



NOISE MANAGEMENT PLAN

BROWARD COUNTY CONVENTION CENTER

1850 - 1950 Eisenhower Boulevard

Fort Lauderdale, FL 33316

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1 Description of Work

- Early morning concrete pours at the Convention Center. The work will start between the hours of 10 PM and 7 AM. Pours would take place Monday – Saturday.
 - o Site Plan & Location Map (Reference Appendix 8.1)
 - o Roadmap for Concrete Trucks to and from Site (Reference Appendix 8.5)
 - o 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:
 - o There was a significant increase in rainfall during 2020 which impacted the construction schedule by 30+ workdays. The project is estimating that in order to make up the 30+ days, the project will have some overnight concrete pours. The project completion date is October 15th, 2021, and it is estimated that the 2021 Boat Show will start loading around the 10th of October.
 - o Safely putting more people to work during COVID-19
 - o Early morning pours will assist with the acceleration of the overall project schedule and subsequently lessen the impact of construction on surrounding residential neighborhoods and businesses by keeping the project within the original completion date.
 - o Early morning concrete pours will help alleviate the amount of Construction traffic on SE 17th Street during peak traffic hours.
- Commencement Date and Duration of Work:

- Early Morning Pours will commence on (DATE TBD)
- Concrete pours will be up to 72 hours each depending on weather and availability of material. The average duration of pours will be approximately 10-12 hours assuming weather and materials do not impact the pour.

2 Contractor Contacts

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

| Table 2: BBC Contact List | | |
|---------------------------|--------------------------|----------------|
| Name | Position | Contact Number |
| 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 concrete pours are as follows:
 - Concrete Trucks
 - Concrete Pumps
 - Concrete Vibrators
 - Back-up Alarm on Construction Equipment
- 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

- Equipment Noise Emission Levels (Lmax Noise (dba) 50 ft):
 - Concrete Trucks – 85
 - Concrete Pumps – 82
 - Concrete Vibrators – 80
 - Back-up Alarm – 97 – 112
- 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

- Only the equipment necessary for early concrete pours will be utilized beyond the current off hours plan.
 - 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 ATTN: Ron Ferguson 7901 S.W. 6 th Court, Ste. 200 Plantation, FL 33324 (407) 713-1877 | Balfour Beatty Construction ATTN: Chris Baran 7901 S.W. 6 th Court, Ste. 200 Plantation, FL 33324 (407) 461-4107 |
|--|---|

6.2 Community Notification

- Balfour Beatty Construction will post a Community Notification around the project site on the perimeter fence. (Reference Appendix 8.3).
- The project will also utilize the Fort Lauderdale Office of Neighbor Support to ensure maximum outreach.
- Notifications will identify early morning concrete pours and will be posted prior to the commencement of work.

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 8.6).

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 Roadmap for Concrete Trucks

