

ARCHITECTURAL – GENERAL NOTES

A. GENERAL

a. ARCHITECTURAL:

- ALL DIMENSIONS ARE IN FEET & INCHES
- THE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE TECHNICAL SPECIFICATIONS, THE GENERAL CONDITIONS & ANY ADDITION OR WRITTEN INSTRUCTIONS IN CASE OF ANY CONTRADICTIONS, THE ENGINEER MUST BE ADVISED IMMEDIATELY.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO CHECK ALL THE DRAWINGS AND VERIFY ALL DIMENSIONS AND LEVELS ON SITE.

THE CONTRACTOR(S) SHALL WORK IN LINE WITH THE ENGINEER REPRESENTATIVE FOR APPROVAL OF DETAILED STATEMENT OF WORK/DRAWINGS PRIOR TO COMMENCING WORK, ALL WORK SHALL BE PERFORMED TO THE HIGHEST STANDARDS OF WORKMANSHIP AND TO THE SPECIFICATION.

- ALL MATERIALS SHALL MEET EQUIVALENT STANDARDS, UNLESS OTHERWISE SPECIFIED. WRITTEN APPROVAL OF THE ENGINEER REPRESENTATIVE SHALL BE OBTAINED PRIOR TO ORDERING OR BRINGING TO THE SITE ANY MATERIAL.
- ALL BLOCK WALLS TO BE HOLLOW BLOCKS EXCEPT WHERE OTHERWISE SO INDICATED ON THE DRAWINGS OR INSTRUCTED BY THE ENGINEER. BLOCK WALLS SHALL BE CONSTRUCTED AS SPECIFIED IN THE SPECIFICATIONS/DRAWINGS.
- ALL EXTERNAL CONCRETE AND BLOCK WORK FACES TO BE PLASTERED AS SPECIFIED IN THE SPECIFICATIONS.
- WHERE EPOXY COATING IS SPECIFIED, SAME SHALL BE CARRIED OUT AS RECOMMENDED BY THE APPROVED MANUFACTURER/EQUIVALENT STANDARDS.
- INTERNAL WALL SURFACES SHALL BE FINISHED WITH MORTAR PLASTERING AND PAINT FINISHES UNLESS OTHERWISE SPECIFIED.
- COLOR OF PAINT, TILES, ETC. SHALL BE APPROVED BY THE OWNER.
- CONTRACTOR MUST ALLOW FOR PROVIDING THRESHOLDS WHERE WET AND DRY AREAS MEET AND IN ALL AREAS WITH DIRECT CONNECTION TO THE OUTSIDE, ALL AS APPROVED BY THE OWNER'S ENGINEER.
- ALL WATER SUPPLY PIPES SHALL BE 'PVC' (WITH APPROVED STANDARDS; CLASS AND SIZES).

B. EXTRUDED TILES :

EXTRUDED TILES SHALL BE IN PLAIN COLORS AND PRODUCED WITH KEY BACK PROFILING COMPLYING WITH THE SPECIFICATIONS OR EQUIVALENT AS FOLLOWS:

- TO BE ACID AND ALKALI RESISTANT.
- AVERAGE WATER ABSORPTION NOT TO BE MORE THAN 1.5%.
- SCRATCH RESISTANT.
- TILES SHALL BE SUITABLE FOR HEAVY DUTY PURPOSES AS RECOMMENDED BY THE MANUFACTURER FOR SIMILAR BUILDING TYPES.

C. SCHEDULE OF INTERNAL FINISHES:

a. FLOORS:

- CERAMIC TILES AS SPECIFIED IN THE SPECIFICATIONS, TILING SHALL BE CARRIED OUT AS SPECIFIED IN THE SPECIFICATIONS.
- ALL FLOOR FINISHES MUST BE CAST-IN-PLACE NON- SLIP CERAMIC TILES OR OTHER WISE SPECIFIED IN THE SPECS CATALOG.

b. WALLS:

- SEMI-GLOSS LATEX EMULSION PAINT (2 COATS) WITH 1 COAT PRIMER/PUTTY OVER PLASTER.

D. SCHEDULE OF EXTERNAL FINISHES:

- FULL ENAMEL PAINT (2 COATS), 1 COAT PRIMER
- COLOR SHALL BE AS APPROVED BY THE OWNER.

E. DOOR & WINDOWS:

- DOOR AND WINDOWS SHALL BE AS SPECIFIED.
- DOOR AND WINDOWS SHALL BE FINISHED WITH ENAMEL PAINT (2 COATS) WITH ANTI-RUST PAINT (1 COAT) AS PRIMER.

F. HARDWARE AND IRONMONGERY:

HARDWARE AND IRONMONGERY SHALL BE AS SPECIFIED.

EACH DOOR SHALL BE COMPLETE WITH DOOR CLOSER AND STOP KNOB. ITEMS MUST BE SUBMITTED TO THE ENGINEER REPRESENTATIVE FOR APPROVAL PRIOR TO PLACING ORDERS.

G. HAZARDOUS ELEMENTS AND MATERIALS :

NOTE:

ELEMENTS AND MATERIALS WITH KNOWN HAZARDOUS CONTENT MUST NOT BE USED. APPROPRIATE PRECAUTIONARY MEASURES ARE REQUIRED FOR MATERIALS THAT MAY BE HAZARDOUS DURING CONSTRUCTION ACTIVITIES.

Notes :		Revisions :						THIS DRAWING IS THE PROPERTY OF CITIES ALLIANCE AND IS SUBJECT TO THE CONDITION NOT TO BE COPIED, REPRODUCED OR DISTRIBUTED IN WHOLE OR IN PART EXCEPT BY WRITTEN PERMISSION OF CITIES ALLIANCE.											
		No	Date																
				PROJECT		CONSTRUCTION OF WATER KIOSKS						DWG. TITLE:		ARCHITECTURAL NOTES		DRAWN BY		MICHAEL MULBAH	
				CLIENT		CITIES ALLIANCE										ENGINEER		ANTHONY WAYLEA	
		CAT		LOCATION		GREATER MONROVIA						SCALE		NA		APPROVED BY			
		A		DATE		OCTOBER 2019						CHECKED		FRED ABANKWA					

CONSTRUCTION DRAWINGS

PROPOSED WATER KIOSKS

TABLE OF DRAWING CONTENTS

NO	DISCIP.	SEQ.NO	DESCRIPTION
00	A	00	Architectural Notes
01	A	01	Structural Notes
02	A	02	Proposed Layout
03	A	03	Elevations
04	A	04	Cross section
05	A	05	Window Details
06	A	06	Finishing Plan
07	S	01	Foundation Layout
08	S	02	Foundation & Column Details
09	S	03	Floor Framing Plan
10	S	04	Roof Plan & Details
11	M	01	Water Supply Plan
12	E	01	Energy Generation Option

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GENERAL PROJECT NOTES:

- 1.THE DIMENSION UNIT IN THIS DRAWING IS IMPERIAL IN FEET AND FRACTIONAL INCHES SCALED TO A PRECISION OF 0'-0", AND THE ELEVATIONS ARE IN FEET AND INCHES AS WELL UNLESS OTHERWISE SPECIFIED. THE POSITION OF THE WALL IS CENTER TO CENTER ON THE AXIS.
- 2.ALL STRUCTURAL DRAWINGS ARE SET STANDARD FOR BEAMS, COLUMN, AND FOOTINGS AS SHOWN IN THE FOUNDATION DETAILS AND OTHER DRAWINGS IN THIS VOLUME.
- 3.ALL MASONRY WALLS ARE MADE OF 6"X8" X16" SANDCRETE HALLOW BLOCK UNLESS OTHER WISE NOTED.
- 4.ALL FLOORS ARE CAST-IN-SITU MASS CONCRETE WITH SMOOTH TOWELED OR MORTAR SCREED FINISH.
- 5.CONTRACTOR MUST VERIFY WITH CITIES ALLIANCE BEFORE MAKING ANY MODIFICATION TO THE DRAWINGS, INCLUDING STEEPING THE BUILDING TO MATCH SITE CONTOURS.
- 6.INDICATIVE FOUNDATIONS ONLY SHOWN ON THE DRAWING. SPECIFIC DESIGNS WILL BE ADOPTED FOR EACH SITE CONSIDERING TOPOGRAPHY AND TERRAIN.
- 7.ENSURE THAT PROVISIONS ARE TAKEN AGAINST TERMITES, USING CHEMICALS, PLASTIC MEMBRANES, AND TERMITES GUARDS WHERE APPROPRIATE.
- 8.CONTRACTOR TO REMOVE THE A MINIMUM OF 12" OF THE TOPSOIL TO 4'-0" IN BUILDING AREA.
- 9.CONTRACTOR TO REMOVE ALL ORGANIC MATTERS, SUCH AS ROOTS AND VEGETATION.
- 10.CONTRACTOR IS TO BACKFILL WITH APPROVED LATERITE SOIL ONLY AND THEN COMPACTED INTO 6" LAYER.

PROJECT NOTES:

1. ALL MASONRY WALLS ARE MADE OF 8"X8" X16" SANDCRETE HALLOW BLOCK UNLESS OTHER WISE NOTED
2. ALL FLOORS ARE CAST-IN-SITU MASS CONCRETE WITH PORCELAIN TILE FINISHING
3. ENSURE THAT PROVISIONS ARE TAKEN AGAINST TERMITES, USING CHEMICALS, PLASTIC MEMBRANES, AND TERMITES GUARDS WHERE APPROPRIATE
4. ALL FOUNDATION BLOCK WALLS ARE 6" GROUT FILLED CONCRETE BLOCKS
5. BACKFILL WITH APPROVED LATERITE SOIL ONLY AND THEN COMPACTED INTO 6" LAYER.

PROJECT DETAILS











LOCATION
(Give name of Town/ Village, District and County)

GREATER MONROVIA,
MONTERRADO COUNTY, LIBERIA

CONTRACTOR
(Give name and Office location and contact details of partner, include phone number and email address)

DRAWN AND DESIGNED BY: M. MULBAH
ENGINEER/STRUCTURE: A. WAYLEA
CHECKED BY: F. ABANKWA

ARCHITECTURAL SYMBOLS AND LEGENDS

COLUMN GRID	GENERAL PLAN SYMBOLS	
<div><div>A</div><div>1</div></div>	<div> DOOR SYMBOL</div>	<div> TYPICAL CROSS SECTION THRU BUILDING</div>
	<div> DOOR TAG</div>	<div> SPOT ELEVATION</div>
	<div> DETAIL SEC.THRU</div>	<div> WINDOW SYMBOL</div>
	<div> WINDOW TAG</div>	<div> FDN. DETAIL SEC.</div>
	<div> DRAWING TITLE</div>	<div> ELEVATION</div>

FULL PACKAGE OF WORKING DRAWINGS FOR PROPOSED WATER KIOSKS

STRUCTURAL – GENERAL NOTES

GOVERNING CODE: The design and construction of this project shall conform to the "International Building Code (IBC)", 2015 Edition, hereinafter referred to as the IBC, as adapted by the Authority Having Jurisdiction (AHJ).

REFERENCE STANDARDS: Refer to Chapter 35 of 2015 IBC. Where other Standards are noted in the drawings, use the latest edition of the standard unless a specific date is indicated. Reference to a specific section in a code does not relieve the contractor from compliance with the entire standard.

SPECIFICATIONS: Refer to the project specifications issued as part of the contract documents for information supplement to these drawings.

OTHER DRAWINGS: The structural drawings shall be utilized in conjunction with other drawings. Refer to the architectural, electrical, civil and plumbing drawings for additional information including but not limited to: dimensions, slopes, door and window openings, non-bearing walls, stairs, finishes, elevations, and other nonstructural items.

STRUCTURAL DETAILS: The structural drawings are intended to show the general and extent of the project and are not intended to show all details of the work. Use details marked "typical" wherever they apply.

STRUCTURAL RESPONSIBILITIES: The structural engineer (SER) is responsible for the strength and stability of the primary structure in its completed form.

COORDINATION: The Contractor is responsible for coordinating details and accuracy of the work; for confirming and correlating all quantities and dimensions; and for performing work in a safe and secure manner.

MEANS, METHODS and SAFETY REQUIREMENTS: The structural drawings are intended for the structure to act as a whole once construction is complete. The contractor is responsible for the means and methods of construction and all job related safety standards.

CONSTRUCTION LOADS: Loads on the structure during construction shall not exceed the design loads as noted in DESIGN CRITERIA & LOADS below.

CHANGES IN LOADING: The contractor has the responsibility to notify the SER of any architectural, electrical, or plumbing load imposed onto the structure that differs from, or that is not documented on the original architectural / structural drawings. Provide documentation of location, load, size and anchorage of all undocumented loads in excess of 300 pounds. Provide marked-up structural plan indicating locations of any new loads. Submit plans to the SER for review prior to installation.

NOTE PRIORITIES: Plan and detail notes and specific loading data provided on individual plans and detail drawings supplements information in the Structural General Notes.

DISCREPANCIES: In case of discrepancies between the General Structural Notes, Specifications Plan/details or Reference Standards, the SER shall determine which shall govern or the General Structural Notes shall supersede the project specifications. Discrepancies shall be brought to the attention of the SER before proceeding with the work.

SITE VERIFICATION: The contractor shall verify all dimensions and conditions at the site. Conflicts between the drawings and actual site conditions shall be brought to the attention of the SER before proceeding with the work.

ALTERNATES: Alternate products of similar strength, nature and form for specified items may be submitted with adequate technical documentation or that significantly deviate from the design intent of materials specified may be returned without review. Alternates that require substantial effort to review will not be reviewed unless authorized by the Owner.

DESIGN CRITERIA AND LOADS

AREA	LOAD	MAGNITUDE (UNIFORM)	REMARKS
Roof	SUPERIMPOSED DEAD	15 psf	
Floor Slab	LIVE	20 psf	

SPECIAL INSPECTION: Special Inspectors shall be employed by the Owner, to provide Special Inspections for the project.

SOIL AND FOUNDATIONS

REFERENCE STANDARDS: Conform to IBC Chapter 18 " Soils and Foundations"

GEOTECHNICAL SUBGRADE INSPECTION: The SER shall inspect all subgrades prepared soil bearing surfaces, prior to placement of foundation reinforcing steel and concrete. The SER must ensure that soils are adequate to support the "Allowable Foundation Bearing Pressure" shown below.

