PURCHASING SECTION
13450 – 104 Avenue, Surrey BC V3T 1V8
Tel: 604-590-7274
E-mail: purchasing@surrey.ca

ADDENDUM #1

REQUEST FOR QUOTATIONS (RFQ) NO.:	**1220-040-2019-032**
TITLE:	**CLOVERDALE CURLING RINK STAIR RENOVATION**
ADDENDUM ISSUE DATE:	**May 24, 2019**

INFORMATION FOR CONTRACTORS

This Addendum is issued to provide additional information to the RFQ for the above named project, to the extent referenced and shall become a part thereof. No consideration will be allowed for extras due to the Contractor not being familiar with this Addendum. This Addendum No. 1 contains thirty-four (34) pages in total.

INFORMATION ONLY

1. SECOND INFORMATION MEETING

A second information meeting will be hosted by the City Representative to discuss the City's requirements under this RFQ (the "Information Meeting"). While attendance is at the discretion of Contractors, Contractors who do not attend will be deemed to have attended the Information Meeting and to have received all of the information given at the Information Meeting.

At the time of issuance of this addendum, the second information meeting has been scheduled as follows:

Date: Tuesday, May 28, 2019

Time: 1:00 pm Pacific Time

Location: Cloverdale Curling Rink: 6142/6150 - 176 Street, Surrey, BC, V3S 4E7

Contractors are to examine the site prior to submitting a Quotation to fully acquaint themselves with all existing conditions reasonably inferable from examination of the site and its surroundings and the RFQ along with all addenda and to make allowance for such conditions in the Quotation. By submitting a Quotation, a Contractor represents that it has examined the site fully as to all conditions, contingencies, risks and circumstances, local or otherwise, which might influence or affect the performance or the cost of the work, including but not limited to: location of the work, location of buildings on the site, adjacent properties, Contractor occupancy during the work, access and all other conditions that a competent Contractor experienced in work similar to the

work would consider and take into account, and is further deemed to have included in the contract price all costs occasioned thereby.

CLARIFICATIONS TO THE SUPPLEMENTARY SPECIFICATIONS (PROJECT) AND CONTRACT DRAWINGS (PROJECT):

1. Record drawings from 1979: See attached.

2. Revisions to the arch. and struct. drawings: refer to attached.

3. Provide separate price for new storage closet in cafeteria area along grid line 10 (between F & G). Refer to ground floor plan A211 and drawings 7 & 8 in A351.

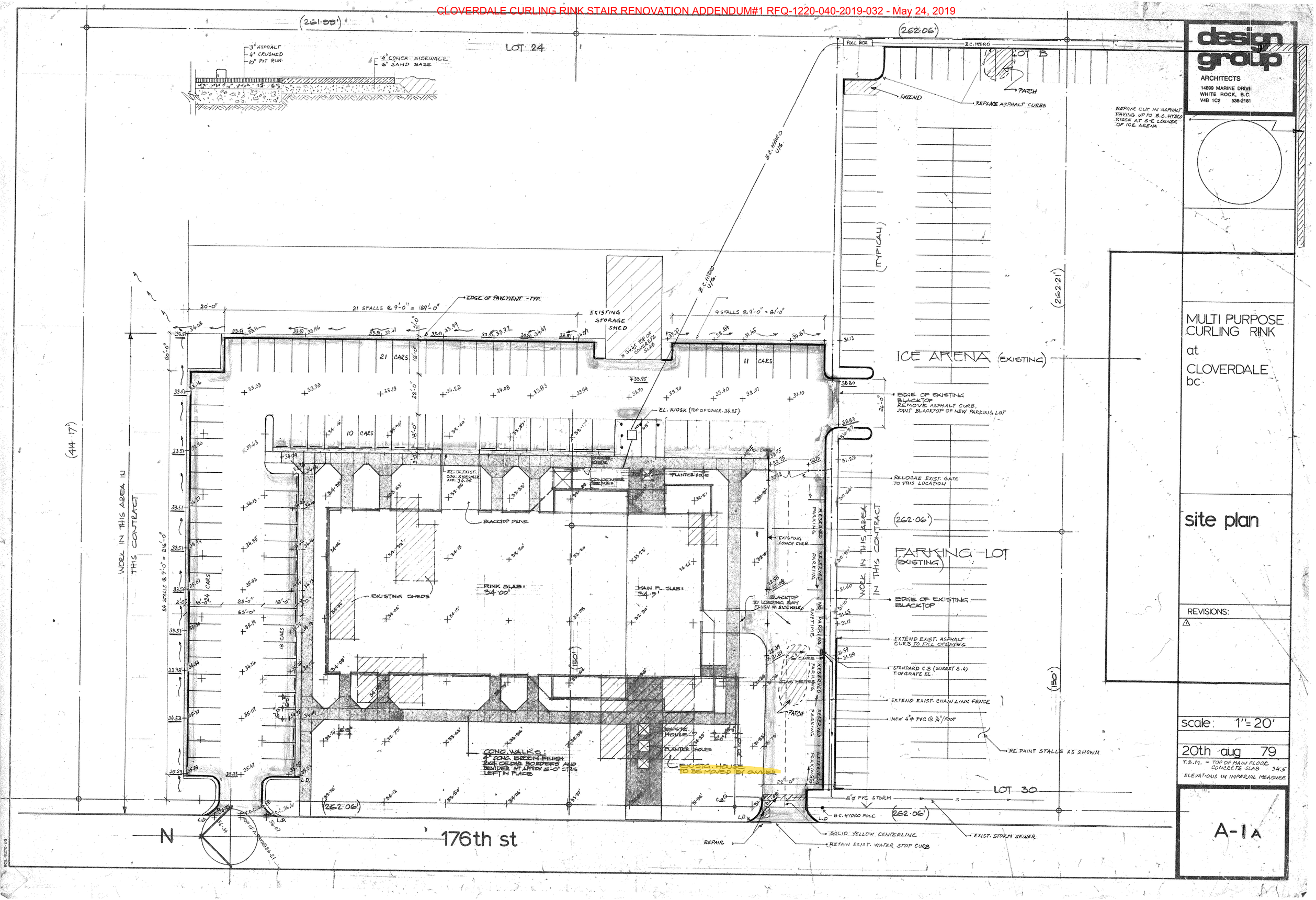
QUESTIONS AND ANSWERS:

Q1: We attended the site visit for the Cloverdale Curling Rink: Stair Replacement and are wanting to price the demolition scope. Do you have a list of the GC's that attended the site visit that you can provide?

A1: See attached.

END OF ADDENDUM #1

All Addenda will become part of the RFQ Documents.



design group
ARCHITECTS
14899 MARINE DRIVE
WHITE ROCK, B.C.
V4B 1C2 536-2161

MULTI PURPOSE CURLING RINK
at
CLOVERDALE
bc

site plan

REVISIONS:

scale: 1"=20'

20th aug 79

T.B.M. - TOP OF MAIN FLOOR CONCRETE SLAB - 34.5
ELEVATIONS IN IMPERIAL MEASURE

A-1A

CLOVERDALE CURLING RINK STAIR RENOVATION ADDENDUM#1 RFQ-1220-040-2019-032 - May 24, 2019

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14899 MARINE DRIVE
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MULTI PURPOSE CURLING RINK
at
CLOVERDALE
bc

main floor

REVISIONS:
1 FEB 26, 1980
2 DIMENSIONS REVISED TO ACCOMODATE CONSTRUCTION BLDG SYSTEM SUPERSTRUCTURE. ISSUED FOR CONSTRUCTION MARCH 21, 1980

scale: 1/8" = 1'-0"

20th aug '79

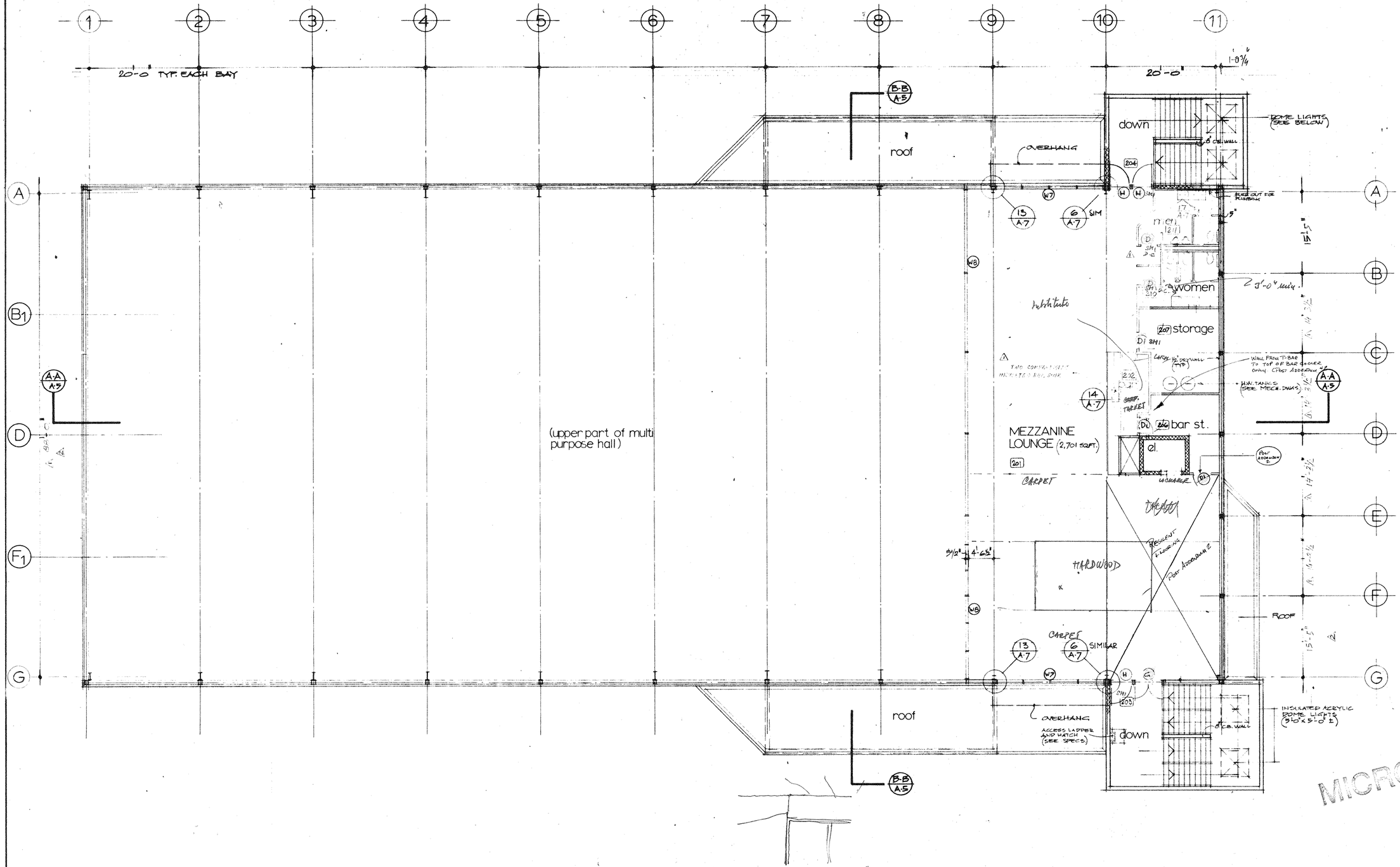
A-2
of 8

MAIN FLOOR PLAN

MULTI PURPOSE HALL 101
150'-0" (CLEAR) ICE SURFACE
LANDSC. AREAS (N.I.C.)
mechanical
covered porch
men 115
women 114
locker room 113
office 112
VIEWING LOUNGE 102
lobby 103
cafeteria
kitchen
storage
storage
covered porch
up
up
el.
mech 108
wh. ch. 111
serv
st.
kiln 110
12'-1" x 14'-1" HIGH OVERHEAD DOOR (SEE SPEC)
3/8" FIR DIVIDERS SEE 1:5 on DWG A-6
HACK INSERTS BY OWNER TO BE INSTALLED BY CONTRACTOR
REMOVABLE DRAIN-OFF AND ACCESS PANELS 1&2/A-5
DEPRESS CURB AND C. WALK
2" C. CURB TO FUTURE PARKING
2" C. CURB TO BLACKTOP DRIVE
CONDENSER (SEE M-1)
OVERHANG
HOSE REEL SEE M-3
FLATDECK: COLOR MATCHING ON WOOD DECKING SEE 1&2/A-5
REMOVABLE DRAIN OFF AND ACCESS PANELS 1&2/A-5
SEE DWG A-7 FOR MILLWORK DETAILS
BACK COUNTER N.I.C. TO BE LAID OUT BY KITCHEN EQUIPM. SUPPLIER
3"x6" POSTS (TYP. ON GRID 9)
DEAD BOLT ON DOOR
HOSE REEL SEE MECH. M-3
FUR. OUT WALL FOR PLUMBING N.I.C.
FUR. OUT WALL 5" FOR PLUMBING ALONG VANITY (DRY-WALL ON MET. STUDS)
8" C.B.S. WALL
8"x11"-12"
SHELVING: 3/4" F. PLY EXCEP 12" DEEP x 2'-6" WIDE, 7'-6" HIGH & SHELVES ea. BAY
LOADING BAY BLACK TOP (SEE SITE PLAN)
ROOF OVERHANG
6" C. CURB
GAS METER ENCL (SEE M-3)
4" BROOM FINISH C. WALK WITH 2" CEDAR DEVIDERS AND BORDERS AS INDICATED (SEE SITE PLAN)
RAMP UP (AS NECESSARY)
PLANTERS

OFFICE W. COPY!

MICROFILMED



MEZZANINE FLOOR PLAN

design group
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WHITE ROCK, B.C.
V4B 1C2 536-2181

MULTI PURPOSE CURLING RINK
at
CLOVERDALE
bc

mezzanine

REVISIONS:

1 - BAR SINK ADDED
- JANITOR ROOM DELETED
- WASHROOM LAYOUT CHANGED
- [illegible] CHANGED
2 - SPACING BETWEEN ℄ A AND G REVISED

MICROFILMED

scale: 1/8" = 1'-0"

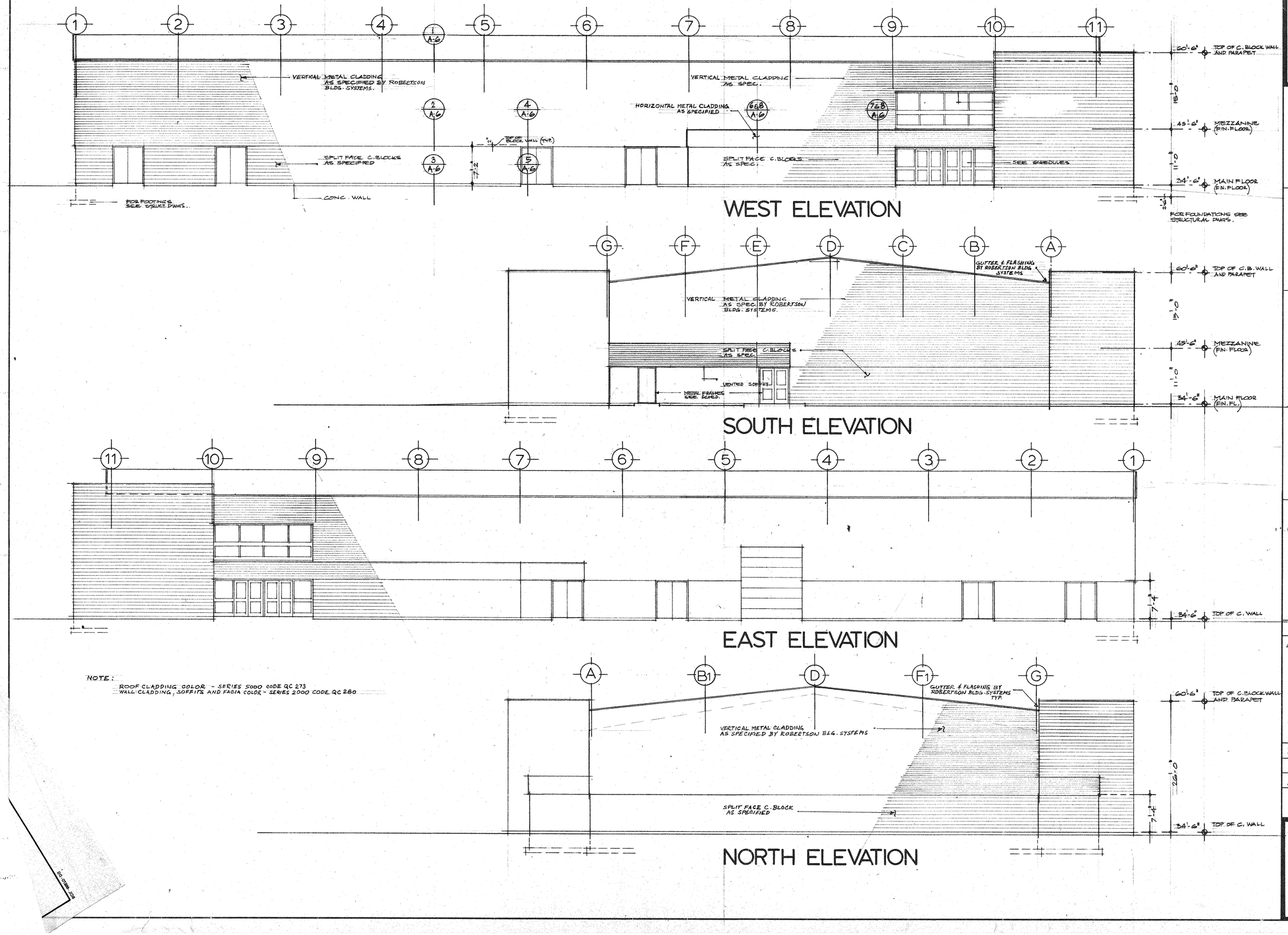
20th aug 79

Issued for construction March 31, 1980
J Vally

OFFICE W. COPY !

A-3

of 8



NOTE:
ROOF CLADDING COLOR - SERIES 5000 CODE QC 273
WALL CLADDING, SOFFITS AND FACIA COLOR - SERIES 2000 CODE QC 280

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MULTI PURPOSE CURLING RINK
at
CLOVERDALE
bc

elevations

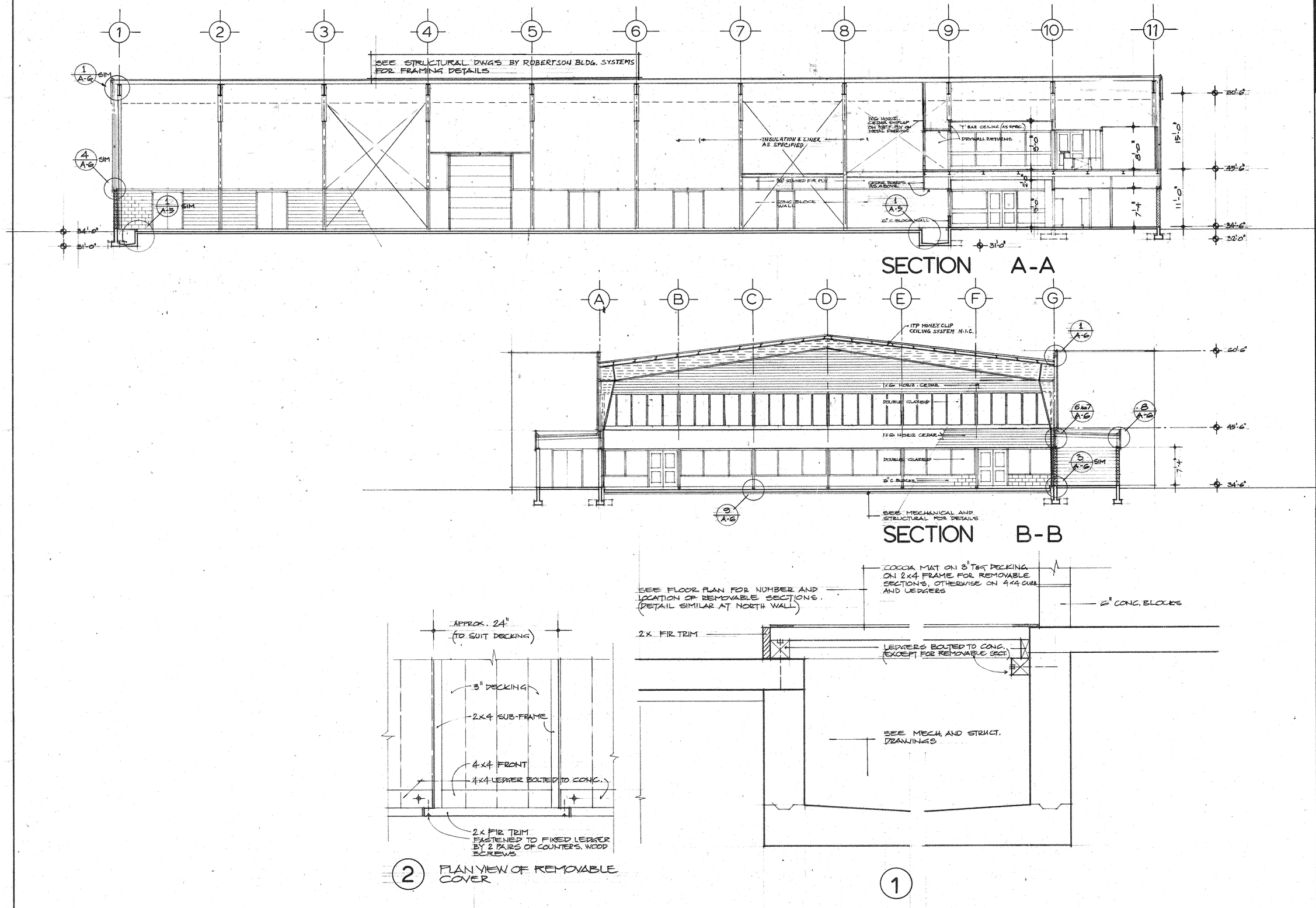
REVISIONS:
1 - GENERAL REVISIONS TO ACC. ROBERTSON BLDG. SYSTEMS SUPERSTRUCTURE
- ISSUED FOR CONSTRUCTION APRIL 8, 1980
J. Valley

scale: 1/8" = 1'-0"

20th aug 79

A-4

of 8



design group
ARCHITECTS
14899 MARINE DRIVE
WHITE ROCK, B.C.
V4B 1C2 536-2161

MULTI PURPOSE CURLING RINK
at
CLOVERDALE
bc

sections

REVISIONS:

1 - GENERAL REVISIONS TO ACC. ROBERTSON BLDG. SYSTEMS SUPERSTRUCTURE ISSUED FOR CONSTRUCTION APRIL 8, 1980 J. Vally

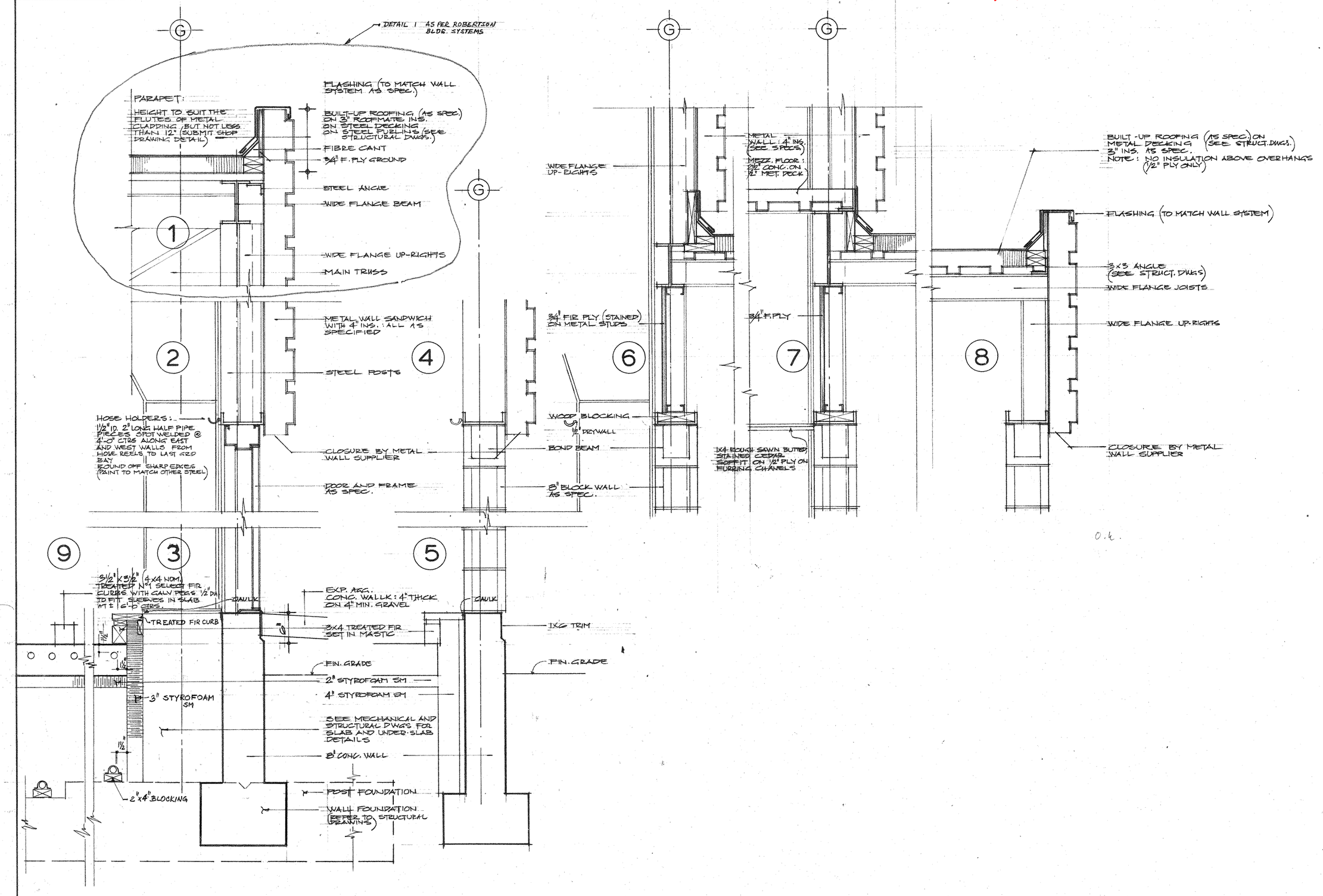
scale : 1/8"= 1'-0"

20th aug 79

A-5

of 8

CLOVERDALE CURLING RINK STAIR RENOVATION ADDENDUM#1 RFQ-1220-040-2019-032 - May 24, 2019



design group
ARCHITECTS
14899 MARINE DRIVE
WHITE ROCK, B.C.
V4B 1C2 536-2161

MULTI PURPOSE CURLING RINK
at
CLOVERDALE
bc

section details

REVISIONS:
1 - GENERAL REVISIONS ISSUED FOR CONSTRUCTION APRIL 10, 1980 J. Valley

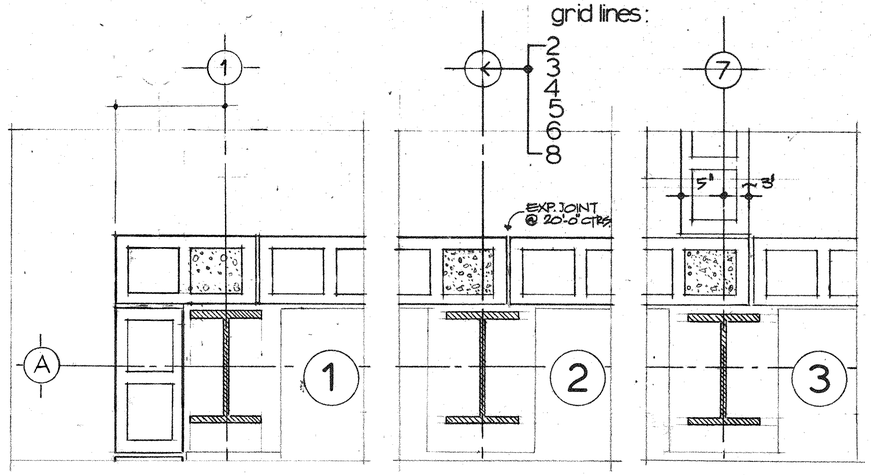
scale 1/8" = 1"

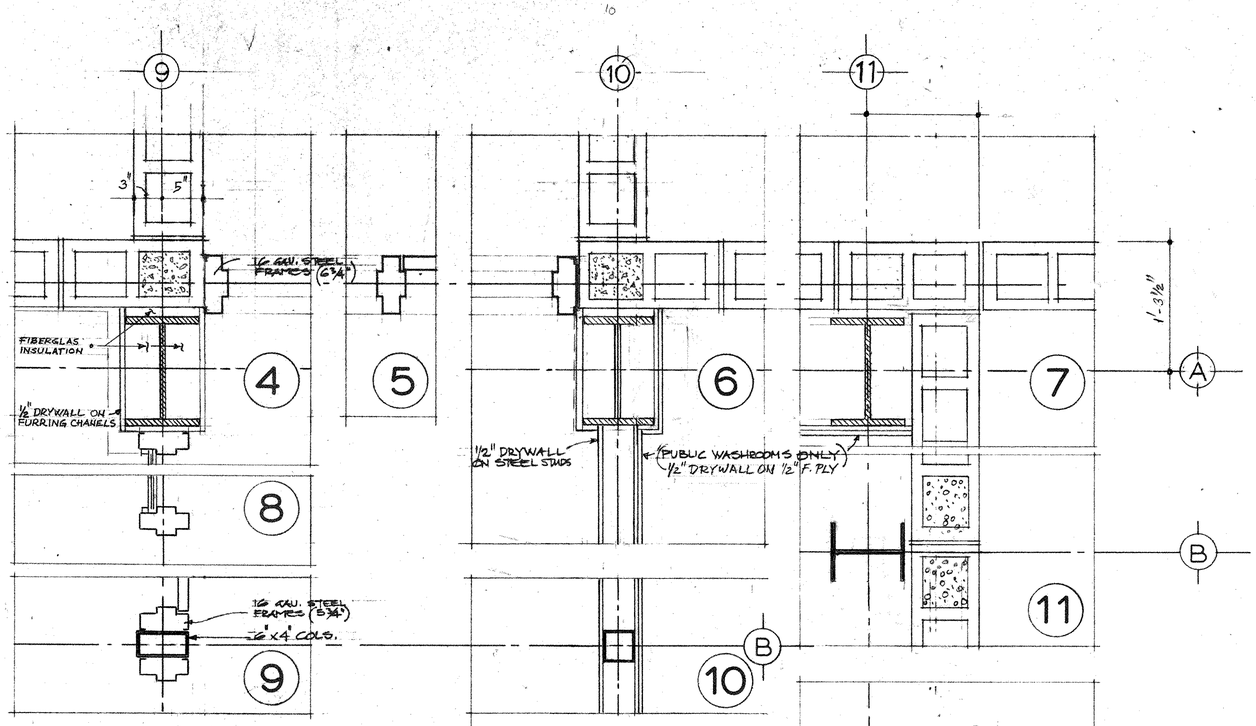
20th aug 79

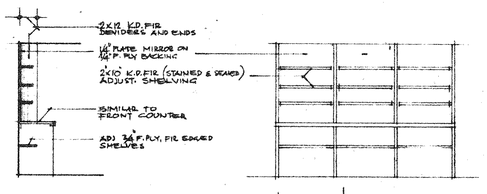
A-6

of 8

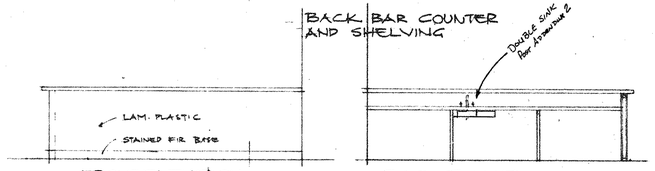
grid lines: 2 3 4 5 6 8







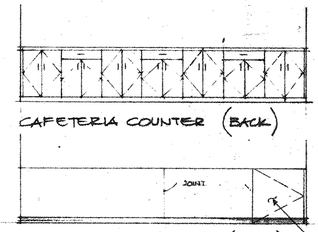
BACK BAR COUNTER AND SHELVING



FRONT ELEVATION BAR COUNTER

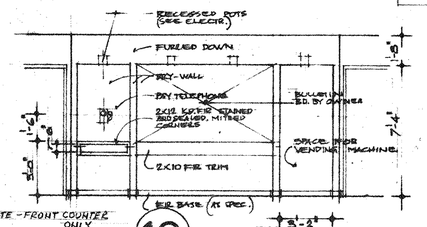
BACK ELEVATION

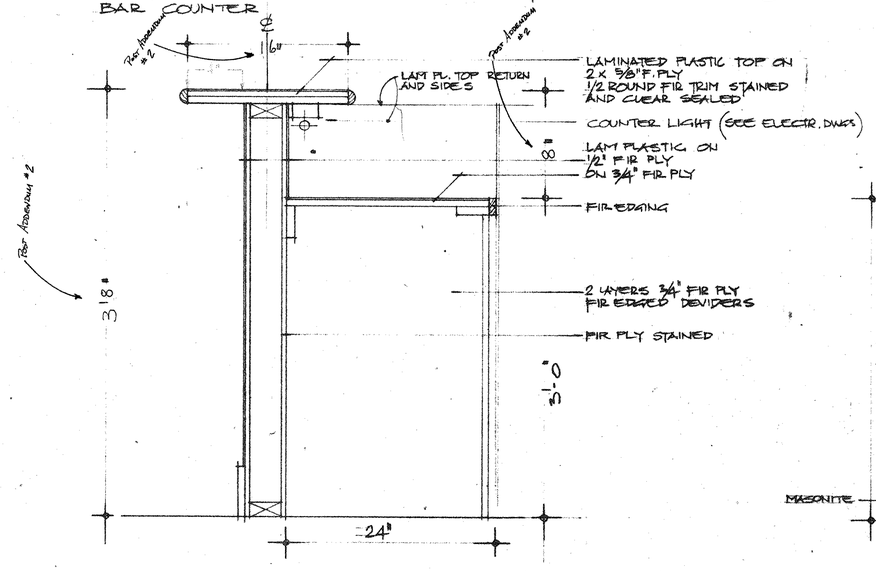
SIDE



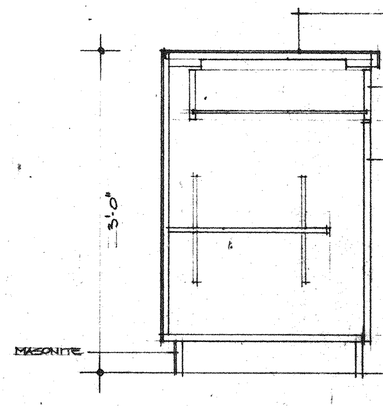
CAFETERIA COUNTER (BACK)

CAFETERIA COUNTER (FRONT)

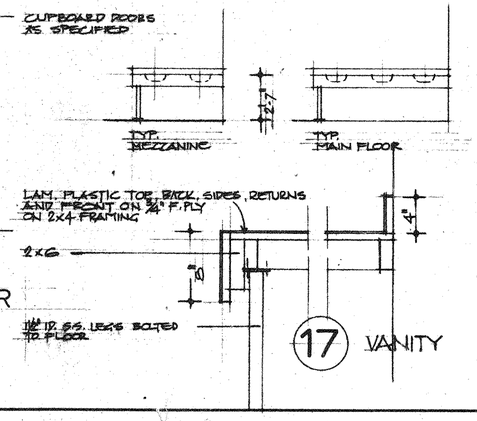




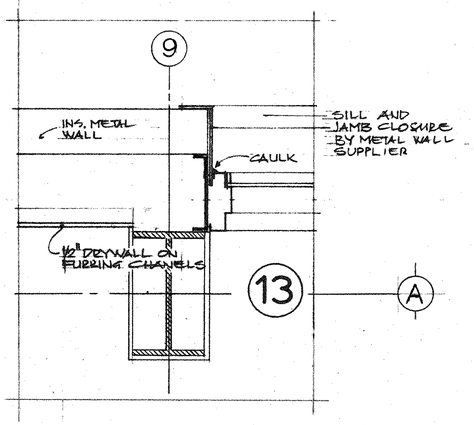
BAR COUNTER
14



CAFETERIA COUNTER
15



17 VANITY



design group
ARCHITECTS
14899 MARINE DRIVE
WHITE ROCK, B.C.
V4B 1C2 536-2161

MULTI PURPOSE CURLING RINK
at
CLOVERDALE
bc

plan details and millwork

REVISIONS:
1 Feb 26, 1980
2 - GENERAL REVISIONS TO ACCOMODATE ROBERTSON BLDG. SYSTEM SUPERSTRUCTURE. ISSUED FOR CONSTRUCTION APRIL 2nd 1980 J. Valle

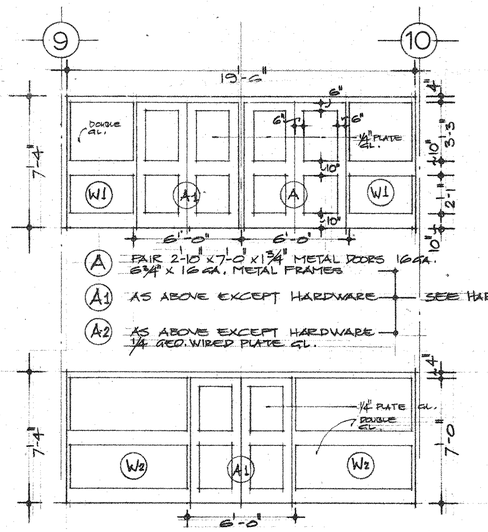
scale: 1/8" = 1"

20th aug 79

A-7

DCL 88170.DG

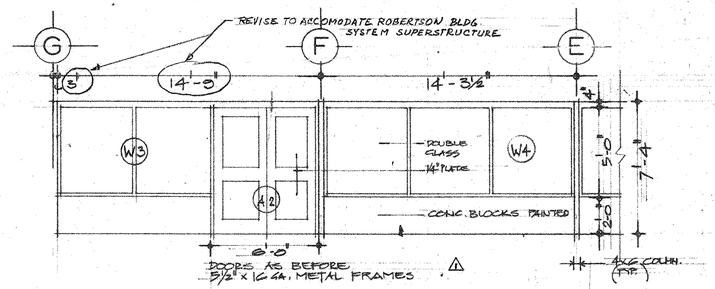
CLOVERDALE CURLING RINK STAIR RENOVATION ADDENDUM#1 RFQ-1220-040-2019-032 - May 24, 2019



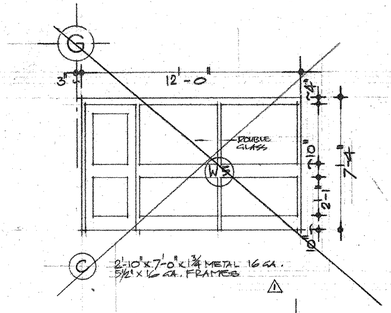
(A) PAIR 2'-10" x 7'-0" x 1¾" METAL DOORS 16 GA. 6¾" x 16 GA. METAL FRAMES

(A1) AS ABOVE EXCEPT HARDWARE — SEE HARDWARE SCHEDULE

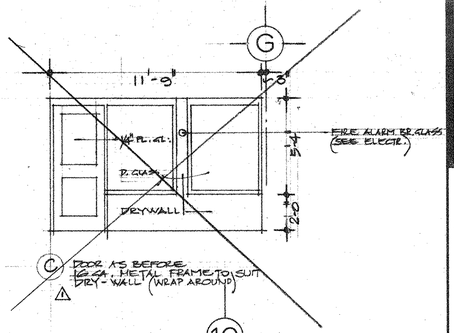
(A2) AS ABOVE EXCEPT HARDWARE ¼" GRD. WIRED PLATE GL.



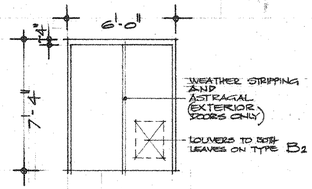
DOORS AS BEFORE 5½" x 16 GA. METAL FRAMES ⚠



(C) 2'-10" x 7'-0" x 1¾" METAL 16 GA. 5½" x 16 GA. FRAMES ⚠



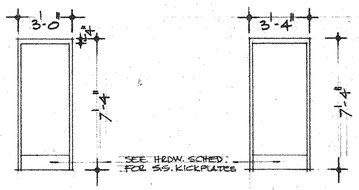
(C) DOOR AS BEFORE 16 GA. METAL FRAME TO SUIT DRY-WALL (WRAP AROUND) ⚠



(B) PAIR 2'-10" x 7'-0" x 1¾" METAL (16 GA.) 6¾" x 16 GA. MET. FRAMES (DOORS ARE TO BE INSULATED) TO SUIT

(B1) SEE HARDWARE SCH.

(B2) SEE HARDWARE SCH.

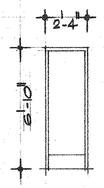


(D) 2'-8" x 7'-0" x 1¾" SOLID CORE WOOD ROTARY MAH. FACE. 16 GA. WRAP AROUND MET. FRAMES TO SUIT

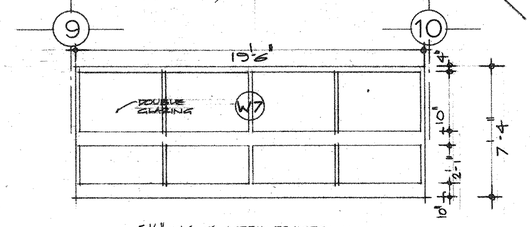
(D1) SEE HRDW. SCHED.