8.6 COVID 19 Project Protocols

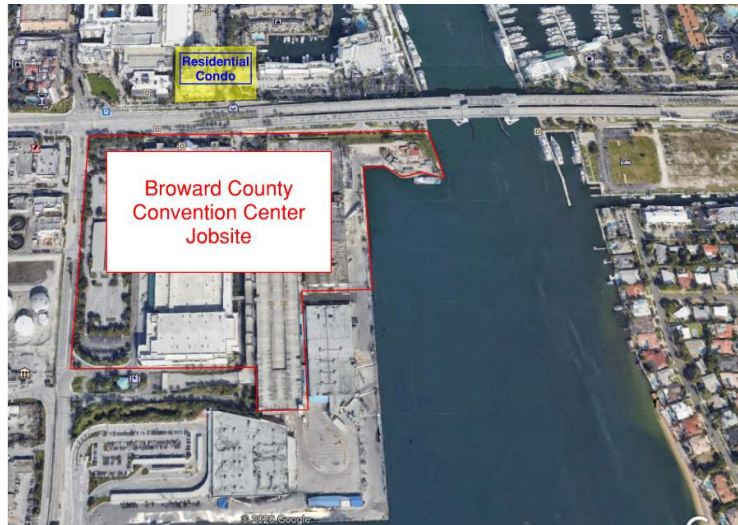
PUBLIC NOTICE

EARLY MORNING CONCRETE POURS

BROWARD COUNTY CONVENTION CENTER

1850 - 1950 Eisenhower Boulevard Fort Lauderdale, FL 33316

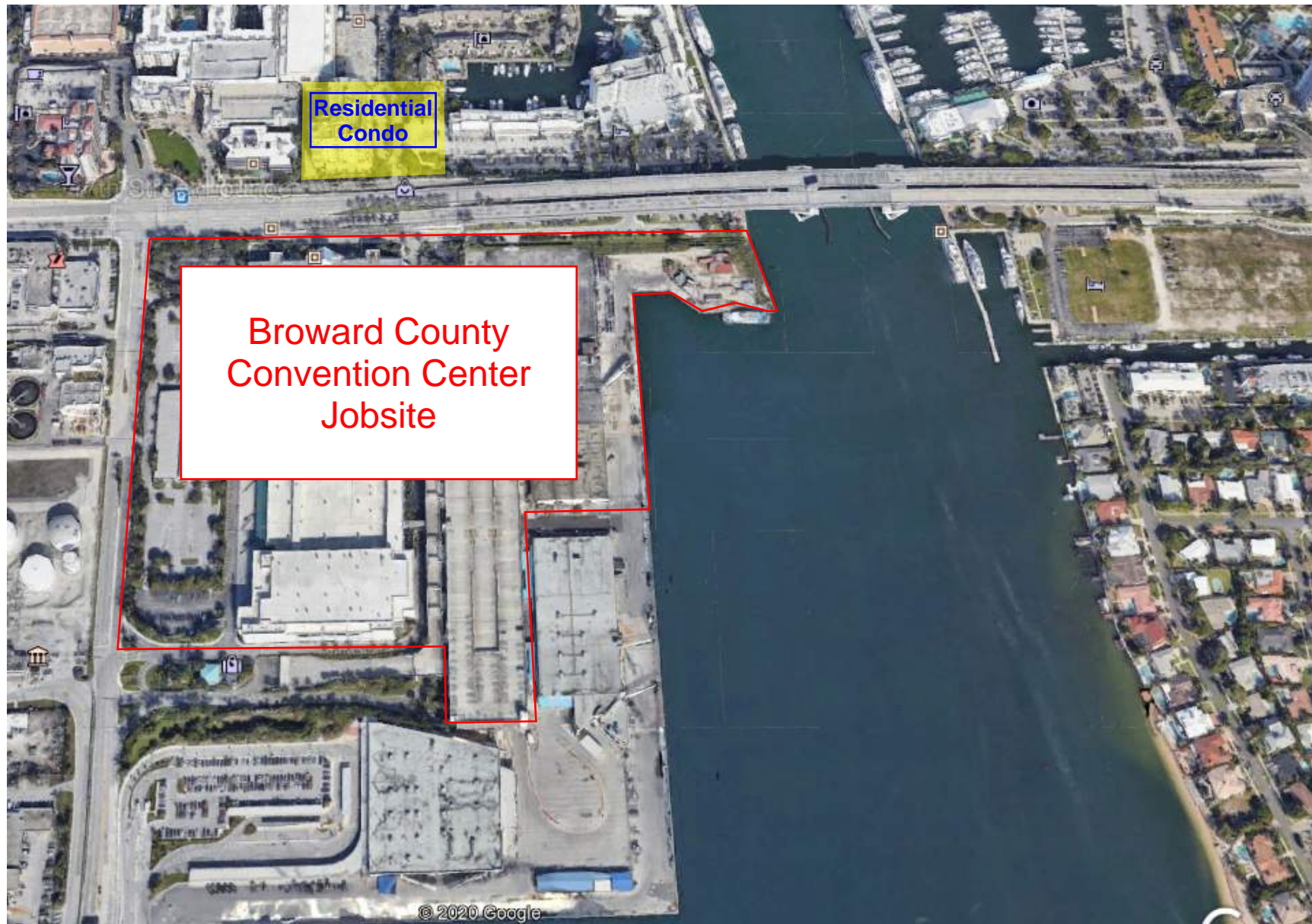
Please be advised that the Broward County Convention Center at 1850-1950 Eisenhower Boulevard, Fort Lauderdale, FL 33316 will be conducting overnight concrete pours between the hours of 10 PM and 7 AM and will continue from (Date TBD).