** The SER should cross check with the Contractor the bearing capacity of the soil.

DESIGN SOIL VALUES:
Allowable Foundation Bearing Pressure..... 3000 psf
Allowable Foundation Settlement.....0.25 in
Passive Pressure.....100 psf
Friction coefficient.....0.5

FOUNDATIONS and FOOTINGS: Foundations shall bear on competent native soil. Exterior perimeter shall bear not less than 18 inches below finish grade, unless otherwise specified by the SER.

FOOTING DEPTH: The minimum footing depth shall be 3'-0" below grade level. Tops of footings shall be shown on plans with vertical changes as indicated with steps in footings; locations of steps shown as approximate and shall be coordinated with civil grading plans to ensure exterior perimeter footings bear no less than 18 inches below finish grade, or as otherwise indicated by the SER.

CAST-IN-PLACE CONCRETE

REFERENCE STANDARDS: Conform to:
1.. ACI 301-10 "Specification of Structural Concrete"
2. ACI 318-14 "Building Code Requirements for Structural Concrete"
3. IBC Chapter 19-Concrete

CONCRETE MIXTURES: Conform to ACI 301 Section 4 "Concrete Mixtures", ACI 318-14 Chapter 19 "Concrete: Design and Durability Requirements" and IBC 1903.1.

MATERIALS: Conform to ACI 301 Section 4.2.1 "Materials" for requirements for cementitious materials, aggregates, mixing water and admixtures.

CONCRETE MIX DESIGN: Conform to ACI 301 Section 4.2.1. Use concrete mix design, 1:2:3, with the following requirements given below.

Strength(f'c)..... 3000 PSI
Test Age..... 28 Days
Maximum Aggregate..... 1"
Maximum W/C Ratio..... 0.50

Mix Design Requirements Notes:

- W/C Ratio: Water-cementitious ratios shall be based on the total weight of the cementitious materials. Maximum ratios are controlled by strength noted above and durability requirements given in ACI 301 Section 4.3.
- Aggregates shall conform to ASTM C33.
- Slump: Conform to ACI 301 Section 4.2.2.2. Slump shall determined at point of placement.
- Shrinkage Limit: Concrete used in elevated slab and beams shall have a shrinkage limit of 0.035% at 20 days measured in accordance with ASTM C157.

MEASURING, MIXING, AND DELIVERY: Conform to ACI 301 Section 4.3.

HANDLING, PLACING, CONSTRUCTION AND CURING: Conform to ACI 301 Section 5. .

CONCRETE PLACEMENT TOLERANCE: Conform to ACI 117-10 for concrete placement tolerance.

FLOOR FLATNESS AND FLOOR LEVELNESS: All concrete slabs shall have a minimum Floor Flatness (FF) of 20 as measured in accordance with ACI 117.

CONCRETE REINFORCEMENT

- REFERENCE STANDARDS: Conform to:
- ACI 301-10 "Standard Specifications for Structural Concrete", Section 3 "Reinforcement and Reinforcement Supports."
 - ACI 318-14
 - IBC Chapter 19-Concrete
 - ACI 117-10
 - CRSI MSP-09, 28th Edition, "Manual of Standard Practice."

MATERIALS:
1. Reinforcing Bars.....ASTM A615, Grade 40, deformed bars
2. Bar Supports.....CRSI MSP-09, Chapter 3 "Bar Supports."

PLACING: Conform to ACI 301, Section 3.3.2 "Placement." Placing tolerances shall conform to ACI 117.

CAST-IN-PLACE CONCRETE COVER: Conform to the following cover and corrosion protection requirements unless otherwise in the drawings:

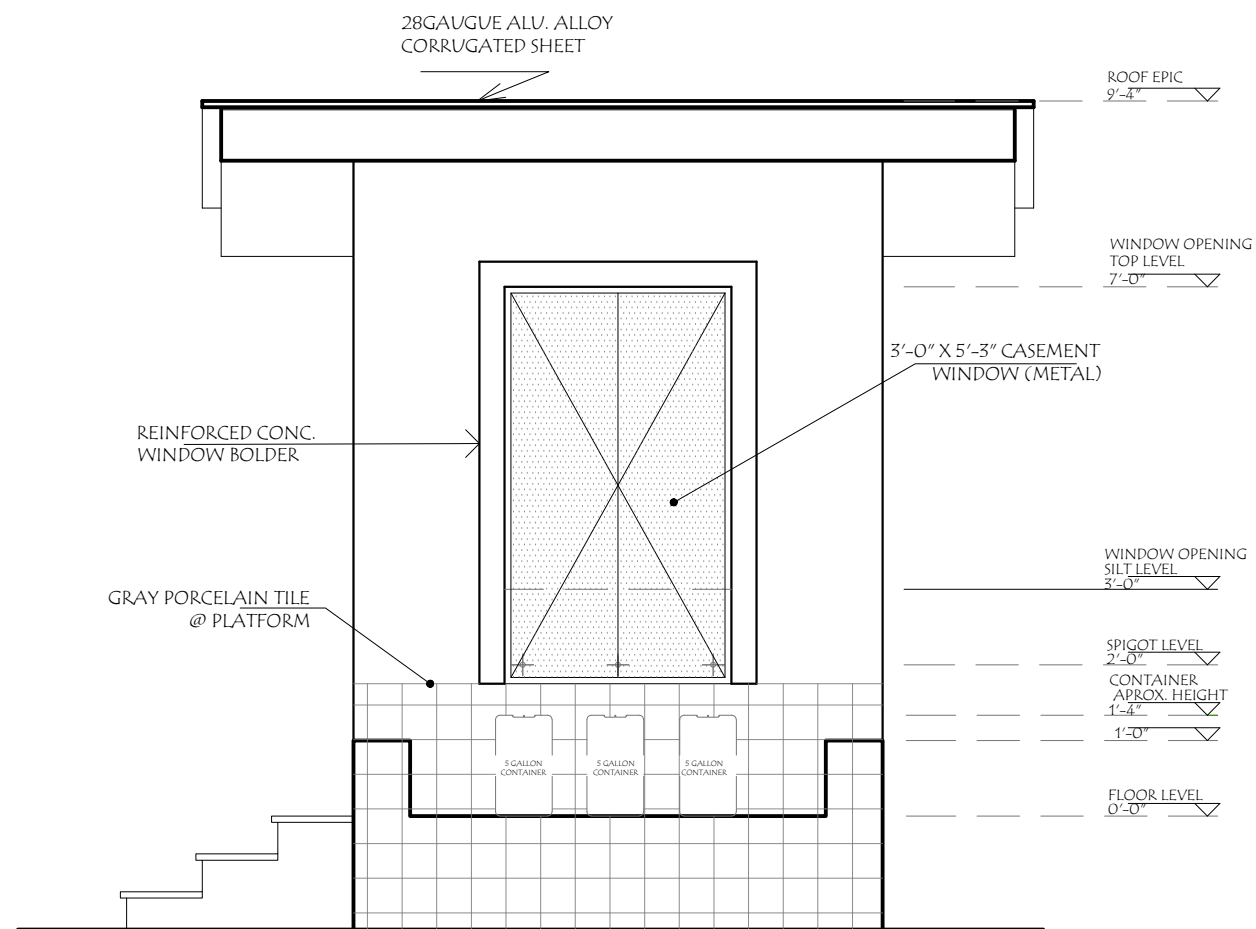
	Minimum Cover
Footing Bottom Reinforcing	3"
Footing Top Reinforcing	2"
L1 and L2 Slab Top Reinforcing	1"
L1 and L2 Slab Bottom Reinforcing	0.75"
L3 Slab Top Reinforcing	1"
L3 Slab Bottom Reinforcing	1"
Columns & Beams	1.5" to ties
Stairs Top Reinforcing	2"
Stairs Bottom Reinforcing	1"

STANDARD HOOKS: Conform to ACI 318-14, Section 25.3. Refer to Table 25.3.1 "Standard hook geometry for development of deformed bars in tension", and Table 25.3.2 "Minimum inside bend diameters and standard hook geometry for stirrups, ties, and hoops" for those specific elements. Standard hooks indicated on individual sheets shall control over the schedule.

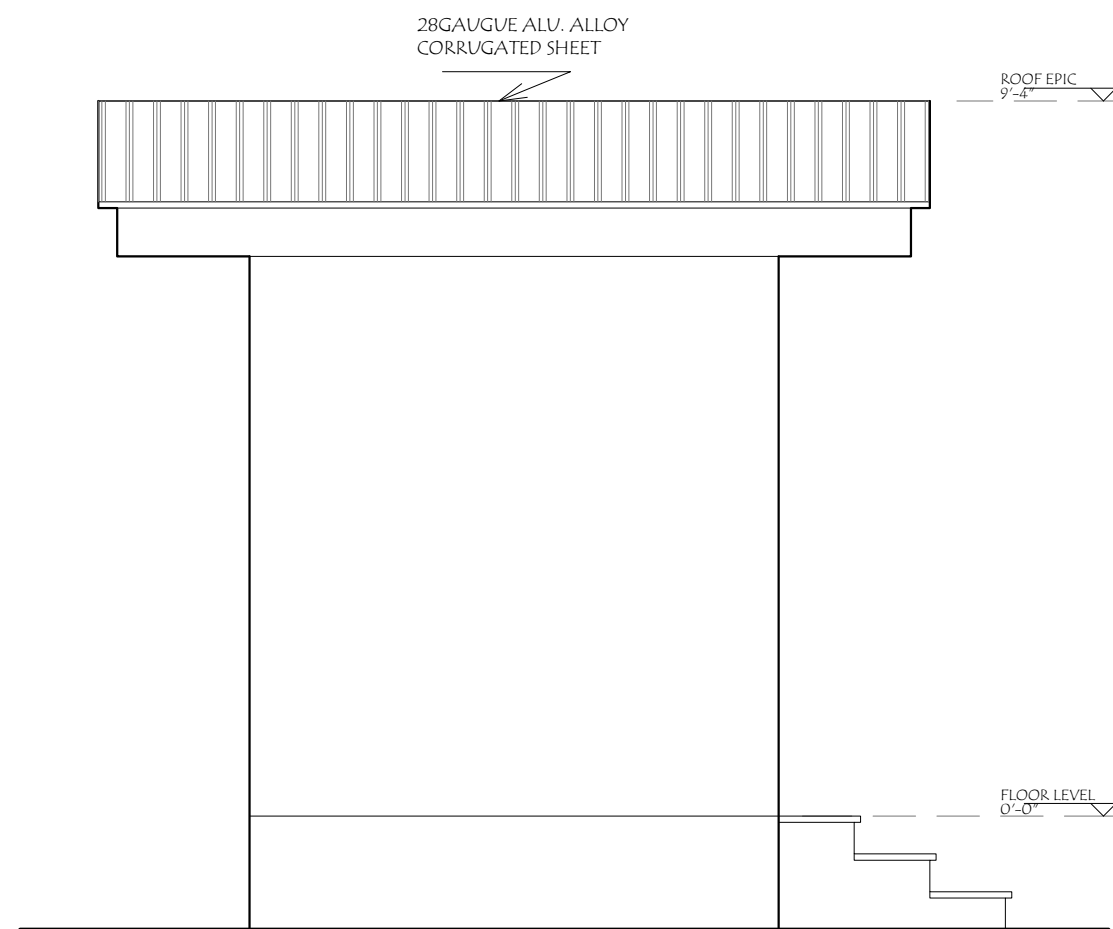
LAP SPLICES: Conform to ACI 301, Section 3.3.2.7, "Splices" or ACI 318-14 Section 25.5. Refer to "Typical Lap Splice and Length Schedule" for typical reinforcement splices. Refer to "Column Vertical Reinforcing Splice Schedule" for those specific elements. Splices indicated on individual sheets shall control over the schedule.

