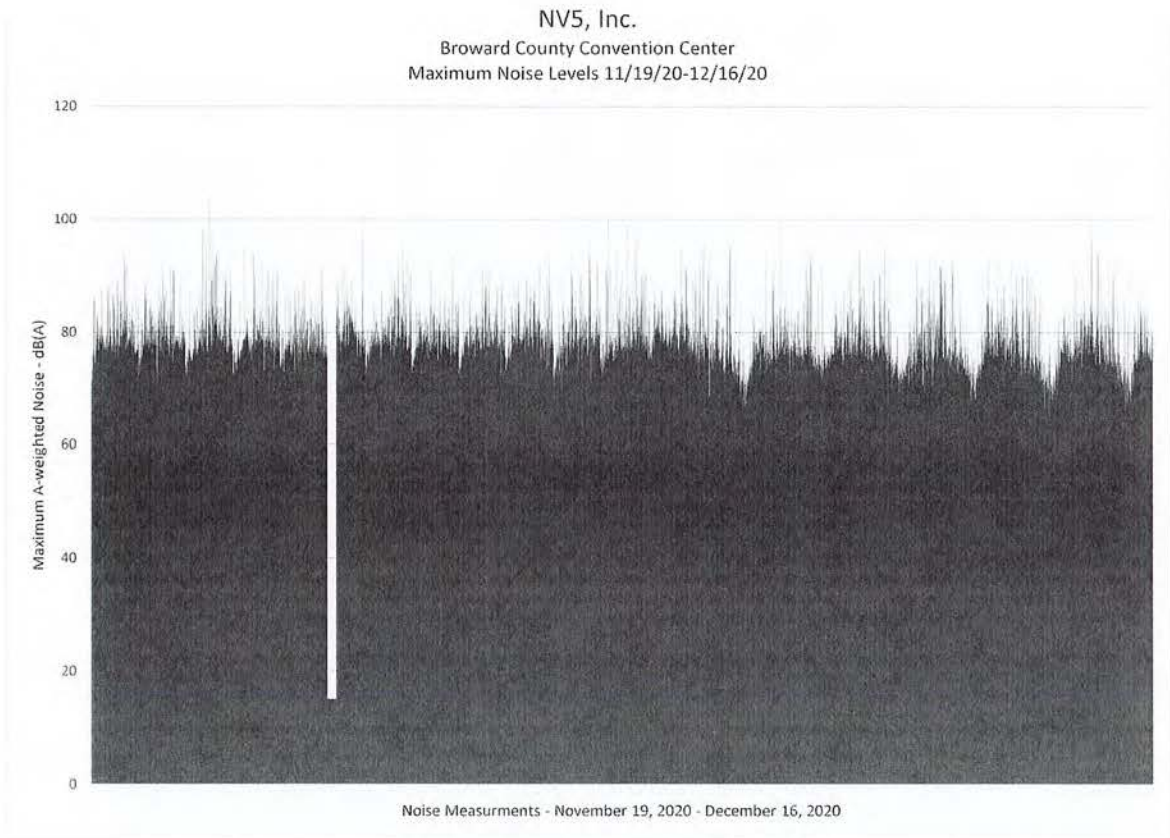
### 8.10 NV5 Signed and Sealed Engineered Calculation



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## 8.10 NV5 Signed and Sealed Engineered Calculation





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### 8.10 NV5 Signed and Sealed Engineered Calculation