



CPMC CATHEDRAL HILL HOSPITAL CONSTRUCTION MANAGEMENT PLAN

Updated: 09/11/2013



HERREROBOLDT
(General Contractor)

Municon Consultants
(Vibration, noise, and geotechnical monitoring)

Archeo-Tec
(Archeological and paleontological)

Treadwell & Rollo
(Geotechnical and environmental)

ENVIRON
(Air Quality)

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1. General Operating Principles and Commitments:

These principles and commitments apply to all aspects and phases of the work related to the construction of the CPMC Cathedral Hill Hospital at Van Ness Avenue. The Contractor and CPMC shall continue to meet with SFMTA, DBI, DPW, the Fire Department, Planning Department, Police Department, CalTrans, MUNI and other appropriate City agencies to determine feasible traffic and pedestrian improvement measures for the duration of the construction period, and shall maintain an overall construction management plan as described herein. This plan shall be shared with neighborhood representatives and interested neighbors.

a. Public Safety / Site Security

- The project site will be made secure and sufficiently lit for safety and security purposes. 24 hour security will be provided.
- The area of the new hospital shall be fully fenced using a combination of temporary fencing and pedestrian and traffic barricades. The fence panels and mesh covering shall be maintained in a like-new condition at all times. Approved traffic barriers will be used as required around the site. Where sidewalks are impacted, temporary ramps and barriers will be erected in compliance with city standards to maintain pedestrian safety. Appropriate way-finding signage shall be provided. All sidewalk/on-street parking relocation or rerouting plans are subject to review and approval by DPW, SFMTA, DBI, CalTrans, and/or other agencies having jurisdiction.
- Open excavations, trenches, and the like shall be protected with fences, covers and railings to maintain safe pedestrian and vehicular traffic passage at all times.
- Any construction debris in service access ways and streets shall be cleaned up promptly, but no less frequently than on a daily basis. A once-weekly survey of an extended area, including across the street from the project area will be made, and any trash and debris resulting from the project will be cleaned up.
- The Contractor shall implement a Site Safety and Health Plan that fulfills the requirements set forth in the California Code of Regulations (CCR) Title 8 Section 3203 Injury and Illness Prevention Plan (Cal/OSHA General Industry Standard) and CCR Title 8 Section 1509.
- The archaeological consultant shall prepare and submit to the Environmental Review Officer for review and approval archaeological monitoring, testing and reporting plans. The ERO shall determine what project activities shall be archaeologically monitored. Should evidence of cultural or historic artifacts of significance be found during project excavation, any excavation which could damage such artifacts shall be halted, and the appropriate agencies and persons shall be notified. The City of San Francisco (through its Environmental Review Officer) shall then review and if

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necessary, recommend specific mitigation measures to be implemented. Copies of reports prepared according to any implemented mitigation measures shall be sent to the Planning Department and to the California Archeological Site Survey Office at Sonoma State University.

b. Operating Hours, Noise and Vibration Management

- **Working Hours:** Typical work hours will be between 7am and 7pm, Monday through Friday with some Saturday work (generally, 8am to 5pm during the demolition phase and 7am to 5pm thereafter). In the case of special conditions any work outside these hours will be handled through special permits if necessary and notice to the neighborhood if possible. Per the SF Noise Ordinance, work is allowed around the clock, but the Ordinance prohibits work exceeding 5 decibels above ambient levels between 8pm and 7am as measured at the nearest property plane.
- Powered construction equipment is required by the SF Noise Ordinance to meet a noise level standard of 80 dBA at a distance of 100 feet. Impact tools and equipment are exempt from the 80 dBA standard but are required to be equipped with mufflers that are approved by DPW or DBI.
- The Contractor shall make reasonable efforts to have the noisiest activities not commence until 8am or after. Noisy equipment will be kept as far from site boundaries as possible, and portable noise barriers may be used on an as-needed basis.
- The project will not require any pile driving. All shoring beams shall be placed in drilled soil mixed holes.
- To the extent practical, the demolition will begin near the center of the site and proceed to the edges. This will allow the remaining structures to act as noise barriers for a portion of the demolition phase. The use of impact hammers (hoe rams) and jackhammers during demolition will generally be limited to the concrete foundations which are at or below ground level, further minimizing noise.
- The tower cranes and manhoists will be located near the center of the site, away from the edges of the site. The tower cranes will be electrically powered and not include diesel engines.
- The Contractor shall maintain regular communication with affected neighbors regarding construction activities. The Contractor shall make all reasonable efforts to provide notice of construction-related activities via phone, e-mail, and/or U.S. Mail to neighborhood representatives to apprise them of upcoming operations, street closures (if any), required after-hours disturbances, etc.

