

SCOPE OF WORK

CATEGORY: BC20 Plumbing

PART 1 – GENERAL

1.01 Related Documents

Division 00 – General Conditions and Supplementary Conditions

Division 01 – General Requirements

Exhibit A – Baseline Schedule

Exhibit B – Logistics Plan

Exhibit C – Soils Report: RMA Group dated August 8, 2024

Exhibit C.1 – Hydrology Report by KPFF Consulting Engineers dated 4/12/24

Exhibit D – Hazmat reports by Charles Taylor Environmental Technical Services

Exhibit E – Final Environmental Impact Report State Clearinghouse No.2023110328 dated June 2024

Exhibit E.1 – Mitigation Monitoring and Reporting Program State Clearinghouse No.2023110328 dated

Exhibit F – Reference Plans: The Construction of Ontario Regional Sports Complex (offsite utility and street plans)

Exhibit F.1 – Reference Plans: Mass Grading Package Phase 1

Exhibit F.2 – Reference Plans: Mass Grading Package Phase 2

Exhibit G – Site Concrete Limits

1.02 Relevant Technical Specifications Sections:

07 90 00 – Joint Protection

07 92 00 – Joint Sealants

Division 21

Division 33 (as it applies)

PART 2 – GENERAL INCLUSIONS:

1. The work includes but is not necessarily limited to furnishing all: labor, materials and the installation of same, appliances, tools, equipment, facilities, transportation, receiving and unloading, hoisting, task lighting, applicable taxes and services necessary for, and incidental to, performing all operations in connection with this scope of work.
2. The breakdown of the scope of work by specifications is for organizational purposes only. The scope noted herein provides additional clarity only. It is not necessarily all inclusive. Where there is a reference to a detail, plan sheet or a note, this is to bring awareness only. Unless specifically “excluded”, this Contractor has the entire scope of work.
3. The scope noted herein; regardless, if duplicated in another’s scope of work and other contract documents, shall be included in this Category Contractor’s base bid. In the event a scope item is duplicated in another Contractor’s scope of work and/or other contract documents, this does not relieve this Contractor from the responsibility of the scope. It shall be the Construction Manager’s discretion as to which Contractor will perform the scope of work and who shall provide a credit for the value of the scope not provided.
4. Any reference in this scope to “Contractor”, “Category Contractor”, “Bid Category Contractor”, “Bid Package”, “Trade Contractor”, “Contractor”, “Subcontractor” or any version of these are all synonymous / one-in-the same.
5. Contractor shall provide at the job site a Superintendent fluent in written and spoken English at all times during the performance of this Contractor’s scope of work. It is the Contractor’s responsibility to supervise their on-site crews and subcontractors at all times work is being performed under Contractor’s scope of work.
6. Contractor is responsible to know the latest SCAQMD requirements:

- A. Includes implementing those means necessary to ensure any and/or all related work materials, fluids, equipment, etc. are stored or covered in a manner acceptable to the requirements.
 - B. Contractor shall provide and maintain adequate dust control throughout the duration of their operation, including, but not limited to: washing/sweeping of existing sidewalks, public streets and concrete and asphalt access roads on a daily basis. Mitigation of dust shall be to the satisfaction of the Owner, City/County, and/or SCAQMD.
 - C. Any penalties the owner receives due to this Contractor's negligence will be forwarded to this Contractor for reimbursement.
7. Contractor shall take reasonable care to maintain Storm Water Pollution (SWPPP) related erosion control facilities and temporary storm water diversion means during all work.
- A. If inclement weather is foreseeable during operations of this trade, this Contractor shall use its best effort to leave the site in a condition that minimizes the effects of erosion caused by such weather.
 - B. Contractor to protect all work from effects of inclement weather at its own cost. Protection of this Contractor's work area is the responsibility of same.
 - C. Any corrections and or repairs required due to damage inflicted by the work of this Contractor shall be the responsibility of same.
 - D. Any penalties the owner receives due to this Contractor's negligence will be forwarded to this Contractor for reimbursement.
 - E. Contractors requiring wash out shall have their washout container(s) clearly marked. NO direct dumping onsite and/or into sewer and/or draining systems.
 - F. Contractor to review 01 64 00 for additional relevant information.
8. Contractor shall comply with all CAL OSHA requirements.
9. Written survey requests are to be provided to Construction Manager's Superintendent a minimum of three (3) working days prior to the start of work requiring surveying and are to be submitted in a manner that does not require excessive surveyor move-ins.
10. Contractor shall properly install and maintain all barricades, traffic control, warning lights, flagmen, for deliveries, hauling and/or disposal, including permits & fees as required by local and/or governing Agencies / municipalities for Contractor's scope of work whether expressly mentioned or not.
11. Contractor shall provide additional fencing, barricades, and/or other protection, which is in addition to site perimeter temporary fencing provided by others to protect open excavations or other hazards resulting from this Contractor's work. Contractor shall cover all open trenches with Cal OSHA compliant covering or soil each day. Temporary trench covering is to be installed in a manner so as to eliminate tripping hazard. It is the Contractor's responsibility to security material and equipment. Any theft of material/equipment is the Contractor's responsibility to replace.
12. Contractor is responsible to turn in Inspection Requests (IRs) and/or testing requests to Construction Manager's Superintendent no less than 48 hours prior to desired IOR inspection and no less than 72 hours for testing laboratory (LOR) inspection. Work must be complete and in compliance with the contract documents prior to IOR inspection. Contractor shall provide the necessary resources to make up time and bear all related cost associated with any late inspection requests and/or rejected inspections.
- A. Contractor foreman shall walk with the IOR during all inspections for this subcontractor's scope of work.
13. Any F.O.B. material and/or coordination required for the installation by this Contractor and/or other Contractors, shall be forwarded by the supplying Contractor with a letter of transmittal and detailed shop drawings showing dimensions, locations, and individual piece count to the installing Contractor via Tilden-Coil. ALL F.O.B. deliveries shall be coordinated with Construction Manager and the receiving Contractor at least 48 hours in

advance. The receiving Contractor shall unload, inventory, and inspect materials. All shortages and damaged material must be noted on said transmittal. Receiving Contractor shall sign and date transmittal. Once the transmittal has been signed, it shall be the receiving Contractor's responsibility to protect and secure the material. Supplying Contractor shall forward a copy of signed transmittal to the Construction Manager's site office for their review and records. Supplying Contractor shall forward all F.O.B. material within the time limits as noted in the construction schedule so as to not delay receiving Contractor's work. If work is delayed due to the untimely forwarding of required material and/or information, the applicable Contractor shall be responsible for any and all costs incurred due to delays and/or corrective work.

