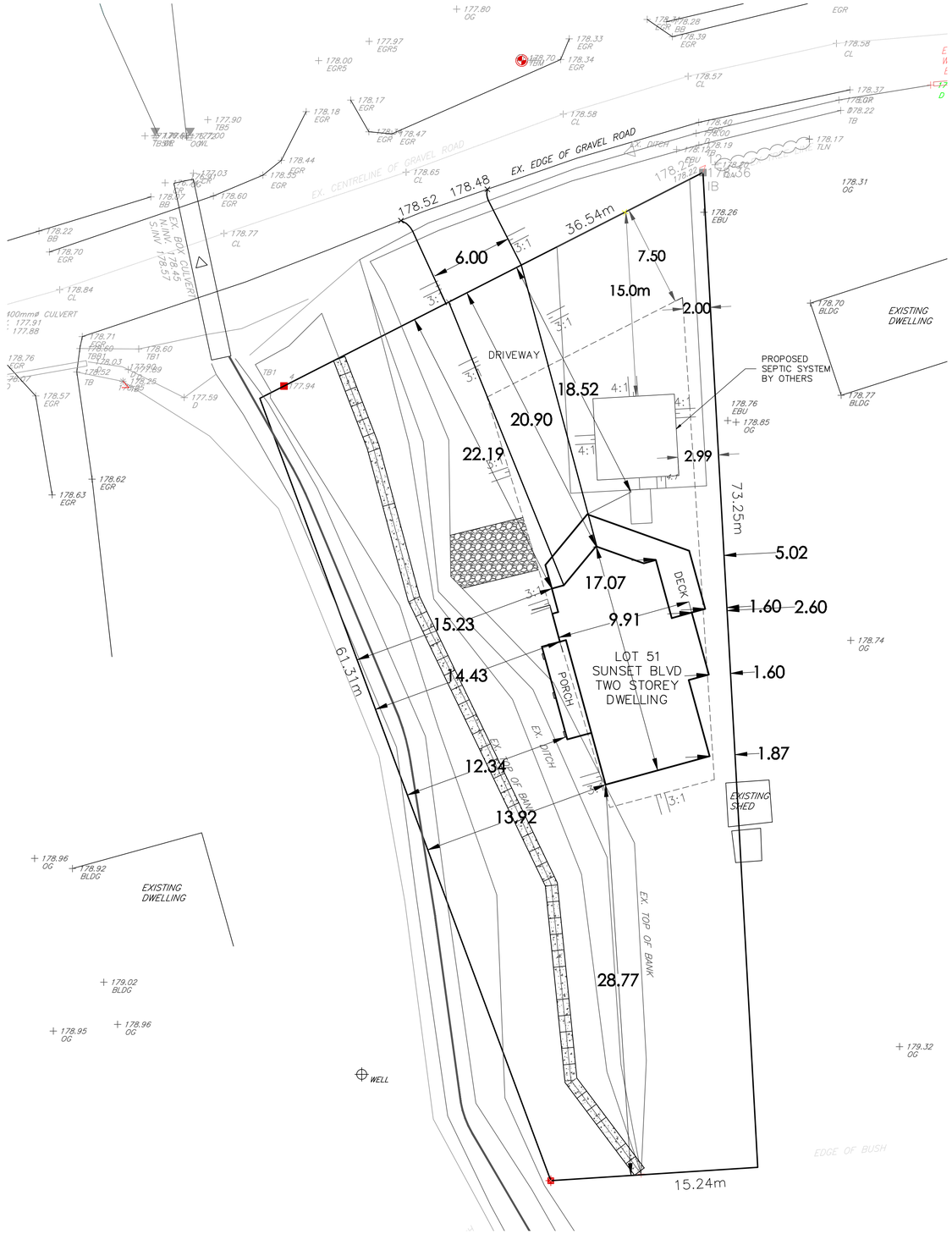

Construction
NORTH

SCOPE OF WORK:

NEW CONSTRUCTION OF TWO STOREY DETACHED RESIDENTIAL DWELLING.

ALL CONSTRUCTION TO ADHERE TO RELEVANT CODES AND AS INDICATED IN THIS DRAWING SET.

INFORMATION TAKEN FROM SURVEY:

APPENDED

CONTRACTOR MUST VERIFY ALL DIMENSIONS IN THE FIELD. ANY DISCREPENCIES MUST BE REPORTED BEFORE PROCEEDING WITH THE WORK.

ALL CONSTRUCTION TO ADHERE TO THESE PLANS AND/OR SPECIFICATIONS AND TO CONFORM TO THE ONTARIO BUILDING CODE AND ALL OTHER APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. THESE REQUIREMENTS ARE TO BE TAKEN AS MINIMUM SPECIFICATIONS. ONT. REG. 332/12.

BUILDING AND LOT STATISTICS

AREA	
GROUND FLOOR	133.04 SM
SECOND FLOOR	65.27 SM
GARAGE	N/A SM
SUBTOTAL	198.31 SM
PORCH	9.00 SM
DECK	32.21 SM
BALCONY	2.75 SM
COVERAGE	133.04 SM

BUILDING STATISTICS:
BUILDING FOOTPRINT:133.04 SM
SITE AREA: 1670.19 SM
COVERAGE: 7.90%

BUILDING LENGTH: 17.07M
BUILDING WIDTH: 9.91M
BUILDING HEIGHT: 9.14M

LOADING
SNOW – 1.90kPa

S=Cb(Ss+Sr) OBC 9.4.2.2.
S=1.90kPa

LIVE (ROOF) – 1kPa
LIVE (INTERIOR) – 1.9kPa

GFA:
1ST+2ND: 198.31 SM

General Notes

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05/12/21
D. FALZON
100159595
PROVINCE OF ONTARIO

LASONNE
ENGINEERING LTD.
KLEINBURG 416.662.2673

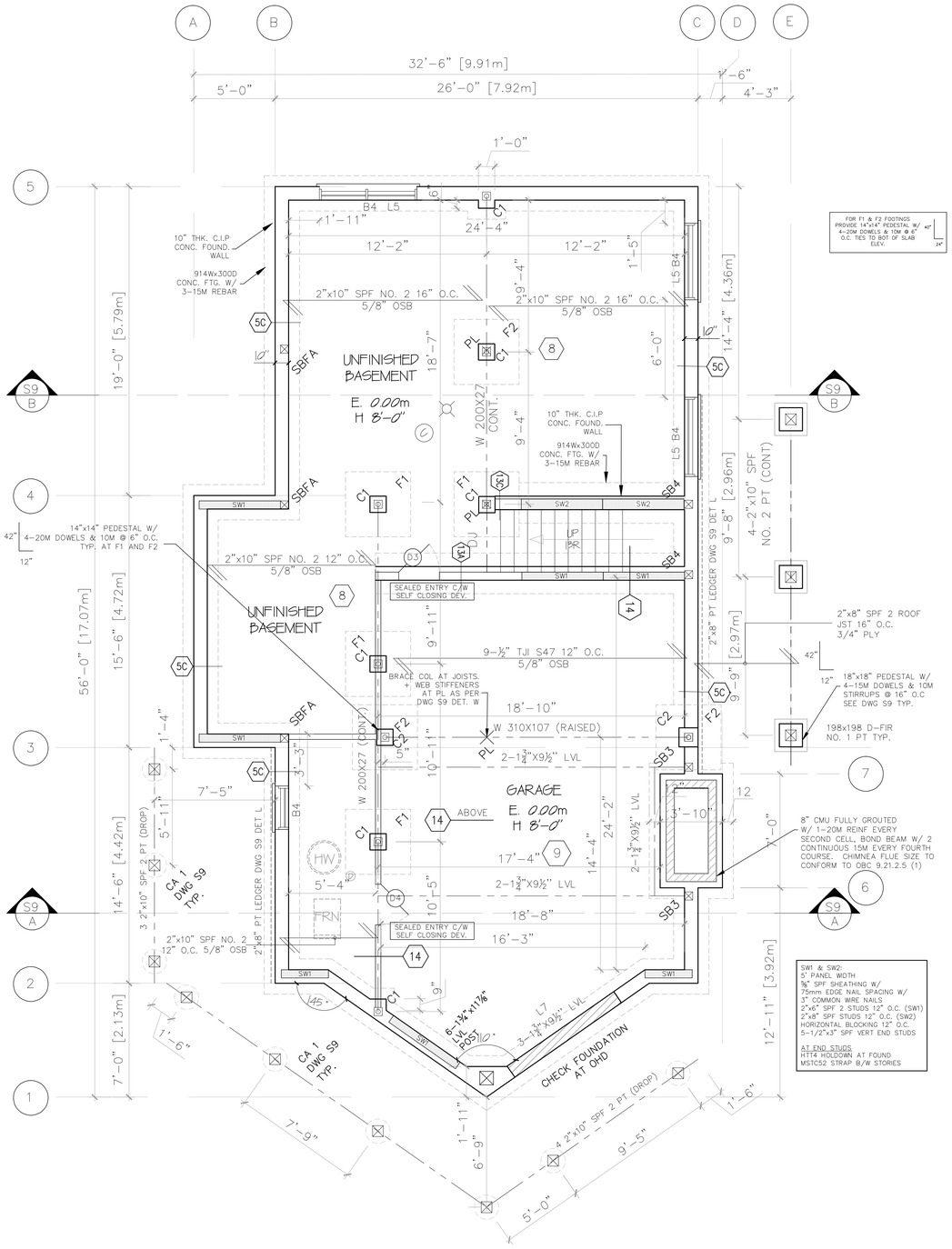
No.	Revision/Issue	Date

SITE PLAN

MACCHIA RESIDENCE

LOT 51 - SUNSET BOULEVARD
SINGLE FAMILY DWELLING
Town of The Blue Mountains, Ontario

Project 1770	Sheet S1
Date SEPT '18	
Scale 1:175	



STEEL COLUMN SCHEDULE		
MARK	SIZE	REMARKS
C1	HSS 102 x 102 x 6.4mm	175x12.5mm TOP AND BOT. PL. 2-5/8" DIA. ANCHOR BOLTS EMBED. 300mm
C2	HSS 152 x 152 x 8.0mm	325x13mm TOP AND BOT. PL. 2-5/8" DIA.x LG. ANCHOR BOLTS EMBED 300mm. WELD TO BEAM BOT FLANGE

LVL BEAMS SHALL BE 2.0E MIN BY WAYERHAUSER OR APPROVED EQUIV. NAIL EACH PLY OF LVL WITH 89mm LG. COMMON WIRE NAILS @ 300mm O.C. STAGGERED IN 2 ROWS FOR DEPTHS UP TO 11-7/8" AND 3 ROWS FOR GREATER DEPTHS AND FOR 4 PLY MEMBERS ADD 13mm DIA. GALV. BOLTS BOLTED AT MID-DEPTH OF BEAM AT 400mm O.C.

FOUNDATION GENERAL NOTES: OBC 9.15.3.

1. ALL CONCRETE FOOTINGS SHALL REST ON UNDISTURBED SOIL WITH ALLOWABLE BEARING CAPACITY OF 150 KPA. (TO BE SITE VERIFIED) AND BE FOUNDED A MIN. OF 4'0" BELOW FINISHED GRADE.
2. ALL CONCRETE FOOTINGS AND FOUNDATION WALLS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 30 MPA AFTER 28 DAYS.
3. STRUCTURAL STEEL MEMBERS AND INSERTS SHALL BE CSA PURPOSE STEEL.
4. BACKFILL SHALL BE PLACED AND COMPACTED EQUALLY ON BOTH SIDES OF GARAGE FOUNDATION WALLS TO AVOID LATERAL LOADING.

NOTE: ALL TIMBER TO BE SEPARATED FROM CONCRETE WITH 0.05mm(0.002")POLY.FILM OR TYPE S ROLL ROOFING. (9.17.4.3.)

