# ARCHITECTURAL ABBREVIATIONS

| | |
|---|---|
| @ | AT |
| ∠ | ANGLE |
| AB | ANCHOR BOLT |
| A/C | AIR CONDITIONING |
| ACT | ACOUSTICAL TILE |
| ADDL | ADDITIONAL |
| ADJ | ADJACENT |
| AFF | ABOVE FINISHED FLOOR |
| AL | ALUMINUM |
| ALT | ALTERNATE |
| AP | ACCESS PANEL |
| APPROX | APPROXIMATELY |
| ARCH | ARCHITECT |
| ATC | ACOUSTICAL TILE CEILING |
| AUTO | AUTOMATIC |
| AVG | AVERAGE |
| BD | BOARD |
| BIT | BITUMINOUS |
| BLDG | BUILDING |
| BLK | BLOCK |
| BLKG | BLOCKING |
| BM | BEAM |
| BN | BULLNOSE |
| BOT | BOTTOM |
| BR | BRICK |
| CAB | CABINET |
| CG | CORNER GUARD |
| CH | CEILING HEIGHT |
| CJ | CONTROL JOINT |
| ℄ | CENTER LINE |
| CL | CHAIN LINK |
| CLO | CLOSET |
| CLG | CEILING |
| CMU | CONCRETE MASONRY UNIT |
| CO | CLEAN OUT |
| COL | COLUMN |
| CONTR | CONTRACTOR |
| CONC | CONCRETE |
| CONST | CONSTRUCTION |
| CONT | CONTINUOUS |
| CPT | CARPET |
| CSWRK | CASEWORK |
| CT | CERAMIC TILE |
| CU | CUBIC |
| Ø | DIAMETER |
| D | DEPTH |
| DIA | DIAMETER |
| DBL | DOUBLE |
| DBL ACT | DOUBLE ACTING |
| DET | DETAIL |
| DIAG | DIAGONAL |
| DIFF | DIFFUSER |
| DIM | DIMENSION |
| DIST | DISTANCE |
| DN | DOWN |
| DR | DOOR |
| DR | DRAIN |
| DWG(S) | DRAWING(S) |
| EA | EACH |
| EC | ELECTRICAL CONTRACTOR |
| EF | EXHAUST FAN |
| EJ | EXPANSION JOINT |
| ELEV | ELEVATION |
| EMER | EMERGENCY |
| EP | EEPOXY PAINT |
| EPT | EPOXY PAINTED |
| EQ | EQUAL |
| EQUIP | EQUIPMENT |
| EWC | ELECTRIC WATER COOLER |
| EXG | EXISTING |
| EXH | EXHAUST |
| EXIST | EXISTING |
| EXP | EXPANSION |
| EXP JT | EXPANSION JOINT |
| EXT | EXTERIOR |
| FD | FLOOR DRAIN |
| FE | FIRE EXTINGUISHER |
| FF | FINISHED FLOOR |
| FG | FINISHED GRADE |
| FIN | FINISH |
| FL | FLOOR |
| FLUOR | FLUORESCENT |
| FO | FIELD OPENING |
| FRM | FRAME |
| FT | FEET |
| FTG | FOOTAGE |
| FUR | FURRING |
| GA | GAUGE |
| GALV | GALVANIZED |
| GC | GENERAL CONTRACTOR |
| GL | GLASS |
| GR | GRADE |
| GWB | GYPSUM WALLBOARD |
| GYP | GYPSUM |
| HB | HOSE BIBB |
| HD | HEAD |
| HDW | HARDWARE |
| HM | HOLLOW METAL |
| HORZ | HORIZONTAL |
| HP | HORSEPOWER |
| HPL | HIGH PRESSURE LAMINATE |
| HPT | HIGH POINT |
| HT | HEIGHT |
| HVAC | HEATING, VENTILATING & AIR CONDITIONING |
| HWH | HOT WATER HEATER |
| HYD | HYDRANT |
| IN | INCHES |
| INSUL | INSULATION, INSULATING, INSULATED |
| INT | INTERIOR |
| JC | JANITOR CLOSET |
| JT | JOINT |
| KI | KITCHEN |
| L | LENGTH, LONG |
| LAM | LAMINATED |
| LAV | LAVATORY |
| LB(S) | POUND(S) |
| LH | LEFT HAND |
| LHR | LEFT HAND REVERSE |
| LP | LOW POINT |
| LTG | LIGHTING |
| MAINT | MAINTENANCE |
| MAX | MAXIMUM |
| MC | MECHANICAL CONTRACTOR |
| MD | EXPOSED METAL DECK |
| MECH | MECHANICAL |
| MET | METAL |
| MFG | MANUFACTURER |
| MH | MAN HOLE |
| MIN | MINIMUM |
| MIRR | MIRROR |
| MISC | MISCELLANEOUS |
| MO | MASONRY OPENING |
| MTL | METAL |
| N | NORTH |
| NIC | NOT IN CONTRACT |
| NO | NUMBER |
| NOM | NOMINAL |
| NTS | NOT TO SCALE |
| OA | OVERALL |
| OC | ON CENTER |
| OD | OUTSIDE DIAMETER |
| OH | OVERHEAD |
| OPNG | OPENING |
| OPP | OPPOSITE |
| OWH | OUTSIDE WALL HYDRANT |
| P | PLENUM |
| PART | PARTITION |
| PC | PLUMBING CONTRACTOR |
| PCL | PRECAST LINTEL |
| PL | PLASTER |
| PLAS | PLASTER |
| PLAS LAM | PLASTIC LAMINATE |
| PLT | PLATE |
| PNL | PANEL |
| POL | POLISHED |
| PAIR | PPAIR |
| PREFAB | PREFABRICATED |
| PRES | PRESSURE |
| PROP | PROPERTY |
| PSF | POUND PER SQUARE FOOT |
| PSI | POUND PER SQUARE INCH |
| PT | POINT |
| PTD | PAINTED |
| PVC | POLYVINYL CHLORIDE |
| QT | QUARRY TILE |
| QTY | QUANTITY |
| R | RADIUS |
| R | RUBBER |
| RAG | RETURN AIR GRILLE |
| RBL | REINFORCED BLOCK LINTEL |
| RD | ROOF DRAIN |
| REFL | REFLECTED |
| REINF | REINFORCED(ING) |
| REQD | REQUIRED |
| REV | REVISION |
| RF | ROOF |
| RH | RIGHT HAND |
| RHR | RIGHT HAND REVERSE |
| R INSUL | RIGID INSULATION |
| RM | ROOM |
| RO | ROUGH OPENING |
| ROD | ROOF OVERFLOW DRAIN |
| ROW | RIGHT OF WAY |
| RWC | RAIN WATER CONDUCTOR |
| SAN | SANITARY |
| SECT | SECTION |
| SF | SQUARE FOOT |
| SHT | SHEET |
| SIM | SIMILAR |
| SP | SERVICE PANEL |
| SPEC | SPECIFICATION |
| SS | STAINLESS STEEL |
| S/S | STAINLESS STEEL |
| STC | SOUND TRANSMISSION GLASS |
| STD | STANDARD |
| STL | STEEL |
| STOR | STORAGE |
| STRUC | STRUCTURE |
| ST STL | STAINLESS STEEL |
| SUSP | SUSPENDED |
| TEL | TELEPHONE |
| TEMP | TEMPERATURE |
| TEMP | TEMPORARY |
| TERR | TERRAZZO |
| THK | THICK |
| THRES | THRESHOLD |
| TOS | TOP OF STEEL |
| TR'D | TREATED |
| TYP | TYPICAL |
| TPH | TOILET PAPER HOLDER |
| TBH | TOOTH BRUSH / TUMBLER HOLDER |
| UNO | UNLESS NOTED OTHERWISE |
| UTIL | UTILITY |
| VCB | VINYL COVE BASE |
| VCT | VINYL COMPOSITION TILE |
| VERT | VERTICAL |
| V.I.F. | VERIFY IN FIELD |
| VOL | VOLUME |
| VSB | VINYL STRAIGHT BASE |
| VT | VINYL TILE |
| VTR | VENT THROUGH ROOF |
| W | WIDE/WIDTH |
| W/ | WITH |
| WAIN | WAINSCOT |
| WD | WOOD |
| WDW | WINDOW |
| WF | WIDE FLANGE |
| W/O | WITHOUT |
| WP | WATER-PROOFING |
| WT | WEIGHT |
| YD | YARD |

# ARCHITECTURAL DRAFTING SYMBOLS & NOTATIONS

DIMENSION

℄ TO ℄ DIMENSION

℄ TO ℄ DIMENSION (COLUMNS)

DETAIL KEY

DETAIL NUMBER
SHEET NUMBER

DRAWING DETAIL
SCALE

2 PARTITION SYMBOL

FLOOR ELEVATION

COLUMN CL.

BUILDING SECTION

WALL SECTION

ELEVATION

4 DETAIL KEY

2 X 2 CEILING GRID

2' x 4' FLUORESCENT LIGHT FIXTURE

9 NOTE INDICATOR

FE FIRE EXTINGUISHER

INCANDESCENT LIGHT FIXTURE

1 X 4 FLUORESCENT FIXTURE

TELEPHONE JACK

TV TELEVISION CABLE OUTLET

DUPLEX RECEPTICLE

QUADRAPLEX RECEPTICLE

$ SINGLE POLE SWITCH

$3 THREE WAY SWITCH

NEW WALLS

2' x 2' FLUORESCENT LIGHT FIXTURE

BRICK

CMU

BATT. INSULATION

CONCRETE

STEEL

RIGID INSULATION

EXISTING CONSTRUCTION TO BE REMOVED

# ZONING BUILDING CODE DATA :

## BUILDING DATA:

PROJECT ADDRESS: 1117 ALLISON STREET NW

## SCOPE OF WORK :

CONVERT SINGLE FAMILY DWELLING INTO THREE DWELLING UNITS. REMOVE INTERIOR PARTITIONS OF BASEMENT, FIRST AND SECOND FLOOR. ALSO REMOVE REAR EXTERIOR WALL. CONSTRUCTION NEW EXTERIOR AND INTERIOR WALLS FROM BASEMENT TO SECOND FLOOR. INSTALL NEW ELECTRICAL, NEW PLUMBING AND NEW HVAC SYSTEMS.

## APPLICABLE CODES:

2013 DC ZONING REGULATIONS ( DCMR 11)
2012 DC CONSTRUCTION CODES SUPPLEMENT ( DCMR 12 ) WHICH AMENDS THE FOLLOWING:

- 2012 ICC INTERNATIONAL CODES SUPPLEMENT ( DCMR 12A )
- 2011 NFPA NATIONAL ELECTRIC CODE ( DCMR 12A )
- 2012 ICC INTERNATIONAL MECHANICAL CODE ( DCMR 12E )
- 2012 ICC INTERNATIONAL PLUMBING CODE ( DCMR 12F )
- 2012 ICC INTERNATIONAL FIRE CODE ( DCMR 12H )
- 2012 INTERNATIONAL ENERGY CONVERSATION CODE ( DCMR 12 I )
- 2012 INTERNATIONAL EXISTING BUILDING CODE (DCMR 12 J )
- ICC/ANSI A117.1 - 2012

## ZONING DATA:

SQUARE NO: 2918
LOT NO: 0059
ZONING DISTRICT: R-4
ZONING OVERLAY: NONE
HISTORIC AREA/SITE: NONE
SITE AREA: 3126 SF ( PER DC RECORD )

| REGULATION ( ZR ) | EXISTING | ALLOWED/ REQUIRED | PROVIDED |
|---|---|---|---|
| BUILDING HEIGHT ( ZR 400.1 ) | ± 25'-0" | 40'-0" MAX ( NO STORY LIMIT ) | 25'-0" |
| FLOOR AREA RATIO ( ZR 402.4 ) | N/A | N/A | N/A |
| LOT OCCUPANCY ( ZR 403.2 ) | 914 SF (BLDG) | 60% ( 1876 SF ) MAX | 57% ( 1,768.2 SF ) |
| REAR YARD ( ZR 404.1 ) | 118'-3" | 4" PER FOOT OF HT= 20 MIN | 54'-11" |
| SIDE YARD ( ZR 405.9 ) | N/A | NONE REQUIRED | N/A |
| OFF-STREET PARKING ( ZR 2101.1 ) | 2 | 1 PER EACH 2 UNITS= 2 MIN | 2 |

IBC CHAPTER 3 - USE & OCCUPANCY:

- R-2 ( RESIDENTIAL - PERMANANT W/ MORE THAN TWO DWELLING UNITS.

IBC CHAPTER 5 - GENERAL BUILDING HEIGHTS & AREAS:

1. HEIGHT: ( IBC TABLE 503, IBC SECTION 504.2 )

| CONST. | USE | ALLOWED | PROVIDED |
|---|---|---|---|
| | R-2 | ( STORIES ) | ( STORIES ) |

2. AREA : ( IBC TABLE 503, IBC SECTION 508 )

| CONST. | USE | FLOOR | AREA |
|---|---|---|---|
| ALLOWED | | | |
| | R-2 | TOTAL PER FLOOR | SF |
| PROVIDED | | | |
| | R-2 | CELLAR ( NON-FAR ) | 1418 SF |
| | | FIRST FLOOR | 1418 SF |
| | | SECOND FLOOR | 1418 SF |
| | | | |
| | | | |
| | | TOTAL ( CONSTRUCTION ) | |

IBC CHAPTER 6 - TYPES OF CONSTRUCTION :

- TYPE: V.B

IBC CHAPTER 7 - FIRE- RESISTANCE-RATED CONSTRUCTION :

1. BUILDING ELEMENT FIRE RESISTANT RATINGS: ( IBC TABLES 601 & 602 )

| BUILDING ELEMENTS | CONDITION | LOCAL | RATING REQUIRED | RATING PROVIDED |
|---|---|---|---|---|
| STRUCTURAL FRAME | | | 0 HR | 0 HR |
| BEARING WALLS | EXTERIOR | | 2 HR | 2 HR |
| | INTERIOR | | 0 HR | 0 HR |
| NONBEARING EXTERIOR WALLS & PARTITIONS | PER FIRE SEPARATION DISTANCE | NON PROVIDED | N/A | N/A |
| NONBEARING INTERIOR WALLS & PARTITIONS | | | 0 HR | 0 HR |
| FLOOR CONSTRUCTION | | | 0 HR | 0 HR |
| ROOF CONSTRUCTION | | | 0 HR | 0 HR |

2. FIRE BARRIERS: ( IBC SECTION 705 )

| BUILDING ELEMENTS | SEPARATION AND/OR PROTECTION REQUIRED | SEPARATION AND/OR PROTECTION PROVIDED |
|---|---|---|
| SHAFT ENCLOSURES ( IBC SECTION 707.4 ) | 2 HR | 2 HR |
| EXIT ENCLOSURES ( IBC SECTION 1020.1 ) | 2 HR | 2 HR |

3. FIRE PARTITIONS: ( IBC SECTION 708.3 )

| BUILDING ELEMENTS | RATING PER | RATING PROVIDED |
|---|---|---|
| ASSEMBLIES BETWEEN DWELLING UNITS | 1 HR | 1 HR |

IBC CHAPTER 7 - FIRE-RESISTANCE-RATED CONSTRUCTION ( CONTINUED ):

| BUILDING ELEMENT ASSEMBLY LOCATION | ASSEMBLY RATING REQUIRED | ELEMENT RATING REQUIRED | ELEMENT RATING PROVIDED |
|---|---|---|---|
| FIRE DOORS | | | |
| FIRE BARRIERS ( >1HR ) | 2 HR | 1.5 HR | 1.5 HR |
| FIRE WINDOWS | | | |
| INTERIOR FIRE BARRIERS ( >1HR ) | 2 HR | LABELED PER IBC SECTION 715.2 | LABELED PER IBC SECTION 715.2 |

IBC CHAPTER 9 - FIRE PROTECTION SYSTEMS:

1. AUTOMATIC SPRINKLER SYSTEM: ( IBC SECTION 903.3.1.2 )
   NFPA 13R AUTOMATIC SPRINKLER SYSTEM PROVIDED
2. STANDARD SYSTEM: ( DCMR 12A SECTION 905.3.1 EXCEPTION #1 )
   CLASS I STANDPIPE SYSTEM PROVIDED
3. FIRE ALARM & DETECTION SYSTEM: ( IBC SECTION 907.2.9 )
   MANUAL FIRE ALARM SYSTEM PROVIDED
4. OTHER PROTECTION PROVISIONS:
   SMOKE DETEDCTORS P[ROVIDED

IBC CHAPTER 10 - MEANS OF EGRESS:

1. OCCUPANT LOAD: ( IBC SECTION 1004, IBC TABLE 1004.1.1 )

| LOCAL | USE | AREA | LOAD PER OCCUPANT | OCCUP. LOAD |
|---|---|---|---|---|
| UNIT ( CELLAR ) | RESIDENTIAL | 1418 SF | 200 SF | 7 |
| UNIT ( 1ST FL ) | RESIDENTIAL | 1418 SF | 200 SF | 7 |
| UNIT ( 2ND FL ) | RESIDENTIAL | 1418 SF | 200 SF | 7 |
| | | | | |
| | | | | |
| | | | BUILDING TOTAL | |

2. EGRESS WIDTH: ( IBC SECTION 1005, IBC TABLE 1005.1 )

| BUILDING ELEMENT | REQUIRED | PROVIDED |
|---|---|---|
| STAIRWAY ( IBC SECTION 1008.1 ) | 36" | 36" |
| DOORS ( IBC SECTION 1008.1.1 ) | 36" | 36" |
| CORRIDORS ( IBC SECTION 1017.2 ) | 36" | 42" |

3. MINIMUM NUMBER OF EXITS ( IBC SECTION 1019.1 )

| FLOOR | OCCUP. LOAD | REQUIRED | PROVIDED |
|---|---|---|---|
| UNIT ( CELLA ) | 7 | 2 | 2 |
| UNIT ( 1ST FL ) | 7 | 2 | 2 |
| UNIT ( 2ND FL ) | 7 | 2 | 2 |
| | | | |
| | | | |

## IBC CHAPTER 11 - ACCESSIBILITY

1. SCOPING REQUIREMENTS: ( IBC SECTION 1103 )
   THIS PROJECT IS NOT ACCESSIBLE.

## IBC CHAPTER 13 - ENERGY EFFICIENCY:

THE FOLLOWING PROVISIONS FOR THERMAL RESISTANCE MEET OR EXCEED THE REQUIREMENTS STIPULATED BY THE DISTRICT OF COLUMBIA RESIDENTIAL ENERGY CODE ( DCMR 12I ):

1. THERMAL ENVELOPE INSULATION ( DCMR 12 I TABLE EC-402.1.1 ):

| | |
|---|---|
| GLAZING | U=0.35 |
| SKYLIGHTS | U=0.50 |
| ROOFS | R-49 |
| FRAME WALLS | R-19 |
| THERMAL MASS WALLS | R-5 ( CONTINUOUS ) R-10 ( FRAMING CAVITY ) |
| FLOORS OVER UNHEATED SPACE | R-19 |
| BASEMENT & CRAWL SPACE | R-10 ( CONTINUOUS ) R-13 ( FRAMING CAVITY ) |
| SLAB PERIMETER | R-10 FOR DEPTH 2'-0" |

2. AIR INFILTRATION ( DCMR 12 I SECTIONS EC-402.4.4 & EC-403.2.2 ):

A. WINDOWS, SKYLIGHTS & SLIDING DOORS NOT TO EXCEED 0.3 CFM PER SQUARE FOOT OF FENESTRATION
B. SWINGING DOORS NOT TO EXCEED 0.5 CFM PER SQUARE FOOT OF DOOR AREA. PROVIDED 1" FIBERGLASS SILL SEALER BETWEEN FOUNDATION AND WALL SILL PLATES.
C. FILL CONSTRUCTION ( ELECTRICAL AND PLUMBING ) HOLES, CRACKS, LOOSE JOINTS AND SPACES IN ROUGH FRAMING AND ROUGH MASONRY WITH APPROVED FOAM SEALER OR SIMILAR SEALANT.

1 * Zoning Data Calculation refers to SHEET C1 and C1-Copy

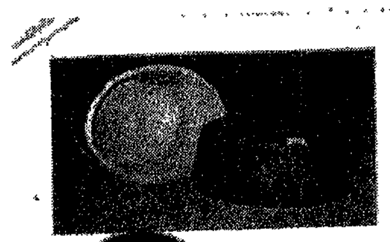
### ZONING DATA CALCULATION:

**EXISTING AREA:**

**Porch : 6'-6"x11'-11" = 73 SF**
**Front Deck : 6'-0"x19'-0" = 115 SF**
**Building Area: 32'-6"x20'-0" = 652 SF**
**TOTAL: 914 SF EXIST. LOT OCCUPANCY**

**NEW LOT OCCUPANCY :**
**Existing Building: 32'-6" X 20'-0" : 652 SF**
**New Addition: 44'-11"x20'-0" = 882.2 SF**
**Porch: 9'-0"x20'-0"= 180 SF**
**Rear Stair: 6'-0"x9'-0" = 54 SF**

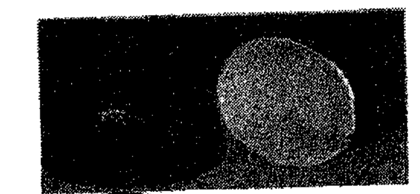
**TOTAL: 1,768.2 SF**



**FF109-300 Fire Rated Light Cover**
**Inside height 8" diameter 13"**

Suitable for regular lights up to 6"

See more details for FF109-300



Intertek

**FF109-350 Fire Rated Light Cover**
**Inside height 11" diameter 15"**

Suitable for regular lights up to 8"

See more details for FF109-350

## LIST OF DRAWINGS

| SHEET NO. | TITLES |
|---|---|
| A1 | COVER SHEET |
| A2 | STRUCTURAL NOTES |
| A3 | EXISTING FLOOR PLANS/ DEMOLITION PLANS |
| A4 | PROPOSED FLOOR PLANS & NOTES |
| A5 | FLOOR PLANS OF REAR PORCHES & DETAILS |
| A6 | CROSS SECTION , FRONT & REAR ELEVATIONS |
| A7 | FOUNDATION AND FRAMING PLANS |
| A8 | WALL CONNECTIONS AND DETAILS |
| A9 | WALL CONNECTIONS AND DETAILS |
| E1 | ELECTRICAL PLANS AND NOTES |
| P1 | PLUMBING PLANS AND DIAGRAMS |
| M1 | MECHANICAL PLANS |
| M2 | PLUMBING / MECHANICAL NOTES |
| C1 | EROSION & SEDIMENT CONTROL PLAN |
| C2 | EROSION & SEDIMENT CONTROL NOTES |

DISTRICT OF COLUMBIA
QUINTON WORRELL

HOUSE RENOVATION
AND ADDITION
1117 ALLISON STREET N.W

A1

# RADON CONTROL METHODS

## APPENDIX F FROM 20 . INTERNATIONAL RESIDENTIAL CODE

### SECTION AF101: SCOPE

**AF101.1 GENERAL.** THIS APPENDIX CONTAINS REQUIREMENTS FOR NEW CONSTRUCTION IN JURISDICTIONS WHERE RADON-RESISTANT CONSTRUCTION IS REQUIRED.

INCLUSION OF THIS APPENDIX BY JURISDICTIONS SHALL BE DETERMINED THROUGH THE USE OF LOCALLY AVAILABLE DATA OR DETERMINATION OF ZONE 1 DESIGNATION IN FIGURE AF101.

### SECTION AF102: DEFINITIONS

**AF102.1 GENERAL.** FOR THE PURPOSE OF THESE REQUIREMENTS, THE TERMS USED SHALL BE DEFINED AS FOLLOWS:

**SUB-SLAB DEPRESSURIZATION SYSTEM (PASSIVE).**
A SYSTEM DESIGNED TO ACHIEVE LOWER SUB-SLAB AIR PRESSURE RELATIVE TO INDOOR AIR PRESSURE BY USE OF A VENT PIPE ROUTED THROUGH THE CONDITIONED SPACE OF A BUILDING AND CONNECTING THE SUB-SLAB AREA WITH OUTDOOR AIR, THEREBY RELYING ON THE CONVECTIVE FLOW OF AIR UPWARD IN THE VENT TO DRAW AIR FROM BENEATH THE SLAB.

**SUB-SLAB DEPRESSURIZATION SYSTEM (ACTIVE).**
A SYSTEM DESIGNED TO ACHIEVE LOWER SUB-SLAB AIR PRESSURE RELATIVE TO INDOOR AIR PRESSURE BY USE OF A FAN-POWERED VENT DRAWING AIR FROM BENEATH THE SLAB.

**DRAIN TILE LOOP.**
A CONTINUOUS LENGTH OF DRAIN TILE OR PERFORATED PIPE EXTENDING AROUND ALL OR PART OF THE INTERNAL OR EXTERNAL PERIMETER OF A BASEMENT OR CRAWL SPACE FOOTING.

**RADON GAS.**
A NATURALLY OCCURRING, HEMICALLY INERT, RADIOACTIVE GAS THAT IS NOT DETECTABLE BY HUMAN SENSES. AS A GAS, IT CAN MOVE READILY THROUGH PARTICLES OF SOIL AND ROCK AND CAN ACCUMULATE UNDER THE SLABS AND FOUNDATIONS OF HOMES WHERE IT CAN EASILY ENTER INTO THE LIVING SPACES THROUGH CONSTRUCTION CRACKS AND OPENINGS.

**SOIL-GAS-RETARDER.**
A CONTINUOUS MEMBRANE OF 6-MIL (.15mm) POLYETHYLENE OR OTHER EQUIVALENT MATERIAL USED TO RETARD THE FLOW OF SOIL GASES INTO A BUILDING.

**SUB-MEMBRANE DEPRESSURIZATION SYSTEM.**
A SYSTEM DESIGNED TO ACHIEVE LOWER-SUB-MEMBRANE AIR PRESSURE RELATIVE TO CRAWL SPACE AIR PRESSURE BY USE OF A VENT DRAWING AIR FROM BENEATH THE SOIL-GAS RETARDER MEMBRANE.

### SECTION AF103: REQUIREMENTS

**AF103.1 GENERAL.** THE FOLLOWING CONSTRUCTION TECHNIQUES ARE INTENDED TO RESIST RADON ENTRY AND PREPARE THE BUILDING FOR POST-CONSTRUCTION RADON MITIGATION, IF NECESSARY (SEE FIGURE AF102). THESE TECHNIQUES ARE REQUIRED IN AREAS WHERE DESIGNATED BY THE JURISDICTION.

**AF103.2 SUBFLOOR PREPARATION.**
A LAYER OF GAS-PERMEABLE MATERIAL SHALL BE PLACED UNDER ALL CONCRETE SLABS AND OTHER FLOOR SYSTEMS THAT DIRECTLY CONTACT THE GROUND AND ARE WITHIN THE WALLS OF THE LIVING SPACES OF THE BUILDING, TO FACILIATE FUTURE INSTALLATION OF A SUB-SLAB DEPRESSURIZATION SYSTEM, IF NEEDED. THE GAS-PERMEABLE LAYER SHALL CONSIST OF ONE OF THE FOLLOWING:

1. A UNIFORM LAYER OF CLEAN AGGREGATE, A MINIMUM OF 4 INCHES (102mm) THICK. THE AGGREGATE SHALL CONSIST OF MATERIAL THAT WILL PASS THROUGH A 2-INCH (51mm) SIEVE AND BE RETAINED BY A ¼-INCH (6.4mm) SIEVE.
2. A UNIFORM LAYER OF SAND (NATIVE OR FILL), A MINIMUM OF 4 INCHES (102mm) THICHK, OVERLAIN BY A LAYER OR STRIPS OF GEOTEXTILE DRAINAGE MATTING DESIGNED TO ALLOW THE LATERAL FLOW OF SOIL GASES.
3. OTHER MATERIALS, SYSTEMS OR FLOOR DESIGNS WITH DEMONSTRATED CAPABILITY TO PERMIT DEPRESSURIZATION ACROSS THE ENTIRE SUB-FLOOR AREA.

**AF103.3 SOIL GAS RETARDER.**
A MINIMUM 6-MIL (.15mm) [OR 3-MIL (.075mm) CROSS- LAMINATED] POLYETHYLENE OR EQUIVALENT FLEXIBLE SHEETING MATERIAL SHALL BE PLACED ON TOP OF THE GAS- PERMABLE LAYER PRIOR TO CASTING THE SLAV OR PLACING THE FLOOR ASSEMBLY TO SERVE AS A SOIL-GAS-RETARDER BY BRIDGING ANY CRACKS THAT DEVELOP IN THE SLAB FLOOR ASSEMBLY AND TO PREVENT CONCRETE FROM ENTERING THE VOID SPACES IN THE AGGREGATE BASE MATERIAL. THE SHEETING SHALL COVER THE ENTIRE FLOOR AREA WITH SEPARATE SECTIONS OF SHEETING LAPPED AT LEAST 12 INCHES (305mm). THE SHEETING SHALL FIT CLOSELY AROUND ANY PIPE, WIRE OR OTHER PENETRATIONS OF THE MATERIAL. ALL PUNCTURES OR TEARS IN THE MATERIAL SHALL BE SEALED OR COVERED WITH ADDITIONAL SHEETING.

**AF103.4 ENTRY ROUTES.**
POTENTIAL RADON ENTRY ROUTES SHALL BE CLOSED IN ACCORDANCE WITH SECTIONS AF103.4.1 THROUGH AF103.4.10.

**AF103.41 FLOOR OPENINGS.**
OPENINGS AROUND BATHTUBS, SHOWERS, WATER CLOSETS, PIPES, WIRES OR OTHER OBJECTS THAT PENETRATE CONCRETE SLABS OR OTHER FLOOR ASSEMBLIES SHALL BE FILLED WITH A POLYURETHANE CAULK OR EQUIVALENT SEALANT APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

**AF103.4.2 CONCRETE JOINTS.**
ALL CONTROL JOINTS, ISOLATION JOINTS, CONSTRUCTION JOINTS AND ANY OTHER JOINTS IN CONCRETE SLABS OR BETWEEN SLABS AND FOUNDATION WALLS SHAL BE SEALED WITH A CAULK OR SEALANT. GAPS AND JOINTS SHALL BE CLEARED OF LOOSE MATERIAL AND FILLED WITH POLYURETHANE CAULK OR OTHER ELASTOMERIC SEALANT APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

**AF103.4.3 CONDENSATE DRAINS.**
CONDENSATE DRAINS SHALL BE TRAPPED OR ROUTED THROUGH NONPERFORATED PIPE TO DAYLIGHT.

**AF103.4.4 SUMPS.**
SUMP PITS OPEN TO SOIL OR SERVING AS THE TERMINATION POINT FOR SUB-SLAB OR EXTERIOR DRAIN TILE LOOPS SHALL BE COVERED WITH A GASKETED OR OTHERWISE SEALED LID. SUMPS USED AS THE SUCTION POINT IN A SUB-SLAB DEPRESSURIZATION SYSTEM SHALL HAVE A LID DESIGNED TO ACCOMMODATE THE VENT PIPE. SUMPS USED AS A FLOOR DRAIN SHALL HAVE A LID EQUIPPED WITH A TRAPPED INLET.

**AF103.4.5 FOUNDATION WALLS.**
HOLLOW BLOCK MASONRY FOUNDATION WALLS SHALL BE CONSTRUCTED WITH EITHER A CONTINUOUS COURSE OF SOLID MASONRY, ONE COUSE OF MASONRY GROUTED SOLID, OR A SOLID CONCRETE BEAM AT OR ABOVE FINISHED GROUND SURFACE TO PREVENT PASSAGE OF AIR FROM THE INTERIOR OF THE WALL INTO THE LIVING SPACE. WHERE A BRICK VENEER OR OTHER MASONRY LEDGE IS INSTALLED, THE COURSE IMMEDIATELY BELOW THAT LEDGE SHALL BE SEALED. JOINTS, CRACKS OR OTHER OPENINGS AROUND ALL PENETRATIONS OF BOTH EXTERIOR AND INTERIOR SURFACES OF MASONRY BLOCK OR WOOD FOUNDATION WALLS BELOW THE GROUND SURFACE SHALL BE FILLED WITH POLYURETHANE CAULK OR EQUIVALENT SEALANT. PENETRATIONS OF CONCRETE WALLS SHALL BE FILLED.