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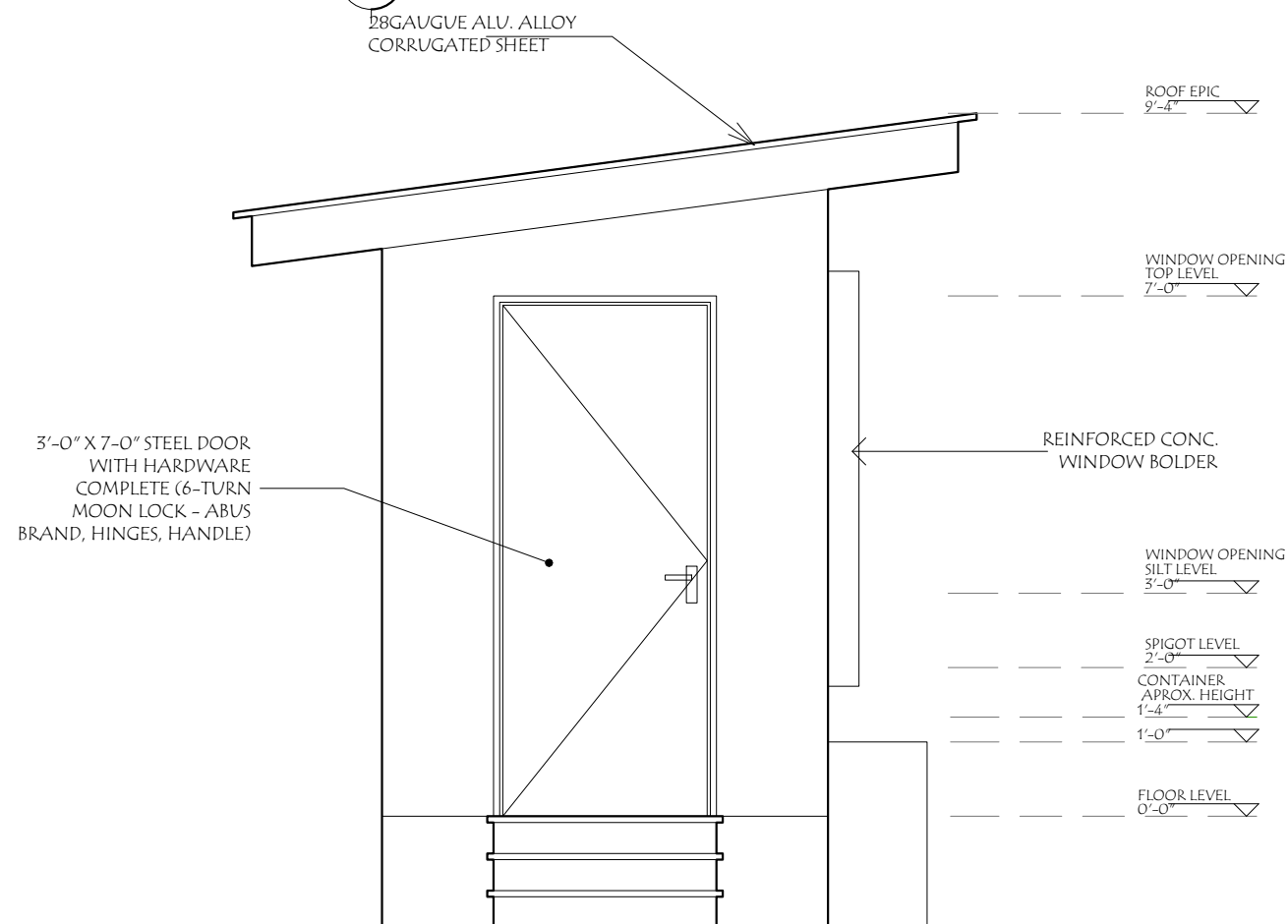
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CLIENT		CITIES ALLIANCE						ENGINEER	ANTHONY WAYLEA
LOCATION		GREATER MONROVIA							
DATE		OCTOBER 2019		CHECKED	FRED ABANKWA	APPROVED BY			
CAT		SHT.No		SCALE					
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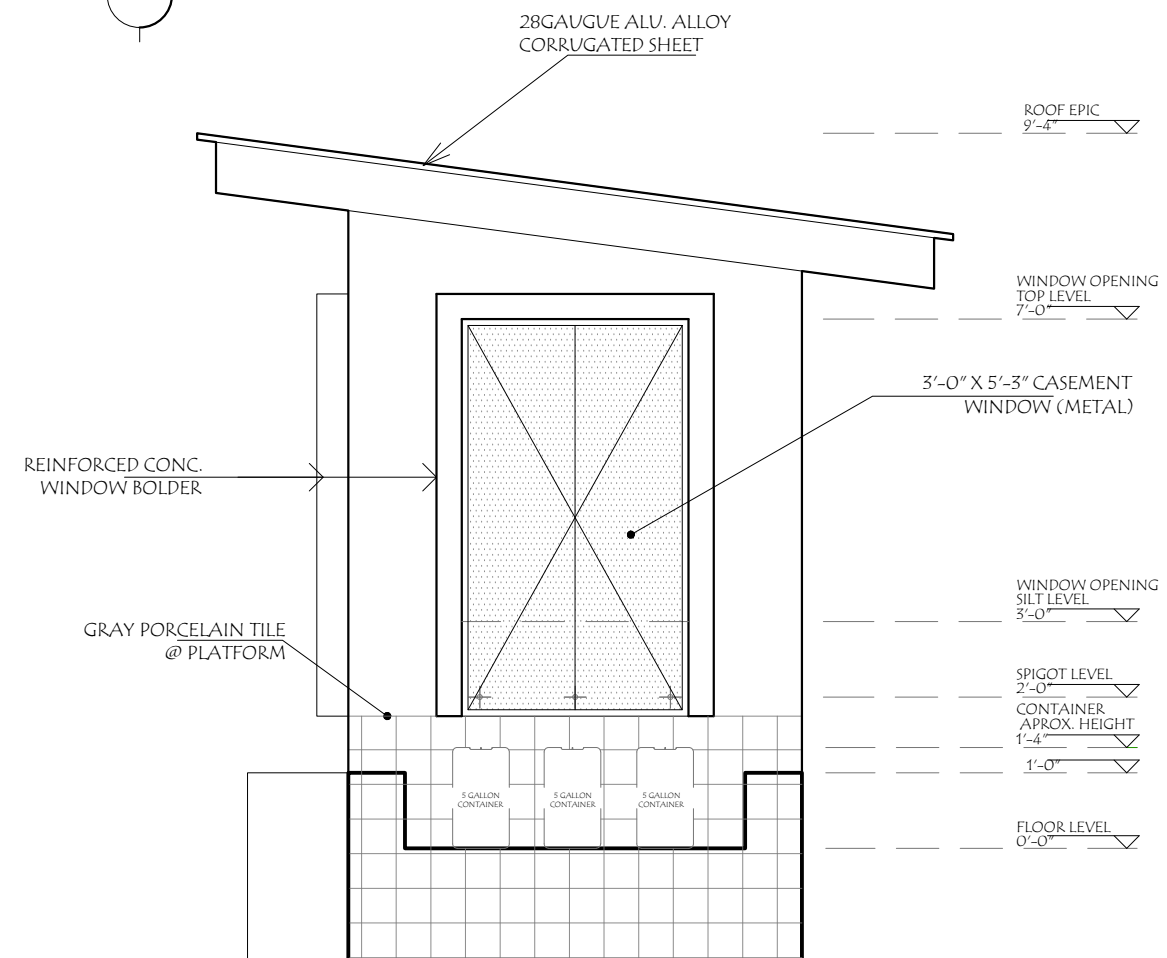
FRONT ELEVATION



BACK ELEVATION



LEFT SIDE ELEVATION



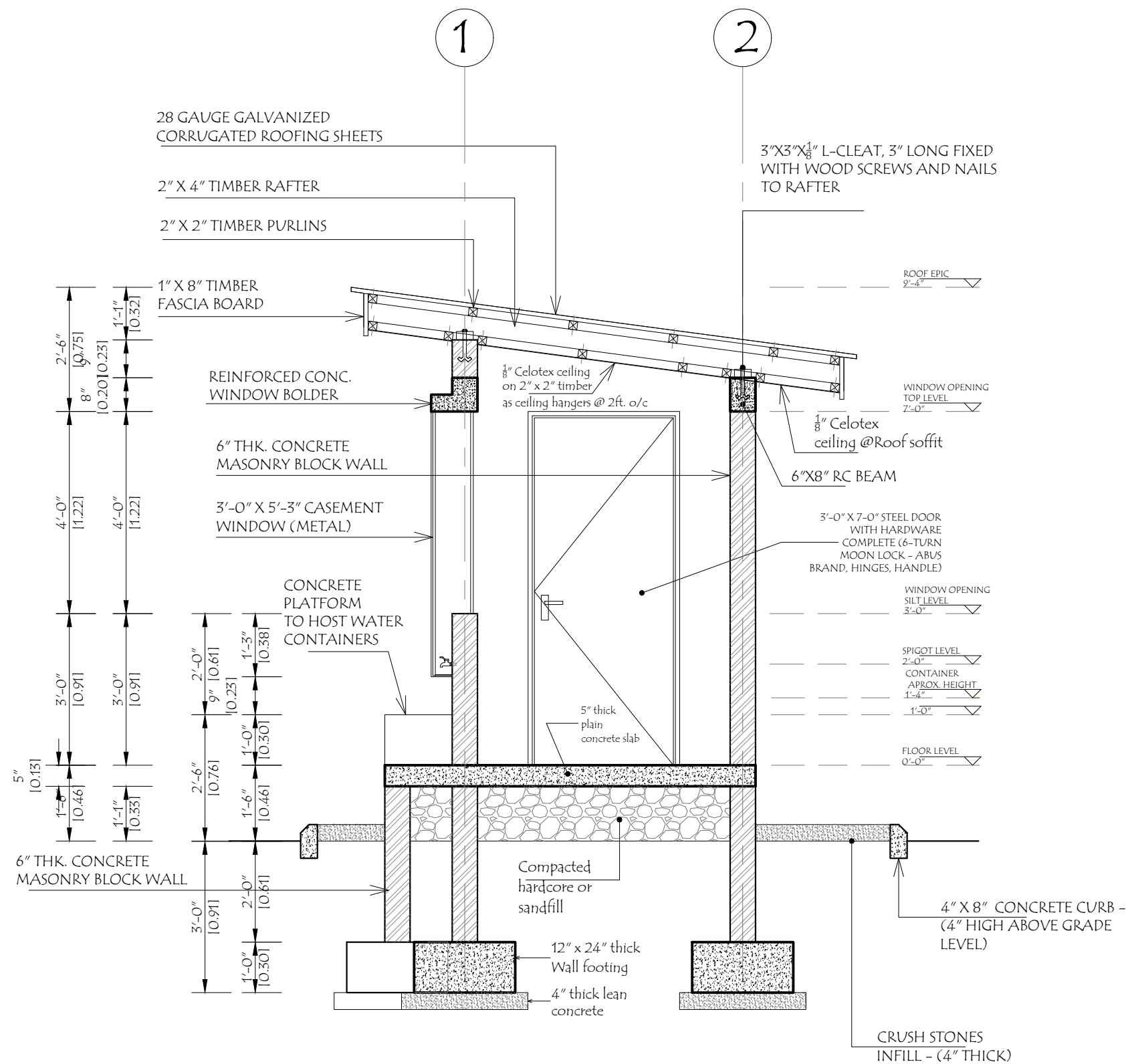
RIGHT SIDE ELEVATION

A - 03

SHEET.

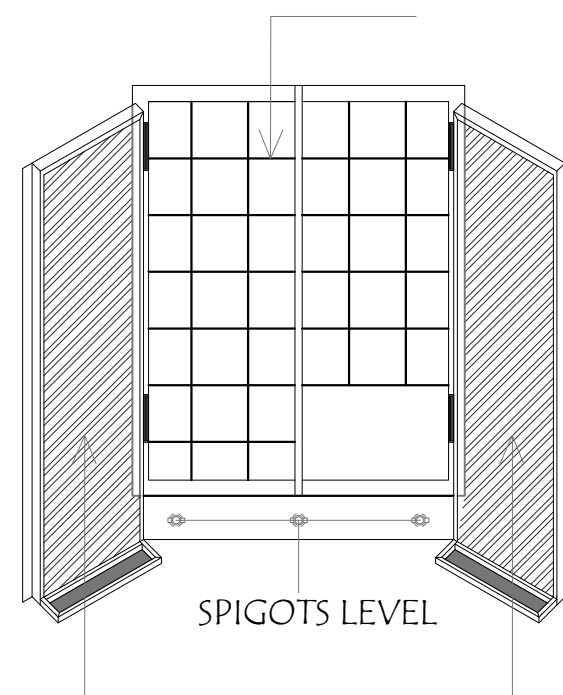
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Notes :	Revisions :		Cat	SHT.No	Date	Project	CONSTRUCTION OF WATER KIOSKS		DWG.TITLE:	ELEVATIONS	DRAWN BY	MICHAEL MULBAH
	No	Date										
			A	03		CITIES ALLIANCE	GREATER MONROVIA		SCALE	1" = 1'-0"	ENGINEER	ANTHONY WAYLEA
					OCTOBER 2019				CHECKED	FRED ABANKWA	APPROVED BY	



CROSS SECTION 1-1
Scale: 1'=1'-0"

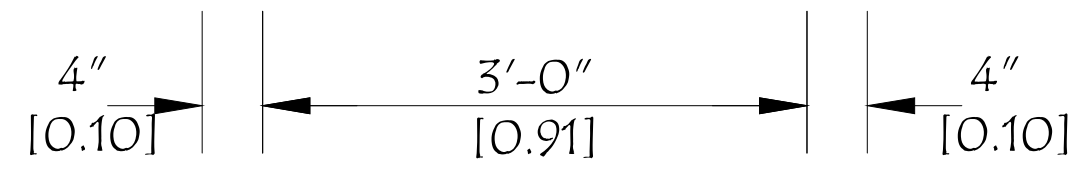
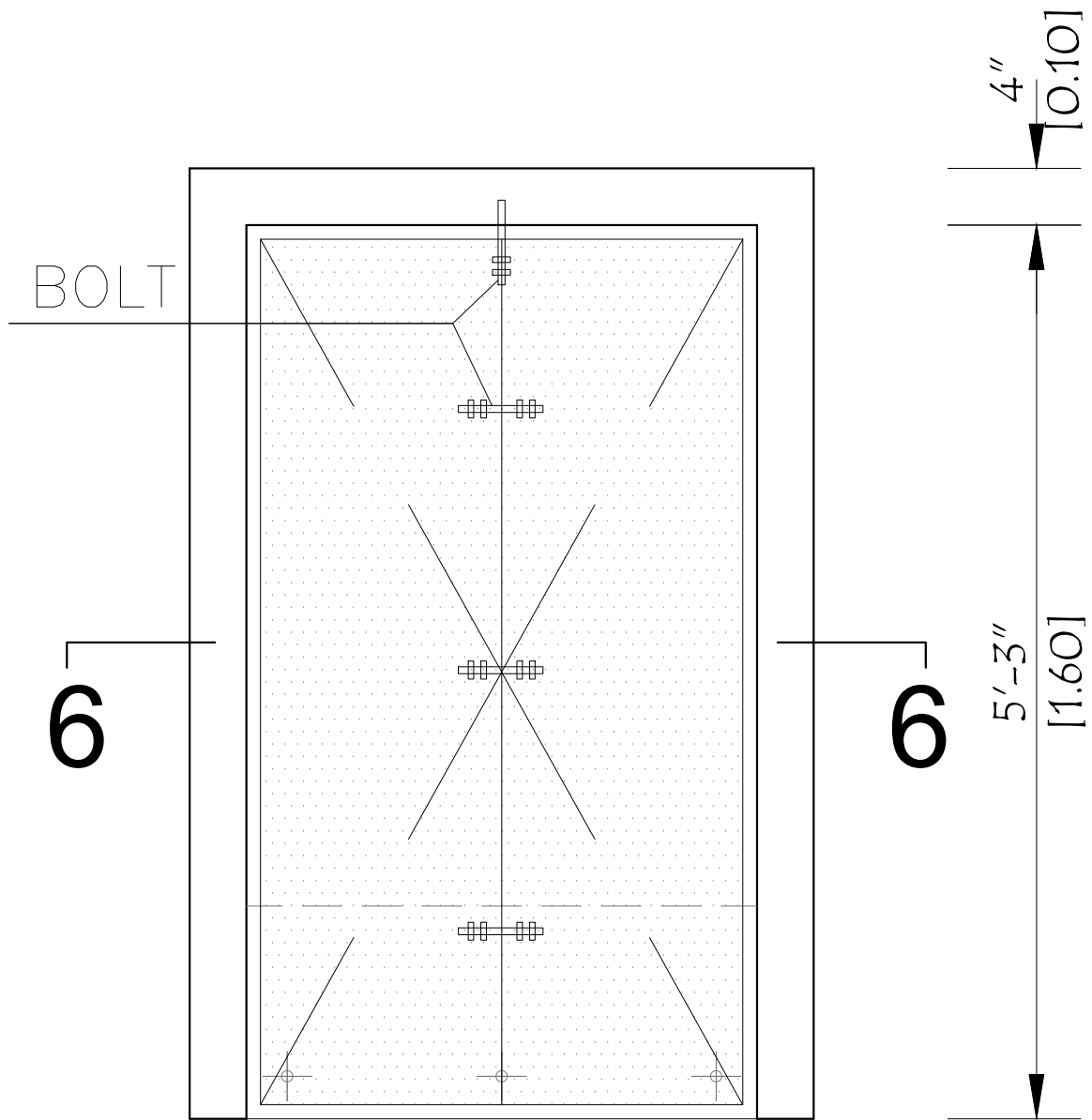
BURGLARY BARS USING 5/8" SQUARE BARS @ approx. 6" o/c or APPROVED EQUIVALENT