ALL STEEL BEAMS SHALL HAVE 6"WASHING & ON 6"x6" STEEL PLATE (ON FOUND. CONCRETE FOUNDATION WALL)

FOOTING SCHEDULE		
Mark	Size	Reinforcing
F1	4'-6"x4'-6" x20" D.	6-15M B.E.W.
F2	5'-0"x5'-0" x24" D.	9-15M B.E.W.
F3	7'-0"x7'-0" x12" D.	3-15M B.E.W.
B.E.W. - BOTTOM EACH WAY		

SOLID BLOCKING @ 16"O.C FIRST JOIST SPAN WHEN PARALLEL W/EXTERIOR WALL

S.B.L. 200mmx18mm THK STEEL PLATE WELD TO BEAM FLANGE

MAX. HEIGHT FOR 2x6" EXT. WALL
2x6" @ 16" O.C.-12'-6"
2x6" @ 12" O.C.-13'-10"
2-2x6" @ 16" O.C.-15'-0"
2-2x6" @ 12" O.C.-17'-4"

MAX HEIGHT FOR 2x8" EXT. WALL
2x8" @ 16" O.C.-16'-0"
2x8" @ 12" O.C.-17'-9"
2-2x8" @ 16" O.C.-20'-4"
2-2x8" @ 12" O.C.-22'-4"

BEAM SCHEDULE	
B1	2-2"x8" SPF #2
B2	3-2"x8" SPF #2
B3	2-2"x10" SPF #2
B4	3-2"x10" SPF #2
B5	2-2"x12" SPF #2
B6	3/2"x12" SPF #2
B7	2-1¾"x11⅞" LVL

LINTEL SCHEDULE (METRIC)	
L1	90x90x6.0 mm
L2	90x90x8.0 mm
L3	100x90x6.0 mm
L4	125x90x8.0 mm
L5	125x90x10.0 mm
L6	150x100x10.0 mm
L7	200x100x10.0 mm

LEGEND

- EXHAUST FAN – 50CFM VENTED TO OUTSIDE
- CARBON MONOXIDE DETECTOR
- CEILING MOUNTED SMOKE ALARM (INTER-CONNECTED)
- SOLID BEARING TO BE AS WIDE AS SUPPORTED MEMBER (MIN. 2 PIECES)
- SOLID WOOD BEARING TO MATCH FROM ABOVE.
- DJ DOUBLE JOIST
- TJ TRIPLE JOIST
- LVL LAMINATED VENEER LUMBER
- PT PRESSURE TREATED LUMBER
- GT GIRDER TRUSS BY MANU.

ALL MATERIAL FINISHES TO BE DETIRMINED BY HOME OWNER DURING CONSTRUCTION

DOOR SCHEDULE		
MK	SIZE	FPR
D1	34"W X 8'0"	1HR
D2	28"W X 6'8" – WOOD	N/A
D3	30"W X 6'8" – WOOD	N/A
D4	32"W X 6'8" – WOOD	N/A

SB3 – 3-2"x6" SOLID BEARING
SB4 – 4-2"x6" SOLID BEARING
SB5 – 5-2"x6" SOLID BEARING
SB6 – 5-2"x8" SOLID BEARING
ALL SOLID BEARING TO BE BRACED AT TOP AND BOTTOM

General Notes

N

LICENCED PROFESSIONAL ENGINEER
05/12/21
D. FALZON
100159595
PROVINCE OF ONTARIO

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KLEINBURG 416.662.2673

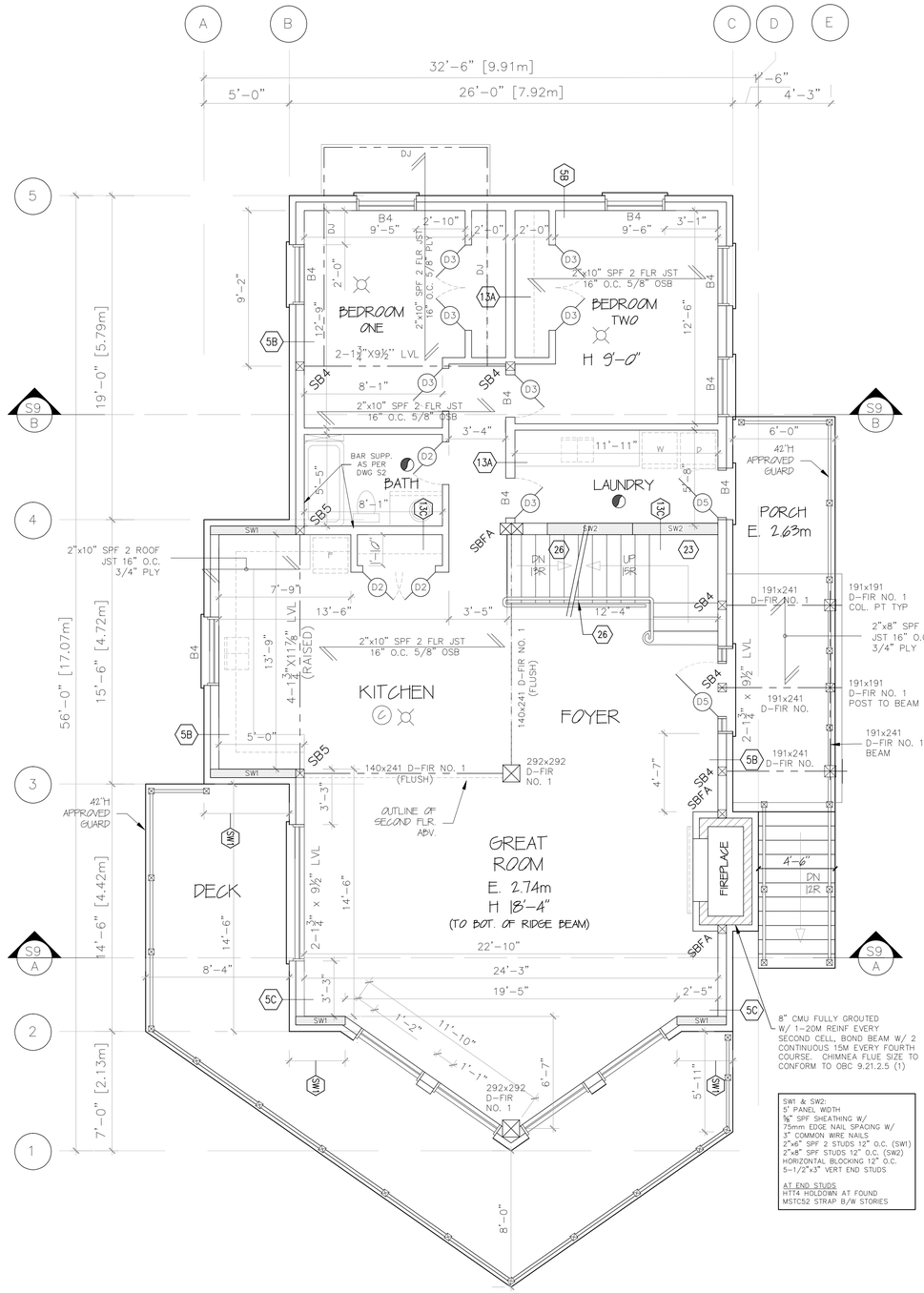
No.	Revision/Issue	Date

PLAN BASEMENT

MACCHIA RESIDENCE

LOT 51 - SUNSET BOULEVARD
SINGLE FAMILY DWELLING

Project 1770	Sheet S2
Date SEPT '18	
Scale ¼" = 1'-0"	



LVL BEAMS SHALL BE 2.0E MIN BY WAYERHAUSER OR APPROVED EQUIV. NAIL EACH PLY OF LVL WITH 89mm LG. COMMON WIRE NAILS @ 300mm O.C. STAGGERED IN 2 ROWS FOR DEPTHS UP TO 11-7/8" AND 3 ROWS FOR GREATER DEPTHS AND FOR 4 PLY MEMBERS. ADD 13mm DIA. GALV. BOLTS BOLTED AT MID-DEPTH OF BEAM AT 400mm O.C.

FOUNDATION GENERAL NOTES: OBC 9.15.3.

1. ALL CONCRETE FOOTINGS SHALL REST ON UNDISTURBED SOIL WITH ALLOWABLE BEARING CAPACITY OF 150 KPA. (TO BE SITE VERIFIED) AND BE FOUNDED A MIN. OF 4'0" BELOW FINISHED GRADE.
2. CONCRETE FOOTINGS AND FOUNDATION WALLS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 30 MPA AFTER 28 DAYS.
3. STRUCTURAL STEEL MEMBERS AND INSERTS SHALL BE CSA PURPOSE STEEL.
4. BACKFILL SHALL BE PLACED AND COMPACTED EQUALLY ON BOTH SIDES OF GARAGE FOUNDATION WALLS TO AVOID LATERAL LOADING.

NOTE: ALL TIMBER TO BE SEPARATED FROM CONCRETE WITH 0.05mm(0.002")POLY.FILM OR TYPE S ROLL ROOFING. (9.17.4.3.)

ALL STEEL BEAMS SHALL HAVE A BEARING A 25.4"x6"x3/8" STEEL PLATE (FOR POURED CONCRETE FOUNDATION WALL)

FOOTING SCHEDULE

Mark	Size	Reinforcing
F1	1'-8"x8"x10" O.	6-15M B.E.W.
F2	2'-0"x8"x10" O.	9-15M B.E.W.
F3	3'-0"x8"x10" O.	3-15M B.E.W.

B.E.W. - BOTTOM EACH WAY

SOLID BLOCKING @ 16"O.C FIRST JOIST SPAN WHEN PARALLEL W/EXTERIOR WALL

S.P.: 200mmx10mm THK STEEL PLATE WELD TO BEAM FLANGE

MAX. HEIGHT FOR 2x6" EXT. WALL
2x6" @ 16" O.C.-12'-6"
2x6" @ 12" O.C.-13'-10"
2-2X6" @ 16" O.C.-15'-0"
2-2X6" @ 12" O.C.-17'-4"

MAX.HEIGHT FOR 2x8" EXT. WALL
2x8" @ 16" O.C.-16'-0"
2x8" @ 12" O.C.-17'-9"
2-2X8" @ 16" O.C.-20'-4"
2-2X8" @ 12" O.C.-22'-4"

BEAM SCHEDULE

B1	2-2"x8" SPF #2
B2	3-2"x8" SPF #2
B3	2-2"x10" SPF #2
B4	3-2"x10" SPF #2
B5	2-2"x12" SPF #2
B6	3-2"x12" SPF #2
B7	2-1¾"x11⅞" LVL

LINTEL SCHEDULE (METRIC)

L1	90x90x8.0 mm
L2	90x90x8.0 mm
L3	100x90x6.0 mm
L4	125x90x8.0 mm
L5	125x90x10.0 mm
L6	150x100x10.0 mm
L7	200x100x10.0 mm

LEGEND

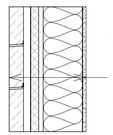
- EXHAUST FAN - 50CFM VENTED TO OUTSIDE
- CARBON MONOXIDE DETECTOR
- CEILING MOUNTED SMOKE ALARM (INTER-CONNECTED)
- SOLID BEARING TO BE AS WIDE AS SUPPORTED MEMBER (MIN. 2 PIECES)
- SOLID WOOD BEARING TO MATCH FROM ABOVE
- DJ DOUBLE JOIST
- TJ TRIPLE JOIST
- LVL LAMINATED VENEER LUMBER
- PT PRESSURE TREATED LUMBER
- GT GIRDER TRUSS BY MANU.

