

# PROJECT XYZ

## **SAMPLE CONSTRUCTABILITY REVIEW**

1-Jan-00

### **Section I, Requests for Information, Potential Change Orders**

| <u>Item</u> |                 |   |              |
|-------------|-----------------|---|--------------|
| <u>No.</u>  | <u>Dwg.</u>     | <u>Clarification</u>  | <u>Notes</u> |
| 1           | C-XX            | There is a 24" SD that must pass through the basement wall @ grid A/B. Please provide structural detail for this penetration. Structural standard details for basement wall penetrations have a maximum diameter of 12".  |              |
| 2           | C-XX            | On south end of building the valley gutter is indicated to have a minimum 2% slope. But, the total drop in the length of the valley gutter is only 6" and the gutter runs nearly 50 feet. This is a total allowable slope of only 1%. Suggest running SD via catch basins and UG piping along this length.                        |              |
| 3           | A-XX            | At grid A/B to A/C along the south wall of room 1234 the structurals call for a 12" concrete shearwall, but architecturals are graphically indicating an 8" wall. This will effect the casework layout along the east and west sides of the room. Please confirm  |              |
| 4           | A-YY and P-XX   | Architecturals indicate a dual drinking fountain immediately outside room 1234, but plumbing drawings indicate only a single drinking fountain. Please clarify  |              |
| 5           | C-XX            | CMU Retaining wall @ west end says refer to structurals, but is not shown on structurals. Please provide wall and footing details.  |              |
| 6           | P-XX, S-YY      | Wall along grid 1, b/w Grids X & Y, is centered over a steel beam, Plumbing indicates a pipe chase at this location, which includes SS lines. Please either shift wall offset of beam or provide re-route for piping. There is no feasible, adjacent, location to re-route this piping as a means and methods coordination issue. |              |
| 7           | A-XX and 1/A-YY | There is a dimensional bust at restroom 1234 between the low height wall on the north end of the sink to the north wall. The floorplan and blow up indicate 2 different dimensions.   |              |
| 8           | L-XXX           | Please provide Architectural details for the low height gates/railings @ grid 1/A   |              |

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| 9               | M-XX            | Note 1 indicates see structural drawings for concrete pads, but these pads are not reflected on the structurals. The standard concrete pad details on the structural "typical" details indicate a max height of 6", but these pads are 12" tall.  |              |
| 10              | M-XX            | Note 2 references pipe supports and states to see structurals, but these supports are not addressed on the structural drawings. Please provide details.   |              |
| 11              | X/A-YY          | Full height CMU walls called out with clips along top of wall, X/A-YY indicates "See Structurals". Structural Drawings do not address these clips. Please provide the size, spacing and anchorage of the CMU Wall Clips.  |              |
| 12              | X/L-YY          | Alignment of exterior walls do not match Architectural and Structural Drawings. This is particularly important along the back of planters. Please coordinate the landscape drawings, and most importantly the planting plan, with the Architectural and Structural drawings   |              |
| 13              | X/A-YY and C-XX | Civil Drawings indicate the areaway grating immediately adjacent to the building wall, but the aluminum panel system crosses this location that will run over, thus trapping, the northern edge of the grating. Should the areaway be shifted?  |              |
| 14              | Elevators       | Should an expansion joint, slip dowels or a separation of any sort be constructed between the existing and new slab on grades? The documents do not address how this connection should be made, please provide detail.  |              |
| 15              | X/A-YY          | The steel wall racks at this location are quite heavy themselves and will have a significant load when full. No structural steel is called out in the wall, please advise if red iron will be required.   |              |
| 16              | X/A-YY and S-XX | Architectural Concrete pilasters and bump outs are indicated at the face of the structural shearwall, but these aesthetic features are not addressed on the structural drawings. Please provide reinforcing details. Also, these bump outs do not indicate chamfers. Suggest adding chamfers to protect the edges, particularly at the main entrance. |              |
| 17              | A-XXX           | Footings/Thickened Sections are not indicated for the metal stairs where they land on SOG. Please confirm. (Note, thickened sections are indicated for the CMU on X/S-YY)   |              |