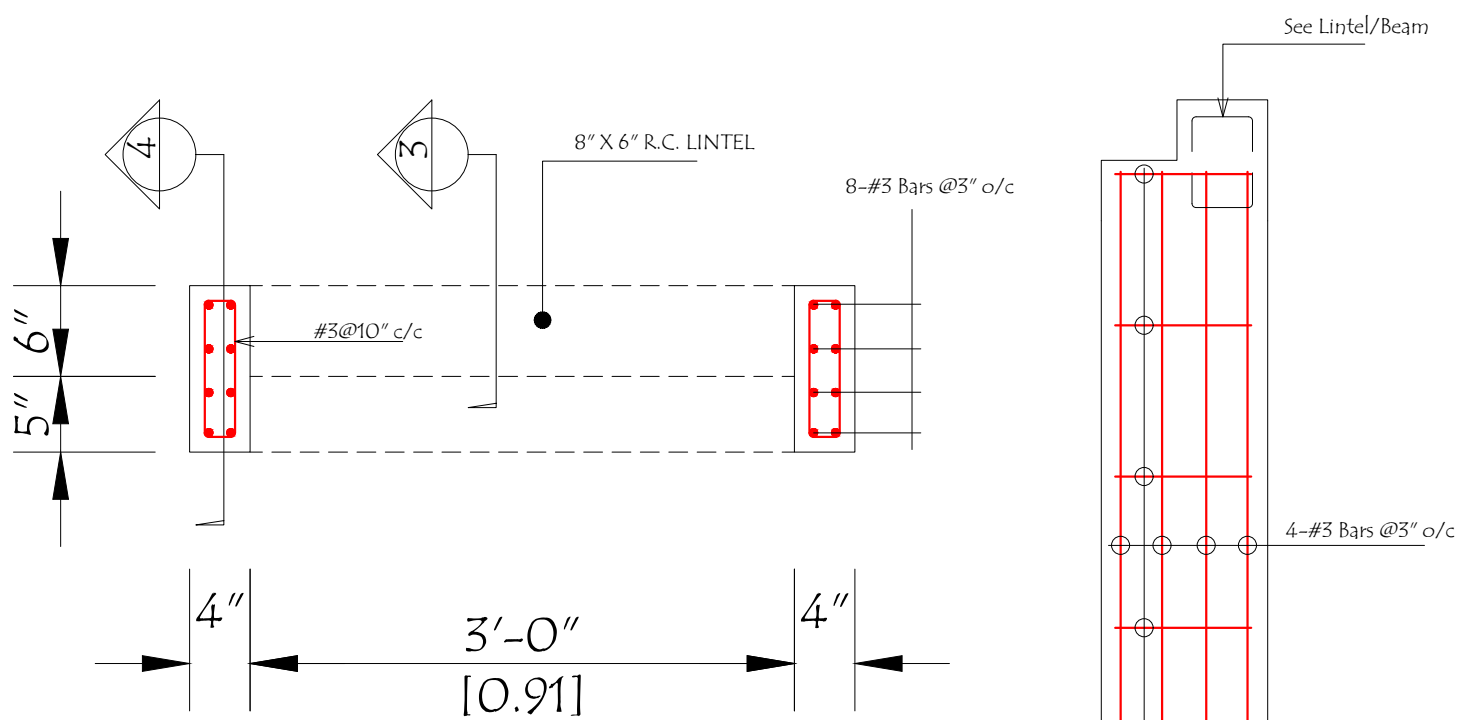
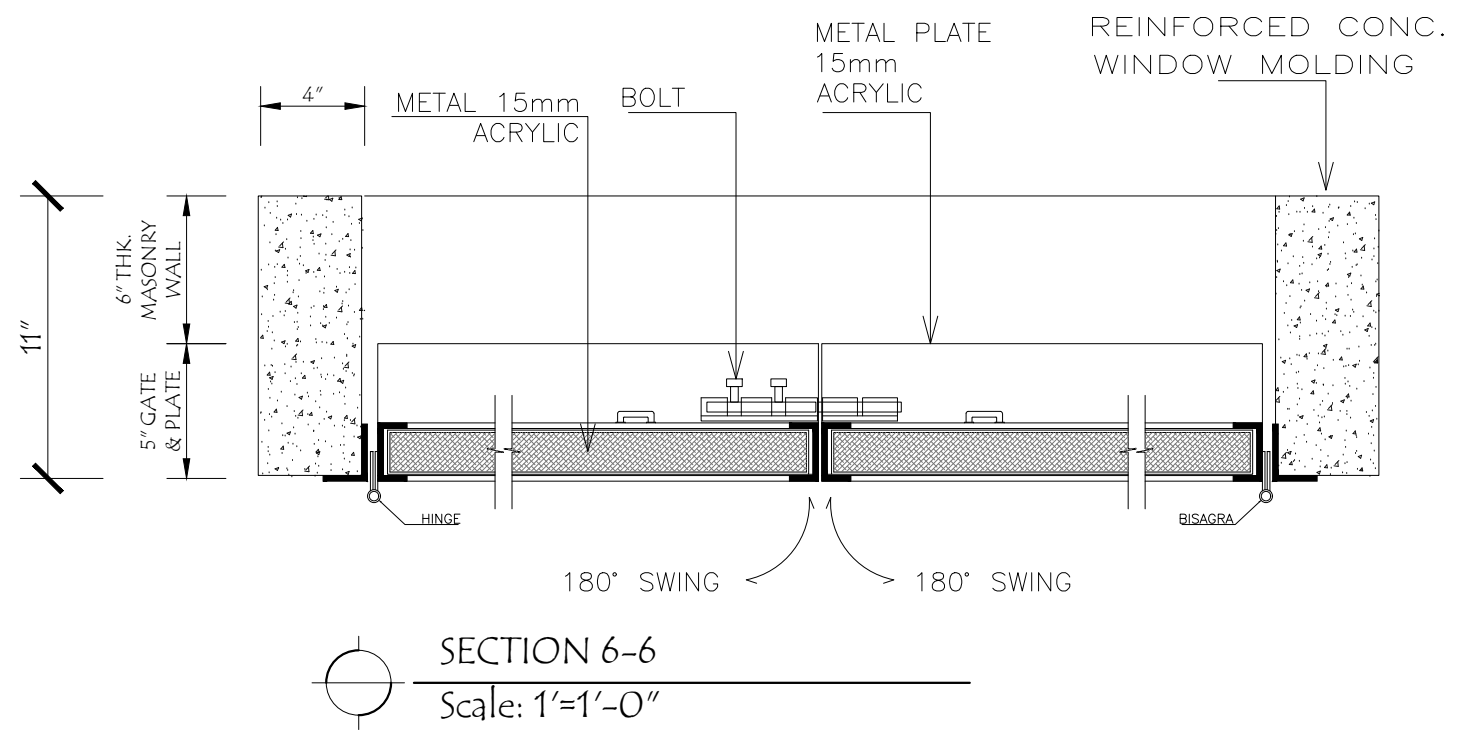
3'-0" X 4'-6" STEEL DOUBLE CASEMENT WINDOW WITH HARDWARE COMPLETE (MOON LOCK - ABUS BRAND, HINGES, HANDLE)

WINDOW DETAIL
Scale: NA

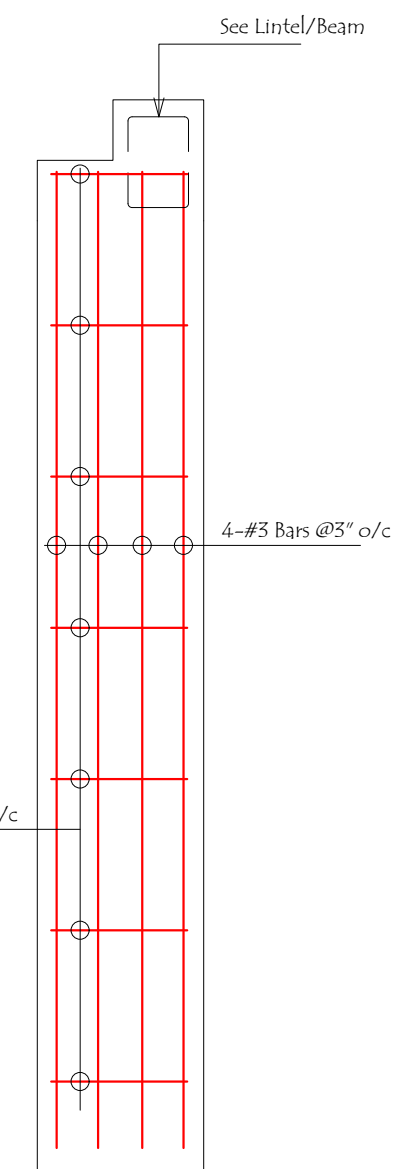
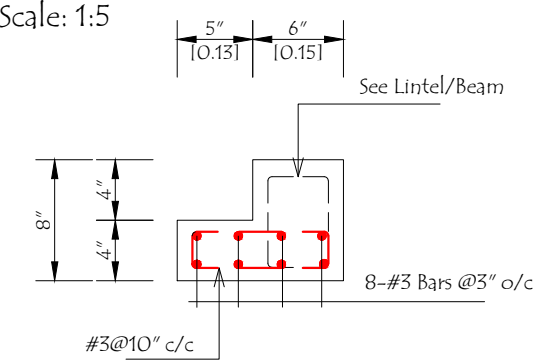
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	No	Date							ENGINEER	ANTHONY WAYLEA
			CAT	SHT.No	LOCATION	GREATER MONROVIA	SCALE	NA	APPROVED BY	
			A	04	DATE	OCTOBER 2019	CHECKED	FRED ABANKWA		



CASEMENT WINDOW DET.
Scale: 1:5

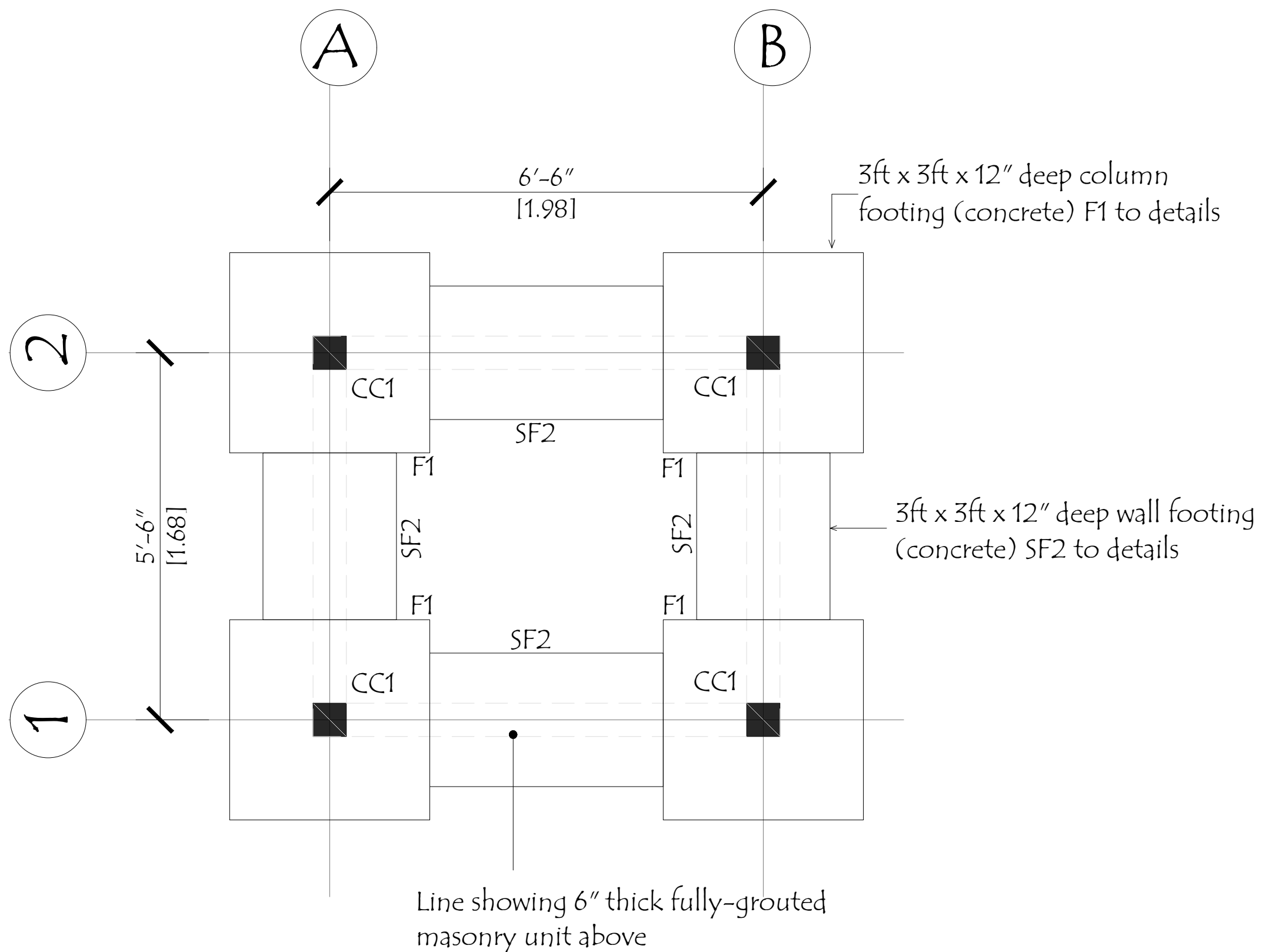


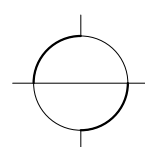
REINFORCED CONC. MOLDING (WINDOW)
Scale: 1:5