**AF103.4.6 DAMPPROOFING.**
THE EXTERIOR SURFACES OF PORTIONS OF CONCRETE AND MASONRY BLOCK WALLS BELOW THE GROUND SURFACE SHALL BE DAMPPROOFED IN ACCORDANCE WITH SECTION R406 OF THIS CODE:

**AF103.4.7 AIR-HANDLING UNITS.**
AIR-HANDLING UNITS IN CRAWL SPACES SHALL BE SEALED TO PREVENT AIR FROM BEING DRAWN INTO THE UNIT.

**EXCEPTION:** UNITS WITH GASKETED SEAMS OR UNITS THAT ARE OTHERWISE SEALED BY THE MANUFACTURER TO PREVENT LEAKAGE.

**AF103.4.8 DUCTS.**
DUCTWORK PASSING THROUGH OR BENEATH A SLAB SHALL BE OF SEAMLESS MATERIAL UNLESS THE AIR-HANDLING SYSTEM IS DESIGNED TO MAINTAIN A CONTINUOUS POSITIVE PRESSURE WITHIN SUCH DUCTING. JOINTS IN SUCH DUCTWORK SHALL BE SEALED TO PREVENT AIR LEAKAGE.

DUCTWORK LOCATED IN CRAWL SPACES SHALL HAVE ALL SEAMS AND JOINTS SEALED BY CLOSURE SYSTEMS IN ACCORDANCE WITH SECTION M1601.3.1

**AF103.4.9 CRAWLSPACE FLOORS.**
OPENINGS AROUND ALL PENETRATIONS THROUGH FLOORS ABOVE CRAWL SPACES SHALL BE CAULKED OR OTHERWISE FILLED TO PREVENT AIR LEAKAGE.

**AF103.4.10 CRAWLSPACE ACCESS.**
ACCESS DOORS AND OTHER OPENINGS OR PENETRATIONS BETWEEN BASEMENT AND ADJOINING CRAWL SPACES SHALL BE CLOSED, GASKETED OR OTHERWISE FILLED TO PREVENT AIR LEAKAGE.

**AF103.5 PASSIVE SUB-MEMBRANE DEPRESSURIZATION SYSTEM.**
IN BUILDINGS WITH CRAWL SPACE FOUNDATIONS, THE FOLLOWING COMPONENTS OF PASSIVE SUB-MEMBRANE DEPRESSURIAZATION SYSTEM SHALL BE INSTALLED DURING CONSTRUCTION.

**EXCEPTION:** BUILDINGS IN WHICH AN APPROVED MECHANICAL CRAWL SPACE VENTILATION SYSTEM OR OTHER EQUIVALENT SYSTEM IS INSTALLED.

# RADON CONTROL METHODS (continued)

**AF103.5.1 VENTILATION:**
CRAWL SPACES SHALL BE PROVIDED WITH VENTS TO THE EXTERIOR OF THE BUILDING. THE MINIMUM NET AREA OF VENTILATION OPENINGS SHALL COMPLY WITH SECTION R408.1 OF THIS CODE.

**AF103.5.2 SOIL GAS RETARDER:**
THE SOIL IN CRAWL SPACES SHALL BE COVERED WITH A CONTINUOUS LAYER OF MINIMUM 6-MIL (.15mm POLYETHYLENE SOIL GAS RETARDER. THE GROUND COVER SHALL BE LAPPED A MINIMUM OF 12 INCHES (305mm) AT JOINTS AND SHALL EXTEND TO ALL FOUNDATION WALLS ENCLOSING THE CRAWL SPACE AREA.

**AF103.5.3 VENT PIPE.**
A PLUMBING TEE OR OTHER APPROVED CONNECTION SHALL BE INSERTED HORIZONTALLY BENEATH THE SHEETING AND CONNECTED TO A 3-OR 4-INCH-DIAMETER (76mm OR 102mm) FITTING WITH A VERTICAL VENT PIPE INSTALLED THROUGH THE SHEETING. THE VENT PIPE SHALL BE EXTENDED UP THROUGH THE BUILDING FLOORS, TERMINATE AT LEAST 12 INCHES (305mm) ABOVE THE ROOF IN A LOCATION AT LEAST 10 FEET (3048mm) AWAY FROM ANY WINDOW OR OTHER OPENING INTO THE CONDITIONED SPACES OF THE BUILDING THAT IS LESS THAN 2 FEET (610mm) BELOW THE EXHAUST POINT, AND 10 FEET (3048mm) FROM ANY WINDOW OR OTHER OPENING IN ADJOINING OR ADJACENT BUILDINGS.

**AF103.6 PASSIVE SUBSLAB DEPRESSURIZATION SYSTEM.**
IN BASEMENT OR SLAB-ON-GRADE BUILDINGS, THE FOLLOWING COMPONENTS OF A PASSIVE SUB-SLAB DEPRESSURIZATION SYSTEM SHALL BE INSTALLED DURING CONSTRUCTION.

**AF103.6.1 VENT PIPE.**
A MINIMUM 3-INCH-DIAMETER (76mm) ABS, PVC OR EQUIVALENT GAS-TIGHT PIPE SHALL BE EMBEDDED VERTICALLY INTO THE SUB-SLAB AGGREGATE OR OTHER PERMEABLE MATERIAL BEFORE THE SLAB IS CAST. A "T" FITTING OR EQUIVALENT METHOD SHALL BE USED TO ENSURE THAT THE PIPE OPENING REMAINS WITHIN THE SUB-SLAB PERMEABLE MATERIAL. ALTERNATIVELY, THE 3-INCH (76mm) PIPE SHALL BE INSERTED DIRECTLY INTO AN INTERIOR PERIMETER DRAIN TILE LOOP OR THROUGH A SEALED SUMP COVER WHERE THE SUMP IS EXPOSED TO THE SUB-SLAB AGGREGATE OR CONNECTED TO IT THROUGH A DRAINAGE SYSTEM.

THE PIPE SHALL BE EXTENDED UP THROUGH THE BUILDING FLOORS, TERMINATE AT LEAST 12 INCHES (305mm) ABOVE THE SURFACE OF THE ROOF, IN A LOCATION AT LEAST 10 FEET (3048mm) AWAY FROM ANY WINDOW OR OTHER OPENING INTO THE CONDITIONED SPACES OF THE BUILDING THAT IS LESS THAN 2 FEET (610mm) BELOW THE EXHAUST POINT, AND 10 FEET (3048mm) FROM ANY WINDOW OR OTHER OPENING IN ADJOINING OR ADJACENT BUILDINGS.

**AF103.6.2 MULTIPLE VENT PIPES**
IN BUILDINGS WHERE INTERIOR FOOTING OR OTHER BARRIERS SEPARATE THE SUB-SLAB AGGREGATE OR OTHER GAS-PERMEABLE MATERIAL, EACH AREA SHALL BE FITTED WITH AN INDIVIDUAL VENT PIPE. VENT PIPES SHALL CONNECT TO A SINGLE VENT THAT TERMINATES ABOVE THE ROOF OR EACH INDIVIDUAL VENT PIPE SHALL TERMINATE SEPARATELY ABOVE THE ROOF.

**AF103.7 VENT PIPE DRAINAGE.**
ALL COMPONENTS OF THE RADON VENT PIPE SYSTEM SHALL BE INSTALLED TO PROVIDE POSITIVE DRAINAGE TO THE GROUND BENEATH THE SLAB OR SOIL-GAS-RETARDER.

**AF103.8 VENT PIPE ACCESSIBILITY.**
RADON VENT PIPES SHALL BE ACCESSIBLE FOR FUTURE FAN INSTALLATION THROUGH AN ATTIC OR OTHER AREA OUTSIDE THE HABITABLE SPACE.

**EXCEPTION:** THE RADON VENT PIPE NEED NOT BE ACCESSIBLE IN AN ATTIC SPACE WHERE AN APPROVED ROOF-TOP ELECTRICAL SUPPLY IS PROVIDED FOR FUTURE USE.

**AF103.9 VENT PIPE IDENTIFICATION.**
ALL EXPOSED AND VISIBLE INTERIOR RADON VENT PIPES SHALL BE IDENTIFIED WITH AT LEAST ONE LABEL ON EACH FLOOR AND IN ACCESSIBLE ATTICS. THE LABEL SHALL READ: "RADON REDUCTION SYSTEM."

**AF103.10 COMBINATION FOUNDATION.**
COMBINATION BASEMENT/ CRAWL SPACE OR SLAB-ON-GRADE/ CRAWL SPACE FOUNDATIONS SHALL HAVE SEPARATE RADON VENT PIPES INSTALLED IN EACH TYPE OF FOUNDATION AREA. EACH RADON VENT SHALL TERMINATE ABOVE THE ROOF OR SHALL BE CONNECTED TO A SINGLE VENT THAT TERMINATES ABOVE THE ROOF.

**AF103.11 BUILDING DEPRESSURIZATION.**
JOINTS IN AIR DUCTS AND PLENUMS IN UNCONDITIONED SPACES SHALL MEET THE REQUIREMENTS OF SECTION M1601. THERMAL ENVELOPE AIR INFILTRATION REQUIREMENTS SHALL COMPLY WITH THE ENERGY CONSERVATION PROVISIONS IN CHAPTER 11. FIRESTOPPING SHALL MEET THE REQUIREMETNS CONTAINED IN SECTION R602.8.

**AF103.12 POWER SOURCE.**
TO PROVIDE FOR FUTURE INSTALLATION OF AN ACTIVE SUB-MEMBRANE OR SUB-SLAB DEPRESSURIZATION SYSTEM, AN ELECTRICAL CIRCUIT TERMINATED IN AN APPROVED BOX SHALL BE INSTALLED DURING CONSTRUCTION IN THE ATTIC OR OTHER ANTICIPATED LOCATION OF VENT PIPE FANS. AN ELECTRICAL SUPPLY SHALL ALSO BE ACCESSIBLE IN ANTICIPATED LOCATIONS OF SYSTEM FAILURE ALARMS.

# STRUCTURAL NOTES

**LIVE LOADS:**
**Residential:**

| | | | |
|---|---|---|---|
| Decks | 40 psf | Pg | = 30 psf |
| Rooms other than Sleeping Rooms | 40 psf | Is | = 1.0 |
| Sleeping Rooms | 30 psf | Ce | = 1.0 |
| Stairs | 40 psf | Ct | = 1.0 |
| Roof | 30 psf | Pf | = 20 psf |

Individual stair treads shall be designed for the uniformly distributed live load of a 300 pound concentrated load acting over an area of 4 square inches, whichever produces the greatest stresses.

Handrail assemblies and guards shall be designed to resist a load of 50 plf applied in any direction at the top and to transfer this load through the supports to the structure. Handrail assemblies and guards shall be able to resist a single concentrated load of 200 pounds, applies in any direction at any point along the top, and have attachment devices and supporting structure to transfer this loading to appropriate structural elements of the building (this load need not act concurrently with the loads specified above). Intermediate rails, balusters, and panel fillers shall be designed to withstand a horizontally applied normal load of 50 pounds.

**WIND LOAD:**

| | | | |
|---|---|---|---|
| Section 1609.0 2009 IRC Code: | V3s | = | 90 mph |
| | qz | = | 20.7 psf |
| | I | = | 1.0 |
| | Exposure: | | B |
| | GCpi | = | +/-0.18 |

**GENERAL:**
1. Provide all labor, material, equipment and miscellaneous items including but not limited to clips, inserts, ties, anchor straps, hangers, bolts, and other fasteners required to complete the work.
2. Verify all floor and roof openings with the architectural and MEP drawings. Verify all depressions, dimensions, and slopes from the architectural drawings. Any discrepancy shall be brought to the attention of the Architect.
3. The contractor shall be solely responsible for site safety, and the stability of all new, temporary, and existing structures, walls, slabs, etc. during the construction phase.

**FOUNDATIONS:**
1. The structural engineer is not responsible for subsurface conditions encountered in the field different to those assumed for the design.
2. Assumed soil bearing value of "[illegible]" psf to be verified by geotechnical engineer or qualified soils technician.
3. All footings shall project at least 1'-0" into undisturbed natural soil or compacted controlled fill having a bearing value at least equal to that specified above.
4. Bottoms of all exterior footings shall be at least 2'-6" below finished grade or as required by local code requirements. Footing elevations indicated on drawings have been established from available information provided by others and may not violate criteria established above. Footing elevations shall be lowered as site conditions warrant for poor soil conditions or as required to facilitate site utilities or existing conditions.
5. Unless otherwise shown on the drawings, wall footings shall be 12" deep and project 6" beyond each face of wall. Wall footings supporting masonry walls are to be reinforced with (3) #5 longitudinal continuous bottom bars.
6. All disturbed earth under footings shall be replaced with lean concrete.
7. All bearing strata shall be adequately drained before foundation concrete is placed.
8. Provide damp-proofing on exterior face of masonry walls below grade.
9. Provide a minimum of 3 courses of solid brick, one course 100% solid block, or a continuous bond beam at bearing of joists, bearing walls or supported slabs.
10. Provide control joints in masonry walls at 30'-0" maximum or as shown on Architectural drawings.
11. All portions of bearing walls having a horizontal cross section of 4 square feet or less shall be of solid masonry down to footings.
12. Provide horizontal masonry reinforcing (DUR-O-WALL or equal) at 16" o.c. in all masonry walls U.O.N.
13. Use buckets to measure materials for mixing mortar. Grout shall be sand and cement, 8 bags of cement per cubic yard.
14. Provide 12 gage galvanized masonry straps with 3/16" diameter ties @ 24" o/c horizontally and 16" o.c. vertically between veneer walls and back-up. Masonry tie assemblies shall be screwed (not nailed) to wood and light gauge stud backup. Provide dovetail anchor slots at 24" o.c. where masonry abuts concrete.

**REINFORCED MASONRY:**
1. Shall be constructed as follows:
   - All cells line up:
   - Provide clean-out holes above the footing in block cells to be reinforced:
   - Break all mortar protruding into block cells with the reinforcing rod and remove loose mortar:
   - Fill cells containing reinforcing with 3000 psi pea-gravel grout.

**LINTELS:**
1. Provide precast lightweight concrete lintels for all openings and recesses in concrete masonry unit walls as follows:
   - one 4x8 lintel for each 4" of wall thickness.
   - one 6x8 lintel for each 6" of wall thickness.

   Reinforce each lintel unit with one #4 rebar top and bottom with #3 stirrups @ 8" oc. Concrete lintel units shall have 8" minimum bearing at ends and may be used for openings up to 8'-0".
2. For brick or face CMU, provide a steel angle for each 4" of wall thickness as follows:
   - L4 x 3 x 1/4" for openings up to 4'-0";
   - L4 x 3 1/2 x 1/4" for openings 4'-0" to 5'-0";
   - L5 x 3 1/2 x 5/16" for openings 5'-0" to 6'-0".
   - L6 x 3 1/2 x 5/16" for openings 6'-0" to 7'-0".
   - L6 x 4 3/8 x 5/16" for openings 7'-0" to 8'-0".

   Provide 6" minimum bearing each end

# STRUCTURAL NOTES (continued)

**CONCRETE:**
1. All concrete construction including detailing, fabrication, placement of reinforcing, mixing, handling, placing, finishing, and curing shall conform to ACI "Structural Concrete for Buildings" (ACI 301), ACI "Manual of Standard Practice for Detailing Reinforced Concrete Structures" (ACI-315), and "ACI Building Code Requirements for Reinforced Concrete" (ACI-318).
2. All concrete shall conform to ASTM C94. Minimum compressive strength and maximum water/cement ratio shall be as follows:
   a. Foundations, walls, slabs on grade: 3000 psi (0.58)
   b. Garage slabs on grade: 3500 psi (0.50)
   c. Deck supported slabs: 3000 psi (0.58)
3. Maximum aggregate size for regular concrete shall be 3/4" and pea-gravel concrete shall be 3/8". Aggregate for regular weight concrete shall conform to ASTM C33 and lightweight concrete shall conform to ASTM C330.
4. Provide damp-proofing on exterior face of masonry walls below grade.
5. Provide a minimum of 3 courses of solid brick, one course 100% solid block, or a continuous bond beam at bearing of joists, bearing walls or supported slabs.
6. Provide control joints in masonry walls at 30'-0" maximum or as shown on Architectural drawings.
7. All portions of bearing walls having a horizontal cross section of 4 square feet or less shall be of solid masonry down to footings.
8. Provide horizontal masonry reinforcing (DUR-O-WALL or equal) at 16" o.c. in all masonry walls U.O.N.
9. Use buckets to measure materials for mixing mortar. Grout shall be sand and cement, 8 bags of cement per cubic yard.
10. Provide 12 gage galvanized masonry straps with 3/16" diameter ties @ 24" o/c horizontally and 16" o.c. vertically between veneer walls and back-up. Masonry tie assemblies shall be screwed (not nailed) to wood and light gauge stud backup. Provide dovetail anchor slots at 24" o.c. where masonry abuts concrete.

**REINFORCEMENT STEEL:**
1. All reinforcing steel except beam stirrups and column ties shall conform to ASTM-A615, Grade 60. Stirrups and ties shall conform to ASTM A615, Grade 40 unless noted otherwise.
2. Welded wire mesh to conform to ASTM-A185. and have minimum side and end laps of 8".
3. Fabricate and provide standard supporting accessories in accordance with the ACI Manual of Standard Practice for Detailing Reinforced Concrete Structures ACI 315.
4. All top reinforcing steel and beam stirrups in balconies, parking slabs and weather-exposed locations shall be epoxy coated per ASTM A 775/A 775M.

**CONCRETE PROTECTION FOR REINFORCEMENT:**
1. Reinforcing bars and mesh to have concrete cover as follows:

| | |
|---|---|
| Footings and other concrete poured against earth | 3" |
| Formed concrete exposed to earth for bars larger than #5 | 2" |
| Formed concrete exposed to earth for bars for #5 or smaller bars | 1 1/2" |
| Interior faces of walls | 1" |
| Beams, columns and top reinforcing in the garage slabs | 1 1/2" |
| Framed Slabs | 3/4" |

Slabs on ground to have reinforcement in top third of thickness.

**POST INSTALLED MECHANICAL AND CHEMICAL ANCHORS:**
1. All mechanical and chemical anchors indicated within these documents shall be provided by Hilti, Inc. or an structural engineer-approved equivalent. Alternate anchors shall submitted to structural engineer for approval-submittal must include all relevant technical information including allowable load values.
2. All anchors shall be installed in accordance with the anchor manufacturer's specifications.
3. UON, all anchors shall have standard embedment depth as defined by the anchor manufacturer.

**TIMBER FRAMING:**
1. Dimensional lumber for posts, beams and joists shall be Spruce Pine Fir No.1/No.2 or approved equal with the following minimum properties: Fb = 875 psi, E = 1,400,000 psi, Fc = 1150 psi, Fv = 135psi.
2. Wall top plates and sill plates shall be Southern Pine No. 2 with the following minimum properties: Fb = 1500 psi, E = 1,600,000 psi, Fv = 175 psi.
3. Wall studs shall be Spruce Pine Fir No.1/No.2 or approved equal with the following minimum properties:
4. Fb = 875 psi, E = 1,400,000 psi, Fc = 1150 psi, Fv = 135 psi.
5. Framing lumber shall have 19% maximum moisture content.
6. Microlam beams shall have the following minimum properties: Fb = 2800 psi, E = 2,000,000 psi.
7. Paralam beams/posts shall have the following minimum properties: Fb = 2900 psi, Fv = 290 psi, Fc(perp) = 650 psi, Fc(parallel) = 2500 psi, E = 2,000,000 psi.
8. Provide cross-bridging for joists at 8'-0" intervals. Joists shall have minimum 4" bearing on masonry.
9. Unless shown otherwise, provide double 2x10 headers over openings in bearing walls up to 6'-0" and double 2x12 headers up to 10'-0".
10. Floor sheathing shall be 3/4" tongue and groove plywood sheathing (or OSB if approved) and shall be glued and screwed to joists or floor trusses no more than 8" oc. Roof sheathing shall be 1/2" exterior grade plywood sheathing or OSB and shall be attached to rafters or roof trusses with 8d common nails spaced no more than 8" oc. Provide plywood clips spaced no more than 12" o.c. except on roofs to receive finish metal.
11. Provide diagonal let-in bracing, 12 gage diagonal straps or plywood sheathing at all corners of exterior wood-framed walls. U.N.O.
12. Joists or trusses running parallel to masonry walls shall be anchored to the walls with 3/16"x2" steel strap anchors at 4'-0" o.c., top and bottom, or approved alternative.
13. Wood joists and beams shall not be cut or drilled unless so authorized by the Engineer.
14. Lumber in contact with masonry or concrete shall be pressure treated against decay.
15. All hardware and fasteners for pressure treated lumber shall be stainless steel or triple zinc G-185 galvanized.
16. Provide double joists below non-bearing partitions parallel to joists, U.N.O.
17. Provide structural engineer-approved heavy duty framing anchors at all beam connections not directly over bearing walls or columns as manufactured by TECO, Simpson, etc. Refer to drawings for beam reactions.
18. Provide structural engineer-approved wood post base assemblies as required at bearing conditions.
19. Provide end sealer & cut beams of all lumber to be utilized below grade or in contact w/MSY, concrete or grade.

**TRUSS JOISTS:**
1. Shall be designed to support the anticipated dead loads, required live loads and any mechanical equipment loads indicated on the drawings and shall conform to the "National Design Specifications for Stress Grade Lumber and Its Fastening", latest edition.
2. Live load deflection shall be limited to span/480 for carpet, hardwood, and linoleum floors. For floors with marble, ceramic tile, or limestone the total load deflection shall not exceed span/720 for spans equal to or less than 14'-0". For spans greater than 14'-0" the total load deflection shall not exceed 7/32". Submit shop drawings and design catalogues for approval prior to fabrication.
3. Joists shall have 4" minimum bearing on masonry.
4. Joists running parallel to masonry walls to be anchored with 3/16"x2" steel strap anchors at 4'-0" o.c.
5. Joists shall not be cut or drilled unless so authorized by the engineer.
6. Use shear panels between joists at bearing walls and solid blocking at all post supports.

**WOOD TRUSSES:**
1. Shall be designed to resist anticipated dead loads, live loads and any mechanical equipment loads indicated on the drawings.
2. Trusses shall conform to the "National Design Specifications for Stress Grade Lumber and Its Fastening".
3. Floor trusses shall be designed such that the calculated live load deflection is limited to span/480.
4. Shop drawings including an erections plan and details indicating dimensions, forces, lumber sizes, grades, connector sizes and properties shall be submitted for approval prior to fabrication.
5. See mechanical drawings for roof equipment.
6. Contractor shall adequately brace trusses until sheathing is in place and roof system is stabilized against exterior forces.

**GLUED LAMINATED STRUCTURAL MEMBERS:**
1. Materials, manufacture, and quality control shall be in accordance with the proposed Commercial Standard "Structural Glued Laminated Timber" of the AITC and current WCLA glued laminated standards.
2. Adhesive shall meet the requirements for wet service condition. Appearance of members shall be "Architectural Appearance Grade".
3. A coat of end sealer shall be supplied to ends of all members as soon as practical after end trimming.
4. Surfaces of members shall be sealed with penetrating sealer and members shall be individually wrapped.

   The fabricator shall furnish connecting and supporting hardware and all other accessories necessary for the system to perform as indicated.

**SLABS ON GRADE:**
1. Except where otherwise noted, shall be 4" thick, reinforced with 6x6 - W1.4xW1.4 (6x6 - 10/10) WWF. Lap mesh 8" in each direction. Slab reinforcement shall be located in top third of slab thickness.
2. Provide control joints at 15'-0" o.c. each way in all slabs on grade. Control joints shall be sawcut within 4 hours after finishing or shall be a pre-fabricated mechanical joint.

   Interior slabs shall be laid on a layer of 6 mil. polyethylene over a 4" layer of washed gravel unless otherwise recommended in Geotechnical report.

**BACKFILL:**
1. Shall not be placed against walls until top of wall is either temporarily braced or permanently braced with floor system. If floor system is a concrete slab, the floor system concrete must have achieved 75% of design strength prior to placement of backfill. Where backfill is required on both sides of walls, backfill both sides simultaneously.

**SUMP PUMPS:**
1. Are to be provided during construction as required to control surface water and after construction as permanent means of controlling underground water.

**WOOD WALL FRAMING:**
1. Refer to Section R602 In The International Residential Building Code 2006 (IRC 2006).

**WALL BRACING:**
1. All exterior walls shall be braced in accordance with Section R602.10 in The International Residential Building Code 200.
2. Wall bracing shall consist of 1/2" minimum exterior grade structural sheathing installed in accordance with Tables R602.3(1), R602.3(2), and R602.3(3) in IRC 200 . Alternate methods of wall bracing shall be submitted for approval.
3. The amount of wall bracing shall be in accordance with Table R602.10.1 in IRC 200 :
   a. One story, and top or two or three story
      -Located at each end and at least every 25 feet on center but not less than 16% of braced wall line.
   b. First story of two story, and second story of three story
      -Located at each end and at least 25 feet on center but not less than 25% of braced wall line.
   c. First story of three story
      -Minimum 48-inch-wide panels located at each end and at least every 25 feet on center but not less than 35% of braced wall line

# GENERAL NOTES

1. ALL WORK IS TO BE DONE IN CONFORMANCE WITH ALL APPLICABLE CODES AND REGULATIONS.
2. CONTRACTOR SHALL CONFORM TO ALL O.S.H.A. REQUIREMENTS.
3. ALL WORK TO BE IN COMPLIANCE WITH THE 200 INTERNATIONAL RESIDENTIAL CODE.
4. APPROVAL OF THESE DRAWINGS BY GOVERNING AUTHORITIES DOES NOT RELEASE THE CONTRACTOR FROM COMPLYING WITH ALL APPLICABLE CODES AND STANDARDS.
5. THE GENERAL CONTRACTOR SHALL BEAR FULL RESPONSIBILITY AND COSTS FOR THE FOLLOWING:
   A. PERMITS, LICENSES, INSPECTIONS AND FEES (ALL IMPACT FEES).
   B. TEMPORARY POWER AND UTILITIES.
   C. TRASH REMOVAL.
   D. LIABILITY AND WORKMEN'S COMPENSATION INSURANCE, ETC.
   E. AND OTHER ITEMS INDICATED IN SPECIFICATIONS.
6. CONTRACTOR TO VISIT SITE AND COMPLETELY FAMILIARIZE HIMSELF WITH EXISTING CONDITIONS PRIOR TO EXECUTION OF ANY CONSTRUCTION, CONTACT ARCHITECT PRIOR TO EXECUTING ANY WORK IN QUESTION.
7. CHECK ALL DIMENSIONS ON JOB AND FULLY VERIFY PRIOR TO EXECUTION. ALL ELEVATIONS GIVEN ARE APPROXIMATE AND ARE GIVEN FOR RELATIONAL PURPOSES. CONTRACTOR SHALL ESTABLISH EXACT LEVELS PRIOR TO START OF WORK AND NOTIFY ARCHITECT OF ANY SIGNIFICANT DISCREPANCIES.
8. CONTRACTOR SHALL NOT SCALE DRAWINGS AND DISCREPANCIES BETWEEN EXISTING CONDITIONS AND DRAWINGS SHALL BE REPORTED TO ARCHITECT FOR CLARIFICATION PRIOR TO COMMENCEMENT OF WORK.
9. THE ARCHITECT WILL NOT BE RESPONSIBLE FOR AND WILL NOT HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE ARCHITECT WILL NOT BE RESPONSIBLE FOR THE FAILURE OF THE CLIENT OR HIS CONTRACTORS, SUBCONTRACTORS, OR ANYONE PERFORMING ANY OF THE WORK, TO CARRY OUT THE WORK IN ACCORDANCE WITH THE APPROVED CONTRACT DOCUMENTS.
10. IN THE EVENT CERTAIN FEATURES OF THE CONSTRUCTION ARE NOT FULLY SHOWN ON THE DRAWINGS, THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS FOR SIMILAR CONDITIONS THAT ARE SHOWN OR NOTED.
11. IN AREAS WHERE THE DRAWINGS DO NOT ADDRESS METHODOLOGY, THE CONTRACTOR SHALL BE BOUND TO PERFORM IN STRICT COMPLIANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
12. THE ARCHITECT AND OWNER WILL CONSIDER FORMAL REQUESTS FROM THE CONTRACTOR FOR SUBSTITUTION OF PRODUCTS, MATERIALS OR MANUFACTURERS. THESE REQUESTS SHALL ACCOMPANY BUT NOT BE INCLUDED IN THE BASE BID ON THE SPECIFIED BID DUE DATE. SUBMIT TWO COPIES OF REQUEST FOR SUBSTITUTION.
13. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS/VENDOR DATA SUBMITTAL SCHEDULE TO ARCHITECT FOR REVIEW AND APPROVAL WITHIN THIRTY (30) DAYS FROM COMMENCEMENT OF WORK. SUBMIT TWO (2) COPIES TO ARCHITECT.
14. DEMOLITION TO BE PROVIDED BY CONTRACTOR AS REQUIRED. COMPLETELY REMOVE ALL TRASH FROM SITE.
15. WHERE NEW WORK IS TO BE DONE, CARE SHALL BE TAKEN TO PROTECT ALL EXISTING ADJACENT SURFACES AND AREAS FROM DAMAGE. ANY AREAS DAMAGED DURING CONSTRUCTION OR DEMOLITION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL COST. THIS APPLIES PARTICULARLY TO ADJACENT SPACES, ROOF, AND OTHER EXTERIOR AREAS AND SURFACES.
16. THE CONTRACTOR IN THE FIELD SHALL ASSESS AND DETERMINE THE METHOD FOR EXCAVATION, SHORING, AND FORMING NEW FOOTINGS AND FOUNDATION WALLS.
17. THE EXCAVATION CONTRACTOR WILL USE ALL NECESSARY PRECAUTIONS WHEN EXCAVATING AT OR NEAR EXISTING BUILDING FOUNDATIONS, TREES, ETC.
18. CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION AGAINST THE DEPOSIT OF SOIL, GRAVEL, OR OTHER MATERIAL ON ANY PUBLIC PROPERTY OR OTHER NEIGHBORING PREMISES PER LOCAL/STATE CODE REQUIREMENTS.
19. ALL CONCRETE DETAILS AND CONSTRUCTION ARE TO COMPLY WITH LATEST A.C.I. CODE AND LOCAL CODES.
20. ALL WOOD FRAMING EXPOSED TO THE WEATHER SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA.
21. ONLY NEW, FIRST CLASS MATERIALS WILL BE USED (EXCEPT AS NOTED). ALL WORK AND EQUIPMENT SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE EXCEPT FOR MANUFACTURER'S GUARANTEES WHICH MAY BE LONGER.
22. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INCLUSION OF ALL WORK NECESSARY FOR A COMPLETE INSTALLATION WHETHER SUCH WORK IS OR IS NOT INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS.
23. ALL MANUFACTURED ITEMS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
24. WARRANTIES, GUARANTEES AND MANUFACTURER'S INSTRUCTIONS ON EQUIPMENT FURNISHED AND INSTALLED BY THE CONTRACTOR SHALL BE GIVEN TO THE OWNER.
25. ALL GYPSUM BOARD SHALL BE TAPED, SPACKLED AND SANDED SMOOTH PRIOR TO FINISHING, METAL BEADING SHALL BE USED ON ALL OUTSIDE CORNERS WHERE APPLICABLE.
26. ALL PENETRATIONS THROUGH EXISTING ROOF SHALL BE SEALED IN PITCH POCKETS AT PIPING, CONDUIT, ETC.; FLASH DUCTS AND CURBS.
27. CONTRACTOR SHALL PROVIDE PROTECTION ON A DAILY BASIS FOR ALL WORK THAT PENETRATES THE EXISTING ROOF MATERIAL. CONTRACTOR TO COVER ALL WORK UNTIL WATER/WEATHER PROOF THROUGH COMPLETION OF CONSTRUCTION.
28. UTILITIES TO BE COORDINATED AND PROVIDED AS PER DRAWINGS.
29. REMOVAL, DISPOSAL, ALTERATION AND RELOCATION OF EXISTING MECHANICAL AND ELECTRICAL EQUIPMENT, CONDUITS, PIPES AND DUCTS ARE INCLUDED IN THE WORK.
30. ALL NOTES ON THIS DRAWING APPLY FOR THE ENTIRE PROJECT WHETHER OR NOT REPEATED ON OTHER DRAWINGS.