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| 18              | X/L-YY          | Please provide structural details for 36" wide planter wall. We have details for 12" and 18" wide planter walls, but not the 36" wide wall. Also, the 36" wide wall is approximately 30" taller than the 12" and 18" walls.   |              |
| 19              | M-121-p         | Storage room 1234 is conditioned, but storage room 5678 in the opposite corner of the building is not conditioned. These storage rooms appear to be for identical purposes and are of similar size. Please advise.  |              |
| 20              | M-XX            | Please confirm height of Mechanical pads on grade   |              |
| 21              | A-XX            | Grid 1/A has note 1 indicating a gypsum ceiling, but it appears this should read note 2 for a plaster ceiling. Occurs immediately exterior of door 123.   |              |
| 22              | S-XX            | Column @ grid 25/Z is missing from the column schedule.   |              |
| 23              | X/A-YY          | Please provide reinforcing details for the concrete trench located at grid A/B  |              |
| 24              | A-XX, S-YY      | Wall @ grid A.2/B to A.2/C is shown as CMU on Architecturals, but CIP on Structurals. This wall does not appear to be structural. Please confirm wall type.   |              |
| 25              | A-XX, P-YY      | Architectural drawings indicate a trench drain immediately inside the door to room 1234, but plumbing drawings indicate an area drain in the center of the room. Please confirm which is correct.   |              |
| 26              | A-XX            | The family restroom 1234 plumbing wall is called out as a type 'A' wall, which is a 3-5/8" single stud wall. A minimum 6" stud wall will be required to accommodate the plumbing. Suggest changing to a Type 'B' Wall and keeping the north face of the wall dimension as shown, thus allowing the wall to grow south into the janitors closet. |              |
| 27              | A-XX            | Suggest moving the trench drain 18" to the south to clear the beam below.   |              |
| 28              | A-XX            | General note indicates FRP wainscot at all restrooms as required by code. Please indicate on drawings where the FRP is required by code.  |              |
| 29              | A-XX and 1/A-YY | The floorplan and blow-up detail differ slightly, please confirm which is correct.  |              |
| 30              | E-XX            | The electrical drawings do not indicate power for the motorized blinds. Please add.   |              |

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| 31              | 1/A-XX               | Suggest indicating caps at the open ends of the exterior pipe rails that end @ walls. These railings are not galvanized, so water will get inside the pipe and rusty water will run down th adjacent wall. Many misc metals subs provide these caps as standard operating procedure, but not all of them.   |              |
| 32              | 1/A-XX               | Please provide make/model of emblem @ center of ornamental gate.  |              |
| 33              | 1/A-XX               | A "washable surface" is called out on this detail. Please confirm what this surface should be. Epoxy Paint?, FRP?   |              |
| 34              | 1/A-XX               | Provide material/finish of trim piece adjacent to drawer  |              |
| 35              | 1/A-XX               | Provide spec for baffle material  |              |
| 36              | A-XX                 | Please provide specification and details for the reflective markers   |              |
| 37              | A-XX                 | Wall Types "P" and "Q" are called out at various locations throughout the building. The majority of these low height walls have full height partitions at either end, but many do not. Suggest using steel posts where these low height walls do not have a stable ending point   |              |
| 38              | FS-XXX, P-YYY        | Trench drains @ grid 1/A, 2/B and 3/C are double covered on both the food service and plumbing drawings, each drawing indicates a different spec for this trench drain, please confirm which is correct and clarify incorrect reference to assure these items are not double bought.  |              |
| 39              | A-XX, A-X1 thru A-X5 | Warehouse bollard layout does not match between the general floorplan A-XX and the blow ups on sheets A-X1 thru A-X5  |              |
| 40              | E-XX                 | Please provide dimensioned electrical floorplans indicating Data and Electrical Outlet locations that have been coordinated with the furniture plan. We want to be sure all outlets are accessible once the furniture is installed. It's understood that the furniture locations may in fact change right up until move-in day, but we want to make the "best effort" to coordinate this and keep as many receptacles from being lost behind file cabinets, shelving, etc... as possible. |              |
| 41              | S-XX                 | The structurals indicate a future coiling door at grid 1/A in the shearwall, but electrical drawings have put several large panels at this location. Suggest moving the electrical panels to adjacent wall to avoid costly relocation at a later date.  |              |
| 42              | 1/L-YY               | Note 4 indicates "architectural block wall". Please provide spec for type of block.   |              |
| 43              | A-XX                 | Please provide details/spec's for the steel gate at the storage bin   |              |
| 44              | A-XX                 | Door 789 is missing from the door schedule.   |              |