(D2) SEE HRDW. SCHED.

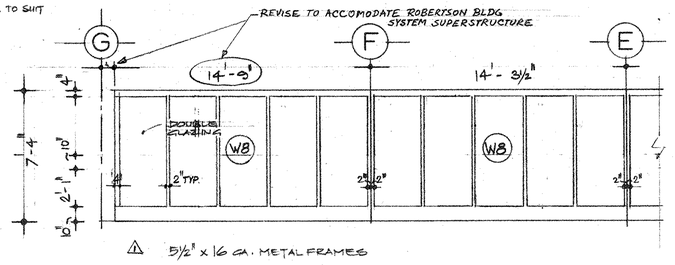
(E) 3'-0" x 7'-0" x 1¾" S.C. WOOD ROT. MAH. 16 GA. MET. FR. 6¾" WIDE



(F) 2'-0" x 6'-8" x 1¾" S.C. WOOD PAINT GRADE 16 GA MET. FR. TO SHIT



5½" x 16 GA. METAL FRAMES



⚠ 5½" x 16 GA. METAL FRAMES

room finish schedule

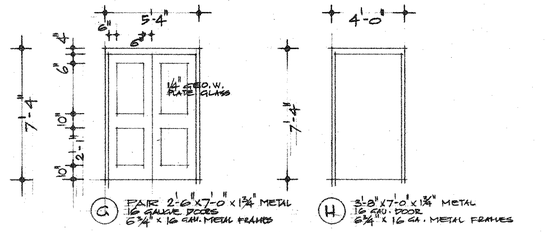
Nº.	ROOM	FLOOR	BASE	WALLS NORTH	WALLS EAST	WALLS SOUTH	WALLS WEST	TRIM	CEILING	REMARKS
101	CURLING RINK (HALL)	C. & WP.	–	C.B. & STF	C.B. & STF	C.B. & WC.	C.B. & STF	–	PD	
102	VIEWING LOUNGE	CN.	WB	C.B. P	D	D	D	–	T AT 3'-10"	NO BASE ON C. BLOCK WALLS
103	CAFETERIA	CN.	WB	–	D	D	D	–	T AT 8'-0"	
104	OFFICE	CPT.	WB	D	D	D	C.B. P		T AT 8'-0"	
105	SERVERY	CN	WB	–	D	D	D		T AT 8'-0"	
106	STORAGE	CN	—	D	D & C.B. P	C.B. P & D	D		D AT 8'-0"	NO BASE TO C.B.
108	MACHINE ROOM	CN	–	CB	CB & D	CB & D	CB & D		D AT 7'-4"	CB TO 7'-4" ONLY EXCEPT ELEV. SHAFT
109	LOBBY	CN	WB	D	C.B. P	–	C.B. P & D		D AT 7'-4" *	SEE NOTE ON PLAN (A-2) FOR 10'-0" CEILING IN PART OF ROOM
110	JANITOR	CN	–	D	D	D	D		D AT 7'-4"	
111	WHEEL CHAIR TOILET	CN	WB						D AT 7'-4"	NO BASE TO CB.
112	WOMEN'S WC.	CN	WB						D AT 7'-4"	
113	MEN'S WC.	CN	WB	CT *	CT *	CT *	CT *		D AT 7'-4"	
114	WOMEN'S WC.	CN	WB						D AT 7'-4"	FINISHES IN THE ENTRY AREAS ARE SIMILAR TO 102 (CEILING AT 7'-4")
115	MEN'S WC.	CN	WB						D AT 7'-4"	SEE NOTE ABOVE
116	LOCKER R.	CN	WB	D	D	D	D		D AT 7'-4"	LOCKERS ON 4" METAL BASE
117	EAST STAIR	CN	–	CB	CB	CB	CB		STF	
118	WEST STAIR	CN	–	CB	CB	CB	CB		STF	
119	STORAGE	C	–	CB	CB	CB	CB		STF	
120	STORAGE	C	–	CB	CB	CB	CB		STF	
122	MECHANICAL R.	C	-	CB	CB	CB	CB		STF	
201	MEZZANINE LOUNGE	CPT	WB	D	D	D	D		D AT 7'-4" T AT 3'-0	
202	BAR	CPT	WB	–	D	D	D		D AT 7'-4"	
203	WEST STAIR	CN	–	CB	CB	CB	CB		STF	
204	EAST STAIR	CN	–	CB	CB	CB	CB		STF	
205	LOBBY	CPT	WB	D	C.B. P	D	D		D AT 10'-0"	
206	BAR STORAGE	CN	-	C.B. P & D	D	D	C.B. P & D		D AT 8'-0"	
207	STORAGE	CN	-	D	D	D	D		D AT 8'-0"	
208	KITCHEN	CN	WB	D	D	D	D		D AT 8'-0"	
209	KITCH. WC.	CN	WB	D	D	D	D		D AT 8'-0"	
210	WOMEN'S WC	CN	WB	CT *	CT *	CT *	CT *		D AT 8'-0"	
211	MEN'S WC	CN	WB						D AT 8'-0"	
212	JANITOR	CN	-	D	D	D	D		D AT 8'-0"	

SYMBOL	DESCRIPTION
C. & W.P.	CONCRETE (WITH HARDENER) WOOD PLATFORM (STAINED)
C.B.	CONCRETE BLOCK (UN-PAINTED)
C.B.P.	CONC. BLOCK PAINTED
STF	STEEL FRAME PAINTED
PD	PERFORATED METAL DECKING
WB.	1X4 FIR (CLEAR SEAL)
WC.	CEDAR STAINED
D	DRYWALL PAINTED (½")
T	T BAR
CPT.	CARPET
CN	CONCRETE WITH HARDN. & COLOR
DP	½" DRYWALL ON ½" F. PLY
CT.	CERAMIC TILE AS SPEC.

NOTE:

ALL EXTERIOR CONC. BLOCK TO BE SPLIT FACE CLEAR SEALED AS SPECIFIED

* SEE SPECS FOR SPECIAL COATING ON ALL WASHROOM WALLS FOR ALTERNATE.

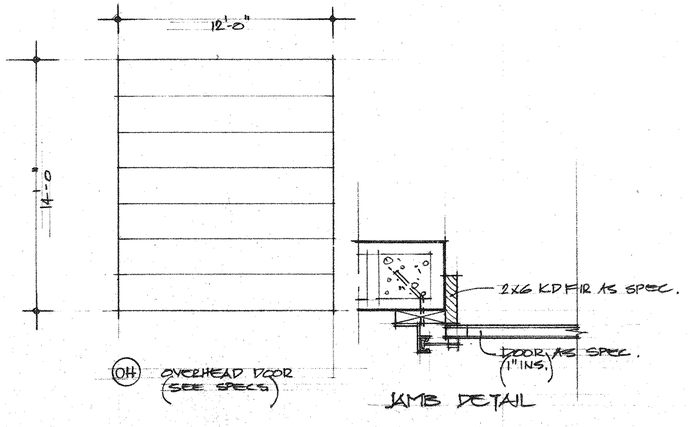


(G) PAIR 2'-6" x 7'-0" x 1¾" METAL 16 GAUGE DOORS 6¾" x 16 GA. METAL FRAMES

(G1) AS ABOVE EXCEPT HARDWARE

(H) 3'-0" x 7'-0" x 1¾" METAL 16 GA. DOOR 6¾" x 16 GA. METAL FRAMES

(H1) AS ABOVE EXCEPT HARDWARE



(OH) OVERHEAD DOOR (SEE SPECS)

JAMB DETAIL

design group
ARCHITECTS
14-99 MARINE DRIVE
WHITE ROCK, B.C.
V4B 1C2 536-2161

MULTI PURPOSE CURLING RINK
at
CLOVERDALE
bc

schedules

REVISIONS:

⚠ NOTES ADDED
W8 REVISED
ISSUED FOR CONSTRUCTION
APRIL 1ST, 1980

scale: 1/4" = 1'-0"

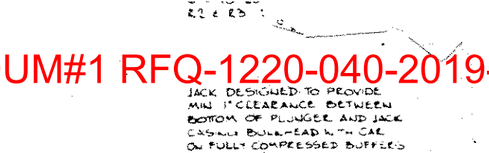
20th aug. 79

A-8

CLOVERDALE CURLING RINK STAIR RENOVATION ADDENDUM#1 RFQ-1220-040-2019-032 - May 24, 2019

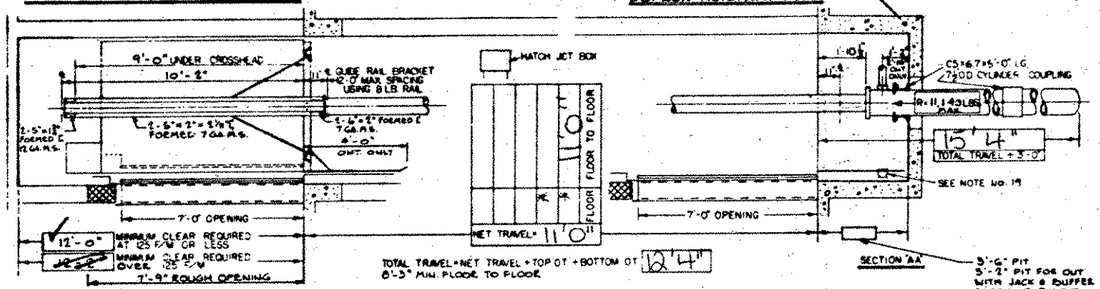
DUPLEX MACHINE ROOM PLAN

MACHINE ROOM LOCATED AT ____ FLOOR



DUPLEX HOISTWAY PLAN

JACK DESIGNED TO PROVIDE MIN. 1" CLEARANCE BETWEEN BOTTOM OF PLUNGER AND JACK CASING BULKHEAD WITH CAR ON FULLY COMPRESSED BUFFERS

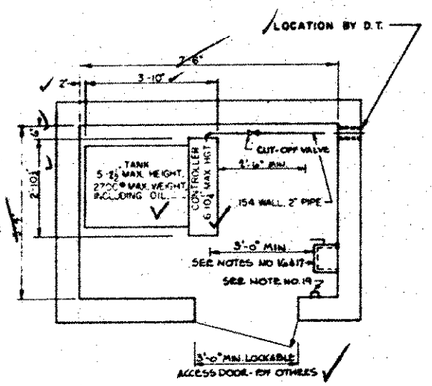


DETAIL OF HALL LANTERN CUTOUT

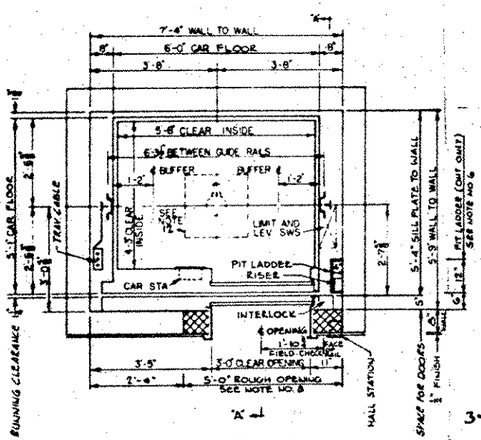
DETAIL OF HALL PUSH BUTTON CUTOUT

75-125 FPM 6"
150 FPM 8"

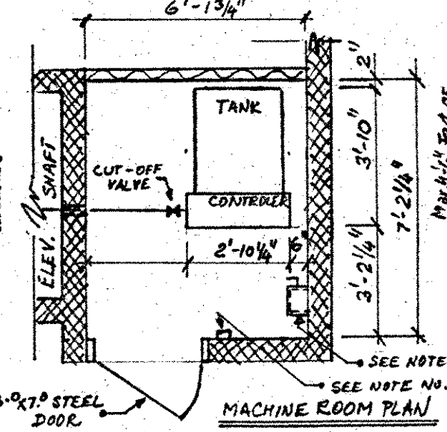
MINIMUM MACHINE ROOM HEIGHT 7'-0" OVERHEAD DUCTS OR PIPES IN MACHINE ROOM REQUIRE SECONDARY CEILING BY OTHERS.



SIMPLEX MACHINE ROOM PLAN



SIMPLEX HOISTWAY PLAN



MACHINE ROOM PLAN

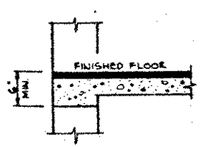
MACHINE ROOM LOCATED AT MAIN FLOOR

SEE REVISED LAYOUT!

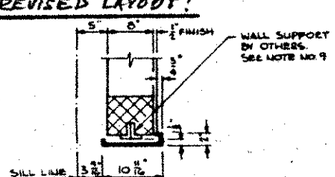
* TABLE NO. 1

HORSEPOWER		15 HP			20 HP			25 HP			30 HP		
VOLTAGE		208 230	416 460	550 600	208 230	416 460	550 600	208 230	416 460	550 600	208 230	416 460	550 600
TYPE D FUSE		60	25	175	70	35	20	90	40	30	100	45	35
CIRCUIT BREAKER	A-L	125	50	40	150	70	40	175	70	70	200	100	70
	Y-Δ	100	40	30	125	50	40	125	70	50	150	70	50
STANDARD FUSE	A-L	150	60	50	200	90	60	225	100	60	300	125	90
	Y-Δ	100	60	40	150	70	50	150	70	70	175	60	70

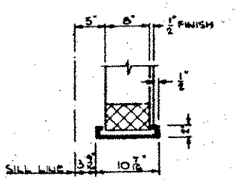
ELEVATOR TO COMPLY WITH BRITISH COLUMBIA BUILDING CODE PART 10 SUBSECTION 10.3.6. VERTICAL ACCESS



SILL DETAIL



HEAD DETAIL



JAMB DETAIL

SL 5911

(261.99')

LOT 24

(262.06')

LANDSCAPING

B.C. HYDRO

LOT B

EXISTING ASPHALT CURB

FINAL LOCATION OF PULL BOX

EXISTING CHAIN LINK FENCE

EXIST. CHAIN LINK FENCE

NOTE:
DEMOLISH AND CLEAR AWAY ALL EXISTING STRUCTURES IN WAY OF THESE PROPOSED WORKS

FINAL B.C. HYDRO UNDERGROUND SERVICE CONN.

10' LONG REINFORCED CONCRETE BRIDGE OVER EXISTING 30"ϕ STORM PIPE

PROPOSED B.C. HYDRO UNDERGROUND SERVICE CONN.

PROPOSED LOCATION OF PULL BOX

FINAL B.C. HYDRO UNDERGROUND SERVICE CONNECTION

EXISTING 3ϕ KIOSK

STORM

(12 CARS)

(12 CARS)

(12 CARS)

PARKING (not in contract)
(201 CARS)

EXISTING BARNS

(15 CARS)

(10 CARS)

(9 CARS)

(10 CARS)

(263.15')

20'-0"

20'-0" (TYPICAL)

22'-0"

(262.21')

ICE ARENA (EXISTING)

EDGE OF EXISTING BLACKTOP

WORK IN THIS AREA IN THIS CONTRACT SEPERATE CONTRACT EXCEPT ELECTRICAL SERVICE CONNECTION

(262.06')

PARKING LOT (EXISTING)

(15 CARS)

(10 CARS)

(9 CARS)

(10 CARS)

DELETE CONCRETE SIDEWALK

PLANTER HOLE

BLACKTOP PATH

EXISTING SHEDS

RINK SLAB: 34.00'

MAIN FL. SLAB: 34.3'

CAP OFF 4" WATER LINE

NEW BLACKTOP TO LOADING BAY

EDGE OF EXISTING BLACKTOP

RAMP: RAMP OF NEW LOADING BAY AND RE-NEW EXIST. BLACKTOP IN THIS GENERAL AREA

2½"ϕ WATER

GAS METER

(150')

CONC. WALKS:
4" FOR BROOM FINISH
BACKFILL BOTHSIDES AND DENTILES AT APPROX 8'-0" C/S'S LEFT IN PLACE

EXISTING HOUSE TO BE MOVED BY OWNER

4" WATER CONNECTION

36"ϕ C.B.

8"ϕ PLASTIC @ 1/8"/Ft.

LOT 30

(262.06')

GAS
SAN
STORM

176th st

MULTI-PURPOSE CURLING RINK at Cloverdale, B.C.

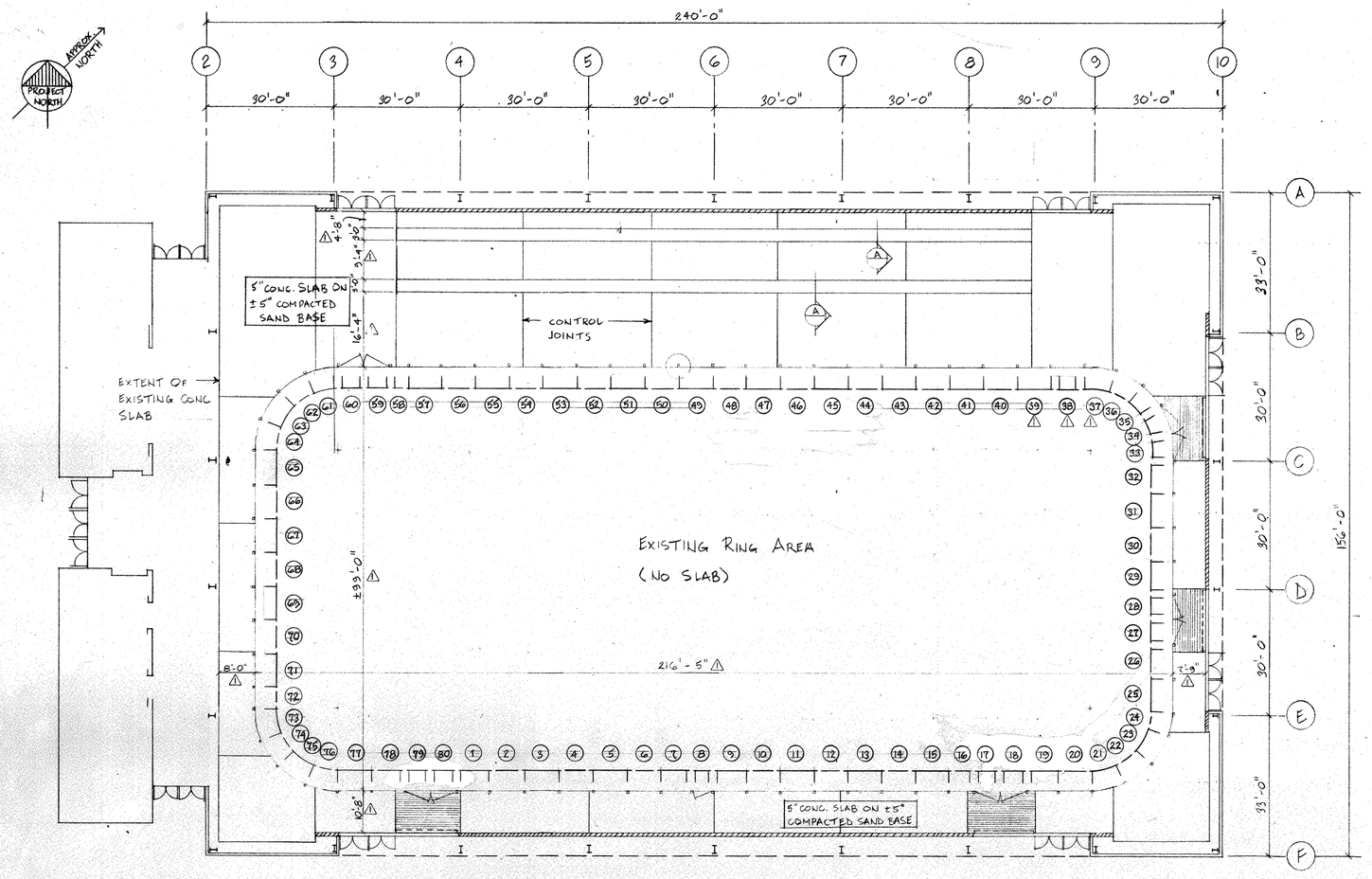
SITE SERVICES

REVISIONS

SCALE: 1" = 20'-0"
DATE: JUNE 30, 1980
DRAWN:
APPROVED:

SS-1

CLOVERDALE CURLING RINK STAIR RENOVATION ADDENDUM#1 RFQ-1220-040-2019-032 - May 24, 2019



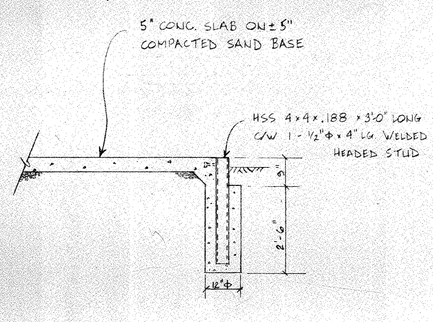
1/16" = 1'-0"

NOTES:

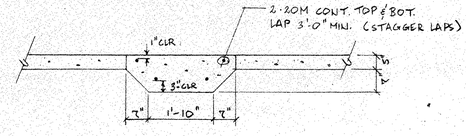
- CONCRETE TO CONFORM TO C.S.A.- CAN3 - A23.1 M77
  - CEMENT - TYPE 10 PORTLAND CEMENT
  - MIN. STRENGTH 25 MPa AT 28 DAYS
  - MAX. AGGREGATE SIZE 19mm
  - MAX SLUMP 50mm ± 13mm
  - ADMIXTURES TO C.S.A. CAN3 - A266.2 - M78 AND TO BE APPROVED BY THE ENGINEER. CALCIUM CHLORIDE SHALL NOT BE USED. AIR ENTRAINMENT SHALL BE MIN. OF 6%
  - MOIST CURE CONC. WITH PONDED WATER FOR MIN. OF 7 DAYS
  - CONCRETE TESTING BY OWNER
- REINFORCING STEEL TO C.S.A. G30.12 - M77 GRADE 400
- STRUCTURAL STEEL TO C.S.A. G40.20 - M78 GRADE 350W
- CONTROL JOINTS 'ZIP STRIP' OR EQUAL

PROCEDURE:

- EXISTING RING TO BE SURVEYED AND REMOVED BY OWNER
- REMOVE BARK MULCH FROM SLAB AREAS AND STOCKPILE IN CENTER OF RING
- PREPARE SUBGRADE, REMOVING ALL TRACES OF BARK MULCH. MATERIAL MAY BE DISPOSED OF ON SITE. COMPACT SUBGRADE TO 95% OF MODIFIED PROCTOR
- PLACE SAND BASE. COMPACT TO 95% OF MODIFIED PROCTOR
- RING POST REFERENCE SURVEY TO BE RE-ESTABLISHED BY OWNER
- INSTALL RING POST SLEEVES IN CONC. FILLED 12" ϕ AUGERED HOLES
- FORM AND PLACE CONCRETE SLAB. STEEL TROWEL FINISH UNLESS NOTED OTHERWISE



TYPICAL RING POST SLEEVE DETAIL.
½" = 1'-0"



(A) STRIP FOOTING DETAIL
½" = 1'-0"

⚠ 12 SEPT 86	ISSUED FOR CONSTRUCTION

THE CORPORATION OF THE DISTRICT OF SURREY
14245 - 56TH AVE. SURREY BC

CLOVERDALE AGRIPLEX ARENA FLOOR SLAB

17763 - 62ND AVE. SURREY BC

SCALE: AS SHOWN
DATE: AUG/86
DRAWING NO. 0553-004-S1

CLOVERDALE CURLING RINK STAIR RENOVATION ADDENDUM#1 RFQ-1220-040-2019-032 - May 24, 2019

10 BAYS @ 20'-0" = 200'-0"

6" SLAB - EL 34'-6"
REINF. #4 @ 15" E.W.
@ MID DEPTH.

FTG. SLOPES SEE S-4

FOOTING TYPE 'A'
4'-6" x 4'-6" x 1'-0"
REINF. 5#5 E.W. BOT.

FOOTING TYPE 'B'
5'-0" x 5'-0" x 1'-0"
REINF. 6#5 E.W. BOT.

FOOTING TYPE 'C'
6'-0" x 6'-0" x 1'-3"
REINF. 8#6 E.W. BOT.

FOOTING TYPE 'D'
3'-10" x 3'-0" x 10"
REINF. 5#5 E.W. BOT.

COLUMN TYPE 'A'
HSS 5"x5"x5/16"

COLUMN TYPE 'B'
HSS 5"x5"x5/16"

COLUMN TYPE 'C'
HSS 6"x4"x5/16"

COLUMN TYPE 'D'
HSS 8"x2-1/2"x.25"

6" SLAB EL 34'-0"

SLAB NOTES TO COME UPON SUPPLY OF WHEEL LOADS DESIRED

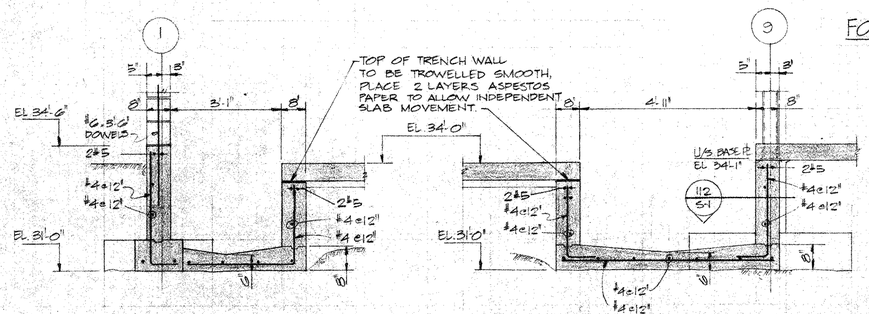
5" SLAB - EL 34'-6"
NO REINF

NOTE
CHECK REQUIREMENT FOR BOLT INSERTS ETC. FOR ELEVATOR RAILS AND HOISTS BEAMS. ALL BOLTS AND INSERTS TO BE SET IN CONCRETE FILLED CORES.

TRENCH

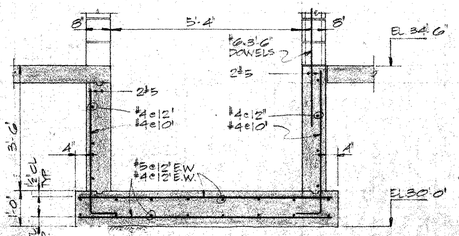
#6 MASONRY REINF. BOND BEAMS @ SAME EL. AS STAIR WALLS

FOUNDATION & MAIN FLOOR PLAN 1/8"=1'-0"

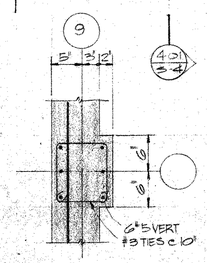


109 S-1 1/2"=1'-0"

110 S-1 1/2"=1'-0"



111 S-1 1/2"=1'-0"



112 S-1 1"=1'-0"

FOR GENERAL NOTES SEE S-2

design group
ARCHITECTS
14899 MARINE DRIVE
WHITE ROCK, B.C.
V4B 1C2 538-2161

SAYERS ENGINEERING LIMITED
CONSULTING ENGINEERS
CIVIL - STRUCTURAL
VANCOUVER B.C. TEL. 682-7264

79-172

Multi-purpose Curling Rink

Cloverdale B.C.

REVISIONS

Foundation Main Floor Plan

DATE

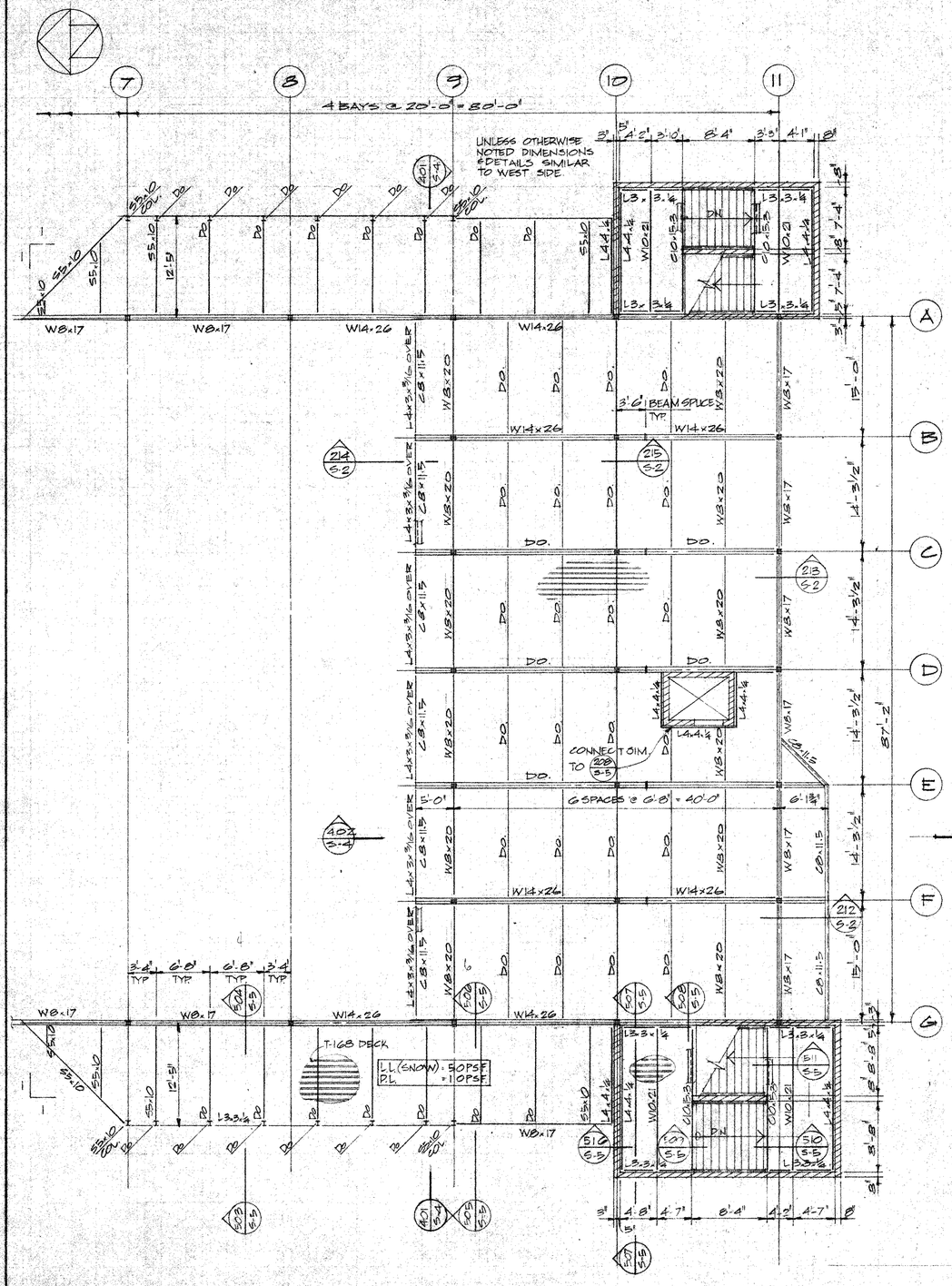
SCALE AS SHOWN

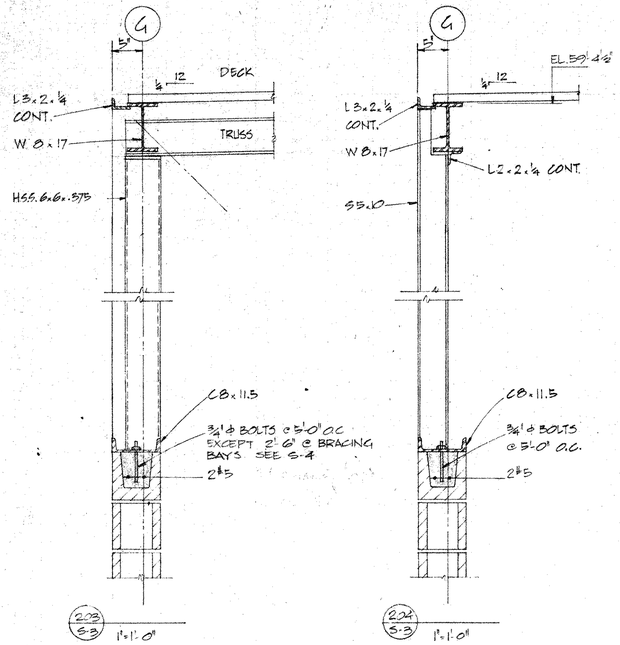
DRAWN: JENS/C.T

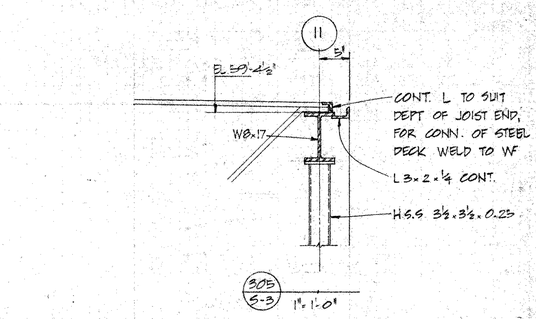
S1

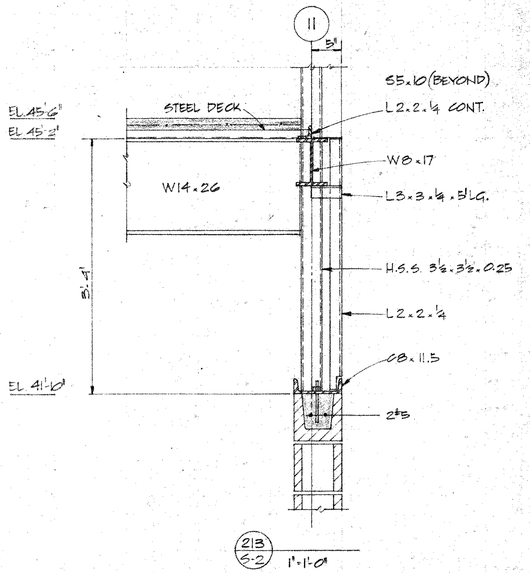
OF 5

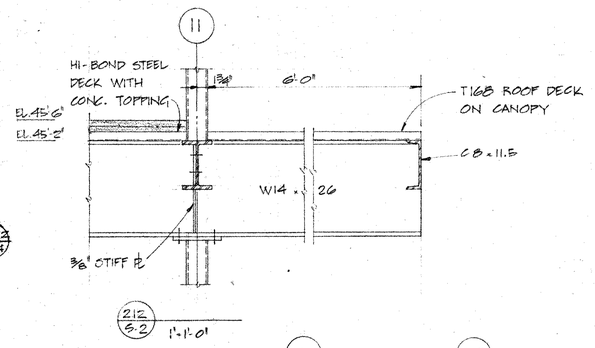
79-172

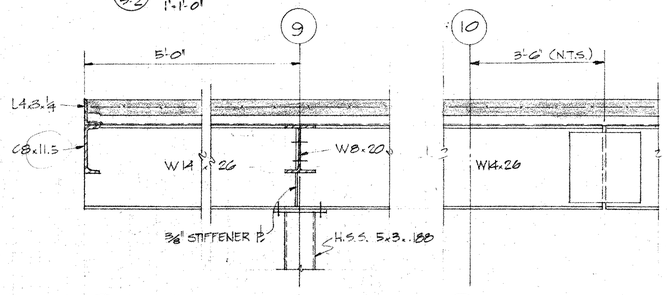


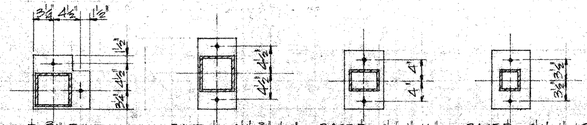












NOTES:

1. All design and construction to conform to the National Building Code of Canada 1977.
2. Check all drawings of other trades.
3. Design loads:
   - Ground snow 40 psf
   - Upper floor live load 100 psf
   - Seismic acceleration 0.08
   - Soil pressure - spread ftgs. 2.5 ksf
   - strip ftgs. 2.0 ksf
   - See soils report recommendations.
4. Concrete:
   - 30 MPa for slabs on grade
   - 20 MPa for all other concrete
5. Reinforcement:
   - #5 and larger Fy=60 ksi
   - #4 and smaller Fy=40 ksi
6. Masonry reinforcement: See dwg. S4
7. Structural steel:
   - to CSA G 40.21 - 44W
   - HSS columns to CSA G 40.20 - Class H Fy=50 ksi
   - All steel work to CSA-S16
   - Fabricators to be CWB approved under CSA W 47.1 Division 1 or 2
   - Submit shop drawings of all steel and decking for review by the Engineer.
8. Inspections:
   - All reinforcement (including masonry and upper floor slab) to be inspected by Engineer.
   - Notify Engineer minimum 24 hours in advance.

design group
ARCHITECTS
14899 MARINE DRIVE
WHITE ROCK, B.C.
V4B 1C2 536-2161

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CONSULTING ENGINEERS
CIVIL - STRUCTURAL
VANCOUVER B.C. TEL 682-7264

79-172

Multi-purpose Curling Rink

Cloverdale B.C.

REVISIONS

Upper Floor Framing Plan & Details

DATE

SCALE: AS SHOWN

DRAWN: JENS / C.T.

S2

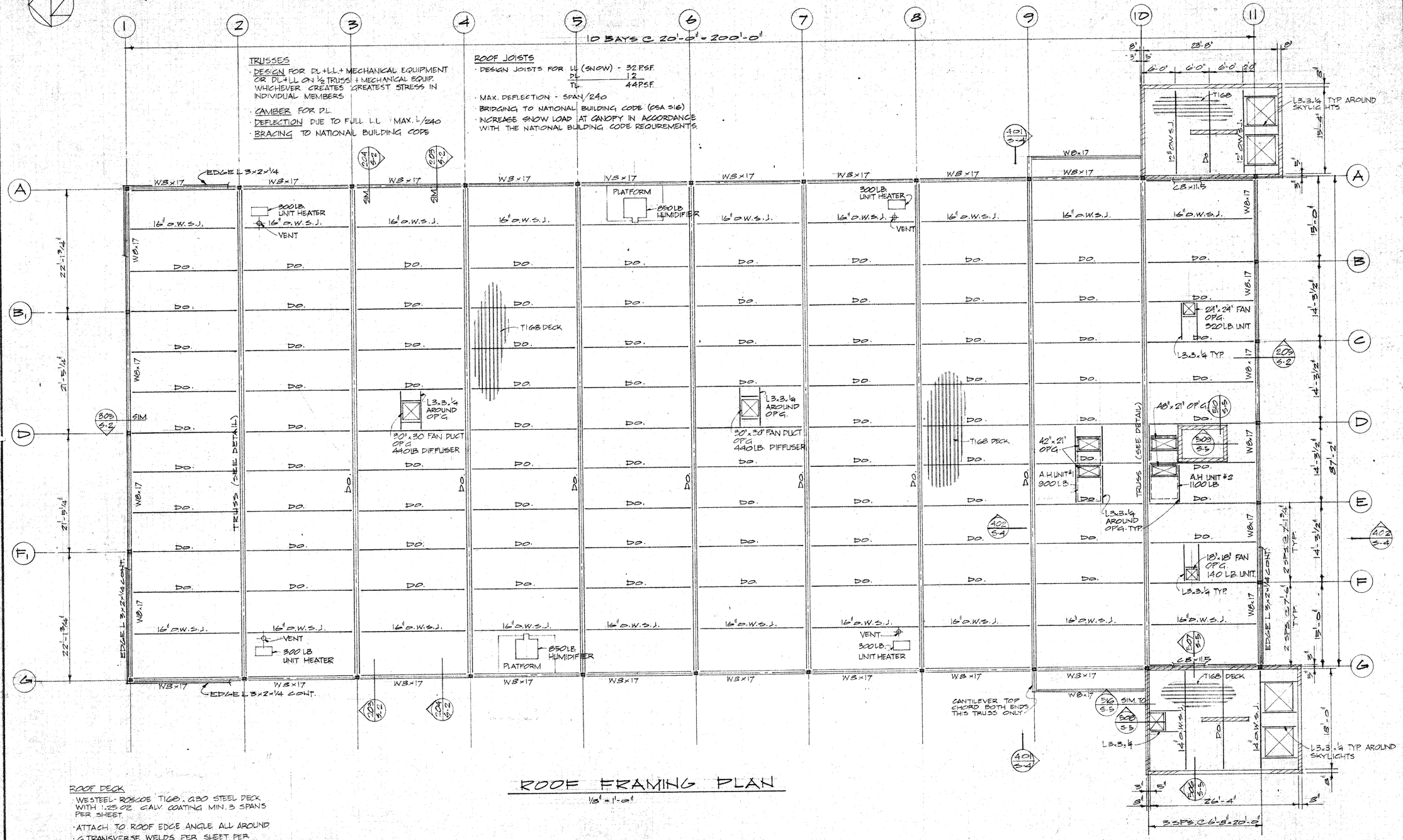
OF 5

CLOVERDALE CURLING RINK STAIR RENOVATION ADDENDUM#1 RFQ-1220-040-2019-032 - May 24, 2019

10 BAYS @ 20'-0" = 200'-0"

TRUSSES
- DESIGN FOR DL+LL+ MECHANICAL EQUIPMENT OR DL+LL ON ½ TRUSS + MECHANICAL EQUIP. WHICHEVER CREATES GREATEST STRESS IN INDIVIDUAL MEMBERS
- CAMBER FOR DL
- DEFLECTION DUE TO FULL LL MAX. L/240
- BRACING TO NATIONAL BUILDING CODE

ROOF JOISTS
- DESIGN JOISTS FOR LL (SNOW) - 32 PSF
  DL 12
  TL 44 PSF
- MAX. DEFLECTION - SPAN/240
- BRIDGING TO NATIONAL BUILDING CODE (CSA S16)
- INCREASE SNOW LOAD AT CANOPY IN ACCORDANCE WITH THE NATIONAL BUILDING CODE REQUIREMENTS



ROOF FRAMING PLAN

1/8" = 1'-0"

ROOF DECK
- WESTEEL-ROBCOR T16B .030 STEEL DECK WITH 1.25 OZ. GALV. COATING MIN. 3 SPANS PER SHEET
- ATTACH TO ROOF EDGE ANGLE ALL AROUND
- 6 TRANSVERSE WELDS PER SHEET PER SUPPORTING JOIST OR BEAM. SIDE LAPS BUTTON PUNCHED @ 1'-0" O.C. LONGITUDENAL WELDS @ BUILDING ENDS (LINES 1 & 11) @ 2'-0" O.C.
- ALL WELDS & DAMAGED COATING TO BE SPOT PAINTED WITH ZINC RICH PAINT.

design group
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14899 MARINE DRIVE
WHITE ROCK, B.C.
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SAYERS ENGINEERING LIMITED
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VANCOUVER B.C. TEL: 682-7284

79-172

Multi-purpose Curling Rink

Cloverdale B.C.