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- **Standard Noise measures:** CPMC shall minimize the impacts of construction noise where feasible by implementing the measures listed below in accordance with the San Francisco Noise Control Ordinance. These measures shall be required in each contract agreed to between CPMC and a contractor.
 - Construction equipment shall be properly maintained in accordance with manufacturers' specifications and shall be fitted with the best available noise suppression devices (e.g., mufflers, silencers, wraps). All hand-operated impact tools shall be shrouded or shielded, and all intake and exhaust ports on power equipment shall be muffled or shielded.
 - Construction equipment shall not idle for extended periods (no more than 5 minutes) of time near noise-sensitive receptors.
 - Stationary equipment (compressors, generators, and cement mixers) shall be located as far from sensitive receptors as feasible. Sound attenuating devices shall be placed adjacent to individual pieces of stationary source equipment located within 100 feet of sensitive receptors during noisy operations to prevent line-of-sight to such receptors, where feasible.
 - Temporary barriers (noise blankets or wood paneling) shall be placed around the construction site parcels and, to the extent feasible, they should break the line of sight from noise sensitive receptors to construction activities. If the use of heavy construction equipment is occurring on-site within 110 feet of an adjacent sensitive receptor, the temporary barrier located between source and sensitive receptor shall be no less than 10 feet in height. For all other distances greater than 110 feet from source to receptor, the temporary noise barrier shall be no less than 8 feet in height. For temporary sound blankets, the material shall be weather and abuse resistant, and shall exhibit superior hanging and tear strength with a surface weight of at least 1 pound per square foot.
 - When temporary barrier units are joined together, the mating surfaces shall be flush with each other. Gaps between barrier units, and between the bottom edge of the barrier panels and the ground, shall be closed with material that would completely close the gaps, and would be dense enough to attenuate noise.
- **Noise Monitoring:** Long-term (24-hour) and short-term (15-minute) noise measurements shall be conducted at ground level and elevated locations to represent the noise exposure of noise-sensitive receptors adjacent to the construction area. The measurements shall be conducted for at least 1 week during the onset of each of the following major phases of construction: demolition, excavation, and structural steel erection. Measurements shall be conducted during both daytime and nighttime hours of construction, with observations and recordings to document combined noise sources and maximum noise levels of individual pieces of equipment. If noise levels

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from construction activities are found to exceed City standards (daytime [80 dB at a distance of 100 feet] or nighttime [5 dB over ambient]) and result in complaints that are lodged with the community liaison, additional noise mitigation measures shall be identified. These measures shall be prepared by the qualified acoustical consultant. These measures shall identify the noise level exceedance created by construction activities and identify the anticipated noise level reduction with implementation of mitigation. These measures may include, among other things, additional temporary noise barriers at either the source or the receptor; operational restrictions on construction hours or on heavy construction equipment where feasible; temporary enclosures to shield receptors from the continuous engine noise of delivery trucks during offloads (e.g., concrete pump trucks during foundation work); or lining temporary noise barriers with sound absorbing materials.

- **Vibration control and monitoring:** CPMC shall minimize the impacts of construction noise and vibration where feasible by implementing the measures listed below. These measures shall be required in each contract agreed to between CPMC and a contractor.
 - Construction equipment generating the highest noise and vibration levels (vibratory rollers) shall operate at the maximum distance feasible from sensitive receptors.
 - Vibratory rollers shall operate during the daytime hours only to ensure that sleep is not disrupted at sensitive receptors near the construction area.
 - A community liaison shall be available to respond to vibration complaints from nearby sensitive receptors. A community liaison shall be designated. Contact information for the community liaison shall be posted in a conspicuous location so that it is clearly visible to the nearby receptors most likely to be disturbed. The community liaison shall manage complaints resulting from construction vibration. Reoccurring disturbances shall be evaluated by a qualified acoustical consultant to ensure compliance with applicable standards. The community liaison shall contact nearby noise-sensitive receptors and shall advise them of the construction schedule.
 - The preexisting condition of all buildings within a 50-foot radius and historical buildings within the immediate vicinity of proposed construction activities shall be recorded in the form of a preconstruction survey. The preconstruction survey shall determine conditions that exist before construction begins and shall be used to evaluate damage caused by construction activities. Fixtures and finishes within a 50-foot radius of construction activities susceptible to damage shall be documented (photographically and in writing) before construction. All buildings damaged shall be repaired to their preexisting conditions.