## FRAMING

ALL WOOD STRUCTURAL MEMBERS SHALL BE 1200 P.S.I.fb OF SIZES, SPACING AND ANCHORAGE SHOWN ON PLANS. PROVIDE DOUBLE FRAMING AROUND ALL OPENINGS SUCH AS STAIRS AND DUCT CHASES. JOIST SHALL BE DOUBLED WHERE INTERIOR PARTITIONS ARE RUNNING DIRECTLY OVER IN SAME DIRECTION. ALL WOOD BEARING PARTITIONS SHALL BE 2"X4" STUDS AT 16" O.C. WITH DOUBLE TOP PLATE AND BLOCK BRIDGED AT MID- HEIGHT. UNLESS OTHERWISE NOTED ON PLANS PROVIDE WOOD LINTELS OVER FRAME OPENINGS AS FOLLOWS:

| | | |
|---|---|---|
| (2) 2" X 4" | FOR SPANS UP TO | 3'-0" |
| (2) 2" X 6" | " " " " | 4'-0" |
| (2) 2" X 8" | " " " " | 5'-6" |
| (2) 2" X 10" | " " " " | 7'-0" |
| (2) 2" X 12" | " " " " | 8'-6" |

## STEEL

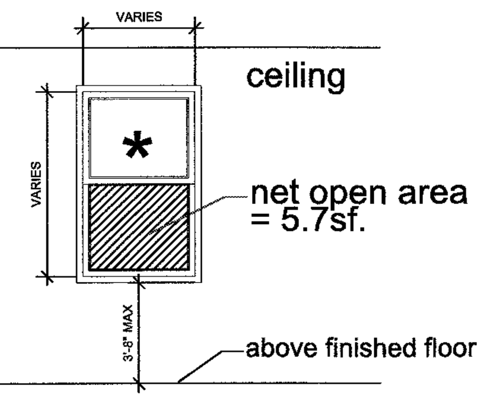
ALL STRUCTURAL STEEL SHALL BE A36. UNLESS OTHERWISE NOTED ON PLANS PROVIDED (1) LOOSE ANGLE LINTEL FOR EACH 4" OF MASONRY OVER OPENINGS AS FOLLOWS:

| | | |
|---|---|---|
| 4" X 3" X 5/16" | FOR SPANS UP TO | 4'-0" |
| 4" X 3½" X 5/16" | " " " " | 5'-0" |
| 4" X 3½" X ⅜" | " " " " | 6'-0" |
| 5" X 3½" X ⅜" | " " " " | 7'-0" |
| 6" X 3½" X ⅜" | " " " " | 8'-0" |

NOTE: CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT JOB SITE AS WORK PROGRESSES.

**HOUSE RENOVATION AND ADDITION**
**1117 ALLISON STREET N.W.**

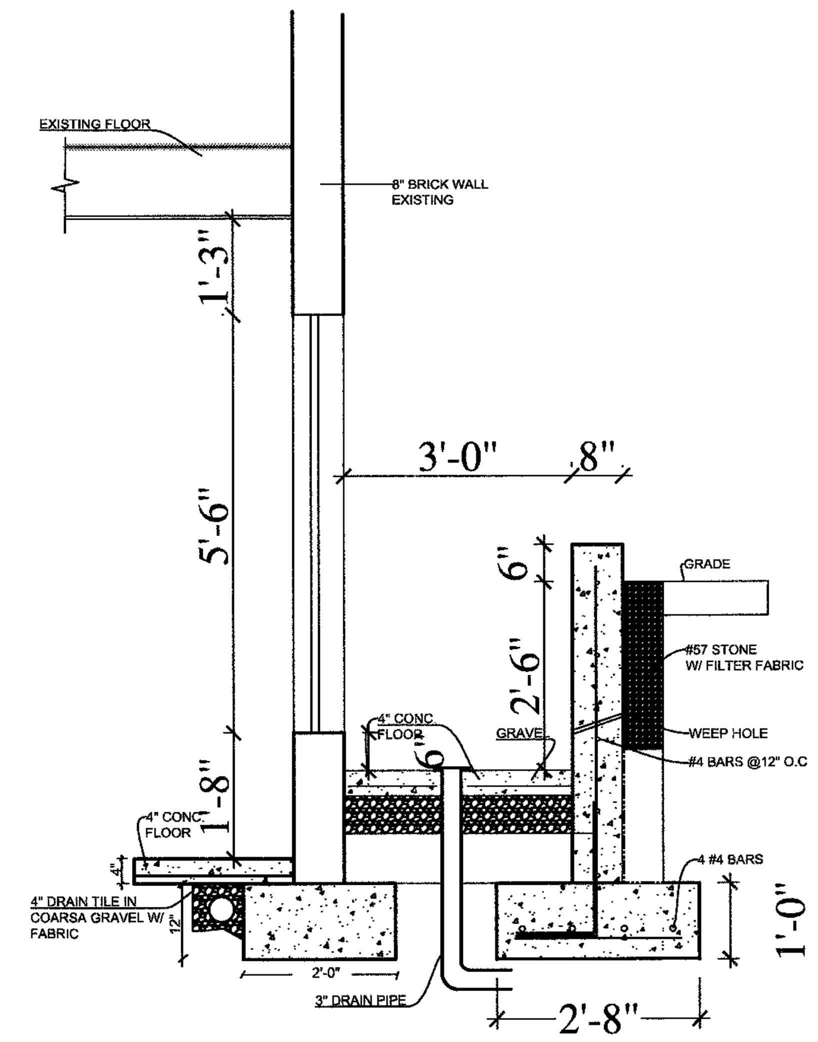
**A2**




EMERGENCY ESCAPE & RESCUE WINDOW DETAIL

## EMERGENCY ESCAPE AND RESCUE OPENINGS:

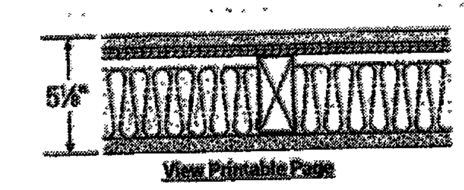
Habitable space and every sleeping room shall have at least one openable emergency escape and rescue window or exterior door opening functioning as an operable emergency escape and rescue opening. Where openings are provided as a means of escape and rescue, each shall have a sill height of not more than 44 inches above the floor. Where a door opening having a threshold below the adjacent ground elevation serves as an emergency escape and rescue opening and is provided with a bulkhead enclosure, the bulkhead enclosure shall comply with Section R310.3. The net clear opening dimensions required by this section shall be obtained by the normal operation of the window or door opening from the inside. Escape and rescue window openings with a finished sill height below the adjacent ground elevation shall be provided with a window well in accordance with Section R310.2.




WINDOW WELL
SCALE: ½" = 1'-0"

- **Cement Board** - 1/2 in. cement board applied vertical or horizontal - DUROCK Brand Cement Board Next Gen
- **Sheathing Materials** - Min 15/32 in. thick, 4 ft wide, wood structural panels, min grade "sheathing" applied vertically
- **Wood Studs** - 2x4 wood studs spaced max 16 in. OC
- **Batts and Blankets** - 3 in. mineral wool batt insulation
- **Gypsum Board** - 5/8 in. thick gypsum board applied vertically or horizontally. - SHEETROCK Brand UltraLight Firecode X Gypsum Panels

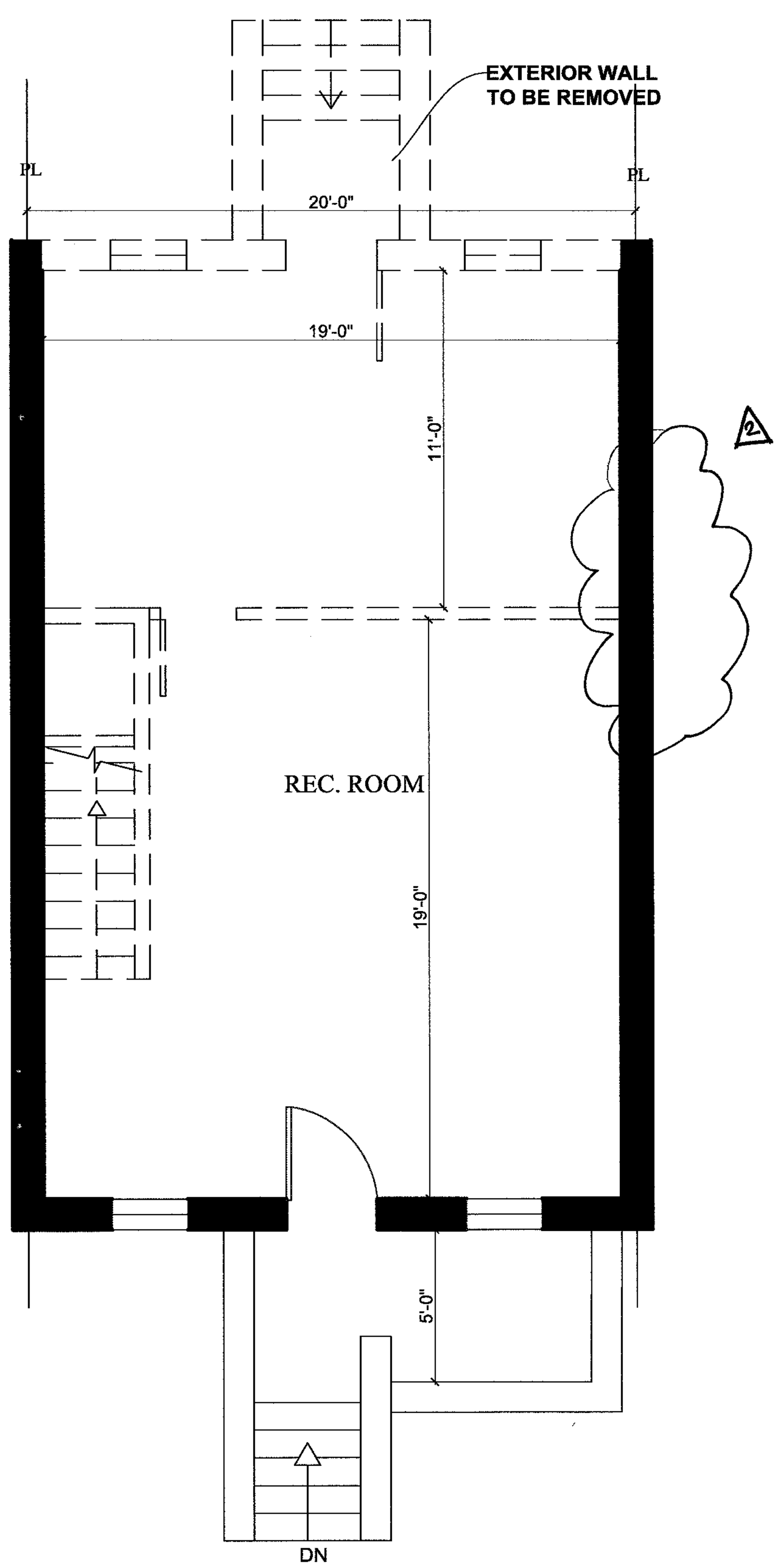
Visit U303



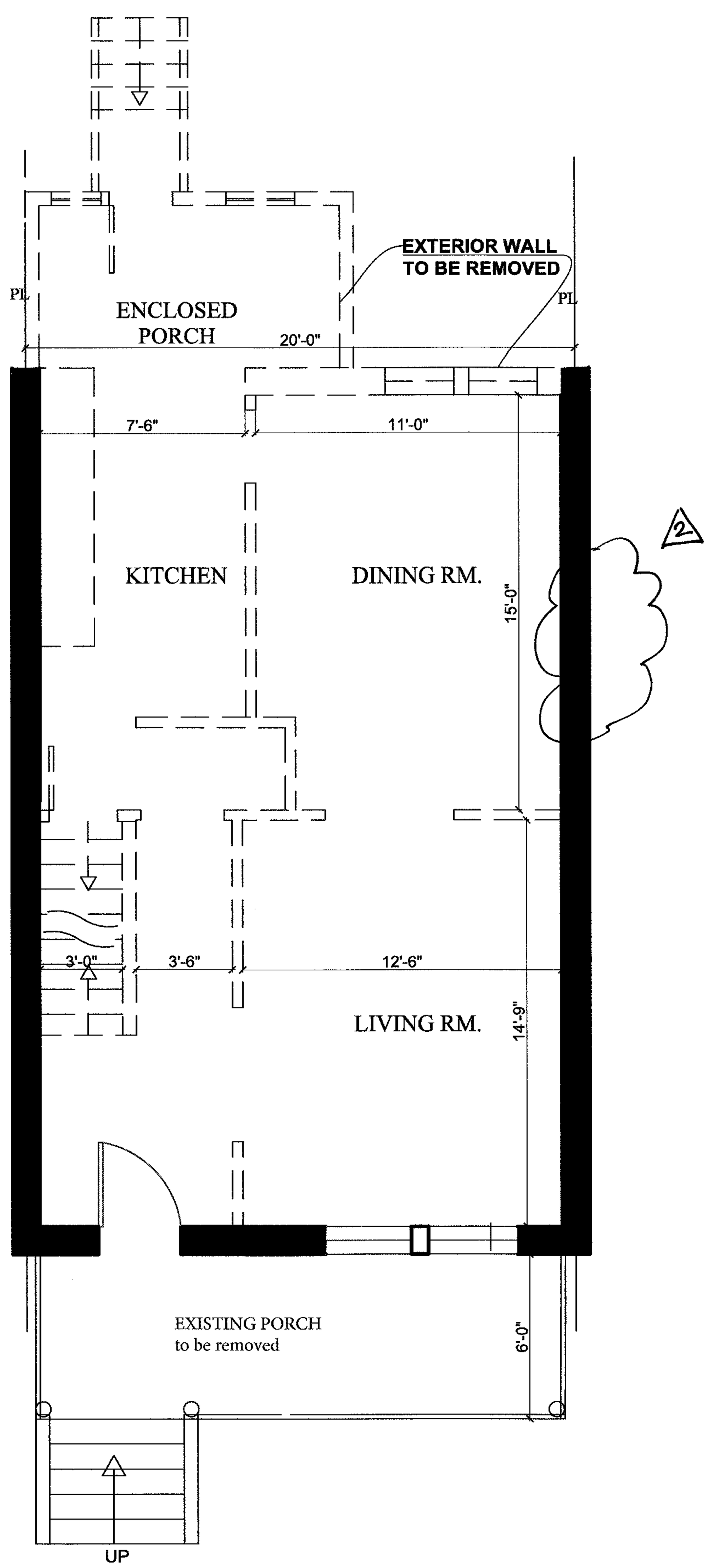

CAD · REVIT · VIEW ASSEMBLY

| Fire Test | Fire Rating | STC | Thickness (in.) |
|---|---|---|---|
| UL U303 or GA-WP-8131 Wood Stud (Loadbearing) Exterior Walls | 1 hr. | N/A | 5-1/8" |

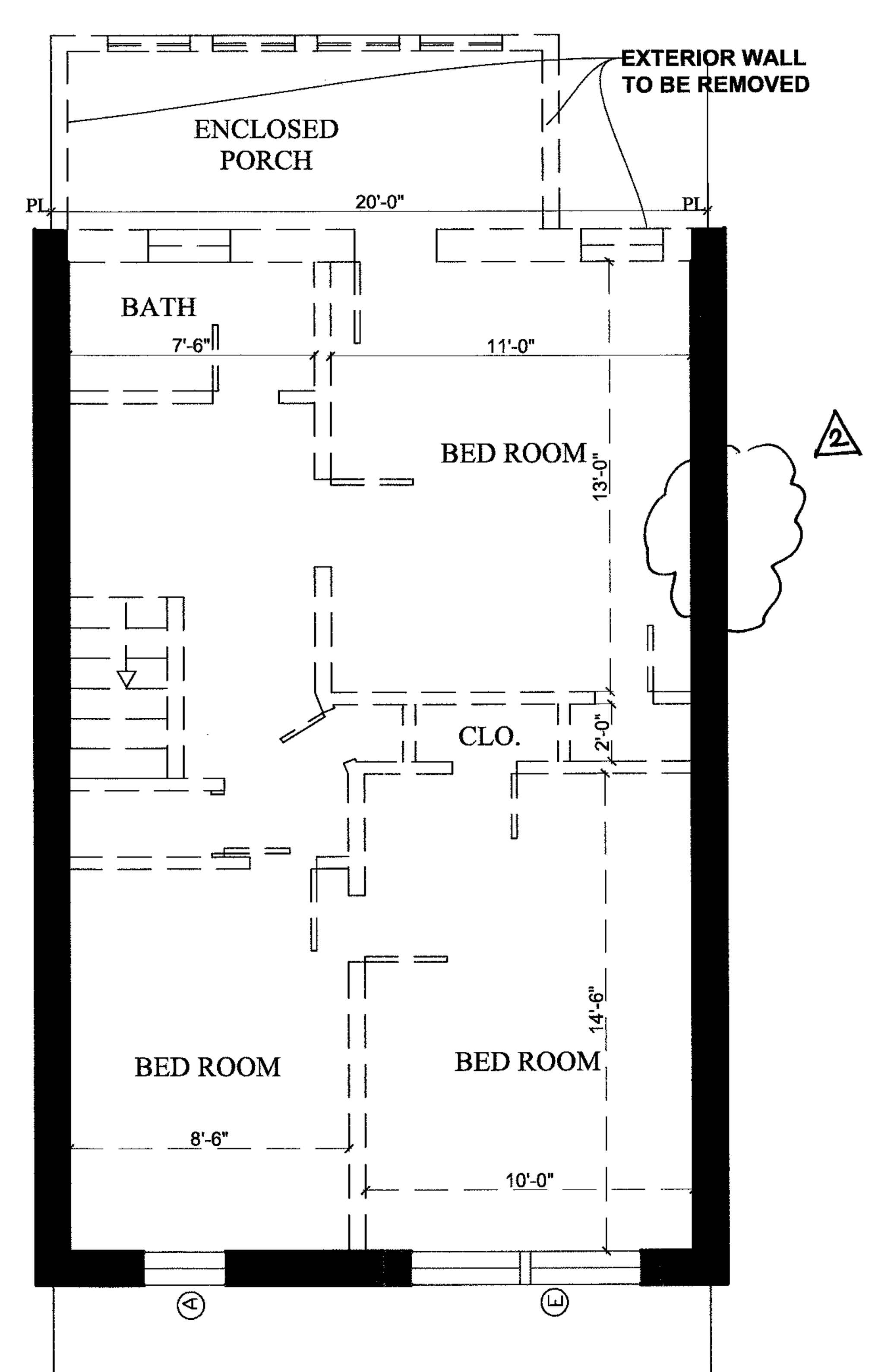
- **Cement Board** - 1/2 in. thick board, applied vertically or horizontally - DUROCK Brand Cement Board Next Gen
- **Sheathing Materials** - Min 15/32 in. thick, 4 ft wide, wood structural panels, min grade "sheathing" applied vertically
- **Wood Studs** - 2x4 wood studs spaced max 16 in. OC
- **Batts and Blankets** - 3 in. mineral wool batt insulation
- **Gypsum Board** - 5/8 in. thick gypsum board applied vertically or horizontally. - SHEETROCK® UltraLight Firecode X Gypsum Panels




EXISTING BASEMENT FLOOR PLAN
SCALE: ¼"=1'-0"

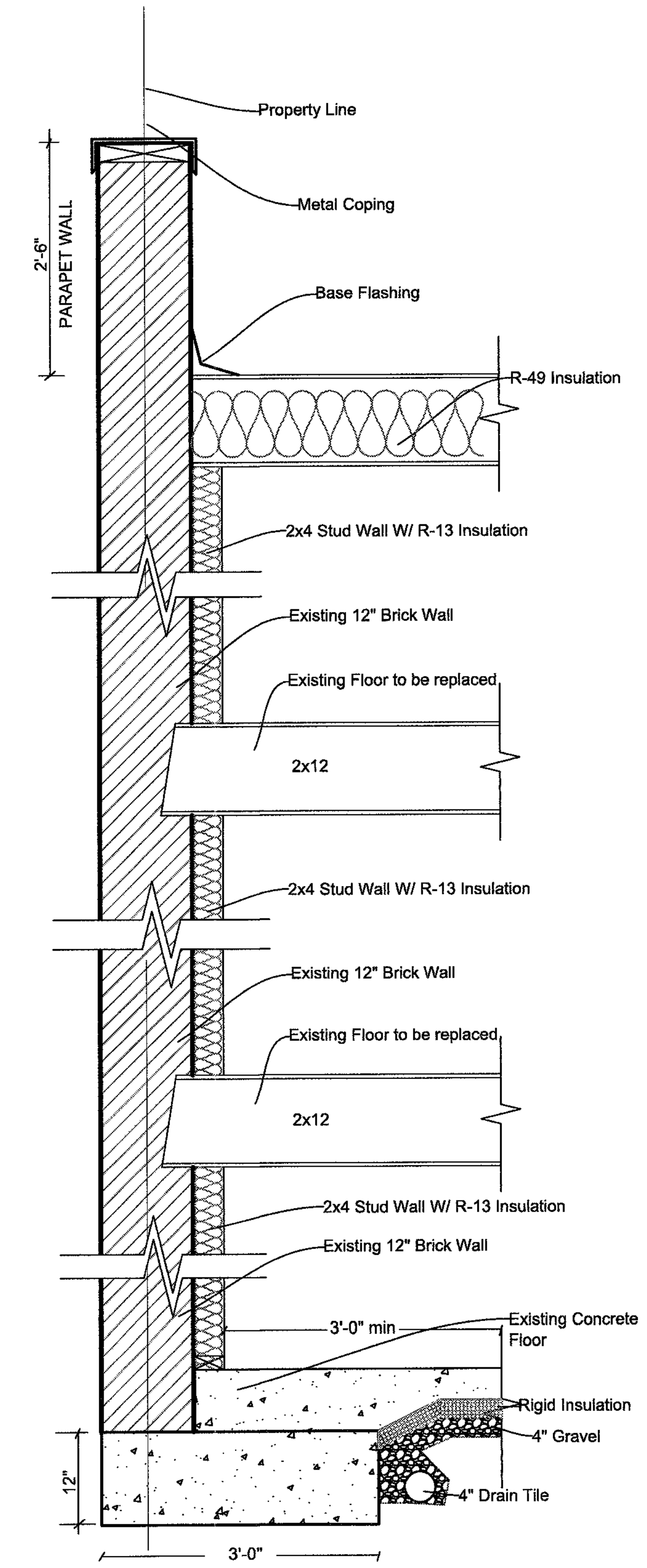



EXISTING FIRST FLOOR PLAN
SCALE: ¼"=1'-0"

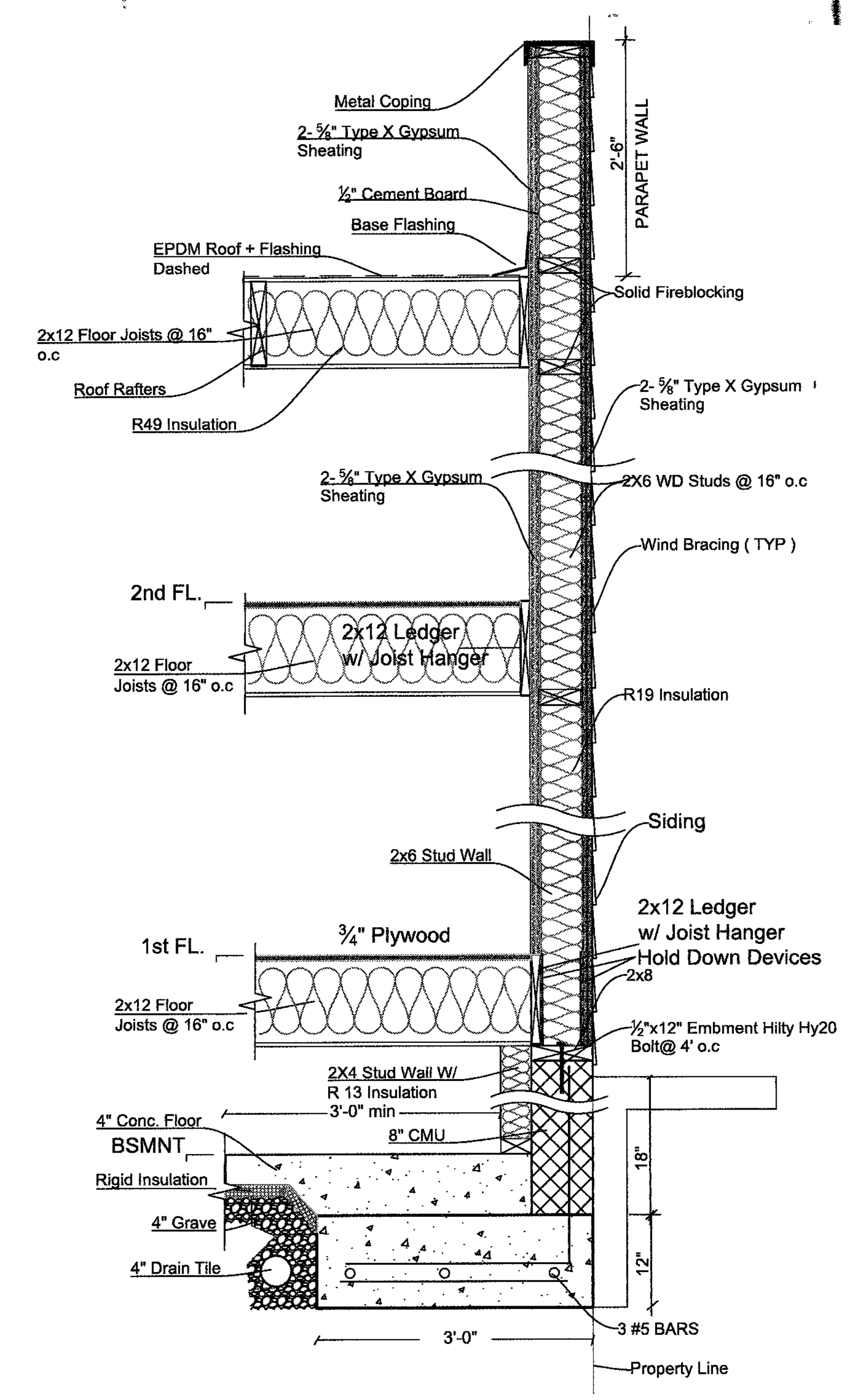



EXISTING SECOND FLOOR PLAN
SCALE: ¼"=1'-0"

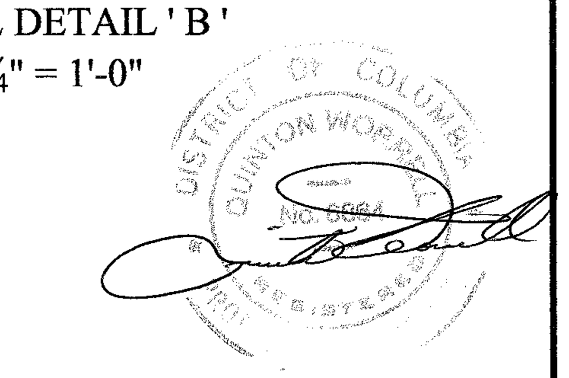
2 * The walls were filled with solid black color to create a visible line.