REVISIONS

Roof Framing Plan

DATE:

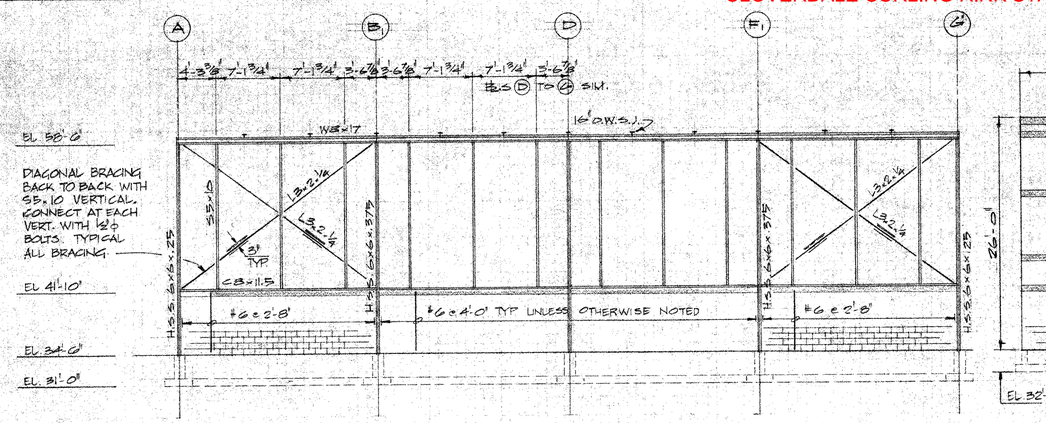
SCALE: AS SHOWN

DRAWN: JENS / CT.

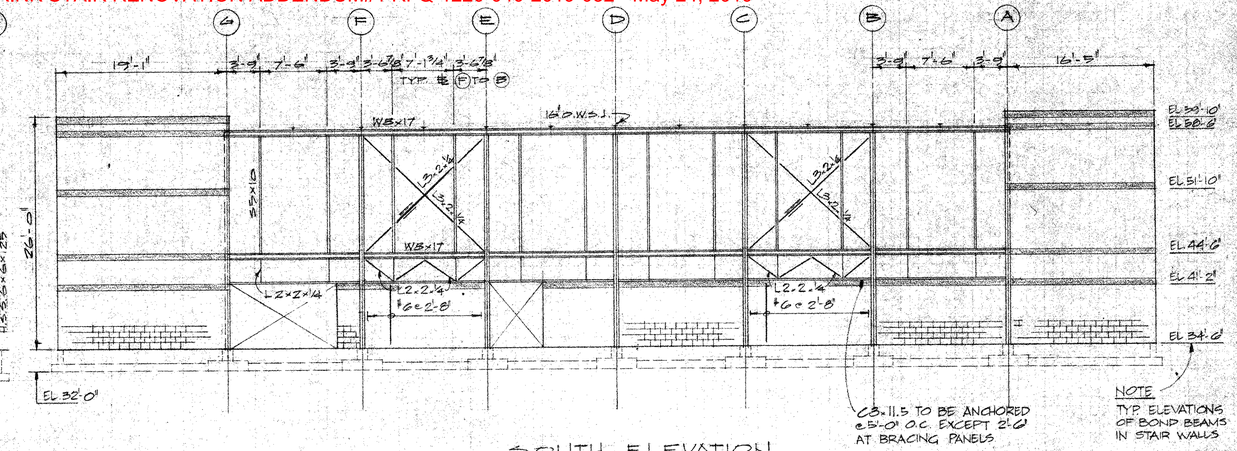
S3

OF 5

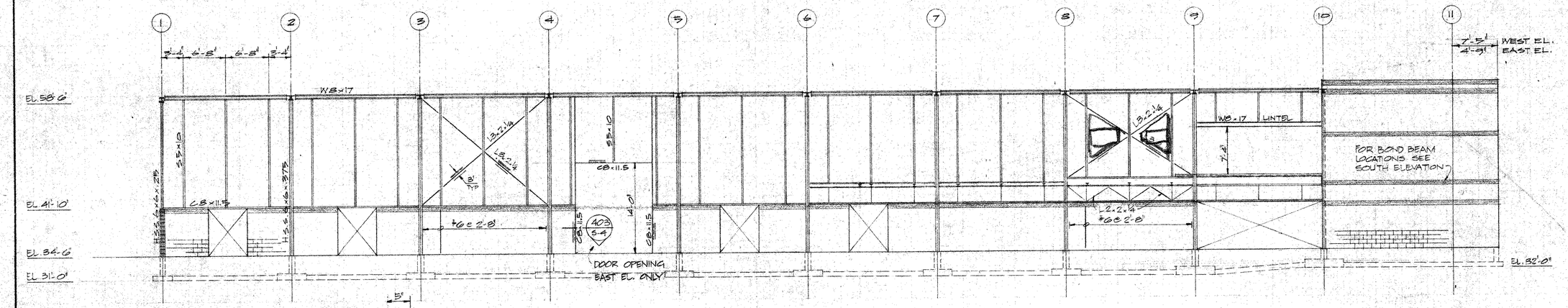
CLOVERDALE CURLING RINK STAIR RENOVATION ADDENDUM#1 RFQ-1220-040-2019-032 - May 24, 2019



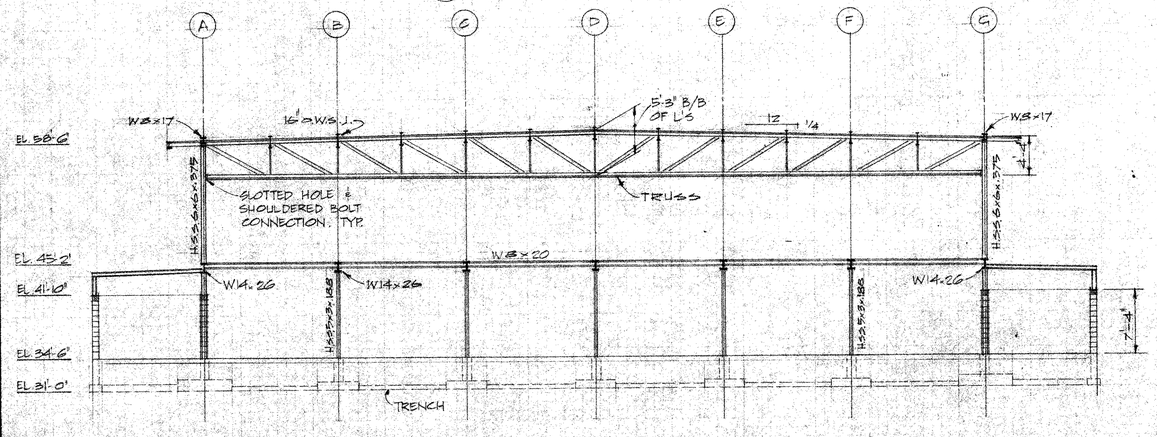
NORTH ELEVATION
1/8"=1'-0"



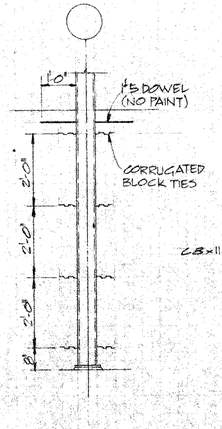
SOUTH ELEVATION
1/8"=1'-0"



WEST ELEVATION (EAST EL. SIM.)
1/8"=1'-0"

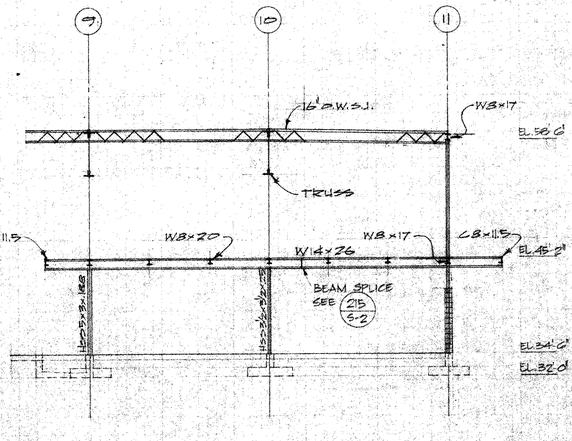


401 S1.2.3 SECTION
1/8"=1'-0"



MASONRY ANCHORS WELDED TO COLUMNS

NOTE COLUMNS A10, A11 G10, G11 TO HAVE ANCHORS FULL HEIGTH
1/2"=1'-0"



402 S1.2.3 SECTION
1/8"=1'-0"

MASONRY REINFORCEMENT

VERTICAL: ϕ6 c 4'-0" EXCEPT AT BAYS WITH DIAGONAL CROSS BRACING ϕ6 c 2'-8"

HORIZONTAL: 2-15 IN BOND BEAMS AT TOP OF MASONRY WALLS AND AS NOTED AT STAIRWALLS ON S-4

ALL CORES TO HAVE CLEAN OUTS AT BOTTOM. TO BE INSPECTED BY ENGINEER BEFORE POURING. VERTICAL BARS TO BE WIRED IN PLACE TO DOWELS OR PROJECTING LOWER LIFT BARS

CONCRETE FILL 3000 PSI.

design group
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14899 MARINE DRIVE
WHITE ROCK, B.C.
V4B 1C2 538-2161

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CONSULTING ENGINEERS
CIVIL - STRUCTURAL
VANCOUVER B.C. TEL 682-7254

79-177

Multi-purpose Curling Rink

Cloverdale B.C.

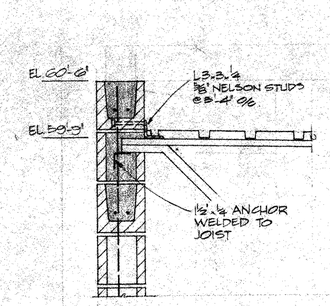
REVISIONS

Elevations
Sections
Details

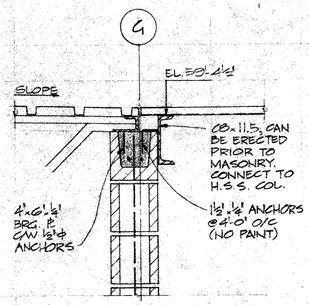
DATE:
SCALE: AS SHOWN
DRAWN: JENS / C.T.

S4
OF 5

CLOVERDALE CURLING RINK STAIR RENOVATION ADDENDUM#1 RFQ-T220-040-2019-032 - May 24, 2019



5/06 5-3 1"=1'-0"



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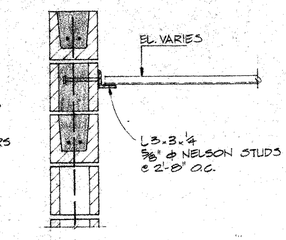

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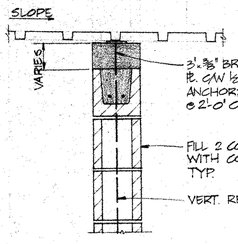

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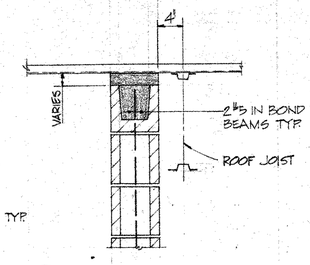

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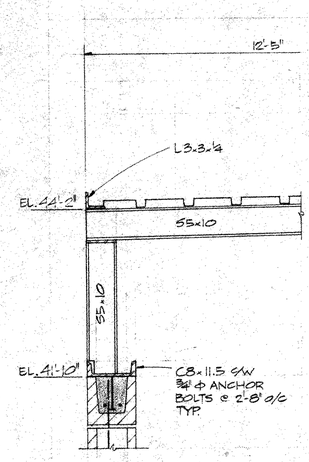

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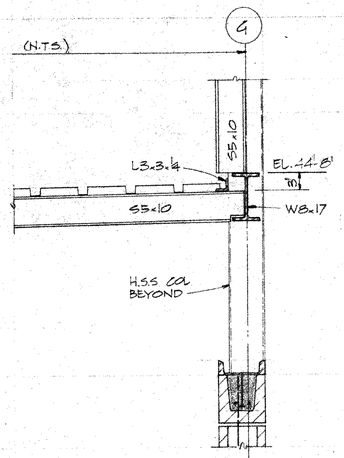

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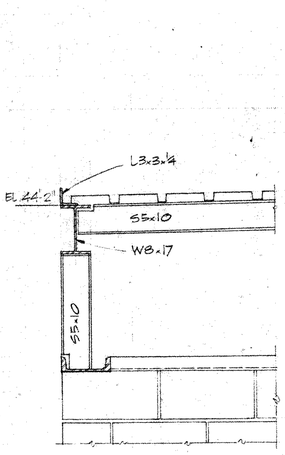

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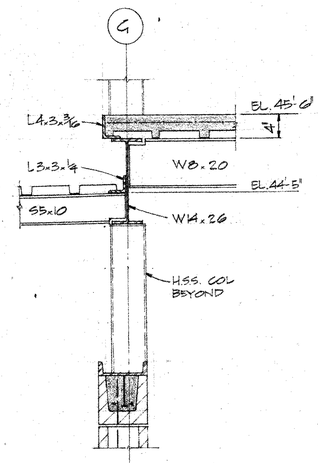

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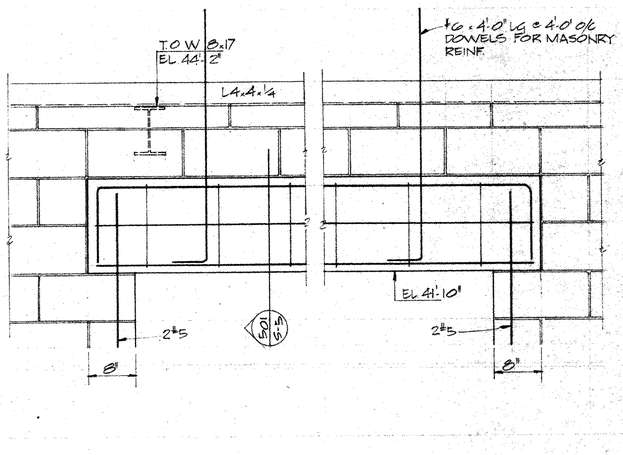

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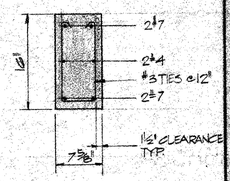

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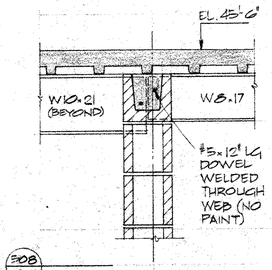

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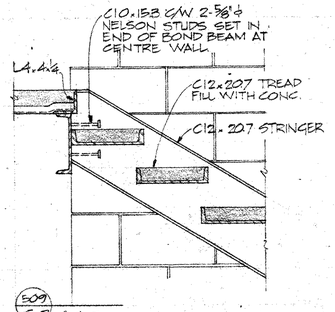

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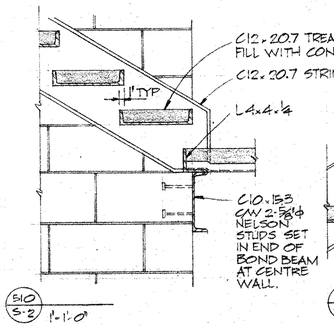

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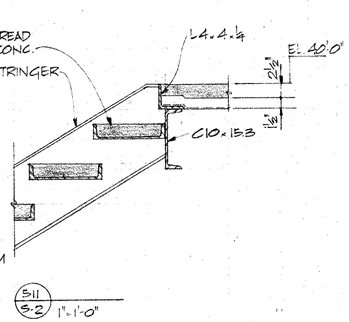

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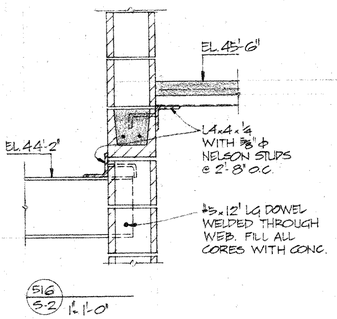

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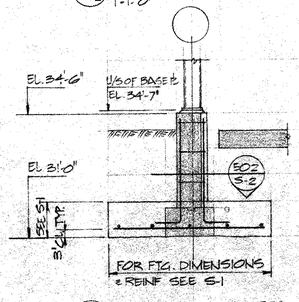
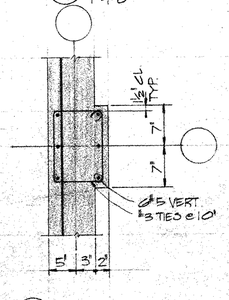


5/03 5-1 1/2"=1'-0" TYP. EXTERIOR COL. FTG.



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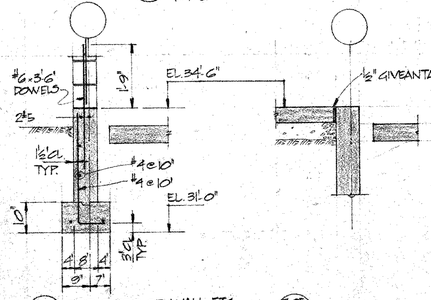
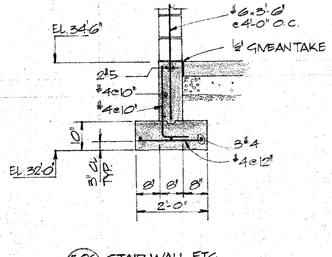


5/04 5-1 1/2"=1'-0" TYP. EXTERIOR WALL FTG.

5/05 5-1 1/2"=1'-0"



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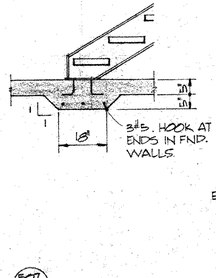

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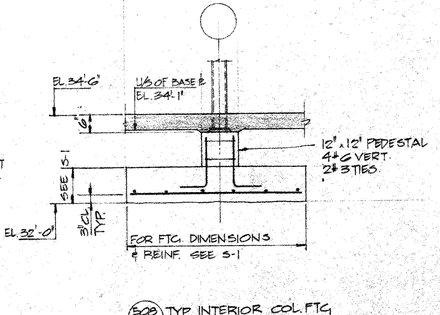

5/08 5-1 1/2"=1'-0" TYP. INTERIOR COL. FTG.

design group
ARCHITECTS
1489 MARINE DRIVE
WHITE ROCK, B.C.
V4B 1C2 536-2161

SAYERS ENGINEERING LIMITED
CONSULTING ENGINEERS
CIVIL • STRUCTURAL
VANCOUVER, B.C. TEL: 682-7284

70-172

Multi-purpose Curling Rink

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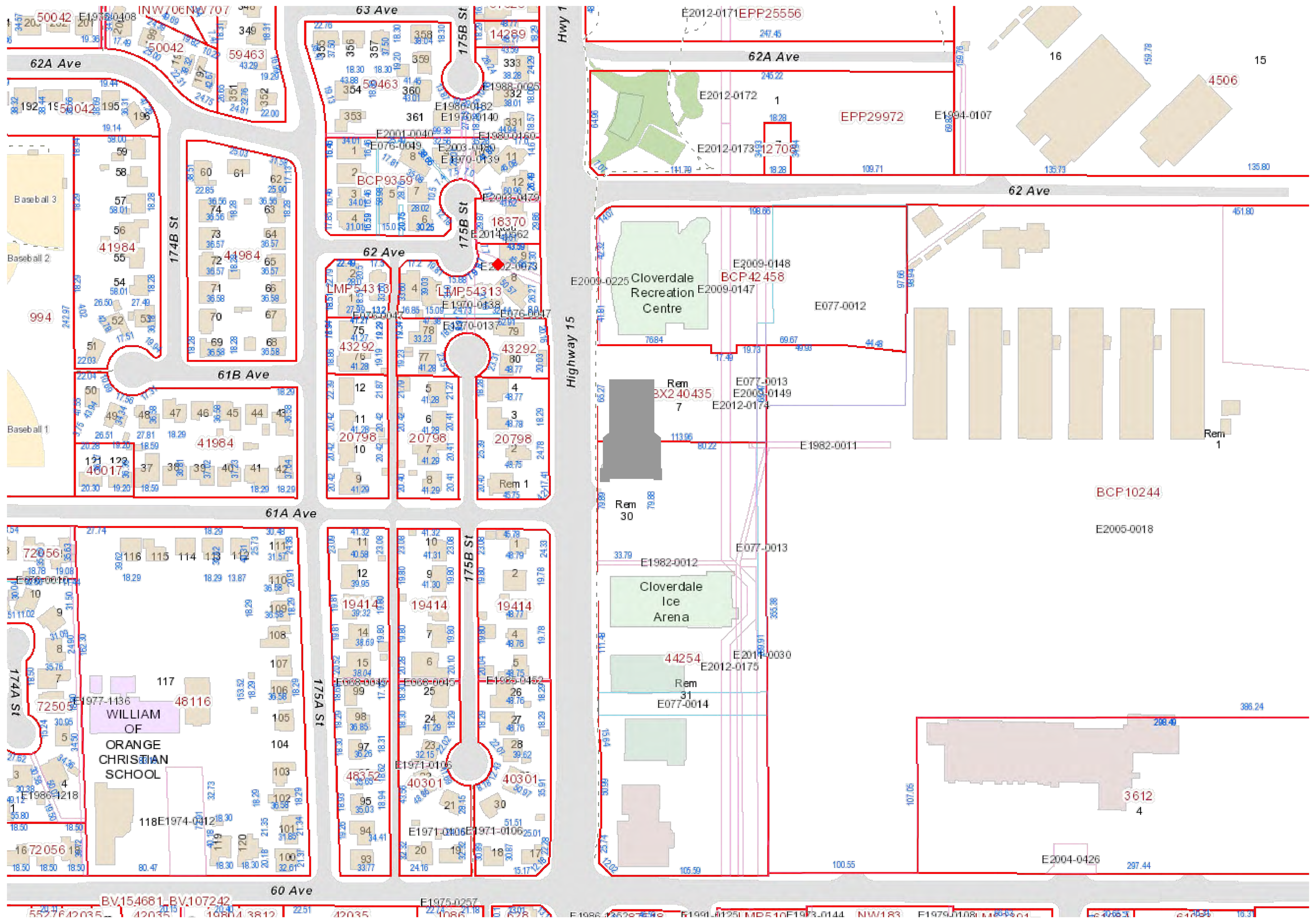
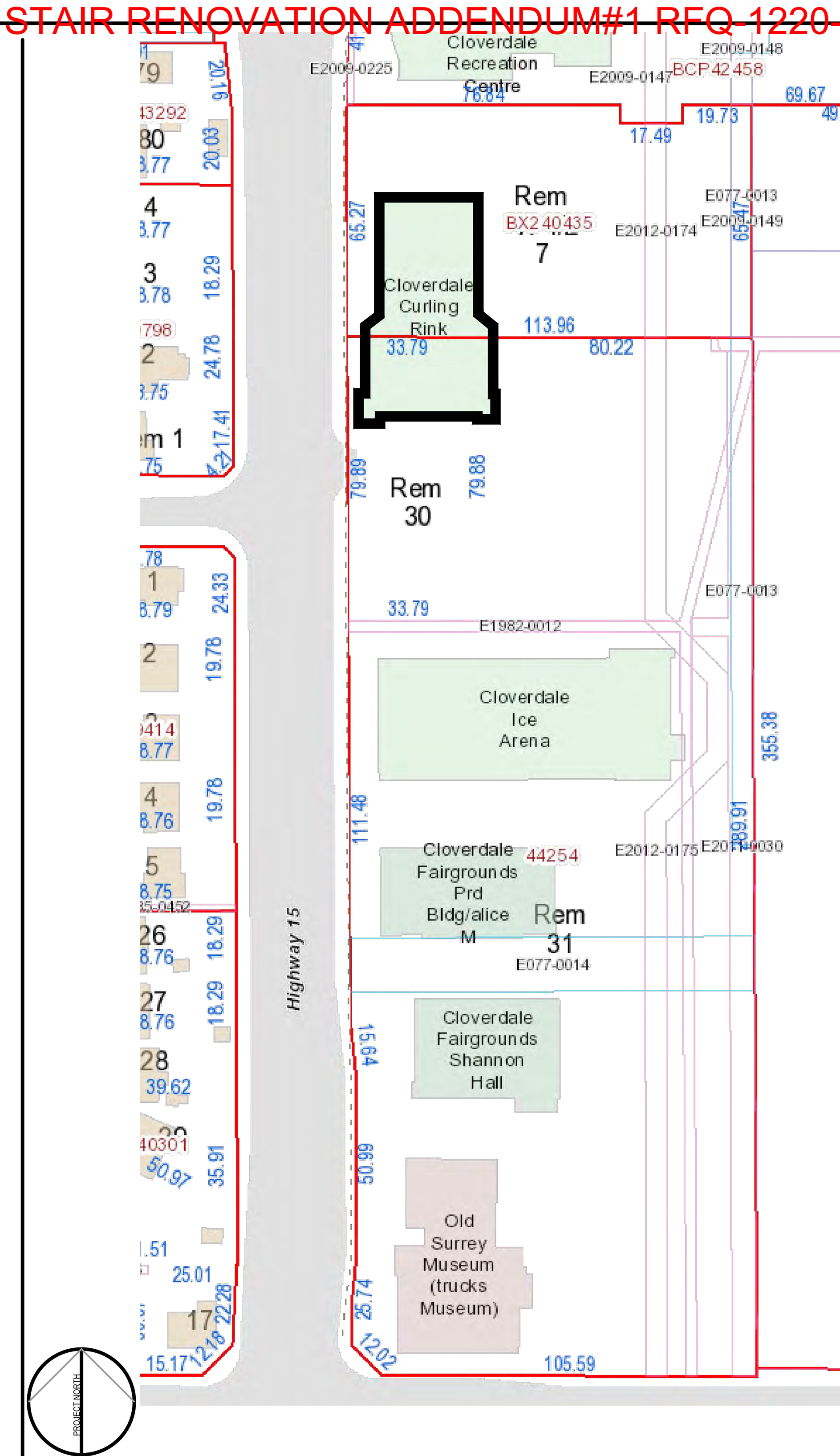
S5

OF 5



2 CONTEXT PLAN
A101 N.T.S.



1 SITE PLAN
A101 1:1500

1. GENERAL NOTES:
- 1.1. ALL CONSTRUCTION TO COMPLY WITH BRITISH COLUMBIA BUILDING CODE 2018, BC PLUMBING CODE, BC FIRE MARSHAL, BC WORKERS' COMPENSATION BOARD, NATIONAL BUILDING CODE OF CANADA, BC BOILER INSPECTOR, BC ELECTRICAL INSPECTOR, NATIONAL FIRE PROTECTION ASSOCIATION AND CITY OF SURREY AUTHORITIES HAVING LOCAL JURISDICTION.
- 1.2. COORDINATE SITE TRAFFIC AND ROAD ACCESS WITH CITY OF SURREY PRIOR TO COMMENCEMENT OF PROJECT.
- 1.3. COORDINATE BUILDING ACCESS AND CONSTRUCTION HOURS WITH CITY OF SURREY PRIOR TO COMMENCEMENT OF PROJECT.
- 1.4. COORDINATE HAZARDOUS MATERIAL ABATEMENT REQUIREMENTS WITH WCB PRIOR TO COMMENCEMENT OF PROJECT.
- 1.5. CONTRACTOR TO OBTAIN ALL APPLICABLE SUB-CONTRACTOR PERMITS, INSPECTIONS AND APPROVALS.
- 1.6. DURING THE BIDDING PERIOD IT IS THE RESPONSIBILITY OF GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS TO VERIFY ALL DIMENSIONS AND CONDITIONS AS SHOWN ON THESE DRAWINGS WITH ACTUAL SITE CONDITIONS. ANY DISCREPANCIES TO BE REPORTED TO THE ARCHITECT PRIOR TO COMMENCEMENT OF CONSTRUCTION AND/OR INSTALLATION. EXTRA COST OCCURRED DUE TO THESE DISCREPANCIES, WILL NOT BE ALLOWED.
- 1.7. EXISTING STRUCTURE & SERVICES TO BE ACCOUNTED FOR IN THE M&E INSTALLATION
- 1.8. CONTRACTOR TO CALL CONSULTANTS AND BUILDING INSPECTOR AND / OR GOVERNING AUTHORITY FOR INSPECTION AS NECESSARY - MINIMUM 48 HOURS NOTICE IS REQUIRED.
- 1.9. CONTRACTOR TO PROVIDE SHOP DRAWINGS TO THE CONSULTANTS FOR REVIEW FOR SPECIFIED ITEMS.
- 1.10. ADJUSTMENTS AND NOTES MADE ON SHOP DRAWINGS BY THE CONSULTANT ARE NOT INTENDED TO CHANGE THE CONTRACT PRICE. IF ADJUSTMENTS AFFECT THE VALUE OF WORK, THE CONTRACTOR TO STATE SUCH IN WRITING TO THE CONSULTANT PRIOR TO PROCEEDING WITH THE WORK.
- 1.11. ADJACENT SUITE SYSTEMS (PLUMBING, MECHANICAL & ELECTRICAL) ARE TO REMAIN INTACT AND FULLY OPERATIONAL AT ALL TIMES DURING THE PROJECT. IF THESE SYSTEMS ARE TO BE INTERRUPTED, PRIOR CONSENT MUST BE OBTAINED FROM THE BUILDING OWNER.
- 1.12. CONTRACTOR TO PROVIDE ADVANCED NOTIFICATION OF THE SERVICE INTERRUPTION.
- 1.13. PRIOR TO THE PLACEMENT OF ANY ORDERS, THE CONTRACTOR TO SUBMIT TO THE CONSULTANT FOR REVIEW, SAMPLES OF ALL FINISHES IN DUPLICATE. LABEL SAMPLES AS TO ORIGIN AND INTENDED USE IN THE WORK.
- 1.14. CONTRACTOR TO ALLOW FOR FINAL GENERAL CLEAN UP AT COMPLETION OF THE PROJECT. CLEANING TO INCLUDE ALL GLAZING ON THE EXTERIOR OF THE PROJECT.
- 1.15. CONTRACTOR TO KEEP UPDATED ARCHITECTURAL RED LINE DRAWING RECORD SET ON SITE AND TO PROVIDE AS-BUILT ARCHITECTURAL DRAWING SETS UPON COMPLETION OF THE PROJECT (CAD, PDF & 2XHARD-COPY).
- 1.16. CONTRACTOR TO PROVIDE ARCHITECTURAL OPERATION & MAINTENANCE MANUALS UPON COMPLETION OF THE PROJECT.

2. CONSTRUCTION
- 2.1. GENERAL CONTRACTOR TO COORDINATE THE SCOPE OF WORK OF THE ELECTRICAL, AND MECHANICAL CONTRACTORS AND HIS OWN WORK TO AVOID CONFLICTS IN THE PLACEMENT OF ARCHITECTURAL ELEMENTS.
- 2.2. ACCESS TO SPACES ADJACENT TO THE PROJECT SPACE TO BE COORDINATED THROUGH THE BUILDING OWNER.
- 2.3. WORKMANSHIP AND MATERIALS TO BE GUARANTEED FOR ONE YEAR FROM CONTRACTOR SUBSTANTIAL COMPLETION. ALL REMEDIAL WORK REQUIRED WILL BE PERFORMED AT NO COST TO THE OWNER.
- 2.4. CONTRACTOR TO CALL ALL REQUIRED SITE MEETINGS.
- 2.5. CONTRACTOR TO PATCH AND MAKE GOOD ALL EXISTING CONCRETE STRUCTURE, WALLS AND FLOORS WHERE DEMOLITION OR CONSTRUCTION PROCESS HAS OCCURRED.
- 2.3. VERIFY ALL DIMENSIONS INDICATED ON DRAWING SET WITH EXISTING CONDITIONS ON SITE PRIOR TO BID SUBMISSION.
- 2.4. DO NOT SCALE DRAWINGS.

3. DEMOLITION
- 3.1. REFER TO HAZMAT REPORT DATED JUNE 2015 AND MAY 2015 FOR HAZARDOUS MATERIAL LOCATION.
- 3.2. THE CONTRACTOR TO PROVIDE A FIRE SAFETY PLAN CONFORMING WITH THE BC FIRE CODE SECTION 2.14 (AS REQ'D BY BCBC2018 8.2) FOR REVIEW AND APPROVAL OF CITY OF SURREY FIRE DEPARTMENT PRIOR TO COMMENCEMENT OF DEMOLITION
- 3.3. THE CONTRACTOR TO SUBMIT PROPOSED DUST AND NOISE CONTROL MEASURES TO PROJECT MANAGER PRIOR TO COMMENCEMENT OF DEMOLITION.
- 3.4. THE CONTRACTOR TO SUBMIT DEMOLITION ACTIVITIES INDICATING THE FOLLOWING:
  - 3.4.1. INVENTORY OF ITEMS TO BE SALVAGED AND REMOVED BY CONTRACTOR DATES FOR SHUT-OFF, CAPPING AND CONTINUATION OF UTILITIES INVENTORY OF ITEMS TO BE SALVAGED AND REMOVED BY CONTRACTOR.
  - 3.4.2. INVENTORY OF ITEMS TO BE REMOVED BY OWNER.
  - 3.4.3. A RECORD (PHOTO OR VIDEO) OF THE AREA ADJOINING THE SPACE TO BE DEMOLISHED, SHOWING ITEMS THAT MIGHT BE MISCONSTRUED AS DAMAGE CAUSED BY DEMOLITION.
  - 3.4.4. DEMOLITION RECORD DWG'S AT PROJECT CLOSE-OUT, IDENTIFYING AND ACCURATELY LOCATING CAPPED UTILITIES AND OTHER SUBSURFACE STRUCTURAL, ELECTRICAL OR MECHANICAL CONDITIONS.
- 3.5. LANDFILL RECORDS INDICATING RECEIPT AND ACCEPTANCE OF HAZARDOUS WASTE BY A LANDFILL OR OTHER FACILITY AUTHORIZED TO ACCEPT HAZARDOUS WASTE
- 3.6. STOP WORK IMMEDIATELY IF UNIDENTIFIED HAZARDOUS MATERIALS ARE FOUND. CONTACT THE PROJECT MANAGER FOR DIRECTION ON HOW TO PROCEED.
- 3.7. REMOVE AND DISPOSE OF ALL ITEMS AS PER DRAWINGS. RECYCLE AS MANY ITEMS AS POSSIBLE TO LOCAL RECYCLING FACILITY.REMOVE EXISTING FIXTURES, EQUIPMENT, INTERIOR WALLS, CEILINGS, MEZZANINES ETC. AS REQUIRED TO ACCOMMODATE NEW LAYOUT.
- 3.8. REMOVE ALL DIRT AND DEBRIS FROM SITE. VACUUM CLEAN TO LEAVE ALL SURFACES FREE OF DEMOLITION AND CONSTRUCTION DUST AT THE END OF EACH WORK DAY. CONTRACTOR TO REMOVE ALL DEBRIS FROM SITE DAILY.
- 3.9. CONTRACTOR TO TERMINATE CAP POWER, IRRIGATION PIPING, VOICE AND DATA AS REQUIRED FOR DEMOLITION. ALL TERMINATIONS AND CAPPING TO BE DONE IN ACCORDANCE WITH CODE REQUIREMENTS. REMOVE TO JUNCTION-BOX WHEREVER POSSIBLE.
- 3.10. PATCH AND REPAIR REMAINING SURFACES WHERE DEMOLITION HAS OCCURRED. PATCHING TO BE COMPLETED TO THE POINT WHERE SURFACES ARE READY TO RECEIVE NEW APPLICATION OF PAINT.
- 3.11. AT LOCATIONS WHERE DOORS ARE BEING DEMOLISHED, DOOR LOCKS AND CYLINDERS TO BE CLEARLY MARKED WITH THE BUILDING NAME, CITY OF SURREY PROJECT NUMBER, ROOM NUMBER & DATE AND TURNED OVER TO THE BUILDING OWNER.

4. SUSTAINABILITY:
- **4.1. WASTE**
  - 4.1.1. DIVERT MIN 75% OF CONSTRUCTION WASTE FROM LANDFILL TO RECYCLING.
- **4.2. MATERIALS**
  - 4.2.1. RECLAIM AND REUSE EXISTING MATERIAL AND EQUIPMENT WHERE POSSIBLE.
  - 4.2.2. EXISTING MATERIALS OR PARTS NOT REUSED IN THIS PROJECT TO BE TURNED OVER TO CITY OF SURREY.
  - 4.2.3. USE MATERIALS WITH RECYCLED AND RECYCLABLE CONTENT.
  - 4.2.4. USE THIRD PARTY CERTIFIED GREEN/SUSTAINABLE MATERIALS.
- **4.3. AIR QUALITY**
  - 4.3.1. ALL DUCTS (SUPPLY AND EXHAUST) IN THE CONSTRUCTION AREA TO BE ISOLATED - CLOSE DAMPER &COVER DIFFUSER W. POLY.
  - 4.3.2. ALL ENTRY POINTS INTO AND OUT OF THE CONSTRUCTION AREA TO BE ACCESSED THROUGH POLY CURTAIN.

PLAN LEGEND:

Symbol	Description
W1	DENOTES WALL TYPE AS NOTED
	DENOTES EXISTING WALL
	DENOTES DEMO WALL
	DENOTES EXISTING DOOR AND FRAME
	DENOTES DEMO DOOR AND FRAME
CG	DENOTES CORNER GUARD
F.D.	DENOTES FLOOR DRAIN
BR	DENOTES BUMPER RAIL
FE	FIRE EXTINGUISHER CABINET
EP	DENOTES ELECTRICAL PANEL
EWS	DENOTES EYE WASH STATION
	DENOTES PRESSURE MONITOR PANEL
M	DENOTES GAS MANIFOLD
HB	DENOTES HOSE BIB
	DENOTES EMERGENCY SHOWER
X	OWNER SUPPLIED EQUIPMENT
X	EQUIPMENT IN CONTRACT
ROOM XXXX	DENOTES ROOM NAME AND ROOM NUMBER
1214	DENOTES DOOR NUMBER
CT-1/RB	DENOTES FINISH MATERIAL
3	DENOTES REVISION NUMBER

PROJECT DATA

CIVIC ADDRESS:
6142 176 STREET , SURREY, BC, V3S 4E7

LEGAL ADDRESS:
LOT 30 SECTION 8 TOWNSHIP 8 PLAN NWP44254 NWD PART NW 1/4, EXCEPT PLAN BCP17122.

CODE ANALYSIS
THE COMMENTS/FIGURES BELOW ARE PREPARED FOR THE PURPOSE OF THE APPROVAL AUTHORITY'S REVIEW. THE CONTRACTORS NEED TO REFER TO THE CONTRACT DOCUMENTS FOR CONSTRUCTION TYPES AND QUANTITIES. EXISTING BUILDING OCCUPANCY AND FIRE PROTECTION INFORMATION OBTAINED FROM CITY OF SURREY RECORDS DEPARTMENT DRAWINGS PREPARED BY PREVIOUS CONSULTANTS.