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- As part of the vibration management plan, vibration levels shall be monitored at the nearest interior location of adjacent uses, including Daniel Burnham Court, containing vibration sensitive equipment to monitor potential impacts from the project site. In the event that measured vibration levels exceed 65 VdB and disturb the operation of sensitive medical equipment, additional measures shall be implemented to the extent necessary and feasible, including restriction of construction activities, coordination with equipment operators, and/or installation of isolation equipment.
- A final noise/vibration monitoring report will be submitted to the Planning Department at completion of construction.

c. Air Quality Management

- The Contractor will create and implement a site-specific dust minimization and control plan, as required by the San Francisco Department of Public Health. Examples of dust control practices included are street sweeping; water spraying of paved and unpaved areas; covering soil and other material when kept in stockpiles and during truck hauling; and/or the use of portable dust barriers. Dust control activities will be increased during windy periods.
- The following mitigation measures shall be implemented during construction activities to avoid short-term significant impacts to air quality:

BAAQMD Basic Control Measures

- Water all active construction areas at least twice daily.
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard.
- Pave, apply water three times daily, or apply (nontoxic) soil stabilizer on all unpaved access roads, parking areas, and staging areas at construction sites.
- Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites.
- Sweep street daily (with water sweepers) if visible soil material is carried into adjacent public streets.

Additional Construction Mitigation Measures

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered twice daily.

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- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt trackout onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 2 minutes, to the extent feasible, or 5 minutes maximum (as required by the California airborne toxics control measures, Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The air district's phone number shall also be visible to ensure compliance with applicable regulations. Emission-generating equipment will be kept as far from site boundaries as possible.
- To the extent practicable the Contractor will ensure that haul trucks are fully loaded, to reduce the number of trucks entering and leaving the site.
- To the extent practicable, truck egress and ingress routes will be as far from neighboring residents as possible.
- Site construction activities shall be optimized to minimize the hours of equipment operation, and equipment size.
- To reduce risk associated with exhaust emissions of DPM by construction equipment during construction of the Cathedral Hill Campus CPMC and its construction contractor shall implement the following BAAQMD-recommended control measures during construction:
 - Where sufficient electricity is available from the PG&E power grid, electric power shall be supplied by a temporary power connection to the grid, provided by PG&E. Where sufficient electricity to meet short-term electrical power needs for

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specialized equipment is not available from the PG&E power grid, non-diesel or diesel generators with Tier 4 engines (or equivalent) shall be used.

- At least half of each of the following equipment types shall be equipped with Level 3-verified diesel emission controls (VDECs): backhoes, concrete boom pumps, concrete trailer pumps, concrete placing booms, dozers, excavators, shoring drill rigs, soil mix drill rigs, and soldier pile rigs. If only one unit of the above equipment types is required, that unit shall have Level 3 VDECs retrofits.

d. Storm Water Pollution Prevention Plan

- The contract drawings will include an erosion control plan for implementation on the Project site. The rainy season is from October 15 to April 15; this is when erosion control must be in place.
- The project erosion and sediment control measures shall meet or exceed the requirements of ABAG (Association of Bay Area Governments, the governing agency) and applicable City, County, and State Requirements.
- The site shall be maintained to prevent sediment-laden run-off from entering the storm drain system during construction. The actual mitigation measures that will be implemented are dependent upon the time of year the site work is occurring. Measures that the Contractor may apply include:
 - Covering soil stockpiles with tarps.
 - Installing silt bags at all impacted existing drainage structures.
 - Placing fiber rolls, and/or velocity dams on all exposed slopes (bare soil) to trap sediment on the site.
 - Establishing entrances/exits with stabilized tracking mats.