PARTY WALL DETAIL ' A'
SCALE: ¾" = 1'-0"




PARTY WALL DETAIL ' B '
SCALE: ¾" = 1'-0"

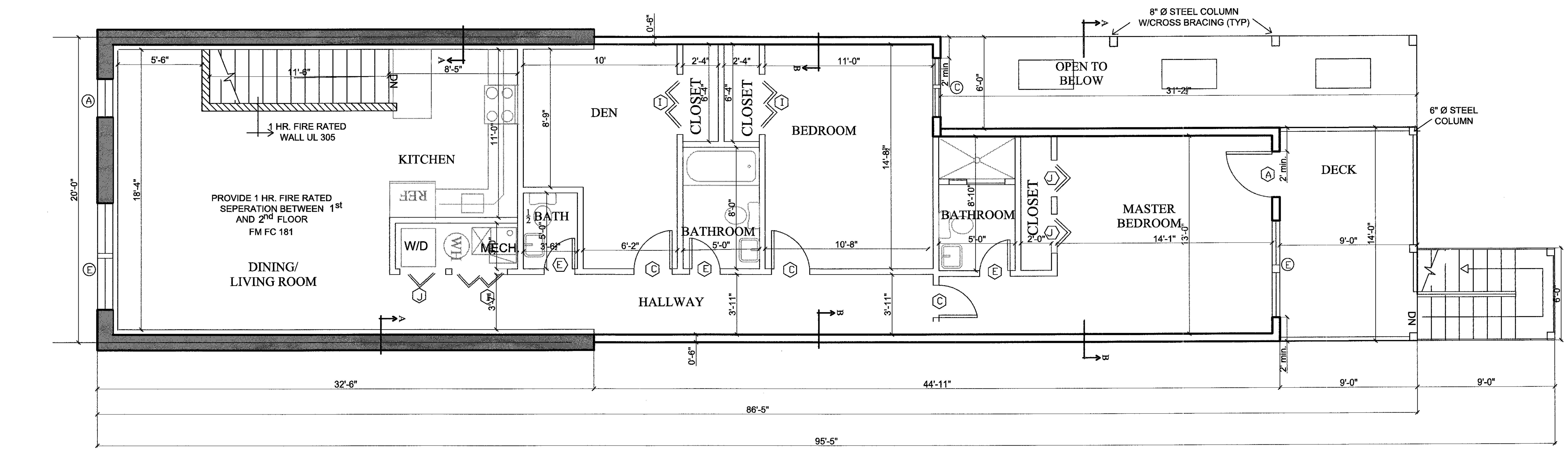



PARTITION LEGEND:

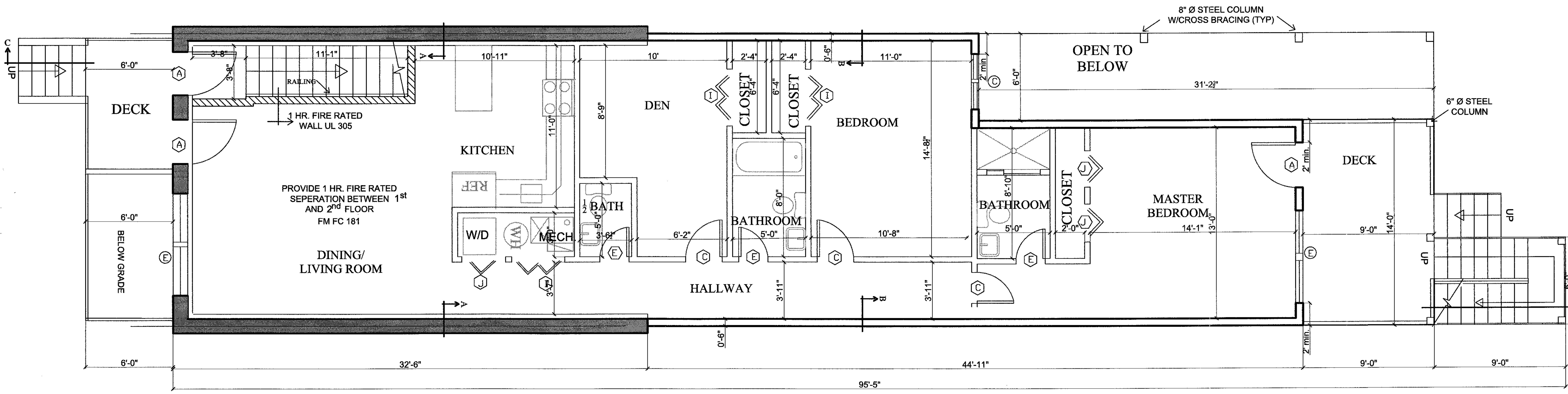
| | |
|---|---|
| ——— | EXIST. PARTITION TO REMAIN |
| - - - - | EXIST. PARTITION TO BE REMOVED |

HOUSE RENOVATION AND ADDITION
1117 ALLISON STREET N.W

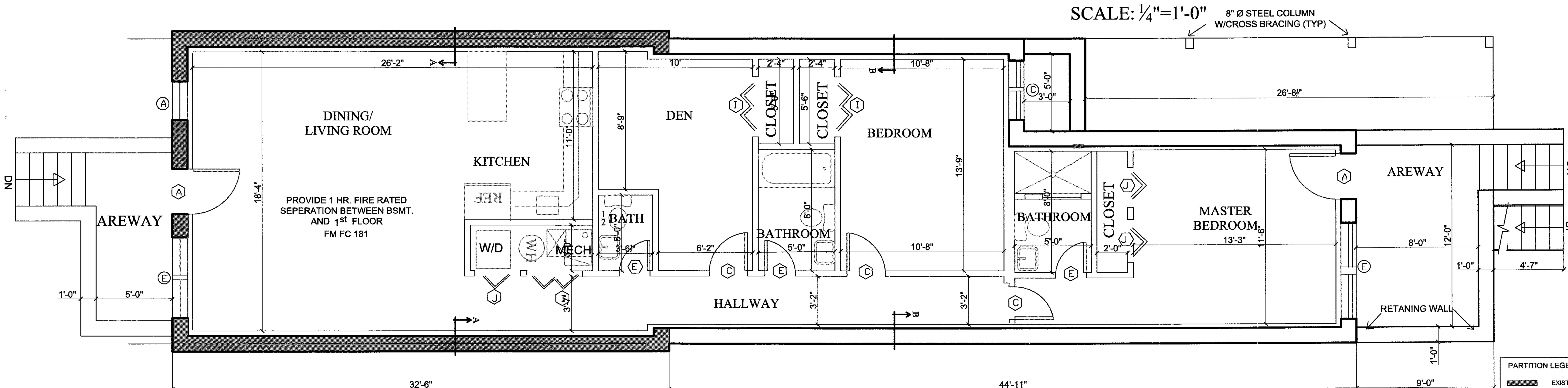
A3




PROPOSED SECOND FLOOR PLAN
SCALE: ¼"=1'-0"




PROPOSED FIRST FLOOR PLAN
SCALE: ¼"=1'-0"

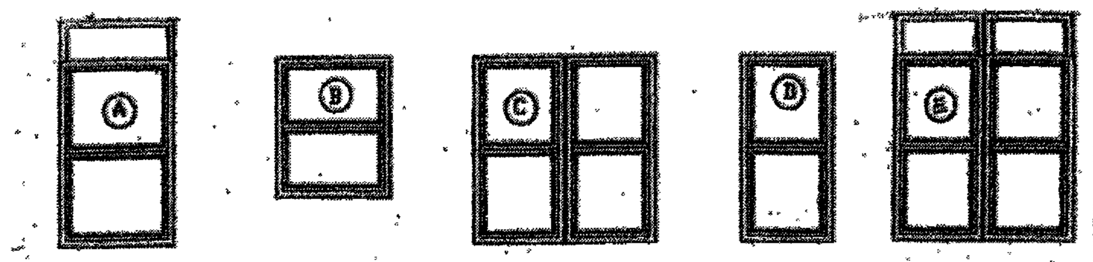



PROPOSED BASEMENT FLOOR PLAN
SCALE: ¼"=1'-0"

| DOOR SCHEDULE | | | | | | | |
|---|---|---|---|---|---|---|---|
| SYMBOL | WIDTH | HEIGHT | THICKNESS | MATERIAL | TYPE | QUANTITY | REMARKS |
| A | 3'-0" | 6'-8" | 1 3/8" | WOOD | SOLID CORE | | 1 HR. FIRE RATED DOOR |
| B | 2'-8" | 6'-8" | 1 3/8" | WOOD | SOLID CORE | | |
| C | 2'-6" | 6'-8" | 1 3/8" | WOOD | SOLID CORE | | |
| D | 2'-4" | 6'-8" | 1 3/8" | WOOD | SOLID CORE | | |
| E | 2'-0" | 6'-8" | 1 3/8" | WOOD | SOLID CORE | | |
| F | 4'-0" | 6'-8" | 1 3/8" | WOOD | FRENCH | | |
| G | 6'-0" | 6'-8" | 1 3/8" | WOOD | FRENCH | | |
| H | 5'-0" | 6'-8" | 1 3/8" | WOOD | BIFOLD | | |
| I | 4'-0" | 6'-8" | 1 3/8" | WOOD | BIFOLD | | |
| J | 3'-0" | 6'-8" | 1 3/8" | WOOD | BIFOLD | | |
| K | [illegible]-0" | 6'-8" | 1 3/8" | METAL | PATIO | | |

| WINDOW SCHEDULE | | | | | |
|---|---|---|---|---|---|
| NUMBER | SIZE | TYPE | MATERIAL | GLAZING | REMARKS |
| A | 3'-0"(±)x7'-0"(±) | DOUBLE-HUNG | VINYL CLAD | 1" INSULATED DOUBLE-PANE | |
| B | 2'-6"(±)x3'-4"(±) | DOUBLE-HUNG | VINYL CLAD | 1" INSULATED DOUBLE-PANE | |
| C | 6'-0"(±)x5'-6"(±) | DOUBLE-HUNG | VINYL CLAD | 1" INSULATED DOUBLE-PANE | |
| D | 2'-6"(±)x5'-6"(±) | DOUBLE-HUNG | VINYL CLAD | 1" INSULATED DOUBLE-PANE | |
| E | 7'-0"(±)x7'-0"(±) | DOUBLE-HUNG | VINYL CLAD | 1" INSULATED DOUBLE-PANE | |
| F | 2'-3"(±)x3'-4"(±) | DOUBLE-HUNG | VINYL CLAD | 1" INSULATED DOUBLE-PANE | |
| | | | | | |
| | | | | | |

NOTES:
1. ALL WINDOWS SHALL BE SUPPLIED WITH EXTERIOR FULL ALUMINUM SCREENS.
2. SIZES SHALL BE VERIFIED AT THE SITE WITH FIELD MEASUREMENTS ONLY.



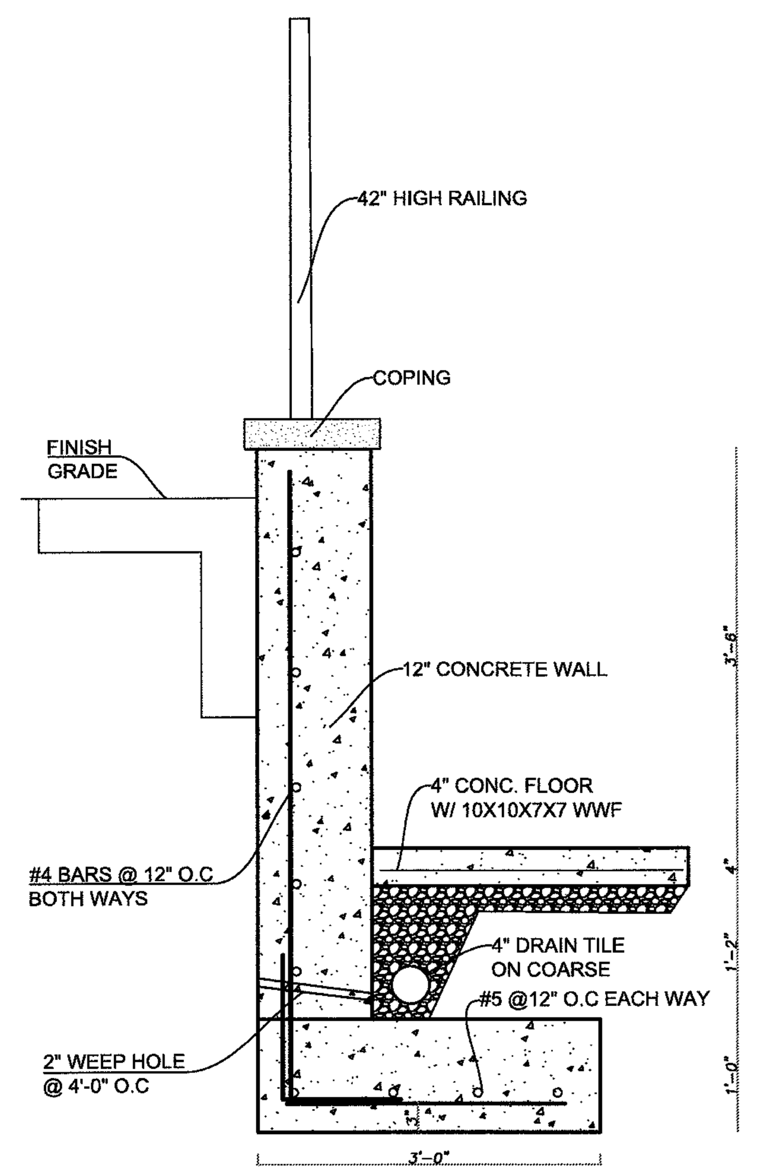

| ROOM FINISH SCHEDULE | | | | | | |
|---|---|---|---|---|---|---|
| ROOM/AREA | FLOOR | WALL | BASE | WAINSCOT | CEILING | REMARKS |
| | | | | | | |
| FOYER | HARDWOOD | GYP. BD. | 5" WOOD | NONE | GYP. BD. | REFINISH & REPAIR EXISTING |
| LIVING ROOM | HARDWOOD | GYP. BD. | 5" WOOD | NONE | GYP. BD. | |
| DINING ROOM | HARDWOOD | GYP. BD. | 5" WOOD | NONE | GYP. BD. | |
| POWDER ROOM | CERAMIC TILE | GYP. BD. | CERAMIC (COVED) | NONE | GYP. BD. | |
| HALLWAY | HARDWOOD | GYP. BD. | 5" WOOD | NONE | GYP. BD. | |
| STAIRS | OAK | GYP. BD. | 5" WOOD | NONE | GYP. BD. | |
| KITCHEN | 12"x12" VINYL TILE | GYP. BD. | 5" WOOD | NONE | GYP. BD. | |
| BEDROOM | HARDWOOD | GYP. BD. | 5" WOOD | NONE | GYP. BD. | |
| BEDROOM | HARDWOOD | GYP. BD. | 5" WOOD | NONE | GYP. BD. | |
| | | | | | | |
| BATHROOM | CERAMIC TILE | GYP. BD. | CERAMIC (COVED) | CERAMIC TILE | GYP. BD. | |
| UTILITY ROOM | 12"x12" VINYL TILE | GYP. BD. | 5" WOOD | NONE | GYP. BD. | |

DISTRICT OF COLUMBIA QUINTON WORRELL

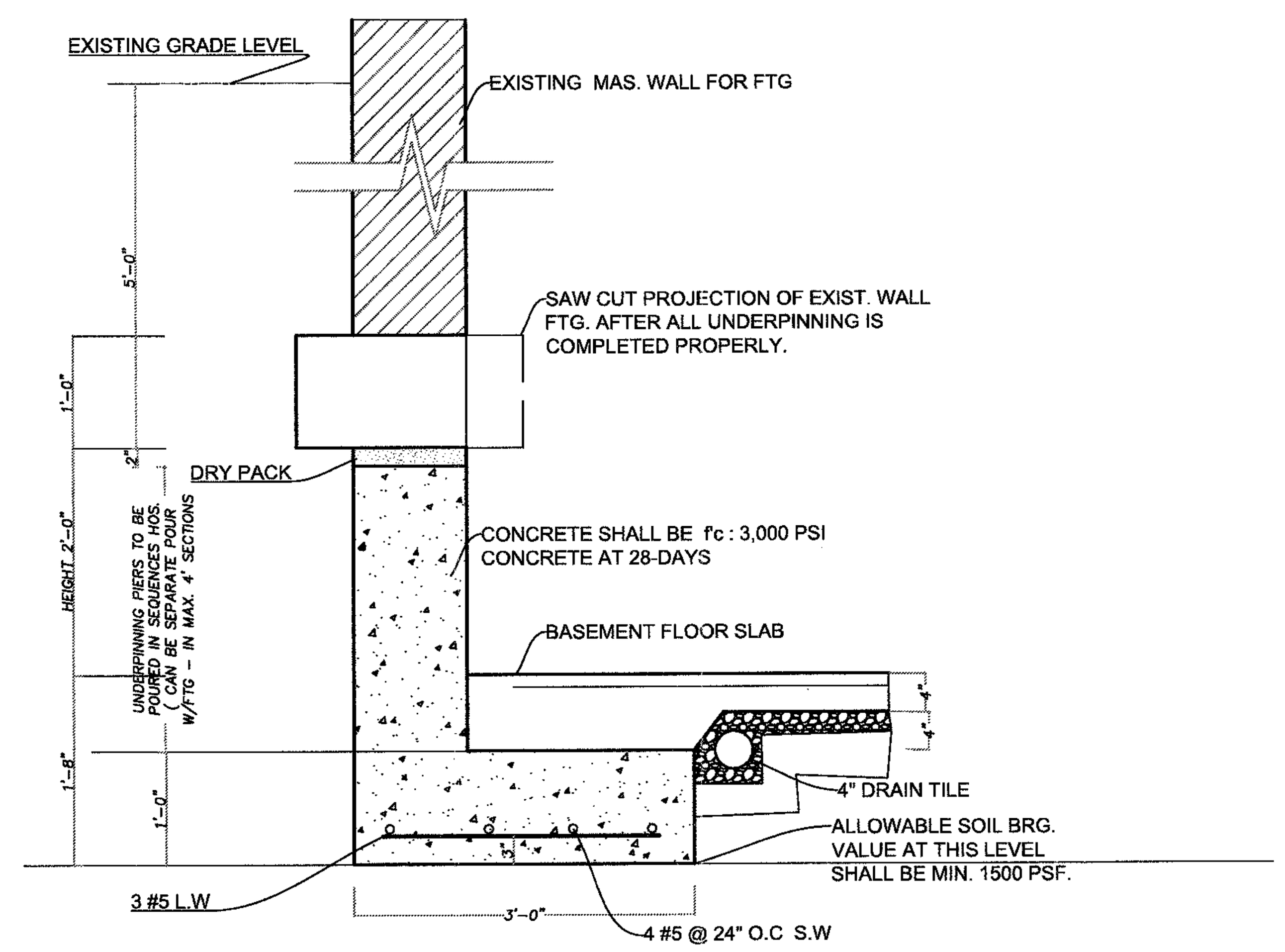
PARTITION LEGEND:
EXIST. PARTITION/WALL TO REMAIN
NEW PARTITION
EXIST. PARTITION TO BE REMOVED

HOUSE RENOVATION AND ADDITION
1117 ALLISON STREET N.W

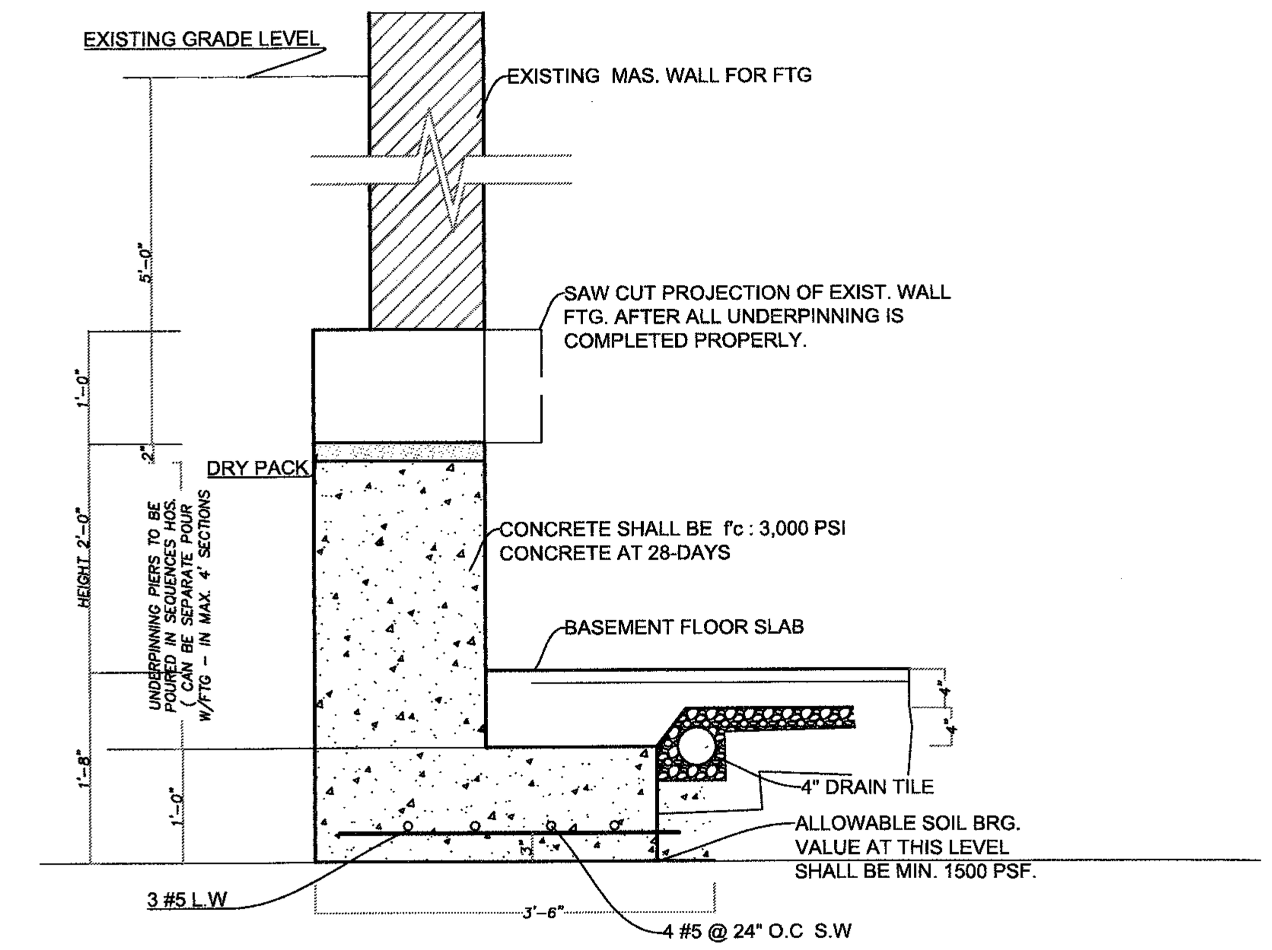
A4



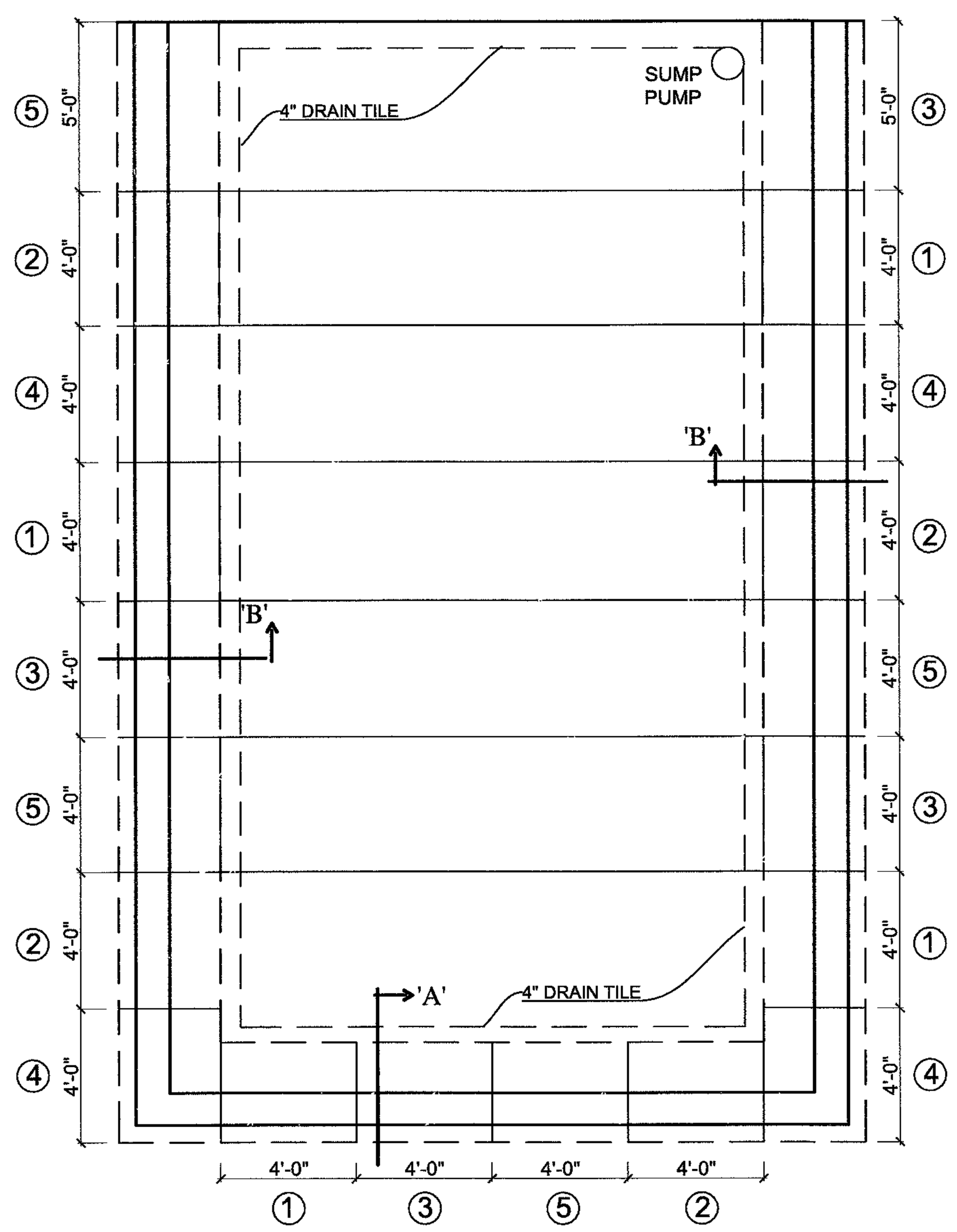

RETANING WALL DETAIL
SCALE: ¾" = 1'-0"



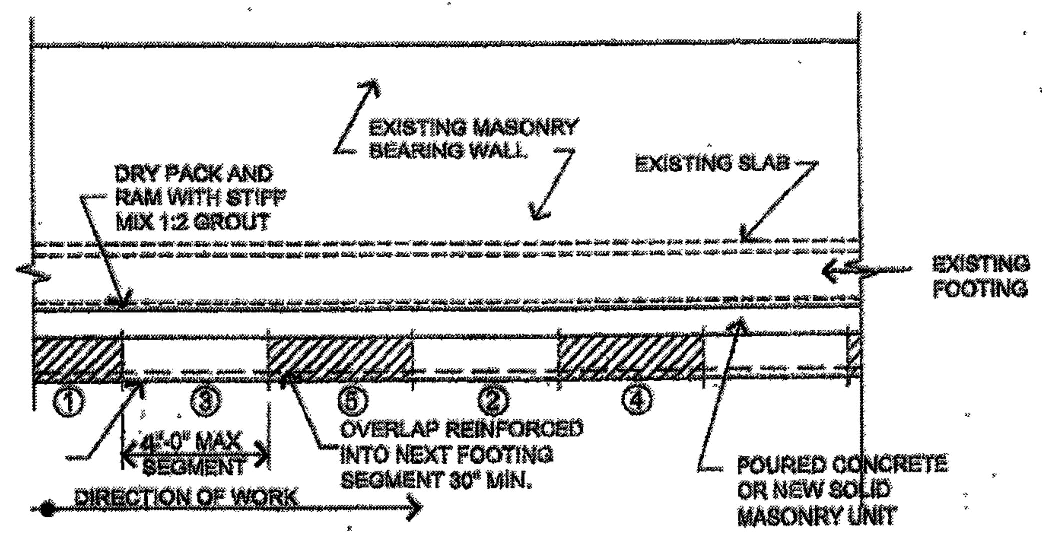

WALL UNDERPINNING DETAILS 'B'
SCALE: ¾" = 1'-0"




WALL UNDERPINNING DETAILS 'A'
SCALE: ¾" = 1'-0"




BASEMENT UNDERPINNING PLAN
SCALE: ¼"=1'-0"

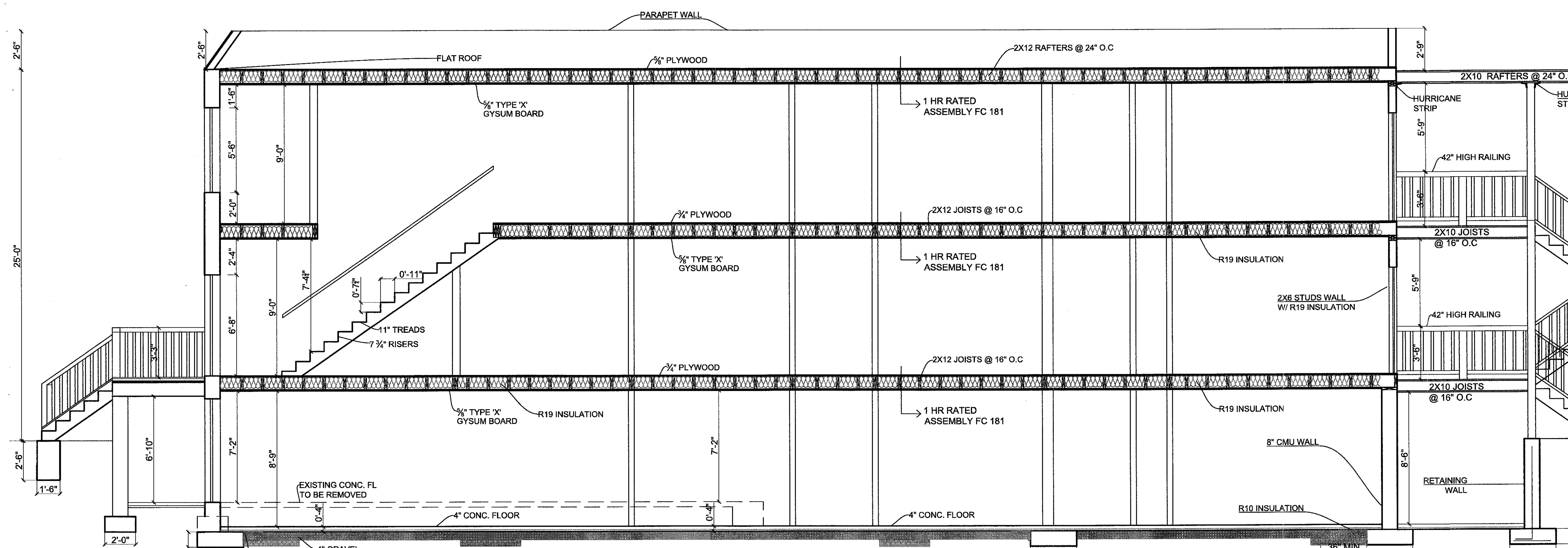



UNDERPINNED WALL DETAIL (TYP)

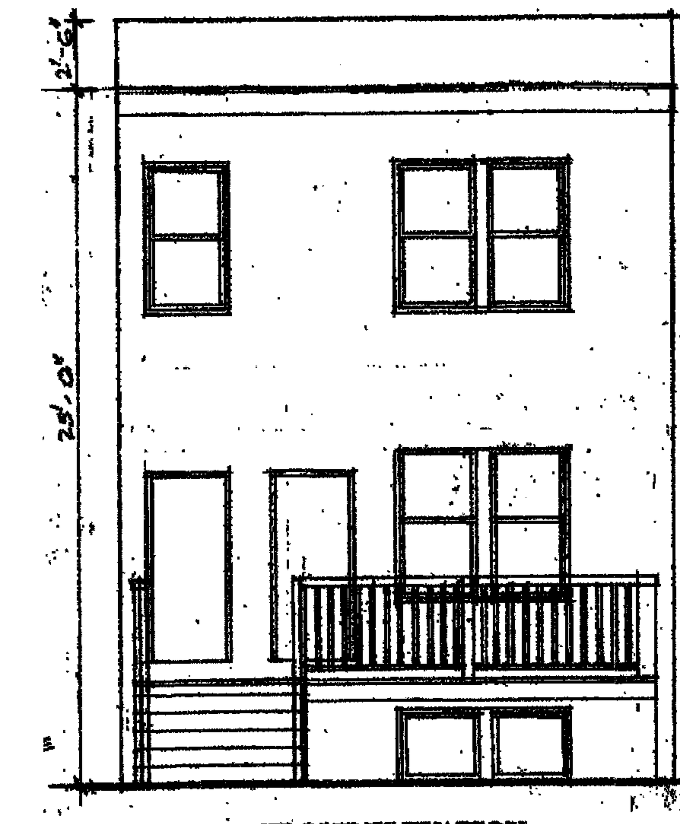
**Underpinning work shall be performed by a specialty contractor licensed, bonded and insured in Washington, DC and having a minimum of 5 years of continuous experience in this type of work and under similar conditions.**

**SHORING AND BRACING:** Shore/brace/support temporarily floor framing (joists, beams etc.) resting on the walls to be removed. The ground supporting the shores shall be made level and compacted to guard against settlements. Fasten and brace all shores securely for lateral stability. Check and ensure that all clamps, screws, pins and other components are properly engaged and the shores are tight against floor joists and the concert slabs and ground. Shoring/bracing shall not be subjected to eccentric and impact, shock and dynamic loads. Shores shall not be supported on sloping surfaces. Shores base plates shall be supported using skills, beams and cribbing in a way to ensure uniform distribution of shore loads.

| HOUSE RENOVATION AND ADDITION 1117 ALLISON STREET N.W | A5 |
| --- | --- |



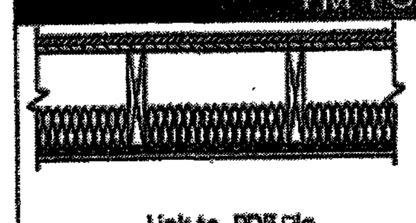

CROSS SECTION C-D
SCALE: ¼"=1'-0"




FRONT ELEVATION
SCALE: 1/8"=1'-0"

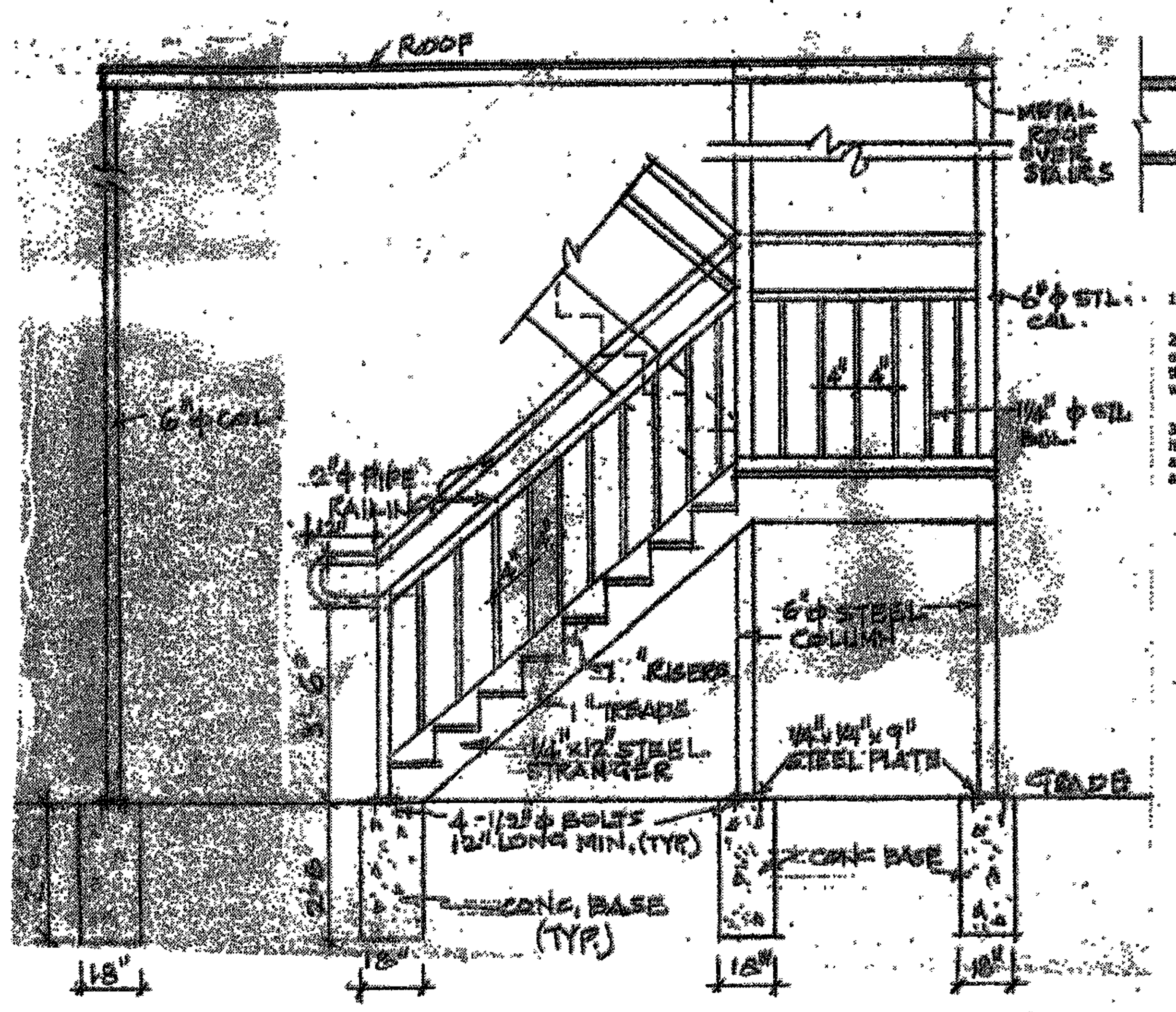
## Floor/Ceiling Assemblies - Wood Framing

| 1 Hour | Design# FM FC 181 | GA File# FC 5120 | STC - 50-54 Sound Test #CG HIOC3MT | IIC - 73 Test #CG HIOC3MT |
|---|---|---|---|---|



Link to .PDF file
Link to .DWG file
Link to .DWG/Text file

1/2" (12.7 mm) Fire-Shield C Gypsum Board applied at right angles to resilient furring channels 24" o.c. with 1" type S drywall screws 8" o.c. at ends and 12" o.c. at intermediate furring channels. Gypsum board end joints located midway between continuous channels and attached to additional pieces of channels 64" inches long with screws 8" o.c. Resilient furring channels applied at right angles to 2x10 wood joists 16" o.c. with 6d coated nails, 1-7/8" long, .085" shank, 1/4" heads, per joist. Wood joists supporting 5/8" plywood with exterior glue subfloor and 3/8" particle board. 3-1/2" fiberglass insulation friction fit in joist cavities supported alternately every 12" by wire rods and resilient furring channels. Sound and IIC tested with Carpet and pad.