2ND FLOOR EXIT CAPACITY CALCULATION:
NUMBER OF EXITS = 2 (EXISTING) (3.4.2.1.(1))

EXISTING EXIT WIDTH STAIR#1	=	1,220mm (4'-0")
EXISTING EXIT WIDTH STAIR#2	=	1,830mm (6'-0")
TOTAL	=	3,050mm (10'-0")

EXIT DOOR WIDTH = 3.4.3.2(b)
OCCUPANT CALCULATION 3.1.17.1 (DINING, BEVERAGE & CAFETERIA SPACE)
2ND FLOOR LOUNGE OCCUPANT LOAD CALCULATION
332 SQR.M (3,570 SQ.FT) / 1.2 SQ.M PER PERSON = 276 PEOPLE
PROPOSED OCCUPANT LOAD = 280 PEOPLE (3.4.3.2 (1b))
EXIT WIDTH REQUIREMENT FOR 280 PEOPLE = 2,240mm (7'-4")

BUILDING CODE :
APPLICABLE BUILDING CODE: BCBC 2018 PART 3

LOCAL AUTHORITY :
CITY OF SURREY PLANNING AND DEVELOPMENT,
13450 - 104 AVENUE, SURREY, B.C. V3T 1V8, TEL:604.591.4441

1.0 SCOPE OF WORK :
- REPLACE EXISTING EXIT STAIR ON SOUTH WEST CORNER

2.0 BUILDING OCCUPANCY CLASSIFICATION :
GROUP A DIVISION 3 ASSEMBLY (ARENA)

3.0 FIRE PROTECTION/EMERGENCY SERVICES PROVIDED :

EXISTING FIRE ALARM SYSTEM	-	UNCHANGED
SPRINKLERED	-	NO
MONITORED	-	YES
NON-COMBUSTIBLE CONSTRUCTION	-	YES

4.0 EXISTING BUILDING FLOOR AREA :

GROUND FLOOR	= 1,875 SQR.M	(20,177 SQR.FT)
SECOND FLOOR	= 530 SQR.M	(5,700 SQR.FT)
Total	= 2,405 SQR.M	(25,877 SQR.FT)

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LIST OF DRAWINGS

ARCHITECTURAL
A101 SITE PLAN
A111 SPECIFICATIONS
A112 SPECIFICATIONS
A201 DEMOLITION PLANS
A211 GROUND FLOOR PLAN & WEST ELEVATION
A212 SECOND FLOOR PLAN & SOUTH ELEVATION
A351 DETAIL PLANS
A352 DETAILS & STAIR SECTION

STRUCTURAL
S101 GENERAL NOTES
S111 TABLES
S201 PLANS
S202 BRACE ELEVATIONS
S401 CONCRETE AND MASONRY DETAILS
S501 STEEL DETAILS

SEPARATELY ISSUED:
SURE HAZMAT AND TESTING - BUILDING MATERIAL INVESTIGATION REPORT DATED APRIL 18TH, 2019

BRAUN GEOTECHNICAL REPORT DATED NOVEMBER 2015

NO	DATE	REVISIONS
3	22MAY2019	ISSUED FOR TENDER ADDENDUM #1
2	06MAY2019	ISSUED FOR TENDER
1	01MAY2019	ISSUED FOR BUILDING PERMIT

Art Cader Architect Inc.
212-1807 Maritime Mews
Vancouver, B.C. Canada, V6H 3W7
Tel (604) 558-2782 ; Fax (866) 351-8167
www.acarch.ca

CITY OF SURREY
the future lives here.

CLOVERDALE CURLING RINK STAIR RENOVATION
6142 176 STREET, SURREY, BC, V3S 4E7

SITE PLAN

A101

DRAWN	SCALE	PROJECT	DATE
LSL	AS NOTED	18SUR05	NOV.2018

OUTLINE SPECIFICATION:

DIVISION 0 - BIDDING & CONTRACT REQUIREMENTS

1. THE PROJECT WILL BE TENDERED TO A PRE-SELECTED LIST OF GENERAL CONTRACTORS.
2. THE FORM OF CONTRACT WILL BE THE CANADIAN CONSTRUCTION DOCUMENT CCDC2 - (2008) FOR A STIPULATED LUMP SUM CONTRACT, TOGETHER WITH ANY OWNER SUPPLEMENTARY CONDITIONS OR CITY OF SURREY SHORT-FORM CONTRACT.
3. THE PROJECT WILL BE CONSTRUCTED UNDER THE BC BUILDING CODE 2018, THE NATIONAL BUILDING CODE 2015, AND ALL OTHER PROVINCIAL CODES AND STANDARDS AS APPLICABLE FOR THE LOCATION OF THE BUILDING.

DIVISION 1 - GENERAL REQUIREMENTS

1. CONTRACTOR RESPONSIBILITIES: THE CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY AND ACTUAL PLACEMENT OF THE BUILDING. AT SUBSTANTIAL PERFORMANCE OF THE PROJECT THE CONTRACTOR SHALL SUBMIT TO THE OWNER AN AS-BUILT SURVEY DRAWING PREPARED BY A BC REGISTERED LAND SURVEYOR INDICATING ALL AS-BUILT CONDITIONS, INCLUDING BUILDING LOCATIONS AND ENTRY POINTS OF UNDERGROUND SERVICES.
   - 1.1. THE CORRECT SETTING OUT OF THE WORK SHALL REST SOLELY WITH THE CONTRACTOR WHO WILL BE RESPONSIBLE FOR SAME AND SHALL MAKE GOOD AT THEIR OWN EXPENSE ANY ERRORS CAUSED BY THEIR NEGLIGENCE OR WORKMANSHIP. THE CONTRACTOR SHALL LOCATE AND MAINTAIN MAIN REFERENCE POINTS AND BE RESPONSIBLE FOR MAIN GRID LINES AND ELEVATIONS.
   - 1.2. THE CONTRACTOR SHALL ARRANGE FOR THE PROVISION OF THE MAIN BENCHMARK, PROPERTY LINES AND OTHER MAIN DATUM POINTS SUFFICIENT TO SET OUT THE BASIC GRID OF THE BUILDING. THE CONTRACTOR SHALL COORDINATE THE WORK OF ALL SUBCONTRACTORS WITH EFFICIENT AND CONTINUOUS SUPERVISION.
   - 1.3. THE RESPONSIBILITY AS TO WHICH SUBCONTRACTOR PROVIDES REQUIRED WORK TO BE BUILT-IN OR SUPPLIED RESTS ENTIRELY WITH THE CONTRACTOR. DIFFERENCES IN INTERPRETATION OF THE SPECIFICATIONS OR DRAWINGS AS TO WHICH TRADE SHALL PROVIDE CERTAIN WORK SHALL NOT BE GROUNDS FOR PAYMENT OF EXTRAS.
2. CONSTRUCTION SCHEDULE: THE CONTRACTOR WILL PREPARE A SCHEDULE INDICATING THE SEQUENCE OF OPERATIONS PROPOSED FOR COMPLETING THE PROJECT BY THE DATE STATED IN THE AGREEMENT, AND INCLUDE ANY SUCH INTERMEDIATE DATES FOR SPECIFIC PORTIONS OF THE WORK TO BE COMPLETED AS REQUIRED BY THE OWNER.
   - 2.1. THE CONTRACTOR SHALL MAKE WHATEVER REVISIONS TO THE SCHEDULE THE CONSULTANT AND OWNER MAY REASONABLY REQUIRE AND WHEN REVIEWED, SUCH CHART OR SCHEDULE SHALL BECOME THE APPROVED CONSTRUCTION SCHEDULE REFERRED TO IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THE APPROVED SCHEDULE AND DIRECT OWN AND SUBCONTRACTOR'S OPERATIONS IN CONFORMITY THEREWITH.
   - 2.2. THE CONTRACTOR SHALL DELIVER TO THE CONSULTANT AT THE END OF EACH CALENDAR MONTH WITH THE APPLICATION FOR PAYMENT A PROJECT STATUS REPORT DERIVED FROM EVALUATION OF THE SCHEDULE IN A FORMAT ACCEPTABLE TO THE CONSULTANT. IN ORDER FOR THE CONSULTANT TO MAKE PROPER EVALUATION OF THESE DRAWS IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE APPROPRIATE BACK-UP DOCUMENTATION IN A FORMAT ACCEPTABLE TO THE CONSULTANT.
   - 2.3. THE CONTRACTOR SHALL MAINTAIN COMPLETE AND ACCURATE RECORDS OF THE DAILY PROGRESS OF WORK.
3. SUBMITTALS: ALL SHOP DRAWINGS, SAMPLES, COLOUR CHARTS, BROCHURES, EQUIPMENT DETAILS, TEMPLATES, INSTALLATION INSTRUCTIONS, OPERATING INSTRUCTIONS AND THE LIKE REQUIRED BY THE SPECIFICATIONS, SHALL BE SUBMITTED TO THE CONSULTANT THROUGH THE CONTRACTOR'S OFFICE, UNLESS SPECIFIED OTHERWISE.
   - 3.1. THE CONTRACTOR SHALL MAKE SUBMITTALS SPECIFIED IN THIS SECTION TO THE CONSULTANT UNLESS OTHERWISE SPECIFIED, WITH ADDITIONAL SUBMISSIONS MADE IN A MANNER THEY SO DIRECT, TO OTHER PARTIES INVOLVED WITH CONSTRUCTION OF THE PROJECT AS THEIR INTERESTS ARE CONCERNED.
   - 3.2. THE CONTRACTOR SHALL REVIEW SUBMITTALS PRIOR TO SUBMISSION TO THE CONSULTANT. THIS REVIEW REPRESENTS THAT NECESSARY REQUIREMENTS HAVE BEEN DETERMINED AND VERIFIED, OR WILL BE, AND THAT EACH SUBMITTAL HAS BEEN CHECKED AND COORDINATED WITH THE REQUIREMENTS OF THE WORK AND THE CONTRACT DOCUMENTS. SUBMITTALS NOT SUBSTANTIALLY COMPLETE AND CORRECT, NOR STAMPED, SIGNED, DATED AND IDENTIFIED BY THE CONTRACTOR, WILL BE RETURNED WITHOUT BEING EXAMINED AND SHALL BE CONSIDERED REJECTED.
   - 3.3. SHOP DRAWINGS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING AND FOR INSTRUCTING SUBCONTRACTORS AND SUPPLIERS TO SUBMIT THROUGH THEIR OFFICE TO THE CONSULTANT, EIGHT (8) BLACK LINE PRINTS OF ALL SHOP DRAWINGS AND REQUIRED RECORD DRAWINGS. ANY COMMENTS, ADJUSTMENTS OR REVISIONS TO BE DRAWN TO THE CONTRACTOR'S OR SUPPLIERS' ATTENTION SHALL BE MADE ON THE PRINTS BY THE CONSULTANT AND "RETURNED TO THE CONTRACTOR FOR DISTRIBUTION. RE-SUBMISSION OF SHOP DRAWINGS OR PRINTS MAY BE REQUIRED BY THE CONSULTANT AT THEIR DISCRETION. SHOP DRAWINGS WHICH REQUIRE EXTENSIVE CORRECTION WILL BE SENT BACK FOR REVISIONS AND RE-SUBMISSION WITHOUT REVIEW.
   - 3.4. SAMPLES: WHERE REQUIRED BY A PARTICULAR SPECIFICATION SECTION OR BY THE CONSULTANT SAMPLES SHALL BE SUBMITTED IN DUPLICATE FOR REVIEW AND ANY REQUIRED TESTING. SAMPLES TO BE THE MATERIALS SPECIFIED OR THE PROPERLY REVIEWED ALTERNATIVES; NO DEVIATION PERMITTED AFTER REVIEW OF SAMPLES.
   - 3.5. AT SUBSTANTIAL PERFORMANCE OF THE PROJECT THE CONTRACTOR SHALL SUBMIT TO THE CONSULTANT FOR SUBMISSION TO THE OWNER, OPERATING AND MAINTENANCE MANUALS, AS REQUIRED BY CITY OF SURREY REQUIREMENTS.
   - 3.6. MANUALS SHALL CONTAIN OPERATIONAL INFORMATION ON EQUIPMENT, CLEANING AND LUBRICATION SCHEDULES, FILTERS, OVERHAUL AND ADJUSTMENT SCHEDULES, SPARE PARTS SUPPLIERS, AND SIMILAR MAINTENANCE INFORMATION. INSTRUCTIONS IN THIS MANUAL SHALL BE IN SIMPLE LANGUAGE SO AS TO GUIDE THE OWNER IN THE PROPER OPERATION AND MAINTENANCE OF BUILDING SYSTEMS COMPONENTS.
   - 3.7. ADMINISTRATIVE DOCUMENTATION: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ARRANGING, OBTAINING, COLLECTING, COMPILING ALL CLEARANCES, CERTIFICATES, SUB-CONTRACTOR PERMITS, GUARANTEES, MAINTENANCE MANUALS, RECORD DRAWINGS ETC., AS REQUIRED WITHIN THE VARIOUS SECTIONS OF THE SPECIFICATIONS OR BYLAWS. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING REQUIREMENT OR THE GENERAL CONDITIONS OF THE CONTRACT, THE FOLLOWING IS A CONSOLIDATED CHECKLIST FOR CONVENIENCE. THE CONTRACTOR SHALL FORWARD TO THE CONSULTANT.
4. QUALITY CONTROL: ALL EQUIPMENT AND MACHINERY SHALL BE OF A SIZE AND TYPE SUITABLE FOR THE WORK TO BE PERFORMED, IN FIRST CLASS WORKING ORDER AND OPERATED BY SKILLED PERSONS. ALL WORK SHALL BE DONE BY MECHANICS SKILLED IN THE TYPE OF WORK SPECIFIED.
   - 4.1. FOR THE PURPOSES OF QUALITY CONTROL, SPECIFIED PARTS OF THE WORK WILL BE SUBJECT TO ON-SITE TESTING AND INSPECTION AND/OR LABORATORY TESTING PROCEDURES DURING CONSTRUCTION BY INDEPENDENT TESTING AGENCIES APPOINTED AND PAID FOR BY THE CONTRACTOR.
   - 4.2. WRITTEN REPORTS ON EACH TEST OR EACH SERIES OF TESTS/INSPECTIONS WILL BE PREPARED BY THE TESTING AGENCY AND SUBMITTED SIMULTANEOUSLY TO THE CONTRACTOR AND THE CONSULTANT.
   - 4.3. THE CONTRACTOR SHALL CO-OPERATE AND ASSIST TESTING FIRMS TO TAKE TESTS AND TEST PROCEDURES ON THE VARIOUS PARTS OF THE WORK, INCLUDING SUFFICIENT PRIOR NOTICE OF TESTING TIMES. SCHEDULING AND EXPEDITING OF TESTING PROCEDURES WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
   - 4.4. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE INSPECTION/TESTING AGENCY AND CONSULTANT IN ADVANCE OF THE REQUIREMENT FOR TESTS IN ORDER THAT ATTENDANCE ARRANGEMENTS CAN BE MADE.
   - 4.5. THE CONTRACTOR SHALL REMOVE DEFECTIVE WORK, WHETHER THE RESULT OF POOR WORKMANSHIP, USE OF DEFECTIVE PRODUCTS OR DAMAGE, AND WHETHER INCORPORATED IN THE WORK OR NOT, WHICH HAS BEEN REJECTED BY THE CONSULTANT AS FAILING TO CONFORM TO THE CONTRACT DOCUMENTS. REPLACE OR RE-EXECUTE ANY SUCH REJECTED WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
5. TEMPORARY SERVICES & FACILITIES: HOARDING: THE CONTRACTOR SHALL PROVIDE, MAINTAIN, RELOCATE OR MODIFY AS REQUIRED, A COMBINATION OF A MINIMUM 8'-0" HIGH PLYWOOD AND CHAIN-LINK SITE HOARDING TO PROTECT THE PUBLIC, WORKERS, AND PUBLIC AND PRIVATE PROPERTY FROM INJURY OR DAMAGE, AND SHALL BE COMPLETE WITH LIGHTING, WARNING LIGHTS , SIGNAGE ETC, TO THE REQUIREMENTS OF THE LOCAL AUTHORITY.
   - 5.1. THE CONTRACTOR SHALL PROVIDE, MAINTAIN AND RELOCATE AS NECESSARY, ALL PERIMETER GUARD RAILS AND/OR BARRICADES TO THE BUILDING AND AT ALL FLOOR OPENINGS ETC. WITHIN THE BUILDING. SUCH PROTECTION WILL BE TO THE REQUIREMENTS OF WORKSAFEBC.
   - 5.2. THE CONTRACTOR SHALL PROVIDE WEATHER-TIGHT CLOSURES TO UNFINISHED DOOR AND WINDOW OPENINGS, AND OTHER OPENINGS IN FLOORS AND ROOFS TO MAINTAIN ENVIRONMENTAL CONDITIONS FOR WORK WITHIN THE ENCLOSURE AND TO PREVENT DAMAGE TO STORED MATERIALS. THE CONTRACTOR SHALL CLOSE OFF FLOOR AREAS WHERE WALLS ARE NOT FINISHED, SEAL OFF OTHER OPENINGS AND ENCLOSE BUILDING INTERIOR WORK AREAS FOR TEMPORARY HEAT.
   - 5.3. TOILET FACILITIES: THE CONTRACTOR SHALL PROVIDE CHEMICAL NON-FLUSH TOILETS SUFFICIENT FOR ALL PERSONS ON THE SITE; ENCLOSED, WATERPROOF, KEPT SANITARY AND FREE FROM ODOUR TO THE PROVINCIAL HEALTH DEPARTMENT AND/OR OTHER HEALTH AUTHORITIES, AND SHALL REMOVE TOILETS AND DISINFECT AREA AT COMPLETION OF THE WORK
   - 5.4. FIRST AID: THE CONTRACTOR WILL ARRANGE FOR THE PROVISION OF FIRST AID FACILITIES AND AN ACCIDENT PREVENTION PROGRAM TO THE REQUIREMENTS OF WORKSAFEBC.
   - 5.5. TEMPORARY WATER SUPPLY: THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE LOCAL AUTHORITY AND PAY ALL COSTS TO OBTAIN CONTINUOUS SUPPLY OF POTABLE WATER FOR CONSTRUCTION USE.
   - 5.6. TEMPORARY HEAT & ENCLOSURE: THE CONTRACTOR WILL PROVIDE AND PAY ALL COSTS FOR A TEMPORARY GENERAL HEATING SYSTEM FOR THE BUILDING.
   - 5.7. TEMPORARY VENTILATION: THE CONTRACTOR SHALL PROVIDE AND PAY ALL COSTS TO VENTILATE HEATED AREAS AND KEEP BUILDING FREE OF EXHAUST OR COMBUSTION GASES.
   - 5.8. TEMPORARY POWER: THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE UTILITY COMPANY AND PAY ALL COSTS FOR TEMPORARY ELECTRIC SERVICE REQUIRED FOR THE PERFORMANCE OF THE WORK BY THEIR OWN FORCES AND BY THOSE FORCES OF ALL SUBCONTRACTORS ON THE SITE.
   - 5.9. TEMPORARY LIGHTING: THE CONTRACTOR SHALL PROVIDE AND PAY ALL COSTS FOR TEMPORARY LIGHTING FOR THE BUILDING WHILE UNDER CONSTRUCTION.
   - 5.10. TEMPORARY DRAINAGE & DE-WATERING: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND PAY ALL COSTS FOR THE PROVISION OF ALL TEMPORARY DRAINAGE FROM BUILDING AND SITE, UNTIL SUCH TIME AS THE PERMANENT DRAINAGE FACILITIES ARE CONNECTED.
   - 5.11. SITE SECURITY: THE CONTRACTOR SHALL PROVIDE TWENTY-FOUR (24) HOUR SECURITY SURVEILLANCE OF THE SITE AND MATERIALS BY EITHER ON-SITE SECURITY PERSONNEL OR CAMERAS CONNECTED TO A SECURITY MONITORING STATION.
6. MATERIALS & EQUIPMENT: MATERIALS SHALL BE PROTECTED FROM DAMAGE DURING HANDLING, STORAGE AND INSTALLATION. MATERIALS SHALL BE STORED IN DRY, WEATHER- TIGHT ENCLOSURES. CEMENTITIOUS MATERIALS SHALL BE STORED CLEAR OF THE EARTH ON TIGHT, WOODEN PLATFORMS AND COVERED WITH TARPAULINS DURING INCLEMENT WEATHER, IF EXPOSED TO SAME. METALS SHALL BE PROTECTED AGAINST CORROSION AND BENDING. OTHER MATERIALS SHALL BE PROTECTED AGAINST DAMAGE, DIRT OR DAMPNESS.
   - 6.1. THE CONTRACTOR SHALL IMMEDIATELY INFORM THE CONSULTANT SHOULD SUPPLIER'S CONFIRMATION OF DELIVERY DATES INDICATE THAT CONSTRUCTION COMPLETION MAY BE DELAYED. IN THE EVENT OF FAILURE TO NOTIFY THE CONSULTANT, SHOULD IT SUBSEQUENTLY APPEAR THAT WORK MAY BE DELAYED FOR SUCH REASON THE CONSULTANT RESERVES THE RIGHT TO SUBSTITUTE MORE READILY AVAILABLE MATERIAL OF SIMILAR CHARACTER, AT NO COST TO THE OWNER.
   - 6.2. WORKMANSHIP: WORKMANSHIP SHALL BE THE BEST QUALITY, EXECUTED BY WORKERS EXPERIENCED AND SKILLED IN THE RESPECTIVE DUTIES FOR WHICH THEY ARE EMPLOYED. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CONSULTANT IF REQUIRED WORK IS SUCH AS TO MAKE IT IMPRACTICAL TO PRODUCE REQUIRED RESULTS. SUBCONTRACTORS SHALL NOT EMPLOY ANY UNFIT PERSON OR ANYONE UNSKILLED IN THEIR REQUIRED DUTIES.
7. PROJECT CLOSE-OUT:: THE CONTRACTOR SHALL ARRANGE TO COMPLETELY "HOUSECLEAN" THE INTERIOR AND EXTERIOR OF THE CONSTRUCTION JUST PRIOR TO OCCUPANCY. SUBCONTRACTORS SHALL USE ONLY THOSE CLEANING MATERIALS AS RECOMMENDED BY THE MANUFACTURER OF THE SURFACES TO BE CLEANED AND BE COMPATIBLE WITH THE CLEANING MATERIALS TO BE USED BY THE OWNER FOLLOWING COMPLETION OF THE WORK.
   - 7.1. OPERATING AND MAINTENANCE MANUALS SHALL BE PREPARED BY EXPERIENCED AND QUALIFIED STAFF OR CONSULTANTS. ACCEPTANCE OF THE MAINTENANCE MANUALS SHALL BE SUBJECT TO THE REVIEW AND APPROVAL OF THE CONSULTANT.
   - 7.2. INSPECTION & TAKEOVER PROCEDURES: PRIOR TO APPLICATION FOR CERTIFICATE OF SUBSTANTIAL PERFORMANCE OF THE WORK THE CONTRACTOR SHALL CAREFULLY INSPECT THE WORK AND ENSURE IT IS COMPLETE, THAT MAJOR AND MINOR CONSTRUCTION DEFICIENCIES ARE COMPLETE AND/OR CORRECTED, AND THE BUILDING IS CLEAN AND IN CONDITION FOR OCCUPANCY. OBTAIN AND SUBMIT TO THE CONSULTANT ALL "CERTIFICATES OF OCCUPANCY" OR "CERTIFICATES OF APPROVAL" SUCH AS MAY BE ISSUED BY BUILDING, PLUMBING, ELECTRICAL, HEALTH OR FIRE DEPARTMENTS, OR BY ANY OTHER INSPECTION AUTHORITIES HAVING JURISDICTION OVER THE SITE AND PROJECT.
   - 7.3. LETTERS OF ASSURANCE: REGISTERED PROFESSIONAL ENGINEERS WHO SIGN AND SEAL SHOP DRAWINGS (WHERE CALLED FOR) SHALL PERFORM SUFFICIENT FIELD REVIEWS IN ORDER TO ALLOW THEM TO PROVIDE A LETTER OF PROFESSIONAL ASSURANCE AFTER COMPLETION OF THE WORK GIVING ASSURANCE THAT THE WORK HAS BEEN INSTALLED IN GENERAL CONFORMANCE WITH THE SEALED SHOP DRAWINGS. WRITTEN INSPECTION REPORTS OF FIELD REVIEWS SHALL BE SUBMITTED TO THE CONSULTANT PROMPTLY AS THE FIELD REVIEWS ARE MADE.

DIVISION 2 - SITEWORK

1. CLEARING & GRUBBING: DO ALL CLEARING AND GRUBBING AT THE SITE, ALL SITE CLEARING AND THE REMOVAL OF ANY LOCALLY QUARRIED ROCK FILLS AND UNDERLYING ORGANIC LADEN SOILS, LARGE ROOTS AND OTHER FOREST DEBRIS, AND ANY OTHER UNSUITABLE INTER-BEDDED GRANULAR DEPOSITS AS DESCRIBED IN THE SOILS REPORT.
2. EXCAVATION. SHORING & BACKFILL: EXCAVATION AND SHORING WILL BE REQUIRED FOR UTILITY TRENCHES AND PITS FOR PLUMBING AND ELECTRICAL SERVICES AND BACKFILL AFTER COMPLETION OF THE EXCAVATION. BACKFILL SHALL CONFORM TO ASTM D698-91TEST METHODS FOR LABORATORY COMPACTION, CHARACTERISTICS OF SOIL USING STANDARD EFFORT; ASTM D1557 TEST METHODS FOR LABORATORY COMPACTION AND CHARACTERISTICS OF SOIL USING MODIFIED EFFORT. REFER TO THE SOILS REPORT FOR COMPACTION REQUIREMENTS.
   - 2.1. BACKFILL & FILL: SHALL BE FREE DRAINING GRANULAR FILL MATERIAL 75 MM (3") MINUS, CONTAINING NOT MORE THAN 5%, BY DRY WEIGHT PASSING THE 0.075 (#200) SIEVE AND CONFORMING TO REQUIREMENTS OF THE CURRENT MASTER MUNICIPAL SPECIFICATIONS.
   - 2.2. DRAINS TILES: SHALL CONFORM TO CAN/CSA-8182.1-M92, AND SHALL BE 152 MM (6") PERFORATED PIPE AND FITTINGS, OR AS INDICATED ON THE ARCHITECTURAL AND MECHANICAL DRAWINGS. (REFER TO SOILS REPORT AND ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SITE DRAINAGE REQUIREMENTS). DRAIN TILES SHALL BE INSTALLED IN DRAIN GRAVEL WITH FILTER FABRIC AROUND DRAIN TILES AND SHALL BE LOCATED ON THE NORTH SIDE OF THE BUILDING ONLY WITHIN A RECESSED FRENCH DRAIN TO DIVERT SURFACE WATER RUN-OFF AS DETAILED ON THE ARCHITECTURAL DRAWINGS.
   - 2.3. DRAIN GRAVEL: SHALL BE CLEAN 19 MM (3/4") MINUS AND FINE 4.75 MM (3/16") MINUS TORPEDO GRAVEL, AS PER THE GRADATIONS IN THE MASTER MUNICIPAL SPECIFICATIONS FOR DRAIN ROCK.
   - 2.4. GRAVEL ACCESS ROAD & PARKING AREAS: SHALL BE CLEAN CRUSHED 19 MM (3/4") MINUS WELL GRADED DRAINING FREE GRANULAR MATERIAL CONTAINING NOT MORE THAN 5% PASSING THE 0.075 MM (#200) SIEVE, AND CONFORMING TO THE REQUIREMENTS OF THE CURRENT MASTER MUNICIPAL SPECIFICATIONS. GRAVEL UNDER THE BUILDING SHALL BE LAID OVER 10 MIL POLYETHYLENE SHEET AS A ROOT INHIBITOR.
   - 2.5. FILTER FABRIC: AROUND DRAIN GRAVEL AT FOOTING DRAINS, SHALL BE HEAT BONDED WOVEN POLYPROPYLENE FABRIC; MIRAFI P-150 FILTER FABRIC AS MANUFACTURED BY DOMINION TEXTILE; TERRAFIX 270R FABRIC; OR NILEX C-14 FILTER FABRIC AS MANUFACTURED BY NILEX GEOTECHNICAL PRODUCTS. FILTER FABRIC SHALL BE PLACED ONLY WHERE DIRECTED BY THE GEOTECHNICAL CONSULTANT.
   - 2.6. ROUGH GRADING: ROUGH GRADING OF THE SITE TO FINAL SUB-GRADE FOR FINISHED SURFACES.
   - 2.7. SEDIMENT CONTROL:(IF REQUIRED), TO TRAP SEDIMENTS SHALL BE AS DESIGNED BY THE CIVIL CONSULTANT TO MEET THE REQUIREMENTS OF THE LOCAL AUTHORITY, AND ALL OTHER PROVINCIAL AND FEDERAL REQUIREMENTS FOR ENVIRONMENTAL PROTECTION.

DIVISION 3 - CONCRETE

1. REINFORCED CONCRETE PADS: FOR SUPPORT OF ROOF EXTENSION SUPPORT POSTS WILL BE SET ON TOP OF STEEL PILES AS SPECIFIED UNDER DIVISION 5.
2. REFER TO THE DETAILS ON THE ARCHITECTURAL AND STRUCTURAL DRAWINGS AND THE STRUCTURAL SPECIFICATIONS.
3. CONCRETE SHALL BE MIXED ON SITE DUE TO THE EXTENSIVE TRAVEL DISTANCE TO THE NEAREST CONCRETE MANUFACTURING PLANT.

DIVISION 5 - STEELWORK

1. STRUCTURAL OR SEMI-STRUCTURAL MEMBERS SHALL CONFORM TO CAN/CSA-S16.1-94. STEEL POSTS SHALL CONFORM TO THE SEISMIC REQUIREMENTS OF THE BC BUILDING CODE 2018 AND THE NATIONAL BUILDING CODE 2015.
2. WELDING (IF REQUIRED)SHALL CONFORM TO DESIGN AND PROCEDURE REQUIREMENTS OF CSA STANDARD W59-M1989 (R2001). ALL MEMBERS OF ITEMS SUBJECT TO LOADINGS OR STRESS SHALL BE FABRICATED BY AN OPERATOR QUALIFIED UNDER CSA W47.1-92 (R2001) WELDING QUALIFICATION CODE.
3. MISCELLANEOUS METALS: PROVIDE ALL MISCELLANEOUS METALWORK, SEISMIC BRACING BRACKETS, CHANNELS, ANGLES AND FASTENINGS AS REQUIRED FOR ARCHITECTURAL WOODWORK, STORE ROOM SHELVING, SUPPORT OF SLIDING PARTITION, AND OTHER ITEMS OF WORK AS INDICATED ON THE DRAWINGS.

DIVISION 6 - WOOD & PLASTICS

1. ROUGH CARPENTRY: ROUGH CARPENTRY INCLUDING; FRAMING LUMBER STUDS, PLATES, ROOF TRUSSES, JOISTS, BEAMS, STRAPPING, AND PLYWOOD SHEATHING ETC SHALL BE AS DETAILED ON THE DRAWINGS. ROUGH FRAMING MEMBERS IN CONTACT WITH THE GROUND OR CONCRETE SHALL BE PRESSURE TREATED WITH WOOD PRESERVATIVE. ALL DIMENSIONAL LUMBER SHALL BE GRADED ACCORDING TO THE NATIONAL LUMBER GRADING AUTHORITY RULES FOR DOUGLAS FIR, PACIFIC COAST HEMLOCK AND WESTERN RED CEDAR. SIZE, GRADING AND INSPECTION SHALL CONFORM TO CSA 0141. SPECIES GROUPS TO CSA 086.1.REFER TO THE STRUCTURAL DRAWINGS AND OUTLINE SPECIFICATIONS FOR DIMENSIONS AND PERFORMANCE CRITERIA OF THE WOOD FRAMING COMPONENTS.
2. PLYWOOD SHEATHING:
   - 2.1. WALL SHEATHING: SHALL BE EXTERIOR TYPE CONFORMING TO CSA 0141. SIZE 4'-0" X 8'-0" X ⅜" (1220 X 2440 X 19 MM) SHEETS, G1S DOUGLAS FIR PLYWOOD WITH SQUARE EDGES FOR WALL SHEATHING. SCREEN VENTS TO AIR SPACE CAVITIES SHALL BE GALVANIZED OR FIBREGLASS MESH. (REFER TO WALL ASSEMBLIES FOR LOCATIONS).
   - 2.2. ROOF SHEATHING: ROOF SHEATHING SHALL BE TONGUE AND GROOVE EDGES G1S (GOOD SIDE DOWN WHERE EXPOSED TO VIEW). SIZES SHALL BE AS DETAILED ON THE DRAWINGS. INSTALL FIBREGLASS MESH VENTILATION STRIPS IN SOFFITS WHERE DETAILED.
3. COMMERCIAL WRAP: SHALL BE A NON-WOVEN FIBRE STRUCTURE WHICH RESISTS AIR INFILTRATION AND WATER INTRUSION. ACCEPTABLE PRODUCT: TYVEK COMMERCIAL WRAP AS SUPPLIED BY DUPONT.
4. PRESERVATIVE TREATMENT: ALL TIMBER IN CONTACT WITH CONCRETE OR MASONRY, AT ALL POSSIBLE MOISTURE PENETRATIONS, AND WHERE OTHERWISE INDICATED SHALL BE PRESERVATIVE TREATED TO 0.23 RETENTION OR REFUSAL. PRESSURE TREATMENT SHALL BE 0.40 LB/FT2 TO CSA 080-M89. ACCEPTABLE PRODUCTS: SODIUM BORATE (SBX); DISODIUM OCTABORATE TETRAHYDRATE (DOT) FOR TIMBERS IN CONCRETE OR GROUND CONTACT; OR OTHER PRE-APPROVED EQUIVALENT. MATERIALS USED SHALL BEAR THE CANADIAN WOOD PRESERVATIVES BUREAU (CWPB) STAMPS.
5. FIRE RETARDANT TREATMENT: ALL EXTERIOR WOOD ITEMS PROVIDED UNDER THIS SECTION SHALL BE ULC OR UL FIRE RETARDANT PRESSURE TREATED TO PROVIDE A FLAME SPREAD RATING OF 25 OR LESS, CONFORMING TO ASTM D2898-72, ASTM E84 AND CAN4- S102.ACCEPTABLE MANUFACTURERS: GENERAL PAINTS; SHERWIN WILLIAMS; OR OTHER MANUFACTURERS WHO CAN MEET THE ABOVE STANDARDS
6. FINISH CARPENTRY: FINISH CARPENTRY INCLUDING INSTALLATION OF METAL DOORS, METAL DOOR FRAMES, WOOD DOORS, WOOD SILLS, FASCIA BOARDS, ALL INTERIOR AND EXTERIOR WOOD TRIM AND FINISH HARDWARE ETC.

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NO	DATE	REVISIONS
3	22MAY2019	ISSUED FOR TENDER ADDENDUM#1
2	06MAY2019	ISSUED FOR TENDER
1	01MAY2019	ISSUED FOR BUILDING PERMIT

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CITY OF SURREY
the future lives here.

CLOVERDALE CURLING RINK STAIR RENOVATION
6142 176 STREET, SURREY, BC, V3S 4E7

SPECIFICATION

A111

DRAWN	SCALE	PROJECT	DATE
LSL	N/A	18SUR05	NOV.2018

CLOVERDALE CURLING RINK STAIR RENOVATION ADDENDUM#1 RFQ-1220-040-2019-032 - May 24, 2019

DIVISION 7 -THERMAL & MOISTURE PROTECTION

1. SELF-ADHERED MEMBRANE: AT ALL EXTERIOR DOOR AND WINDOW FRAMES SHALL BE SELF- ADHERING STRIPS 611 WIDE APPLIED OVER ALL JUNCTIONS, PENETRATIONS AND TRANSITIONS TO ENSURE THE INTEGRITY OF THE INFILTRATION BARRIER. ACCEPTABLE PRODUCTS: PEEL-AND-STICK BLUESKIN MEMBRANE BY HENRY/BAKOR; OR OTHER PRE-APPROVED EQUIVALENT
2. BUILDING INSULATION: SHALL BE UN-FACED FRICTION-FIT GLASS FIBRE BATT INSULATION CONFORMING TO CSA A101-M1983 FOR FLOORS, WALLS AND CEILINGS AS INDICATED ON THE DRAWINGS. ACCEPTABLE MANUFACTURERS: AS SUPPLIED BY FIBREGLASS CANADA; CERTAIN-TEED; OR OTHER PRE-APPROVED MANUFACTURER. THICKNESSES SHALL BE AS INDICATED ON THE DRAWINGS. NOTE: THE INSULATION WITHIN THE MAIN FLOOR FRAMING JOINTS SHALL BE HELD IN PLACE WITH PERFORATED METAL SCREENING AS DETAILED.
   - 2.1. VAPOUR BARRIER: SHALL BE 6 MIL (0.15 MM) THICK POLYETHYLENE SHEETING; CONFORMING TO CAN/CGSB 51.34 SUITABLE FOR CLASS 1 CONSTRUCTION HAVING A PERM RATING OF 0.09, AS SUPPLIED BY DUPONT CANADA LTD.
   - 2.2. APPLY VAPOUR BARRIER ON THE WARM SIDE DIRECTLY OVER INSULATION. LAP ALL JOINTS 611 MINIMUM. SECURE WITH DOUBLE SIDED TAPE AT. SOLID BEARING. FOLD BACK INTO REVEALS OF ALL OPENINGS, AND BRING TIGHT AGAINST ELECTRICAL OUTLETS AND ANY OTHER ITEMS WHERE LEAKAGE MAY OCCUR. REPAIR ANY TORN OR DEFECTIVE VAPOUR BARRIER. APPLY SUPPLEMENTARY STRIPS OF POLYETHYLENE TO CORRECT ANY DEFICIENCIES.
3. METAL FLASHING : SHALL BE 24 GAUGE PRE-FINISHED METAL WITH BAKED ENAMEL FINISH. COLOUR SHALL BE AS SELECTED BY THE CONSULTANT.
4. SEALANTS & CAULKING: SHALL BE IN ACCORDANCE WITH CAN/CGSB 19-GP-5M SEALING COMPOUND, ONE-COMPONENT, ACRYLIC BASE, SOLVENT CURING, AND CAN/CGSB 19.24-M90 SEALING COMPOUND, MULTI-COMPONENT, CHEMICAL CURING, POLYURETHANE OR SILICONE TO PROVIDE MINIMUM TEN (10) YEARS LIFE CYCLE. TYPE 3 MILDEW RESISTANT ONE-PART SILICONE TO BE USED AT FOOD SERVICE AREAS.
   - 4.1. TYPE 1 POLYURETHANE SEALANT: SHALL BE TWO -PART CONFORMING TO CAN/CGSB 19.24-M90 TYPE CLASS B, AND BE CHEMICAL CURING, NON-SAGGING, NON- STAINING, GUN-GRADE POLYURETHANE SEALANT TYPE II CLASS A COMPOUNDS. ACCEPTABLE PRODUCTS: SHALL BE AS SUPPLIED BY TREMCO; NP1 BY BASF; OR OTHER PRE-APPROVED TWO-PART POLYURETHANE SEALANT.
   - 4.2. TYPE 2 POLYURETHANE SEALANT: SHALL BE ONE-PART, POURABLE POLYURETHANE SEALANT CONFORMING TO CAN/CGSB-19.13-M87. ACCEPTABLE PRODUCTS: TREMCO DYMONIC FC; SONELASTIC NP2 BY BASF; OR OTHER PRE-APPROVED SEALANT.
   - 4.3. TYPE 3 SILICONE SEALANT: SHALL BE MILDEW AND MOLD RESISTANT; ONE COMPONENT CONFORMING TO CAN/CGSB-19.13-M87 AND ASTM C920-01 TYPE S; ACCEPTABLE PRODUCTS: DOW CORNING 790/795/CWS/CCS; OR OTHER PRE-APPROVED SEALANT.
5. FIRE-STOPPING & SMOKE SEALS: ALL FIRE-STOPPING AND SMOKE SEALS SHALL BE LISTED BY THE UNDERWRITERS LABORATORIES OF CANADA (ULC) AND SHALL FORM A DRAFT-TIGHT BARRIER TO RETARD THE PASSAGE OF SMOKE, FLAME AND HOSE STREAM AS NOTED IN THE APPROPRIATE ULC CLASSIFICATION. ALL WORK SHALL CONFORM TO ASTM E814-94B METHODS OF FIRE TESTS OF THROUGH PENETRATION FIRE STOPS, AND CAN4 S115-M85 STANDARD METHOD OF FIRE TESTS OF FIRE-STOP SYSTEMS, AND BE OF THE HIGHEST QUALITY ACCORDING TO BEST TRADE PRACTICE, AND IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PRINTED SPECIFICATIONS.
   - 5.1. FIRE-STOPPING & SMOKE SEALS: SHALL BE ASBESTOS-FREE LOW VOC MATERIALS AND SYSTEMS CAPABLE OF MAINTAINING AN EFFECTIVE BARRIER AGAINST FLAME, SMOKE AND GASES IN COMPLIANCE WITH THE REQUIREMENTS OF CAN4-S115-M85, OR ULI1479 AND ASTM 814, AND SHALL NOT EXCEED THE SIZE OF OPENINGS FOR WHICH THEY ARE INTENDED.
   - 5.2. FIRE-STOPPING: MATERIALS TO BE USED TO FILL VOIDS, UNLESS ANY OF THE FOLLOWING ACCEPTABLE SYSTEMS INCLUDE FIRE-STOPPING AS PART OF THE SYSTEM, SHALL BE PRE-FORMED, SEMI-RIGID, NON-COMBUSTIBLE MINERAL FIBRE FELT AS SUPPLIED BY AID FIRE PROTECTION SYSTEMS INC; USG THERMAFIBER SATING INSULATION; FIBERFAX DURABLANKET BY CARBORUNDUM COMPANY; OR OTHER PRE-APPROVED EQUIVALENT.
   - 5.3. SMOKE SEAL SEALANTS: SEALANTS SHALL BE LOW VOC THAT PROVIDED AS PART OF THE LISTED AND APPROVED FIRE-STOPPING SYSTEM. ONLY THOSE PRODUCTS TESTED, APPROVED AND LISTED IN THE ULC LIST OF EQUIPMENT & MATERIALS- VOLUME II BUILDING CONSTRUCTION, MAY BE USED, AND ONLY WITHIN SPECIFIC FIRE-STOP JOINT LOCATIONS AS LISTED.
   - 5.4. FIRE-STOPPING MANUFACTURERS SHALL BE SELECTED FROM THE FOLLOWING:
     HILTI (CANADA) CORPORATION. 604-940-8376
     TREMCO LIMITED. 1-800-363-3213 OR 416-421-3300
     A D FIRE BARRIER BY AD FIRE PROTECTION SYSTEMS INC 1-800-665-3153
     3M CANADA. 1-800-364-3577 OR 519-451-2500