Notes :	Revisions :		PROJECT	CONSTRUCTION OF WATER KIOSKS		DWG. TITLE:	WINDOW DETAILS	DRAWN BY	MICHAEL MULBAH
	No	Date		CITIES ALLIANCE					
			CAT	SHT.No	GREATER MONROVIA	SCALE	NA	ENGINEER	ANTHONY WAYLEA
			A	05	LOCATION	CHECKED	FRED ABANKWA	APPROVED BY	
					DATE				
					OCTOBER 2019				

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FOUNDATION - (EL. to verified on site)
Construction of Water Kiosks
 Scale : 1:8

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		No		Date		CLIENT		FOUNDATION	
						CITIES ALLIANCE		SCALE	
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						CAT		FRED ABANKWA	
						DATE		OCTOBER 2019	
								APPROVED BY	
								ENGINEER	
								DRAWN BY	
								MICHAEL MULBAH	

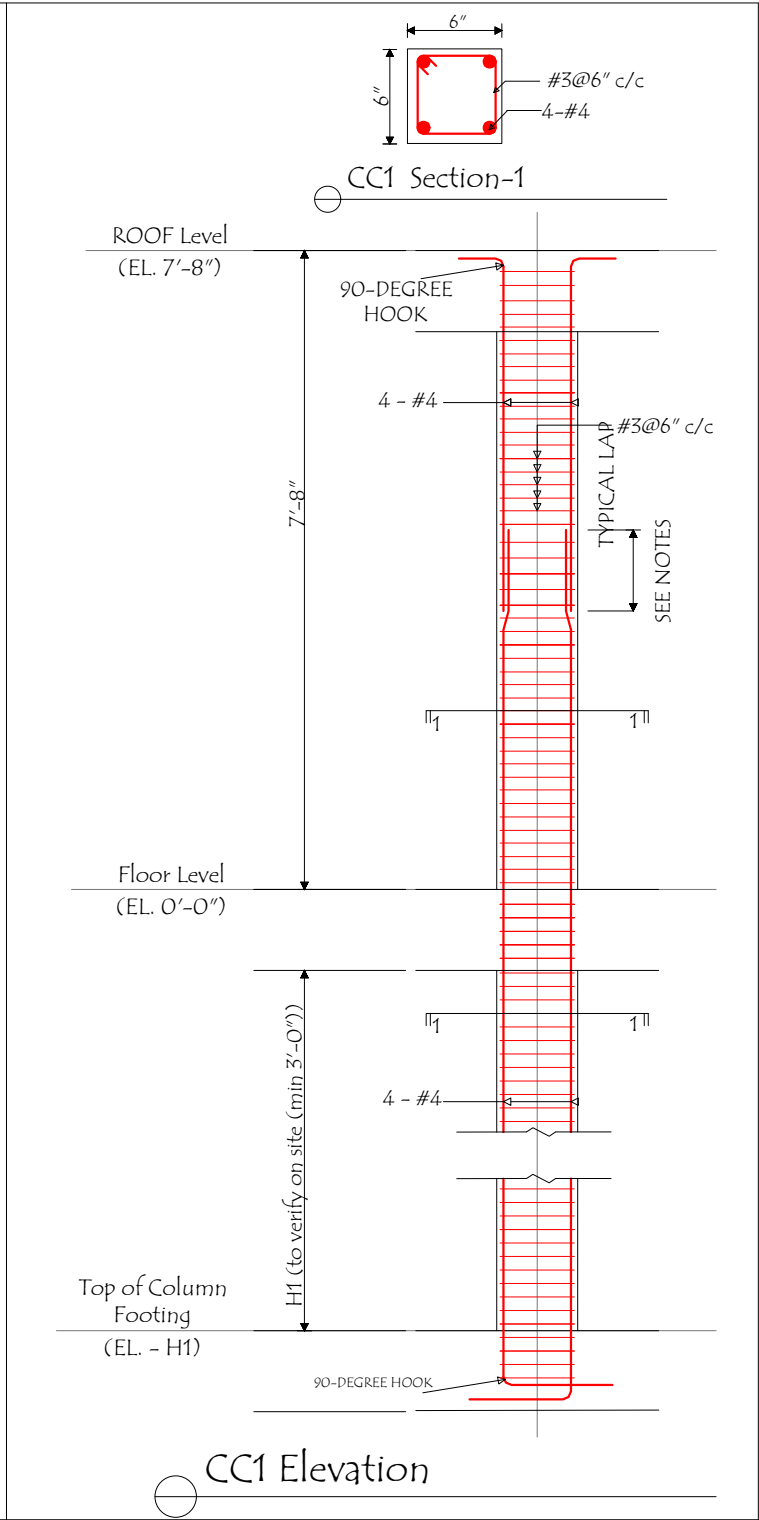
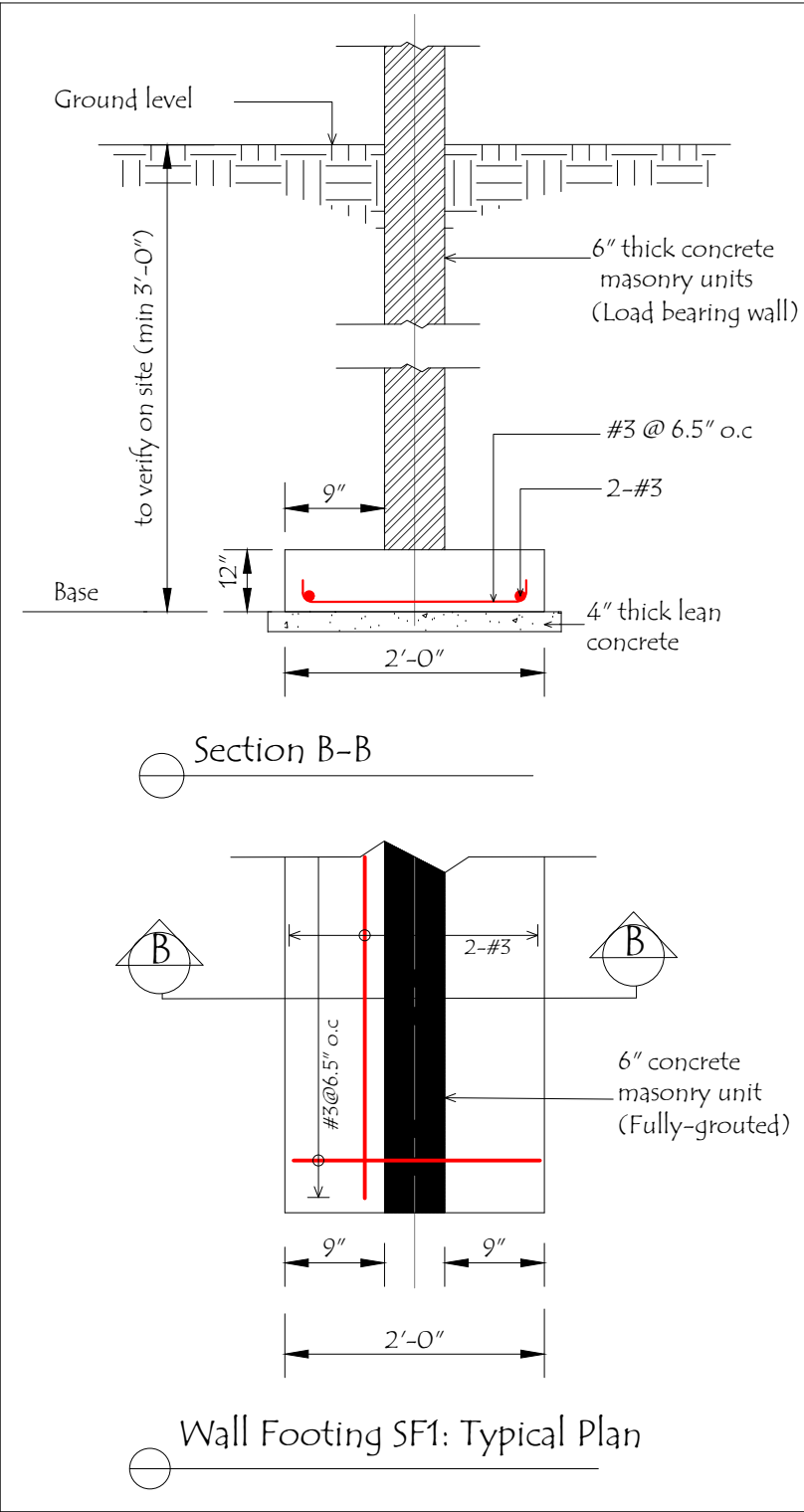
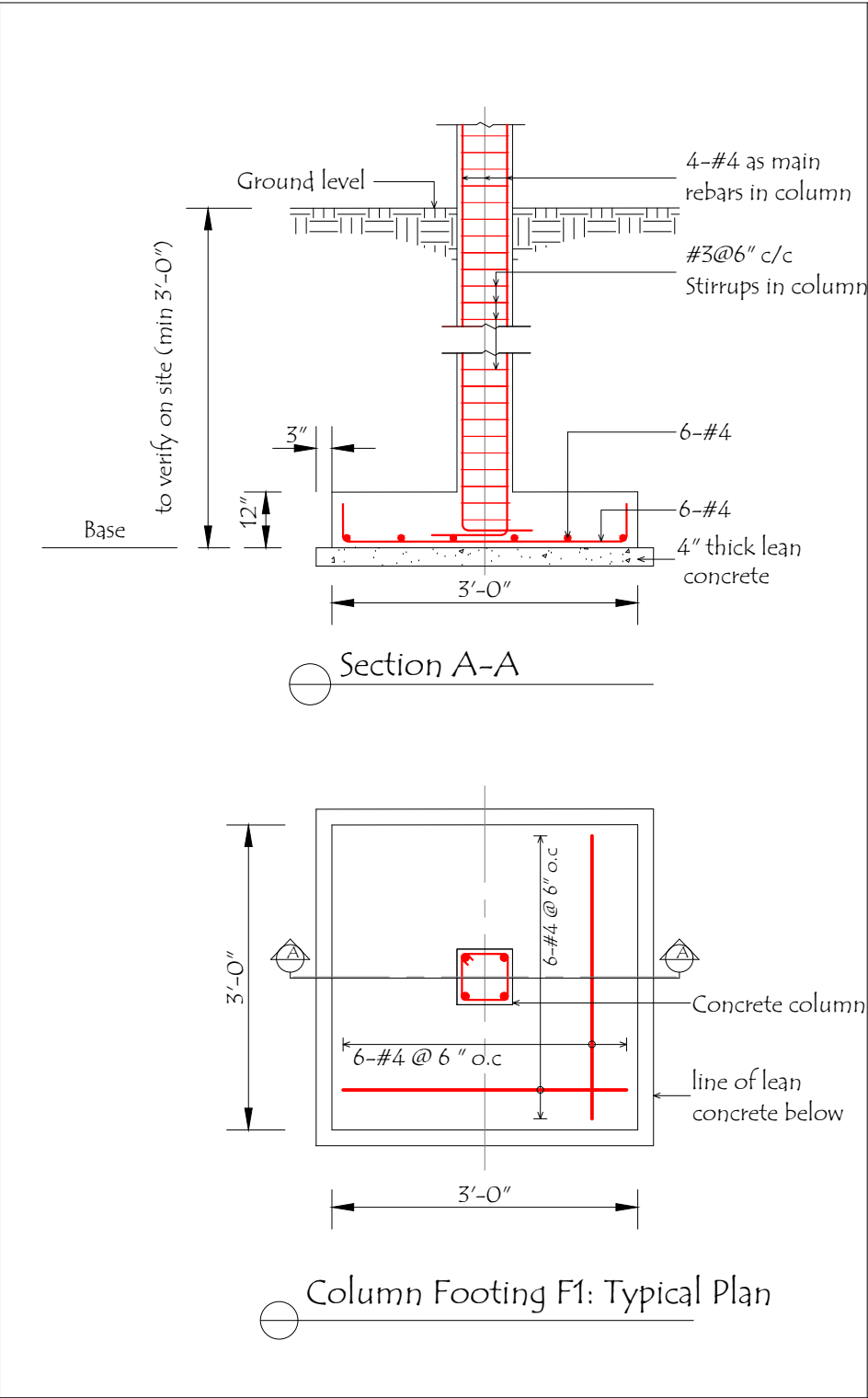
GENERAL NOTES:

FOOTINGS

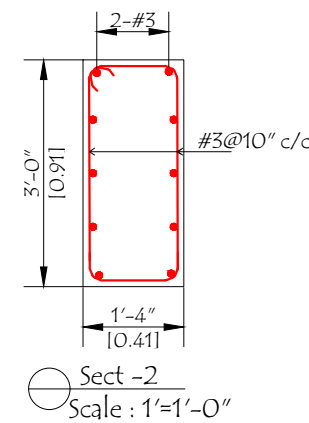
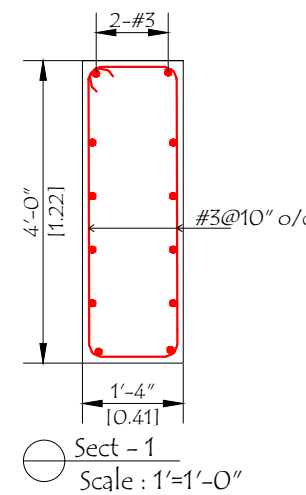
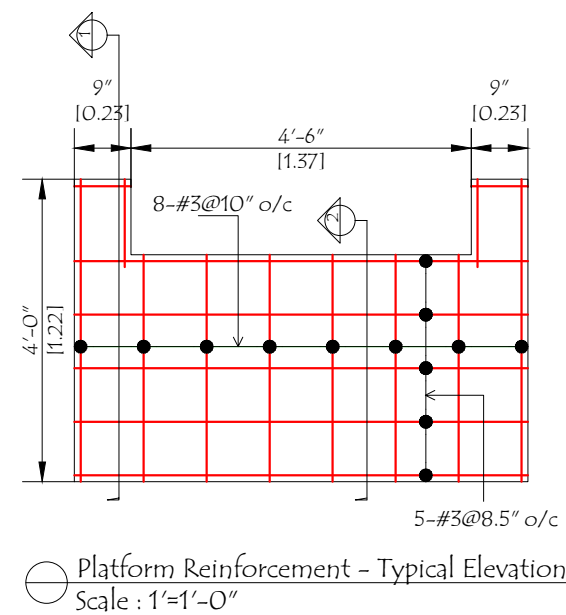
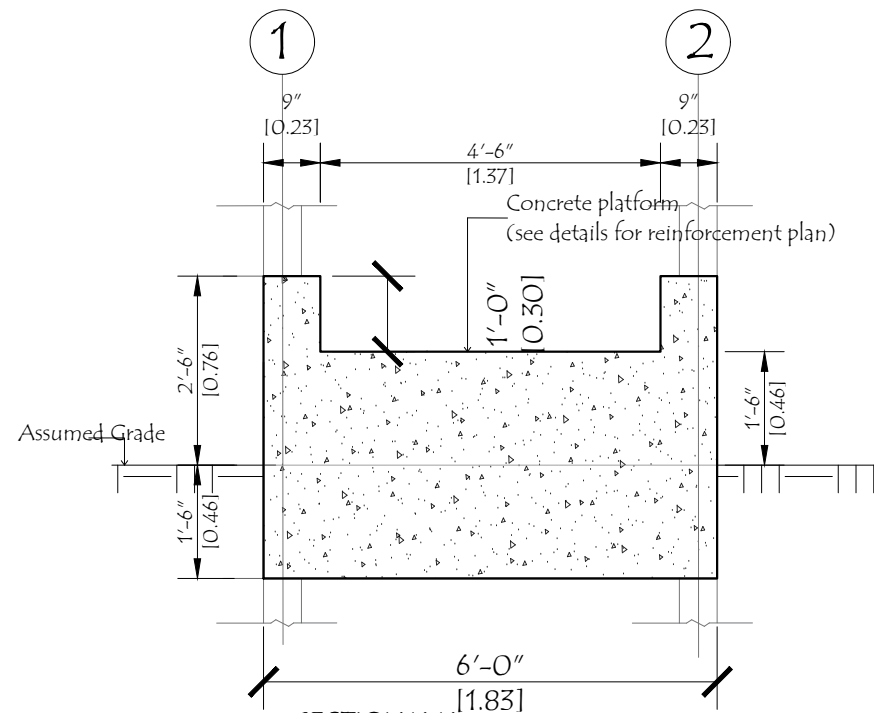
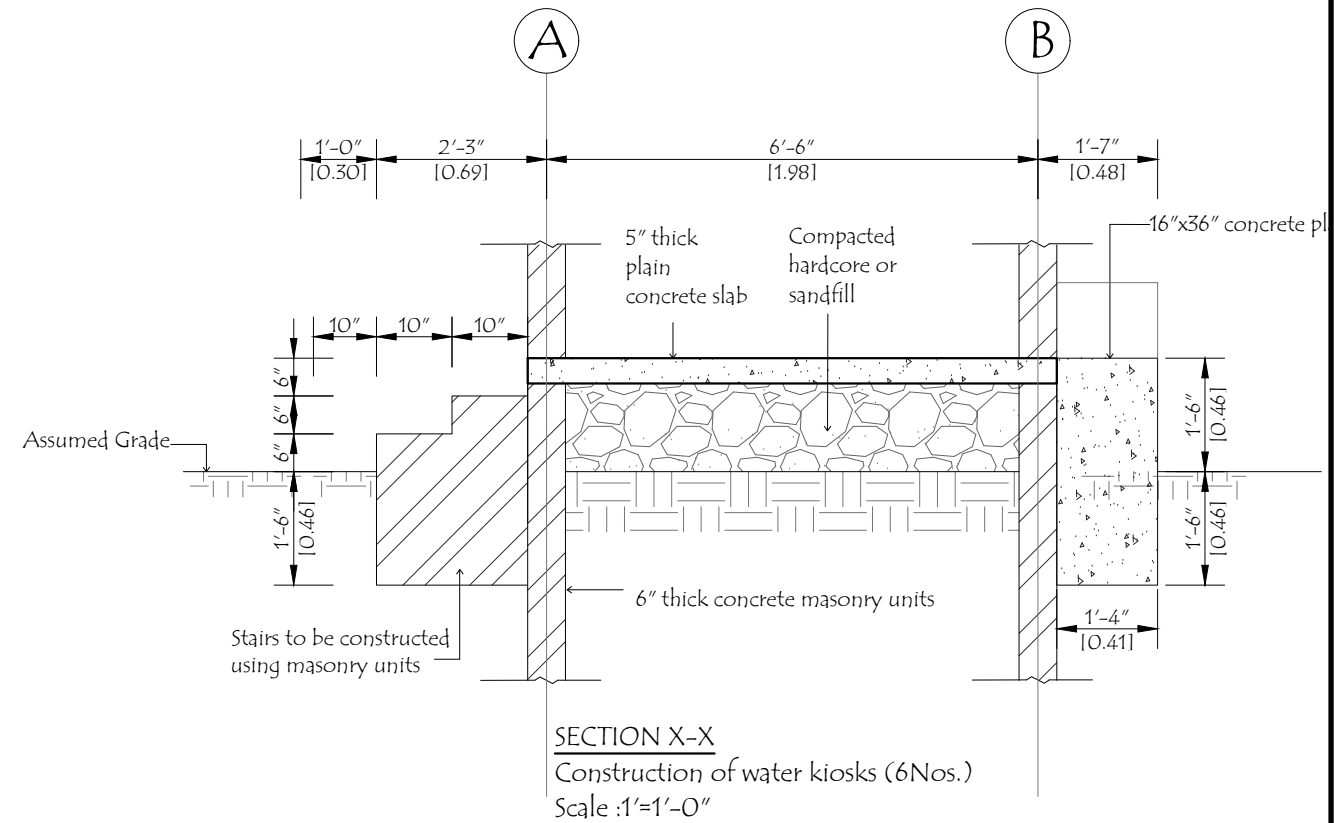
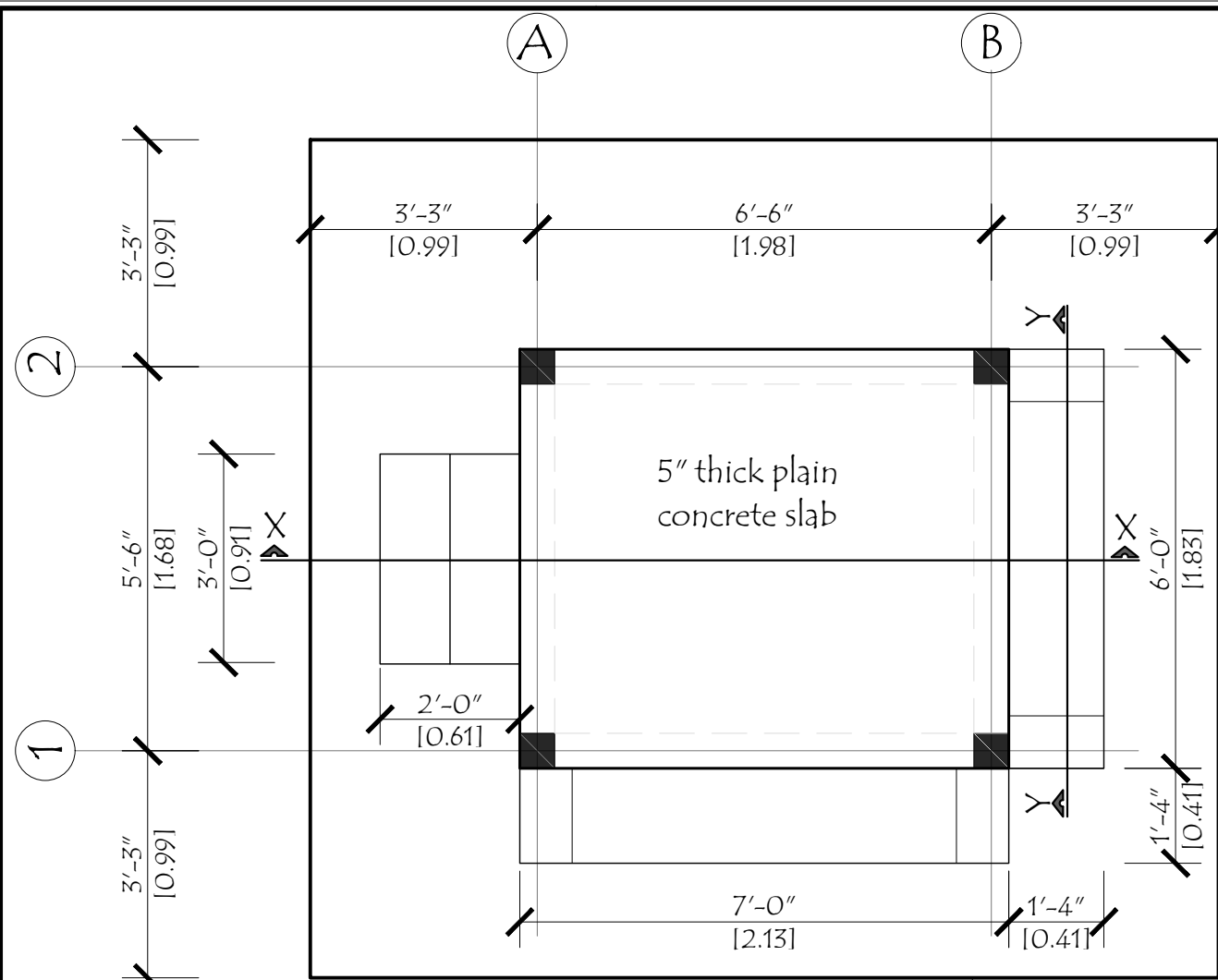
- 1. The standard hook for column longitudinal reinforcement in footing shall be 90-degree hook, with minimum length of 9" (minimum inside bend diameter and straight length extension shall be 3" and 6" respectively).
- 2. The standard hook length for footing reinforcement shall be at least 9" and 6" for 90-degree hook and 180-degree hook respectively. The minimum inside bend diameter and straight length extension of these standard hook geometry as in the Structural Notes shall be observed.
- 3. Apply or use damp proof materials (e.g. bitumen) on the footings and underground structural elements to protect concrete and reinforcement against water/sewage leakage.

COLUMNS

- 1. The first stirrup in Zone A shall be located 2" maximum from the face of column ends.
- 2. Lap splices shall be located along the middle of the column clear height and shall not extend within the beam/column joint, nor within a distance of 10" at the column ends.
- 3. Lap splices shall be enclosed by closed hoop stirrups at a maximum spacing of **2.5"**.
- 4. Minimum distance for lap splice shall be **12"**.
- 5. Minimum length for the 90-degree hook for column vertical/ longitudinal reinforcement shall be 9" (minimum inside bend diameter and straight length extension shall be 3" and 6" respectively).
- 6. The standard hook length for stirrups and ties shall be at least 5" for 135-degree hook. The minimum inside bend diameter and straight length extension of these standard hook geometry shall be observed as in the Structural Notes.

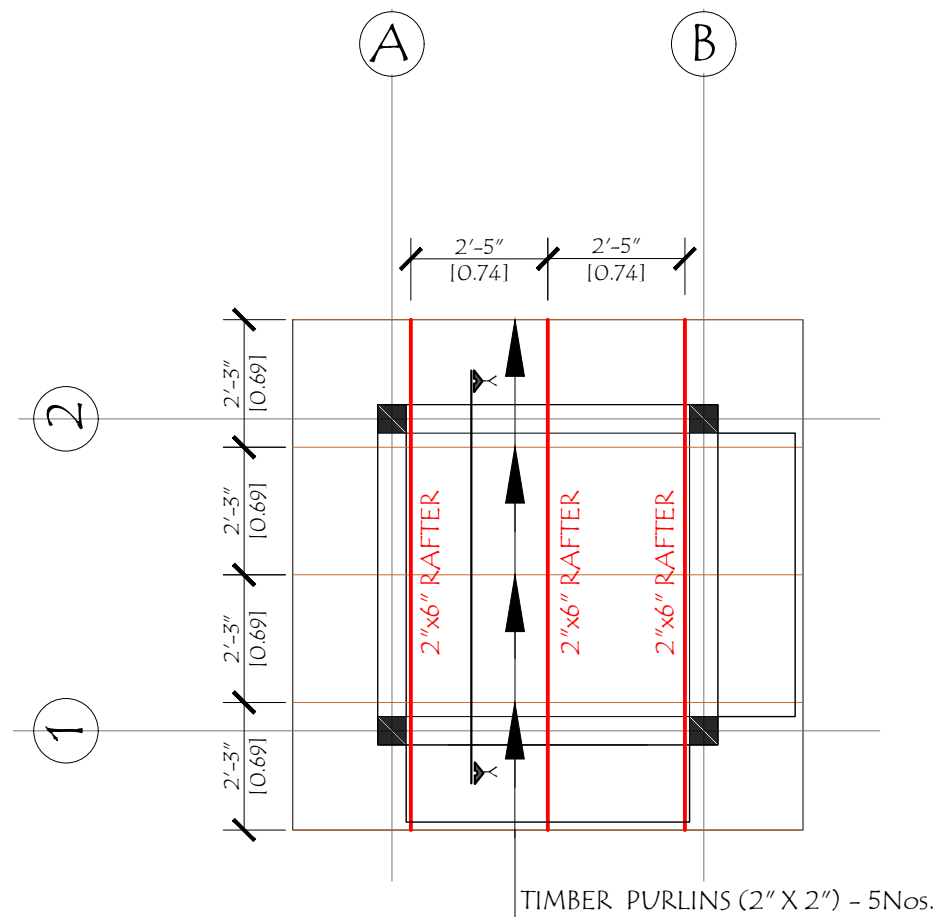


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DRAWN BY		ENGINEER		APPROVED BY					
FOUNDATION DETAILS		NA		FRED ABANKWA					
DWG. TITLE:		SCALE		CHECKED					
CONSTRUCTION OF WATER KIOSKS		CITIES ALLIANCE		GREATER MONROVIA		OCTOBER 2019			
PROJECT		CLIENT		LOCATION		DATE			
				SHT. No		08			
				CAT		S			
Revisions :		Date							
Notes :		No							