Balfour Beatty Construction

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

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



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

| Equipment | Typical Noise Level (dBA) 50 ft., U. S. Dept. of Trans. study 1979 | Average Noise Level (dBA) 50 ft., CA/T Project study 1994 | Typical Noise Level (dBA) 50 ft., U. S. Dept. of Trans. study 1995 | Lmax Noise (dBA) 50 ft., CA/T Project Spec. 721.560 |
|---------------------|---|--|---|--|
| 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 |

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

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.

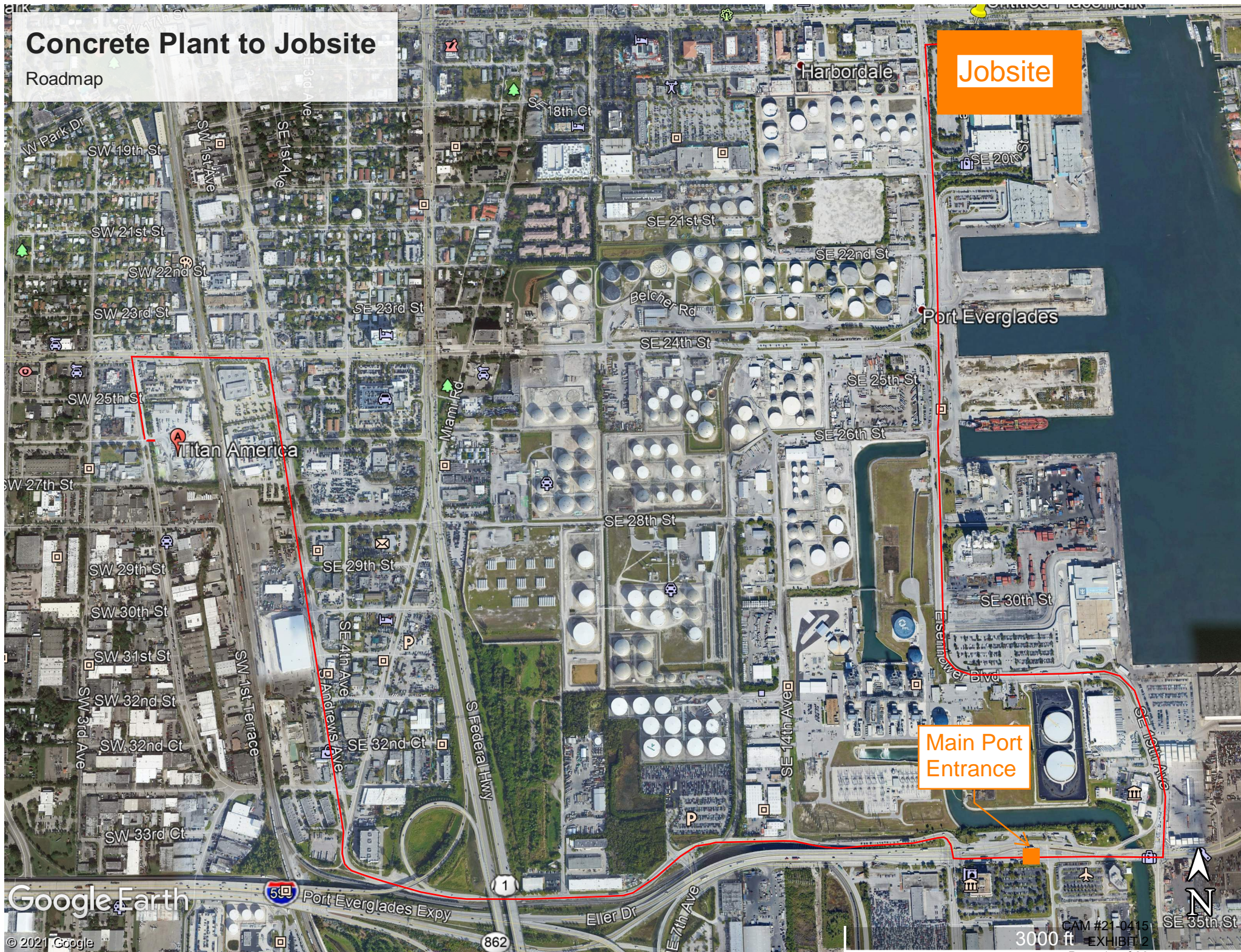
Source control is the most effective method of controlling construction noise. Source controls, which limit noise, are the easiest to oversee on a construction project. Mitigation at the source reduces the problem everywhere not just along one single path or for one receiver. The specification of equipment *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