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| 45              | A-XX          | Brace frame at line 1, grid A-B, is not reflected and will conflict with the coiling door at this location.   |              |
| 46              | A-XX          | Is a water curtain required at the grand stair glass storefront?  |              |
| 47              | 1/A-XX        | Finish Schedule calls for the walls in this room (Room #123) to have painted walls, but this detail indicates a wall covering.  |              |
| 48              | 1/A-XX        | Need to slope top of concrete beam at upper elevator shaft landing, I believe a shelf of over 4" is illegal in an elevator shaft.   |              |
| 49              | 1/A-YY        | Per wall type 1A, faced insulation is called out for interior demising wall, does insulation in this condition need to be faced?  |              |
| 50              | A-XX          | Room 1234 is called out to have painted walls on the interior elevation, but the finish schedule indicates only rock and tape in this maintenance storage room. Please confirm which is correct.  |              |
| 51              | 11/A-YY       | Immediately below the gyp board there are 2 lines. This may just be a typo, but I'm not sure. This strikes me as a couple lines meant to indicate an Owner provided sign, which would be somewhat similar to a couple other details. If this is an Owners provided sign please identify backing requirements. |              |
| 52              | 1/A-XX        | Please provide details for the metal roofing over the storage bin.  |              |
| 53              | 08700         | Door 1234 indicates weatherstripping, but it is an interior door.   |              |
| 54              | 1/A-XX        | Reflected ceiling plan shows recessed fixtures in the loading dock plaster ceiling, but electrical drawings indicate pendant mount high bay fixtures. Please confirm which is correct.  |              |
| 55              | 1/A-XX        | Reflected ceiling drawing calls for painted exposed ceiling, but finish schedule does not call for paint, just exposed. Please confirm this ceiling gets painted.   |              |
| 56              | A-XX          | Please provide detail cut showing soffit above curtain wall condition @ elevation 50'-0", grid 1/A  |              |
| 57              | 11/A-YY, S-XX | Detail graphically shows a 24" deep beam, but this beam is actually 36" deep. This means the bottom of beam is actually 6" below the ceiling grid, should the ceiling elevation be lowered?   |              |
| 58              | AV-XX, M-XX   | It appears the data closets on all levels 1234, 2234, 3234, 4234 have equipment in them, not just panel locations. These rooms are not conditioned, should we add individual zones for these rooms, or possibly fan coils?  |              |

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| 59              | 11/A-YY         | Calls for galvanized sheet metal roof jack, but this is a built up roof, so all roof jacks need to be lead. Suggest making a clear statement to this effect in the notes on the roof plan in the Architectural, Plumbing, Mechanical and Electrical drawings.   |              |
| 60              | M-111-p         | Owner mentioned the dividing wall between the maintenance shop and maintenance storage would be changed to a chain link partition. Please confirm.  |              |
| 61              | 02000           | Site concrete spec calls for a light broom finish, but details 1&10/L-YY indicate a sandblast finish.   |              |
| 62              | 09250           | Plaster spec calls for brushed aluminum reveals, but 11/A-YY indicates painted reveals. Please clarify.   |              |
| 63              | 08800           | Calls for standard or custom color as determined by the architect. Need to specify one or the other, Subs can't put a firm lump sum dollar value on this aspect of work if it is a variable.  |              |
| 64              | A-YY, S-YY      | Beam along grid 1, from grids A to B, is indicated as 18" wide on structurals, but Architecturals show this as a 24" wide exposed concrete beam and has 24" gypsum soffits in the same vicinity. If the intent was for the concrete beam to match the gyp soffits?  |              |
| 65              | S-XX            | Slab designation immediately behind elevator shaft at second floor is missing.  |              |
| 66              | A-XX and S-YY   | For the elevator shaft @ grid 1/A a 6" CMU wall is called out on the Architecturals, but an 8" CMU wall is called out on structurals. Please confirm which is correct   |              |
| 67              | A-XX & L-YY     | Architecturals indicate a pattern of 12 planters at the 2nd level patio, grid 1/X. Landscaping shows 14 planters, please clarify.   |              |
| 68              | A-ZZ            | Unsafe Condition: The Rooftop AHU's are quite large and sit atop high curbs, maintenance workers will likely need to use step stools to access the panels. AHU's 11 and 12 have the panels facing south, towards the edge of the roof, and they are very close to the edge. Therefore a worker on a ladder will be in an unsafe condition. Suggest moving the units inward on the roof. |              |
| 69              | 1/A-XX & 2/S-YY | The bottom of slab above the warehouse coiling doors 1 and 2 is elevation 20', the doors are 10' tall, meaning that per Architecturals the spandrel above these doors is 10' tall. Structurals call for this spandrel to be 8' maximum.   |              |