e. Waste and Material Re-use

- The Contractor shall remove all surplus soil, unsuitable top soil, obstructions, waste materials and demolished materials from project site and legally dispose of them. All hazardous materials, if any, will go to an EPA approved landfill.
- The existing structures being removed are of concrete construction. The majority of the structures shall be recycled.
- A waste and material reuse plan shall be developed with the Demolition Contractor as those documents are developed. A concerted effort will be made to divert construction waste from landfills by recycling or by returning unused material for use on other projects. When feasible, demolished materials will be salvaged and

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reused or repurposed for other projects. Additional material will be recycled as allowed.

f. Traffic and Parking Management

- The Contractor shall prepare a Construction Transportation Management Plan (CTMP) to reduce traffic and congestion from construction workers around the job site on Geary and Van Ness and to ensure access to parking for the local community. CTMP will be submitted to the City (DPW/MTA) for review and approval.
- The project will encourage construction workers to use public transportation, bike, or walk to work if possible.
- There will also be project-wide programs to encourage car pooling for those who find it necessary to ride in a vehicle. A shuttle service shall be provided, as needed, to offsite parking areas that have been identified as satellite parking available to the project.
- The anticipated truck route for deliveries and excavation off-haul, subject to approval by the San Francisco Metropolitan Transportation Agency (SFMTA). Prior to construction, the Contractor shall meet with SFMTA to review sidewalk and parking requirements and construction material staging for each phase of the work.
- The Contractor shall provide the city with anticipated truck routes to and from site for the various stages of construction. These routes may change in order to minimize traffic impacts.
- The Contractor shall make reasonable efforts to limit large truck movements to before 3:30 PM to avoid impeding traffic flow at the PM peak period.
- Operations that result in potential queuing or staging of vehicles (e.g. concrete pumping, import/off-haul, material delivery) shall not occur on Post Street from 6:00 a.m. to 8:00 a.m. or after 5:00 p.m.
- The Contractor will utilize proper signage and traffic control for deliveries to and from site.
- All sidewalk/on-street parking relocation or rerouting plans are subject to review and approval by DPW / SFMTA. The Contractor anticipates that parking lanes and sidewalks on the four sides of the project will be required for project use for most of the duration of construction. With the review and approval of DPW/SFMTA, the parking lane on Van Ness between Post and Geary is anticipated to be used for pedestrian traffic traveling under a covered and protected walkway. On other frontages pedestrian traffic will either be rerouted to avoid the closed sidewalks or walkways provided in the parking lanes, similar to Van Ness Avenue. At different times during the construction,

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parking lanes and sidewalks will be needed for: staging for concrete pours, staging for erection of steel and erection of curtain-wall and glazing, staging for roofing, and installation of utilities. Sidewalks will ultimately be removed and replaced as part of the project. Additionally, the Contractor may need to use some additional portions of the parking / bus lanes as needed for safety and logistics. See also Public Safety / Site Security section.

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2. Phasing of Work: Implementation of operating principles during specific phases
(Note: Phases will overlap during transition to subsequent phase.)

HOSPITAL CONSTRUCTION:

1. Mobilization, Abatement, and Demolition (Months 1 to 8):

- a. Property surveys, baseline noise and vibration readings** – Within 60 days of the start of abatement and demolition, inspections of the existing buildings including written reports, photographs and/or video recordings shall be completed. This documentation shall serve as record to assess any actual or perceived damage during or immediately after construction. Similarly, within 60 days of the start of any construction, Contractor shall determine the appropriate locations for vibration monitoring equipment on sensitive neighboring properties and shall install. The monitoring equipment shall include both crack monitors and vibration monitors. Once construction begins, baseline noise and vibration readings shall be taken at selected points around the project site, at representative times of day and thereafter monitored at key periods when high-vibration producing equipment is used.
During the first part of this phase, the existing buildings will be abated of any hazardous material using specific methods for this type of work and will be under the supervision of qualified personnel. Also at this time the Contractor shall make safe all utilities and begin setting up temporary facilities for operation of the project. The buildings are of concrete construction and will be demolished using a long reach excavator with a hydraulic processor. This machine uses a large set of hydraulic jaws to crush the concrete and reduce it to rubble that can be loaded and hauled away. The rubble will kept large for quick removal from the site for recycling.
- b. Public Safety / Site Security:** Before the structural demolition starts, the area of the new hospital will be fully fenced using a combination of temporary fencing and traffic/pedestrian barricades in accordance with the approved traffic plan.
- c. Hours, Noise and Vibration:** Excavators with hydraulic processors, loaders, and trucking will be used during this phase and this is generally the noisiest portion of the project. The noise will be a mix of continuous sources such as engines and intermittent impact sounds such as concrete rubble dropping into truck beds. To the extent practical, the demolition will begin near the center of the site and proceed to the edges. This will allow the remaining structures to act as noise barriers for a portion of the demolition phase. Vibration is likely to occur during removal of the perimeter building foundation. The use of impact hammers (hoe rams) and jackhammers will generally be limited to the concrete foundations which are at or below ground level. Extended hours may be needed to off-haul material.