14. A representative from this Contractor is to be on site to receive all material deliveries, whether they are performing work on site at the time or not. Construction Manager will not receive or sign for any deliveries of this Contractor's material. Contractor is to provide traffic control, including but not limited to flagmen, signage, delineators, etc. for any delivery vehicles that are unable to be unloaded on the project site, in accordance with all local traffic laws.
15. Contractor understands that housekeeping is critical to both safety and efficiency. Therefore, daily cleanup is an obligation of the contract. Contractor is responsible to legally remove their debris offsite on a daily basis or as necessary as not to be an impact to safety and dependent trades / progress of the project schedule. If daily housekeeping falls below acceptable standards, the Owner shall consider one of the three options to mitigate:
 - A. Require a composite cleanup crew, as needed, until standard is restored. Contractor's manpower contribution size will be based on manpower size as follows:
 - i. 1 to 5 workers = 1, 6 to 10 workers = 2, 11-15 workers = 3, 16 to 20 workers = 4, 20+ workers = 5.
 - B. Hire a separate cleanup crew as needed until standard is restored. Hired crew will be funded via a deductive change order to the offending Contractor(s).
 - C. Require an "all hands" cleanup session as needed until standard is restored.
16. Contractor shall protect all existing on and/or offsite conditions. Any damage sustained by the work of this Contractor, shall be repaired or replaced by the next shift or as directed by Construction Manager or Owner at the expense of this Contractor.
17. For known trade causing damage, it is required to be repaired by the next shift.
18. Contractor has been allotted a number of days for construction activities that relates to this trade. Contractor must manage to complete all work in allotted time frame without excuse. Contractor agrees to assign the appropriate manpower to complete the activities. Therefore, all clarification and approvals must be obtained prior to start of work and in such time as to allow response, procurement, and preparation without compromising the schedule activity time and scheduled start date and finish date. Late coordination and RFI's requested during work progress will not be an excuse for delay.
19. Contractor shall provide their own storage and safety measures.
20. Mobilizations and move-ins as necessary to achieve the progression of the project schedule.
21. Contractor understands and is responsible for all layout for their respective work.
22. Any new substrate provided by others for this Contractor's use and/or any existing substrate (existing conditions) is found to be unacceptable at the time of installation, Contractor shall advise Construction Manager before commencing. Any repairs and/or replacement required to the substrate once Contractor has commenced their work on the substrate, all costs associated with the removal and replacement of finished product shall be at the expense of this Contractor.

PART 3 - TRADE SPECIFIC INCLUSIONS:

Building Plumbing:

1. Building related plumbing systems, plumbing fixtures, plumbing piping, and equipment such as but not limited to domestic water, sewer, venting, storm drain, rain water, and condensate drains.
2. All related equipment and appurtenances, ~~such as~~ including but not limited to clean outs, trap primers, circulating pumps, water heaters, expansion tanks, water filters, thermometers, valves, mixing valves, solenoids, hose bibs, water filters, pressure gauges, reduced pressure backflow preventers, garbage disposal, pressure reducing valve assembly, and pumps.
3. Extend waste and supply lines from building and tie into the respective underground utility main line; regardless, if the lateral lines are shown or not and final connection.
4. Plumbing lines not shown but noted on the fixture schedule and/or contained in the specifications is included in based bid.
5. Provide water heater platform assembly and the attachment of same.
6. Supply plumbing related lines to HVAC equipment and final connection of same.
7. Primary condensation drain lines and connection to HVAC equipment requiring same. Secondary drain lines by the HVAC Contractor.
8. FOB program timer and aqua state to Electrical Contractor.
9. Fasten roof drain clamp ring after roofing has been installed and water testing roof drain piping in the presence of the Construction Manager.
10. Commissioning.
11. Grease interceptors and waste lines.
12. All fixtures noted in the Plumbing Fixture Schedule on P-0.02.
13. Drywells and condensate piping.
14. Hand sinks, Mop sinks per Bar/Food Service Equipment Schedule regardless if noted supplied/installed by others.
15. Drinking fountains at buildings regardless if noted as provided and installed by owner.
16. Any fixture that dispenses water.

Bar/Kitchen / Food Service:

17. The food service plans in many details and/or sheets differentiates which trade food service, electrical, plumbing or mechanical is to provide which scope of service. This scope has specified which trade will be responsible for which service. This scope supersedes the plans. If this scope is silent on this Contractor's responsibility, then the trade as noted in the plans shall be responsible.
18. All plumbing related supply, vent, and waste lines for food service equipment and final connection as noted on the Food Service plan sheets unless noted otherwise. Refer to the plumbing notes in the Food Service Plans.
 - A. Indirect waste lines.
 - B. All condensate and vent lines.