ALL MATERIAL FINISHES TO BE DETRIMINED BY HOME OWNER DURING CONSTRUCTION

DOOR SCHEDULE

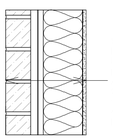
MK	SIZE	FPR
D1	34"W X 8'0"	1HR
D2	28"W X 6'8" - WOOD	N/A
D3	30"W X 6'8" - WOOD	N/A
D4	32"W X 6'8" - WOOD	N/A

SB3 - 3-2"x"6" SOLID BEARING
SB4 - 4-2"x"6" SOLID BEARING
SB5 - 5-2"x"6" SOLID BEARING
SB6 - 5-2"x8" SOLID BEARING
ALL SOLID BEARING TO BE BRACED AT TOP AND BOTTOM



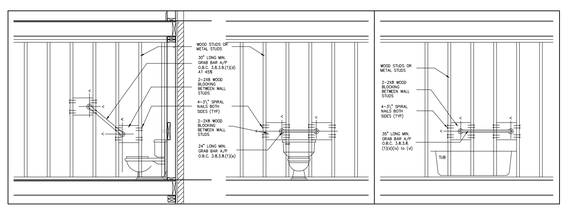
1" EXTERIOR SIDING (FASCIA)
CONNECTION BY MFG (1X2" SPF STRAPPING
EXT. AIR/VAPOR BARRIER
R5 CONT. INS.
15.9MM (⅝") OSB
2"X6" SPF 2 STUD
R24 MINERAL FIBRE BATT INS.
AIR/VAPOR BARRIER
15.9MM (⅝") GYP. BD

WALL TYPE 5B: DETAILS
(SEE NOTES FOR ADDITIONAL NOTES)



9.5" STONE (FASCIA)
1" AIR SPACE
EXT. AIR/VAPOR BARRIER
15.9MM (⅝") OSB
AIR/VAPOR BARRIER
2"X6" SPF 2 STUD
R24 MINERAL FIBRE BATT INS.
AIR/VAPOR BARRIER
15.9MM (⅝") GYP. BD

WALL TYPE 5C: DETAILS
(SEE NOTES FOR ADDITIONAL NOTES)



STRUCTURAL REINFORCEMENT
WASHROOM GRAB BAR - ROUGH IN ONLY

General Notes

N

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05/12/21
D. FALZON
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PROVINCE OF ONTARIO

LASONNE ENGINEERING LTD.
KLEINBURG 416.662.2673

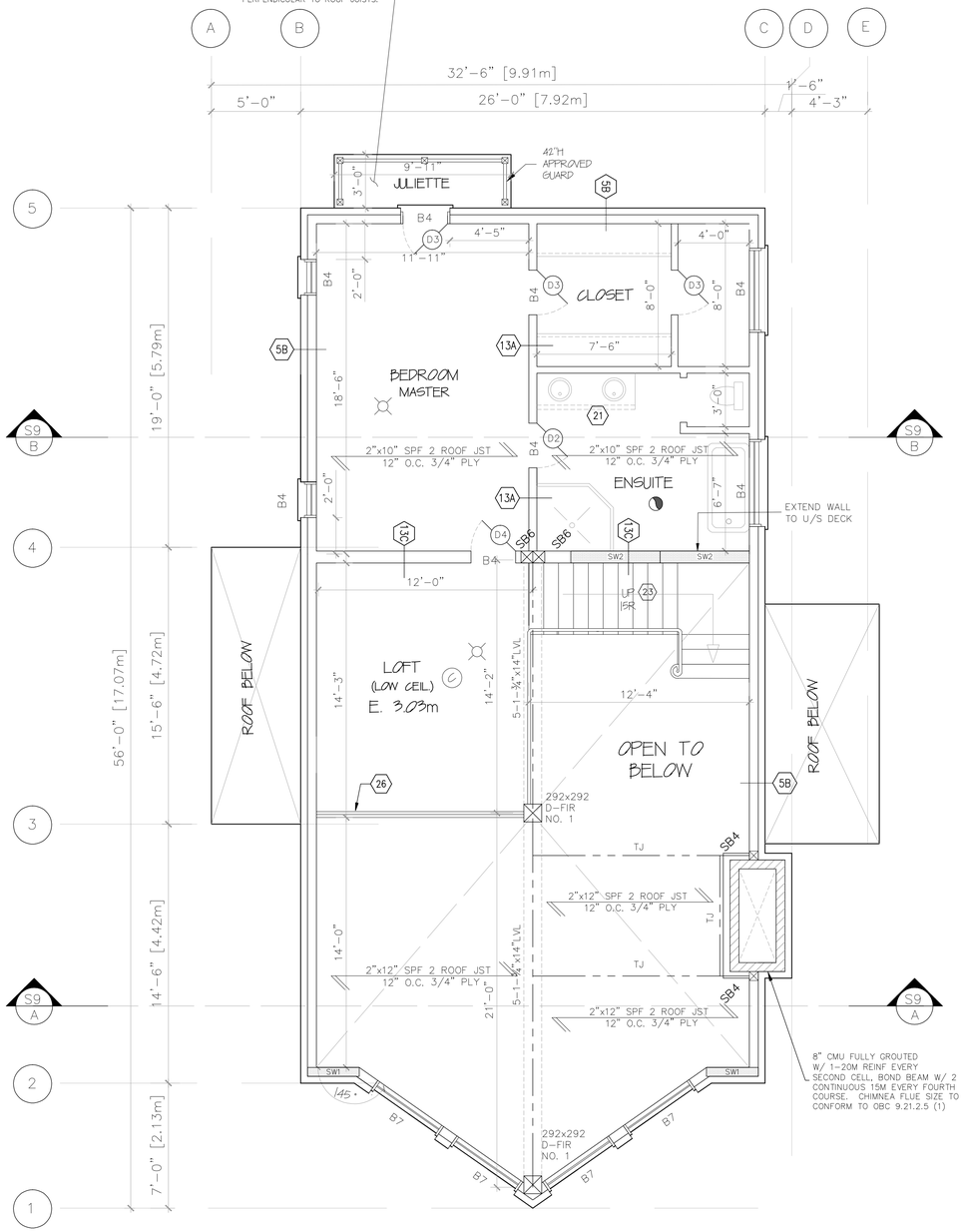
No.	Revision/Issue	Date

PLAN FIRST FLOOR

MACCHIA RESIDENCE

LOT 51 - SUNSET BOULEVARD
SINGLE FAMILY DWELLING

Project 1770	Sheet S3
Date SEPT '18	
Scale ¼" = 1'-0"	



LVL BEAMS SHALL BE 2.0E MIN BY WAYERHAUSER OR APPROVED EQUIV. NAIL EACH PLY OF LVL WITH 89mm LG. COMMON WIRE NAILS @ 300mm O.C. STAGGERED IN 2 ROWS FOR DEPTHS UP TO 11-7/8" AND 3 ROWS FOR GREATER DEPTHS AND FOR 4 PLY MEMBERS. ADD 13mm DIA. GALV. BOLTS BOLTED AT MID-DEPTH OF BEAM AT 400mm O.C.

FOUNDATION GENERAL NOTES: OBC 9.15.3.

1. ALL CONCRETE FOOTINGS SHALL REST ON UNDISTURBED SOIL WITH ALLOWABLE BEARING CAPACITY OF 150 KPA. (TO BE SITE VERIFIED) AND BE FOUNDED A MIN. OF 4'0" BELOW FINISHED GRADE.
2. CONCRETE FOOTINGS AND FOUNDATION WALLS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 30 MPA AFTER 28 DAYS.
3. STRUCTURAL STEEL MEMBERS AND INSERTS SHALL BE CSA PURPOSE STEEL.
4. BACKFILL SHALL BE PLACED AND COMPACTED EQUALLY ON BOTH SIDES OF GARAGE FOUNDATION WALLS TO AVOID LATERAL LOADING.

NOTE: ALL TIMBER TO BE SEPARATED FROM CONCRETE WITH 0.05mm(3.002")POLY.FILM OR TYPE S ROLL ROOFING. (9.17.4.3.)

ALL STEEL BEAMS SHALL HAVE A BEARING A 25.4"x6" STEEL PLATE (FOR POURED CONCRETE FOUNDATION WALL)

FOOTING SCHEDULE

Mark	Size	Reinforcing
F1	4'-0"x1'-6" x20" D.	6-15M B.E.W.
F2	5'-0"x2'-0" x24" D.	9-15M B.E.W.
F3	7'-0"x2'-0" x24" D.	3-15M B.E.W.

B.E.W. - BOTTOM EACH WAY

SOLID BLOCKING @ 16"O.C FIRST JOIST SPAN WHEN PARALLEL W/EXTERIOR WALL

S.P.L.: 200mmX8mm THK STEEL PLATE WELD TO BEAM FLANGE

MAX. HEIGHT FOR 2x6" EXT. WALL
2x6" @ 16" O.C.-12'-6"
2X6" @ 12" O.C.-13'-10"
2-2X6" @ 16" O.C.-15'-0"
2-2X6" @ 12" O.C.-17'-4"

MAX.HEIGHT FOR 2x8" EXT. WALL
2X8" @ 16" O.C.-16'-0"
2X8" @ 12" O.C.-17'-9"
2-2X8" @ 16" O.C.-20'-4"
2-2X8" @ 12" O.C.-22'-4"

BEAM SCHEDULE

B1	2-2"x8"	SPF #2
B2	3-2"x8"	SPF #2
B3	2-2"x10"	SPF #2
B4	3-2"x10"	SPF #2
B5	2-2"x12"	SPF #2
B6	3-2"x12"	SPF #2
B7	2-1 3/4"x11 7/8"	LVL

LINTEL SCHEDULE (METRIC)

L1	90x90x6.0	mm
L2	90x90x8.0	mm
L3	100x90x6.0	mm
L4	125x90x8.0	mm
L5	125x90x10.0	mm
L6	150x100x10.0	mm
L7	200x100x10.0	mm

LEGEND

- EXHAUST FAN - 50CFM VENTED TO OUTSIDE
- CARBON MONOXIDE DETECTOR
- CEILING MOUNTED SMOKE ALARM (INTER-CONNECTED)
- SOLID BEARING TO BE AS WIDE AS SUPPORTED MEMBER (MIN. 2 PIECES)
- SOLID WOOD BEARING TO MATCH FROM ABOVE
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- TJ TRIPLE JOIST
- LVL LAMINATED VENEER LUMBER
- PT PRESSURE TREATED LUMBER
- GT GIRDER TRUSS BY MANU.

ALL MATERIAL FINISHES TO BE DETRMINED BY HOME OWNER DURING CONSTRUCTION

DOOR SCHEDULE

MK	SIZE	FPR
D1	34"W X 8'0"	1HR
D2	28"W X 6'8" - WOOD	N/A
D3	30"W X 6'8" - WOOD	N/A
D4	32"W X 6'8" - WOOD	N/A

SB3 - 3-2"X"6" SOLID BEARING
SB4 - 4-2"X"6" SOLID BEARING
SB5 - 5-2"X"6" SOLID BEARING
SB6 - 5-2"X8" SOLID BEARING
ALL SOLID BEARING TO BE BRACED AT TOP AND BOTTOM

General Notes

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05/12/21
D. FALZON
100159595
PROVINCE OF ONTARIO