## Design No. U305

June 27, 2014

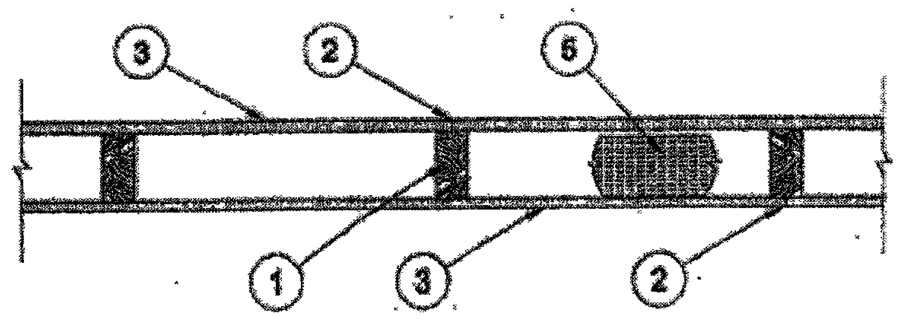
Bearing Wall Rating — 1 Hr

Finish Rating — See Items 3, 3A, 3D, 3E, 3F, 3G, 3H, 3J and 3L.

STC Rating - 56 (See Item 9)

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

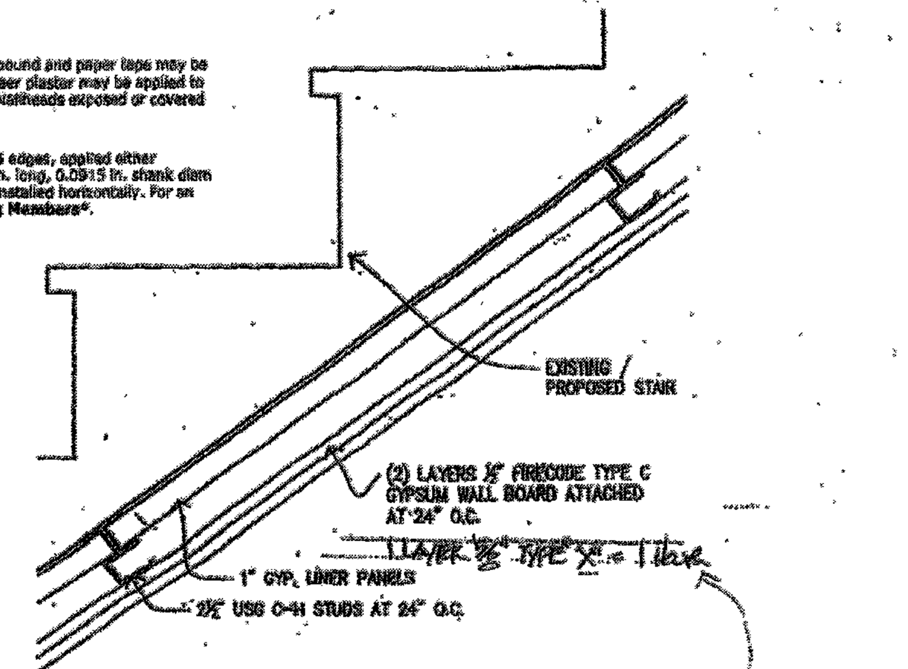



1. Wood Studs — Nom 2 by 4 in. spaced 16 in. OC max, effectively firestopped.

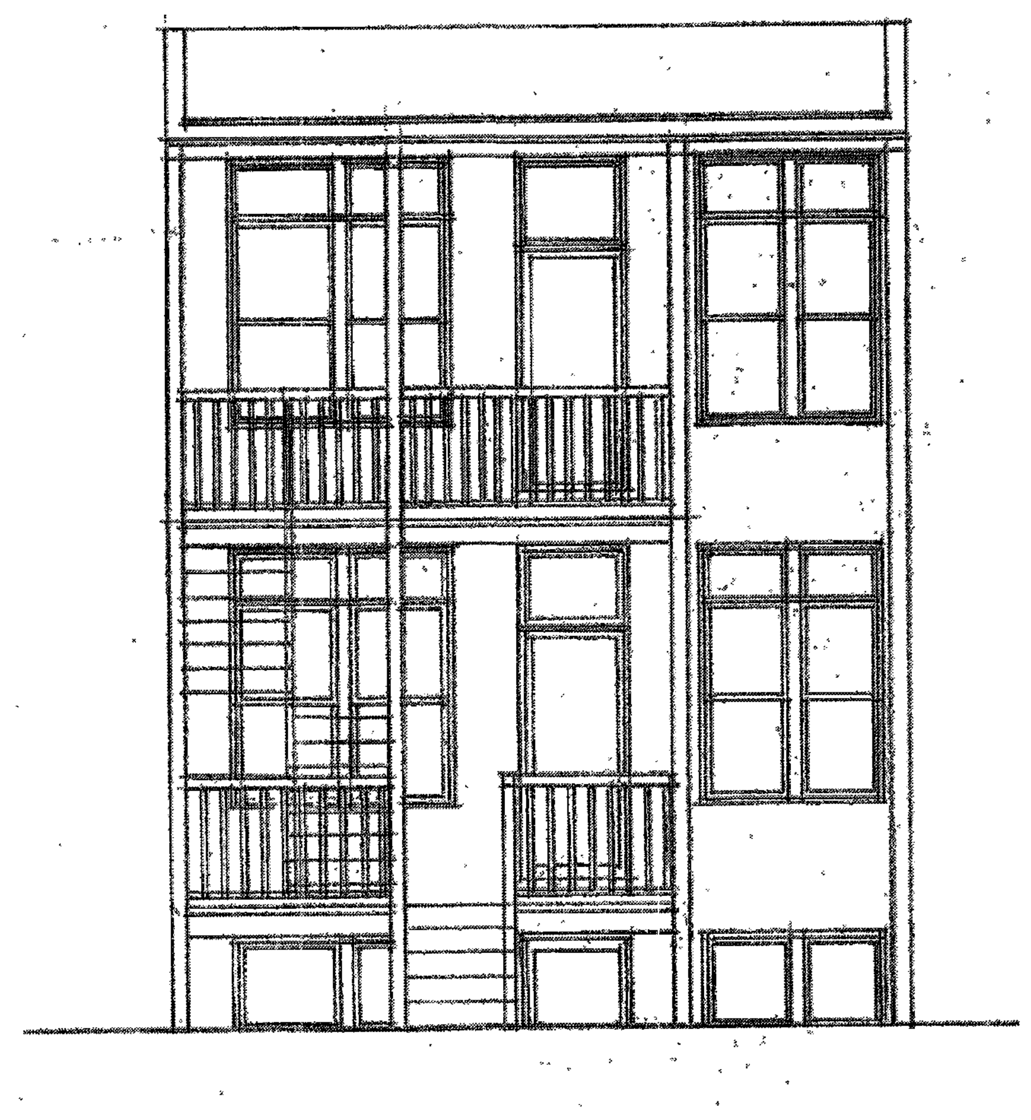
2. Joints and Nail-Heads — Joints covered with joint compound and paper tape. Joint compound and paper tape may be omitted when square edge boards are used. As an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard with the joints reinforced with paper tape. Nailheads exposed or covered with joint compound.

3. Gypsum Board* — 5/8 in. thick paper or vinyl surfaced, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths other than 48 in., gypsum panels are to be installed horizontally. For an alternate method of attachment of gypsum panels, refer to Item 6, 6A or 6B, Steel Framing Members*.

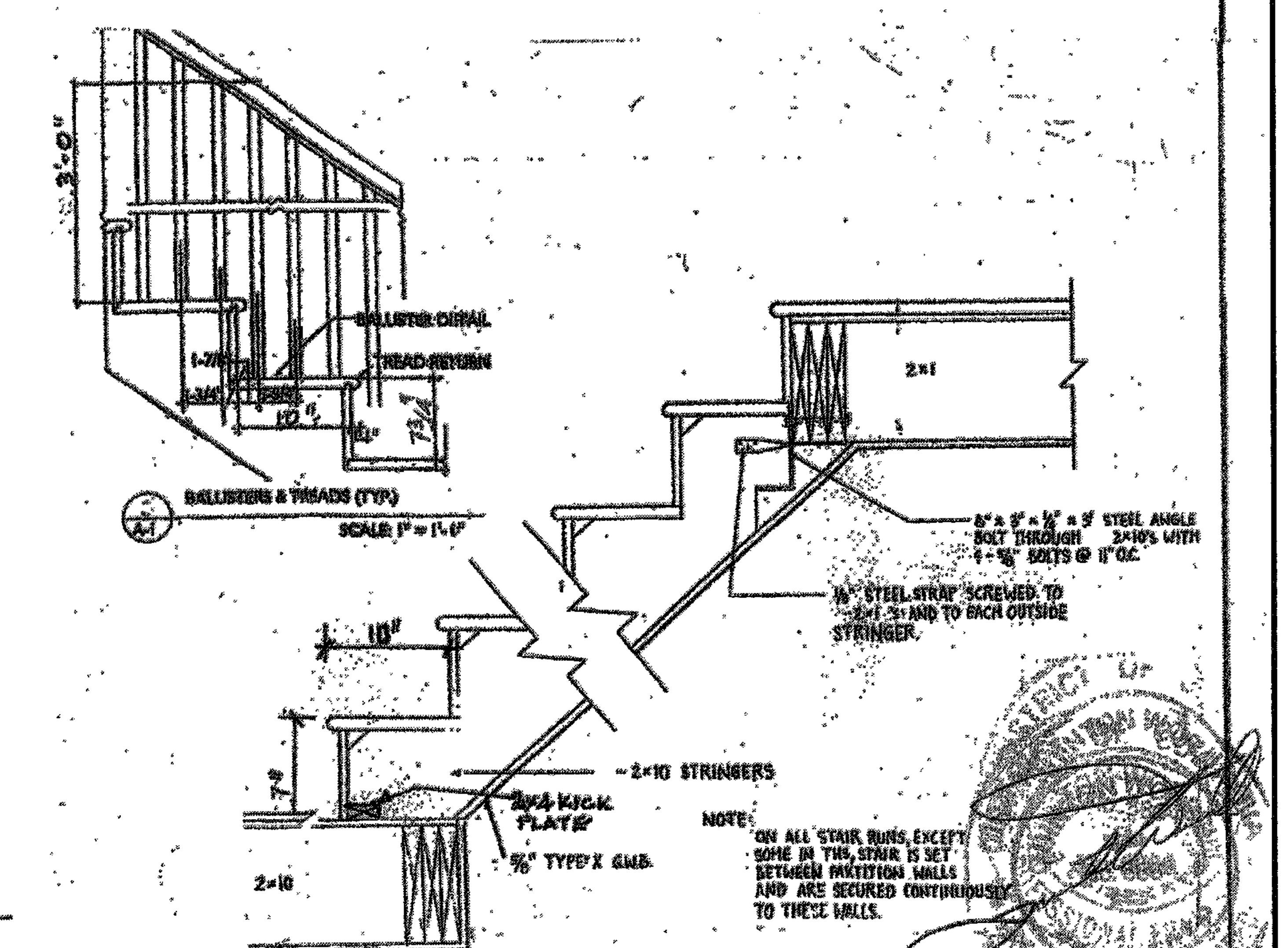
RATED SLOPED CEILING-BOCA NER-258




RATED SLOPED CEILING - 2 HR. / 1 HR
REPORT NO. NER-258
3" = 1'-0"



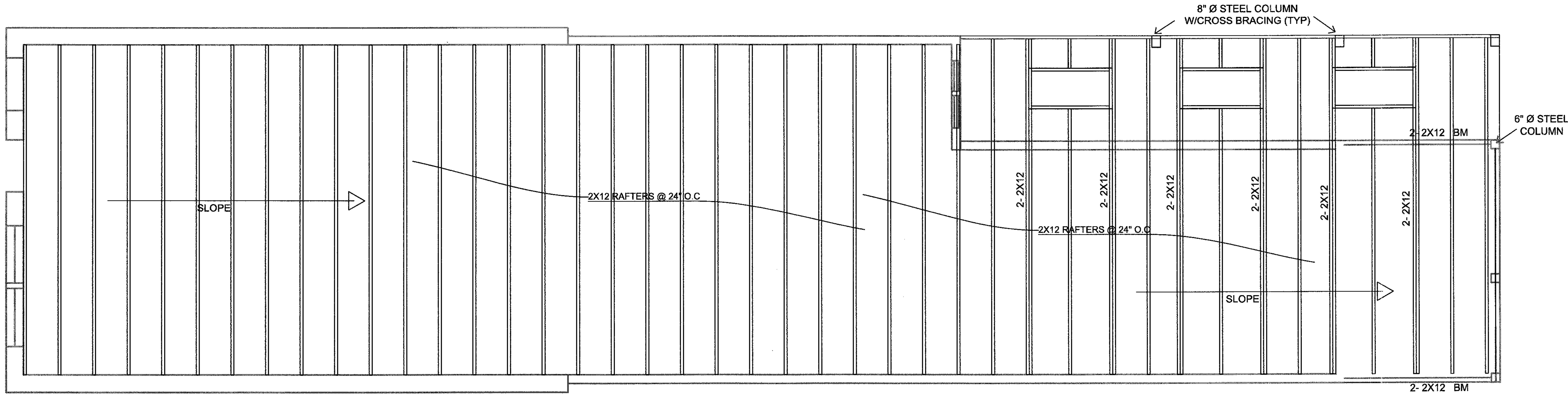
REAR ELEVATION
SCALE: ¼"=1'-0"



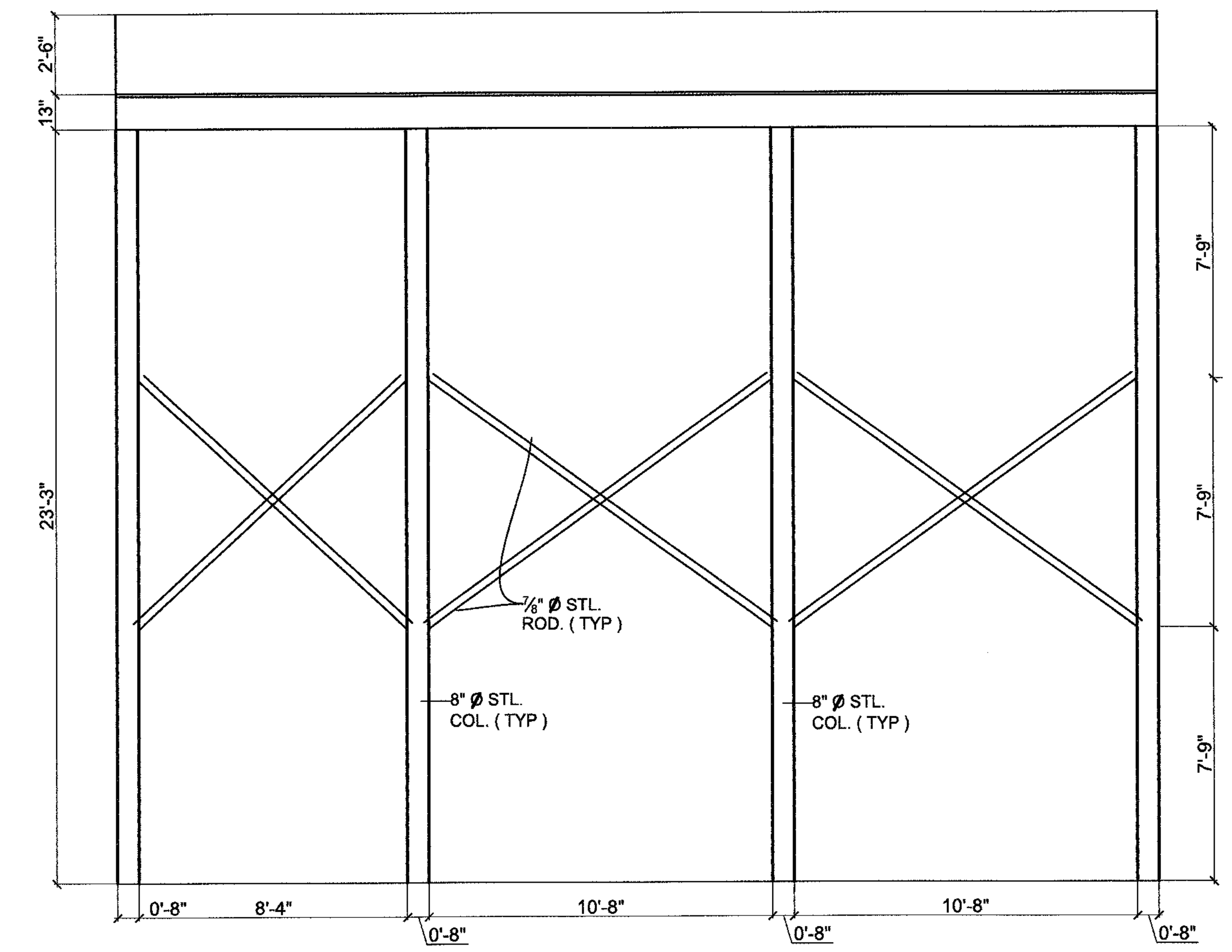

INTERIOR STAIR DETAIL

HOUSE RENOVATION
AND ADDITION
1117 ALLISON STREET N.W

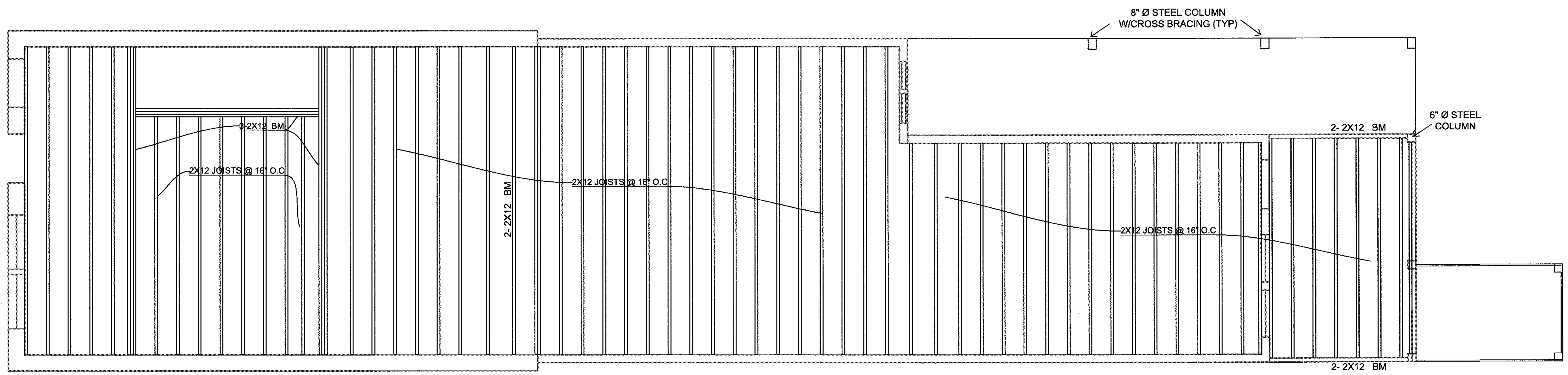
A6




ROOF FRAMING PLAN
SCALE: ¼"=1'-0"

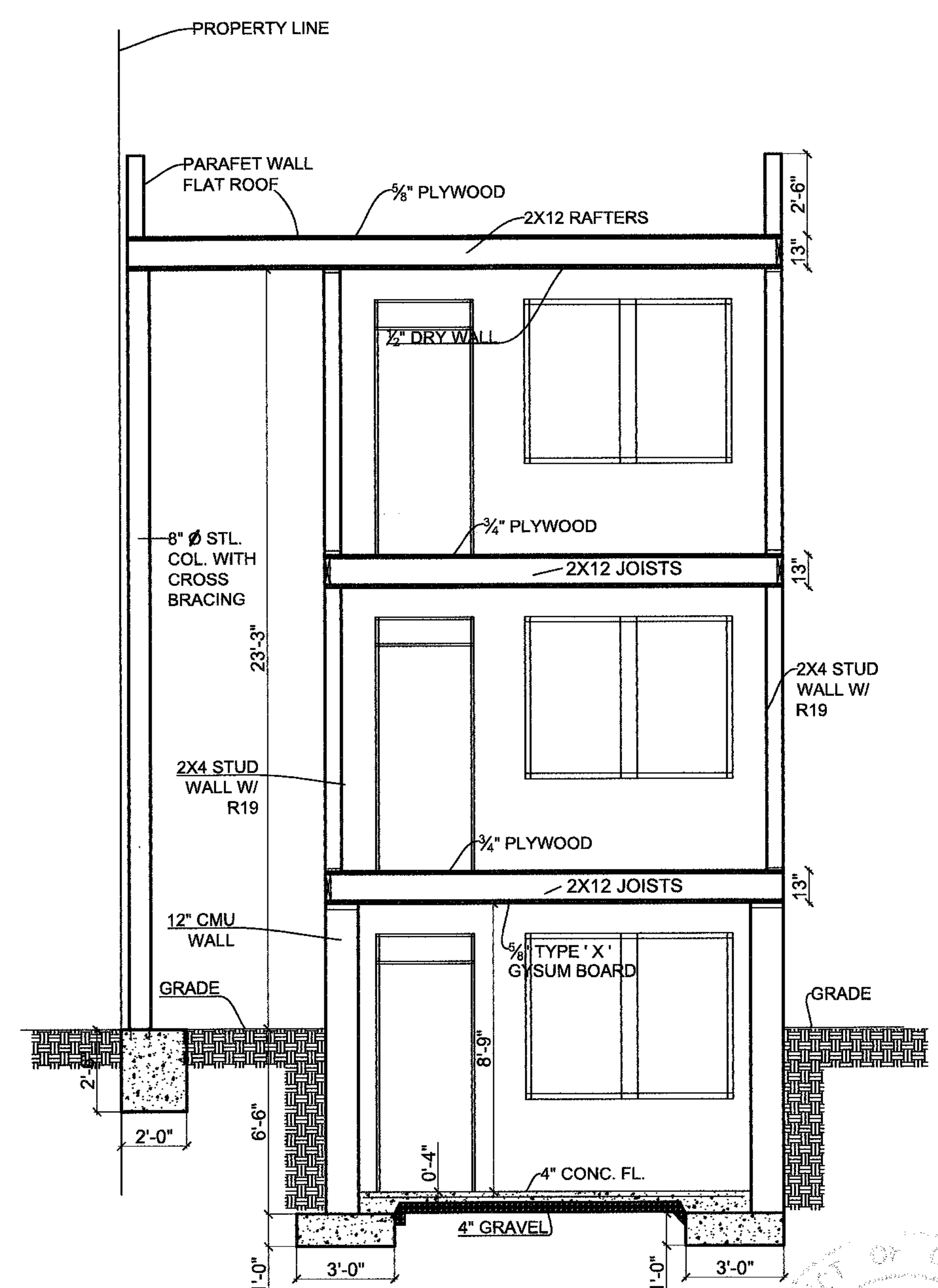


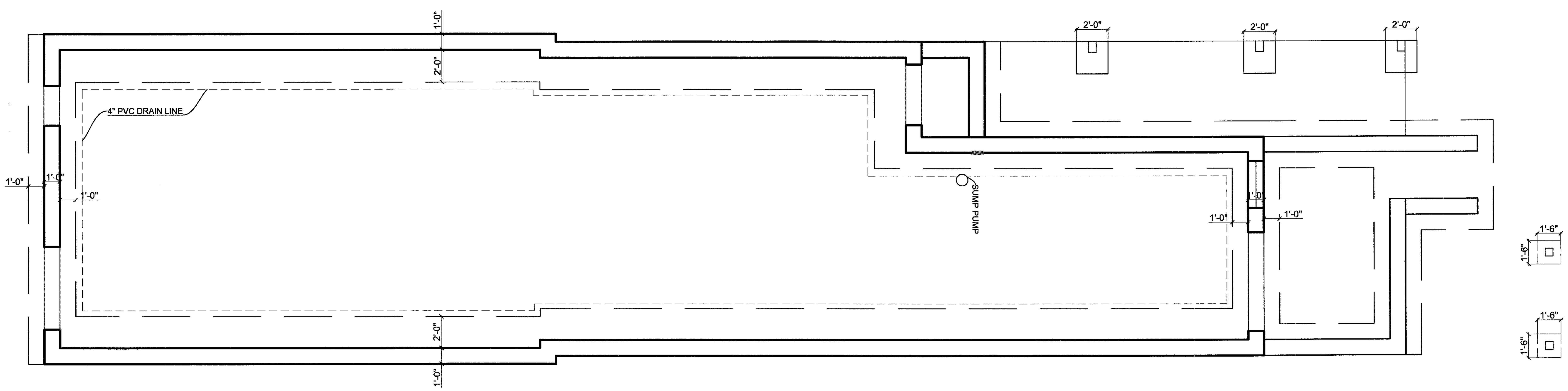

WEST ELEVATION
SCALE: ¼"=1'-0"




2ND FLOOR FRAMING PLAN
SCALE: ¼"=1'-0"