Concrete Plant to Jobsite

Roadmap



Google Earth

© 2021 Google

CAM #21-0415

EXHIBIT 2

Page 17 of 22

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 17th 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.

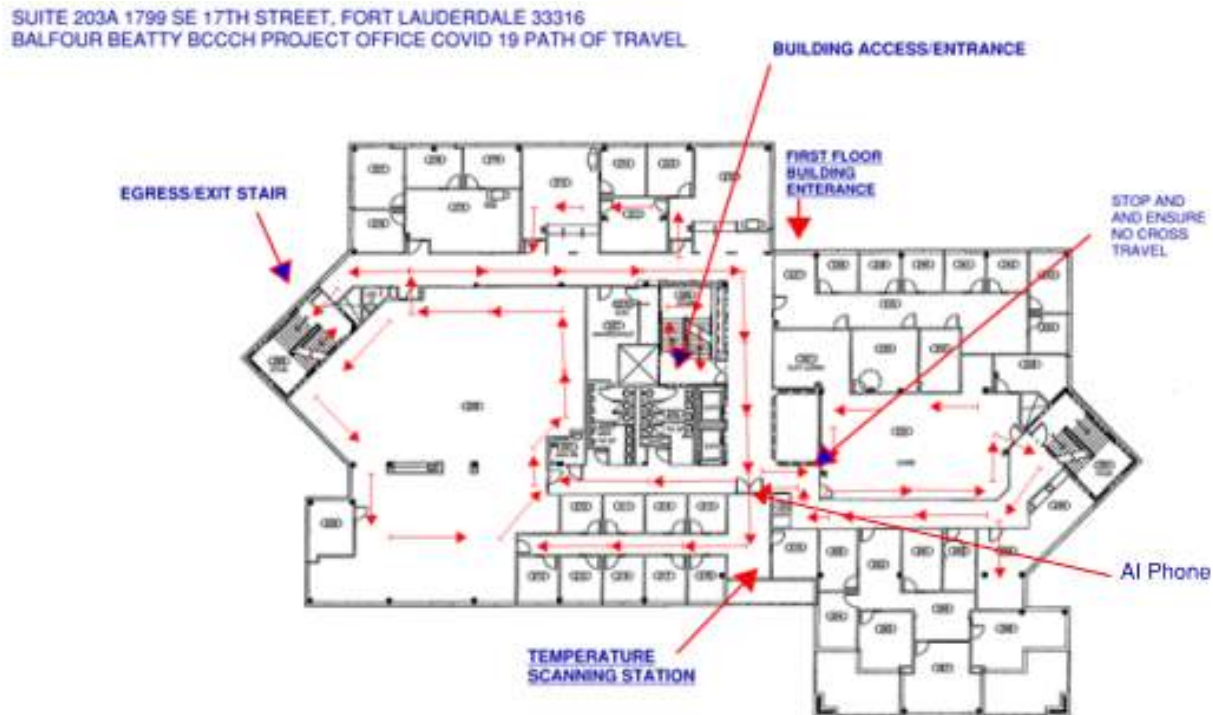
NOTE ALL EMPLOYEES AND GUEST MUST BE SCANNED BY THE THERMAL IMAGING CAMERA LOCATED AT THE OFFICE LOBBY EVERY TIME THEY ENTER THE OFFICE. IF ANYONE IS SCANNED AND IDENTIFIED AS HAVING AN ABNORMAL TEMPERATURE (AS NOTED BY THE THERMAL IMAGING CAMERA) WILL BE ASKED TO LEAVE THE OFFICE AND NOT RETURN UNTIL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