LASONNE ENGINEERING LTD.
KLEINBURG 416.662.2673

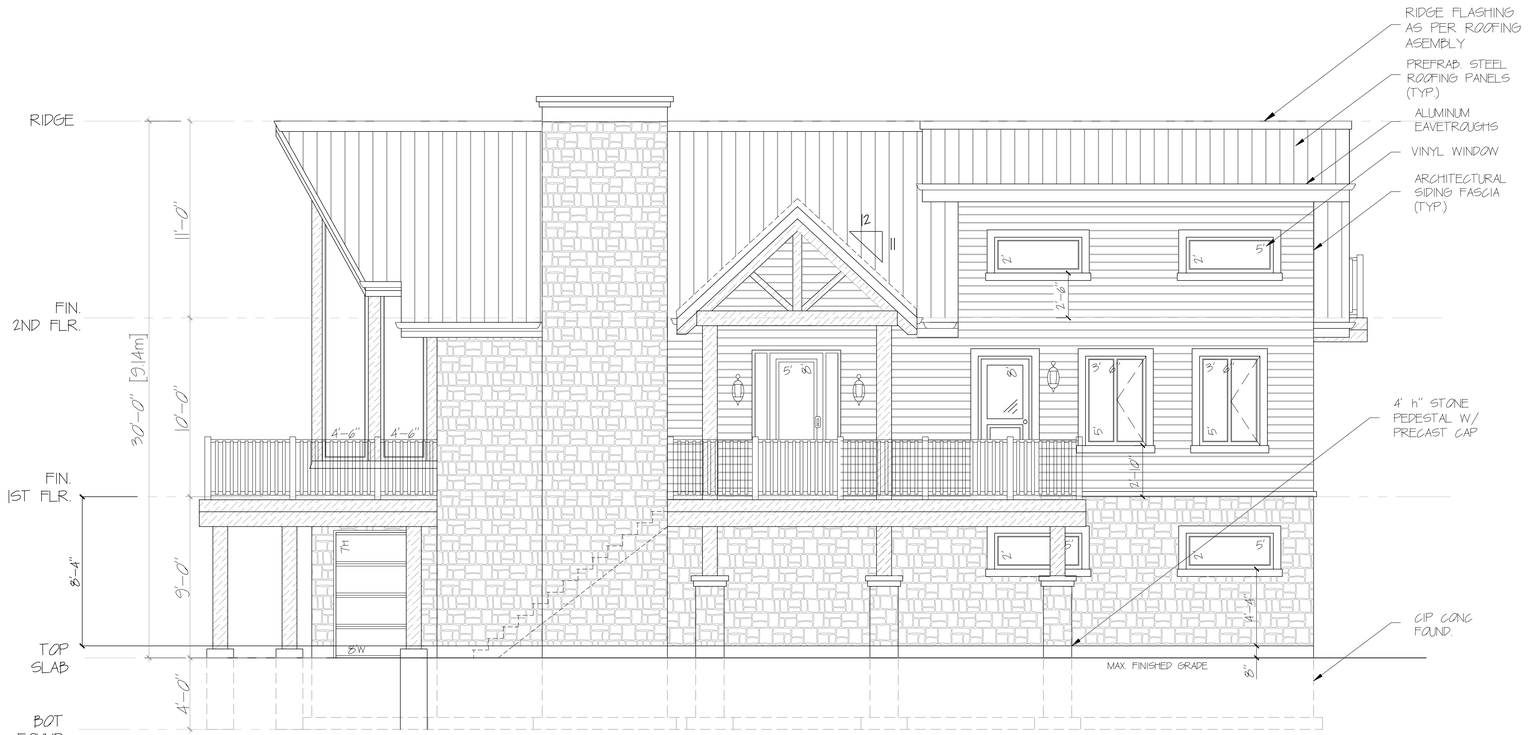
No.	Revision/Issue	Date

PLAN FIRST FLOOR

MACCHIA RESIDENCE

LOT 51 - SUNSET BOULEVARD
SINGLE FAMILY DWELLING

Project 1770	Sheet S4
Date SEPT '18	
Scale 1/4" = 1'-0"	



SECOND LAYER DECK POSTS NOT SHOWN FOR CLARITY

ELEVATION WEST

CONTRACTOR MUST VERIFY ALL DIMENSIONS IN THE FIELD. ANY DISCREPENCIES MUST BE REPORTED BEFORE PROCEEDING WITH THE WORK.

ALL CONSTRUCTION TO ADHERE TO THESE PLANS AND/OR SPECIFICATIONS AND TO CONFORM TO THE ONTARIO BUILDING CODE AND ALL OTHER APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. THESE REQUIREMENTS ARE TO BE TAKEN AS MINIMUM SPECIFICATIONS. ONT. REG. 332/12.

General Notes

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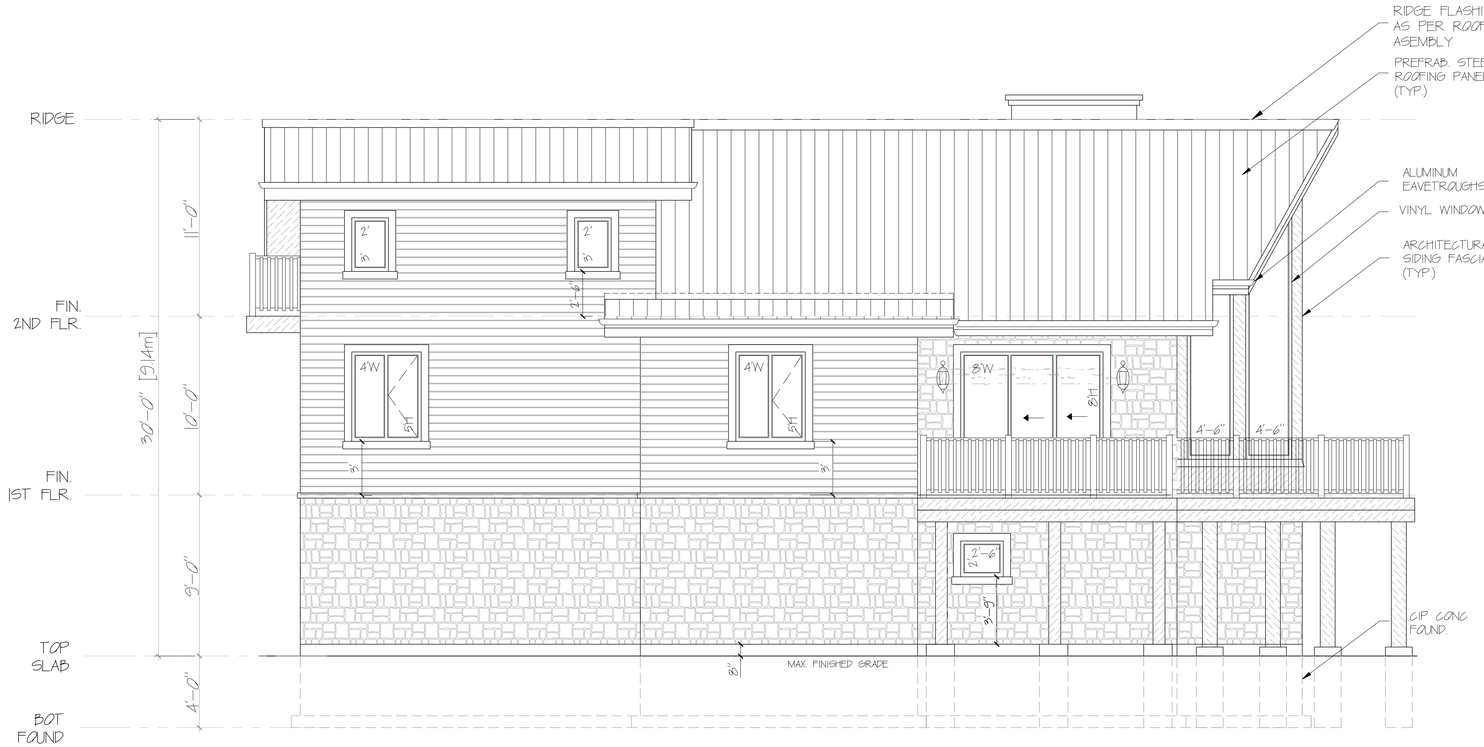
No.	Revision/Issue	Date

ELEVATION WEST

MACCHIA RESIDENCE

LOT 51 - SUNSET BOULEVARD
SINGLE FAMILY DWELLING

Project 1770	Sheet S5
Date SEPT '18	
Scale 1/4" = 1'-0"	



ELEVATION EAST

SECOND LAYER DECK POSTS NOT SHOWN FOR CLARITY

CONTRACTOR MUST VERIFY ALL DIMENSIONS IN THE FIELD. ANY DISCREPENCIES MUST BE REPORTED BEFORE PROCEEDING WITH THE WORK.

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General Notes

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PROVINCE OF ONTARIO

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KLEINBURG 416.662.2673

No.	Revision/Issue	Date

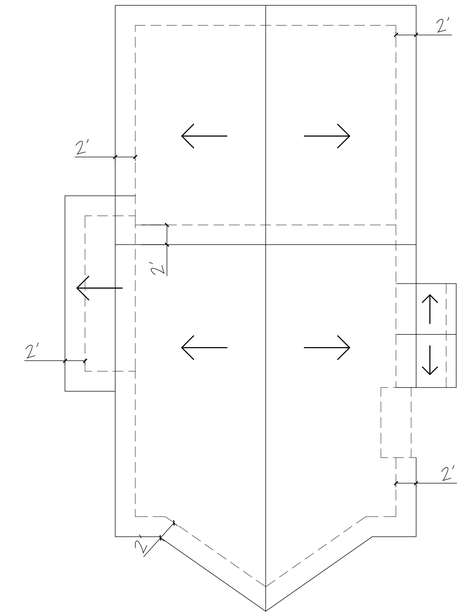
ELEVATIONS EAST

MACCHIA RESIDENCE

LOT 51 - SUNSET BOULEVARD
SINGLE FAMILY DWELLING

Project 1876	Sheet S6
Date SEPT '18	
Scale 1/4" = 1'-0"	

ELEVATION SOUTH



PLAN – ROOF

CONTRACTOR MUST VERIFY ALL DIMENSIONS IN THE FIELD. ANY DISCREPENCIES MUST BE REPORTED BEFORE PROCEEDING WITH THE WORK.

ALL CONSTRUCTION TO ADHERE TO THESE PLANS AND/OR SPECIFICATIONS AND TO CONFORM TO THE ONTARIO BUILDING CODE AND ALL OTHER APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. THESE REQUIREMENTS ARE TO BE TAKEN AS MINIMUM SPECIFICATIONS. ONT. REG. 332/12.

General Notes

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No.	Revision/Issue	Date

ELEVATION SOUTH

MACCHIA RESIDENCE

LOT 51 - SUNSET BOULEVARD
SINGLE FAMILY DWELLING

Project 1876	Sheet S7
Date SEPT '18	
Scale 1/4" = 1'-0"	

ELEVATION NORTH

*DECK NOT SHOWN FOR CLARITY

CONTRACTOR MUST VERIFY ALL DIMENSIONS IN THE FIELD. ANY DISCREPENCIES MUST BE REPORTED BEFORE PROCEEDING WITH THE WORK.

ALL CONSTRUCTION TO ADHERE TO THESE PLANS AND/OR SPECIFICATIONS AND TO CONFORM TO THE ONTARIO BUILDING CODE AND ALL OTHER APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. THESE REQUIREMENTS ARE TO BE TAKEN AS MINIMUM SPECIFICATIONS. ONT. REG. 332/12.