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- d. Air Quality:** Demolition will begin at the center of the site and progress outwards, such that the building structures along Geary and Post Streets will remain intact until the latter stages of this phase. While they remain standing, these buildings will provide some shielding from emissions to areas along these streets. Such activities shall be increased during windy periods. Stockpiling of excavated material will be performed as far from the site boundaries as possible. To the extent practicable, the Contractor will ensure that haul trucks are fully loaded to reduce the number of truck trips, and trucking ingress and egress shall be away from residential areas. In addition, truck and equipment idling will be limited to two minutes where practicable, or five minutes maximum.
- e. Storm Water:** Erosion control measures will be established during this phase.
- f. Waste:** Proper disposal / recycling of off-hauled materials shall be as described above in the general operating principals.
- g. Traffic, Parking:** The contractor shall develop and execute a site specific Construction Traffic Management Plan in accordance with all local governing agencies including but not limited to flagman and traffic control plan. The plan will be designed to minimize the interface wherever possible between Public and Site traffic, and reducing the number of deliveries where practicable, including the staging of deliveries such that the volume of traffic is kept as even as possible avoiding peaks, and controlling vehicular movements on the Project.

This first stage of the project will generate the highest flow of truck traffic due to the amount of material removed from the site in the shortest time frame. We will be implementing the traffic plan as approved by appropriate agencies and augment our work to create the most efficient flow for the varying conditions.

- h. Nesting Bird Surveys:** It is not expected that any demolition or construction activities will occur during the nesting season (January 15 through August 15) involving removal of trees or shrubs. But if so, a contractor shall conduct a preconstruction survey for nesting birds. The surveys shall be conducted by a qualified wildlife biologist no sooner than 14 days before the start of removal of trees and shrubs. If no nests are present, tree removal and construction may commence. If active nests are located during the preconstruction bird nesting survey, the contractor shall contact Dept. of Fish and Game for guidance.

2. Shoring and Excavation (Months 9 to 14):

Shoring of the excavation will be conventional using soldier beams and lagging with tie-backs. The soldier beam holes are drilled with a soil mixing machine creating a mixture that the beam will be pushed down into. The excavation of material will be done with excavators, trucks, and smaller equipment to move material. The excavation varies from 20ft to 60ft in depth.

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- a. **Public Safety / Site Security:** same as above.
- b. **Hours, Noise and Vibration:** Noise will primarily come from engines of the equipment. The shoring method will help reduce maximum noise levels since impact driven piles will not be used.
- c. **Air Quality:** The Site will conduct dust control activities such as regular street cleaning and dust suppression by watering, covering or applying non-toxic soil stabilizers. Dust control activities will be increased during windy periods. To the extent practicable, equipment operation such as truck loading and stockpiling of excavated material will be performed in areas away from the site perimeter. Also, to the extent practicable the site will ensure that haul trucks are fully loaded to reduce the number of trucks entering and leaving the site, and that trucking ingress and egress will be away from residential areas. In addition, truck and equipment idling will be limited to two minutes if practicable, or five minutes maximum.
- d. **Storm Water:** Erosion control measures will be maintained during this phase.
- e. **Waste:** Some small amount of debris will be generated.
- f. **Traffic, Parking:** The contractor shall develop and execute a site specific Construction Traffic Management Plan in accordance with all local governing agencies including but not limited to flagman and traffic control plan. The plan will be designed to minimize the interface wherever possible between Public and Site traffic, and reducing the number of deliveries where practicable, including the staging of deliveries such that the volume of traffic is kept as even as possible avoiding peaks, and controlling vehicular movements on the Project.