DIVISION 8 - DOORS & WINDOWS

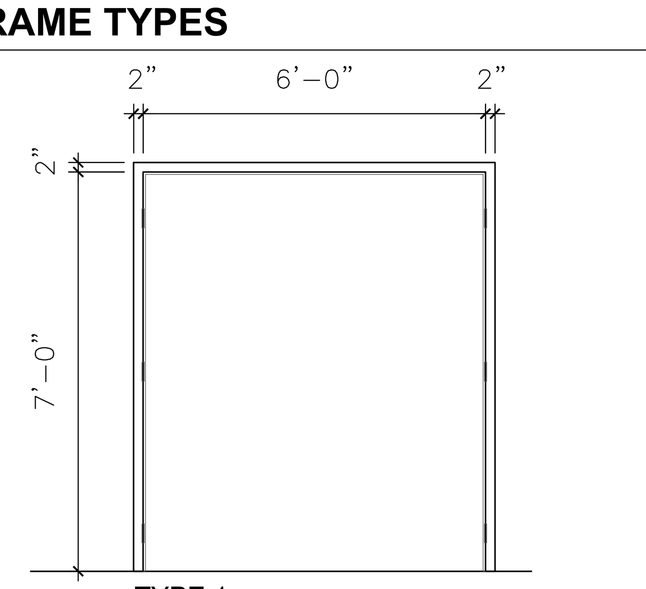
1. IHOLLOW METAL DOORS: HOLLOW METAL DOORS SHALL BE 45 MM (1-3/4") THICK, FULL FLUSH FACE, EDGE SEAM ONLY, FABRICATED FROM MINIMUM 16 GAUGE FOR EXTERIOR AND 18 GAUGE STEEL FOR INTERIOR, HAVING A DRY PASSIVATED COATING DESIGNATION A40 (ZF120) KNOWN COMMERCIALLY AS GALVANNEAL. EXTERIOR DOORS SHALL BE INSULATED AND SHALL CONFORM TO CAN/CSA A440 WINDOWS AND CSA A440. CORE FOR INSULATED DOORS SHALL BE INORGANIC GLASS FIBRE PREFORMED SLAB INSULATION OF 4.5 LBS/CU.FT DENSITY, OR POLYURETHANE RIGID INSULATION TO THE DOOR MANUFACTURER'S STANDARD. REFER TO THE DOOR SCHEDULE FOR TYPES, DIMENSIONS AND GLAZING PANELS.
2. FIRE-RATED HOLLOW METAL DOORS: SHALL BE CONSTRUCTED TO ULC OR WHI APPROVAL AND SHALL HAVE THE REQUIRED FIRE-RATING LABEL ATTACHED. CORE MATERIALS TO FIRE-RATED DOORS TO BE THE MANUFACTURER'S STANDARD FOR FIRE-RATED ULC OR WHI, APPROVED FIRE DOORS. DOORS WITH CLEAR GLASS (OR WIRED GLASS) VISION PANEL SHALL CONFORM TO CAN/CGSB-12.11-M90; MINIMUM THICKNESS 1/4" (6 MM), AT ENTRANCES AND EXITS AS REQUIRED. REFER TO THE DOOR SCHEDULE FOR TYPES AND DIMENSIONS.
3. VINYL WINDOWS: VINYL WINDOWS SHALL BE INSTALLED IN THE LOCATIONS INDICATED ON THE DRAWINGS. WINDOWS SHALL CONSIST OF DOUBLE GLAZED FIXED WINDOWS AND VENTILATOR UNITS AS INDICATED ON THE DRAWINGS. WINDOWS SHALL CONFORM TO SECTION 5.4 AND 8.5 OF CAN/CSA A440 AND CAN/CGSB -12.8 MOO.
   ACCEPTABLE WINDOW TYPES: 7100 SERIES NAIL-ON BY STARLINE WINDOWS LTD, 604-882-5100; OR SIMILAR BY WESTECK WINDOWS; OR OTHER PRE-APPROVED EQUIVALENT. FRAME TYPE TO SUIT DETAILS INDICATED.
   - 3.1. VINYL FRAMING SHALL BE SO DESIGNED AND CONSTRUCTED AS TO PROVIDE FOR SUCH EXPANSION AND CONTRACTION OF COMPONENT MATERIALS AS WILL BE CAUSED BY AN EXTERIOR TEMPERATURE RANGE OF -15 DEGREES CELSIUS TO +40 DEGREES CELSIUS AND BUILDING INTERIOR TEMPERATURE RANGE OF +10 DEGREES CELSIUS TO +29 DEGREES CELSIUS WITHOUT CAUSING HARMFUL BUCKLING, GLASS BREAKAGE, FAILURE OF JOINT SEALS, UNDUE STRESS ON FASTENERS, OR OTHER DETRIMENTAL EFFECTS.
   - 3.2. GLASS THICKNESS SHALL BE DESIGNED TO WITHSTAND LOCAL POSITIVE AND NEGATIVE WIND PRESSURE LOADS IN ACCORDANCE WITH REQUIREMENTS OF THE BC BUILDING CODE 2018, WITH A FAILURE RATE OF EIGHT (8) PER 1,000 WINDOWS, ASSUMING GLASS STRENGTH HAS A COEFFICIENT OF VARIATION OF 0.25. VINYL WINDOWS SHALL CONFORM TO CAN/CSA-A440-M90 WINDOWS TO PROVIDE FOLLOWING MINIMUM RATINGS: AIR LEAKAGE- A3; WATER LEAKAGE-B3 WINDOWS; WIND LOAD - C3. SHOP DRAWINGS AND CALCULATIONS SHALL BE PREPARED UNDER THE SUPERVISION OF A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE PROVINCE OF BRITISH COLUMBIA. THIS ENGINEER SHALL VERIFY BY SEALING THE SHOP DRAWINGS THAT THE DRAWINGS WERE PREPARED UNDER THEIR SUPERVISION AND THAT THE WINDOW AND DOOR SYSTEMS MEET THE DESIGN AND PERFORMANCE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS.
   - 3.3. GLASS: WINDOWS AND DOORS SHALL BE GLAZED WITH SEALED INSULATING GLASS UNITS CONFORMING TO CAN/CGSB-12.8-M90, WITH MINIMUM 5 MM (3/16") CLEAR FLOAT GLASS EXTERIOR LIGHT AND MINIMUM 5 MM (3/16") CLEAR FLOAT INTERIOR LIGHT, HAVING 13 MM (1/2") ARGON FILLED AIR SPACE BETWEEN. THICKNESS OF GLASS TO SUIT WINDOW SIZE INDICATED, IN ACCORDANCE WITH UNIT MANUFACTURER'S STANDARD FOR MAXIMUM GLASS SIZE TO MEET LOCAL WIND LOAD REQUIREMENTS.
   - 3.4. FINISH: ALL SURFACES OF THE VINYL WINDOWS AND DOORS SHALL BE PRE-FINISHED WITH THE MANUFACTURERS' STANDARD FINISH. THE COLOUR SHALL BE AS SELECTED BY THE CONSULTANT FROM THE MANUFACTURERS' STANDARD RANGE. REFER TO BUILDING ELEVATIONS FOR THE LOCATIONS OF DIFFERENT SIZED WINDOWS.
   - 3.5. SHOP DRAWINGS: FURNISH COMPLETE SHOP AND ERECTION DRAWINGS, GIVING SIZES, QUANTITIES, DETAILS, MATERIALS, FASTENINGS, ETC., OF WINDOWS, DOORS AND SIDELIGHTS TO THE CONSULTANT BEFORE COMMENCING FABRICATION.
   - 3.6. LETTER OF ASSURANCE: SUBMIT ASSURANCE OF FIELD REVIEW AND COMPLIANCE FORM FOR THE WINDOWS. THE LETTER OF ASSURANCE SHALL BE SIGNED BY A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN BC, WHO IS A MEMBER IN GOOD STANDING OF ASSOCIATION OF PROFESSIONAL ENGINEERS. SUBMIT A COPY OF THE ABOVE LETTER OF ASSURANCE TO THE CONSULTANT.
   - 3.7. WARRANTY: THE VINYL WINDOW AND DOOR CONTRACTOR REPRESENTS AND WARRANTS TO THE OWNER THAT ALL THE WORK INCLUDED IN THIS SECTION WILL BE FREE OF DEFECTS AND DEFICIENCIES WHICH APPEAR PRIOR TO AND DURING A PERIOD OF FIVE (5) YEARS FROM THE DATE OF SUBSTANTIAL PERFORMANCE OF THE PROJECT.
4. MISCELLANEOUS GLAZING: ANY MISCELLANEOUS GLASS SHALL CONFORM TO CAN/CGSB-12.5-M86 (NO.1 QUALITY), AND THE REQUIREMENTS OF THE BC BUILDING CODE 2018, AND THE NATIONAL BUILDING CODE 2015 AS APPLICABLE ACCORDING TO MAXIMUM GLASS SIZES.
5. REFER TO DWG A351 FOR DOOR HARDWARE SCHEDULE

DIVISION 9 - FINISHES

1. GYPSUM WALLBOARD: ALL WORK SHALL BE IN ACCORDANCE WITH ASSOCIATION OF WALL AND CEILING CONTRACTORS OF BC, (AWCC) SPECIFICATION STANDARDS MANUAL, (LATEST EDITION) SECTION 9.7 AND BY A QUALIFIED SPECIALIST FIRM EMPLOYING SKILLED MECHANICS. DESIGN AND INSTALLATION OF DRYWALL CEILING SUSPENSION SYSTEMS SHALL TO CONFORM TO THE SEISMIC RESTRAINT REQUIREMENTS OF THE BC BUILDING CODE 2018, AND THE NATIONAL BUILDING CODE 2015 AS APPLICABLE.
2. GYPSUM WALLBOARD AND ACOUSTIC INSULATION RATINGS USED IN. THE PROJECT SHALL MEET OR EXCEED THE REQUIREMENTS SPECIFIED UNDER PART 2, PRODUCTS OF SECTION 9.10 OF THE AWCC SPECIFICATION STANDARDS MANUAL. ALL GYPSUM WALLBOARD FACING WHEN ASSEMBLED SHALL PROVIDE THE FIRE RESISTANCE RATING IN ACCORDANCE WITH THE UNDERWRITERS LABORATORIES OF CANADA DESIGN NUMBER, OR WARNOCK HERSEY INTERNATIONAL FIRE TEST NUMBER.
   - 2.1. FIRE RATED GYPSUM WALLBOARD TYPE X: SHALL CONFORM TO CAN/CSAA82.27. TYPE X, HAVING THE APPLICABLE ULC LABEL; THICKNESS 13 MM (1/2") OR 16 MM (5/8"); DIMENSIONS 1219 MM (48") X LENGTH FOR MINIMUM JOINTS; EDGE TYPE TAPERED: ACCEPTABLE MANUFACTURERS: THE CANADIAN GYPSUM CO. LTD.; OR OTHER PRE-APPROVED EQUIVALENT.
   - 2.2. AT FIRE-RATED PARTITIONS THE METHOD OF APPLYING THE WALLBOARDS SHALL BE AS USED IN THE ULC FIRE TEST SPECIMEN. APPLY WALLBOARD VERTICALLY AT SUCH PARTITIONS WITH JOINTS ON SUPPORTING MEMBERS AND SECURE WITH SCREWS. IF THE SPACING OF SCREWS IS OTHER THAN SPECIFIED ABOVE, THE SPACING SHALL BE IN ACCORDANCE WITH APPLICABLE ULC DESIGN. REFER TO DETAILS ON THE DRAWINGS FOR LOCATIONS WHERE FIRE-RATED WALLS ARE REQUIRED.
   - 2.3. STANDARD GYPSUM WALLBOARD: SHALL BE EDGE TYPE PLAIN TAPERED, THICKNESS 13 MM (1/2") AND 16 MM (5/8"), UNLESS INDICATED OTHERWISE ON THE DRAWINGS. DIMENSIONS SHALL BE 1219 MM (48") X LENGTH FOR MINIMUM JOINTS. ACCEPTABLE MANUFACTURERS: CANADIAN GYPSUM CO LTD; DOMTAR CONSTRUCTION MATERIALS LTD; WESTERN GYPSUM PRODUCTS LTD; TRUROC; OR OTHER PRE-APPROVED EQUIVALENT. NOTE: ENSURE THAT THE PLYWOOD SHEATHING TO WALLS BEHIND THE GYPSUM WALLBOARD AROUND THE RECORDS STORAGE, MEDICAL STORAGE AND GENERAL STORAGE ROOMS IS IN PLACE BEFORE GB APPLICATION IN THESE LOCATIONS.
   - 2.4. CASING & CORNER BEADS: SHALL BE MINIMUM 28 GAUGE GALVANIZED SHEET STEEL; "L" OR "J" TYPE AS REQUIRED, BEADED ANGLE OR CASING WITH ONE SIDE PERFORATED FOR JOINT FILLING, SUITABLE FOR 13 MM (1/2") OR 16 MM (5/8") WALLBOARD.
   - 2.5. ACOUSTIC INSULATION: SHALL BE UN-FACED GLASS FIBRE SOUND ATTENUATION BLANKET INSULATION FOR WOOD STUD INSTALLATION. THICKNESS 70,89 AND 140 MM (2-3/4",3-1/2" AND 5-1/2") MINIMUM R-8, OR AS INDICATED ON THE DRAWINGS. WIDTH AS REQUIRED TO SUIT STUD SPACING. ACCEPTABLE PRODUCTS: FIBERGLAS OF THERMAFIBER.
   - 2.6. ACOUSTIC SEALANTS: ACOUSTIC SEALANTS SHALL BE ONE-COMPONENT LOW VOC, GUN-GRADE NON-STAINING, NON-HARDENING AND PERMANENTLY FLEXIBLE TYPE. SEALANT SHALL BE SYNTHETIC RUBBER BASED AND SHALL CONFORM TO CGSB 19- GP-21-M87. SEALANT SHALL HAVE BEEN ACOUSTICALLY TESTED IN GYPSUM WALLBOARD PARTITION SYSTEMS. ACCEPTABLE SEALANTS: TREMCO ACOUSTICAL SEALANT; CHEMTRON METASEAL; CGC ACOUSTICAL SEALANT; PRC PR181 ACOUSTICAL SEALANT; OR OTHER PRE-APPROVED EQUIVALENT. ACOUSTICAL SEALANT SHALL BE USED FOR UNEXPOSED JOINTS ONLY.
3. SHEET LINOLEUM FLOORING: SHALL BE STANDARD SHEET LINOLEUM 2.5 MM GAUGE CONFORMING TO ASTM F 1303, ASTM F 2034, C/W MATCHING COLOURED HEAT- WELDED SEAMS AND FLASH COVE BASE INSTALLED TO THE MINIMUM REQUIREMENTS OF THE NATIONAL FLOOR COVERING ASSOCIATION SPECIFICATION MANUAL (LATEST EDITION). ADHESIVES: SHALL BE NON-TOXIC, NON-SOLVENT LOW VOC TYPE AS RECOMMENDED BY THE MANUFACTURER. ACCEPTABLE PRODUCT: FORBO MARMOLEUM AS MANUFACTURED BY FORBO LINOLEUM INC. AND DISTRIBUTED BY PHOENIX; OR SIMILAR BY ARMSTRONG AS DISTRIBUTED BY BUCKWOLD WESTERN; OR OTHER PRE-APPROVED EQUIVALENT. ALL RESILIENT FLOORING SHALL BE AS SELECTED BY THE CONSULTANT OR AS INDICATED ON THE FINISH SCHEDULE.
   FLOORING SHALL MEET THE FOLLOWING SPECIFICATIONS:
   - NOMINAL THICKNESS: 2.5 MM AND/OR 2.0 MM FOR THE TYPES AS SCHEDULED.
   - WIDTH: 2M
   - LENGTH: 20M
   - COLOURS: AS INDICATED ON THE MATERIAL LEGEND.
   - SEAM TREATMENT SHALL BE HEAT-WELDED SYSTEM, COLOUR-MATCHED WELDING RODS. COLOUR OF SEAMS SHALL MATCH FLOORING OR AS DIRECTED BY THE CONSULTANT.
4. ACOUSTIC T-BAR CEILING: FURNISH ALL LABOUR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY FOR THE SUPPLY AND INSTALLATION OF AN ACOUSTIC TILE SYSTEM AS INDICATED ON THE DRAWINGS, THE FINISH SCHEDULE, INCLUDING ACOUSTIC TILES, SUSPENSION SYSTEM, HANGERS, INSERTS, WALL AND EDGE MOULDINGS, INCLUDING FRAMING WITHIN SUSPENSION SYSTEM FOR RECESSED LIGHTING AND/OR DIFFUSERS.
   - 4.1. SUSPENSION SYSTEM SHALL BE DESIGNED AND INSTALLED TO CONFORM TO SEISMIC RESTRAINT REQUIREMENTS OF THE BC BUILDING CODE 2018 AND THE NATIONAL BUILDING CODE 2015 AND AS INDICATED ON THE DRAWINGS.
   - 4.2. ACOUSTIC TILES: SHALL BE RATED CLASS 25 (INCOMBUSTIBLE) UNDER FLAME SPREAD INDEX SECTION OF FEDERAL SPECIFICATIONS SS-S-118A FOR A CLASS 1 FLAME SPREAD RATING ACCORDING TO ASTM E84-61 (TUNNEL TEST METHOD). TILE SHALL ALSO BE LISTED AND LABELLED BY UNDERWRITERS LABORATORIES INC. OR ULC. HAZARD CLASSIFICATION FOR FLAME SPREAD OF 0-25. REFER TO DRAWINGS AND FINISH SCHEDULE FOR TYPES AND LOCATIONS.
   - 4.3. SEISMIC RESTRAINT BRACING: FOR ACOUSTIC TILE CEILINGS SHALL CONFORM TO THE BC BUILDING CODE 2018, AND TO ASTM E580.
   - 4.4. SUSPENSION SYSTEM: COMPONENTS FOR CEILING SUSPENSION SYSTEMS SHALL BE 15/16" PRELUDE T-GRID SYSTEM MANUFACTURED TO MEET ASTM C-635 SPECIFICATIONS AND FORMED FROM COMMERCIAL QUALITY COLD ROLLED STEEL, ZINC COATED TO MEET THE SEISMIC RESTRAINT REQUIREMENTS. ALL EXPOSED SURFACES OF THE SYSTEM SHALL BE FINISHED IN LOW SHEEN SATIN ENAMEL TO MATCH TILES; MINIMUM (0.178 MM) 17 MIL THICK FOR ACOUSTIC CEILINGS.
1. PAINTING: PAINTING SHALL BE IN ACCORDANCE WITH THE APPLICABLE CHAPTERS OF THE MASTER PAINTERS INSTITUTE MPI AND MPDA ARCHITECTURAL PAINTING SPECIFICATION MANUAL (LATEST EDITION). ALL PAINTS, THINNERS AND SOLVENTS, ETC, USED ON THIS PROJECT SHALL ONLY BE THOSE PRODUCTS AND MATERIALS WITH LOW VOLATILE ORGANIC COMPOUNDS (VOC) CONTENT. ALL PAINT AND COATINGS SHALL MEET OR EXCEED VOC AND CHEMICAL COMPONENT LIMITS OF GREEN SEAL REQUIREMENTS.

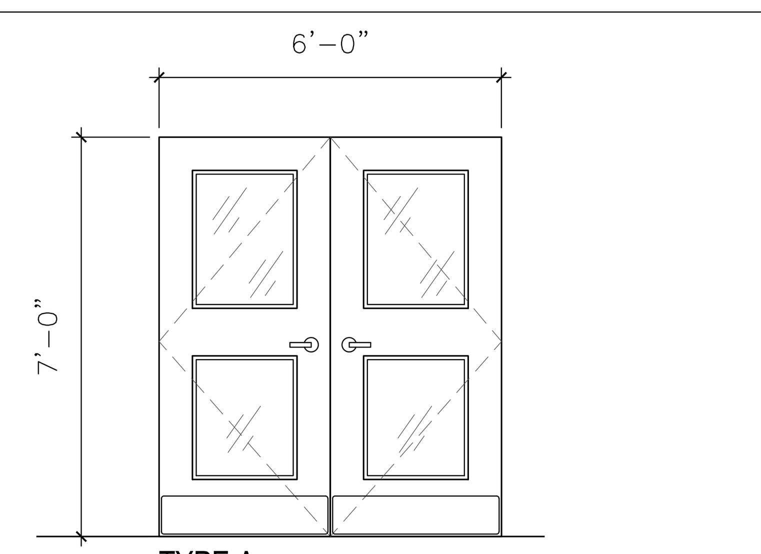
END OF OUTLINE SPECIFICATIONS

FRAME TYPES

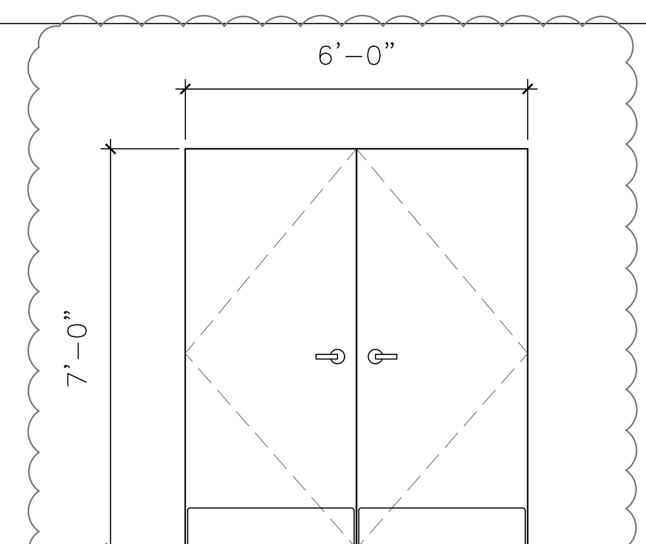


TYPE 1

DOOR TYPES



TYPE A



TYPE B

NOTE: DIMENSIONS AS INDICATED, UNLESS NOTED OTHERWISE. DOOR SWING ACCORDING TO FLOOR PLAN.

DOOR HARDWARE SET #1 DOOR#102A & 102B

6	EA.	HINGES MCKINNEY TA786-114MM X 101MM X NRP
1	EA.	LOCK SET SARGENT 8236 X LNJ
2	EA.	KICK PLATES ROCKWOOD K1050F-6" X WIDTH LESS 2"
2	EA	ROCKWOOD OH1004S OVERHEAD STOPS
1	EA	ROCKWOOD 550 FLUSHBOLT
1	EA	ROCKWOOD 550 FLUSHBOLT W. 570 DUSTPROOF STRIKE

DOOR HARDWARE SET #2 DOOR#203

6	EA.	HINGES MCKINNEY TA786-114MM X 101MM X NRP
2	EA.	SARGENT MD8613-ET CONCEALED VERTICAL ROD EXIT DEVICE .
2	EA.	CLOSER LCN 4040XP-HCUSH-3049CNS
4	EA.	KICK PLATES ROCKWOOD K1050F-6" X WIDTH LESS 2"
2	EA.	ROCKWOOD OVERHEAD DOOR STOP

DOOR SCHEDULE

DOOR

ROOM NO.		LEAF: TYPE	SINGLE LEAF	DOUBLE LEAF	WIDTH	HEIGHT	THICKNESS	FINISH	MATERIAL: ALUMINUM	METAL	WOOD	CORE: HOLLOW	SOLID	INSULATED	GLAZED
102a	STORAGE	TYPE-B		●	2x3'-0"	7'-00"	1 ¾"				●		●		
102b	STORAGE	TYPE-B		●	2x3'-0"	7'-00"	1 ¾"				●		●		
203	STAIR#1	TYPE-A		●	2x3'-0"	7'-00"	1 ¾"			●					●

FRAME / GLASS / RATING

ROOM NO.	FRAME TYPE	DETAIL #	FINISH	PRESSED METAL FRAME	ALUMINUM	WOOD	GLASS: WIRED SAFETY GLASS	T. SAFETY GLASS	FIRE RATED GLASS	RATING: TEMPERATURE RISE LIMIT	FIRE RESISTANCE RATING (MINUTES)	SMOKE SEPARATION
102a	1	XXX	IP-1	●								
102b	1	XXX	IP-1	●								
203	1	XXX	IP-1	●					●		45	

HARDWARE

ROOM NO.	HW.SET	HINGES: BUTT HINGES	ELECTRIC HINGE	SLIDING DOOR HW	LOCKSET: PASSAGE SET	CLASSROOM SET	STORE ROOM SET	OFFICE SET	ELECTRIFIED LOCKSET FAIL SECURE	DEADBOLT	MISCELLANEOUS: PUSH / PULL	PANIC HARDWARE	FLUSHBOLT	ASTRAGAL	DOOR CLOSER	HOLD OPEN	FLOOR STOP	WALL STOP	OVERHEAD STOP	THRESHOLD	ACOUSTIC DROPSEAL	ACOUSTIC FRAME SEAL	CARD READER	PUNCH LOCK	COMMENTS
102a	SET#01	●					●						●						●						
102b	SET#01	●					●						●						●						
203	SET#02	●						●				●			●		●								

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NO	DATE	REVISIONS
3	22MAY2019	ISSUED FOR TENDER ADDENDUM#1
2	06MAY2019	ISSUED FOR TENDER
1	01MAY2019	ISSUED FOR BUILDING PERMIT

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CITY OF SURREY the future lives here.

CLOVERDALE CURLING RINK STAIR RENOVATION
6142 176 STREET, SURREY, BC, V3S 4E7

SPECIFICATION

A112

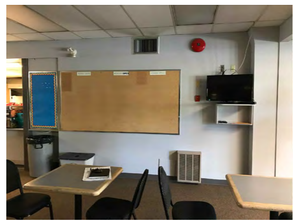
DRAWN	SCALE	PROJECT	DATE
LSL	N/A	18SUR05	NOV.2018

201.1 - WEST ENTRY/EXIT DOORS TO REMAIN. CANOPY TO REMAIN.

201.2 - SALVAGE EXISTING SIGNAGE AND RE-INSTALL AFTER REPLACEMENT STAIR IS CONSTRUCTED.

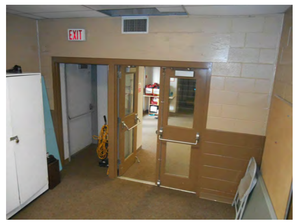
201.3 - CITY OF SURREY TO RELOCATE EXISTING GAS SERVICE.

201.4 - RELOCATE LIGHT FIXTURES, EM. LIGHT, HVAC GRILLE, F.A.BELL, HEATING REGISTER AND T.V. REFER TO DETAIL 7 & 8 DWG#A351.

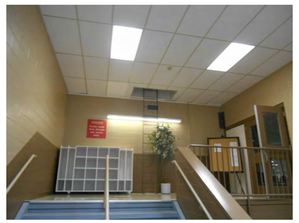


201.5 - FIRE ALARM PANEL AT STAIR DOUBLE DOOR. RE-VERIFY FIRE ALARM PRIOR TO OCCUPANCY.

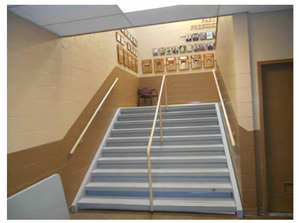
201.6 - WEST ENTRY/EXIT DOORS TO REMAIN.



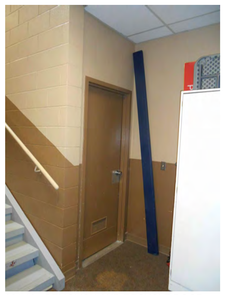
201.7 - SALVAGE EXISTING EXIT SIGN AND BLANK-OFF EXISTING HVAC DIFFUSER DURING CONSTRUCTION. EXISTING EXIT DOORS TO REMAIN.



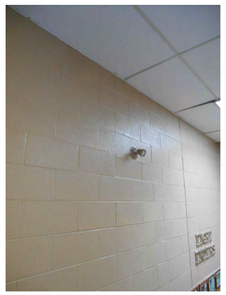
201.8 - DEMOLISH SOUTH AND WEST WALL. EAST & NORTH WALL TO REMAIN. SALVAGE LIGHT FIXTURES, ROOF ACCESS LADDER. COVER HVAC DIFFUSER ON NORTH WALL DURING CONSTRUCTION. DEMOLISH AND RECYCLE CEILING, ROOF AND SKYLIGHTS.



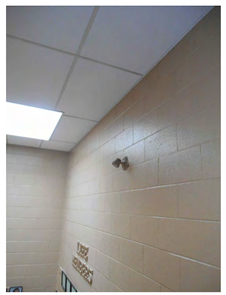
201.9 - DEMOLISH STAIR AND CMU WALLS AND RECYCLE.



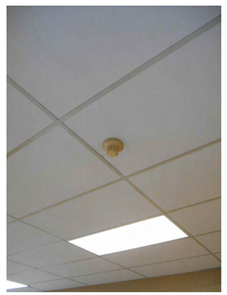
201.10 - DEMOLISH AND RECYCLE DOOR, DOOR FRAME AND DOOR HARDWARE.



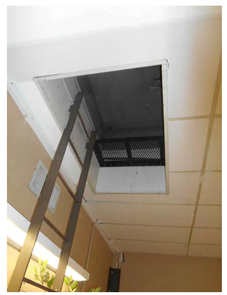
201.11 - DEMOLISH EMERGENCY LIGHT FIXTURE.



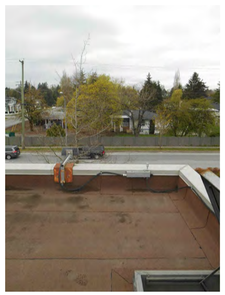
201.12 - DEMOLISH EMERGENCY LIGHT FIXTURE.



201.13 - DEMOLISH SMOKE DETECTOR.



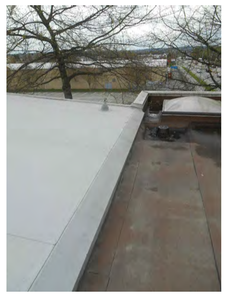
201.14 - SALVAGE ROOF ACCESS LADDER AND METAL GRATE.



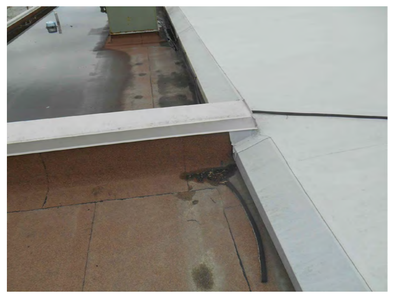
201.15 - DISCONNECT SIGNAGE LIGHT FIXTURE AND DAYLIGHT CENSOR. REMOVE RUST AND REPAINT BEFORE RE-INSTALLATION.

201.16 - SALVAGE ROOF ACCESS HATCH. CLEAN, SERVICE AND REMOVE RUST BEFORE RE-INSTALLATION.

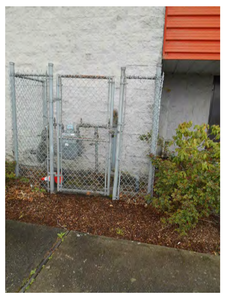
201.17 - DEMOLISH SKYLIGHTS AND RECYCLE. DEMOLISH ROOF AND RECYCLE.



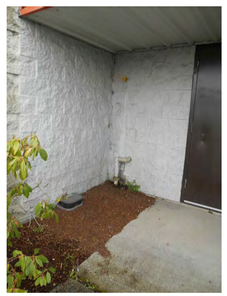
201.18 - CUT BACK METAL FLASHING. DEMOLISH ROOF AND RECYCLE. DEMOLISH ROOF DRAIN AND CAP RWL LINE AT GROUND LEVEL.



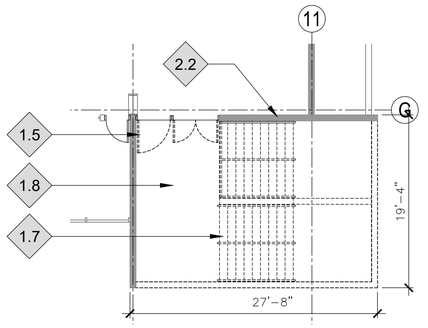
201.19 - NORTH WALL TO REMAIN. REPLACE FLASHING AFTER NEW ROOF INSTALLATION.



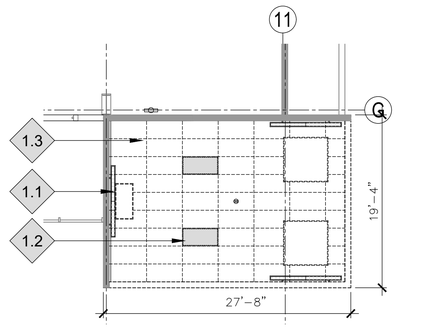
201.20 - EXISTING GAS METER.



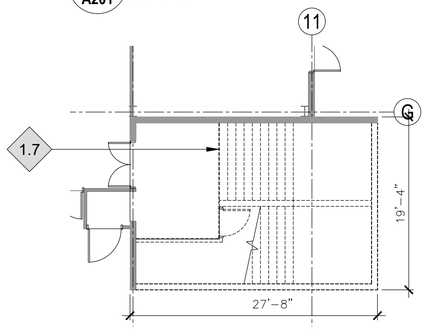
201.21 - EXISTING GAS LINE ENTRY IN BUILDING.



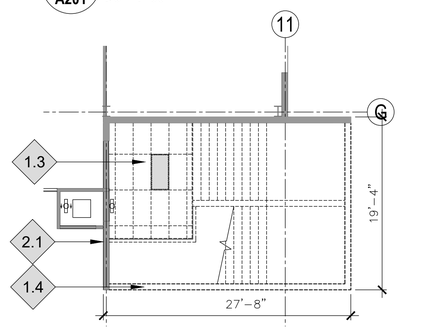
2 A201 **EXIST. STAIR 1 SECOND FLOOR DEMOLITION PLAN**
1/8"=1'-00"



4 A201 **EXIST. STAIR 1 SECOND FLOOR DEMOLITION RCP**
1/8"=1'-00"



1 A201 **STAIR 1 GROUND FLOOR DEMOLITION PLAN**
1/8"=1'-00"



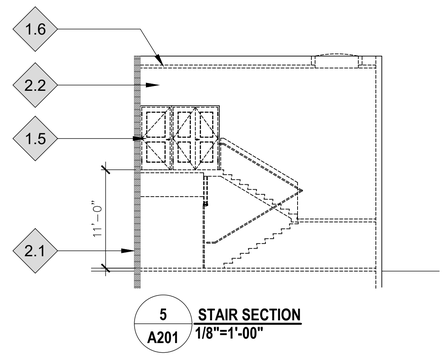
3 A201 **STAIR 1 GROUND FLOOR DEMOLITION RCP**
1/8"=1'-00"

DEMOLITION NOTES:

1.1) UNINSTALL EXISTING ROOF ACCESS LADDER AND KEEP FOR RE-INSTALLATION..
1.2) DEMOLISH EXISTING ELECTRICAL FIXTURES.
1.3) DEMOLISH EXISTING T-BAR CEILING.
1.4) DEMOLISH EXISTING EXTERIOR CMU WALL AND MAKE GOOD. SALVAGE EXISTING SIGNAGE FOR RE-INSTALLATION .
1.5) DEMOLISH EXISTING EXIT DOOR FRAMES AND DOORS AND MAKE GOOD.
1.6) DEMOLISH EXISTING ROOF AND MAKE GOOD..
1.7) DEMOLISH EXISTING STAIR.
1.8) DEMOLISH EXISTING FLOOR SLAB AND MAKE GOOD.

CONSTRUCTION NOTES:

2.1) MAKE GOOD REMAINING CMU WALL.
2.2) REPAIR EXISTING CMU WALL . REFER TO STRUCTURAL DRAWINGS.