NOTE: 1ST FLOOR FRAMING MEMBERS
SAME AS 2ND FLOOR

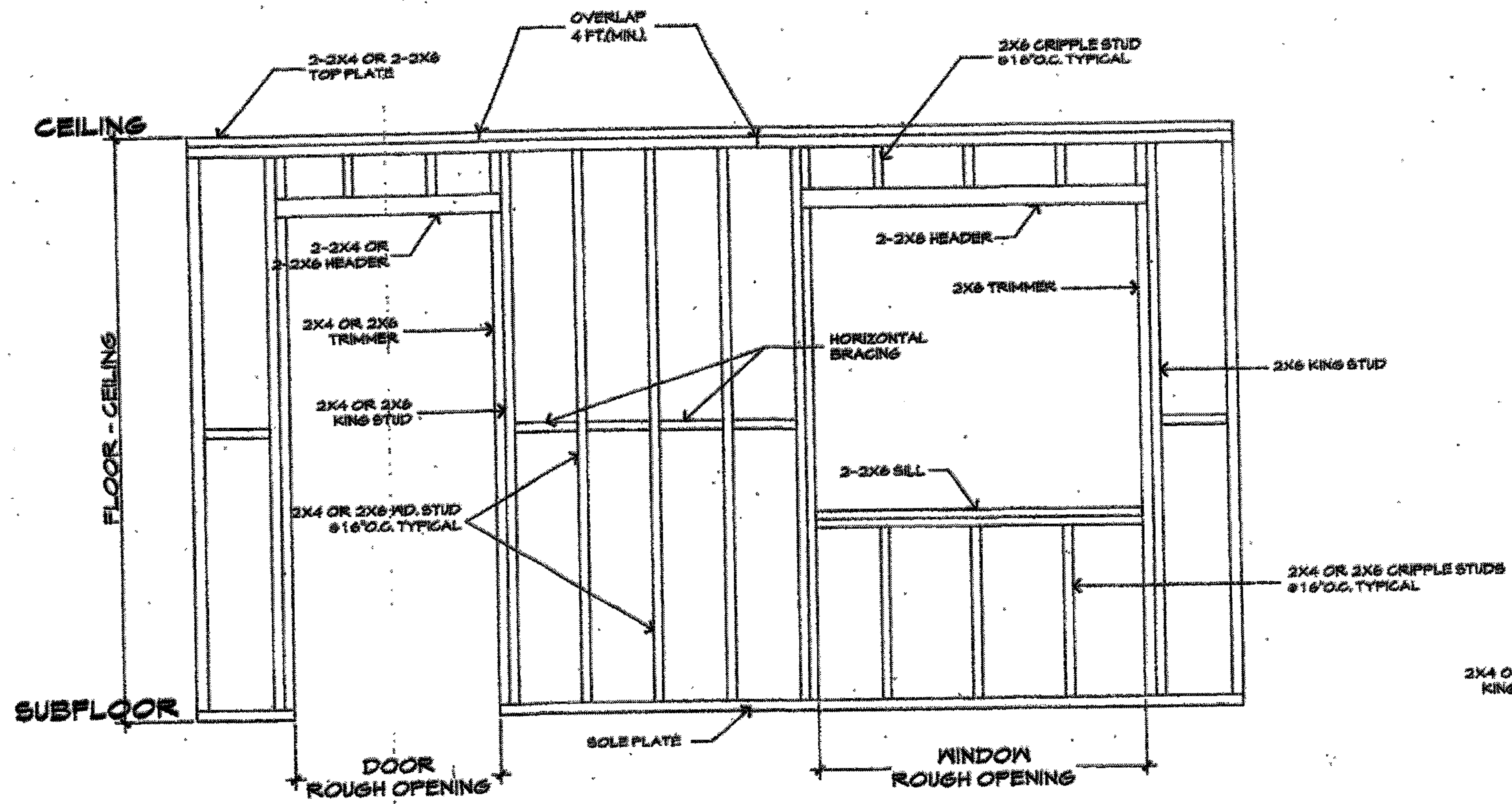


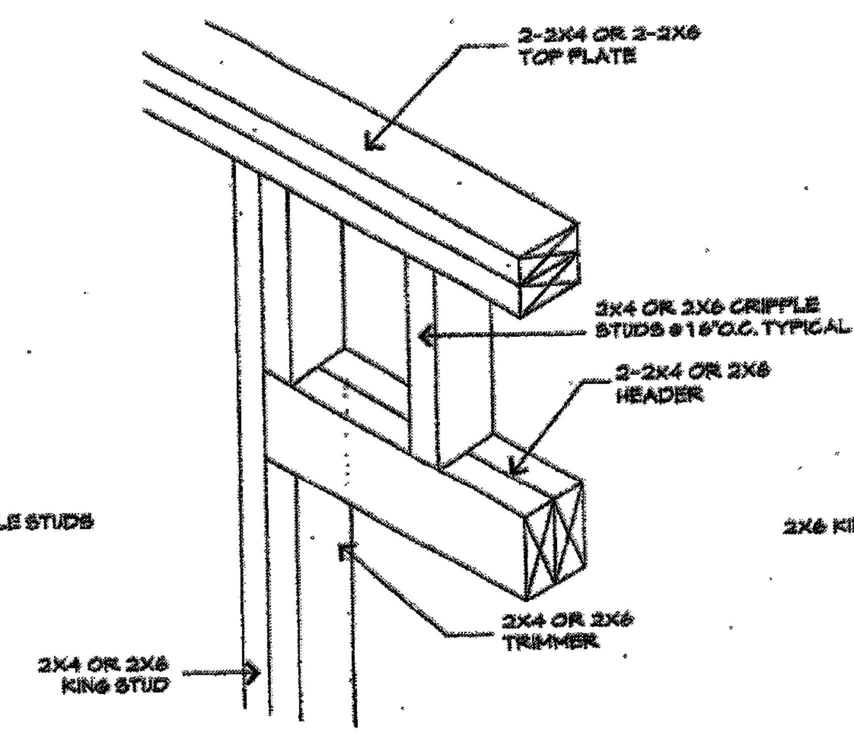

FOUNDATION PLAN
SCALE: ¼"=1'-0"

HOUSE RENOVATION
AND ADDITION
1117 ALLISON STREET N.W

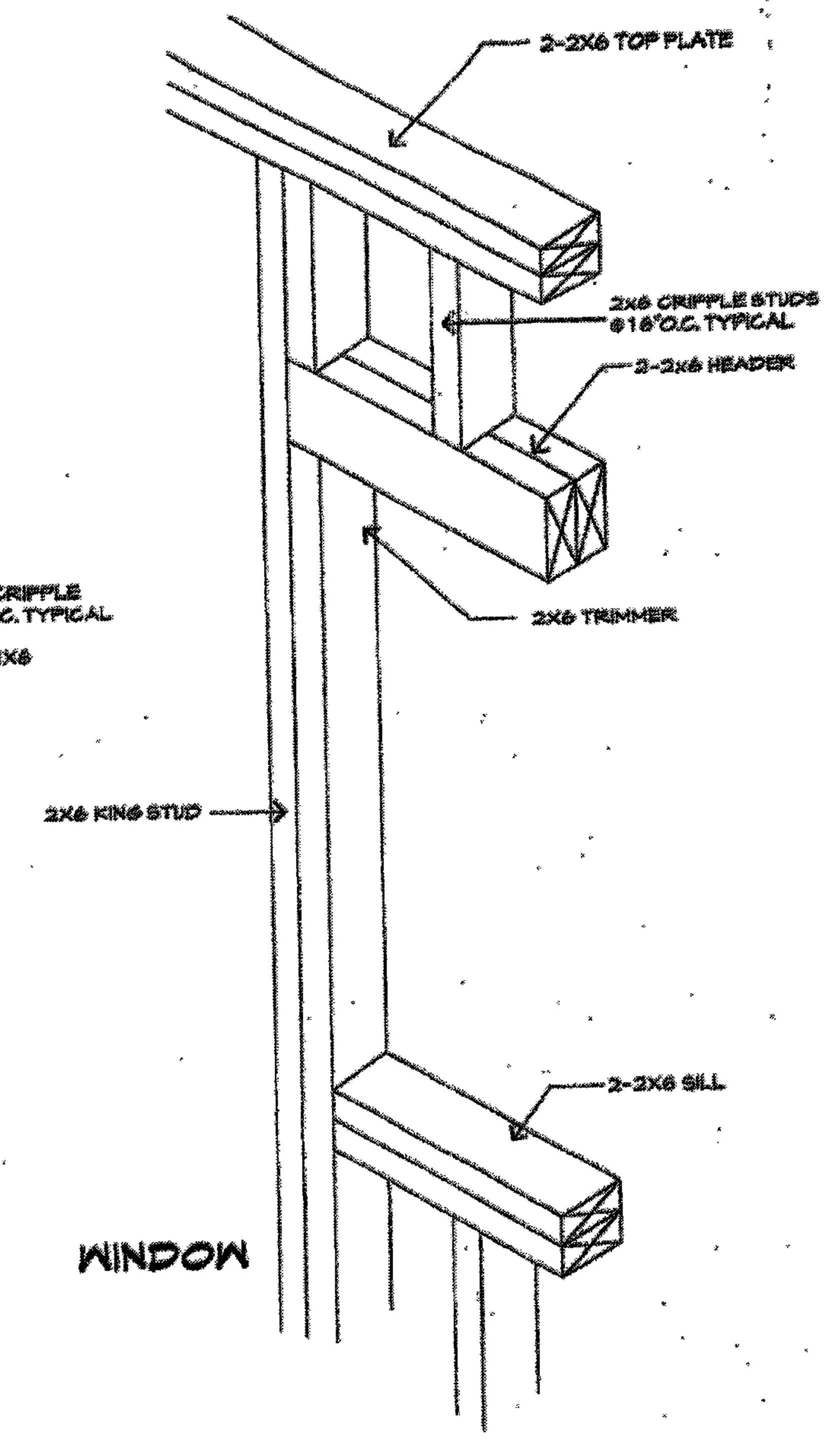
A7




## TYPICAL WALL FRAMING
NOT TO SCALE

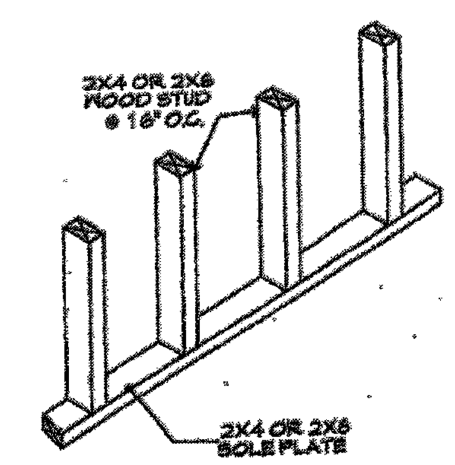



DOOR HEAD

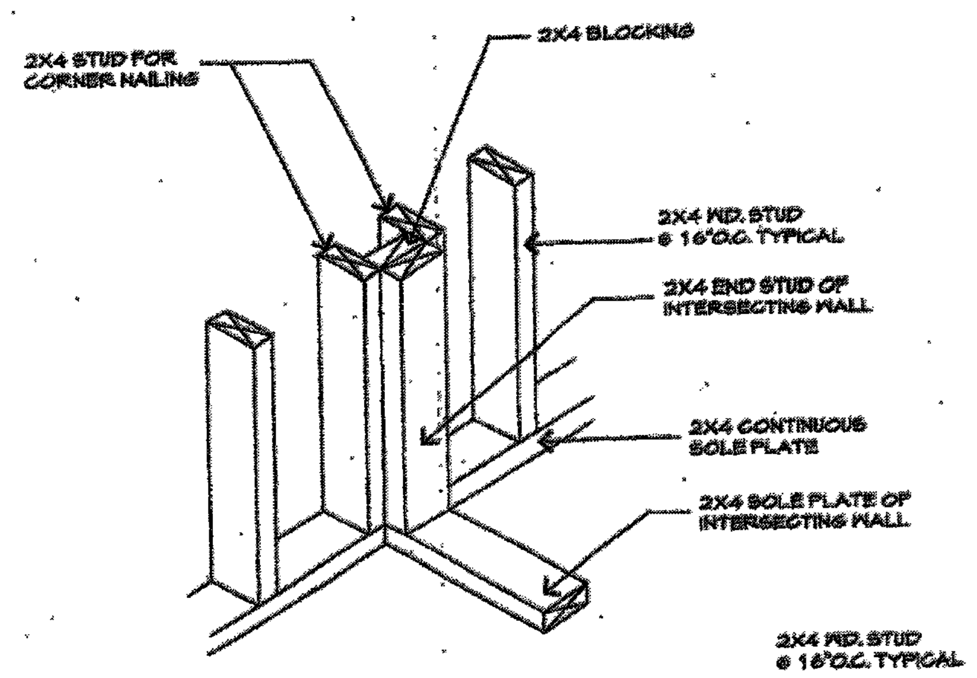


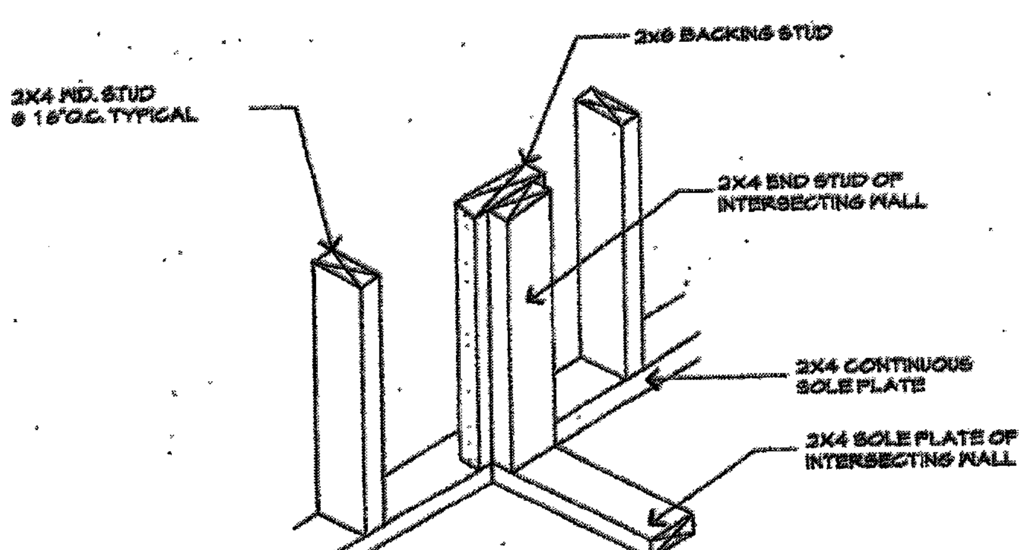

WINDOW

## FRAMING AT DOOR AND WINDOW LOCATION
NOT TO SCALE

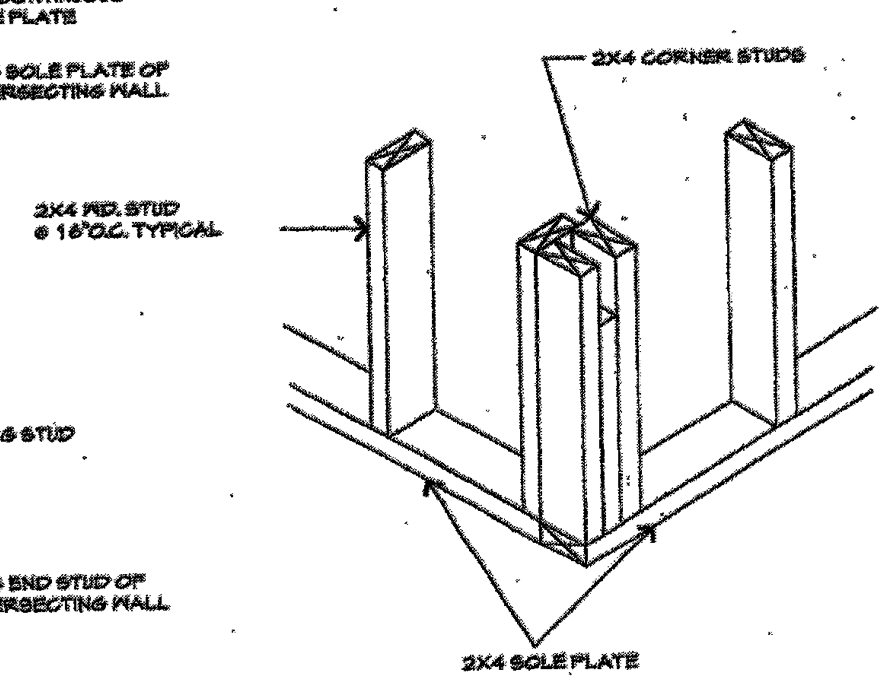



## SOLE PLATE
NOT TO SCALE

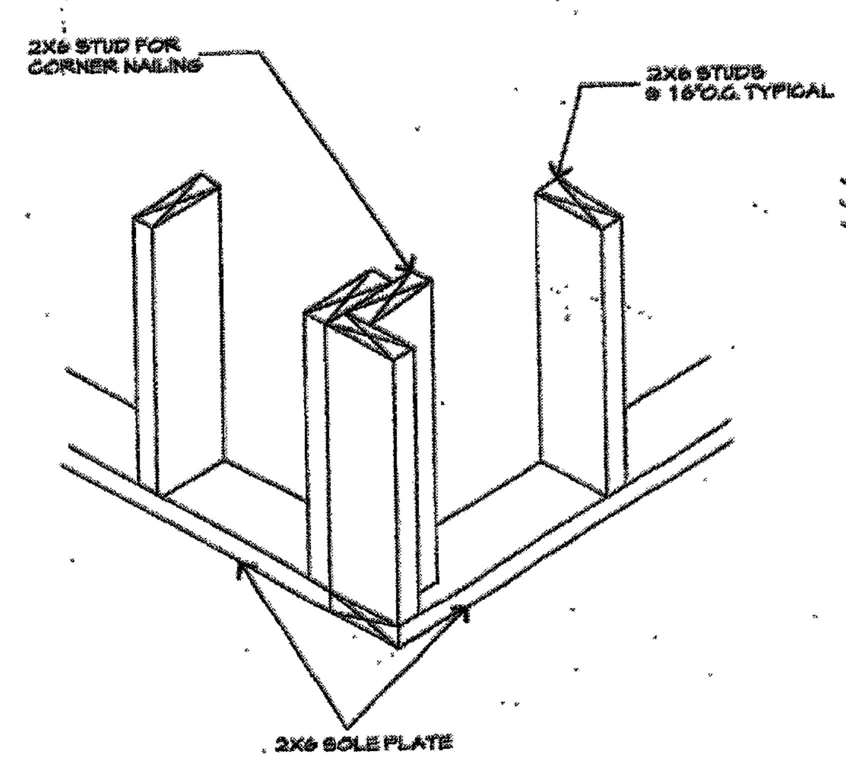


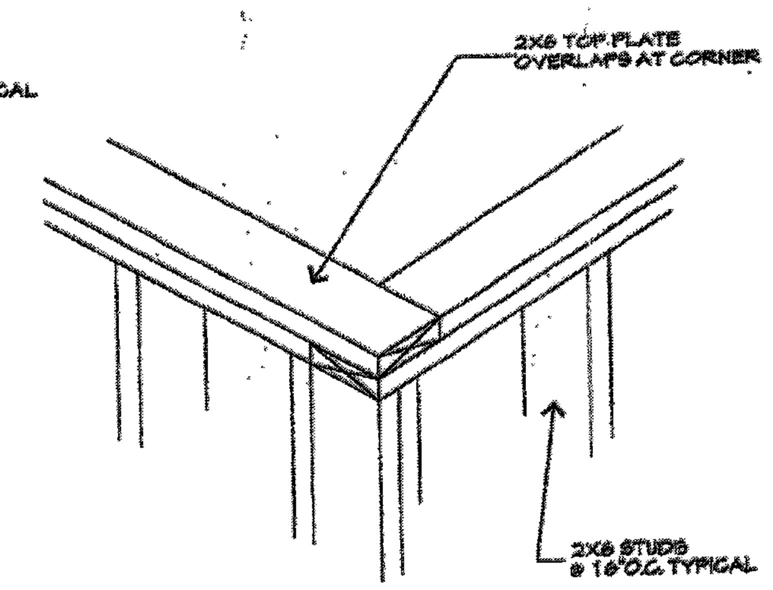

## TYPICAL INTERIOR WALL FRAMING DETAILS
NOT TO SCALE




FRAMING AT BOTTOM CORNER

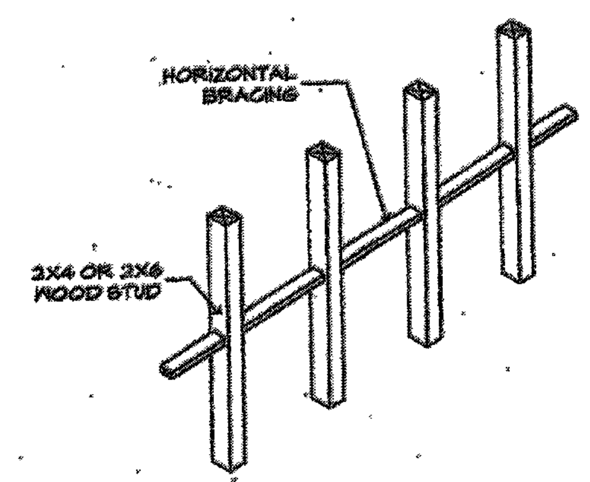



FRAMING AT BOTTOM CORNER



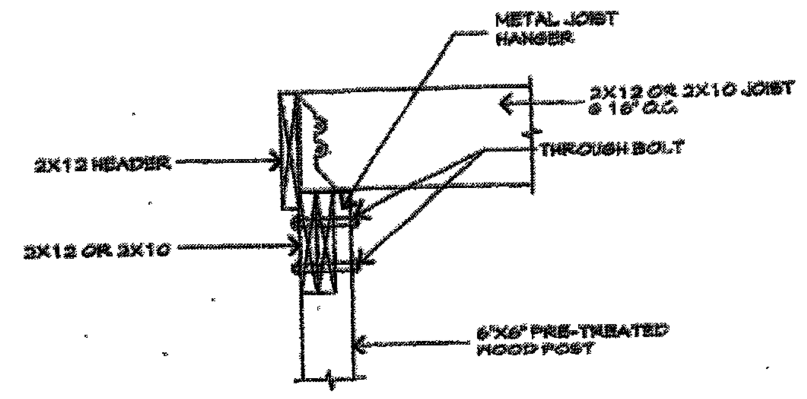

FRAMING AT TOP CORNER

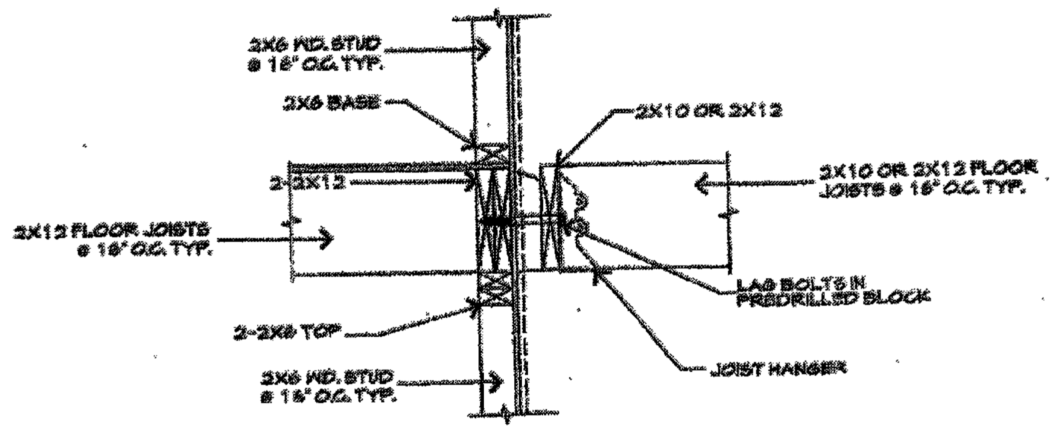
## TYPICAL EXTERIOR WALL FRAMING DETAILS
NOT TO SCALE

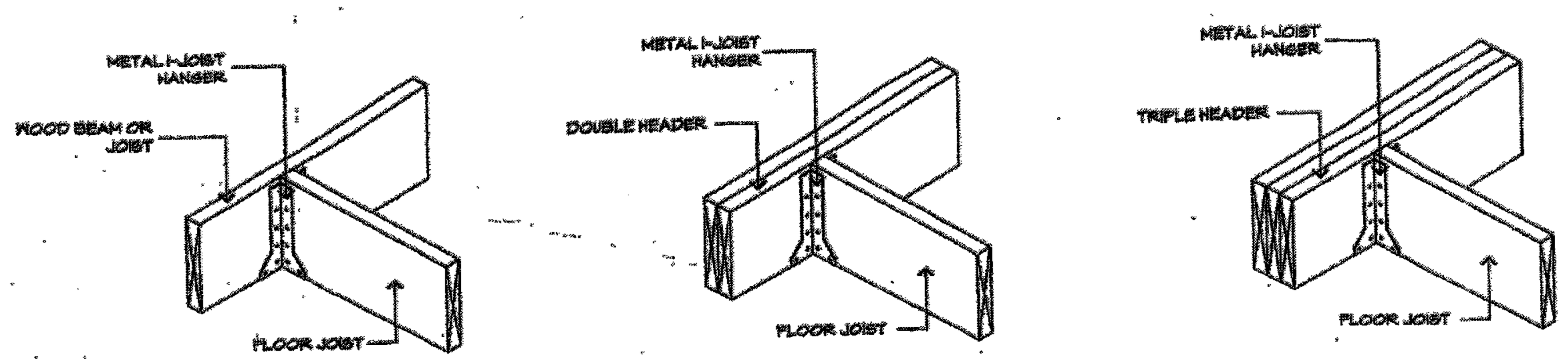



## HORIZONTAL BRACING
NOT TO SCALE

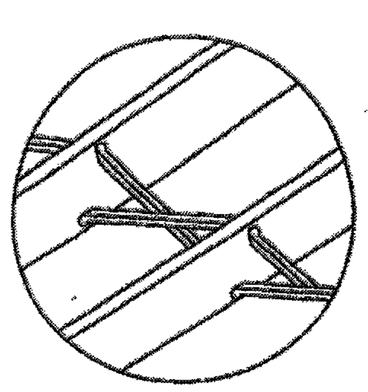
| | |
|---|---|
| HOUSE RENOVATION<br>AND ADDITION<br>1117 ALLISON STREET N.W | A8 |



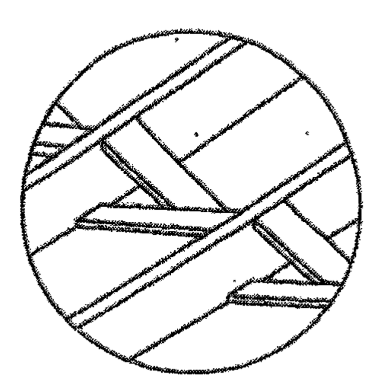




FLOOR JOIST CONNECTIONS
NOT TO SCALE



METAL BRIDGING

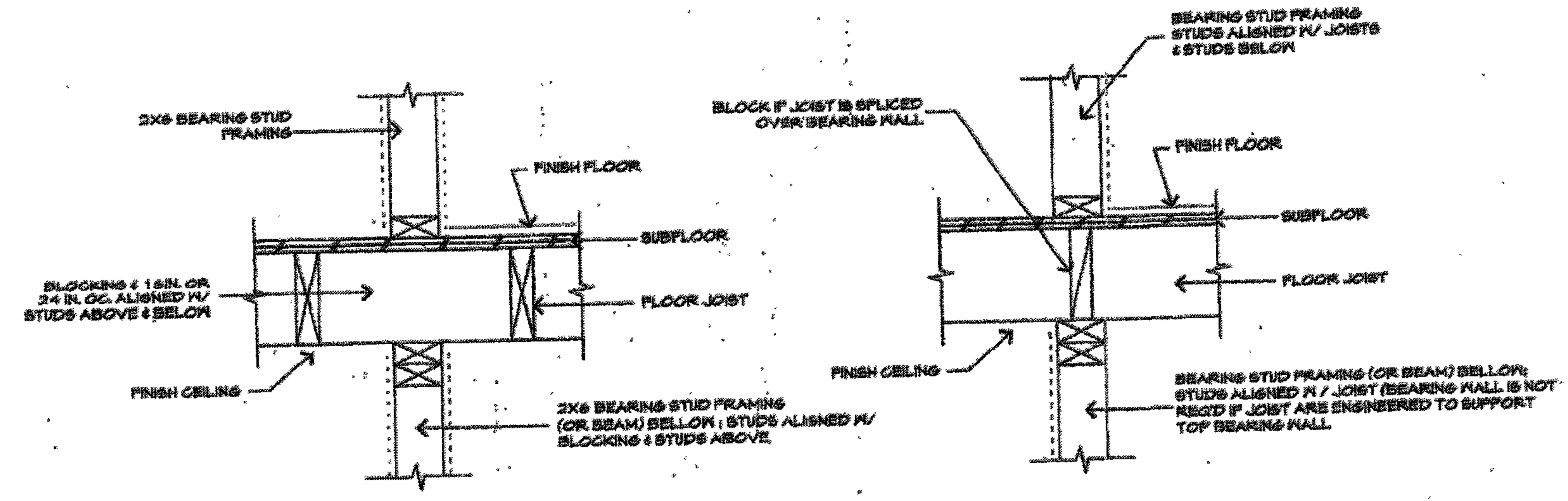
METAL PIECES SHOULD NOT TOUCH EACH OTHER.



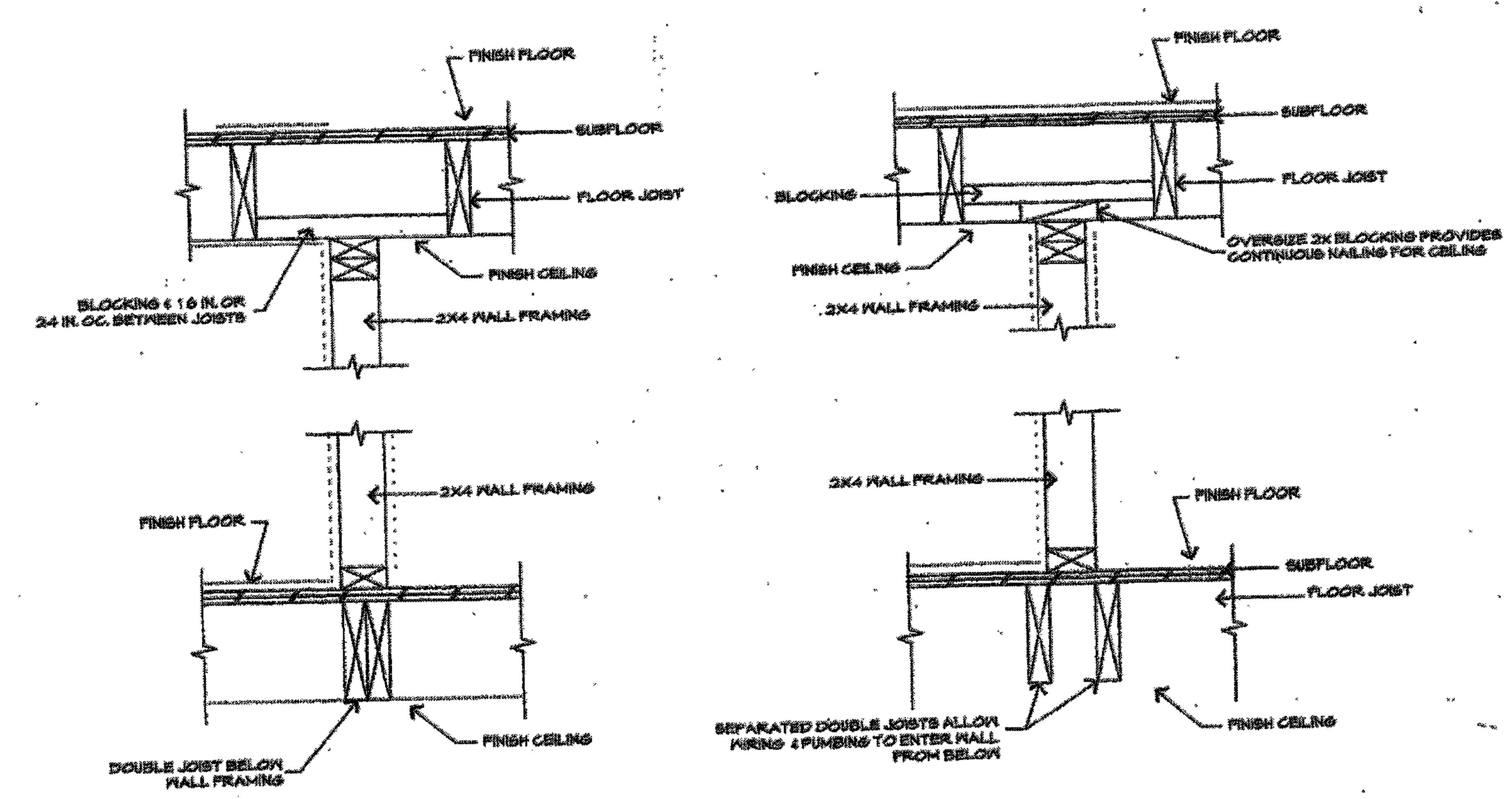
CROSS BRIDGING

5/4X3 OR 5/4X4 OR 2X2 OR 1X4 BOARDS ARE NAILED IN A CROSS PATTERN BETWEEN JOISTS. PIECES SHOULD NOT TOUCH EACH OTHER.