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| 70              | L-XX & A-YY | Landscape drawings indicate a railing at the warehouse dock ramp, but Architecturals indicate a short CMU wall with a handrail. Please confirm which is correct.   |              |
| 71              | A-XX        | General note 100 calls for all exterior steel to be galvanized. Please confirm if the painted exterior steel needs to be galvanized.   |              |
| 72              | 15/A-XY     | An expansion joint is called out, but does not appear necessary. Please confirm necessity.   |              |
| 73              | 1/S-XX      | Indicates a vertical cold joint with a keyway, please confirm this cold joint can be run horizontally at the contractors option, it will be less expensive to run the joint horizontally.                                      |              |
| 74              | A-XX & P-YY | Architecturals indicate only a single area drain at storage room 1234, but plumbing indicates 2 drains. Please confirm which is correct. Architecturals show this floor sloping to a single drain.                             |              |
| 75              | 1/S-XX      | No keyway is indicated, please confirm if required.  |              |
| 76              | 1/A-XX      | Restroom 1234 has an area drain in the center, but a slope to drain is not indicated in this room. Please confirm required, adjacent womens restroom 5678 does indicate a slope to drain.                                      |              |
| 77              | A-XX & S-YY | Structural documents indicate a depressed slab for the ceramic tile in family restroom 4321, but Architecturals call for a thin set application. Please confirm which is correct.  |              |
| 78              | A-XX & P-YY | Architecturals indicate area drains at the bottom of the large stairwells 10, 11 and 12. But plumbing drawings do not show these drains.   |              |
| 79              | A-XX & C-YY | Exterior doors 123, 456 and 789 have between a 6" and 10" drop immediately outside the doors per the civil documents. Either need step(s) inside the building or a landing outside the building.                               |              |
| 80              | A-XX        | South Wall of room 1234 is called out as Type "A", 6" above ceiling grid, but it appears this wall should be a full height fire rated wall.  |              |
| 81              | 1/A-XX      | Please confirm size of steel angle   |              |
| 82              | A-ZZ        | No curb is indicated at the penthouse door, suggest minimum 8" above the top of roofing.   |              |
| 83              | A-XX        | The ceiling height of rooms 1234 and 1235 is 10'-0", but the structural beam running along the south side of these rooms has a bottom of beam elevation of 9'-6". Suggest either soffitng the beam or lowering the ceiling 6". |              |
| 84              | M-ZZ        | Exhaust from generator appears very close to AHU 11 intake.  |              |