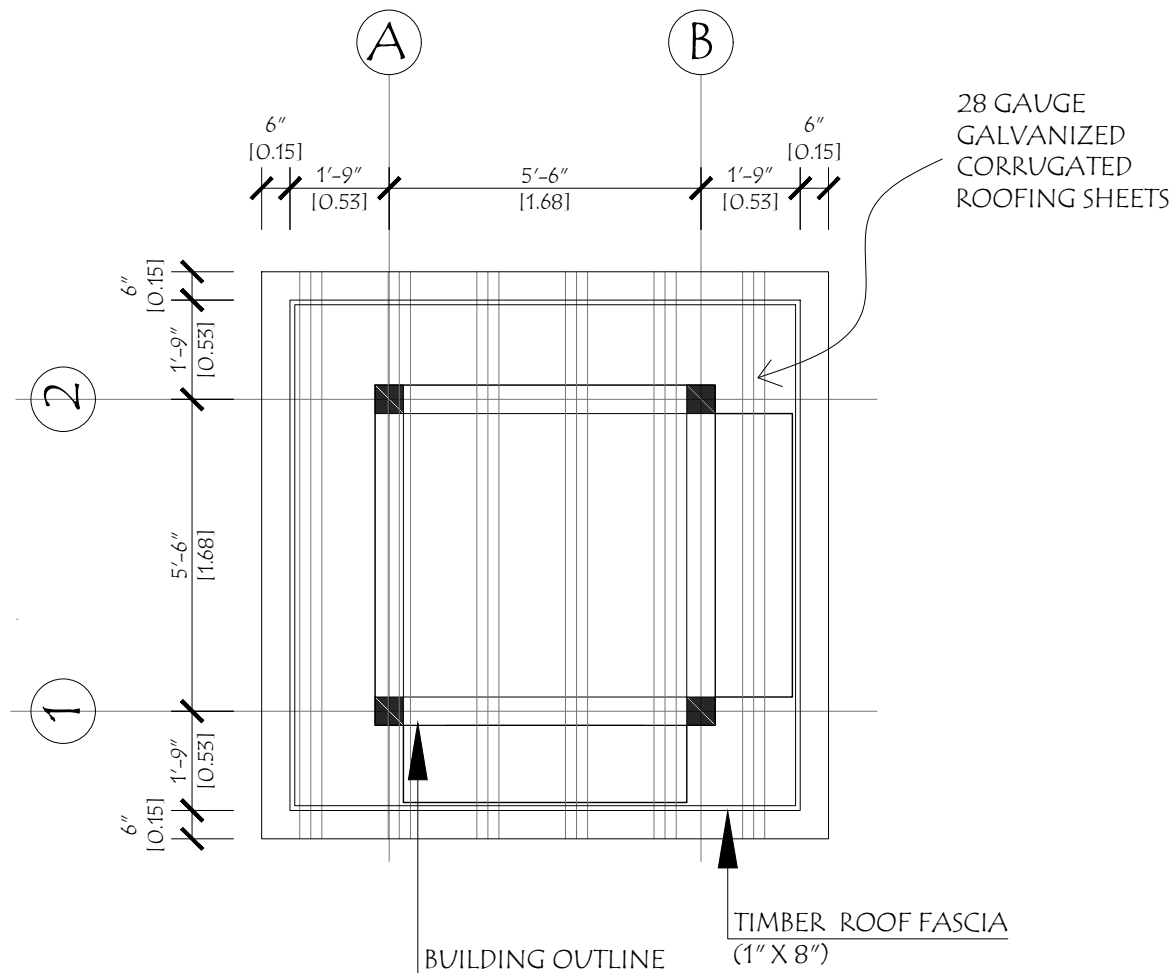


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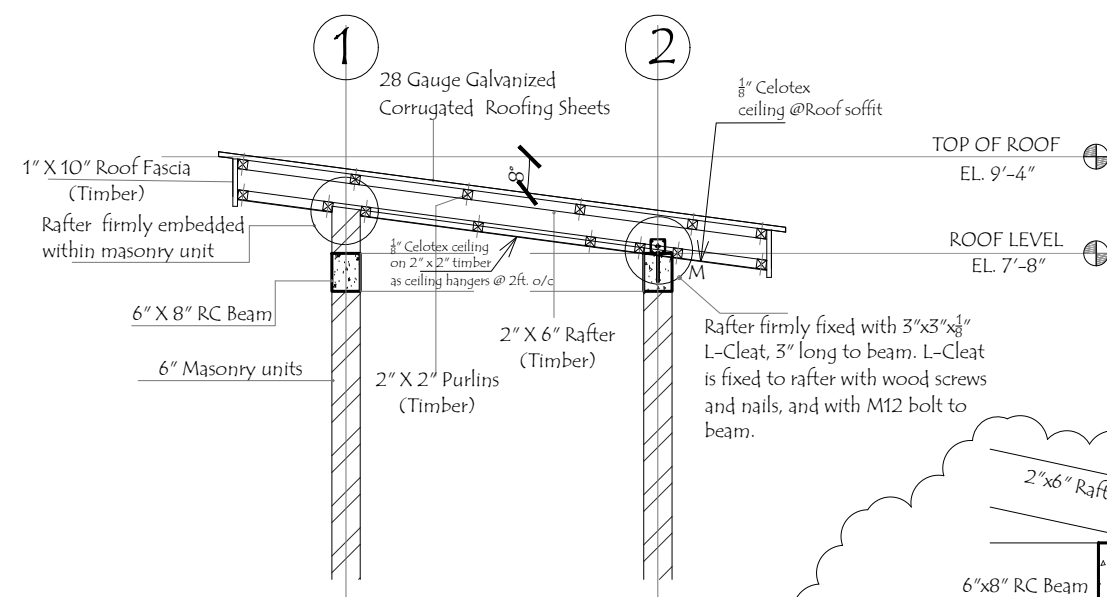
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	No	Date											
			09	S	GREATER MONROVIA	CITIES ALLIANCE	KIOSKS	FLOOR FRAMING PLAN		SCALE	1'=1'-0"	ENGINEER	ANTHONY WAYLEA
					OCTOBER 2019			CHECKED			FRED ABANKWA	APPROVED BY	



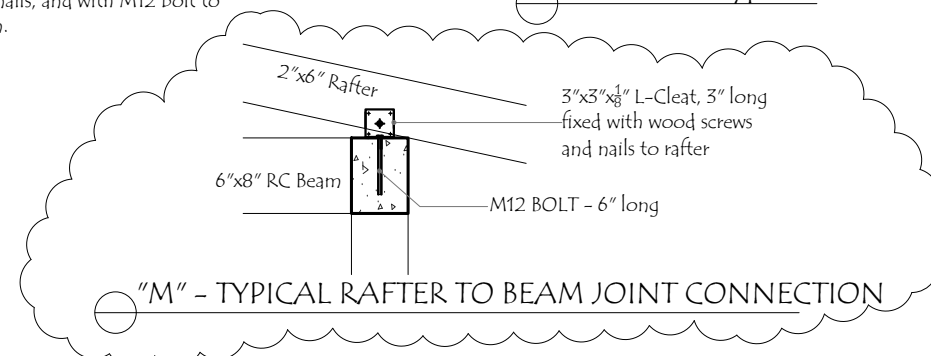
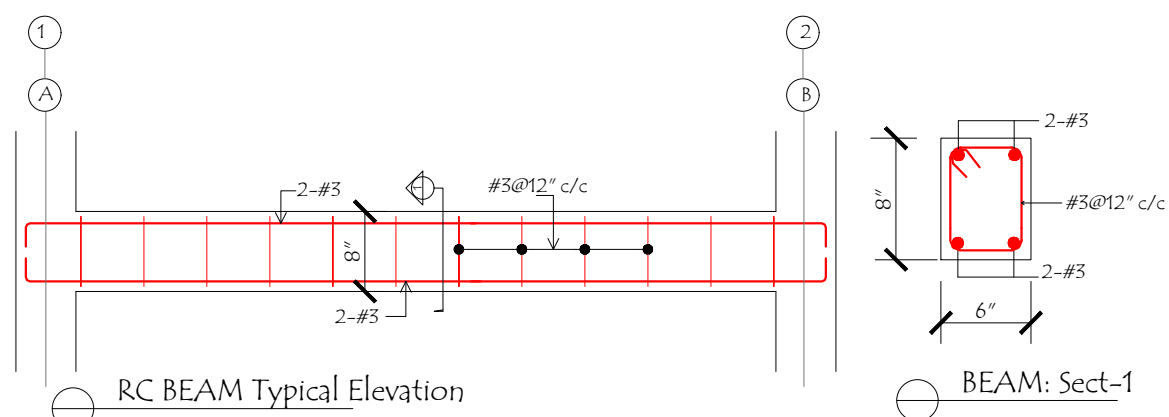
ROOF FRAMING PLAN (EL. 7'-8")
Construction of water kiosks (6Nos.)
Scale : 3/4"=1'-0"



ROOF SHEETING PLAN (EL. 9'-4")
Construction of water kiosks (6Nos.)
Scale : 3/4"=1'-0"

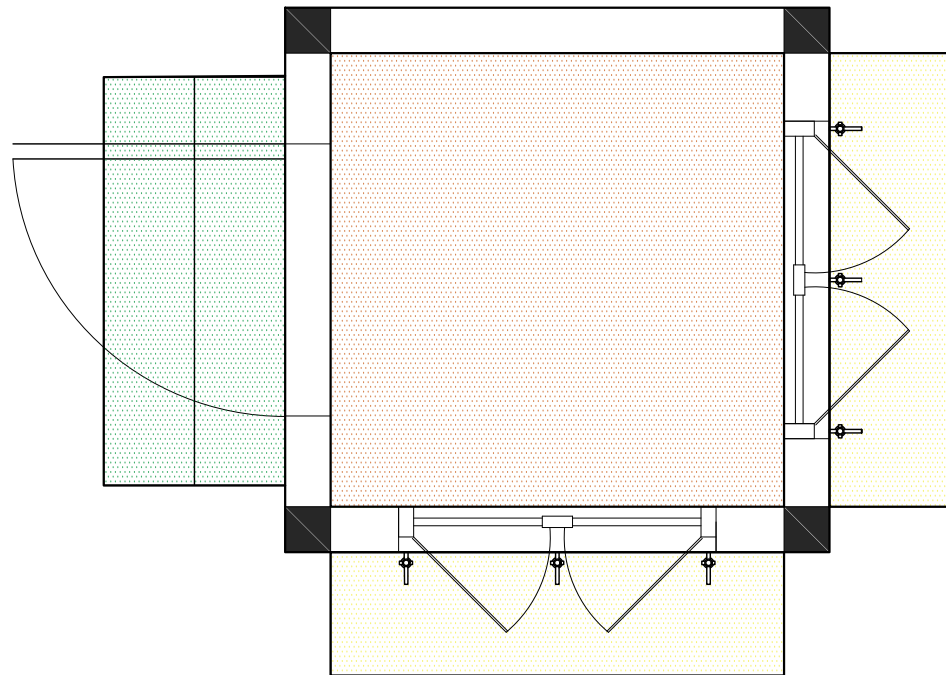


SECTION Y-Y
Construction of water kiosks (6Nos.)
Scale : 3/4"=1'-0"



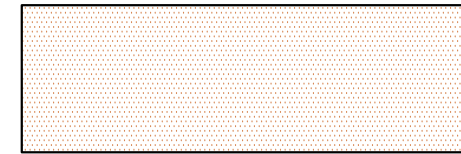
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	No	Date						
			CLIENT	CITIES ALLIANCE	SCALE	NA	ENGINEER	ANTHONY WAYLEA
			LOCATION	GREATER MONROVIA				
			DATE	OCTOBER 2019				
			CAT	SHT.No	CHECKED	FRED ABANKWA	APPROVED BY	
			S	10				
			OCTOBER 2019					



ZONE COLOR/ SYMBOL

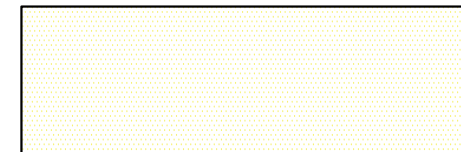
Sitting Area



Stairs



Concrete Platform



FINISHING PLAN

Scale : 1:2

AREA	WALL FINISHING	FLOOR FINISHING
Sitting Area	<ul style="list-style-type: none">- 1/2" plaster on wall- 2 coats water based paint (washable) on one coat primer from finished floor to roof level.- 2 coats oil based paint on one coat primer for undercoat	Porcelain floor tiles (12" x 12")
Stairs	N/A	Concrete fine finished with Floortex coating or paint
Concrete Platform	Ceramic Wall tiles (8" x 12")	Porcelain floor tiles (12" x 12")
EXTERIOR WALLS <ul style="list-style-type: none">- 1/2" Plaster on wall with 2 coats latex enamel paint on one coat primer DOOR & WINDOW <ul style="list-style-type: none">- 2 coats anti-rust paint		

A - 06

SHEET.