Trucks will be driven in and out of the excavation to off-haul material using a dirt ramp. This process will continue until the ramp sections of the excavation are reached, at which point, the ramp will be removed as the equipment works its way out of the excavation site.

3. Foundation / Concrete Walls (Months 15 to 30):

This phase consists of pumping and placing concrete spread footings and poured in place concrete walls. The concrete walls will be constructed after the start of steel erection as the two are tied together. The two tower cranes will be erected during this phase.

- a. **Public Safety / Site Security:** same as above.
- b. **Hours, Noise and Vibration:** Noise will primarily come from engines of the concrete trucks, pumps and placing equipment.

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- c. **Air Quality:** Early in this phase the soil exposed by the excavation will be covered by concrete and base rock. The potential for dust emissions from soil will be greatly reduced, and will be minimized further by measures listed above. Usage of emission-generating equipment will be minimized to the extent practicable, and conducted as far from site boundaries as possible.
- d. **Storm Water:** Erosion control measures will be maintained during this phase.
- e. **Waste:** The Contractor will be using debris boxes that will be delivered and removed (daily to weekly) as required by waste stream.
- f. **Traffic, Parking:** The contractor shall develop and execute a site specific Construction Traffic Management Plan in accordance with all local governing agencies including but not limited to flagman and traffic control plan. The plan will be designed to minimize the interface wherever possible between Public and Site traffic, and reducing the number of deliveries where practicable, including the staging of deliveries such that the volume of traffic is kept as even as possible avoiding peaks, and controlling vehicular movements on the Project.

4. Steel Erection/Concrete Decks (Months 18 to 34):

During this phase, the Contractor will be delivering and erecting structural steel, setting metal decking, delivering and placing reinforcement steel then pouring the floor and roof decks. Tower cranes are the primary method of handling material. Concrete pumps and trucks will be used.

- a. **Public Safety / Site Security:** Fencing will be maintained
- b. **Hours, Noise and Vibration:** Tower cranes will be the primary means of setting steel. Most noise will still be from engines. The tower cranes and manhoists will be located near the center of the site, away from the edges of the site. The tower cranes will be electrically powered and not include diesel engines.
- c. **Air Quality:** To the extent possible, emission-generating equipment will be operated away from the site perimeter (Note, though, that the concrete pumping equipment must be operated outside the building perimeter).
- d. **Storm Water:** Erosion control measures will be maintained during this phase.
- e. **Waste:** The Contractor will be using debris boxes that will be delivered and removed (daily to weekly) as required by waste stream.

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- f. Traffic, Parking:** The contractor shall develop and execute a site specific Construction Traffic Management Plan in accordance with all local governing agencies including but not limited to flagman and traffic control plan. The plan will be designed to minimize the interface wherever possible between Public and Site traffic, and reducing the number of deliveries where practicable, including the staging of deliveries such that the volume of traffic is kept as even as possible avoiding peaks, and controlling vehicular movements on the Project.

5. Exterior Enclosure (Months 28 to 39):

During this phase the Contractor will be erecting the curtainwall and metal panel system. We will begin installing Mechanical, Electrical, and Plumbing (MEP) systems at this stage.

- a. Public Safety / Site Security:** same as above
- b. Hours, Noise and Vibration:** Noise will be limited to moving personnel and materials around the site and construction equipment such as screw guns and nail guns.
- c. Air Quality:** same as above.
- d. Storm Water:** Erosion control measures will be maintained during this phase.
- e. Waste:** The Contractor will be using debris boxes that will be delivered and removed (daily to weekly) as required by waste stream. Multiple boxes will be used to allow for on-site separation of recyclable materials (metals, etc...)
- f. Traffic, Parking:** The contractor shall develop and execute a site specific Construction Traffic Management Plan in accordance with all local governing agencies including but not limited to flagman and traffic control plan. The plan will be designed to minimize the interface wherever possible between Public and Site traffic, and reducing the number of deliveries where practicable, including the staging of deliveries such that the volume of traffic is kept as even as possible avoiding peaks, and controlling vehicular movements on the Project.