General Notes

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KLEINBURG 416.662.2673

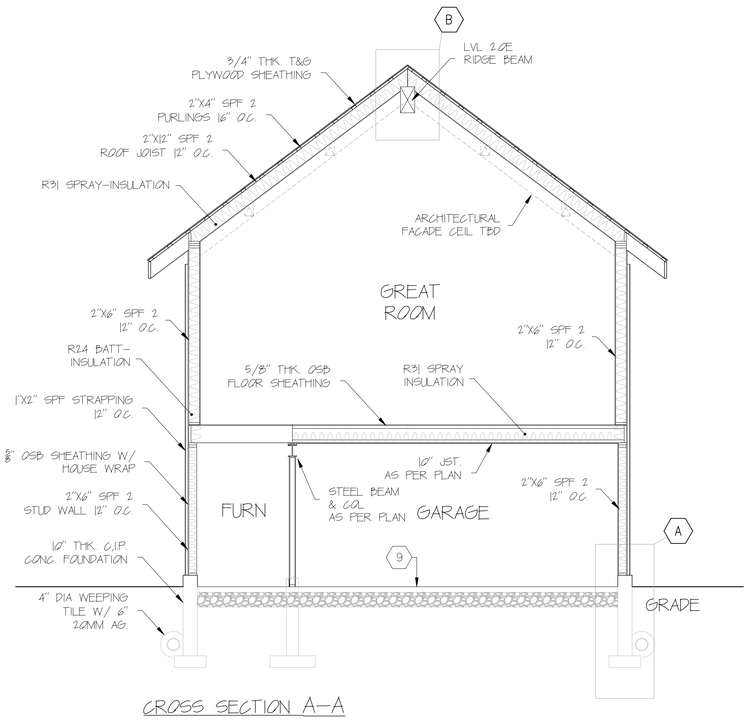
No.	Revision/Issue	Date

ELEVATION NORTH

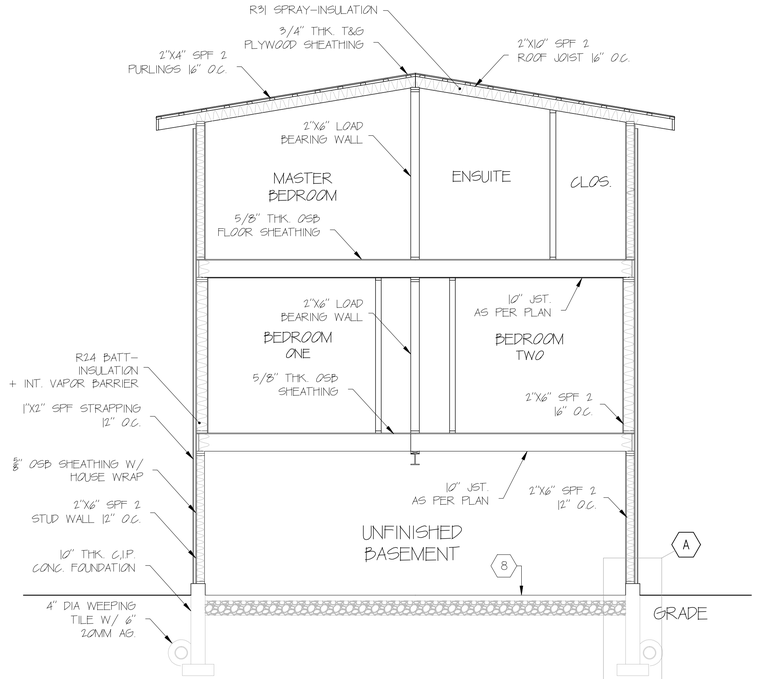
MACCHIA RESIDENCE

LOT 51 - SUNSET BOULEVARD
SINGLE FAMILY DWELLING

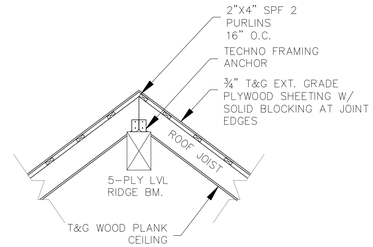
Project 1876	Sheet S8
Date SEPT '18	
Scale ¼" = 1'-0"	



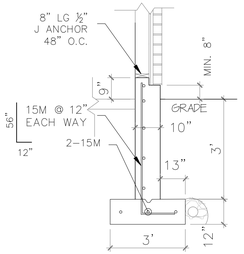
CROSS SECTION A-A



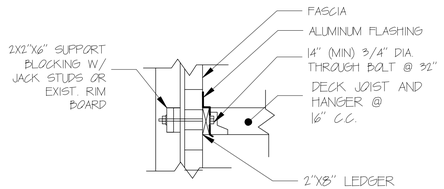
CROSS SECTION B-B



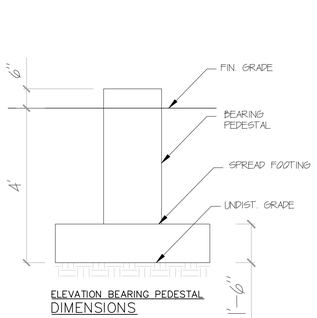
DETAIL B:
RIDGE CONSTRUCTION



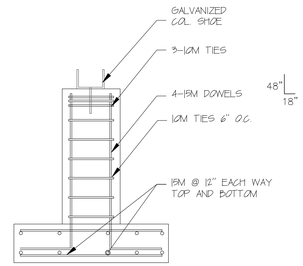
DETAIL A: FOUNDATION WALL & FOOTINGS
1:40



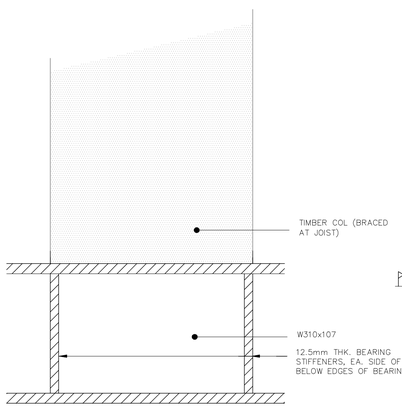
DETAIL L: DECK LEDGER



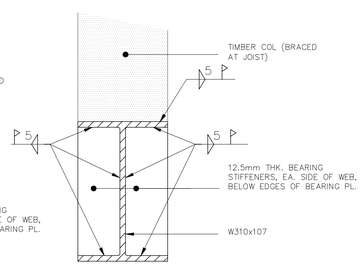
ELEVATION BEARING PEDESTAL
DIMENSIONS



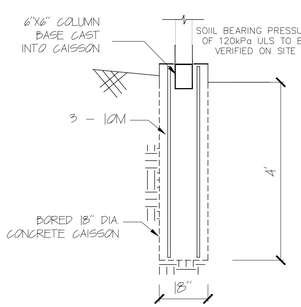
ELEVATION BEARING PEDESTALS
REINFORCEMENT



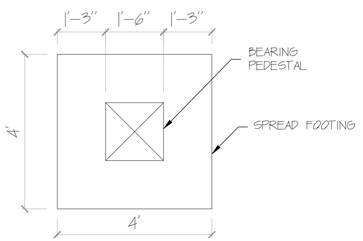
DETAIL W:
BEAM STIFFENERS - ELEVATION



DETAIL W:
BEAM STIFFENERS - SECTION



CAISSON - COLUMNS 'CA1'
DETAILS



PLAN BEARING PEDESTAL
DIMENSIONS

ALL FOOTINGS SHALL REST ON UNDISTURBED SOIL WITH A MIN. BEARING CAPACITY OF 150kPa ULS. SOIL BEARING CAPACITY MUST BE VERIFIED BY A GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT.

GENERAL NOTES:

2.1 LUMBER:
1. ALL LUMBER SHALL BE SPRUCE No.2 GRADE OR BETTER UNLESS NOTED OTHERWISE.

2. STUDS SHALL BE STUD GRADE SPRUCE, UNLESS OTHERWISE NOTED.

3. JOIST HANGERS: PROVIDE APPROVED METAL HANGERS FOR ALL JOISTS AND BUILT-UP WOOD MEMBERS INTERSECTIONG WITH FLUSH BUILT-UP WOOD MEMBERS.

4. WOOD FRAMING NOT TREATED WITH A WOOD PRESERVATIVE IN CONTACT WITH CONCRETE SHALL BE SEPARATED FROM THE CONCRETE BY AT LEAST 2mm POLYURETHANE FILM, No. 50 (450ml) ROLL ROOFING OR OTHER DAMPROOFING MATERIAL.

2.2 STEEL:
1. STRUCTURAL STEEL SHALL CONFORM TO CAN/CSA-G40-21 GRADE 300W. HOLLOW STRUCTURAL SECTIONS SHALL CONFORM TO CAN/CSA-G40-21 GRADE 350W CLASS 'H'.

2. REINFORCING STEEL SHALL CONFORM TO CSA-G30-18M GRADE 400W.

2.3 CONCRETE:
1. THE MINIMUM COMPRESSIVE STRENGTH f'c OF ALL CONCRETE SHALL BE 30MPa.

2. CLEAR COVER TO REINFORCING STEEL SHALL BE AS FOLLOWS:

100mm+/- 20mm FOOTINGS CAST AGAINST EARTH
70mm +/- 20mm REMAINDER UNLESS NOTED

2.3 MECHANICAL:
1. MECHANICAL VENTILATION SHALL PROVIDE 1 AIR CHANGE PER HOUR IF NOT AIR CONDITIONED 0.5 PER HOUR IF AIR CONDITIONED AVERAGED OVER 25 HOURS.

2. HOT WATER TANK MANUFACTURER SPECS SHALL CONFORM TO OBC 9.31.6.

2.4 FLASHING:
1. FLASHING MATERIALS AND DISTALLATION SHALL CONFORM TO O.B.C SECTIONS 9.20.13, 9.26.4 & 9.27.3

2.5 ELECTRICAL FACILITIES:
1. ALL ELECTRICAL FACILITIES SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 9.34

2.6 GRADING:
1. THE BUILDING SHALL BE LOCATED OR THE BUILDING SITE GRADED SO THAT WATER WILL NOT ACCUMULATE AT OR NEAR THE BUILDING AND WILL NOT ADVERSELY AFFECT ADJACENT PROPERTIES. GRADING SHALL CONFORM TO 9.14.6.

General Notes

LICENSED PROFESSIONAL ENGINEER
05/12/21
D. FALZON
100159595
PROVINCE OF ONTARIO

LASONNE ENGINEERING LTD.
KLEINBURG 416.662.2673

No.	Revision/Issue	Date

DETAILS

MACCHIA RESIDENCE

LOT 51 - SUNSET BOULEVARD
SINGLE FAMILY DWELLING

Project	1876	Sheet	S9
Date	SEPT '18		
Scale	NTS		

GENERAL NOTES:

EXCAVATION AND BACKFILL
1. EXCAVATION SHALL BE UNDERTAKEN IN SUCH A MANNER SO AS TO PREVENT DAMAGE TO EXISTING STRUCTURES, ADJACENT PROPERTIES AND UTILITIES.

2. THE TOPSOIL AND VEGETABLE MATTER IN UNEXCAVATED AREAS UNDER A BUILDING SHALL BE REMOVED. THE BOTTOM OF EXCAVATIONS FOR FOUNDATIONS SHALL BE FREE OF ALL ORGANIC MATERIAL.

3. IF TERMITES ARE KNOWN TO EXIST, ALL STUMPS, ROOTS AND WOOD DEBRIS SHALL BE REMOVED TO A MINIMUM DEPTH OF 500MM IN EXCAVATED AREAS UNDER A BUILDING, AND THE CLEARANCE BETWEEN UNTREATED STRUCTURAL WOOD ELEMENTS AND THE GROUND SHALL BE NO LESS THAN 450MM.

4. BACKFILL WITHIN 600MM OF THE FOUNDATION WALLS SHALL BE FREE OF DELETERIOUS DEBRIS AND BOULDERS OVER 250MM IN DIAMETER.

DAMP-PROOFING AND DRAINAGE
1. IN NORMAL SOIL CONDITIONS, THE EXTERIOR SURFACES OF FOUNDATION WALLS ENCLOSING BASEMENTS AND CRAWL SPACES SHALL BE DAMP-PROOFED WHERE HYDROSTATIC PRESSURE OCCURS, A WATERPROOFING SYSTEM IS REQUIRED.

2. MASONRY FOUNDATION WALLS SHALL BE PARGED WITH 6MM OF MORTAR COVED OVER THE FOOTING PRIOR TO DAMP-PROOFING.

3. 100MM DIA. FOUNDATION DRAINS SHALL BE LAID ON LEVEL, UNDISTURBED GROUND ADJACENT TO THE FOOTINGS AT OR BELOW THE TOP OF THE BASEMENT SLAB OR CRAWL SPACE FLOOR, AND SHALL BE COVERED WITH 150MM OF CRUSHED STONE. FOUNDATION DRAINS SHALL DRAIN TO A STORM SEWER, DRAINAGE DITCH, DRY WELL OR SUMP.

4. WINDOW WELLS SHALL BE DRAINED TO THE FOOTING LEVEL OR TO A DITCH OR SUMP PUMP.

5. DOWNSPOUTS NOT DIRECTLY CONNECTED TO A STORM SEWER SHALL HAVE EXTENSIONS TO CARRY WATER AWAY FROM THE BUILDING, AND PROVISIONS SHALL BE MADE TO PREVENT SOIL EROSION.

6. CONCRETE SLABS IN ATTACHED GARAGES SHALL BE SLOPED TO DRAIN TO THE EXTERIOR.

7. THE BUILDING SITE SHALL BE GRADED SO THAT SURFACE, SUMP AND ROOF DRAINAGE WILL NOT ACCUMULATE AT OR NEAR THE BUILDING AND WILL NOT ADVERSELY AFFECT ADJACENT PROPERTIES.

FOOTINGS
1. MINIMUM 30MPA POURED CONCRETE.