Miscellaneous Scope of Work and Coordination:

19. All related excavation, bedding, backfill and compaction. Return grades disturbed to compacted grade within +/- 0.10 foot of engineered grade.
 - A. Shore as needed to support trench excavations.
 - i. For trenches greater than 5 feet, pursuant to Labor Code Section 6705, submit a detailed plan showing the design of shoring for protection from the hazard of caving ground.
 - ii. For trenches 20 feet and greater, submit engineered shoring plans by a California registered licensed engineer.
 - B. Comply with geotechnical general notes identified in the soils report.
20. Pot-hole before trenching to avoid existing utilities and to confirm inverts prior to commencement of any utility installation. Includes underground ID survey before excavation. Plumbing Contractor will make final connections to site utilities.
21. Protect plumbing related trenches. Set up dewatering measures prior to commencement of rain and maintain as necessary. Remove mud and implement the necessary remediation to restore compaction.
 - A. Contractor may elect to install a rat slab at bottom of trench as their means and methods in protecting the integrity of the trench bottom.
22. Plumbing penetrations:
 - A. Plumbing Contractor is responsible to layout all plumbing related penetrations and provide a detailed layout for sleeve installation.
 - B. FOB sleeve to the respective Trade at:
 - i. Concrete or masonry walls.
 - ii. Foundation system.
 - a. Plumbing Contractor to adjust inverts when possible to avoid conflicts with proposed grade beams. Where a conflict occurs, Contractor to notify Construction Manager requesting clarification prior to proceeding with installation. Installation to occur only upon receipt of written approval from Architect/Engineer
 - iii. Concrete over decking or wood sheathing,
 - a. Plumbing Contractor to drill hole in wood sheathing.
 - C. Plumbing Contractor to cut holes in non-structural openings in walls and metal decks or wood sheathed decks at floors or roofs.
 - D. Penetrations not identified or coordinated timely shall be the responsibility of the Plumbing Contractor to provide at their expense.
 - i. Any penetrations made after concrete or masonry wall placement shall be made in compliance with code and structural engineer requirements. All coring costs, x-ray, structural support for non-verified or improper placement will be the responsibility of this Contractor.
 - E. Core drill through structural and building members as required at existing conditions, including scanning.
23. On wood framed projects, Plumbing Contractor to drill and/or notch wood framing / members in accordance with structural details and install nail protection plates to protect plumbing related piping whether shown or not.
24. Submit dimensioned shop drawings for plumbing housekeeping pads. Coordinate housekeeping pads with the Concrete Contractor.
25. Participation in Building Information Modeling "BIM". Any BIM drawings provided by this Contractor does not constitute "layout". Contractor shall provide field layout for their respective work and coordinate with other trades as necessary.
26. Counter flash, lead flash and/or boots at all roof and wall plumbing penetrations generated. Includes clamping and joint sealant/caulking.

27. Provide templates for cutting countertops for sinks and coordinate layout and cutting of tops with Casework Contractor. If templates are not provided in a manner to avoid delaying the Casework Contractor, this Contractor shall be responsible for cutting openings in countertops.
28. Joint sealant, acoustical sealant, fire safe, fire barrier, fire stopping at Plumbing related penetrations and boxes.
29. Braces, angles, brackets, wire, unistrut, seismic related attachments for overhead, wall mounted, pad mounted or roof mounted support of the Plumbing system/equipment including structural and miscellaneous steel complete as required for this work as detailed in the plumbing and/or structural drawings and/or as required by code. Provide shop drawings for structural review.
30. Access doors for this scope of work will not be provided by others despite any indications to the contrary in the plans or specifications. This Contractor must provide suitable sized, finished and rated Plumbing access doors for installation by the Framing Contractor. Locations of access panels to be coordinated prior to the installation of finish materials via shop drawings and locations provided by this Contractor.
31. Any required overhead support attachment to steel receiving fireproofing shall be installed before fireproofing installation. Any missed or late support installation requiring the fireproofing to be removed, Plumbing Contractor will be responsible to remove fireproofing to accommodate support attachment. Any cost associated with fireproof patching shall be at the expense of this Contractor.
32. All labels, tags, placards, and directional arrows.
33. All plumbing related pipe insulation including condensate lines where noted. Insulate exposed waste lines/tailpieces on lavatories, whether noted or not.
34. Flue pipe, weather cap and related roof flashing.
35. No pipe cutting permitted on the building slab.
36. Pipe escutcheons at plumbing exposed pipe penetration; regardless, if shown or not on the plans.
37. Once the lines have been pressure tested and accepted, Plumbing Contractor shall keep line(s) under pressure, with pressure gauge, pressurized to 20-30psi and capped. System to remain pressurized until final connection is made and operative.
38. Disinfect / chlorinate in accordance with plans, specifications, governing codes and/or agencies and provide certification.
39. Any reference to "Contractor" or "General Contractor" noted in the plumbing plan sheets shall be synonymous with Plumbing Contractor, unless noted otherwise.
40. Stock pile excess soils to an on-site location as determined by the Construction Manager. Until this Contractor's spoils have been located to the determined location, it shall be this Contractor's responsibility to protect spoils in accordance with the SWPPP requirements. Once the spoils have been located to a common site location, it shall be the responsibility of others to maintain.
41. Maintain, full, uninterrupted, and continuous use of existing water, sewer, storm drain, gas service to existing on-site and building facilities.
 - A. Any shut-down for plumbing related tie-in(s), MUST be coordinated with Owner and Construction Manager weeks in advance prior to the scheduled shut down. Refer to Div. 01 for procedure.
 - B. Contractor will provide temporary measures as needed and/or required to ensure the necessary site plumbing needs are being continuously met.