6. Interior Buildout and Final Sitework (Months 26 to 59):

In this phase, the Contractor will begin the interior finish work such as electrical and mechanical fixtures, sheetrock and other finishes. The Contractor will complete the connection of the building to major utilities (sewer, water, electricity) and perform all testing of systems. Also during the final phase, the Contractor will remove and replace the sidewalk. After the hardscape is installed, the landscaping will be installed. The final months of this phase will include move-in of equipment.

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- a. Public Safety / Site Security:** Fencing will be maintained for protection of the public.
- b. Hours, Noise and vibration:** The interior finish work will occur within the building shell and noise levels will be significantly reduced by the exterior skin of the building. Removal and replacement of existing sidewalk surfaces will be similar to normal street work in San Francisco involving excavators, jack hammers, backhoes, and concrete pumps and trucks.
- c. Air Quality:** Dust emissions from activities such as the installation of utilities, sidewalks and landscaping will be managed as outlined in the Dust Control Plan. To the extent practicable, usage of emission-generating equipment will be minimized and performed away from the site boundaries. Truck and equipment idling will be limited to two minutes if practicable, or five minutes maximum.
- d. Storm Water:** Erosion control measures shall be maintained as needed during this phase.
- e. Waste:** The Contractor shall use debris boxes that will be delivered and removed (daily to weekly) as required by waste stream. Multiple boxes will be used to allow for on-site separation of recyclable materials.
- f. Traffic, Parking:** The contractor shall develop and execute a site specific Construction Traffic Management Plan in accordance with all local governing agencies including but not limited to flagman and traffic control plan. The plan will be designed to minimize the interface wherever possible between Public and Site traffic, and reducing the number of deliveries where practicable, including the staging of deliveries such that the volume of traffic is kept as even as possible avoiding peaks, and controlling vehicular movements on the Project.

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TUNNEL CONSTRUCTION AND COORDINATION WITH MEDICAL OFFICE BUILDING, OTHER PROJECTS

Tunnel: The tunnel connecting the new hospital and the MOB will be constructed during the shoring/excavation and foundation phases of the hospital project. A majority of the work will happen during the standard working hours for the project. The exception will be the first stage prep work as described below and the resurfacing stage upon completion of the tunnel, both of which will occur at night to reduce impacts on traffic along Van Ness.

Tunnel Construction Phasing (Months 12 to 20) - The new hospital and medical office building are located across from each other separated by Van Ness Avenue. A pedestrian tunnel is to be constructed between them running under Van Ness Avenue. The first stage of the tunnel construction will be to provide a steel roadcover that will bridge over the future tunnel excavation. This work consists of placing posts into drilled holes drilled in a regular pattern across the width of Van Ness Avenue. Concrete planks are then placed across the posts to provide a solid surface for the roadway. This surface work will be done outside of normal hours due to the traffic flow on Van Ness Avenue. The tunnel will then be excavated and constructed from below ground with no surface impact, starting at the Hospital site and working toward the MOB site. The final portion of the excavation and structural work will be to restore the roadway. Interior completion of the tunnel shall occur during the final months of construction of the hospital.

Medical Office Building: The Medical Office Building project is not anticipated to start within the first three months of the Hospital Project. When that project is ready to start, a similar Construction Management Plan will be prepared, and the construction activities of that project will be coordinated with the Hospital project to minimize overall disruption to the neighborhood.

Other Projects: Similarly, should other projects occur proximate to the Hospital project site (such as the proposed Van Ness Bus Rapid Transit project), the Construction Management Plan will be reviewed and modified if necessary to minimize overall disruption.

**CPMC CATHEDRAL HILL HOSPITAL
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3. Neighborhood Liaison / Communications with neighborhood

A website shall be maintained by the Contractor and the Construction & Community Liaison that will provide up-to-date information about project construction activities, potential traffic impacts, contact information, etc. The website address is www.rebuildcpmc.org.

To submit a written question or comment please visit
<http://rebuildcpmc.org/contact/>

For questions or comments related to items on the construction activity logs please reference the contact information below;

Construction Coordination Hotline:
415 517 3578

Construction & Community Liaison:
Paul Klemish
1200 Van Ness, San Francisco, CA 94109
Office - 415 415 762 7435, Mobile - 415 517 3578

In addition, a newsletter shall be prepared and distributed to affected neighbors. Community meetings to present and discuss ongoing project issues will occur no less than quarterly, with locations to be determined.