2. MINIMUM 1200MM BELOW FINISHED GRADE. FOOTINGS SHALL BE FOUNDED ON NATURAL UNDISTURBED SOIL, ROCK OR COMPACTED GRANULAR FILL WITH MINIMUM BEARING CAPACITY OF 15KPA.

FOUNDATION WALLS
1. TO BE POURED CONCRETE, UNIT MASONRY, ICF OR PRESERVED WOOD (SEE DRAWINGS FOR TYPE AND THICKNESS).

2. DAMP-PROOFING SHALL BE A HEAVY COAT OF BITUMINOUS MATERIAL.

3. FOUNDATION WALL TO EXTEND MINIMUM 150MM ABOVE FINISHED GRADE.

4. A DRAINAGE LAYER IS REQUIRED ON THE OUTSIDE OF A FOUNDATION WALL WHERE THE INTERIOR INSULATION EXTENDS MORE THAN 900MM BELOW EXTERIOR GRADE.

5. A DRAINAGE LAYER SHALL CONSIST OF:
MIN. 19MM MINERAL FIBRE INSULATION WITH MIN. DENSITY OF 57 KG/M
MIN. 100MM OF FREE DRAINAGE GRANULAR MATERIAL OR
AN APPROVED SYSTEM WHICH PROVIDES EQUIVALENT PERFORMANCE.
FOUNDATION WALLS SHALL BE BRACED OR HAVE THE FLOOR JOISTS INSTALLED BEFORE BACKFILLING.

CONCRETE FLOOR SLABS
1. GARAGE, CARPORT AND EXTERIOR SLABS AND EXTERIOR STEPS SHALL BE 32MPA CONCRETE WITH 5-8% AIR ENTRAINMENT.

2. BASEMENT SLAB 25MPA CONCRETE, MINIMUM 75MM THICK, PLACED ON A MINIMUM 100MM OF COARSE, CLEAN, GRANULAR MATERIAL.

3. ALL FILL OTHER THAN COARSE CLEAN MATERIAL PLACED BENEATH CONCRETE SLABS SHALL BE COMPACTED TO PROVIDE UNIFORM SUPPORT

MASONRY WALLS
1. WHERE CONSTRUCTED OF 90MM BRICK, WALL SHALL BE BONDED WITH A HEADER COURSE EVERY 600MM O/C VERTICALLY AND HORIZONTALLY AND 900MM O/C FOR BLOCK OR TILE.

2. PROVIDE 50MM SOLID MASONRY, CONCRETE FILLED TOP COURSE OR CONTINUOUS 38X89 WOOD PLATE UNDER ALL ROOF AND FLOOR FRAMING MEMBERS.

3. PROVIDE 190MM SOLID MASONRY UNDER BEAMS AND COLUMNS.
4.
5. MASONRY WALL TO BE TIED TO EACH TIER OF JOISTS WITH 40MM X 4.76MM CORROSION RESISTANT STEEL STRAPS, KEYED MINIMUM 100MM INTO MASONRY. WHEN JOISTS ARE PARALLEL TO WALL, TIES ARE TO EXTEND ACROSS AT LEAST 3 JOISTS @ 2000MM O.C.

6. INSIDE OF WALL TO BE PARGED AND COVERED WITH NO. 15 BREATHER-TYPE ASPHALT PAPER.

7. FOR REDUCED FOUNDATION WALLS TO ALLOW A BRICK FACING WHILE MAINTAINING LATERAL SUPPORT, TIE MINIMUM 90MM BRICK TO MINIMUM 90MM BACKUP BLOCK WITH CORROSION RESISTANT TIES AT LEAST 17.8MM IN CROSS SECTIONAL AREA, SPACED 200MM VERTICALLY AND 900MM HORIZONTALLY, WITH JOINTS COMPLETELY FILLED WITH MORTAR.

8. MASONRY OVER OPENINGS SHALL BE SUPPORTED ON CORROSION RESISTANT OR PRIME PAINTED STEEL LINTELS WITH A MINIMUM OF 150MM END BEARING.

MASONRY VENEER
1. MINIMUM 70MM THICK IF JOINTS ARE NOT RAKED AND 10MM THICK IF JOINTS ARE RAKED.

2. MINIMUM 25MM AIR SPACE TO SHEATHING.

3. PROVIDE WEEP HOLES @ 800MM O.C. AT THE BOTTOM OF THE CAVITY AND OVER DOORS AND WINDOWS.

4. DIRECT DRAINAGE THROUGH WEEP HOLES WITH 0.5MM POLY FLASHING EXTENDING MINIMUM 150MM UP BEHIND THE SHEATHING PAPER.

5. VENEER TIES MINIMUM 0.76MM THICK X 22MM WIDE CORROSION RESISTANT STRAPS SPACED @ 500MM VERTICALLY AND 400MM HORIZONTALLY.

6. FASTEN TIES WITH CORROSION RESISTANT 3.18MM DIAMETER SCREWS OR SPIRAL NAILS WHICH PENETRATE AT LEAST 50MM INTO STUDS.

WOOD FRAME CONSTRUCTION
1. ALL LUMBER SHALL BE SPRUCE-PINE-FIR NO. 1 & 2, AND SHALL BE IDENTIFIED BY A GRADE STAMP

2. MAXIMUM MOISTURE CONTENT 19% AT TIME OF INSTALLATION.

3. WOOD FRAMING MEMBERS WHICH ARE SUPPORTED ON CONCRETE IN DIRECT CONTACT WITH SOIL SHALL BE SEPARATED FROM THE CONCRETE WITH 0.05MM POLYETHYLENE OR TYPE 'S' ROLL ROOFING.

WALLS
1. EXTERIOR WALLS SHALL CONSIST OF:
- CLADDING
- AIR BARRIER SYSTEM LAPPED 100MM AT JOINTS
- LUMBER, PLYWOOD, OSB OR GYPSUM SHEATHING
- 38X140 STUDS @ 400MM O.C.
- RSI 4.23 INSULATION

2. INTERIOR LOADBEARING WALLS SHALL CONSIST OF:
- 38X89 STUDS @ 400MM O.C.
- 38X89 BOTTOM PLATE AND DOUBLE38X89 TOP PLATE
- 38X89 MID-GIRTS IF NOT SHEATHED
- 12.7MM GYPSUM BOARD SHEATHING

FLOORS
1. JOISTS TO HAVE MINIMUM 38MM OF END BEARING.

2. JOISTS SHALL BEAR ON A SILL PLATE FIXED TO FOUNDATION WITH 12.7MM ANCHOR BOLTS @ 2400MM O.C.

3. HEADER JOISTS BETWEEN 1200MM AND 3200MM IN LENGTH SHALL BE SIZED BY CALCULATIONS.

4. TRIMMER JOISTS SHALL BE DOUBLED WHEN SUPPORTED HEADER IS BETWEEN 800MM AND 2000MM. TRIMMER JOISTS SHALL BE SIZED BY CALCULATIONS WHEN SUPPORTED HEADER EXCEEDS 2000MM.

5. 38X38 CROSS BRIDGING REQUIRED NOT MORE THAN 2100MM FROM EACH SUPPORT AND FROM OTHER ROWS OF BRIDGING.

6. JOISTS SHALL BE SUPPORTED ON JOIST HANGERS AT ALL FLUSH BEAMS, TRIMMERS AND HEADERS.

7. NON-LOADBEARING PARTITIONS SHALL BE SUPPORTED ON A JOIST OR ON A BLOCKING BETWEEN JOISTS.

ROOF & CEILINGS
1. HIP AND VALLEY RAFTER SHALL BE 38MM DEEPER THAN COMMON RAFTERS.

2. 38X39 COLLAR TIES @ RAFTER SPACING WITH 19X84 CONTINUOUS BRACE AT MID SPAN IF COLLAR TIE EXCEEDS 1.2M IN LENGTH.

NOTCHING & DRILLING TRUSSES, JOIST, RAFTERS
1. HOLES IN FLOOR, ROOF AND CEILING MEMBERS TO BE NOT LARGER THAN 1/4 THE ACTUAL DEPTH OF MEMBER AND NOT LESS THAN 50MM FROM EDGES.

2. NOTCHES IN FLOOR, ROOF AND CEILING MEMBERS TO BE LOCATED ON TOP OF MEMBER WITHIN 1/5 THE ACTUAL DEPTH FROM THE EDGE OF BEARING AND NOT GREATER THAN 1/3 THE JOIST SPAN.

3. WALL STUDS MAY BE NOTCHED OR DRILLED PROVIDED THAT NO LESS THAN 2/3 THE DEPTH OF THE STUD REMAINS, IF LOAD BEARING, AND 40MM IF NON-LOAD BEARING.

4. ROOF TRUSS MEMBERS SHALL NOT BE NOTCHED, DRILLED OR WEAKENED UNLESS ACCOMMODATED IN THE DESIGN.

ROOFING
1. FASTENERS FOR ROOFING SHALL BE CORROSION RESISTANT. ROOFING NAILS SHALL PENETRATE THROUGH OR AT LEAST 12MM INTO ROOF SHEATHING.

2. EVERY ASPHALT SHINGLE SHALL BE FASTENED WITH AT LEAST 4 NAILS FOR 1000MM WIDE SHINGLE (OR 611MM STAPLES).

3. EAVES PROTECTION SHALL EXTEND 900MM UP THE ROOF SLOPE FROM THE EDGE AND AT LEAST 300MM FROM THE INSIDE FACE OF THE EXTERIOR WALL AND SHALL CONSIST OF TYPE M OR TYPE S ROLL ROOFING LAID WITH MINIMUM 100MM HEAD AND END LAPS CEMENTED TOGETHER, OR GLASS FIBRE OR POLYESTER FIBRE COATED BASE SHEETS, OR SELF SEALING COMPOSITE MEMBRANES CONSISTING OF MODIFIED BITUMINOUS COATED MATERIAL OR NO. 15 SATURATED FELT LAPPED AND CEMENTED. EAVE PROTECTION IS NOT REQUIRED FOR UNHEATED BUILDINGS, FOR ROOFS EXCEEDING A SLOPE OF 1 IN 1.5, OR WHERE A LOW SLOPE ASPHALT SHINGLE APPLICATION IS PROVIDED.

4. OPEN VALLEYS SHALL BE FLASHED WITH 2 LAYERS OF ROLL ROOFING, OR 1 LAYER OF SHEET METAL MIN. 600MM WIDE.

5. SHEET METAL SHALL CONSIST OF NOT LESS THAN 1.73M SHEET LEAD, 0.33MM GALVANIZED STEEL, 0.33MM COPPER, 0.35M ZINC, OR 0.48MM ALUMINUM.

COLUMNS, BEAMS & LINTELS
1. STEEL BEAMS AND COLUMNS SHALL BE SHOP PRIMED 350W STEEL

2. MINIMUM 89MM END BEARING FOR WOOD AND STEEL BEAMS, WITH 190MM SOLID MASONRY BENEATH THE BEAM

3. STEEL COLUMNS TO HAVE MINIMUM OUTSIDE DIAMETER OF 73MM AND MINIMUM WALL THICKNESS OF 4.76MM.

4. WOOD COLUMNS FOR CARPORTS AND GARAGES SHALL BE MINIMUM 89MMX89MM; IN ALL OTHER CASES EITHER 140MMX140MM OR 184MM ROUND, UNLESS CALCULATIONS BASED ON ACTUAL LOADS SHOW LESSER SIZES ARE ADEQUATE. ALL COLUMNS SHALL BE NOT LESS THAN THE WIDTH OF THE SUPPORTED MEMBER.

5. MASONRY COLUMNS SHALL BE A MINIMUM OF 290 MMX290 MM OR 240MM X 380MM.

6. PROVIDE SOLID BLOCKING THE FULL WIDTH OF THE SUPPORTED MEMBER UNDER ALL CONCENTRATED LOADS.

INSULATION AND WATERPROOFING
1. SUPPLY DUCTS IN UNHEATED SPACE INSULATION SHALL BE PROTECTED WITH GYPSUM BOARD OR AN EQUIVALENT INTERIOR FINISH, EXCEPT FOR UNFINISHED BASEMENTS WHERE 0.15MM POLY IS SUFFICIENT FOR FIBERGLASS TYPE INSULATIONS.