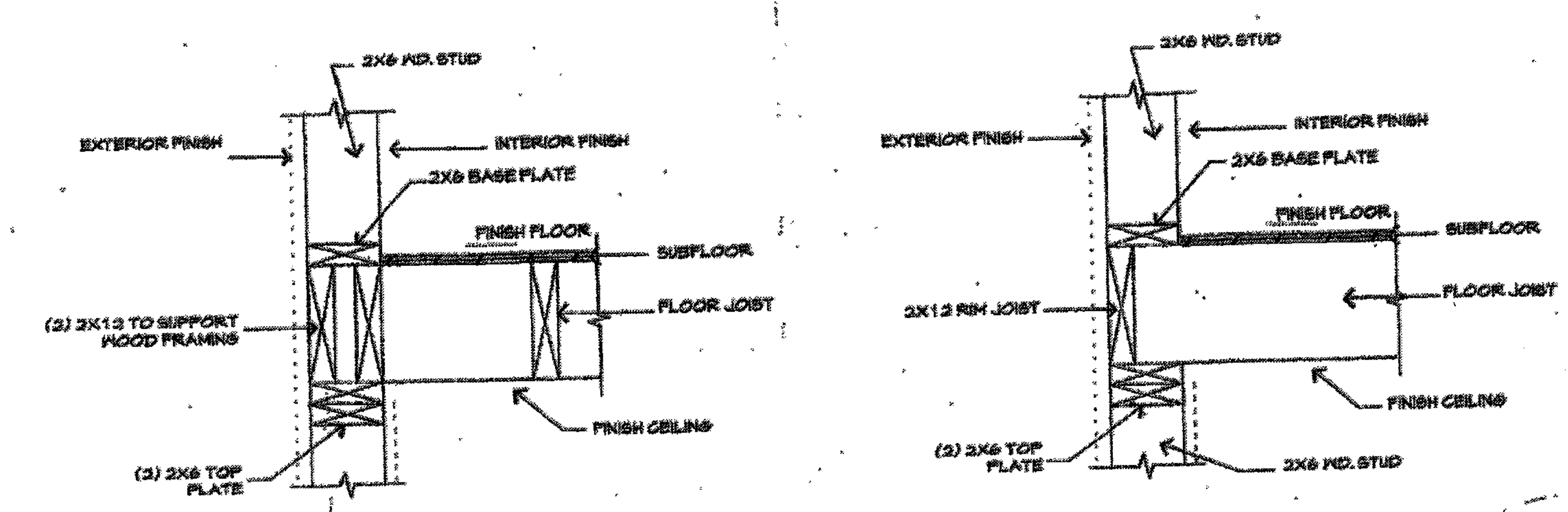
FLOOR JOIST BRIDGING
NOT TO SCALE




JOISTS & BEARING FRAMING




JOISTS & STUD FRAMING
(INTERIOR)

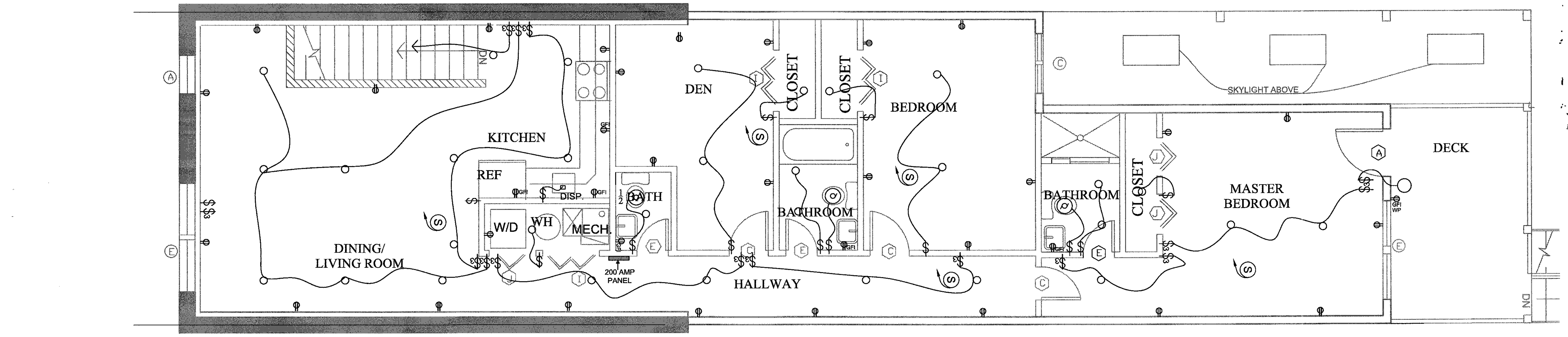



JOISTS-STUD FRAMING
(EXTERIOR)

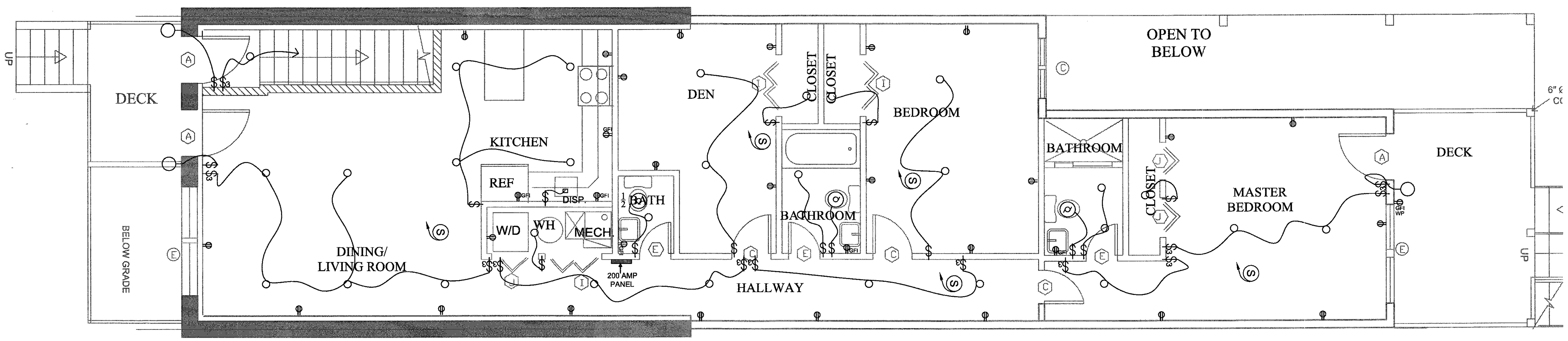
WALL-FLOOR DETAIL
NOT TO SCALE

| | |
|---|---|
| HOUSE RENOVATION<br>AND ADDITION<br>1117 ALLISON STREET N.W | A9 |

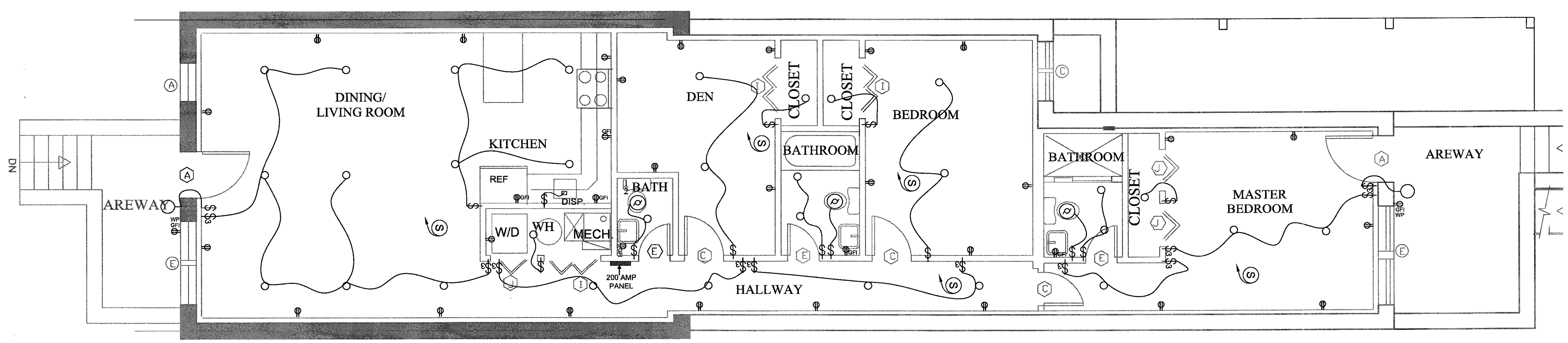
| PANEL | | | | | | | | SERVICE: 208/120V., 1PH., 3W. | | | | | ENTER TORB'T AT: | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FEEDER: 3#1+1#6G. | | | | | | | | ☐ MAIN BRK. 200 AMP ☒ MLO | | | | | BUS: 225A., 1ϕ., 3W. | |
| | | | | | | | | MTG. RECESSED | | | | | LOCATION: | |
| DESCRIPTION | LOAD KVA ϕA | LOAD KVA ϕB | POLE | TRIP | CKT | A B | CKT | TRIP | POLE | LOAD KVA ϕA | LOAD KVA ϕB | DESCRIPTION | | |
| LIGHTS | 1.2 | | 1 | 20 | 1 | | 2 | 20 | 1 | 1.5 | | KITCHEN RECEPTACLES | | |
| BATHROOM RECEPTACLES | | 1.5 | 1 | 20 | 3 | | 4 | 20 | 1 | | 1.5 | KITCHEN RECEPTACLES | | |
| BATHROOM RECEPTACLES | 1.5 | | 1 | 20 | 5 | | 6 | 20 | 1 | 1.5 | | DINNING RM. RECEPT. | | |
| CLOTHES DRYER | | 2.5 | 2 | 30 | 7 | | 8 | 20 | 1 | | 1.4 | CLOTHES WASHER | | |
| | 2.5 | | | | 9 | | 10 | 20 | 1 | 1.5 | | LAUNDRY RECEPTACLES | | |
| HOT WATER HEATER | | 2.5 | 2 | 30 | 11 | | 12 | 15 | 1 | | 0.9 | AHU | | |
| | 2.5 | | | | 13 | | 14 | 15 | 1 | 1.0 | | RECEPTACLES | | |
| CONDENSING UNIT | | 1.1 | 2 | 15 | 15 | | 16 | 15 | 1 | | 1.3 | RECEPTACLES | | |
| | 1.1 | | | | 17 | | 18 | 15 | 1 | 1.5 | | RECEPTACLES | | |
| DISPOSAL | | 1.2 | 1 | 20 | 19 | | 20 | 15 | 1 | | 1.3 | RECEPTACLES | | |
| DISHWASHER | 1.4 | | 1 | 20 | 21 | | 22 | 15 | 1 | – | | SPARE | | |
| SPACE ONLY | | | 1 | – | 23 | | 24 | – | 1 | | – | SPACE ONLY | | |
| TOTAL (KVA) = 32.4 | | | ϕA = 17.2 | | | | | | | ϕB = 15.2 | | | | |
| AIC RATING 10 KAIC | | | | | | | AMPS/PHASE AT 208/120 VOLT (DEMAND) | | | | | | | |
| NOTE: PROVIDE #14AWG CONDUCTORS FOR 15A CIRCUITS, #12 AWG FOR 20A CIRCUITS, #10 AWG FOR 30A CIRCUITS. | | | | | | | | | | | | | | |




PROPOSED SECOND FLOOR PLAN
SCALE: ¼"=1'-0"




PROPOSED FIRST FLOOR PLAN
SCALE: ¼"=1'-0"




PROPOSED BASEMENT FLOOR PLAN
SCALE: ¼"=1'-0"

LOAD CALCULATIONS ( TYPICAL OF EACH UNIT )

| | | |
|---|---|---|
| GENERAL LIGHTING | ( 1933X3 ) | 5799 VA |
| SMALL APPL. | BRANCH CIR. & LAUND. CIR. ) | 4500VA |
| OTHER APPL. | WATER HEATER<br>DRYER<br>RANGE<br>DISH WASHER<br>DISPOSAR<br>MACROWAIVE<br>GAS FURN | 26340 VA |
| TOTAL | | 36639 VA |
| FIRST 10000 @ 100% | | 10000 VA |
| 36639 - 10000 = 26639 X 0.4 | | 10656 VA |
| 10000 + 10656 = 20656 / 240 | | 86 AMP |
| | USE 200 AMP | |

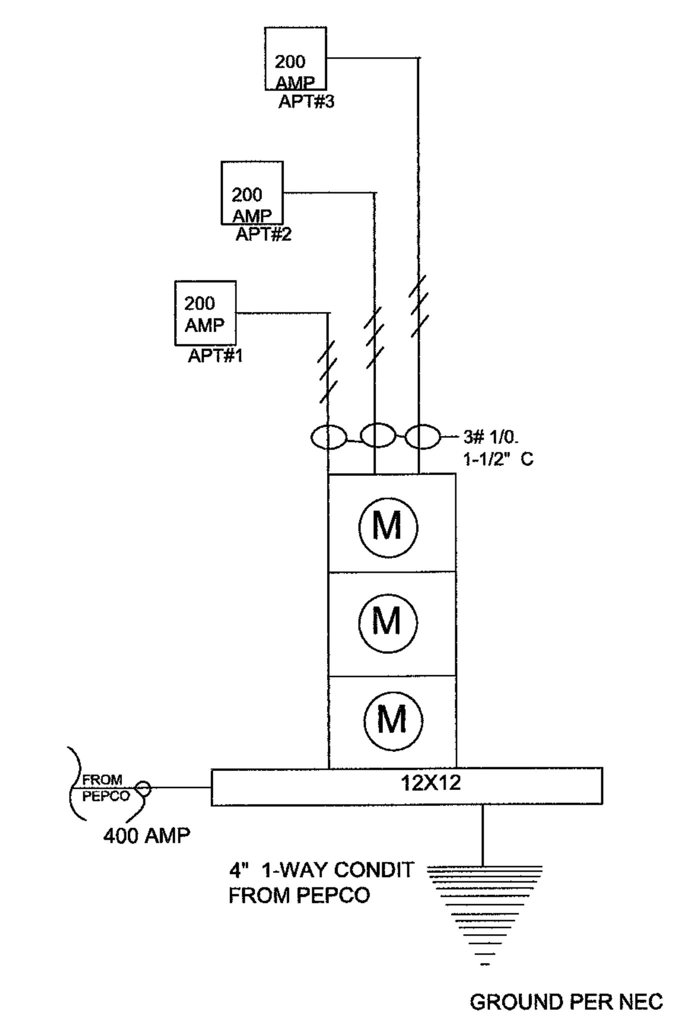
USE 600 AMP FOR FEEDER

FOR 3 UNITS = 86X3 = 258

MULT. UNIT FACTOR = 0.45 X 258 = 116 AMPS

FOR FUTURE DEMAND = 116 X 1.25 = 145 AMPS

USE 400 AMPS




POWER RISER DIAGRAM
SCALE: N.T.S

NOTE:
- PROVIDE AFCI PROTECTION IN ALL BEDROOM OUTLETS AND RECEPTACLES AS PER NEC 2011 EDITION ART. 210.12 B AND IRC 2012 E3802.12.

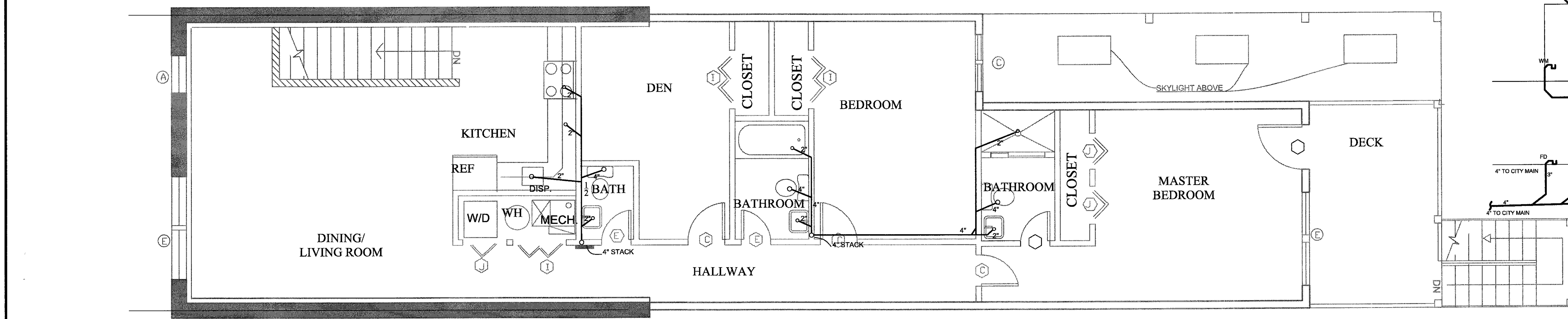
- ALL RECEPTACLE OUTLETS IN THE DWELLING SHALL BE OF 'AFCI' TYPE UNO.

## ELECTRICAL LEGEND

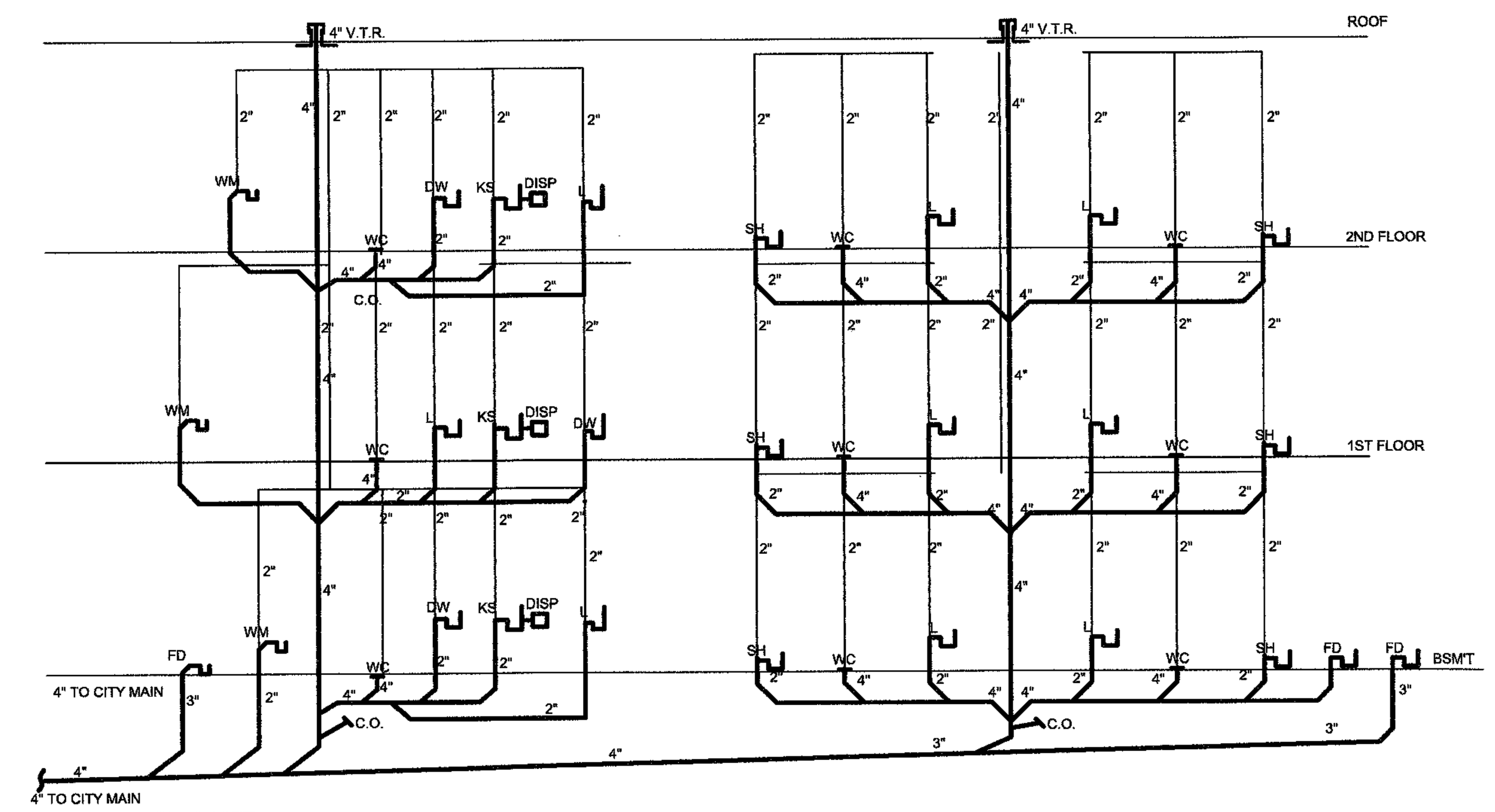
- ELECTRICAL PANEL
- $ SINGLE POLE SWITCH
- $DM DIMMER SWITCH
- $3 THREE-WAY SWITCH
- LIGHT ABOVE VANITY/PORCH LIGHT/SCUNC
- WALL/CEILING MOUNTED OR RECESSED INCANDESCENT LIGHT FIXTURE
- PC PULL CHAIN LIGHT
- POWER FIXTURE IN CEILING
- GFI GROUND FAULT OUTLET
- CEILING FAN
- DUPLEX OUTLET
- D DEDICATED OUTLET
- QUAD OUTLET
- J JUNCTION BOX
- S HARD WIRED SMOKE DETECTOR AND INTERCONNECTED
- BRANCH CIRCUIT WIRING CONCEALED IN WALLS AND/OR CEILING
- EMERGENCY LIGHTING/EXIT

ALL SMOKE DETECTORS SHALL BE HARDWIRED, INTERCONNECTED, AND BATTERY BACKUP.

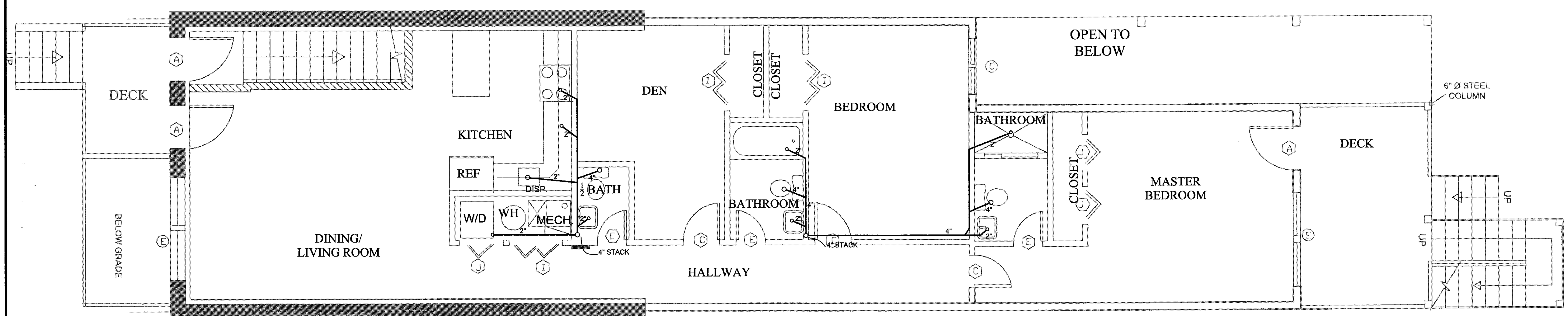
| | |
|---|---|
| HOUSE RENOVATION<br>AND ADDITION<br>1117 ALLISON STREET N.W | E1 |



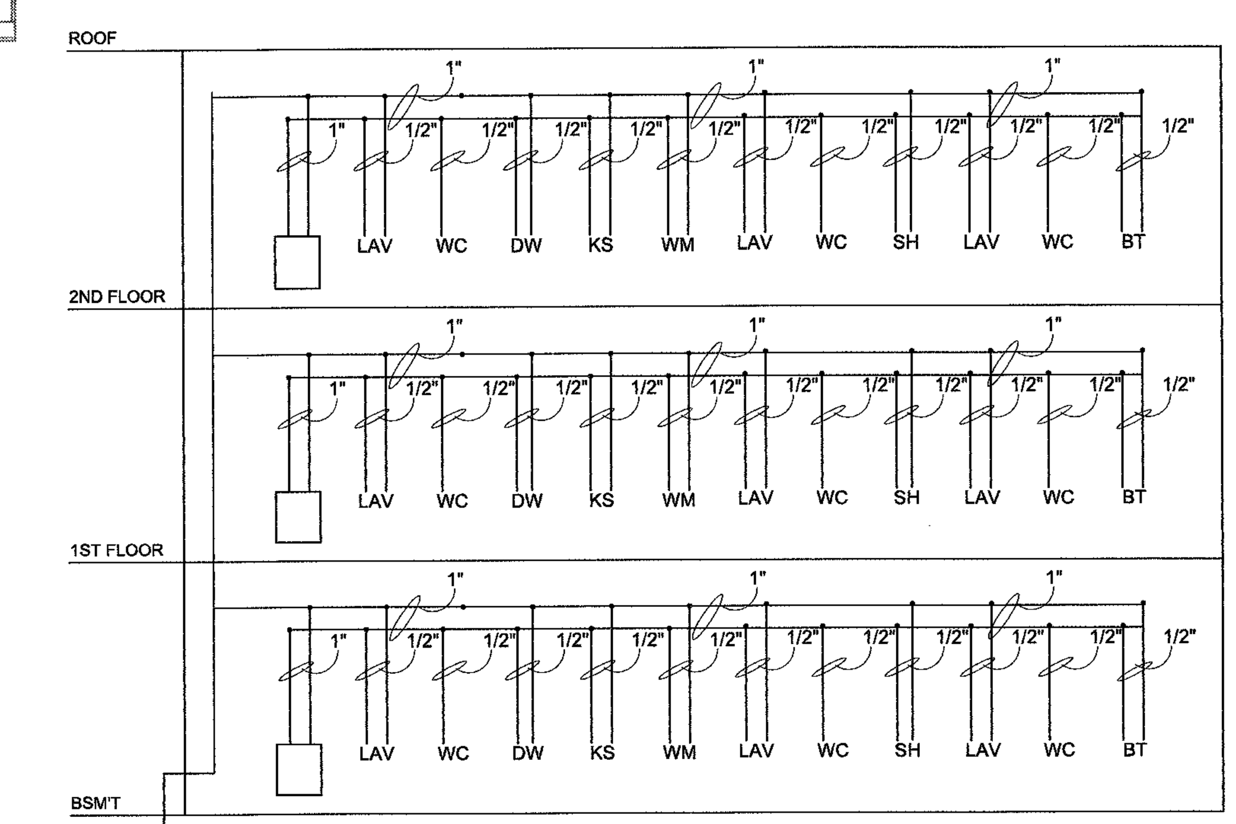

PROPOSED SECOND FLOOR PLAN
SCALE: ¼"=1'-0"



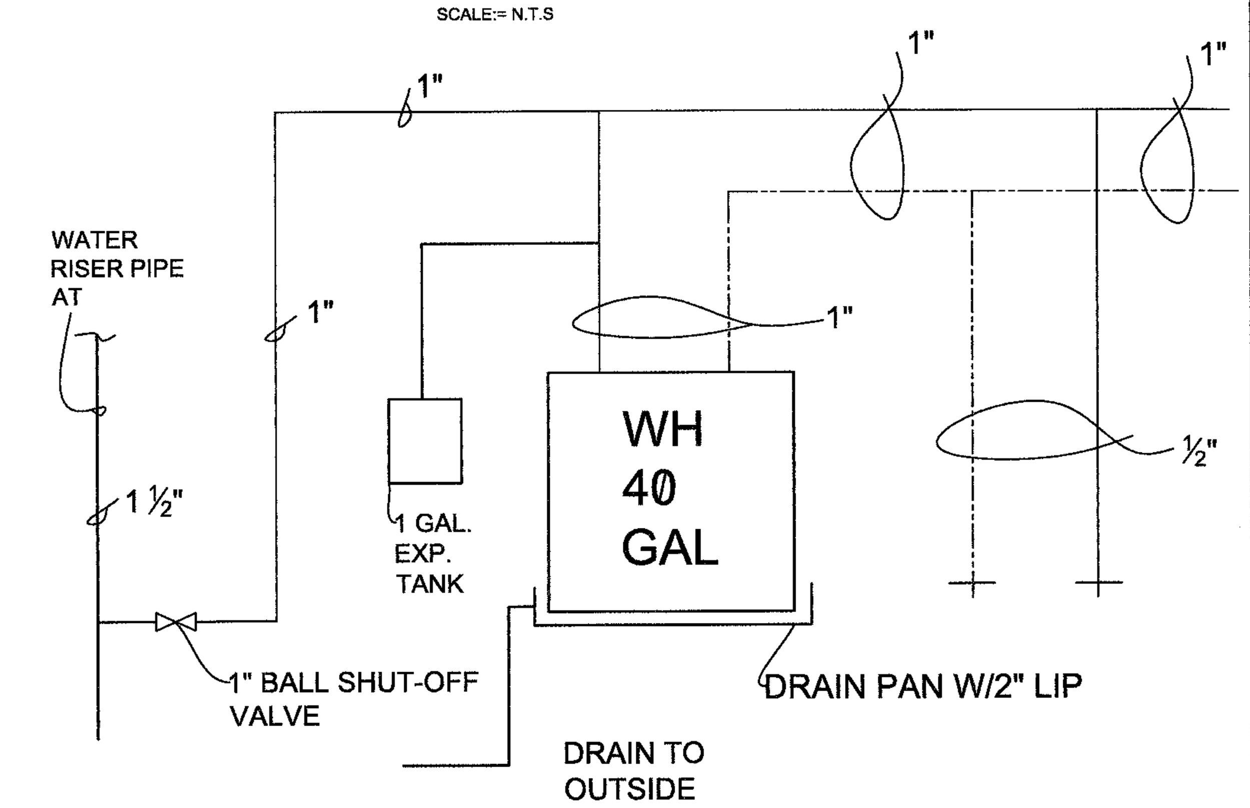

PLUMBING RISER DIAGRAM

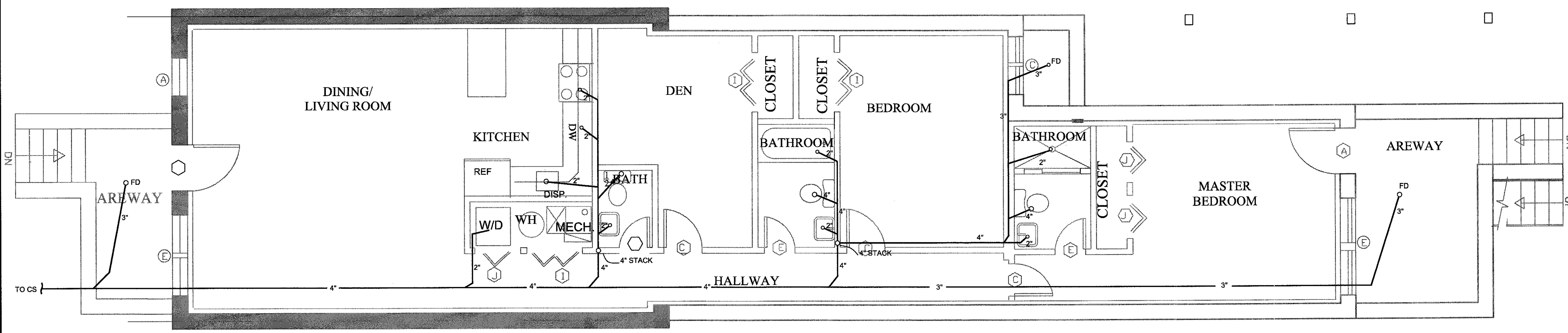



PROPOSED FIRST FLOOR PLAN
SCALE: ¼"=1'-0"