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

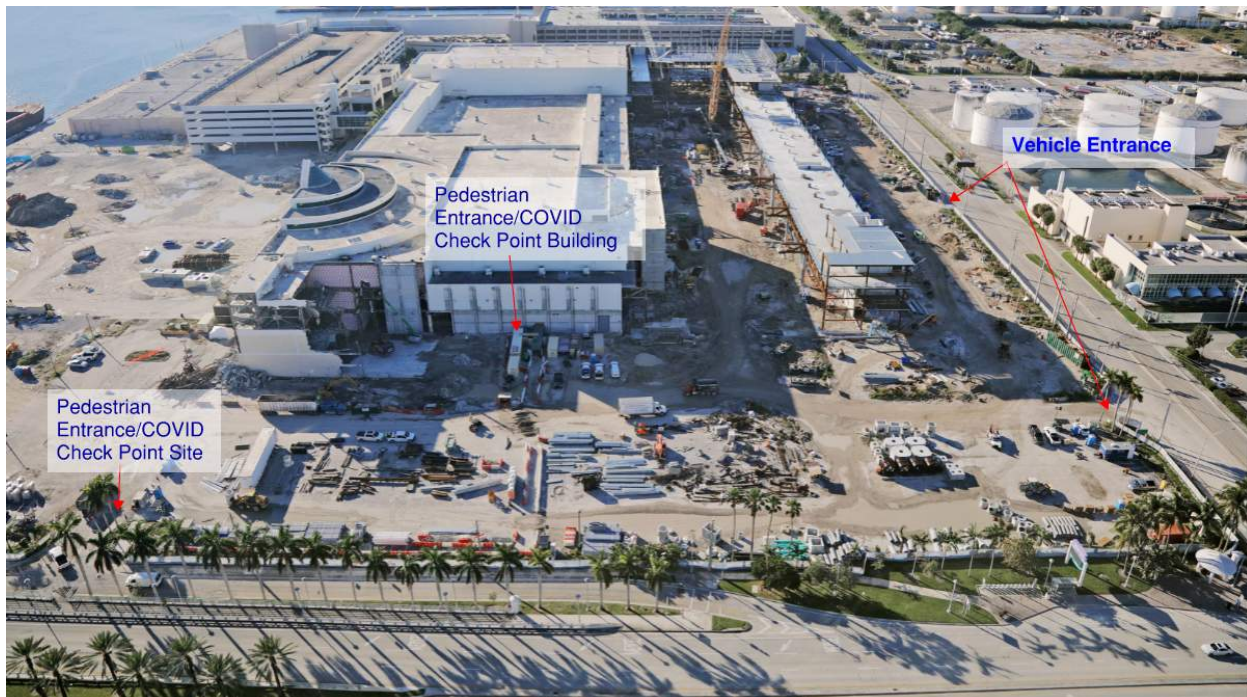
Items to check daily in the field:

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 COVID19 Project Protocols

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

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.



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8.8 COVID19 Project Protocols

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