2. DUCTS PASSING THROUGH UNHEATED SPACE SHALL BE MADE AIRTIGHT WITH TAPE OR SEALANT.

3. CAULKING SHALL BE PROVIDED FOR ALL EXTERIOR DOORS AND WINDOWS BETWEEN THE FRAME AND THE EXTERIOR CLADDING.

4. WEATHERSTRIPPING SHALL BE PROVIDED ON ALL DOORS AND ACCESS HATCHES TO THE EXTERIOR, EXCEPT DOORS FROM A GARAGE TO THE EXTERIOR.

5. EXTERIOR WALLS, CEILINGS AND FLOORS SHALL BE CONSTRUCTED SO AS TO PROVIDE A CONTINUOUS BARRIER TO THE PASSAGE OF WATER VAPOUR FROM THE INTERIOR AND TO THE LEAKAGE OF AIR FROM THE EXTERIOR.

NATURAL VENTILATION
EVERY ROOF SPACE ABOVE AN INSULATED CEILING SHALL
1. BE VENTILATED WITH UNOBSTRUCTED OPENINGS EQUAL TO NOT LESS THAN 1/300 OF THE INSULATED CEILING AREA

2. INSULATED ROOF SPACES NOT INCORPORATING AN ATTIC SHALL BE VENTILATED WITH UNOBSTRUCTED OPENINGS EQUAL TO NOT LESS THAN 1/150 OF THE INSULATED CEILING AREA.

3. ROOF VENTS SHALL BE UNIFORMLY DISTRIBUTED WITH MIN. 25% AT TOP OF THE SPACE AND 25% AT BOTTOM OF THE SPACE DESIGNED TO PREVENT THE ENTRY OF RAIN, SNOW OR INSECTS

4. UNHEATED CRAWL SPACES SHALL BE PROVIDED WITH 0.1M 2 OF VENTILATION FOR EACH 50M2

5. MINIMUM NATURAL VENTILATION AREAS, WHERE MECHANICAL VENTILATION IS NOT PROVIDED, ARE:
BATHROOMS: 0.09M
OTHER ROOMS: 0.28M
UNFINISHED BASEMENT: 0.2% OF FLOOR AREA

HANDRAILS AND GUARDS
1. A HANDRAIL IS REQUIRED FOR INTERIOR STAIRS CONTAINING MORE THAN 2 RISERS AND EXTERIOR STAIRS CONTAINING MORE THAN 3 RISERS.

2. GUARDS ARE REQUIRED AROUND EVERY ACCESSIBLE SURFACE WHICH IS MORE THAN 600MM ABOVE THE ADJACENT LEVEL AND WHERE THE ADJACENT SURFACE HAS A SLOPE OF MORE THAN 1:2.

3. INTERIOR AND EXTERIOR GUARDS MIN. 900MM HIGH.

4. EXTERIOR GUARDS SHALL BE 1070MM HIGH WHERE HEIGHT ABOVE ADJACENT SURFACE EXCEEDS 1800MM.

5. GUARDS SHALL HAVE OPENINGS SMALLER THAN 100MM AND NO MEMBER BETWEEN 140MM AND 900MM THAT WILL FACILITATE CLIMBING.

5. MASONRY COLUMNS SHALL BE A MINIMUM OF 290 MMX290 MM OR 240MM X 380MM.

6. PROVIDE SOLID BLOCKING THE FULL WIDTH OF THE SUPPORTED MEMBER UNDER ALL CONCENTRATED LOADS.

DOORS AND WINDOWS
1. EVERY FLOOR LEVEL CONTAINING A BEDROOM AND NOT SERVED BY AN EXTERIOR DOOR SHALL CONTAIN AT LEAST 1 WINDOW HAVING AN UNOBSTRUCTED OPEN AREA OF 0.35M2 AND NO DIMENSION LESS THAN 380MM, WHICH IS OPENABLE FROM THE INSIDE WITHOUT TOOLS MAXIMUM SILL HEIGHT 1000MM FOR FIN. FLOORS ABOVE GRADE.

2. EXTERIOR HOUSE DOORS AND WINDOWS WITHIN 2000MM FROM GRADE SHALL BE CONSTRUCTED TO RESIST FORCED ENTRY. DOORS SHALL HAVE A DEADBOLT LOCK

3. THE PRINCIPAL ENTRY DOOR SHALL HAVE EITHER A DOOR VIEWER, TRANSPARENT GLAZING OR A SIDELIGHT

4. MAXIMUM U-VALUE 1.8 FOR WINDOWS $ SLIDING GLASS DOORS

EXTERIOR WALLS
1. NO WINDOWS OR OTHER UNPROTECTED OPENINGS ARE PERMITTED IN EXTERIOR WALLS LESS THAN 1200MM FROM PROPERTY LINES

2. 15.9MM TYPE 'X' FIRE RATED DRYWALL SHALL BE INSTALLED ON THE INSIDE FACE OF ATTACHED GARAGE EXTERIOR WALLS AND GABLE ENDS OF ROOFS WHICH ARE LESS THAN

3. 1200MM AND NOT LESS THAN 600MM FROM PROPERTY LINES

4. NON COMBUSTIBLE CLADDING SHALL BE INSTALLED ON ALL EXTERIOR WALLS LESS THAN 600MM FROM PROPERTY LINES

CERAMIC TILE
1. WHEN CERAMIC TILE IS APPLIED TO A MORTAR BED WITH ADHESIVE, THE BED SHALL BE A MINIMUM OF 12.5MM THICK & REINFORCED WITH GALVANIZED DIAMOND MESH LATH, APPLIED OVER POLYETHYLENE ON SUBFLOORING AN JOISTS AT NO MORE THAN 400MM O.C. WITH AT LEAST 2 ROWS CROSS BRIDGING

ACCESS TO ATTICS AND CRAWL SPACES
1. ACCESS HATCH MINIMUM 545MMX 588MM TO BE PROVIDED TO EVERY ROOF SPACE WHICH IS 10M OR MORE IN AREA AND MORE THAN 600MM IN HEIGHT.ACCESS HATCH MINIMUM 500MMX 700MM TO BE PROVIDED TO EVERY CRAWL SPACE.

GARAGE GAS-PROOFING
1. THE WALLS AND CEILING OF AN ATTACHED GARAGE SHALL BE CONSTRUCTED AND SEALED SO AS TO PROVIDE AN EFFECTIVE BARRIER TO EXHAUST FUMES.

2. ALL PLUMBING AND OTHER PENETRATIONS THROUGH THE WALLS AND CEILING SHALL BE CAULKED.

3. DOORS BETWEEN THE DWELLING AND ATTACHED GARAGE MAY NOT OPEN INTO A BEDROOM AND SHALL BE WEATHER-STRIPPED AND HAVE A SELF-CLOSER.

ALARMS AND DETECTORS
1. AT LEAST ONE SMOKE ALARM SHALL BE INSTALLED ON OR NEAR THE CEILING ON EACH FLOOR AND BASEMENT LEVEL. 900MM OR MORE ABOVE AN ADJACENT LEVEL

2. SMOKE ALARMS SHALL BE INTERCONNECTED AND LOCATED SUCH THAT ONE IS WITHIN 5M OF EVERY BEDROOM DOOR AND NO MORE THAN 15M TRAVEL DISTANCE FROM ANY POINT ON A FLOOR.

3. A CARBON MONOXIDE DETECTOR SHALL BE INSTALLED ADJACENT TO EVERY SLEEPING AREA FOR DWELLINGS WITH FUEL BURNING FIREPLACE OR STOVE, OR AN ATTACHED GARAGE.

STAIRS
1. MAXIMUM RISE : 200MM
MINIMUM RUN: 210MM
MINIMUM TREAD: 235MM
MINIMUM HEAD ROOM: 1950MM
MINIMUM WIDTH: 860MM

2. CURVED STAIRS SHALL HAVE A MIN. RUN OF 150MM AT ANY POINT AND A MINIMUM AVERAGE RUN OF 200MM

3. WINDERS WHICH CONVERGE TO A POINT IN STAIRS MUST TURN THROUGH AN ANGLE OF NO MORE THAN 90° WITH NO LESS THAN 30° OR MORE THAN 45° PER TREAD. SETS OF WINDERS MUST BE SEPARATED BY 1200MM ALONG THE RUN OF THE STAIR.

4. A LANDING IS REQUIRED AT THE TOP OF ANY STAIR LEADING TO THE PRINCIPAL ENTRANCE TO A DWELLING AND OTHER EXTERIOR ENTRANCES WITH MORE THAN 3 RISERS.

5. EXTERIOR CONCRETE STAIRS WITH MORE THAN 2 RISERS REQUIRE FOUNDATIONS.

1 FLUSH ROOF CONSTRUCTION

2-PLY TORCHED ON ROOFING ON 1/2" PLYWOOD SHEATHING ON ROOF JOISTS AS NOTED ON DRAWINGS, 6 MIL SUPER POLY VAPOUR BARRIER AT U/S OF CEILING JOIST W/ 1/2" GYPSUM BOARD FILLED,TAPED, SANDED READY FOR PAINT.

NOTE: ALLOW FOR CROSS VENTILATION IN PLENUM BETWEEN ROOF AND CEILING JOISTS WITH ROOF VENTING AREA MIN. 1 SQ.FT./150 SQ.FT. OF ROOF AREA. PROVIDE MIN. R-31 BATT INSULATION. WHERE VENTILATION IS NOT PROVIDED FILL JOIST CAVITY SOLID W/ MIN. R-50 SPRAY FOAM INSULATION.

2 SLOPED ROOF CONSTRUCTION

BITUMINOUS SHINGLES ON 1x3 NAILER ON 1/2" PLYWOOD SHEATHING ON TYPAR ROOFING MEMBRANE ON RAFTERS/TRUSSES AS NOTED. PROVIDE APPROVED EAVES PROTECTION TO MINIMUM 6'-0" BEYOND INNER FACE OF EXTERIOR WALL. MIN. R-31 BATT INSULATION IN CATHEDRAL CEILING SPACES/ 6 MIL SUPER POLY VAPOUR BARRIER (WARM SIDE) W/ 1/2" GYPSUM BOARD TAPED, FILLED, SANDED, READY FOR PAINT.
NOTE: PROVIDE MIN. 1 SQ. FT. OF ROOF VENT AREA PER 300 SQ.FT. OF CEILING AREA W/ MIN. 50% AT EAVES. PROVIDE CONTINUOUS ROOF VENTING AT EAVE & RIDGE, AND MIN. 2 1/4" VENT SPACE ABOVE INSULATION IN RAFTER CAVITY.

3 COPPER/METAL ROOF CONSTRUCTION

COPPER/METAL ROOFING ON 15 LB. BLDG. PAPER ON 1/2" PLYWOOD SHEATHING, ON ROOF RAFTERS OR TRUSSES AS NOTED. PROVIDE APPROVED EAVES PROTECTION (CE & WATER SHIELD) TO MINIMUM 6'-0" BEYOND INNER FACE OF EXTERIOR WALL. MIN. R-24 BATT INSULATION IN CATHEDRAL CEILING SPACE/ 6 MIL SUPER POLY VAPOUR BARRIER (WARM SIDE) W/ 1/2" GYPSUM BOARD TAPED, FILLED, SANDED, READY FOR PAINT.
NOTE: PROVIDE MIN. 1 SQ. FT. OF ROOF VENT AREA PER 300 SQ.FT. OF CEILING AREA W/ MIN. 50% AT EAVES. PROVIDE CONTINUOUS ROOF VENTING AT EAVE & RIDGE. AND MIN. 2 1/4" VENT SPACE ABOVE INSULATION IN RAFTER CAVITY.