5 A201 **STAIR SECTION**
1/8"=1'-00"

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NO	DATE	REVISIONS
3	22MAY2019	ISSUED FOR TENDER ADDENDUM#1
2	06MAY2019	ISSUED FOR TENDER
1	01MAY2019	ISSUED FOR BUILDING PERMIT

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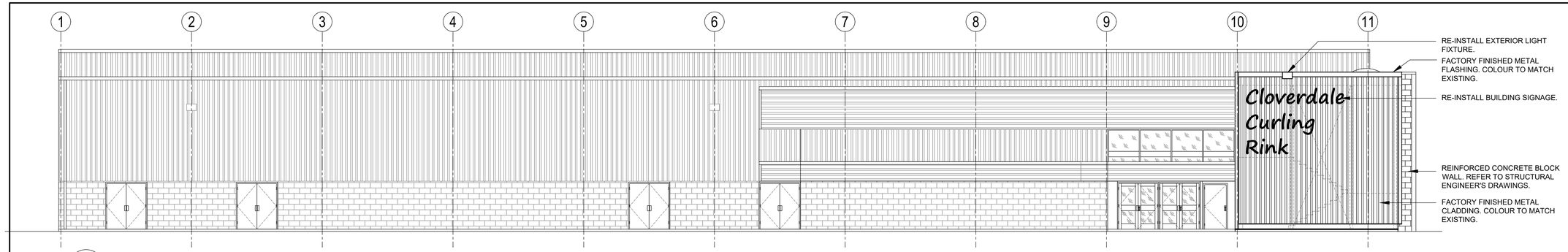
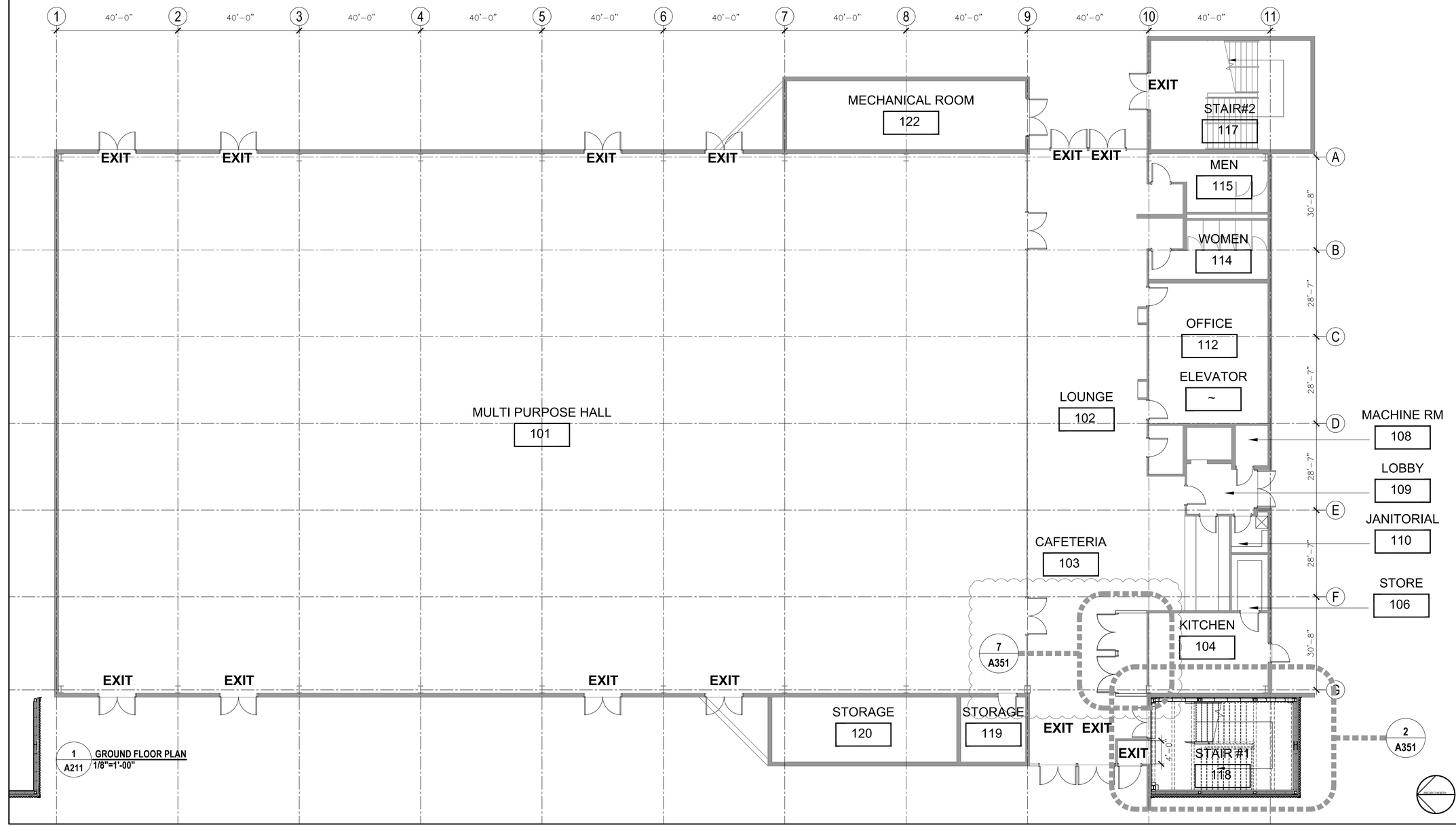
DEMOLITION PLANS

A201

DRAWN	SCALE	PROJECT	DATE
LSL	1/8" = 1'-0"	18SUR05	NOV.2018



2 A211 **WEST ELEVATION**
1/8"=1'-00"



1 A211 **GROUND FLOOR PLAN**
1/8"=1'-00"

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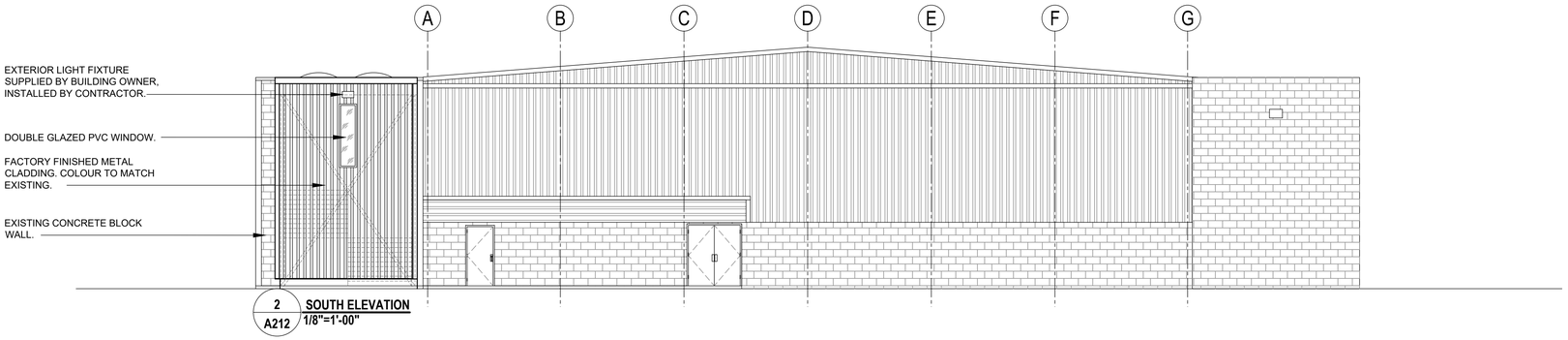
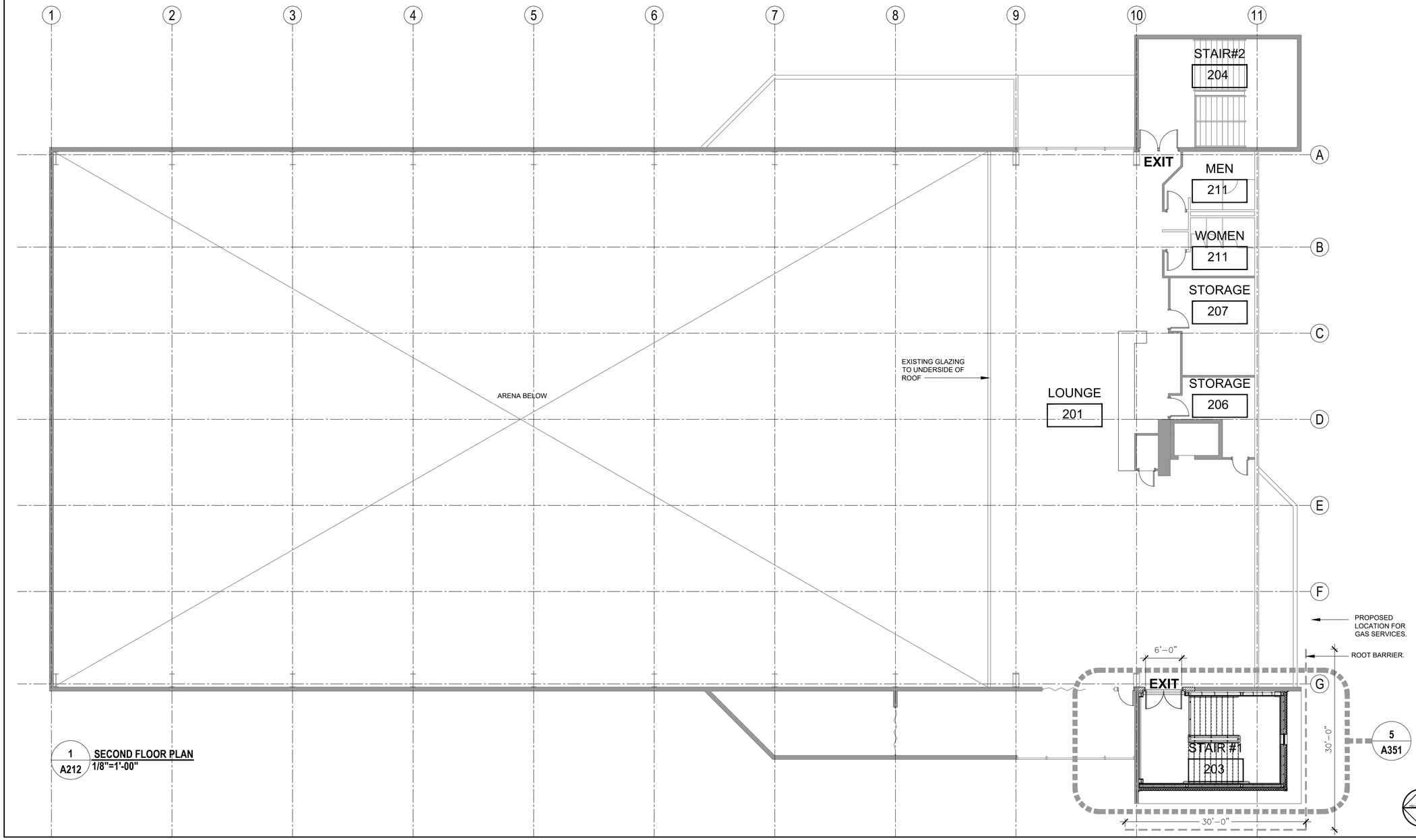
GROUND FLOOR PLAN

A211

DRAWN	SCALE	PROJECT	DATE
LSL	1/8" = 1'-0"	18SUR05	NOV.2018



2 / A212 **SOUTH ELEVATION** 1/8"=1'-00"



1 / A212 **SECOND FLOOR PLAN** 1/8"=1'-00"

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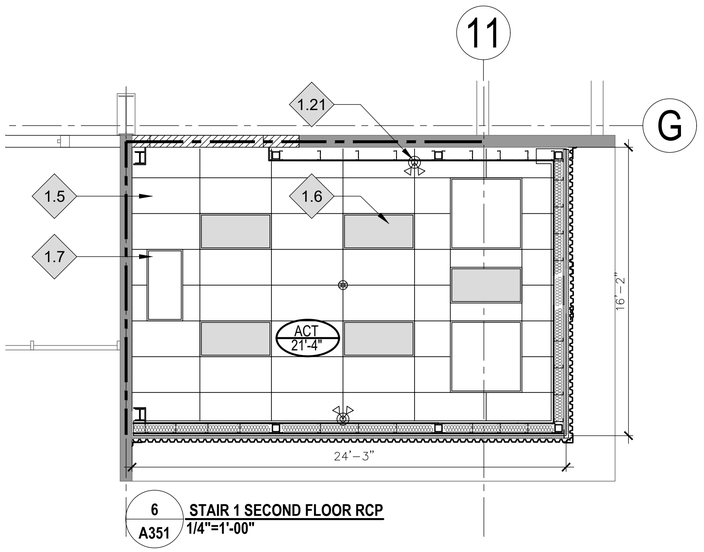
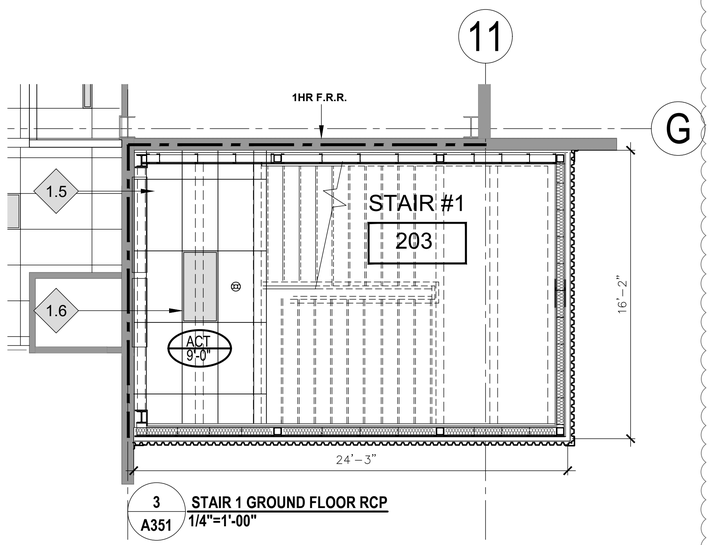
2ND FLOOR PLAN

A212

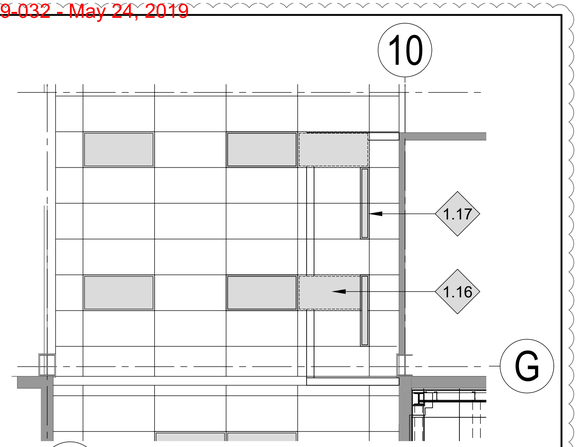
DRAWN	SCALE	PROJECT	DATE
LSL	1/8" = 1'-0"	18SUR05	NOV.2018



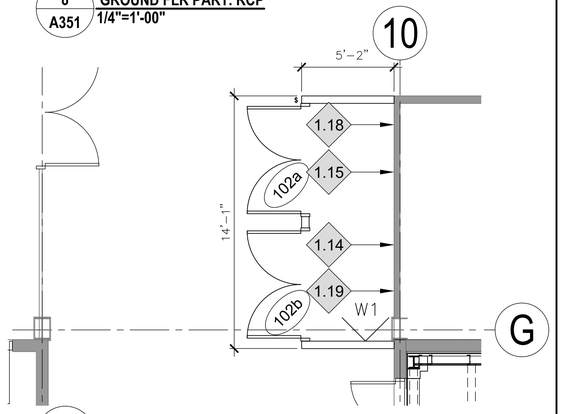
6 / A351 **STAIR 1 SECOND FLOOR RCP**
1/4"=1'-00"



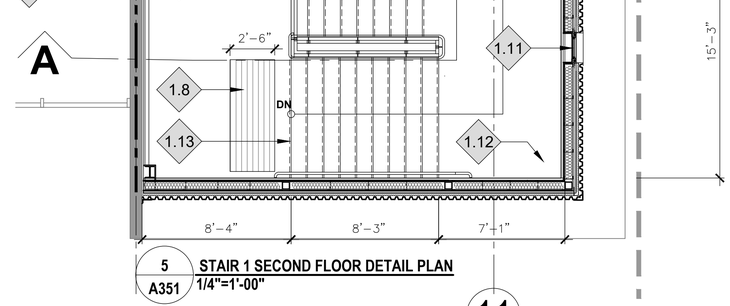
3 / A351 **STAIR 1 GROUND FLOOR RCP**
1/4"=1'-00"



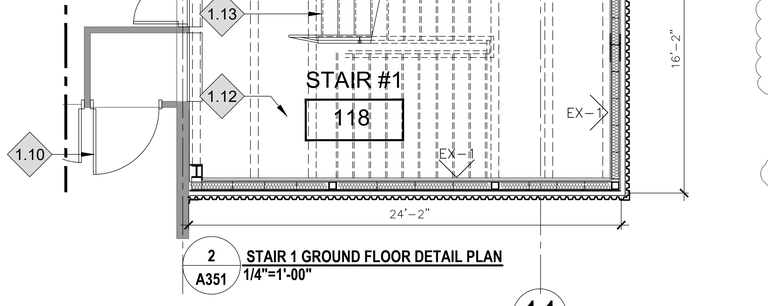
8 / A351 **GROUND FLR PART. RCP**
1/4"=1'-00"



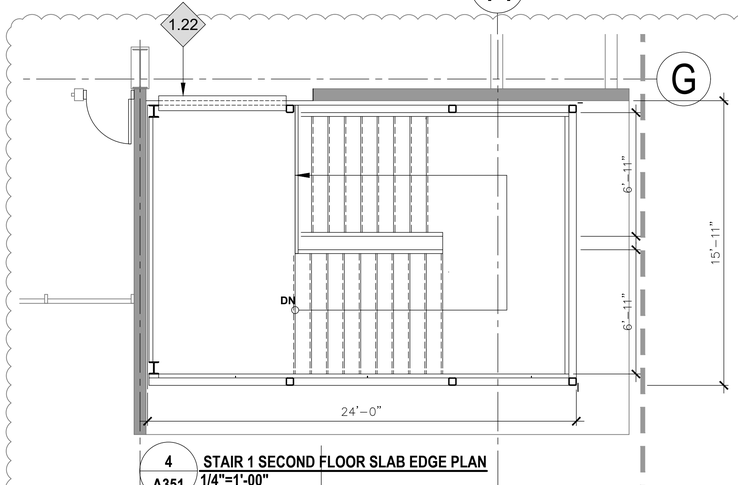
7 / A351 **GROUND FLOOR STORAGE CLOSET**
1/4"=1'-00"



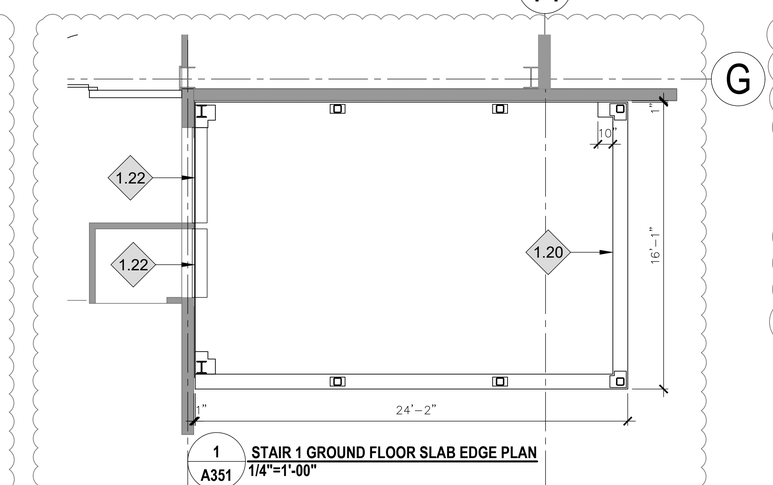
5 / A351 **STAIR 1 SECOND FLOOR DETAIL PLAN**
1/4"=1'-00"



2 / A351 **STAIR 1 GROUND FLOOR DETAIL PLAN**
1/4"=1'-00"



4 / A351 **STAIR 1 SECOND FLOOR SLAB EDGE PLAN**
1/4"=1'-00"



1 / A351 **STAIR 1 GROUND FLOOR SLAB EDGE PLAN**
1/4"=1'-00"

CONSTRUCTION NOTES:

1.1) PAINTED STEEL GUARD RAIL.
1.2) 1 1/2" Ø PAINTED STEEL HANDRAIL.
1.3) EXISTING CONCRETE BLOCK WALL.
1.4) REPAIR EXISTING REINFORCE CONCRETE BLOCK WALL. REFER TO STRUCTURAL ENGINEER'S DRAWINGS.
1.5) T-BAR CEILING (ACT) ARMSTRONG 672 OR EQUAL APPROVED.
1.6) LED LIGHT FIXTURES.
1.7) SALVAGED ROOF ACCESS HATCH.
1.8) TACKTILE WARNING STRIP ACCORDING TO BCBC2018.
1.9) STEEL STAIR. REFER TO STRUCTURAL ENGINEER'S DRAWINGS.
1.10) EXISTING DOOR TO REMAIN.
1.11) DOUBLE GLAZED VINYL WINDOW - SIZE 24"x84"
1.12) LINOLEUM FLOOR FINISH MARMOLEUM ETERNAL STEP SR "174922 CONCRETE" WITH JOHNSONITE BURN UMBER 4" RUBBER BASE
1.13) FORBO SARLON STAIR NOSING COLOUR: 630119 UNI PEARL, NOSE MEDIUM GREY.
1.14) RELOCATE EXISTING FIRE ALARM BELL. SUBMIT FIRE ALARM VERIFICATION CERTIFICATE PRIOR TO OCCUPANCY.
1.15) RELOCATE HVAC DUCT AND GRILL.
1.16) RELOCATE EXISTING LIGHT FIXTURES.
1.17) LED SURFACE-MOUNT LIGHT FIXTURE (48") WITH LIGHT SWITCH.
1.18) RELOCATE EXISTING EM LIGHT.
1.19) RELOCATE EXIST. TV & TV SHELF.
1.20) REINFORCED CONCRETE CURB. REFER TO STRUCTURAL ENGINEER'S DRAWINGS.
1.21) EM. LIGHT. CONNECT TO EXISTING EM. CIRCUIT.
1.22) EXPANSION JOINT COVER (808-A01-075) BY JOINT MASTER OR EQ. APPROVED.

ASSEMBLY SCHEDULE

WALL ASSEMBLY - INTERIOR

W1	5/8"	TYPE X GYPSUM BOARD
	2 1/2"	STEEL STUD (MIN. 20 GAUGE) AT 16" O/C
	5/8"	TYPE X GYPSUM BOARD
W2	5/8"	TYPE X GYPSUM BOARD
	6"	STEEL STUD (MIN. 20 GAUGE) AT 16" O/C

WALL ASSEMBLY - EXTERIOR

EX-1	5/8"	TYPE X GYPSUM BOARD
	6"	STEEL STUD (MIN. 20 GAUGE) AT 16" O/C
	6"	ROXUL OR EQ. MINERAL FIBRE THERMAL INSULATION
	3/4"	EXTERIOR GRADE PLYWOOD SHEATHING
		TYVEK OR EQUAL APPROVED PERMEABLE VAPOUR/AIR CONTROL LAYER
	R20	ROXUL OR EQ. EXTERIOR HIGH DENSITY MINERAL FIBRE INSULATION
	1"	AIR GAP
	1 1/2"	WESTMAN STEEL "ELITE RIB" OR EQ. APP. 26GA GALV. STEEL CLADDING. MATCH EXISTING. COLOUR INTERNATIONAL ORANGE 8234

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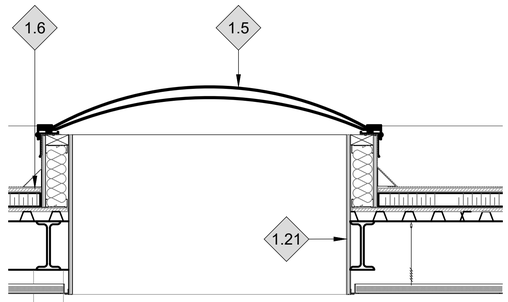
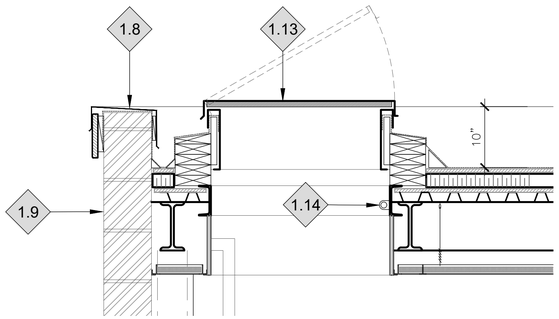
STAIR DETAIL PLANS

A351

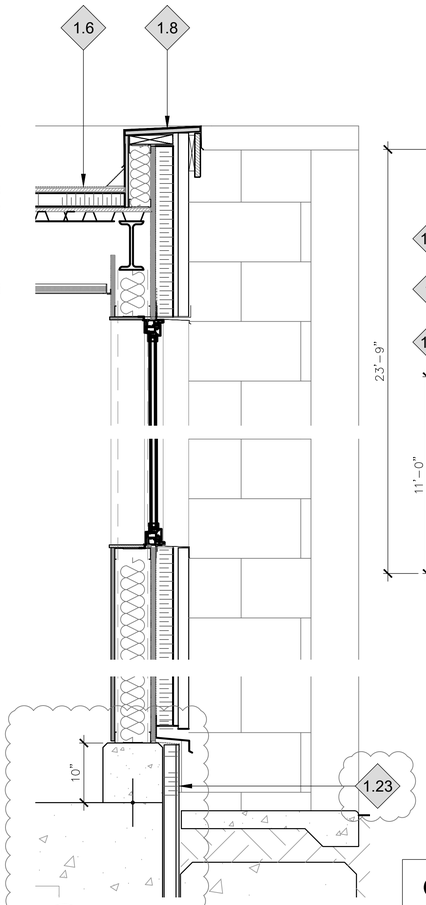
DRAWN	SCALE	PROJECT	DATE
LSL	1/4" = 1'-0"	18SUR05	NOV.2018



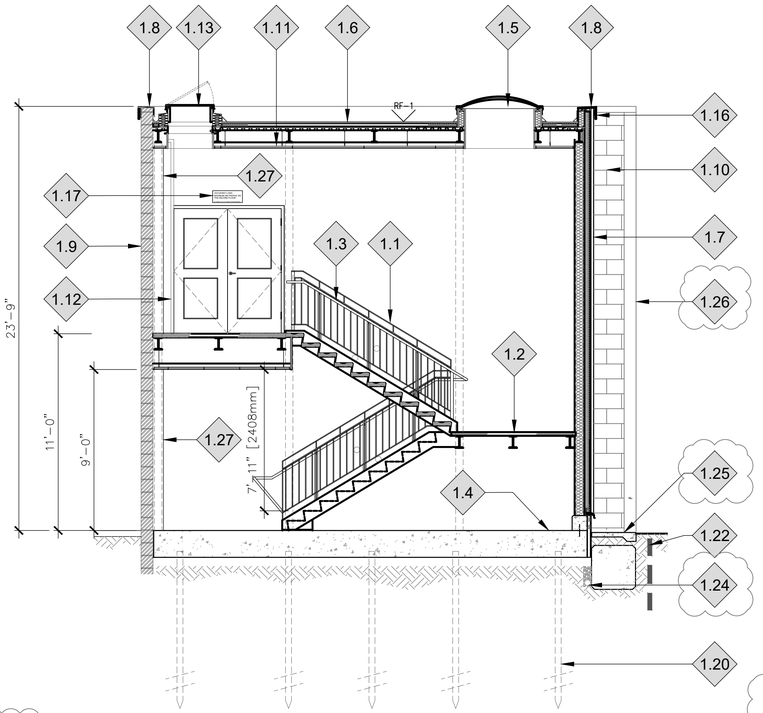
5 A352 **SECTION DETAIL** 1"=1'-00"



4 A352 **SECTION DETAIL** 1"=1'-00"



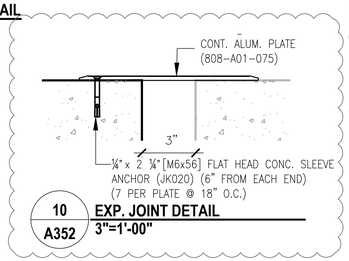
3 A352 **WALL SECTION** 1"=1'-00"



2 A352 **STAIR SECTION A-A** 1/4"=1'-00"

CONSTRUCTION NOTES:

1.1) PAINTED STEEL GUARD RAIL.
1.2) STEEL STAIR. REFER TO ENGINEER'S DRAWINGS.
1.3) 1 1/2" Ø PAINTED STEEL HANDRAIL.
1.4) REINFORCED CONCRETE SLAB. REFER TO STRUCTURAL ENGINEER'S DRAWINGS.
1.5) ACRYLIC DOME SKYLIGHT.
1.6) TWO-PLY SBS ROOF MEMBRANE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
1.7) FACTORY FINISHED, GALVANIZED METAL CLADDING. MATCH EXISTING.
1.8) FACTORY FINISH CAP FLASHING.
1.9) EXISTING CONCRETE BLOCK WALL.
1.10) REINFORCED CONCRETE BLOCK WALL. REFER TO STRUCTURAL ENGINEER'S DRAWINGS.
1.11) T-BAR CEILING (ACT) ARMSTRONG 672 OR EQUAL APPROVED.
1.12) SALVAGED ROOF ACCESS LADDER.
1.13) SALVAGED ROOF ACCESS HATCH.
1.14) ROOF ANCHOR. REFER TO STRUCTURAL ENGINEER'S DRAWINGS.
1.15) EXTERIOR LIGHT FIXTURE SUPPLIED BY BUILDING OWNER, INSTALLED BY CONTRACTOR.
1.16) 10"X2" HARDIE TRIM - PAINT TO MATCH FLASHING COLOUR.
1.17) SIGNAGE ABOVE DOOR
1/8" WHITE SINTRA BACK PLATE WITH 1/2" ROUNDED CORNERS.
RED VINYL LETTERS 1' (24mm) HIGH
TYPEFACE: HELVETICA MEDIUM
1.18) MAXIMUM OCCUPANT LOAD SIGN
POST ABOVE ENTRY DOOR AND AT BAR COUNTER.
1.19) ROOFDRAIN TO CONNECT TO EXISTING STORMWATER LINE CAPPED AT GROUND DURING DEMOLITION.
1.20) SCREWPILES - REFER TO STRUCTURAL AND GEOTECHNICAL ENGINEER.
1.21) GOOD-ONE-SIDE MAPLE PLY (3/4"), PAINTED TO MATCH CEILING.
1.22) ROOT-BARRIER (DEEPROOT UB-48-2) INSTALLED ON C.O.S. PARKS DEPARTMENT AND C.O.S. ARBORIST RECOMMENDATIONS. CONFIRM CUTTING OF TWO EXISTING TREE ROOTS WITH CITY OF SURREY BEFORE INSTALLING ROOT BARRIER.
DEEPROOT CANADA CORP.
SUITE 341 – 550 WEST BROADWAY VANCOUVER, BC V5Z 0E9TEL: 604 687 0899
TOLL FREE: 800 561 3883
(CANADA ONLY)
FAX: 604 684 6744
MJAMES@DEEPROOT.COM
1.23) TECH-CRETE CFI - CONCRETE FACED INSULATED PANEL.
1.24) WEEPING TILE IN 3/4" CRUSH TRENCH 12" WIDE16" DEEP. CONNECT TO EXISTING STORMWATER LINE.
1.25) REINFORCED CONCRETE APRON WITH 2% SLOPE AWAY FROM STAIR - MEDIUM BRUSH FINISH.
1.26) VERTICAL METAL FLASHING - 8"X8"X8" X HEIGHT OF CMU WALL.
1.27) PAINTED MDF TRIM 3/4" FULL HEIGHT OF COLUMN.

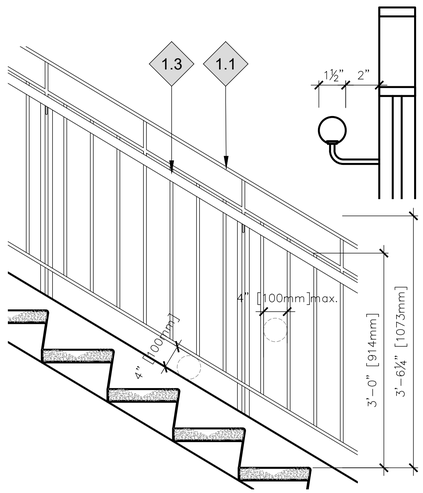


10 A352 **EXP. JOINT DETAIL** 3"=1'-00"

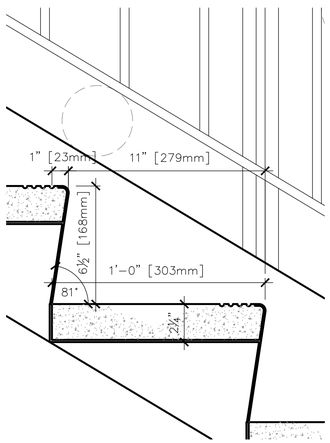
OCCUPANT LOAD:
MAXIMUM 280 PEOPLE ON THE SECOND FLOOR.

BY ORDER OF CITY OF SURREY FIRE DEPARTMENT.

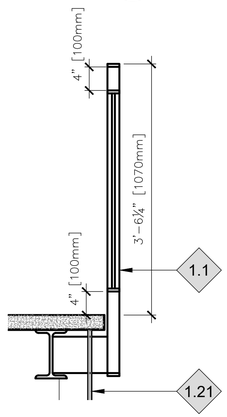
10 A352 **SIGN DETAIL** 3"=1'-00"



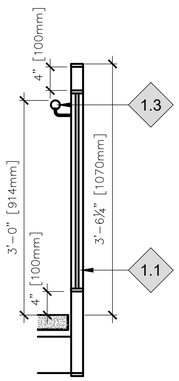
6 A352 **DETAIL** 1"=1'-00"



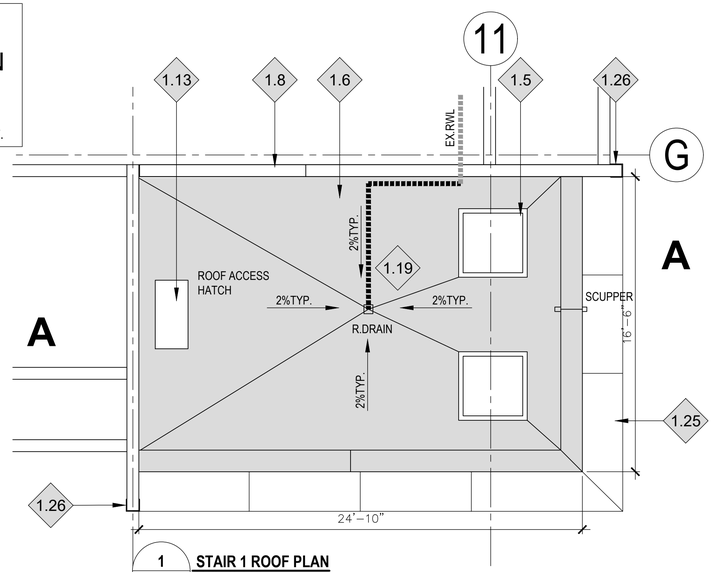
7 A352 **DETAIL** 3"=1'-00"



8 A352 **DETAIL** 1"=1'-00"

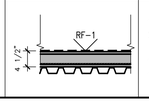


9 A352 **DETAIL** 1"=1'-00"



1 A352 **STAIR 1 ROOF PLAN** 1/4"=1'-00"

ROOF ASSEMBLY



	2 PLY SBS ROOF MEMBRANE
1/2"	GP DENSDECK ROOFBOARD INSULATION OVERLAY
2"	SOPRA-ISO PLUS INSULATION.
	AIR/VAPOUR CONTROL LAYER
1/2"	GP DENSDECK ROOFBOARD DECK OVERLAY
1 1/2"	WESTMAN STEEL "DECK MATE" OR EQUAL APPROVED 26GA GALV. STEEL DECK.

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NO	DATE	REVISIONS
3	22MAY2019	ISSUED FOR TENDER ADDENDUM#1
2	06MAY2019	ISSUED FOR TENDER
1	01MAY2019	ISSUED FOR BUILDING PERMIT

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www.acarch.ca

CITY OF SURREY
the future lives here.

CLOVERDALE CURLING RINK STAIR RENOVATION
6142 176 STREET, SURREY, BC, V3S 4E7

STAIR DETAILS

A352

DRAWN	SCALE	PROJECT	DATE
LSL	1/4" = 1'-0"	18SUR05	NOV.2018

Drawing List

S101	GENERAL NOTES
S111	TABLES
S201	PLANS
S202	BRACE ELEVATIONS
S401	CONCRETE AND MASONRY DETAILS
S501	STEEL DETAILS

DRAWING USAGE NOTES:

1. DO NOT BUILD FROM THESE DRAWINGS UNLESS THEY ARE MARKED AS "ISSUED FOR CONSTRUCTION" IN THE ISSUES COLUMN IN THE TITLE BLOCK.
2. DO NOT SCALE FROM ANY OF THE ABOVE NOTED DRAWINGS.
3. ALL OF THE ABOVE NOTED DRAWINGS ARE TO BE READ IN CONJUNCTION WITH EACH OTHER TO ASCERTAIN THE FULL EXTENT OF THE STRUCTURAL REQUIREMENTS.
4. INFORMATION CONTAINED IN THE GENERAL NOTES, LEGENDS, TABLES, AND TYPICAL DETAILS SHOWS MINIMUM STRUCTURAL REQUIREMENTS AND SHALL ALWAYS APPLY UNLESS NOTED OTHERWISE ON THE PLANS, DETAILS, ELEVATIONS OR SCHEDULES.

Abbreviations

GENERAL / NON MATERIAL SPECIFIC

Af	-	FACTORED AXIAL FORCE	MECH	-	MECHANICAL DRAWINGS
ARCH	-	ARCHITECTURAL DRAWINGS	Mf	-	FACTORED MOMENT
BM	-	BEAM	MIN.	-	MINIMUM
BOT.	-	BOTTOM	NIC	-	NOT IN CONTRACT
CANT	-	CANTILEVERED	NTS	-	NOT TO SCALE
Cf	-	FACTORED COMPRESSION FORCE	O/C	-	ON CENTRE
CL	-	CENTRELINE	OPNG	-	OPENING
CLR	-	CLEAR	OPP	-	OPPOSITE
COL	-	COLUMN	REQD	-	REQUIRED
CONT	-	CONTINUOUS	RTU	-	ROOF TOP UNIT
C/W	-	COMPLETE WITH	R/W	-	REINFORCED WITH
DIA OR Ø	-	DIAMETER	SDF	-	STEPPED DOWN FOOTING
DL	-	DEAD LOAD	SDL	-	SUPERIMPOSED DEAD LOAD
DP	-	DEEP	SIM	-	SIMILAR
DTS	-	DEPTH TO SUIT	SYMM	-	SYMMETRICAL
EXP JT	-	EXPANSION JOINT	TBC	-	TO BE CONFIRMED
ELEC	-	ELECTRICAL DRAWINGS	T&B	-	TOP AND BOTTOM
EQ	-	EQUAL	Tf	-	FACTORED TENSION FORCE
EX	-	EXISTING	TYP	-	TYPICAL
EXT	-	EXTERIOR	UNO	-	UNLESS NOTED OTHERWISE
GA	-	GAUGE	U/S	-	UNDERSIDE
GALV	-	GALVANIZED	VERT.	-	VERTICAL
GEOTECH.	-	GEOTECHNICAL ENGINEER	Vf	-	FACTORED SHEAR FORCE
HOR.	-	HORIZONTAL	W/	-	WITH
LG	-	LONG	WP	-	WORKING POINT
LL	-	LIVE LOAD	WHM	-	WICKE HERFST MAVER CONSULTING INC.
LV	-	LENGTH VARIES			
MAX.	-	MAXIMUM			

CONCRETE / REINFORCEMENT

ALT	-	ALTERNATING	REINF	-	REINFORCING
B	-	BOTTOM	S.O.G.	-	SLAB ON GRADE
BEW	-	BOTTOM EACH WAY	STAG	-	STAGGERED
BLL	-	BOTTOM LOWER LAYER	STIR	-	STIRRUP
BUL	-	BOTTOM UPPER LAYER	SW	-	SHORT WAY
CONC	-	CONCRETE	T	-	TOP
DWLS	-	DOWELS	TEW	-	TOP EACH WAY
EF	-	EACH FACE	TLL	-	TOP LOWER LAYER
EW	-	EACH WAY	TOC	-	TOP OF CONCRETE
FTG	-	FOOTING	TOF	-	TOP OF FOOTING
H	-	HORIZONTAL	TUL	-	TOP UPPER LAYER
H1E	-	HOOK ONE END	V	-	VERTICAL
H2E	-	HOOK TWO ENDS	VEF	-	VERTICAL EACH FACE
HEF	-	HORIZONTAL EACH FACE	VIF	-	VERTICAL INSIDE FACE
HIF	-	HORIZONTAL INSIDE FACE	VOF	-	VERTICAL OUTSIDE FACE
HOF	-	HORIZONTAL OUTSIDE FACE			
LW	-	LONG WAY			
P/T	-	POST TENSIONING			

1. General Requirements

1. GENERAL:

- THE GENERAL NOTES APPLY THROUGHOUT THE PROJECT UNLESS MORE STRINGENT REQUIREMENTS ARE NOTED ELSEWHERE ON THE STRUCTURAL DRAWINGS OR OTHER DISCIPLINES' DRAWINGS.
- THE TERM 'CONTRACTOR' SHALL INCLUDE THE GENERAL CONTRACTOR, CONSTRUCTION MANAGER, SUBCONTRACTORS, SITE SUPERINTENDANTS OR ANY OTHER PARTY RESPONSIBLE FOR THE CONSTRUCTION OF THE WORK AS THE CASE MAY BE.
- ALL STRUCTURAL DOCUMENTS, WHICH INCLUDE NOTES, PLANS, SPECIFICATIONS AND DETAILS, SHALL BE READ AS ONE DOCUMENT.
- THESE DRAWINGS SHOW THE DESIGN INTENT FOR THE COMPLETED INSTALLATION OF THE PILES AND THE REPAIR OF THE BLOCK WALLS. THE CONTRACTOR IS RESPONSIBLE FOR ANY TEMPORARY WORKS NECESSARY FOR THE COMPLETION OF CONSTRUCTION, THE MAINTENANCE OF STRUCTURAL STABILITY DURING CONSTRUCTION, AND FOR ALL SAFETY CONSIDERATIONS IN AND AROUND THE CONSTRUCTION SITE.
- PROPOSED SUBSTITUTIONS AND/OR REVISIONS TO ANY SPECIFIED MATERIAL OR FRAMING ASSEMBLY SHALL BE SUBMITTED TO WHM FOR REVIEW. IF THE CONTRACTOR BIDS, ORDERS, FABRICATES, OR OTHERWISE PROCEEDS WITH ANY SUBSTITUTIONS OR REVISIONS PRIOR TO REVIEW AND ACCEPTANCE BY WHM, IT DOES SO COMPLETELY AT ITS OWN RISK.
- PROPOSED SUBSTITUTIONS OF PROPRIETARY PRODUCTS WILL NOT BE PERMITTED UNLESS ADEQUATE ENGINEERING DATA IS SUBMITTED FOR REVIEW TO, AND DEEMED ACCEPTABLE BY, WHM. WHM MAY REQUIRE AT ITS SOLE DISCRETION DESIGNS OF SUBSTITUTIONS TO BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER.
- THE CONTRACTOR SHALL REMAIN COMPLETELY RESPONSIBLE FOR ENSURING SAFE LOADING IS NOT EXCEEDED ON ANY INCOMPLETE OR TEMPORARY STRUCTURE DURING CONSTRUCTION.

2. CODES:

- STRUCTURAL MATERIALS AND ASSEMBLIES SPECIFIED ON THESE DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH **PART 4 OF THE BRITISH COLUMBIA BUILDING CODE 2018(HEREINAFTER REFERRED TO AS 'THE CODE')**.
- ALL STRUCTURAL MATERIALS AND FRAMING ASSEMBLIES SHALL COMPLY WITH THE CODE AND ALL CSA STANDARDS AND DESIGN GUIDES REFERENCED THEREIN.
- ALL CSA AND ASTM STANDARDS APPLICABLE TO THE WORK, WHETHER REFERENCED IN THESE DRAWINGS OR NOT, SHALL BE THE MOST CURRENT EDITIONS ENACTED IN THE JURISDICTION IN WHICH THE CONSTRUCTION IS TO TAKE PLACE.

3. PROJECT SCOPE:

- THE PROJECT INVOLES THE INSTALLATION OF PILES WHERE DIFFERENTIAL SETTLEMENT OCCURRED AND THE REPAIR OF THE BLOCK WALLS AFFECTED BY THIS SETTLEMENT.
- THE RENOVATIONS WILL NOT ADVERSELY EFFECT THE EXISTING GRAVITY OR LATERAL LOAD RESISTING CAPACITY OF THE EXISTING BUILDING.

4. DESIGN PARAMETERS:

- SEE THE TABLES STARTING ON S101.

5. CONTRACTOR'S SUBMITTALS:

- WHM WILL REVIEW SUBMITTALS (WHICH INCLUDE SHOP DRAWINGS) TO THE EXTENT DEEMED NECESSARY BY WHM TO ASCERTAIN GENERAL CONFORMANCE TO THE DESIGN INTENT AND/OR AS REQUIRED BY THE BUILDING AUTHORITY HAVING JURISDICTION.
- REGARDLESS OF ANY TERMINOLOGY USED IN THE COURSE OF SUCH REVIEWS, WHM NEVER APPROVES SUBMITTALS AS THESE DOCUMENTS ARE AN INSTRUMENT OF SERVICE OF THE CONTRACTOR WHO PREPARED THEM, AND THEREFORE REMAIN ENTIRELY THE CONTRACTOR'S RESPONSIBILITY.
- THE GENERAL CONTRACTOR / CONSTRUCTION MANAGER MUST REVIEW ALL SUBMITTALS FROM SUB-CONTRACTORS FOR CONFORMANCE TO THE CONTRACT DOCUMENTS BEFORE SUBMITTING THEM TO WHM AND AFFIX THEIR STAMP TO THE SUBMITTALS INDICATING COMPLETION OF THIS REVIEW.
- SHOP DRAWINGS AND CALCULATIONS FOR ANY STRUCTURAL COMPONENT FOR WHICH DESIGN RESPONSIBILITY IS DELEGATED TO THE CONTRACTOR SHALL BE SEALED AND SIGNED, PRIOR TO SUBMISSION, BY A PROFESSIONAL ENGINEER REGISTERED IN BRITISH COLUMBIA.
- THE CONTRACTOR SHALL SUBMIT EACH SUBMITTAL TO WHM, WHO, AFTER REVIEWING IT, WILL SCAN A9ND RETURN BY EMAIL THE SUBMITTAL WITH ANY COMMENTS MARKED THEREON.
- IN CERTAIN CIRCUMSTANCES WHM'S CAD FILES MAY BE CONDITIONALLY USED AS BACKGROUNDS FOR SHOP DRAWINGS. SUCH CIRCUMSTANCES WILL BE ENTIRELY AT WHM'S DISCRETION AND FILES WILL ONLY BE PROVIDED UPON RECEIPT OF WHM'S WAIVER FORM SIGNED BY THE PARTY PREPARING THE SHOP DRAWINGS. IN CERTAIN CIRCUMSTANCES, AT THE DISCRETION OF WHM, FEES MAY BE CHARGED TO THE CONTRACTOR FOR USE OF STRUCTURAL FILES AS SHOP DRAWINGS.