- C. All tie-ins must be performed after hours and/or on weekends and associated cost is included in the base bid.
42. The Mechanical, Plumbing, and Electrical plans in many details and/or plan sheets differentiates which trade is to provide which scope of service. This Scope of Work has specified which trade will be responsible for which service. This Scope of Work supersedes the plans. If this Scope of Work is silent on the trade's responsibility, then the trade as noted in the plans shall be responsible.
 43. Plumbing Contractor shall participate in the building commissioning process. This includes attending meeting, filling out pre-functional checklists, demonstrating to Commissioning Authority functionality of systems in the field and making all corrections. Contractor shall provide O&M's for purposes of commissioning above and beyond closeout O&Ms.
 44. As-built drawings showing depth of utilities (provide pipe invert elevations) and horizontal dimensions in two (2) directions, referenced from fixed building points must be updated weekly, and will be reviewed prior to approval of pay requests.
 45. Temporary Water Service:
 - A. Connect to the water service and provide a 2" fire hose/bibb connection and domestic hose bibb each with a backflow preventer at each building structure location. Coordinate location with Construction Manager.
 - B. Cut and cap water lines when directed by the Construction Manager.
 - C. Provide a 100' fire hose for Construction Manager and trade use at each building structure location.
 46. Provide an electronic video to ensure piping is sound and miscellaneous or construction debris are not found inside each system prior to turnover to the Owner. The Construction Manager shall be notified and included during the flushing and electronic video. A copy of the video shall be provided to the Construction Manager and one to the Owner.
 47. **Wundercover plumbing infill covers as noted per P-0.01 General Note 16. In the event a Wundercover is not noted provide in all areas where utility boxes are located in concrete flatwork or masonry pavers.**

PART 4 – ALLOWANCES:

1. Bid Contractor shall include in their base bid the Trade Specific Bid Category Allowance identified in Division 01 (Specification Section 01 21 00 – Allowance). This allowance shall be used at the discretion of the Construction Manager and/or Owner. The allowance shall not be used for this Contractors' poor workmanship, missed scope, delays imposed due to this Contractor, or corrective work. All labor rates and material cost shall be determined in accordance with the General Conditions. All mark-up, general conditions, bonds, fee, overhead & profit, insurance, and supervision for this allowance shall be in addition to the allowance amount identified in Division 01 and is to be included in this Contractor's Base Bid. This allowance shall be specifically itemized on this Bid Category Contractors Schedule of Values.

PART 5 – EXCLUSIONS:

1. Site utilities (By Site Utilities Contractor)

***** This page is left blank intentionally *****