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DRAWN BY

ANTHONY WAYLEA

ENGINEER

APPROVED BY

FINISHING PLAN

DWG. TITLE:

SCALE

NA

CHECKED

FRED ABANKWA

CONSTRUCTION OF WATER KIOSKS

PROJECT

CITIES ALLIANCE

CLIENT

GREATER MONROVIA

LOCATION

OCTOBER 2019

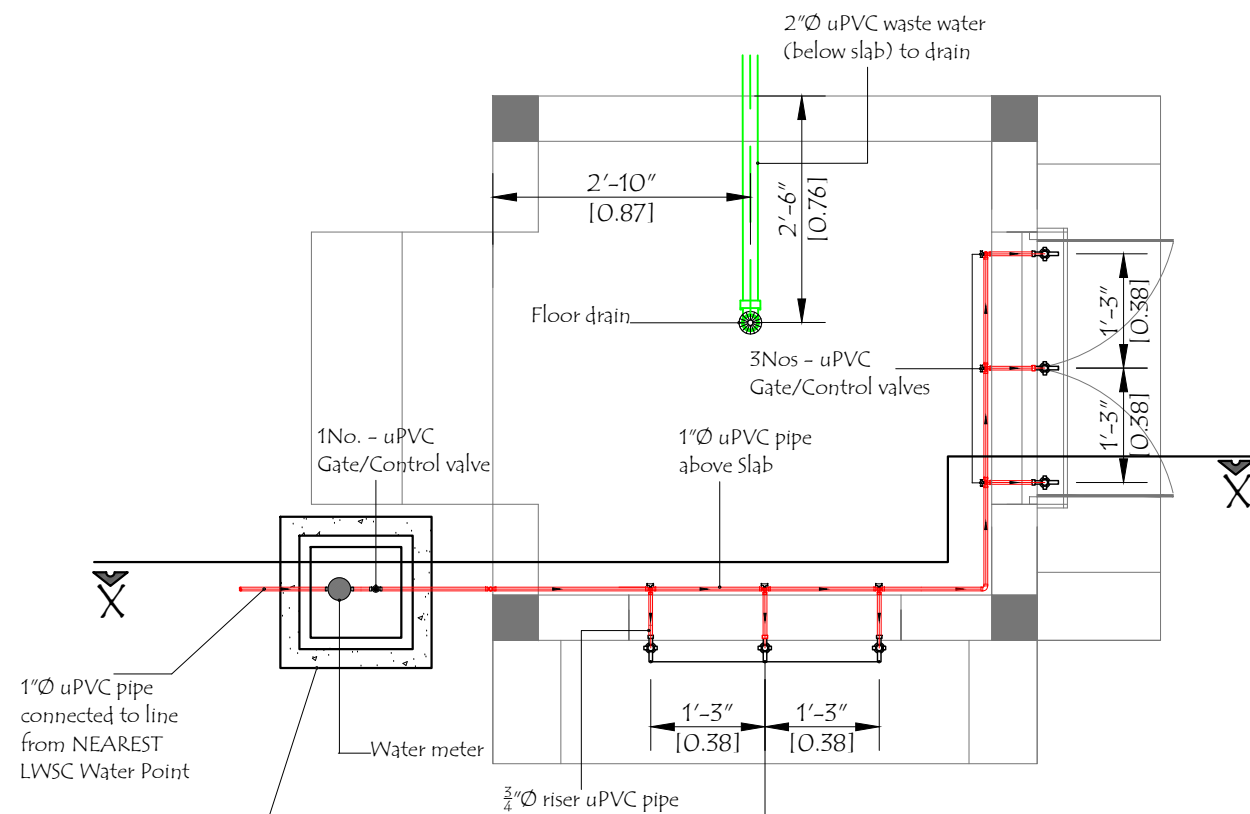
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Date



20" x 20" concrete chamfer pit
 ** Pit is to be sealed with "steel grill cover (12" x 12") made of 1 1/2"x1 1/2"x1/8" L-Cleat and 1/4" steel sheet with hardware complete (6-turn Moon Lock - Abus brand, hinges, handle)

WATER SUPPLY PLAN

Construction of water kiosks (6Nos.)

Scale : 1:4

NOTE:

Liberia Water and Sewer Corporation will be responsible for the following;

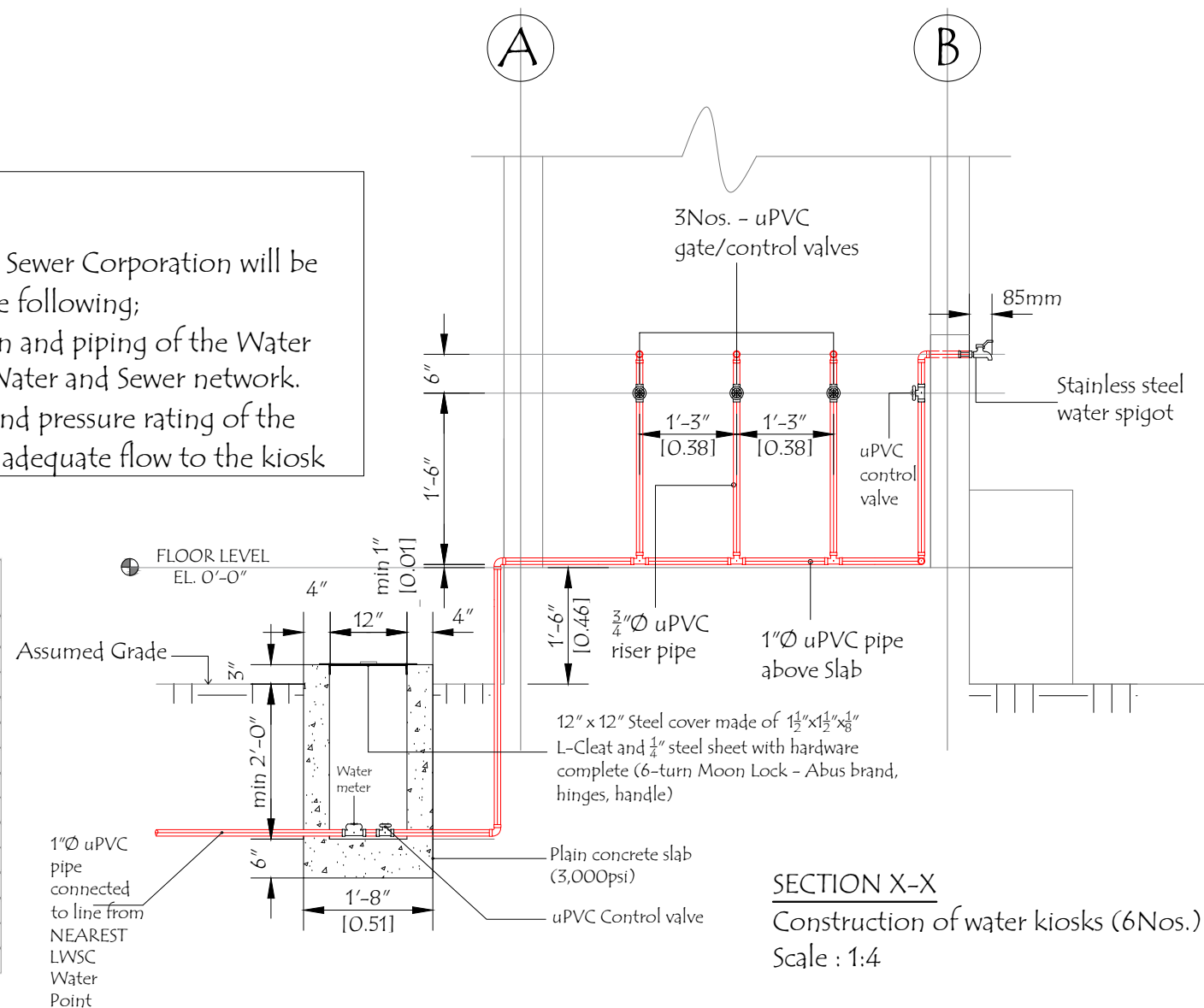
- Connection and piping of the Water kiosks to Water and Sewer network.
- Metering and pressure rating of the system for adequate flow to the kiosk

uPVC SCHEDULE 40 INDUSTRIAL PIPES AS PER ASTM D-1785

Part No.	Nom. Size		Avg. OD		Min Wall Thickness		Max. Wrok Pre. at 23°C	Max. Wrok Pre. at 23°C
	(in)	(mm)	(in)	(mm)	(in)	(mm)	PSI	(kg/cm²)
M061400501	1/2	15	0.840	21.34	0.109	2.77	600	42.19
M061400502	3/4	20	1.050	26.67	0.113	2.87	480	33.75
M061400503	1	25	1.315	33.40	0.133	3.38	450	31.64
M061400504	1 1/4	32	1.660	42.16	0.140	3.56	370	26.01
M061400505	1 1/2	40	1.900	48.26	0.145	3.68	330	23.20
M061400506	2	50	2.375	60.32	0.154	3.91	280	19.69
M061400507	2 1/2	65	2.875	73.02	0.203	5.16	300	21.09
M061400508	3	80	3.500	88.90	0.216	5.49	260	18.28
M061400509	4	100	4.500	114.30	0.237	6.02	220	15.47
M061400510	6	150	6.625	168.28	0.280	7.11	180	12.66
M061400511	8	200	8.625	219.08	0.322	8.18	160	11.25
M061400512	10	250	10.750	273.05	0.365	9.27	140	9.84
M061400513	12	300	12.750	323.85	0.406	10.31	130	9.14

uPVC SCHEDULE 80 INDUSTRIAL PIPES AS PER ASTM D-1785

Part No.	Nom. Size		Avg. OD		Min Wall Thickness		Max. Wrok Pre. at 23°C	Max. Wrok Pre. at 23°C
	(in)	(mm)	(in)	(mm)	(in)	(mm)	PSI	(kg/cm²)
M061800501	1/2	15	0.840	21.34	0.147	3.73	850	59.76
M061800502	3/4	20	1.050	26.67	0.154	3.91	690	48.51
M061800503	1	25	1.315	33.40	0.179	4.55	630	44.29
M061800504	1 1/4	32	1.660	42.16	0.191	4.85	520	36.56
M061800505	1 1/2	40	1.900	48.26	0.200	5.08	470	33.04
M061800506	2	50	2.375	60.32	0.218	5.54	400	28.12
M061800507	2 1/2	65	2.875	73.02	0.276	7.01	420	29.53
M061800508	3	80	3.500	88.90	0.300	7.62	370	26.01
M061800509	4	100	4.500	114.30	0.337	8.56	320	22.50
M061800510	6	150	6.625	168.28	0.432	10.97	280	19.69
M061800511	8	200	8.625	219.08	0.500	12.7	250	17.57
M061800512	10	250	10.750	273.05	0.593	15.06	230	16.17
M061800513	12	300	12.750	323.85	0.687	17.45	230	16.17



SECTION X-X

Construction of water kiosks (6Nos.)

Scale : 1:4

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MICHAEL MULBAH

ANTHONY WAYLEA

DRAWN BY

ENGINEER

APPROVED BY

WATER SUPPLY PLAN

NA

FRED ABANKWA

DWG. TITLE:

SCALE

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CONSTRUCTION OF WATER KIOSKS

CITIES ALLIANCE

GREATER MONROVIA

OCTOBER 2019

PROJECT

CLIENT

LOCATION

DATE

Revisions :

Date

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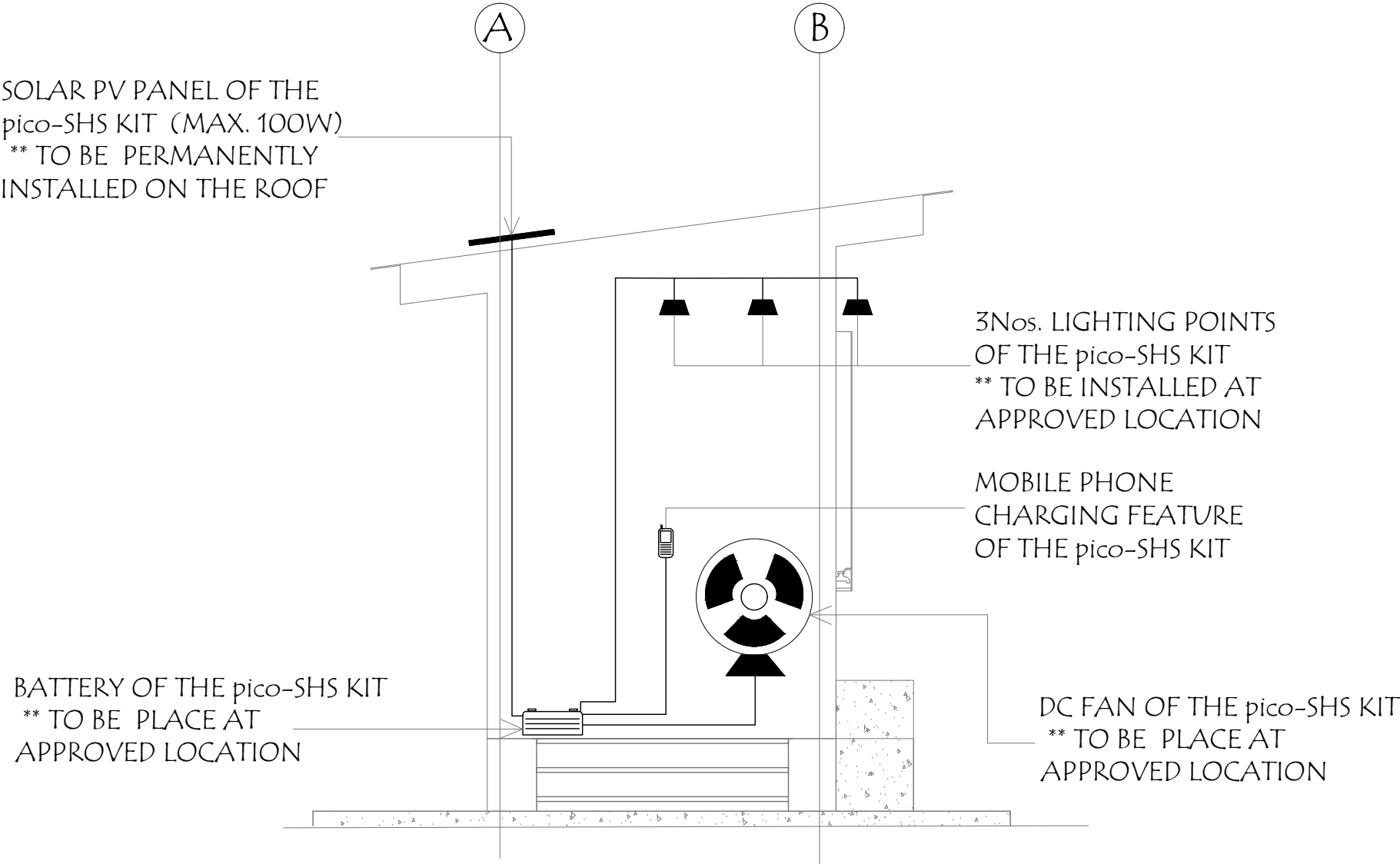
Notes :

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GENERAL NOTE

USE LIGHTING GLOBAL APPROVED OR CERTIFIED "PICO-SOLAR HOME SYSTEM (<100W)" FOR ENERGY GENERATION. THE PICO-SOLAR HOME SYSTEM (SHS) KIT MUST HAVE MINIMUM THREE (3) - LIGHTING POINTS, MOBILE PHONE CHARGING FEATURE AND SOLAR FAN, IN ADDITION TO THE SYSTEM COMPONENTS: PANEL & BATTERY.



ENERGY GENERATION OPTION

Construction of water kiosks (6Nos.)
Scale : 1:4

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				CLIENT		CITIES ALLIANCE		ENERGY GENERATION OPTION	
				LOCATION		GREATER MONROVIA		NA	
				DATE		OCTOBER 2019		FRED ABANKWA	
				CAT		E		CHECKED	
				SHT.No		12		SCALE	
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								ENGINEER	
								APPROVED BY	
								MICHAEL MULBAH	
								ANTHONY WAYLEA	