6. PRICING AND TENDERING:

- UNLESS OTHERWISE APPROVED BY THE OWNER IN WRITING, THE CONTRACTOR SHALL NOT BASE FIXED-PRICE TENDERS ON THESE DRAWINGS UNLESS THE DRAWINGS HAVE BEEN ISSUED EITHER FOR TENDER OR CONSTRUCTION AND ARE SO MARKED IN THE "ISSUES" COLUMN AT THE RIGHT SIDE OF EACH SHEET.
- ANY DRAWINGS THAT HAVE NOT BEEN ISSUED FOR TENDER OR CONSTRUCTION, (THIS INCLUDES DRAWINGS THAT HAVE BEEN ISSUED FOR PRICING), ARE SUBJECT TO CHANGE WITHOUT NOTICE. WHM SHALL IN NO WAY BE HELD RESPONSIBLE FOR ANY PRICING UNDERTAKEN BASED ON SUCH DRAWINGS, NOR FOR THE COST OF ANY SUBSEQUENT CHANGES TO THE DRAWINGS.
- THE CONTRACTOR SHALL ACCOUNT FOR ALL CONTINGENCY ALLOWANCES NOTED ON THE TENDER AND CONSTRUCTION DRAWINGS.
- ADDENDA, SKETCHES, FIELD REPORTS, AND OTHER WRITTEN INSTRUCTIONS ISSUED BY WHM AFTER DRAWINGS ARE ISSUED FOR TENDER OR CONSTRUCTION SHALL BE CONSIDERED AN INTEGRAL PART OF THE STRUCTURAL CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE HELD FULLY RESPONSIBLE FOR CONSTRUCTING THE WORK IN CONFORMANCE WITH SUCH DOCUMENTS.
- IF THE CONTRACTOR BELIEVES THAT ANY ADDENDA, SKETCHES, FIELD REPORTS, OR OTHER WRITTEN INSTRUCTIONS ISSUED BY WHM AFTER DRAWINGS ARE ISSUED FOR TENDER OR CONSTRUCTION CONSTITUTE ADDITIONAL COST TO THE OWNER, THIS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL PROCEED WITH SUCH WORK ONLY UPON RECEIVING APPROVAL FROM THE OWNER.
- **ALL BIDS BASED ON THESE DRAWINGS SHALL INCLUDE UNIT RATE PRICES THAT SHALL APPLY TO BOTH FUTURE ADDITIONS AND DELETIONS TO THE DRAWINGS. BIDDERS SHALL SUPPLY SUCH UNIT RATES FOR ALL DISTINCT COMPONENTS OF THE WORK. THIS REQUIREMENT SHALL APPLY UNLESS THE OWNER SPECIFICALLY WAIVES IT IN WRITING.**
- SEE NOTE SECTION 2 FOR CONTINGENCY ALLOWANCE FOR RENOVATION WORK.

7. FIELD REVIEWS:

- WHM IS RESPONSIBLE FOR UNDERTAKING FIELD REVIEWS OF STRUCTURAL COMPONENTS AND ASSEMBLIES SHOWN IN THESE DRAWINGS. WHERE THE GEOTECHNICAL ASPECT OF THE RENOVATION IS INVOLVED (SEE SECTION 4.2), WHM WILL COMMUNICATE WITH BRAUN GEOTECHNICAL LTD. FOR THE LATTER TO PERFORM THE FIELD REVIEW. THE PURPOSE OF THESE REVIEWS IS TO ASCERTAIN GENERAL CONFORMANCE WITH THE DESIGN INTENT AS SET FORTH IN THESE DRAWINGS.
- THE FREQUENCY AND SCOPE OF FIELD REVIEWS ARE DETERMINED SOLELY BY WHM.
- THE CONTRACTOR SHALL ARRANGE ADEQUATE OPPORTUNITY FOR WHM TO UNDERTAKE A FIELD REVIEW. ALL STRUCTURAL COMPONENTS AND ASSEMBLIES SET FORTH IN THESE DRAWINGS SHALL REMAIN UNCONCEALED AND VISIBLE UNTIL EITHER REVIEWED IN THE FIELD BY WHM AND TO THEIR SATISFACTION, OR OTHERWISE PERMITTED BY WHM. THE CONSULTANTS MAY REQUIRE ANY CONCEALMENT OR OBSTRUCTIONS TO BE REMOVED AS REQUIRED TO FACILITATE FIELD REVIEW. CONSEQUENT REPAIR COST WILL BE THE CONTRACTOR'S RESPONSIBILITY.
- THE CONTRACTOR SHALL KEEP WHM APPRISED OF THE CONSTRUCTION SCHEDULE AT ALL TIMES SO THAT FIELD REVIEWS CAN BE SCHEDULED AT LEAST 48 HOURS IN ADVANCE.
- THE CONTRACTOR SHALL INSPECT ALL WORK IN THE FIELD PRIOR TO CALLING WHM TO SCHEDULE FIELD REVIEWS. THE CONTRACTOR SHALL KEEP RECORDS OF THESE REVIEWS AND SHALL FURNISH THEM TO WHM UPON REQUEST.
- THE CONTRACTOR SHALL NOT CONSIDER FIELD REVIEWS BY WHM AS A SUBSTITUTE FOR THEIR OWN INSPECTIONS OF THE WORK.
- PHOTOGRAPHS, INCLUDING DIGITAL PHOTOGRAPHS SUBMITTED TO WHM BY EMAIL, ARE **NOT** AN ACCEPTABLE SUBSTITUTE FOR IN-PERSON FIELD REVIEW BY WHM EXCEPT IN SPECIFIC INSTANCES AND CIRCUMSTANCES **PRE-APPROVED** BY WHM. IN SUCH CASES, THE PHOTOGRAPHS SHALL BE SUBMITTED IN SUCH A MANNER THAT WHM CAN REVIEW AND NOTE ANY DEFICIENCIES FOR CORRECTION WELL IN ADVANCE OF CONCEALMENT. IN ADDITION, PHOTOGRAPHS SHALL BE CLEARLY LABELED WITH DATE, LOCATION, AND ORIENTATION, AND SHALL COMPLETELY DOCUMENT ALL ASPECTS OF THE WORK.
- INCOMPLETE AND/OR INCORRECT WORK MAY REQUIRE REPEAT FIELD REVIEWS BY WHM. WHM WILL INVOICE THE OWNER FOR SUCH REPEAT REVIEWS, THE COSTS OF WHICH MAY ACCRUE TO THE CONTRACTOR PURSUANT TO IT'S CONTRACT WITH THE OWNER.
- FIELD REVIEWS ARE **NOT** UNDERTAKEN FOR THE CONTRACTOR'S BENEFIT. THE CONTRACTOR ALWAYS REMAINS COMPLETELY RESPONSIBLE FOR QUALITY ASSURANCE/CONTROL RELATING TO ALL CONSTRUCTION MATERIALS, ASSEMBLIES AND PROCESSES, AND FOR BUILDING THE WORK IN CONFORMANCE WITH THE DESIGN INTENT AS SET FORTH IN THE CONTRACT DOCUMENTS.
- FIELD REVIEW REPORTS SHALL BE CONSIDERED PART OF THE STRUCTURAL CONTRACT DOCUMENTS, AND AS SUCH, REQUIRE FULL AND COMPLETE ATTENTION FROM THE CONTRACTOR.

8. BUILDING ENVELOPE AND OTHER WATERPROOFING:

- WHM DOES NOT OFFER ANY SERVICES, NOR HOLDS ITSELF OUT AS BEING QUALIFIED IN ANY WAY WHATSOEVER, IN THIS FIELD OF WORK. WHM WILL NOT ACCEPT ANY LIABILITY FOR ANY ISSUES WHATSOEVER IN RELATION TO WATERPROOFING, WATER INGRESS, MOISTURE CONTROL, DRAINAGE, MOULD, MILDEW, FUNGUS, ETC.
- THE OWNER IS ADVISED TO RETAIN A COMPETENT AND WELL-INSURED PROFESSIONAL IN THIS FIELD OF WORK TO PROVIDE WHATEVER ADVICE THEY MAY REQUIRE.

2. Existing Conditions

1. SITE VERIFICATION:

- THE STRUCTURAL DESIGN INTENT DEPENDS ON ASSUMED AS-BUILT DIMENSIONS FOR THE EXISTING BUILDING STRUCTURE AND ON ASSUMED DETAILING AND PLACING PRACTICES CURRENT AT THE TIME THE EXISTING STRUCTURE WAS BUILT. THESE ASSUMPTIONS MAY VARY FROM THE ACTUAL ON-SITE CONDITIONS. THE CONTRACTOR SHALL DOCUMENT WITH PHOTOGRAPHS OR SKETCHES ANY ACTUAL VARIATIONS FROM THE ASSUMED CONDITIONS AND SHALL IMMEDIATELY INFORM WHM.
- THE CONTRACTOR SHALL MAINTAIN THE INTEGRITY AND SAFETY OF THE EXISTING STRUCTURE AND IS RESPONSIBLE FOR ALL TEMPORARY WORKS PER NOTE SECTION 1.
- THE CONTRACTOR SHALL REPORT TO WHM ANY EXISTING CONDITIONS THAT APPEAR UNSAFE OR OTHERWISE INADEQUATE WITH RESPECT TO THE CODE OR THE STRUCTURAL DESIGN INTENT. SUCH CONDITIONS INCLUDE BUT ARE NOT LIMITED TO:
  - CORROSION.
  - EXCESSIVE DEFLECTIONS.
  - ANY OTHER EVIDENCE OF STRUCTURAL FAILURE.
- PRIOR TO FABRICATION OF ANY STRUCTURAL MEMBERS, THE CONTRACTOR SHALL COMPLETE A SITE REVIEW OF CRITICAL "TIE-IN" DIMENSIONS AND CONFIRM ALL DIMENSIONS TO ENSURE PROPER FIT OF NEW WORK TO EXISTING. REPORT ANY DISCREPANCIES TO WHM PRIOR TO STARTING WORK.
- THE CONTRACTOR SHALL ENSURE THAT ALL NECESSARY AS-BUILT AND TIE-IN DIMENSIONS ARE RECORDED FOR THE PURPOSE OF COORDINATING ALL WORK, INCLUDING THAT OF SUBCONTRACTORS. THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR THE ACCURACY AND COMPLETENESS OF SUCH DIMENSIONS, AND FOR COORDINATION
- COMMENCEMENT OF CONSTRUCTION OR ANY PART THEREOF CONSTITUTES ACCEPTANCE OF EXISTING CONDITIONS AND MEANS DIMENSIONS AND ELEVATIONS HAVE BEEN CONSIDERED, VERIFIED AND HAVE BEEN DEEMED ACCEPTABLE.

3. Concrete

1. RESPONSIBILITY:

- THE CONTRACTOR SHALL ENSURE CONCRETE AND REINFORCEMENT IS DELIVERED, INSTALLED, AND CURED TO ALL CODE REQUIREMENTS AND TO REQUIREMENTS ON THESE DRAWINGS.
- THE CONTRACTOR SHALL COORDINATE ALL CONCRETE AND REINFORCEMENT WORK WITH THE REQUIREMENTS OF OTHER DISCIPLINES INCLUDING BUT NOT LIMITED TO INSERTS, CANS, SLEEVES, CONDUIT, PIPES, DUCTS, CHASES, OPENINGS, NAILERS, REGLETS, REVEALS, ETC.

2. CODE:

- CONCRETE AND REINFORCEMENT WORK SHALL CONFORM IN ALL RESPECTS TO THE CODE AND ALL REFERENCED DOCUMENTS.
  a. CONCRETE CONSTRUCTION METHODS AND DESIGN: CSA—A23.1, A23.2, A23.3.
  b. PARKING STRUCTURES: CSA S413.
  c. NON-WELDABLE REINFORCEMENT: CSA G30.18.
  d. WELDABLE REINFORCEMENT: CSA G30.18W.
  e. WELDED WIRE MESH: CSA G30.5.

3. WORKMANSHIP:

- ALL CONCRETE SHALL BE:
  a. FULLY AND ADEQUATELY CONSOLIDATED BY VIBRATION WITH SPECIAL CARE AND ATTENTION GIVEN TO AREAS OF CONGESTED REINFORCEMENT AND EMBEDDED HARDWARE, INSERTS, DUCTS, PIPES, ETC.
  b. BUILT LEVEL, PLUMB AND TO THE DIMENSIONS SPECIFIED IN THE CONTRACT DOCUMENTS.
- MINOR HONEYCOMBING SHALL BE REPAIRED WITH NON-SHRINK GROUT/PATCHING MATERIAL TO THE SATISFACTION OF THE ARCHITECT AND OWNER.
- MAJOR HONEYCOMBING (EXPOSED REINFORCEMENT OR AREAS GREATER THAN ONE SQ. FT) SHALL BE REPORTED TO WHM FOR REVIEW.
- ALL REINFORCEMENT:
  a. SHALL BE CHAIRED AND TIED SECURELY IN PLACE SUCH THAT IT WILL NOT DISPLACE AT ALL DURING CONCRETE PLACEMENT.
  b. SHALL USE PLASTIC OR RUBBER COATED CHAIRS.
  c. SHALL BE CONTINUOUS. WHERE LAP SPLICES ARE REQUIRED USE TENSION LAPS, LAPPED BARS SHALL BE IN CONTACT WITH EACH OTHER.

4. CURING AND PROTECTION:

- ALL CONCRETE SHALL BE CURED AND PROTECTED FROM ADVERSE CONDITIONS SUCH AS RAIN, WIND, COLD AND HEAT UNDER THE GUIDANCE OF A QUALIFIED MATERIALS ENGINEER AND IN CONFORMANCE WITH CSA A23.1.
- WHM IS NOT RESPONSIBLE FOR DEFINING CURING AND PROTECTION METHODS AND PROCESSES. THIS IS THE CONTRACTOR'S RESPONSIBILITY. **WHM REQUIRES THE CONTRACTOR RETAIN A PROFESSIONAL MATERIALS ENGINEERING CONSULTANT TO ADVISE ON APPROPRIATE CURING AND PROTECTION METHODS** TO ENSURE ALL CONCRETE WORK MEETS ALL STRUCTURAL AND ARCHITECTURAL REQUIREMENTS.
- WHEN TEMPERATURES REACH ABOVE 25C OR BELOW 5C, EXTRA PROTECTION TO CONCRETE IS REQUIRED. CONTRACTOR TO SEEK THE ADVICE OF A MATERIALS ENGINEER.

5. MATERIALS - CONCRETE:

- CEMENT SHALL BE GENERAL USE HYDRAULIC CEMENT—TYPE GU. "EcoCem PLC" BY LEHIGH CEMENT IS AN ACCEPTABLE ALTERNATIVE. PROVIDED ALL OTHER REQUIREMENTS ON THESE DRAWINGS ARE MET.
- WATER SHALL BE POTABLE, HEATED IF NECESSARY FOR APPROPRIATE CURING.
- CONCRETE SHALL BE REGULAR WEIGHT.
- ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE USED.
- MIX DESIGNS SHALL BE PREPARED BY THE CONCRETE SUPPLIER.
- TESTING:
  a. ALL CONCRETE SHALL BE TESTED IN CONFORMANCE WITH THE CODE BY A TESTING AGENCY CERTIFIED BY THE CANADIAN COUNCIL OF INDEPENDENT LABORATORIES AND SHALL ALSO CONFORM TO CSA A283. TESTING PERSONNEL SHALL BE CSA CERTIFIED.
  c. THE TESTING AGENCY SHALL BE RETAINED BY THE CONTRACTOR UNLESS ALTERNATIVE ARRANGEMENTS ARE MADE **IN ADVANCE** BETWEEN THE OWNER AND CONTRACTOR.
  d. THE CONTRACTOR SHALL FULLY COOPERATE WITH THE TESTING AGENCY TO FACILITATE APPROPRIATE TESTING.
  e. **WHM IS NOT RESPONSIBLE FOR DEFINING THE SCOPE AND METHODS OF TESTING. THIS IS THE SOLE RESPONSIBILITY OF THE TESTING AGENCY.**

6. MATERIALS - BAR REINFORCEMENT:

- SHALL BE RATED FOR 400 MPa YIELD STRESS.
- SHALL BE STANDARD DEFORMED BILLET STEEL BARS.
- SHALL NOT BE WELDED IN ANY WAY EXCEPT AS SPECIFIED, IN WHICH CASE WELDABLE REINFORCEMENT SHALL BE USED.
- SHALL BE FREE OF DIRT, OIL, AND OTHER DELETERIOUS MATERIAL THAT MAY INHIBIT PROPER BONDING WITH CONCRETE.
- THE CONTRACTOR SHALL RETAIN MILL CERTIFICATES FOR ALL REINFORCEMENT AND SHALL PROVIDE THESE TO THE TESTING AGENCY FOR REVIEW UPON REQUEST.

7. MATERIALS - EMBEDDED HARDWARE:

- PRE-SET ALL EMBEDDED HARDWARE WITH TEMPLATES OR BY FASTENING SECURELY TO FORMS. WET -SETTING OF EMBEDDED HARDWARE IS NOT PERMITTED.
- SPECIAL CARE SHALL BE TAKEN TO VIBRATE AND CONSOLIDATE CONCRETE COMPLETELY AROUND ALL EMBEDDED HARDWARE.
- SHOP DRAWINGS SHALL BE PREPARED FOR ALL EMBEDDED HARDWARE EXCEPT PRE-DRILLED (EXPANSION AND ADHESIVE) ANCHORS.

8. MATERIALS - PRE-DRILLED (EXPANSION AND ADHESIVE) ANCHORS:

- CAST-IN-PLACE ANCHORS SHALL NOT BE SUBSTITUTED WITH PRE-DRILLED ANCHORS.
- HILTI CANADA CORP IS THE ONLY PRE-APPROVED SUPPLIER OF PRE-DRILLED ANCHORS.
- ALL ON-SITE PERSONNEL INSTALLING PRE-DRILLED ANCHORS SHALL HAVE OBTAINED A CERTIFICATE FOR HILTI'S ACCREDITED INSTALLER PROGRAM. THE CONTRACTOR SHALL PROVIDE THESE CERTIFICATES TO WHM PRIOR TO INSTALLING ANY PRE-DRILLED ANCHORS.
- ADHESIVE ANCHORS CONSIST OF AN ANCHOR ROD AND AN ADHESIVE INSTALLED INTO SOLID CONCRETE SUBSTRATE IN STRICT ACCORDANCE WITH HILTI'S LATEST PUBLISHED RECOMMENDATIONS.
- ADHESIVE ANCHOR RODS SHALL COME COMPLETE WITH NUT AND STANDARD-CUT WASHER SIZED TO SUIT ROD DIAMETER. SEE TABLE AND PLANS FOR ACCEPTABLE ROD TYPES.

9. FORMWORK, SHORING AND RESHORING

- FORMWORK FOR SLABS , SLABBANDS AND BEAMS ARE TO REMAIN IN PLACE UNTIL TESTS CONFIRM THE CONCRETE HAS REACHED 70% OF ITS SPECIFIED DESIGN STRENGTH. THEREAFTER, RE-SHORING SHALL BE MAINTAINED UNTIL TESTS CONFIRM FULL STRENGTH HAS BEEN REACHED AND THE CONCRETE IS AT LEAST 28-DAYS OLD.

4. Masonry

1. RESPONSIBILITY:

- THE CONTRACTOR SHALL ENSURE ALL MASONRY WORK IS DELIVERED, INSTALLED, AND CURED TO ALL CODE REQUIREMENTS AND TO REQUIREMENTS ON THESE DRAWINGS.

2. CODE:

- STRUCTURAL MASONRY WORK SHALL CONFORM IN ALL RESPECTS TO THE CODE AND ALL REFERENCED DOCUMENTS.
  a. MASONRY DESIGN AND CONSTRUCTION: CSA S304.1.
  b. MATERIALS AND PRACTICE: CSA A371.
  c. CONCRETE BLOCKS: CSA A165.1.
  d. MASONRY GROUT: CSA A179.
  e. MORTAR: CSA A179.
  f. WELDABLE REINFORCEMENT: CSA G30.18W.

3. WORKMANSHIP:

- ALL MASONRY WORK SHALL BE CONSTRUCTED BY EXPERIENCED PLACERS SUPERVISED BY AN EXPERIENCED FOREMAN. CREDENTIALS SHALL BE FURNISHED TO WHM UPON REQUEST.
- ALL MORTAR BEDS AND JOINTS SHALL BE NEATLY TOOLED WITH ALL GROUT AND MORTAR SPILLAGE REMOVED.
- ALL CELLS CONTAINING REINFORCEMENT OR EMBEDDED HARDWARE OR ANCHORS SHALL BE COMPLETELY FILLED WITH CONCRETE GROUT.
- CONCRETE GROUT SHALL BE FULLY AND ADEQUATELY CONSOLIDATED BY VIBRATION WITH SPECIAL CARE AND ATTENTION GIVEN TO AREAS OF CONGESTED REINFORCEMENT AND EMBEDDED HARDWARE, INSERTS, DUCTS, PIPES, ETC.
- CLEANOUTS ARE REQUIRED TO DEMONSTRATE ADEQUATE FILL AND CONSOLIDATION.
- ALL REINFORCEMENT:
  a. SHALL BE POSITIONED AT THE CENTRE OF THE BLOCK COURSE AND TIED SECURELY IN PLACE SUCH THAT IT WILL NOT DISPLACE AT ALL DURING GROUT PLACEMENT.
  b. SHALL BE CONTINUOUS. LAP SPLICES SHALL BE MINIMIZED BUT WHERE REQUIRED SHALL BE TENSION LAPS. LAPPED BARS SHALL BE IN CONTACT WITH EACH OTHER. SEE TABLES FOR EMBEDMENT AND LAP LENGTH REQUIREMENTS.

4. MATERIALS - CONCRETE MASONRY BLOCKS:

- CONCRETE MASONRY BLOCKS SHALL BE STANDARD HOLLOW CONCRETE MASONRY UNITS (CMU).
- ALL CMU SHALL BE OF STANDARD METRIC DIMENSIONS. STANDARD IMPERIAL SIZES SHALL NOT BE USED UNLESS EXPLICITLY SPECIFIED ON THE PLANS OR PERMITTED IN WRITING BY THE ARCHITECT. NOMINAL CMU SIZE SHALL BE 200 THICK x 200 HIGH x 400 LONG. ACTUAL SIZE IS 190 x 190 x 390.
- CUT BLOCKS OR SQUARE HALF-BLOCKS SHALL BE USED ONLY WHERE REQUIRED TO ACHIEVE THE CORRECT ELEMENT DIMENSIONS AND EVEN THEN IN THE MINIMUM POSSIBLE NUMBERS.
- BLOCKS SHALL BE COMPRISED OF REGULAR WEIGHT CONCRETE.
- BLOCKS SHALL BE TYPE H/15/A/M (f'm = 15 MPa).

5. MATERIALS - MORTAR AND GROUT:

- MORTAR SHALL BE TYPE S PREPARED BY PROPORTION SPECIFICATION (TYPE 10 PORTLAND CEMENT).
- CELLS TO BE GROUTED ARE TO BE KEPT CLEAN AND CLEAR OF ANY PIPING, CONDUITS OR OTHER MATERIAL.
- POUR LIFTS FOR GROUT FILLED CORES ARE NOT TO EXCEED 5'-0". IF CLEAN OUTS OR SPECIAL PROCEDURES APPROVED BY WHM ARE PROVIDED, POUR LIFTS MAY BE INCREASED TO MAXIMUM 10'-0".

6. MATERIALS - REINFORCEMENT:

- SHALL BE RATED FOR 400 MPa YIELD STRESS.
- SHALL BE STANDARD DEFORMED BILLET STEEL BARS.
- SHALL NOT BE WELDED IN ANY WAY.
- SHALL BE FREE OF DIRT, OIL, AND OTHER DELETERIOUS MATERIAL THAT MAY INHIBIT PROPER BONDING WITH GROUT.

5. Structural Steel

1. RESPONSIBILITY:

- THE CONTRACTOR SHALL ENSURE ALL STEEL WORK IS FABRICATED, DELIVERED, ERECTED, INSTALLED, AND TESTED TO ALL CODE REQUIREMENTS AND TO REQUIREMENTS ON THESE DRAWINGS.

2. CODES:

- STRUCTURAL STEEL WORK SHALL CONFORM IN ALL RESPECTS TO THE CODE AND ALL REFERENCED DOCUMENTS.
- MATERIALS AND PRACTICE SHALL CONFORM TO CSA S16.

3. WORKMANSHIP:

- ALL STEEL WORK SHALL BE BUILT LEVEL, PLUMB AND TO THE DIMENSIONS SPECIFIED IN THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL NOTIFY WHM IN WRITING THAT THE FABRICATOR IS CERTIFIED TO A MINIMUM OF DIVISION 2.1 OF CSA STANDARD W47.1.

4. MATERIALS - FRAMING:

- ROLLED WIDE-FLANGES (W): G40.21M—350W OR EQUIVALENT (Fy=350 MPa)
- CHANNELS (C): G40.21M—300W OR EQUIVALENT (Fy=300 MPa)
- ANGLES (L): G40.21M—300W OR EQUIVALENT (Fy=300 MPa)
- TEES (WT): G40.21M—350W OR EQUIVALENT (Fy=350 MPa)
- RECTANGULAR, ROUND, AND SQUARE HOLLOW STRUCTURAL SECTIONS (HSS): G40.21M—350W (Fy=350 MPa) CLASS C.
- PLATES, BARS, AND SMOOTH RODS: G40.21M—300W OR EQUIVALENT (Fy=300 MPa)

5. MATERIALS - FASTENERS:

- HIGH STRENGTH BOLTS: CSA A325M (Fu = 830 MPa) OR WHERE SPECIFIED ON PLANS, CSA A490M (Fu = 1040 MPa).
- REGULAR ANCHOR RODS: ASTM A307 GR.A (Fu = 414 MPa).
- REGULAR SMOOTH AND THREADED RODS: ASTM A36 OR F1554 GR.36 (Fy = 36ksi / 248MPa AND Fu = 58-80ksi / 400-552 MPa).
- HIGH STRENGTH SMOOTH AND THREADED RODS: ASTM A449 (Fu = 90ksi / 621 MPa) OR ASTM A193 GR.B7 (Fu = 125ksi / 862 MPa).
- NUTS: CSA A325M or ASTM A563 HEAVY HEX
- WASHERS: CSA A325M or ASTM F436.
- SHEAR STUD CONNECTORS / HEADED STUDS (NELSON STUDS): ASTM A108 (Fu = 65ksi / 448 MPa).

6. CONNECTIONS - GENERAL:

- ALL CONNECTIONS SHALL BE DESIGNED BY THE FABRICATOR'S PROFESSIONAL ENGINEER UNLESS SPECIFICALLY DETAILED ON THESE DRAWINGS.
- HSS MEMBERS SHALL BE SEALED IN THE SHOP WITH SEAL-WELDED PLATE OF THICKNESS TO MATCH THE HSS WALL THICKNESS. THE INTERIOR OF THE SECTION MUST BE THOROUGHLY DRIED IN THE SHOP BEFORE SEALING. IF WATER CAN ENTER THE INTERIOR OF THE SECTION IN ANY WAY AFTER IT LEAVES THE SHOP, WEEP HOLES SHALL BE PROVIDED AT THE BASE OF THE SECTION.

7. CONNECTIONS - WELDED:

- ALL WELDING SHALL CONFORM TO ALL REQUIREMENTS OF THE CANADIAN WELDING BUREAU (CWB) AS LISTED IN CSA STANDARD W59.
- ALL WELDING SHALL BE PERFORMED BY CWB CERTIFIED WELDERS UNDER THE REQUIREMENTS OF CSA STANDARD W47.1, THE CONTRACTOR SHALL FURNISH FOR REVIEW CERTIFICATES OF ALL WELDERS UPON REQUEST.
- ALL WELDING SHALL BE PERFORMED IN COMPLIANCE WITH THE FABRICATOR'S WRITTEN WELDING PROCEDURE SPECIFICATIONS (WPS), THE CONTRACTOR SHALL FURNISH FOR REVIEW THE WPS UPON REQUEST.
- ELECTRODES AND FILLER METAL SHALL BE RATED E480xx (E70xx) OR BETTER.
- AS A MINIMUM, WELDED CONNECTIONS SHALL BE 6mm (1/4") FILLETS ALL AROUND.
- THE NOTE 'WELD FOR FULL STRENGTH' , SHALL BE TAKEN TO MEAN THE WELD SHALL BE CAPABLE OF DEVELOPING THE BENDING, AXIAL, AND SHEAR STRENGTH OF THE WEAKER CONNECTED PIECE.

8. CONNECTIONS - BOLTED:

- ALL BOLTED STEEL-TO-STEEL CONNECTIONS SHALL EMPLOY 3/4" DIAMETER MINIMUM HIGH-STRENGTH BOLTS FASTENED FOR SNUG-TIGHTENED CONDITIONS UNLESS SLIP-CRITICAL IS NECESSARY.
- NUTS AND WASHERS ARE REQUIRED FOR ALL BOLTS. NUTS SHALL BE OF HEAVY HEX GEOMETRY WITH SUFFICIENT GRIP CAPACITY TO DEVELOP THE FULL TENSILE STRENGTH OF THE BOLT.
- BOLTED CONNECTIONS SHALL HAVE A MINIMUM OF TWO BOLTS IN EACH CONNECTED PIECE AND BE DESIGNED AS BEARING CONNECTIONS.

9. STEEL DECK:

- SHALL BE WIPE COAT GALVANIZED (ZF075) FOR ROOF AND FLOOR DECK AND DECK TO RECEIVE CONCRETE TOPPING.
- STEEL DECK TO RECEIVE TOPPING SHALL BE COMPOSITE DECK.
- THE CONTRACTOR SHALL ENSURE THAT ALL UNSHORED DECK SPANS DO NOT EXCEED THE MAXIMUMS PERMITTED BY THE MANUFACTURER'S CATALOGUES.
- SHALL BE CONTINUOUS OVER THREE SPANS WHEREVER POSSIBLE.
- SHALL HAVE AT LEAST 50mm (2") OF BEARING AT ALL SUPPORTS.
- ANY HANGERS FASTENED TO THE DECK TO SUPPORT NON-STRUCTURAL ELEMENTS MUST BE PRE-APPROVED BY THE DECK SUPPLIER FOR THE INTENDED LOAD.

10. SURFACES:

- STRUCTURAL STEEL, WHICH WILL NOT RECEIVE A FINISH PAINT COAT AND IS REQUIRED TO BE PRIMED FOR INTERIOR EXPOSURE, SHALL BE CLEANED IN ACCORDANCE WITH CISC / CPMA STANDARD 1-73 AS A MINIMUM.
- STRUCTURAL STEEL TO RECEIVE A SHOP OR FIELD PAINT FINISH SHALL BE CLEANED IN ACCORDANCE WITH THE ARCHITECTURAL SPECIFICATIONS OR SSPC SP6 "COMMERCIAL BLAST CLEANING", WHICHEVER PRODUCES A SURFACE WHICH HAS LESS RUST AND MILL SCALE.
- ANY STRUCTURAL STEEL THAT IS NOT PROTECTED FROM MOISTURE BY THE BUILDING ENVELOPE SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION. WELDS, SCRATCHES, ABRASIONS, ETC., SHALL BE TOUCHED-UP WITH COMPATIBLE ZINC-RICH PAINT AFTER ERECTION.
- SEE THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

11. STAIRS:

- THE CONTRACTOR SHALL DESIGN AND FABRICATE ALL STEEL STAIRS INCLUDING TREADS, PANS, LANDINGS, STRINGERS, SUPPORTING BEAMS, EDGE ANGLES, CONNECTIONS TO THE MAIN STRUCTURE, HANDRAILS, GUARDRAILS, ETC. THE DESIGN SHALL BE UNDER THE GUIDANCE OF A SPECIALTY STRUCTURAL ENGINEER RETAINED BY THE CONTRACTOR.

12. SHOP DRAWINGS:

- SHOP DRAWINGS SHALL BE PREPARED UNDER THE DIRECTION OF A SPECIALTY STRUCTURAL ENGINEER. FOR THOSE CONNECTIONS AND COMPONENTS DESIGNED BY THE FABRICATOR. THIS ENGINEER OR THEIR REPRESENTATIVE SHALL VISIT THE SITE TO REVIEW IN PLACE THE CONNECTIONS AND COMPONENTS DESIGNED BY THIS ENGINEER TO SATISFY THEMSELVES THAT THESE CONNECTIONS AND COMPONENTS COMPLY WITH THEIR DESIGN ON THE SHOP DRAWINGS. THIS ENGINEER SHALL ALSO PROVIDE SEALED SKETCHES FOR ALL FIELD MODIFICATIONS MADE TO THEIR DESIGN.THIS ENGINEER SHALL PROVIDE SIGNED AND SEALED SCHEDULES B AND C-B.

13. TESTING:

- ALL STEEL SHALL BE TESTED IN CONFORMANCE WITH THE CODE BY AN APPROVED TESTING AGENCY.
- APPROVED TESTING AGENCIES ARE AS FOLLOWS :
  a. ELANDER INSPECTION LTD. Phone: (604) 214-1318
  b. ACUREN GROUP INC. Phone: (604) 275-3800
  IF REQUIRED, ALTERNATIVE TESTING AGENCIES SHALL BE SUBMITTED FOR REVIEW TO WHM IN ADVANCE OF THE COMMENCEMENT OF TESTING.
- THE GENERAL CONTRACTOR OR CONSTRUCTION MANAGER FOR THE OVERALL PROJECT (**NOT** THE FABRICATION OR ERECTION SUB-TRADES) SHALL RETAIN THE TESTING AGENCY AND COORDINATE ALL TESTING.
- **WHM IS NOT RESPONSIBLE FOR DEFINING THE FINAL SCOPE AND METHODS OF TESTING. THIS IS THE SOLE RESPONSIBILITY OF THE TESTING AGENCY AND ITS SUPERVISING ENGINEER**. HOWEVER, AS A MINIMUM, THE FOLLOWING SCOPE SHALL BE PERFORMED:
  a. VISUAL INSPECTION OF ALL FRAMING MEMBERS.
  b. REVIEW OF A RANDOM SAMPLING OF MILL CERTIFICATES FOR APPROPRIATE STEEL GRADE AND CHEMICAL COMPOSITION.
  c. VISUAL INSPECTION OF ALL SHOP AND FIELD WELDS.
  d. NON-DESTRUCTIVE TESTING OF ALL FULL-STRENGTH AND FULL-PENETRATION WELDS.
  e. DESTRUCTIVE TESTING OF 5% OF FILLET-WELDED HEADED SHEAR STUDS AND 10% OF FUSION-WELDED HEADED SHEAR STUDS.
  f. DESTRUCTIVE TESTING OF 5% OF WELDED REINFORCING BAR ANCHORS.
  g. VISUAL INSPECTION OF ALL BOLTING.
  h. TORQUE TESTS ON A RANDOM SAMPLING OF SNUG-TIGHT BOLTING.
  i. TORQUE TESTS ON 100% OF SLIP-CRITICAL BOLTING.
  j. CONNECTIONS FOR STEEL DECK.
- THE CONTRACTOR SHALL ALLOW FOR THE COST OF REPLACING COMPONENTS DAMAGED IN THE DESTRUCTIVE TESTING NOTED ABOVE.
- TESTING OF EMBEDDED HARDWARE SHALL BE DONE WELL IN ADVANCE OF CONCRETE PLACEMENT TO ALLOW FOR CORRECTIVE MEASURES TO BE SPECIFIED AND IMPLEMENTED WITHIN A REASONABLE TIME FRAME.

6. Foundations and Soils

1. ALL FOUNDATION AND SOILS WORK:

- SHALL CONFORM TO THE CODE, THE GEOTECHNICAL REPORT, AND AS NOTED HEREIN.

2. THE GEOTECHNICAL ENGINEER:

- FOR THIS PROJECT IS BRAUN GEOTECHNICAL LTD.
- HAS PRODUCED A GEOTECHNICAL REPORT DATED NOVEMBER 20. 2015.
- SHALL BE FULLY RESPONSIBLE FOR ALL ENGINEERING ASPECTS OF THE SOILS IN RELATION TO THE BASE BUILDING STRUCTURE. THESE ASPECTS INCLUDE, BUT ARE NOT LIMITED TO:
  a. VERTICAL & LATERAL SOIL PRESSURE.
  b. RECOMMENDATIONS REGARDING CORROSION OF CONCRETE OR STEEL (REINFORCEMENT, PILING, ETC.) FOUNDATION COMPONENTS.
  c. BACKFILL.
  d. EXCAVATIONS.
  e. FIELD REVIEW OF ITEMS DOCUMENTED ABOVE WITH SIGNED AND SEALED FIELD REPORTS SUBMITTED TO THE BUILDING OFFICIAL AND WHM.

3. THE PILE CONTRACTOR:

- SHALL BE FULLY RESPONSIBLE FOR THE TYPE, CAPACITY, LENGTH, SPACING AND INSTALLATION OF THE PILES.
- SHALL COORDINATE WITH THE GEOTECHNICAL ENGINEERS AS REQUIRED TO DETERMINE SOIL-DEPENDENT CAPACITIES OF THE PILES INCLUDING ANY CAPACITY LIMITATIONS IMPOSED BY DRIVING STRESSES.
- SHALL PERFORM THE REQUISITE SITE TESTING OF THE PILES WHOSE PROCEDURES AND RESULTS ARE SUBJECT TO THE GEOTECHNICAL ENGINEERS REVIEW & APPROVAL.
- SHALL BE FULLY RESPONSIBLE FOR THE GROUT INJECTION UNDER THE SLAB-ON-GRADE. THE SCOPE OF THE GROUT INJECTION SHALL BE DETERMINED IN COORDINATION WITH THE GEOTECHNICAL ENGINEERS.
- SHALL SUBMIT SIGNED AND SEALED PILE SHOP DRAWINGS FOR WHM AND BRAUN GEOTECHNICAL REVIEW PRIOR TO INSTALLATION.

4. SCREW PILE NOTES:

- THE STEEL SCREW PILES ARE TO BE DESIGNED, FABRICATED, AND INSTALLED BY A SPECIALIST PILING MANUFACTURER.
- THE SCREW PILE DESIGN SHALL CONFORM TO THE APPLICABLE CANADIAN CODES AND SHELL STANDARDS STD14-1.11 & STD 13-1.01. THE CONTRACTOR SHALL CONTACT BRAUN GEOTECHNICAL LTD. GEOTECHNICAL CONSULTANTS TO DETERMINE THE NATURE OF THE SOILS TO RECEIVE SCREW ANCHOR. THE PILES SHALL BE SIZED TO RESIST STRESSES DURING INSTALLATION AND TO OVERCOME INSTALLATION RESISTANCE TO CONTRACTOR SHALL WORK WITH BRAUN GEOTECHNICAL LTD. GEO-TECHNICAL TECHNOLOGISTS TO ASSIST IN INSTALLATION PROCEDURE AND TO MONITOR INSTALLATION RECORDS.
- GROUP EFFECTS DUE TO RELATIONSHIP BETWEEN SCREW PILE SPACING AND DIAMETER OF HELICAL PLATES SHALL BE TAKEN INTO ACCOUNT TO DETERMINE THE CAPACITY OF SCREW PILES IN TENSION AND COMPRESSION.
- THE SCREW PILES SHALL BE DESIGNED TO WITHSTAND THE LOADS INDICATED ON THE STRUCTURAL DRAWINGS AS WELL AS POTENTIAL FROST HEAVE FORCES ACTING ON THE PILE SHAFTS WITH THE ZONE OF FROST PENETRATION. THE DESIGN SHALL BEAR THE STAMP OF A REGISTERED ENGINEER.
- THE UPPER—MOST HELICAL PLATE SHALL BE POSITIONED BELOW FROST PENETRATION DEPTH PER THE GEOTECHNICAL REPORT.
- AS AN ALTERNATIVE TO GALVANIZING THE SCREW PILES FOR CORROSION PROTECTION. THE CONTRACTOR MAY PROPOSE OTHER METHODS OF CORROSION PROTECTION INCLUDING SACRIFICIAL CORROSION ALLOWANCE. IF GALVANIZING IS NOT USED THE UPPER PORTIONS OF THE PILE SHAFTS SHALL RECEIVE A SUITABLE PROTECTIVE COATING.
- THE CONTRACTOR SHALL MAINTAIN PILE INSTALLATION RECORDS FOR EACH SCREW PILE. RECORDS SHALL INCLUDE INSTALLATION DEPTH, DEPTH OF HELICAL PLATES, TORQUE HISTORY THROUGHOUT INSTALLATION AND FINAL INSTALLATION TORQUE ACHIEVE RECORDS SHALL BE SUBMITTED TO THE OWNER.
- PITCH OF HELICAL PLATES SHALL BE SUCH THAT SOIL CHURNING SHALL NOT OCCUR AND SPACING OF PLATES SHALL SUCH THAT UPPER HELICAL PLATES FOLLOW THE SAME TRACK AS THE BOTTOM PLATE.
- THE FINISHED PILE/PILECAP INSTALLATION TOLERANCE FROM INDICATED LEVEL AND LOCATION ON THE STRUCTURAL DRAWINGS SHALL NOT BE MORE THAN VERTICAL 1/2" AND HORIZONTAL 2" AT THE TOP OF PILE CAP LEVEL. INCLINATION TOLERANCE SHALL BE WITHIN 2% OF THE PILE LENGTH.
- ALL PIPES USED FOR PILING SHALL BE IN ACCORDANCE WITH ASTM A252 GRADE 2 OR 3 OR A106 GRADE B OR C.
- ALL PILES SHALL BE INSTALLED OPEN ENDED AND EMBEDDED TOP SHALL BE CUT AT 45". THE OPEN TIP OF ALL PILES SHALL BE CUT PARALLEL TO GROUND SLOPE.
- LOADS ARE APPLIED AT THE CENTRELINE ELEVATION OF THE PIPE U.N.O.
- THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY OF ANY PILE NOT IN CONFORMANCE WITH THE DRAWING AND THESE SPECIFICATIONS.
- HELIX(ES) SHALL HAVE A MINIMUM THICKNESS OF 12.7MM AND SHALL BE OF A36 OR G40.21-M, GRADE 300W MATERIAL.
- WELDING PROCEDURE AND WELDER QUALIFICATION SHALL CONFORM TO CSA W59 AND CSA W47.1 WELDING ELECTRODES SHALL BEE48018 CLASSIFICATION CONFORMING TO CSA W40.1
- CHANGES OR REPAIRS OF STRUCTURAL DAMAGE DUE TO IMPROPER PLACEMENT OF PILES SHALL BE MADE AS DIRECTED BY THE CONTRACTOR'S EXPENSE.
- PILE DRILLING RECORDS FOR ALL PIPES SHALL BE PROVIDED TO THE OWNER.
- MAXIMUM LATERAL DEFLECTION OF PILE SHALL BE NOT EXCEED 6MM AT GROUND LEVEL.
- PILE CUT-OFF ELEVATIONS AND TOP OF CAP PLATE ELEVATIONS TO BE TAKEN AT PILE CENTRE LINES.