4 STONE VENEER WALL CONSTRUCTION

2" STONE VENEER, 1" AIR SPACE, TYVEK "HOUSE WRAP" (JOINTS TAPED AND SEALED) ON 1/2" PLYWOOD SHEATHING ON 2 x 6 @ 16" O. C. SPF STUD WALLS
2" x 6" WOOD GIRT AT MID- HEIGHT.
DOUBLE PLATES AT TOP, SILL PLATE AT BOTTOM,
PROVIDE 2/3" THICK x 7/8" WIDE MASONRY TIES @ 16" O.C. HORIZONTALLY AND 32" O.C. VERTICALLY. PROVIDE WEEP HOLES @ 24" O.C. AT COURSES AT TOP OF FOUNDATION WALL AND ABOVE ALL OPENINGS. PROVIDE THROUGH WALL BASE FLASHING UP MIN. 6" BEHIND SHEATHING PAPER.

NOTE: USE TYPE "X" DRYWALL AT ALL WALLS CLOSER THAN 1.2M TO PROPERTY LINE

5 STUCCO ON BLOCK WALL CONSTRUCTION (EIFS- CCMC No. 12969-R)

3 COAT STUCCO STUCCO APPLICATION 1" (.25mm) POLYSTYRENE BOARD FASTENED (RS CONT INS.) W/ CORROSION-RESISTANT SCREWS WITH WIND-DEVIL 2 PLASTIC WASHERS ON 4" CONC. BLOCK VENEER, 1" AIR SPACE, TYVECH "HOUSE WRAP" (JOINTS TAPED AND SEALED) ON 1/2" PLYWOOD SHEATHING ON 2x6 @ 16" O.C. SPF STUD WALLS W/ R-24 BATT INSULATION. 2x6 WOOD GIRT AT MID-HEIGHT. DOUBLE PLATES TOP & SILL PLATE AT BOTTOM, 6MIL POLY VAPOUR BARRIER(WARM SIDE) W/ 5/8" GYPSUM BOARD TAPED, FILLED, SANDED READY FOR PAINT. PROVIDE 0.03" THICK x7/8" WIDE MASONRY TIES @ 16" O.C. HORIZONTALLY AND 32" O.C. VERTICALLY. PROVIDE WEEP HOLES @ 24" O.C. AT COURSES AT TOP OF FOUNDATION WALL AND ABOVE ALL OPENINGS. PROVIDE THROUGH WALL BASE FLASHING UP MIN. 6"BEHIND SHEATHING PAPER.
NOTE THAT OVERALL WALL CONSTRUCTION FOLLOWS THE RAINSCREEN PRINCIPAL.

5A STUCCO ON WOOD FRAME WALL (EIFS- CCMC No. 12969-R)

3 COAT STUCCO APPLICATION ON FIBERGLASS MESH ON 1/2" POLYSTYRENE BOARD FASTENED W/ "WINDLOCK" FASTENERS(EIFS SYSTEM OR EQ.) ON TYVECH "HOUSE WRAP" (JOINTS TAPED & SEALED) ON R5 CONT. INS. ON 5/8" SHEATHING ON 2" x 6" @16" O.C STUD WALLS W/ R-24 BATT INSULATION 2x6 WOOD GIRT AT MID-HEIGHT. DOUBLE PLATES AT TOP & SILL PLATE AT BOTTOM. 6 MIL POLY VAPOUR BARRIER (WARM SIDE) W/ 5/8" GYPSUM BOARD TAPED, FILLED, SANDED READY FOR PAINT.PROVIDE THROUGH WALL BASE FLASHING UP MIN. 6" BEHIND SHEATHING FILM.
NOTE: CONTRACTOR IS RESPONSIBLE FOR INSTALLATION WARRANTY OF PRODUCT. ARCHITECT IS NOT RESPONSIBLE FOR SPECIFICATION OF STUCCO INSTALLATION.

5B SIDING ON WOOD FRAME WALL

2"x2" TIMBER STRAPPING FASTENED W/ "WINDLOCK" FASTNERS(EIFS SYSTEM OR EQ.) ON TYVECK "HOUSE WRAP" (JOINTS TAPED & SEALED) ON R5 CONT. INS. ON 5/8" SHEATHING ON 2" x 6" @16" O.C STUD WALLS W/ R-24 BATT INSULATION 2x6 WOOD GIRT AT MID-HEIGHT. DOUBLE PLATES AT TOP & SILL PLATE AT BOTTOM. 6 MIL POLY VAPOUR BARRIER (WARM SIDE) W/ 5/8" GYPSUM BOARD TAPED, FILLED, SANDED READY FOR PAINT.PROVIDE THROUGH WALL BASE FLASHING UP MIN. 6" BEHIND SHEATHING FILM.
NOTE: CONTRACTOR IS RESPONSIBLE FOR INSTALLATION WARRANTY OF PRODUCT. ARCHITECT IS NOT RESPONSIBLE FOR SPECIFICATION OF SIDING INSTALLATION.

6C BRICK VENEER WALLS
- 1" MAXIMUM BRICK PROJECTION OVER FOUNDATION WALL.
- VENEER TIES 20 GA X 7/8" ATTACHED TO WOOD FRAME AT MAXIMUM 24" O.C. VERTICALLY, 16" O.C.H. HORIZONTALLY.
- VENEER TIES MINIMUM 0.03" THICK, 7/8" WIDE EROSION-RESISTANT (GALVANIZED) STRAPS, CONFORMING TO CAN-A370-M84, CONNECTORS FOR MASONRY.
- 15# BUILDING PAPER OVER SHEATHING TO BE WATER REPELLENT BREATHER TYPE.
- 1" MINIMUM AIR SPACE BETWEEN BRICK VENEER AND WALL SHEATHING.
- FLASHING REQUIRED BENEATH JOINTED MASONRY SILLS AND ABOVE HEADS OF WINDOWS, DOORS AND STEEL SUPPORTS. EXTEND FLASHING A MINIMUM OF 6" ABOVE WINDOW OR DOOR HEAD. ENSURE THAT FLASHING IS INSTALLED UNDER BUILDING PAPER. ALL FLASHING TO BE CONTINUOUS. PROVIDE WEEPHOLES AT 30" O/C AT ALL WINDOW HEADS, SILLS AND OTHER STEEL SUPPORTS.
- BASE FLASHING SHALL BE PLACED BENEATH WEEP HOLES AND 6" UP BEHIND WALL SHEATHING PAPER.

USE 45# ROLL ROOFING OR TYVEK MEMBRANE.
MAXIMUM WALL HEIGHT 36'-0"

6 BAY PROJECTION/DORMER WALL CONSTRUCTION

PT. OR WOOD TRIM AND KREZON WOOD PANELLING, ON TYVECK "HOUSE WRAP, ON 1/2" PLYWOOD SHEATHING ON 2 X 6 @ 16" O.C. SPF STUD FRAMING W/ 2 X 6 WOOD GIRT AT MID-HEIGHT, DOUBLE PLATES AT TOP, SILL PLATE AT BOTTOM, 6 MIL SUPER POLY VAPOUR BARRIER (WARM SIDE) W/ 1/2" GYPSUM BOARD FILLED, TAPED, SANDED, READY FOR PAINT.

7 FOUNDATION WALL CONSTRUCTION
DRAINAGE LAYER W/ FILTER PAPER ON WATER PROOFING ON POURED CONCRETE/CONC BLOCKS FOUNDATION AS NOTED ON DRAWINGS. REINFORCING & SIZE AS PER DWG. PROVIDE CONTINUOUS 2 X 6 WOOD SILL PLATE FASTENED W/ 1/2"Ø X 12" LONG ANCHOR BOLTS @ 6'-0" O.C. MAX. SET MIN. 6" INTO CONCRETE, SILL PLATE TO BE ON A FLEXIBLE SILL GASKET.

PROVIDE 1/2" AIR SPACE W/ 15 LB. BUILDING PAPER, 2 X 4 WOOD STUDS @ 16" O.C. W/ MIN. R-20 CONT. INSULATION, 6 MIL SUPER POLY VAPOUR BARRIER AND 1/2" GYPSUM BOARD, FILLED, TAPED, SANDED, READY FOR PAINT.

NOTE: FOR FOUNDATION WALL EXPOSED ABOVE GRADE, PROVIDE STONE VENEER WHERE RSI23 BONDED SOLID TO CONC. PTG. AS NOTED ON DWGS. PROVIDE 3/16" "BLOCKLOK" @ 16" O.C. VERTICAL. ALLOW FOR FULL CONTACT W/ STONE OR BRICK.
EXTENTION ABOVE GROUND: EXTERIOR FOUNDATION WALLS SHALL EXTEND NOT LESS THAN 150mm (5 ⅞") ABOVE FINISHED GROUND LEVEL (9.15.4.6)
FOOTINGS
POURED CONCRETE FOOTINGS WIDTH AND DEPTH AS NOTED ON DWGS. f'c=30Mpa CONC., REINFORCED AS PER PLAN OR SOIL REPORT. PROVIDE 4" DIA. WEEPING TILES COVERED W/ 6" MIN. GRANULAR MATERIAL AND FILTER CLOTH. WATER PROOFING COVED OVER POURED CONCRETE FOOTING AT FOUNDATION WALL INTERFACE. (SEE DWGS. FOR COLUMN FOOTINGS.)
NOTE: ALL NEW FOOTINGS SHALL BEAR ON UNDISTURBED SOIL WITH ASSUMED BEARING CAPACITY OF 150Kpa. TO BE VERIFIED BY GEOTECHNICAL ENGINEER. STEP FOOTINGS SHALL HAVE 2'-0" MINIMUM HORIZONTAL STEPS & VERTICAL STEPS NO GREATER THAN 2/3 OF HORIZONTAL STEP TO A MAXIMUM OF 2'-0". BACKFILL W/ NON-FROST SUSCEPTIBLE GRANULAR FILL. FOR REINFORCED FOUNDATION WALLS, PROVIDE REINFORCING AS NOTED ON PLAN.

7A BASEMENT INSULATION

R20 INSULATION BLANKET OR BATTS WITH 25x89mm(2x4") STUD WALL, AND APPROVED VAPOUR BARRIER TO 610mm(24")BELOW FINISH EXTERIOR GRADE, DAMPPROF WITH BUILDING PAPER BETWEEN THE FOUNDATION WALL AND INSULATION UP TO GRADE LEVEL.
NOTE: FULL HEIGHT INSULATION AT COLD CELLAR WALLS.

8 BASEMENT SLAB CONSTRUCTION

100mm (4") CONCRETE SLAB, 25 MPa(3600 psi), ON 100mm(4") COARSE GRANULAR FILL, OR 20 MPa (3000psi) CONCRETE WITH DAMPPROOFING BELOW SLAB. (PROVIDE DRAIN AS PER DRAWING).

9 GARAGE SLAB CONSTRUCTION

100mm(4") CONCRETE SLAB, COMPRESSIVE STRENGTH 32 MPa (4640psi), WITH 5-8% AIR ENTRAINMENT ON OPT. 100mm(4") COARSE GRANULAR FILL WITH COMPACTED SUB-BASE OR COMPACTED NATIVE FILL. SLOPE TO FRONT AT 2% MINIMUM.

10 COLD CELLAR PORCH SLAB

175mm THK. 32 MPa CONC.SLAB WITH 5/8X AIR ENTRAINMENT, REINF. WITH 15M BARS @ 300mm O.C. EACH DIRECTION IN BOTTOM THIRD OF SLAB. MIN. 30mm(1.4")COVER, 600X600 (23 5/8"X23 5/8") DOWELS @ 300mm O.C., ANCHORED IN PERIMETER FOUND.WALLS. SLOPE SLAB MIN.1% FROM WALL. SLAB TO HAVE MIN. 75mm (3") BEARING ON FOUND.WALL. PROVIDE (1)REINFORCEMENT) LINTELS OVER CELLAR DOOR WITH 100mm(4") END BEARING.

100 SLAB ON GRADE

MIN.100mm(4") CONCRETE SLAB ON GRADE 100mm(4") COARSE GRANULAR FILL, REINFORCED WITH 6X6-W2.9 MESH, PLACED NEAR MID-DEPTH OF SLAB. CONC.STRENGHT 32 MPa(4600psi), WITH 5-8% AIR ENTRAINMENT ON COMPAC