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| 85              | P-XX           | There is a hose bibb in the service area of the loading dock, but no area drain. Suggest adding a drain, or possibly a floor sink at this location.  |              |
| 86              | A-ZZ, P-ZZ     | At the southeast eave the Architecturals show scuppers for overflow protection, but plumbing indicates piped overflow drains. Please confirm which is correct  |              |
| 87              | AV-XX          | Concrete shearwall configuration incorrectly reflected. The correct configuration will have an impact on the rack layout in this room.   |              |
| 88              | 07900          | Spec calls for standard or custom color as determined by the Architect. Need to specify one or the other as firm lump sum bids cannot be placed on this variable cost.   |              |
| 89              | P-XX           | Storm drain and SS piping runs across grid 1 between grids A & B. There is a concrete beam along this grid that is only 6" above the ceiling grid, the slope of these pipes will not allow them to pass under the beam and stay above the ceiling for their full run. Nor will the slope of the piping allow them to hit the middle thrid of the beam where the structural engineer will allow penetrations. Suggest lowering the ceiling appx. 8" |              |
| 90              | M-XX           | A louver is shown in the warehouse wall @ grid 1/A, but no fire damper is indicated. This is a rated wall.   |              |
| 91              | E-XX           | There are multiple grade beams between grids 1 and 3. Please confirm if the ductback can be run immediately outside the building footprint in lieu of between grids 1&2 as indicated on E-XX at the contractors option.  |              |
| 92              | 1/S-ZZ         | The gussets @ grids 1/A, 2/B, 3/C & 4/D appear they will encroach into the window openings.  |              |
| 93              | C-XX and L-XX  | Civils indicate a CMU retaining wall along the south side of the ramp. Landscaping indicates a CIP wall. Please confirm which is correct.  |              |
| 94              | S-XX           | Column at grid 10/A indicates a column cap, but there is also a beam running across this column, is the capital necessary?   |              |
| 95              | S-XX           | There is significant rebar congestion at the column baseplates at all brace frames. It appears the drag bars will conflict with the top bars causing problems with both concrete coverage around the bars and general constructibility. Suggest widening the beams where possible to ease construction.  |              |
| 96              | L-XX & 10/S-YY | Pony wall @ northeast corner of the building, appx. 25' northeast of grid 1/A, is 42" tall. Standard structural details for freestanding walls only accounts for a max of 36".   |              |



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| 97              | A-XX and S-XX | Architecturals indicate a door opening 4" from abutting the pilaster on the north end of the shearwall. Jamb steel is specified to go in this 4" space, but the jamb steel needs a minimum 10".  |              |
| 98              | 1/A-XX        | Detail states to see structural for TS support, but structurals do not address this steel  |              |
| 99              | S-XX          | There are dashed lines running along grid 1 from grids A to B. This appears to be a beam, but there is no beam mark. Please confirm.   |              |
| 100             | 1/L-XX        | Guying of trees is shown on only one detail, which indicates a triangular pattern. But, for the trees planted immediately adjacent to the building it will be best to guy them off to the building itself because in most instances these trees are bordered on one side by the building and the oposite side by the pedestrian walkway. |              |
| 101             | 02900         | There are several large trees around the plaza walkways. Need to get guying plan that will not cause many of the guy wires to interfere with the walkways.   |              |
| 102             | 1/A-YY        | Need structural support for the middle and lower attachments of the GFRC spandrel @ elevation 20' along grid 1, b/w grids A and D.   |              |
| 103             | 1/A-YY        | Detail 1/A-YY indicates GFRG wainscot in the south lobby, but the elevation on A-Y2 indicates gyp/paint all the way to the floor. Also, the finish schedule does not address the wainscot.   |              |
| 104             | 1/A-YY        | Detail indicates embedded corner guard at concrete walls, but is referenced from several CMU wall locations. Need detail for corner guard @ CMU walls.   |              |
| 105             | A-ZZ, S-ZZ    | Hoist beams for the traction elevators 1 through 6 are indicated on Architecturals, but not addressed on structurals, need structural design.  |              |
| 106             | 1/A-YY        | Please confirm the flooring at the elevators. The elevators are not addressed on the finish schedule.  |              |
| 107             | A-XX          | No extinguisher is shown at the elevator machine room, code will likely require this.  |              |
| 108             | A-XX          | Electrical drawings do not identify a receptacle at what appears to be the microwave shelf immediately to the right of the sink in room 1234.  |              |
| 109             | 1/C-YY        | Subdrainage indicated on civils to be immediately adjacent to the mat slab is running right through the shoring piles. Is it possible to put the subdrainage below the mat slab?   |              |
| 110             | X/A-YY        | Coiling door steel is indicated on Architectural Drawings, but not sized or detailed. Please provide size of steel members and connection details.   |              |

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| 111             | X/A-YY      | Please provide size and anchoring details for the TS member.   |              |
| 112             | M-YY        | Ceilings of rooms 1234, 2345, 3456 and 4567 call for painted exposed ceilings. Ductwork in these rooms is not specified to be lined (ductwrap isn't paintable), suggest making that qualification. If a high architectural finish is expected in these rooms it is suggested to qualify level of workmanship clearly in the documents. |              |