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NO.	ISSUE / REVISION	DATE	BY
	ISSUED FOR ADDENDUM 01	MAY 23 2019	
	ISSUED FOR TENDER	MAY 06 2019	
	ISSUED FOR BUILDING PERMIT	MAY 03 2019	
	ISSUED FOR COORDINATION	APR. 26 2019	
	ISSUED FOR COORDINATION	APR. 18 2019	
	ISSUED FOR TENDER	NOV. 26 2015	
	ISSUED FOR REVIEW	NOV. 10 2015	

Seal

Project Title

City Of Surrey
Cloverdale Curling Rink
Stair Renovation
6142 176th St., Surrey, BC
V3S 4E7

Drawing Title

General Notes

Project No: 15234	Scale: N/A
Project Drafter: MS	Project Engineer: NH

Dwg. No. S101

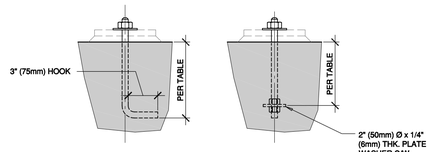
Concrete Table: Anchors

DESIGNATION	OPTION	ALLOWABLE TYPE
ANCHOR(S): EG: 3/4"Ø ADHESIVE ANCHOR PER TABLE. **NOTE: IF OPTION NOT SPECIFICALLY CALLED UP, USE ANY ADJACENT OPTION SHOWN.**	CAST IN PLACE	J-BOLT OR DOUBLE NUT PER DETAIL BELOW
	ADHESIVE ANCHOR	HIT HY100 WITH HAS OR HIT-V OR A307 ROD OR REBAR HIT HY200 WITH HAS OR HIT-V OR A307 ROD OR REBAR HIT RE500 V3 WITH HAS OR HIT-V OR A307 ROD (SEE NOTE 2 BELOW)
	EXPANSION ANCHOR **(NOT PERMITTED WITHIN 6" (150mm) OF ANY CONCRETE EDGE)**	KWIK BOLT-V KWIK BOLT 3
SEISMIC ANCHOR(S): EG: 3/4"Ø CAST IN PLACE SEISMIC ANCHOR PER TABLE. **NOTE: IF OPTION NOT SPECIFICALLY CALLED UP, USE ANY ADJACENT OPTION SHOWN.**	CAST IN PLACE	J-BOLT OR DOUBLE NUT PER DETAIL BELOW
	ADHESIVE ANCHOR	HIT HY200 WITH HIT-Z ROD OR REBAR HIT RE500 V3 WITH HIT-Z ROD OR REBAR (SEE NOTE 2 BELOW)
	EXPANSION ANCHOR **(NOT PERMITTED WITHIN 6" (150mm) OF ANY CONCRETE EDGE)**	KWIK BOLT TZ
FULLY CALLED UP ON PLAN/DETAIL.	NO ALTERNATIVE PERMITTED.	NO ALTERNATIVE PERMITTED

EMBEDMENT UNO ON PLAN/DETAIL (Also See Note 3 Below) :

ANCHOR Ø [REBAR SIZE]	CAST IN PLACE ANCHORS	EXPANSION ANCHORS INCLUDING SEISMIC ANCHORS	ADHESIVE ANCHORS INCLUDING SEISMIC ANCHORS
3/8" (10mm)	6" (152mm)	2 1/2" (64mm)	3 1/2" (89mm)
1/2" (13mm) [10M]	6" (152mm)	3 1/2" (89mm)	4 1/2" (115mm)
5/8" (16mm) [15M]	7" (178mm)	4" (102mm)	6" (153mm)
3/4" (19mm) [20M]	7" (178mm)	4 3/4" (121mm)	7" (178mm)
7/8" (22mm)	9" (229mm)	5 1/2" (140mm)	8" (203mm)
1" (25mm) [25M]	9" (229mm)	6" (153mm)	9" (229mm)

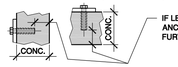
CAST IN PLACE ANCHORS



J- BOLT OPTION

NUT AND WASHER OPTION

Notes:

1. REFER TO GENERAL NOTES FOR FURTHER INFORMATION.
2. USE FOR OVERSIZED HOLES, CORED HOLES, OR HOLES IN WATER.
3. 

IF LESS THAN 3" FOR ANY TYPE OF ANCHOR CONTACT WHM FOR FURTHER INSTRUCTION.

Concrete Table: Reinforcement Designations

LINETYPE	DENOTES:
— — — — — — —	BOTTOM REINFORCEMENT IN SLABS / BEAMS OR FAR FACE REINFORCEMENT IN WALLS
———————	TOP REINFORCEMENT IN SLABS / BEAMS OR NEAR FACE REINFORCEMENT IN WALLS
ANNOTATION	**DENOTES:**
6-15M13.9 (6-15M4200)	6-15M BARS 13'-9" LONG (6-15M BARS 4200mm LONG)
15M13.9 @ 12" (15M4200 @ 300)	15M BARS 13'-9" LONG SPACED AT 12" (15M BARS 4200mm LONG SPACED AT 300mm)
6-C15M13.9 (6C15M4200)	6-15M BARS WITH STANDARD 90° HOOK AT ONE END PER ACI DETAILING PRACTICE; 13'-9" TOTAL LENGTH. (6-15M BARS WITH STANDARD 90° HOOK AT ONE END PER ACI DETAILING PRACTICE; 4200mm TOTAL LENGTH)
20M19.8/16.4 ALT @ 10" (20M6000/5000 ALT @ 250)	20M BARS SPACED AT 10" WITH ALTERNATING BAR LENGTHS: A 19'-8" BAR THEN A 16'-4" BAR 10" AWAY AND SO ON. (20M BARS SPACED AT 250mm WITH ALTERNATING BAR LENGTHS: A 6000mm BAR THEN A 5000mm BAR 250mm AWAY AND SO ON)

General Table: Structural Design Parameters

GRAVITY LOADS: SNOW

GROUND SNOW:	Ss	=	2.40 kPa (50.0 psf)
RAIN LOAD:	Sr	=	0.30 kPa (6.27 psf)
ROOF SNOW:	S	=	2.22 kPa (46.4 psf) ALSO SEE SNOW DIAGRAM WHERE APPLICABLE
CANOPY SNOW:	S	=	4.78 kPa (100 psf)
IMPORTANCE FACTOR:	Is	=	1.0 (ULS)
		=	0.9 (SLS)

GRAVITY LOADS: DEAD AND LIVE

AREA / USE	SUPERIMPOSED DEAD LOADS (NOT INCLUDING SELF-WEIGHT OF STRUCTURE UNO) IN kPa (psf)	LIVE LOAD	
		DISTRIBUTED LOAD IN kPa (psf)	CONCENTRATED LOAD IN kN (kips)
ROOF	1.0 (20)	SEE ROOF SNOW MIN. 1.0 (20)	1.3 (0.3)
UPPER FLOOR/ STAIR LANDING	2.39 (50) *	4.78 (100)	1.3 (0.3)

* 2 1/2" THK. CONCRETE TOPPING ON STEEL DECK AND ON STEEL BEAMS + 10 psf SUPERIMPOSED DEAD LOAD.

LATERAL LOADS - WIND

REFERENCE VELOCITY WIND PRESSURES: $q_{1/50}$ = 0.44 kPa (9.2 psf)

IMPORTANCE FACTOR Iw: = 1.0 (ULS); = 0.75 (SLS)

WIND-FORCE RESISTING SYSTEM: SEE SEISMIC LOAD SECTION FOLLOWING

LATERAL LOADS - SEISMIC

SEISMIC DATA:

Sa(0.2)	=	0.786	Sa(0.5)	=	0.69	Sa(5.0)	= 0.076
Sa(1.0)	=	0.394	Sa(2.0)	=	0.24	Sa(10.0)	= 0.027
PGA	=	0.341	PGV	=	0.511		

SITE CLASS PER GEOTECHNICAL REPORT: = E

ACCELERATION BASED SITE COEFFICIENT: Fa = 0.81

VELOCITY BASED SITE COEFFICIENT: Fv = 1.29

IMPORTANCE FACTOR: Ie = 1.0 (ULS)

SEISMIC FORCE RESISTING SYSTEM (SFRS):

CONCRETE LEVELS: TYPE = CONVENTIONAL CONSTRUCTION; Rd = 1.5; Ro = 1.3

Concrete Table: Embedment And Lap Lengths

TYPE	28 DAY CONCRETE STRENGTH f'c (MPa)	BAR DIAMETER					
		10M	15M	20M	25M	30M	35M
EMBEDMENT LENGTH (E. LEN.), (SEE NOTE 1)	25 OR LOWER	13" (325mm)	18" (450mm)	22" (550mm)	36" (900mm)	43" (1075mm)	51" (1275mm)
	30	12" (300mm)	17" (425mm)	20" (500mm)	33" (825mm)	39" (975mm)	46" (1150mm)
	35 OR HIGHER	12" (300mm)	16" (400mm)	19" (475mm)	30" (750mm)	36" (900mm)	43" (1075mm)
TENSION LAP LENGTH, (T. LAP) (SEE NOTE 1)	25 OR LOWER	17" (425mm)	24" (600mm)	29" (725mm)	47" (1175mm)	55" (1375mm)	66" (1650mm)
	30	16" (400mm)	22" (550mm)	27" (675mm)	43" (1075mm)	51" (1275mm)	60" (1500mm)
	35 OR HIGHER	14" (350mm)	20" (500mm)	25" (625mm)	40" (1000mm)	47" (1175mm)	56" (1400mm)
COMPRESSION LAP LENGTH (C. LAP)	ALL f'c	12" (300mm)	18" (450mm)	24" (600mm)	30" (750mm)	36" (900mm)	42" (1050mm)
LAP LENGTH - MASONRY:		24" (600mm)	32" (800mm)	36" (900mm)	54" (1350mm)	-	-

Note:

1. FOR HORIZONTAL BARS WITH MORE THAN 12" (300) CONCRETE COVER BELOW THE BAR, MULTIPLY LENGTHS NOTED ABOVE BY **1.3** (DOES NOT INCLUDE HORIZONTAL BARS IN WALLS)

Concrete Table: Reinforcement Cover

COMPONENT	FIRE RESISTANCE RATING (SEE ARCH. FOR LOCATION AND EXTENTS)	
	0 - 2 HOURS	3 HOURS
SUSPENDED SLAB ON GRADE		
REGULAR SLABS BOTTOM AND TOP	3" (75mm)	1 1/4" (32mm)

Concrete Table: Mix Requirements

COMPONENT	MIN. 28 DAY **STRENGTH** f'c (MPa)	MAX. **AGGREGATE** SIZE	EXPOSURE CLASS	MIN. % CEMENT REPLACE-MENT
SUSPENDED SLABS, SLAB BANDS AND BEAMS				
INTERIOR	30	3/4" (20mm)	N	-
MASONRY GROUT / FILL	20	3/8" (10mm)	N	-

Notes:

1. AIR CONTENT AND SLUMP TO ADHERE TO THE CODE.
2. EXT. EXP. DENOTES "EXTERIOR EXPOSURE TO WEATHER OR FREEZING".
3. AS AN ALTERNATIVE TO CLASS C-XL CONCRETE, CLASS C-1 MAY BE USED WITH 14.4 L/m^3 OF 30% SOLUTION OF CALCIUM NITRITE.
4. FOR SHOTCRETE WALLS, INCREASE ABOVE-NOTED 28 DAY STRENGTH BY 5 MPa.

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	ISSUED FOR REVIEW	NOV. 10 2015	

Seal

Project Title

City Of Surrey
Cloverdale Curling Rink
Stair Renovation
6142 176th St., Surrey, BC
V3S 4E7

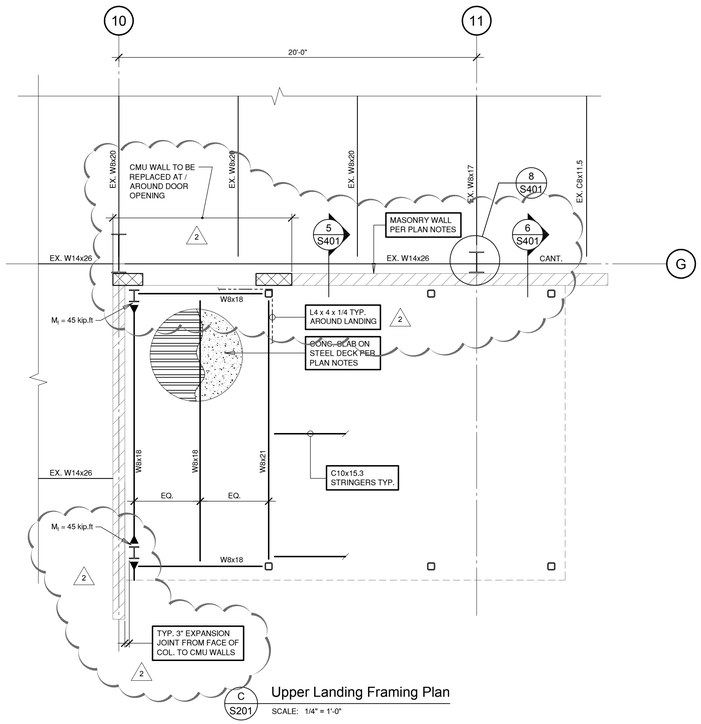
Drawing Title

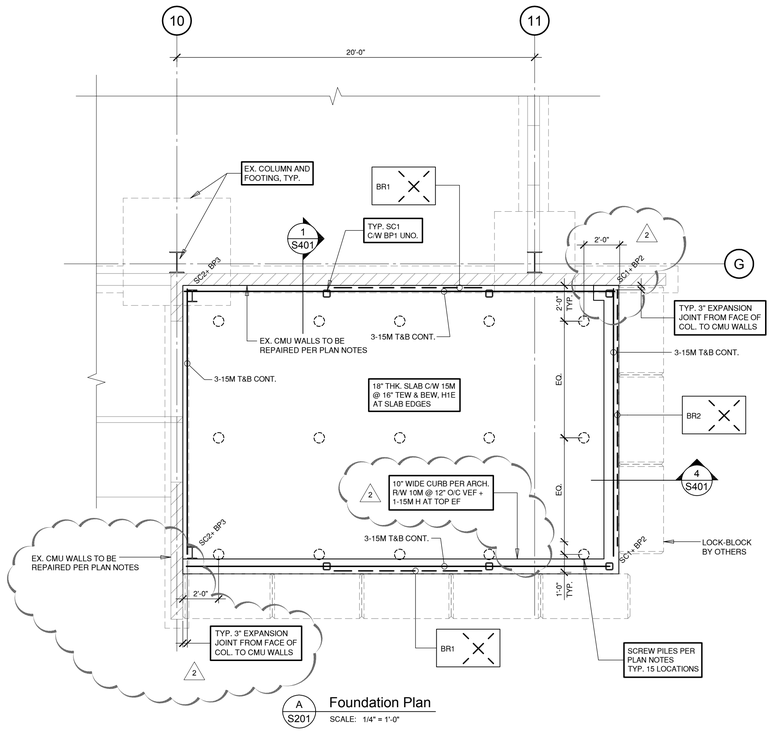
Tables

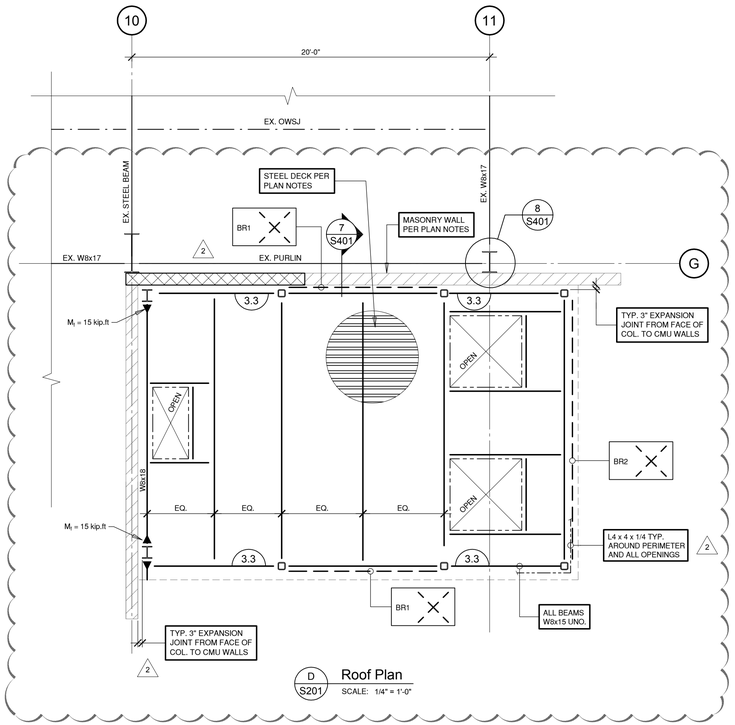
Project No: 15234
Scale: N/A
Project Drafter: MS
Project Engineer: NH

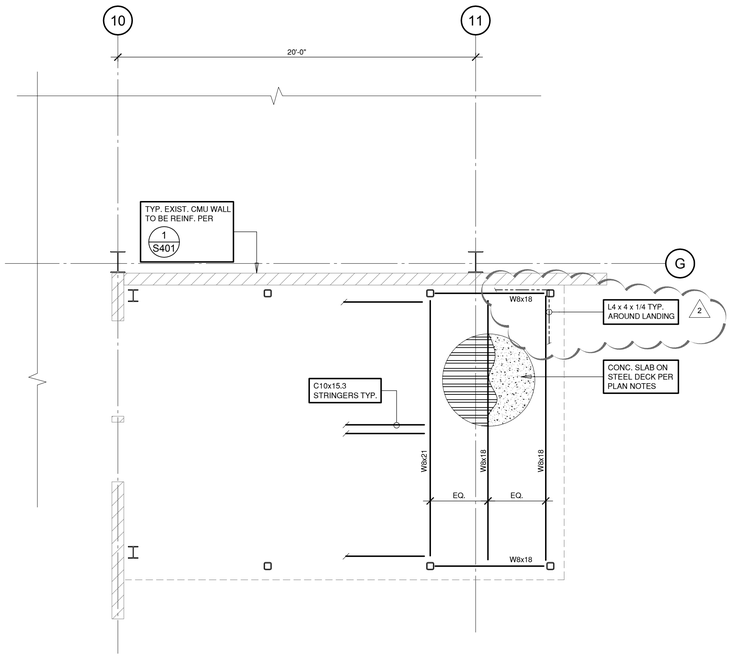
Dwg. No.

S111









Plan Notes

DIMENSIONS AND ELEVATIONS:
- CONTRACTOR TO THOROUGHLY REVIEW ALL DIMENSIONS AND ELEVATIONS SHOWN ON THIS DWG, COMPARE THEM WITH ARCH, AND REPORT ANY DISCREPANCIES TO WHM AND THE ARCH IMMEDIATELY.
- "MAX" OR "MIN" INDICATES STRUCTURAL REQUIREMENTS. BUILD TO THE ARCH. DIMENSIONS AND ELEVATIONS PROVIDED THE STRUCTURAL REQUIREMENTS ARE MET.

EXISTING CONDITIONS:
- CONTRACTOR TO SITE VERIFY ALL EXISTING STRUCTURE NOTED ON PLAN AND REPORT TO WHM, IF DIFFERENT, PRIOR TO CONSTRUCTION.
- WHERE EXISTING STRUCTURE IS NOT NOTED ON PLAN, CONTRACTOR TO SITE CONFIRM AND REPORT ALL EXISTING STRUCTURE IN THE VICINITY OF NEW WORK TO WHM PRIOR TO CONSTRUCTION.

LOADS:
- ALL LOADS SHOWN ARE FACTORED.

STEEL BEAMS:
- UNLESS NOTED OTHERWISE ALL CONNECTIONS FOR BEAMS TO BE DESIGNED FOR THE FOLLOWING END SHEAR DESIGN FORCE (Vf):
  - Vf = 4M/L
  - M = 120% OF THE MEMBERS FULL MOMENT RESISTANCE
  - L = THE SPAN OF THE MEMBER.
- (DS) DENOTES DRAG STRUT. ALL BEAM DRAG STRUTS TO HAVE CONNECTIONS DESIGNED TO TRANSFER 70% OF Vf AS DEFINED ABOVE PLUS AXIAL FORCES SHOWN OR 100% FACTORED END SHEAR DESIGN FORCE, WHICHEVER IS GREATER.

STEEL DECK AND CONC SLAB:
- 2 1/2" THK. CONC. SLAB ON VICWEST RD938 x t = 22GA.(4" TOTAL THICKNESS) COMPOSITE DECK. ATTACH TO STEEL FRAME WITH:
  - HILTI X-HSN 24, X-ENP19 L15, PATTERN 36/11 AND @ 6"O/C AT PERIMETER. FASTEN SIDE LAPS WITH HILTI SLC CONNECTORS @ 6" O/C.
- MINIMUM REINFORCEMENT TO BE WELDED WIRE MESH (WWM) 6 x 6 10/10 (152 x 152 MW9.1 x MW9.1) CHAIRED SECURELY AT MID-DEPTH OF TOPPING SUPPORTED SECURELY ON CHAIRS AND REINFORCING BARS. MINIMUM LAP OF WWM SHEETS TO BE TWO FULL CROSS-WIRES PLUS 2" (50mm).
- REFER TO THE FOLLOWING DETAILS FOR:
  - TENSION SPLICES FOR PERIMETER ANGLE
  - STEEL DECK HIGH RIB CLOSURE

1 S501 2 S501

STEEL DECK:
- SPECIFIED DECK IS DESIGNED FOR 1-SPAN SUPPORT CONDITION. FOR ALTERNATIVE DECK SUPPORT CONDITIONS DECK SUPPLIER TO SUBMIT MODIFIED DESIGN FOR REVIEW BY WHM.
- 18GA. x 1 1/2" DP. VICWEST STEEL ROOF DECK RD938.
- ATTACH TO STEEL WITH HILTI X-HSN24/X-ENP19 L15 PINS IN 36/7 PATTERN AT SUPPORTS, @ 6" O/C AROUND PERIMETER.
- FASTEN SIDE LAPS WITH HILTI SLC CONNECTORS @ 6" O/C.

REPAIR TO EXISTING CMU WALLS:
- EXISTING CMU WALLS TO REMAIN AS SHOWN EXCEPT REPLACED AS SHOWN AT UPPER LANDING FRAMING PLAN.
- CUT SLOTS AS REQUIRED TO INSTALL REINFORCING. GROUT ALL REINFORCED CELLS AND MAKE GOOD ALL CMU.
- 15M @ 32" O/C V. PROVIDE 15M02.0 DOWELS INTO EX. FTG. WITH RE 500, EMBED 6".
- 15M @ 48" O/C H. BOND BEAMS PLUS ABOVE AND BELOW ALL OPENINGS. EXTEND 16" BEYOND OPENINGS.
- PROVIDE ADDITIONAL BOND BEAM AT TOP OF WALL AND AT LEVELS WHERE CLIP ANGLES ARE REQUIRED.
- CORNER BARS TO MATCH SIZE AND SPACING OF HORIZONTAL BARS IN BOND BEAMS.
- PROVIDE 1-15M V. AT ENDS, CORNERS AND EDGES OF WALLS.
- PROVIDE DOUBLE BOND BEAM R.W 2-15M EA. COARSE ABOVE DOOR OPENING,
- REFER TO THE FOLLOWING DETAILS FOR:
  - ADDITIONAL REINF. AT CRACK LOCATIONS

3 S401

SCREW PILES:
- DIAMETER, THICKNESS AND DEPTH TO BE PROVIDE BY OTHERS
- PILES MAX. FACTORED LOADS:
  - AXIAL COMPRESSION = 23 kips
  - AXIAL TENSION = 5 kips
  - HORIZONTAL = 2 kips

REFER TO THE FOLLOWING DETAILS FOR:
- TYP. SCREW PILE SLAB CONNECTION

3 S401

TREE PROTECTION AND ROOT BARRIER:
- CONTRACTOR TO INSTALL TREE PROTECTION AND ROOT BARRIER AS PER CITY OF SURREY INTER OFFICE MEMO FILE NUMBER 6300-01 DATED APRIL 4TH, 2019. ALL TREE PROTECTION AND ROOT BARRIER INSTALLATION SHALL BE REVIEWED AND APPROVED BY CITY OF SURREY.

Steel Column Schedule

MARK	SIZE
SC1	HSS 5 x 5 x 1/4
SC2	W8x28

NOTE:
SEE BASE PLATE (BP#) AND WALL PLATE (WP#) SCHEDULES ON DWG. S202

Legend

- MOMENT CONNECTION
- BR# — BRACE ELEVATION PER DWG. S202
- # — AXIAL FORCE IN KIP

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Project North

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	ISSUED FOR REVIEW	NOV. 10 2015	

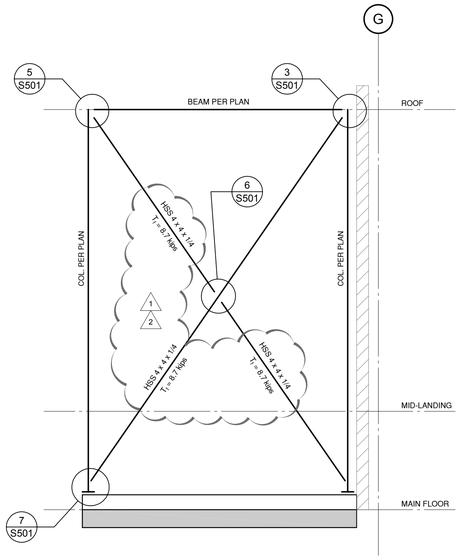
Seal

Project Title
City Of Surrey
Cloverdale Curling Rink
Stair Renovation
6142 176th St., Surrey, BC
V3S 4E7

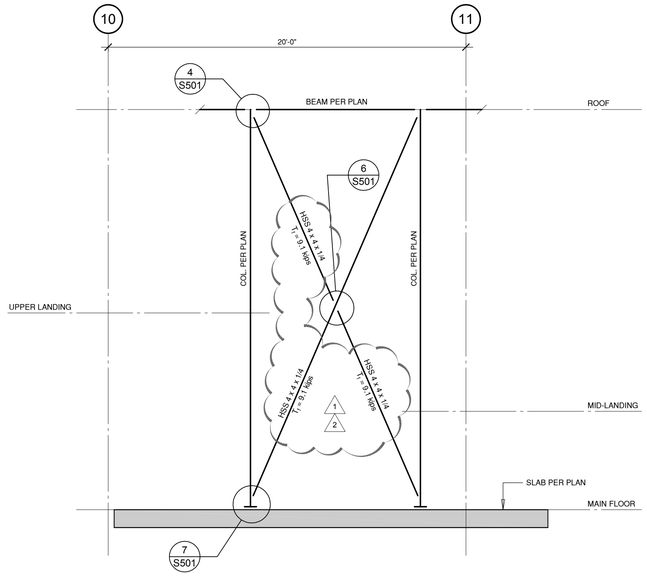
Drawing Title
Plans

Project No: 15234
Scale: As Noted
Project Drafter: MS
Project Engineer: NH

Dwg. No.
S201

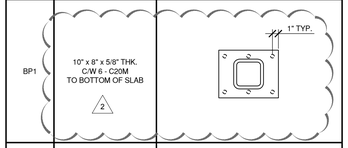
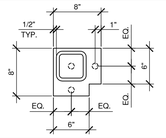
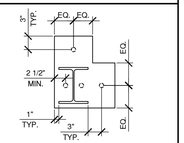


B S202 BR2 Elevation
SCALE: 1/4" = 1'-0"



A S202 BR1 Elevation
SCALE: 1/4" = 1'-0"

Base Plate Schedule

MARK	DESCRIPTION	GEOMETRY
BP1	10" x 8" x 5/8" THK. C/W 6 - C20M TO BOTTOM OF SLAB (2)	
BP2	5/8" THK. C/W 3 - C20M TO BOTTOM OF SLAB (2)	
BP3	5/8" THK. C/W 4 - C20M TO BOTTOM OF SLAB (2)	

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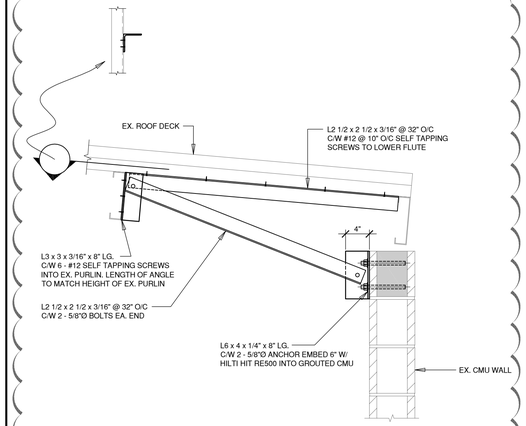
Project Title
City Of Surrey
Cloverdale Curling Rink
Stair Renovation
6142 176th St., Surrey, BC
V3S 4E7

Drawing Title
Brace Elevations

Project No: 15234
Scale: As Noted
Project Drafter: MS
Project Engineer: NH

Dwg. No.
S202



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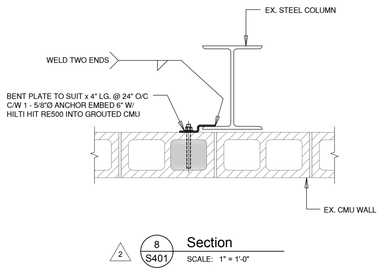

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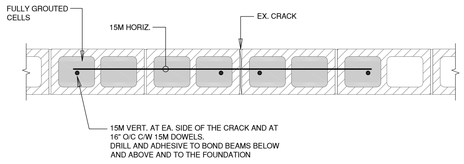
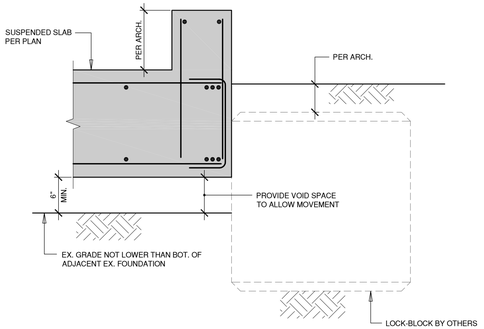


3 S401 Cracked Masonry Cell Repair Detail
SCALE: NTS



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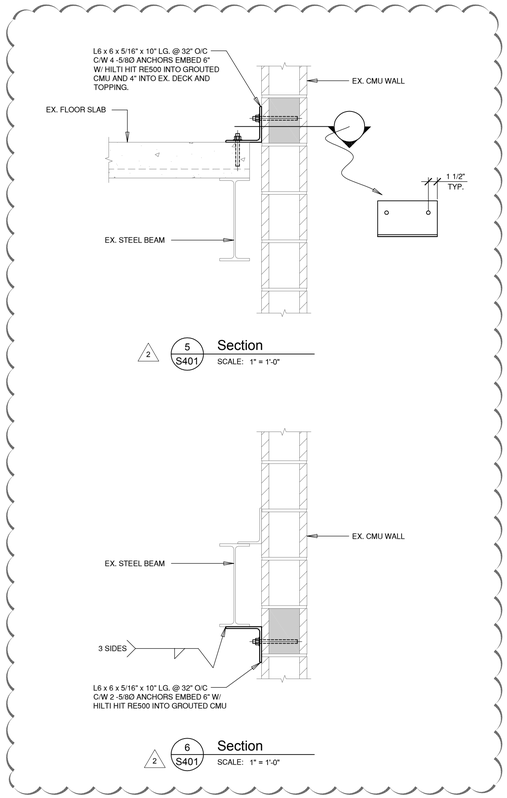

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2 6/S401 Section
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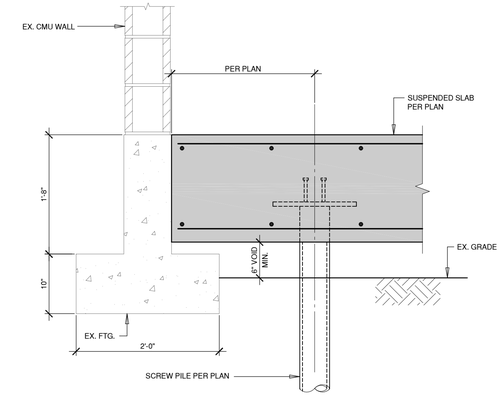
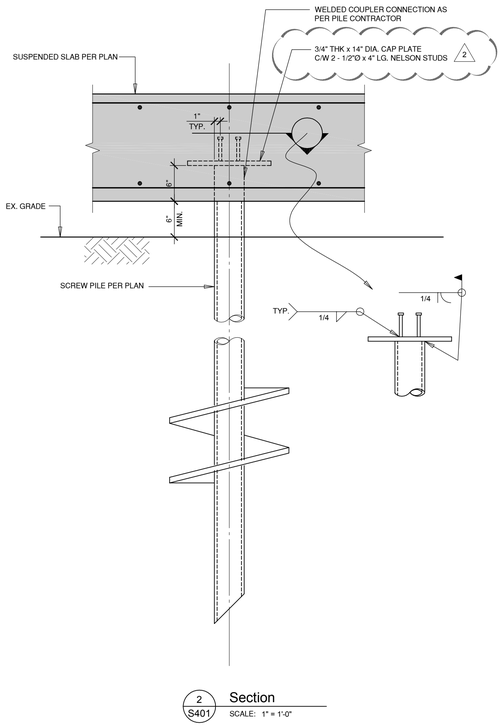


1 S401 Section
SCALE: 1" = 1'-0"

Notes:

- CONTRACTOR TO CONFIRM EXISTING FOOTING LOCATION AND SIZE. CONTACT WHM FOR REVIEW.



2 S401 Section
SCALE: 1" = 1'-0"

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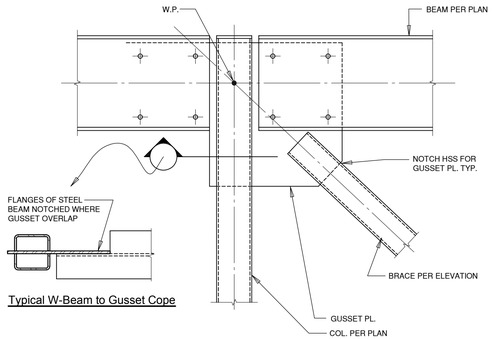
Seal

Project Title
City Of Surrey
Cloverdale Curling Rink
Stair Renovation
6142 176th St., Surrey, BC
V3S 4E7

Drawing Title
Concrete and Masonry Details

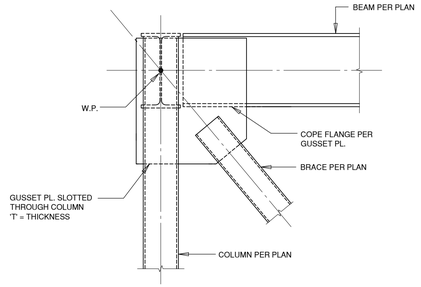
Project No: 15234
Scale: As Noted
Project Drafter: MS
Project Engineer: NH

Dwg. No.
S401



Typical W-Beam to Gusset Cope

4 S501 Section
SCALE: NTS



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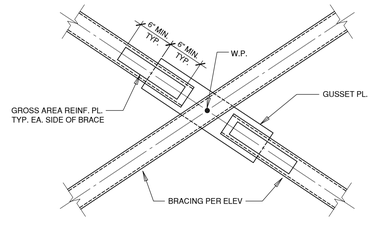

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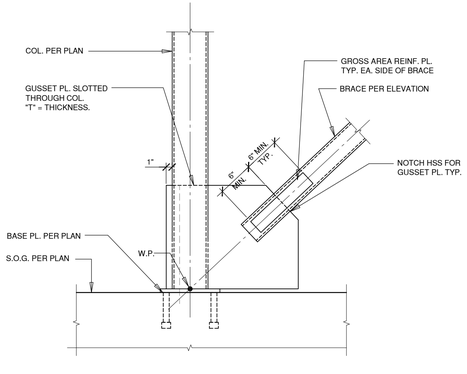

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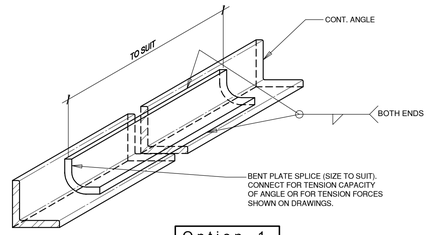
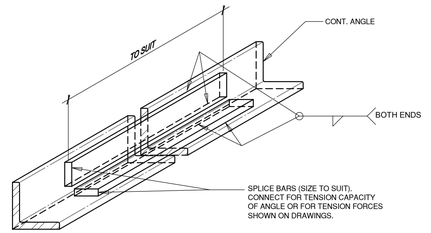
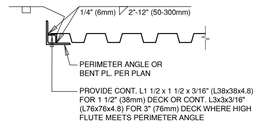


Option 1

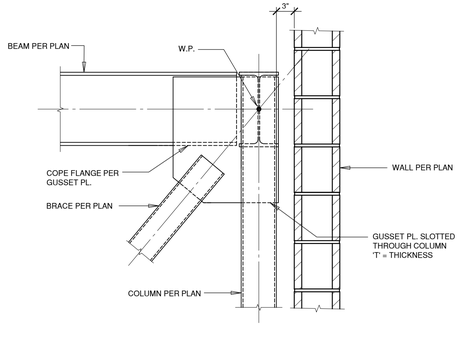


Option 2

1 S501 Tension Splice For Angles
SCALE: NTS



2 S501 Steel Deck High Rib Closure Detail
SCALE: NTS



3 S501 Section
SCALE: NTS

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NO.	ISSUE / REVISION	DATE	BY
	ISSUED FOR ADDENDUM 01	MAY 23 2019	
	ISSUED FOR TENDER	MAY 06 2019	
	ISSUED FOR BUILDING PERMIT	MAY 03 2019	
	ISSUED FOR COORDINATION	APR. 26 2019	
	ISSUED FOR COORDINATION	APR. 18 2019	
	ISSUED FOR TENDER	NOV. 26 2015	
	ISSUED FOR REVIEW	NOV. 10 2015	

Seal

Project Title
City Of Surrey
Cloverdale Curling Rink
Stair Renovation
6142 176th St., Surrey, BC
V3S 4E7

Drawing Title
Steel Details

Project No: 15234
Scale: As Noted
Project Drafter: MS
Project Engineer: NH

Dwg. No.
S501

SITE TOUR INFORMATION MEETING SIGN IN SHEET

CLOVERDALE CURLING RINK STAIR RENOVATION ADDENDUM#1 RFQ-1220-040-2019-032 - May 24, 2019

PROJECT TITLE:	**Cloverdale Curling Rink: Stair Replacement project - information meeting**
SURREY REF:	**1220-040-2019-032**
DATE:	**May 16th, 2019**

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4	Dolomiti Homes	DAVID STAPLETON	604 299 9525	david@dolomitihomes.ca	
5	RJS Construction	Ryan Steward	604-786-4499	Ryan@RJS-construction.ca	
6	Wood Projects ltd	Ryan Wood	604.538.5546	ryan@woodprojectsltd.com	
7	CREZO CONSTRUCTION	CLAUDIO ZORNIO	604-299-8003	claudio@crezoconstruction.com	
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9					
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