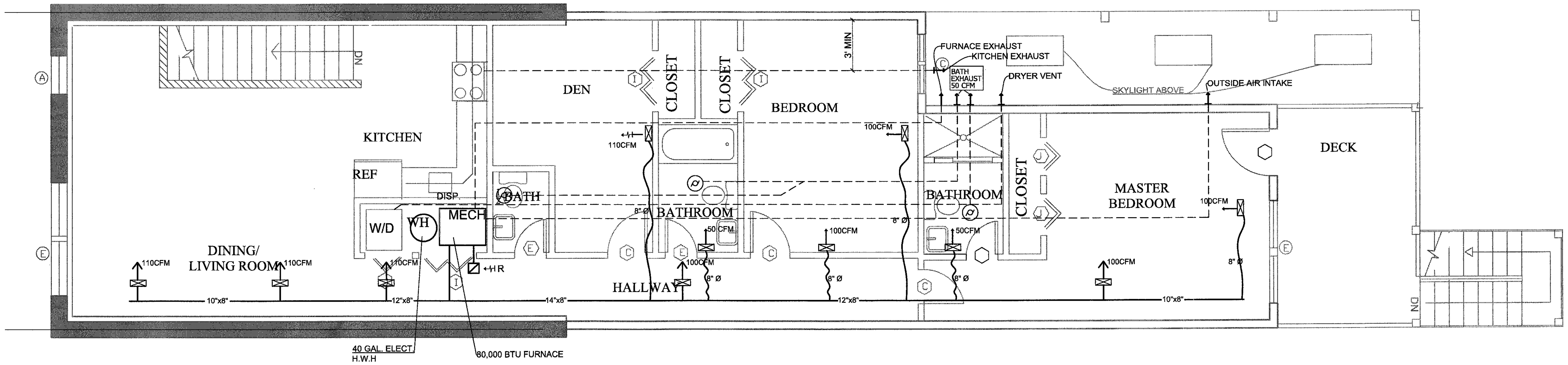

WATER RISER DIAGRAM
SCALE:= N.T.S



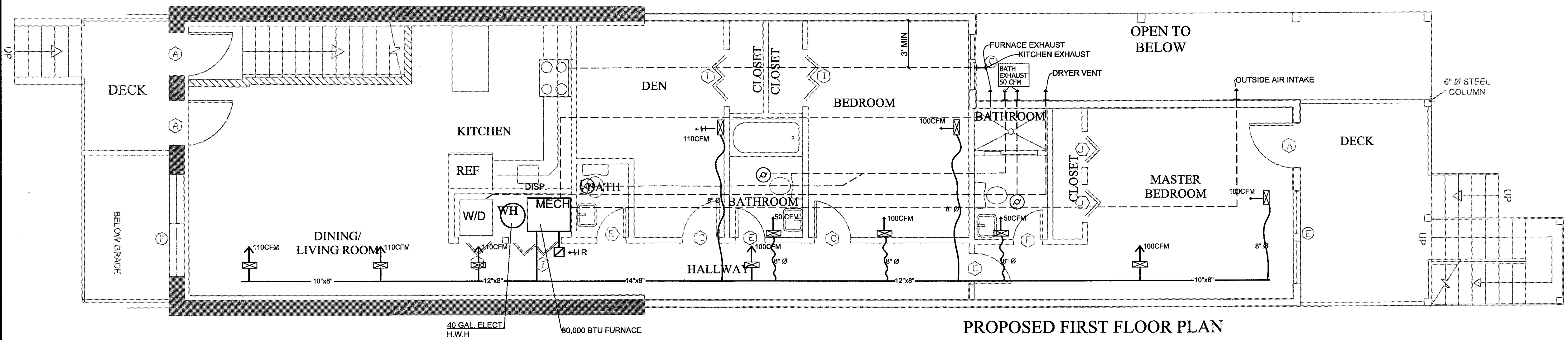




PROPOSED BASEMENT FLOOR PLAN
SCALE: ¼"=1'-0"

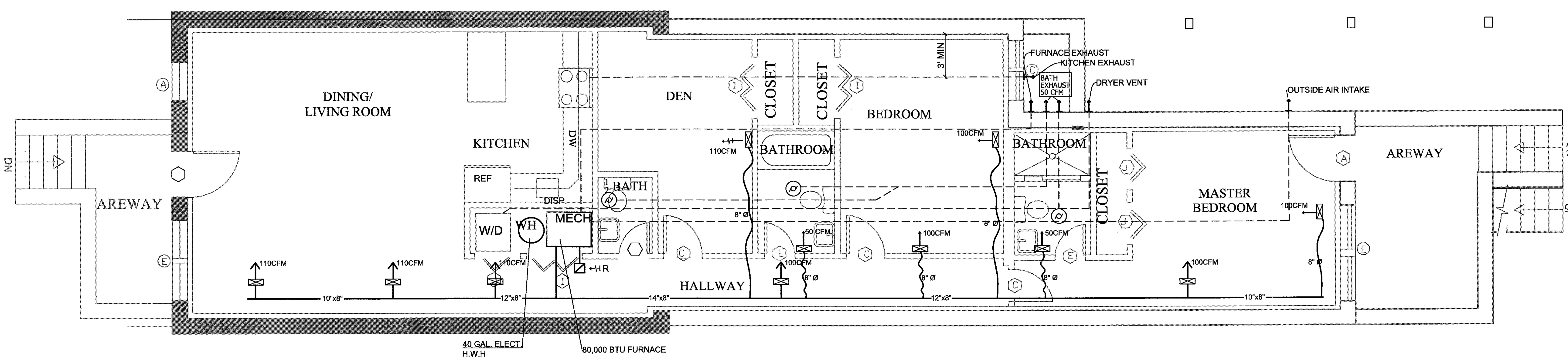
| | |
|---|---|
| HOUSE RENOVATION<br>AND ADDITION<br>1117 ALLISON STREET N.W | P1 |




PROPOSED SECOND FLOOR PLAN
SCALE: ¼"=1'-0"




PROPOSED FIRST FLOOR PLAN
SCALE: ¼"=1'-0"




PROPOSED BASEMENT FLOOR PLAN
SCALE: ¼"=1'-0"

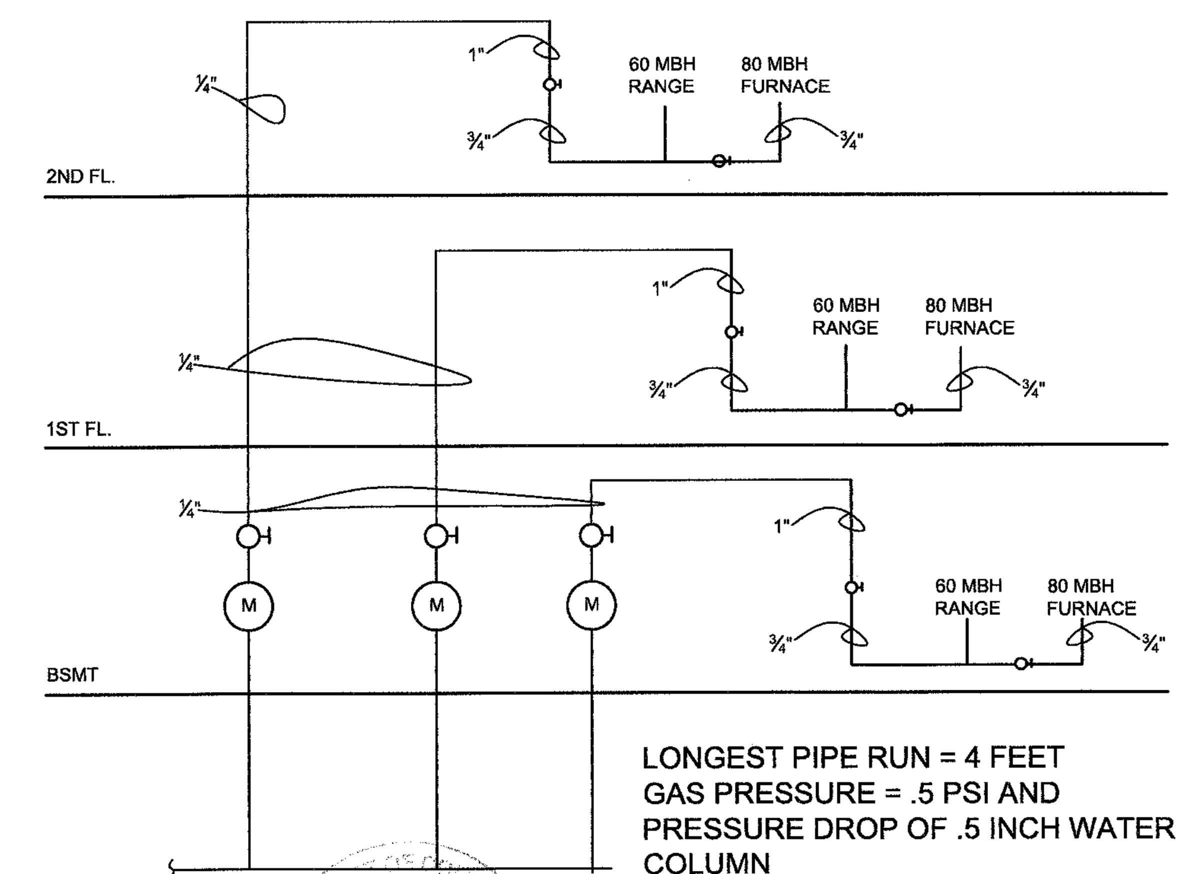
## Dryer Venting Comparison Chart

The chart below shows the manufacturer recommendations** for maximum vent length under various conditions. The recommendations can change from model to model even on the same brand's products so consult the owner's manual or installation instructions for your specific model.

Vent length for vertical installations should likely be "considerably" less than the maximum lengths quoted which are geared to regular horizontal vent installations.


TO BE USED

| Brand | Vent Material | Hood Type | Maximum Vent Length with 90° elbows: 0 elbows | 1 elbow | 2 elbows | 3 elbows | 4 elbows |
|---|---|---|---|---|---|---|---|
| Amana Speed Queen (domestic) | Rigid Metal | A | 44 ft. | 34 ft. | 26 ft. | 20 ft. | 14 ft. |
| | | B | 34 ft. | 26 ft. | 20 ft. | 14 ft. | 8 ft. |
| | Semirigid Metal | A | 24 ft. | 20 ft. | 16 ft. | 12 ft. | - |
| | | B | 20 ft. | 16 ft. | 12 ft. | 8 ft. | - |
| Frigidaire White Westinghouse Tappan, Gibson | Rigid Metal | A | 60 ft. | 52 ft. | 44 ft. | 32 ft. | 28 ft. |
| | | B | 48 ft. | 40 ft. | 32 ft. | 24 ft. | 16 ft. |
| | Flexible Metal | A | 30 ft. | 22 ft. | 14 ft. | - | - |
| | | B | 18 ft. | 14 ft. | 10 ft. | - | - |
| GE (6.0+ capacity electric models) | Rigid Metal | A | 90 ft. | 60 ft. | 45 ft. | 35 ft. | 25 ft. |
| | | B | 60 ft. | 45 ft. | 35 ft. | 25 ft. | 15 ft. |
| | Flexible Metal | A | 55 ft. | 40 ft. | 30 ft. | 20 ft. | 15 ft. |
| | | B | 45 ft. | 30 ft. | 20 ft. | 15 ft. | 10 ft. |
| GE (5.7 capacity gas & electric) | Rigid Metal | A | 60ft. | 52 ft. | 44 ft. | 32 ft. | 28 ft. |
| | | B | 48 ft. | 40 ft. | 32 ft. | 24 ft. | 16.ft. |
| | Flexible Metal | A | 30 ft. | 22 ft. | 14 ft. | - | - |
| | | B | 18 ft. | 14 ft. | 10 ft. | - | - |
| GE (6.0+ capacity gas models) | Rigid Metal | A | 45 ft. | 35 ft. | 25 ft. | 15 ft. | - |
| | | B | 30 ft. | 20 ft. | 10 ft. | - | - |
| | Flexible Metal | A | 30 ft. | 20 ft. | 10 ft. | - | - |
| | | B | 15 ft. | 10 ft. | - | - | - |
| Camco GE, Moffat, McClary | Rigid Metal | A | 45 ft. | 35 ft. | 25 ft. | - | - |
| | | B | 30 ft. | 20 ft. | 10 ft. | - | - |
| | Flexible Metal | A | 30 ft. | 20 ft. | 10 ft. | - | - |
| | | B | 15 ft. | 10 ft. | - | - | - |
| Magic Chef Admiral, Norge | Rigid Metal | A | 45 ft. | 35 ft. | 25 ft. | - | - |
| | | B | 30 ft. | 20 ft. | 10 ft. | - | - |
| Maytag MDE... models | Rigid Metal | A | 65 ft. | 54 ft. | 44 ft. | 36 ft. | 28 ft. |
| | | B | 59 ft. | 48 ft. | 38 ft. | 30 ft. | 22 ft. |
| | Flexible Metal | A | 36 ft. | 32 ft. | 28 ft. | 25 ft. | 23 ft. |
| | | B | 28 ft. | 24 ft. | 20 ft. | 17 ft. | 15 ft. |

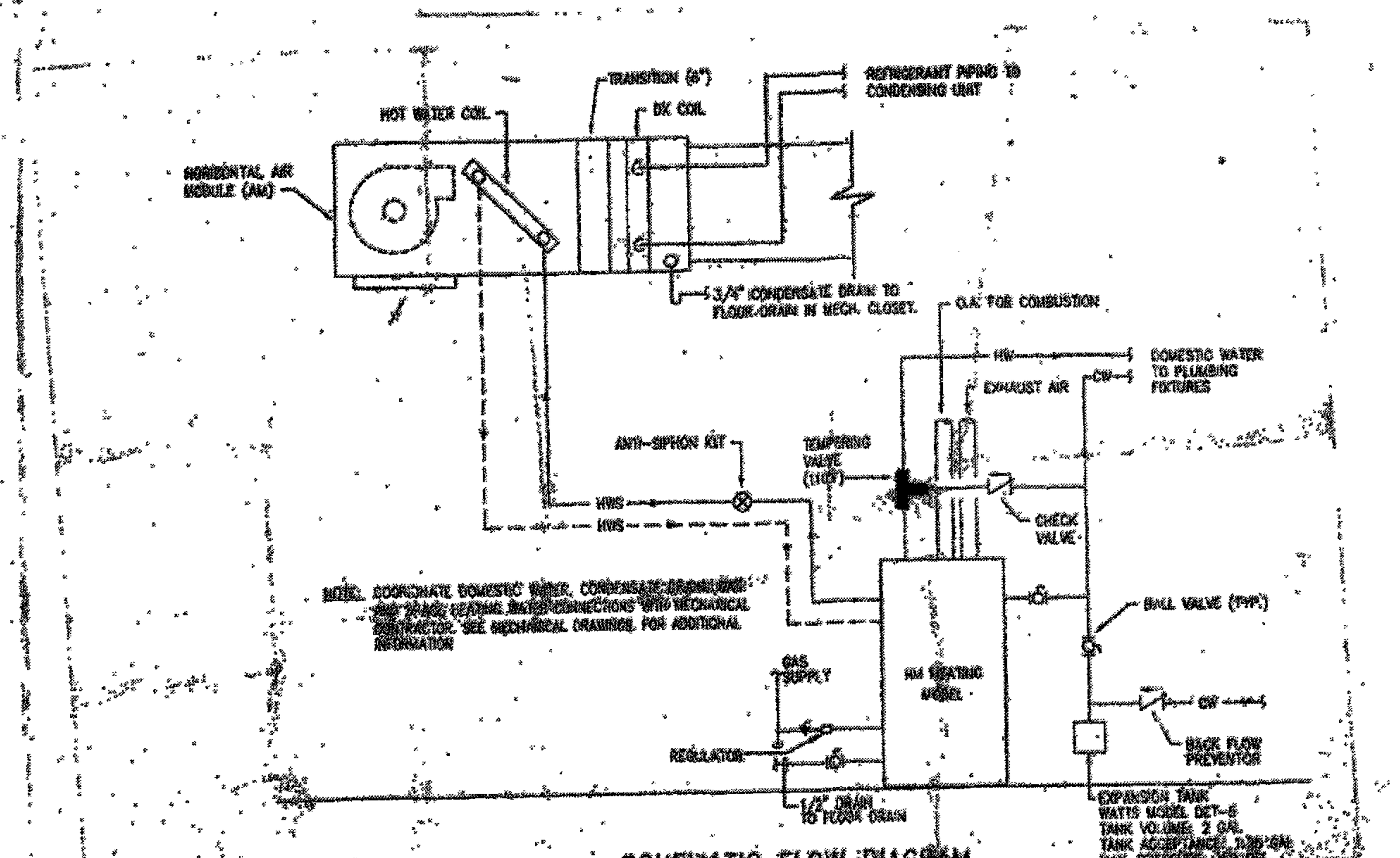



LONGEST PIPE RUN = 4 FEET
GAS PRESSURE = .5 PSI AND
PRESSURE DROP OF .5 INCH WATER COLUMN

GAS RISER DIAGRAM

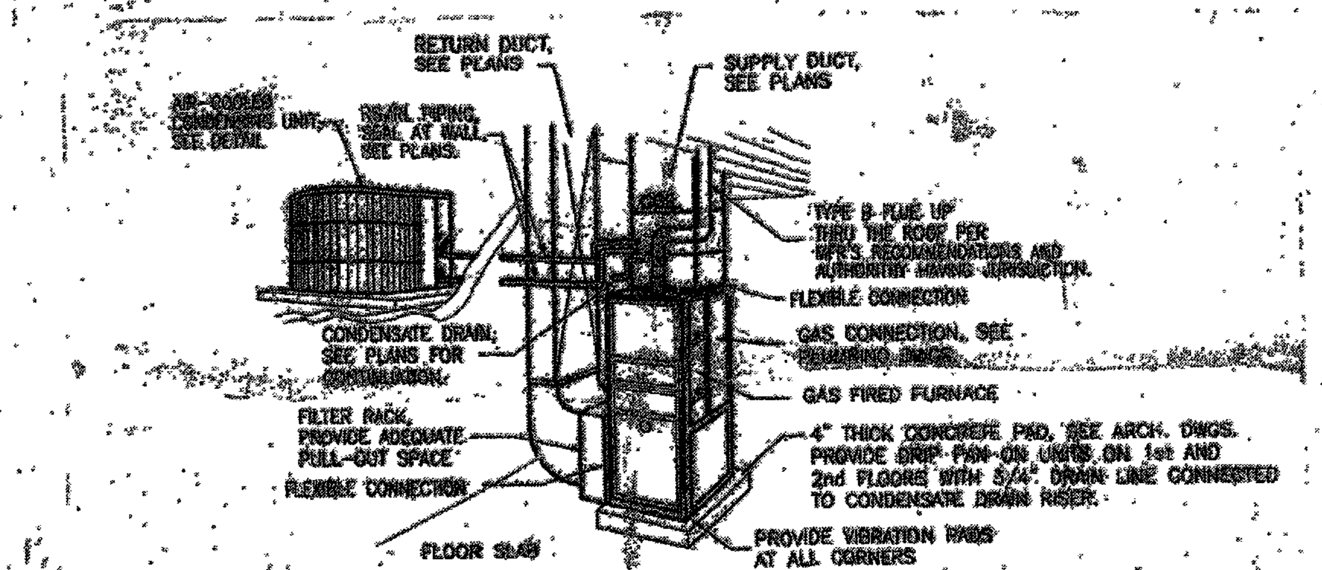
HOUSE RENOVATION
AND ADDITION
1117 ALLISON STREET N.W

M1



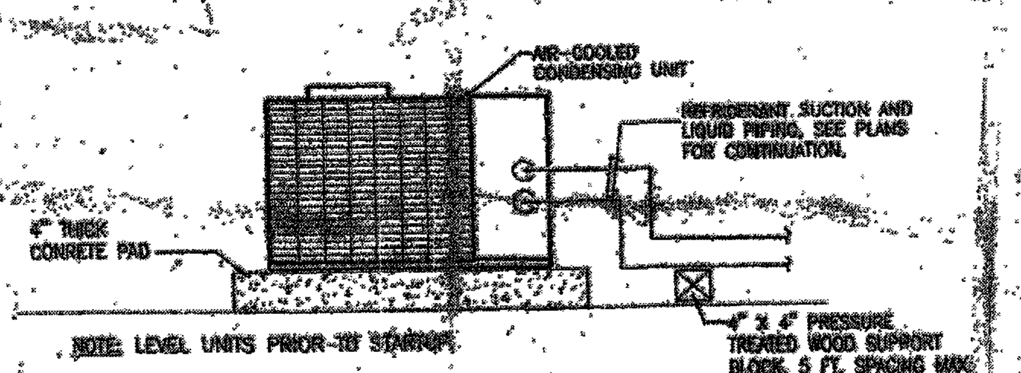

SCHEMATIC FLOW DIAGRAM

NO SCALE




GAS-FIRED CONDENSING FURNACE DETAIL

NO SCALE




AIR-COOLED CONDENSING UNIT DETAIL

NO SCALE

## GENERAL NOTES - HVAC

ALL WORK SHALL BE IN ACCORDANCE WITH BOCA CODE & LOCAL CODES, CONSIDERED AS MINIMUM REQUIREMENTS.

ALL DUCTWORK SHALL BE GALVANIZED STEEL CONSTRUCTION, BRACED AND SUPPORTED IN ACCORDANCE WITH THE LATEST EDITION OF SMACNA STD. & BOCA CODE REQUIREMENT. THE SUPPLY DUCT WORK SHALL BE OF 2" W.C. AND RETURN DUCT SHALL BE OF 2" W.C. THE MINIMUM GAGES SHALL BE AS FOLLOWS

| MAXIMUM SIZE | GAGES |
|---|---|
| 0 - 12 | 26 GA. |
| 13 - 30 | 24 GA. |
| 31 - 54 | 22 GA. |
| 55 - 84 | 20 GA. |

ALL DUCTWORK SHALL BE FABRICATED FROM FIELD TAKEN DIMENSIONS AND NOT FROM DRAWING. CEILING CLEARANCE, PRIOR TO DUCT FABRICATION, SHALL VERIFIED WITH ALL ELECTRICAL, PLUMBING AND ARCHITECTURAL WORK. REVISIONS TO DUCTWORK WILL BE MADE AS REQUIRED FOR ABOVE AT NO ADDITIONAL COST TO THE OWNER. COORDINATE WITH NEW REFLECTED CEILING.

VERIFY ALL DIMENSIONS, LOCATIONS AND CLEARANCES AND COORDINATE WORK WITH ALL TRADES PRIOR TO STARTING OF WORK.

PROVIDE TURNING VANES, SPLITTER DAMPERS AND VOLUME DAMPERS AS NECESSARY TO BALANCE THE AIR QUANTITIES AS SHOWN ON THE DRAWING BY INDEPENDENT BALANCING COMPANY OR PROFESSIONAL ENGINEER. PROVIDE VOLUME DAMPER AT ALL THE SUPPLY AND RETURN BRANCHES.

ALL DUCT OR PIPE PENETRATION THROUGH ROOF OR WALL SHALL BE CAULKED AND SEALED. THE CONTRACTOR SHALL NOT CUT STRUCTURAL COMPONENTS WITHOUT APPROVAL OF OWNER'S ARCHITECT.

CONTRACTOR SHALL VISIT SITE TO FIELD VERIFY POINTS OF CONNECTION TO EXISTING FACILITIES AND SYSTEMS PRIOR TO BID THE JOB.

ALL WORK SHALL BE COORDINATED WITH OWNER TO MAINTAIN PREMISES IN ORDER AND CLEAN FROM DEBRIS.

THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE WORK TO BE DONE AND SHALL EXAMINE THE SITE AND CONSIDER THE CONDITIONS UNDER WHICH HE WILL BE OBLIGED TO OPERATE IN THE PERFORMANCE OF THE CONTRACTED WORK. SUBSEQUENTLY IN THIS CONNECTION, FOR ANY ERRORS THROUGH NEGLIGENCE ON HIS PART. THE CONTRACTOR IS HEREBY ADVISED THAT HE WILL BE REQUIRED TO OBSERVE ALL RECOMMENDED PRACTICES FOR FIRE AND SAFETY PRECAUTIONS FOR THE PROTECTION OF THE FACILITY.

DIFFUSERS, REGISTERS, AND GRILLES SHALL BE METAL AIRE OR EQUAL. ALL AIR OUTLETS SHALL BE OF COLOR TO MATCH ADJACENT CEILINGS OR WALLS AND OF ALUMINUM CONSTRUCTION. COORDINATE LOCATION OF CEILING DIFFUSERS WITH LIGHTS.

SUBMIT SIX (6) COPIES OF ALL HVAC EQUIPMENT FOR APPROVAL BY ARCHITECT.

## KITCHEN APPLIANCE SCHEDULE

| SYM. | DESCRIPTION | NOTE |
|---|---|---|
| A | RANGE | 30" GAS, SELF CLEANING |
| B | RANGE | 24" GAS, SELF CLEANING |
| C | DISHWASHER | 24" UNDERCOUNTER |
| D | RANGE HOOD | 30" VENTED |
| E | RANGE HOOD | 24" VENTED |
| F | GARBAGE DISPOSAL | 1/2 HP |
| G | REFRIGERATOR | 30" |

NOTE:

KITCHEN CABINETS SHALL BE BUILDERS GRADE OR WOOD

ALL COUNTERTOPS SHALL BE PLASTIC LAMINATED.

## BATH/ TOILET ACCESSORIES

| SYM. | DESCRIPTION | MOUNTING HGT. |
|---|---|---|
| A | BATH TUB | FLOOR MOUNTED 30"X60"X16 |
| B | WATER CLOSET | FLOOR MOUNTED |
| C | LAVATORY | 19"X16" |
| D | MEDICINE CABINET | 16 1/4"X24 1/4"X4 7/8, RECESSED W/MIRROR |
| E | TUMBLER / TOOTHBRUSH | WALL MOUNTED |
| F | TOILET PAPER HOLDER | SURFACE MOUNTED |
| G | SHOWER HEAD | 78" ABOVE FIN. FLOOR |
| H | SHOWER ROD | 78" ABOVE FIN. FLOOR |
| I | SOAP DISH | RECESSED, 18" ABOVE TOP OF TUB |
| | | |
| | | |

## MECHANICAL LEGEND

SUPPLY TO ABOVE

RISER / RETURN

DUCT SIZE TRANSITION

ROUND DUCT

EXHST FAN TO EXTERIOR

RETURN AIR INTAKE

REFRIGERANT LINE

## Electrical Data

| Model | Volts | PH | Wire Ampacity | *Maximum Overcurrent Protection | Maximum Volts | Minimum Volts | Compressor RLA | Compressor LRA | Cond. Fan FLA | Cond. Fan HP |
|---|---|---|---|---|---|---|---|---|---|---|
| CK18-1 | 208/230 | 1 | 12.6 | 20 | 253 | 197 | 9.0 | 45 | 1.3 | 1/6 |
| CK24-1 | 208/230 | 1 | 16.4 | 25 | 253 | 197 | 12.1 | 57 | 1.3 | 1/6 |
| CK30-1 | 208/230 | 1 | 19.7 | 30 | 253 | 197 | 14.7 | 73 | 1.3 | 1/6 |
| CK36-1 | 208/230 | 1 | 23.2 | 40 | 253 | 197 | 17.5 | 92 | 1.3 | 1/6 |
| CK36-3 | 208/230 | 3 | 14.9 | 25 | 253 | 197 | 10.9 | 78 | 1.3 | 1/6 |
| CK42-1 | 208/230 | 1 | 25.8 | 45 | 253 | 197 | 19.6 | 102 | 1.3 | 1/6 |
| CK49-1 | 208/230 | 1 | 26.8 | 45 | 253 | 197 | 20.0 | 110 | 1.3 | 1/6 |
| CK49-3 | 208/230 | 3 | 17.8 | 30 | 253 | 197 | 12.8 | 78 | 1.8 | 1/4 |
| CK60-1 | 208/230 | 1 | 37.8 | 60 | 253 | 197 | 28.8 | 175 | 1.8 | 1/4 |
| CK60-3 | 208/230 | 3 | 21.2 | 35 | 253 | 197 | 15.5 | 124 | 1.8 | 1/4 |
| CK60-4 | 460 | 3 | 11.1 | 15 | 506 | 414 | 7.4 | 59.6 | 1.8 | 1/4 |
| CK62-1/-1A | 208/230 | 1 | 35.9 | 60 | 253 | 197 | 26.9 | 147 | 2.3 | 1/3 |

*May use fuses or HACR type Circuit Breakers of the same size as noted.

## MECHANICAL NOTES

THE CONTRACTOR SHALL LAY OUT HIS WORK AND COORDINATE HIS WORK WITH THAT OF OTHER TRADES AND BE RESPONSIBLE FOR ALL MEASUREMENTS.

THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS AND PAY FOR ALL FEES, CHARGES, AND PERMITS REQUIRED, AND FOR ALL HAULING, RIGGING AND TRANSPORTATION CHARGES.

THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING WORK AND SHALL NOTIFY THE ENGINEER IF A CONDITION [illegible] EXIST WHICH PREVENTS THE CONTRACTOR FROM ACCOMPLISHING THE INTENT OF THE DRAWINGS. ALL WORK SHALL BE FIELD VERIFIED FOR ACCURACY.

THE CONTRACTOR SHALL BE AWARE OF EXISTING BUILDING FINISHES, FURNITURE, AND EQUIPMENT AND BE RESPONSIBLE FOR [illegible] FOR ANY DAMAGES CAUSED BY OR RESULTING FROM HIS WORK.

THE CONTRACTOR SHALL GUARANTEE AND SERVICE ALL WORKMANSHIP AND MATERIALS TO BE AS REPRESENTED BY HIM AND SHALL REPAIR OR REPLACE, AT NO ADDITIONAL COST TO THE OWNER, ANY PART THEREOF WHICH MAY BECOME DEFECTIVE WITHIN THE PERIOD OF ONE (1) YEAR AFTER THE DATE OF FINAL ACCEPTANCE BY THE ENGINEER.

INTERIOR DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED SHEET [illegible] OF PROPER GAGE PER DUCT DIMENSION AS RECOMMENDED FOR LOW VELOCITY CONSTRUCTION BY THE ASHRAE GUIDE AND DATA BOOK, SMACNA LOW PRESSURE DUCT CONSTRUCTION STANDARDS AND NFPA PAMPHLET 90A.

TURNING VANES SHALL BE USED AT ALL SQUARE ELBOWS ON SUPPLY [illegible] VANES SHALL BE TUTTLE AND BAILEY OR APPROVED EQUAL, INSTALLED AS RECOMMENDED BY MANUFACTURER.

INSTALL FLEXIBLE CONNECTIONS AT THE DUCT CONNECTIONS OF ALL FANS, AIR CONDITIONING UNITS AND AIR HANDLING UNITS. FLEXIBLE CONNECTIONS SHALL BE CONSTRUCTED OF NON-FLAMMABLE CANVAS APPROVED BY THE UNDERWRITERS LABORATORIES INC. INSTALLATION SHALL BE MADE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

INSULATE ALL SUPPLY DUCTWORK WITH A MINIMUM 1" FIBERGLASS INSULATION AS MANUFACTURED BY JOHN MANVILLE OR APPROVED EQUAL.

FIRE DAMPERS SHALL BE U.L. APPROVED AND LABELED.

CEILING DIFFUSERS SHALL BE CARNES OR EQUAL WITH VOLUME CONTROL DAMPERS, TURNING VANES AND EXTRACTORS, FURNISHED BY THE DIFFUSER MANUFACTURER, FITTED AT EACH DUCT TAKE-OFF (COLLAR) TO PROVIDE UNIFORM VELOCITY ACROSS THE DIFFUSER INLET.

THE CONTRACTOR SHALL BALANCE AND ADJUST SUPPLY RETURN AND EXHAUST SYSTEM TO PROVIDE THE DESIGN AIR FLOW, AS INDICATED THIS SHEET.

## PLUMBING FIXTURE CONNECTION SCHEDULE

| ITEM | DESIGNATION | W | V | CW | HW | ITEM |
|---|---|---|---|---|---|---|
| WC | WATER CLOSET | 4" | 2" | 1/2" | - | FLOOR MOUNTED TANK |
| SK | KITCHEN SINK | 2" | 2" | 1/2" | 1/2" | SINGLE COMPARTMENT W/DISPOSER |
| L | BATHROOM LAV | 2" | 2" | 1/2" | 1/2" | |
| SH | SHOWER | 2" | 2" | 1/2" | 1/2" | |
| BT | BATH TUB | 2" | 2" | 1/2" | 1/2" | |
| WM | WASHING MACHINE | 2" | 2" | 1/2" | 1/2" | |
| DW | DISH WASHER | - | - | - | 1/2" | |

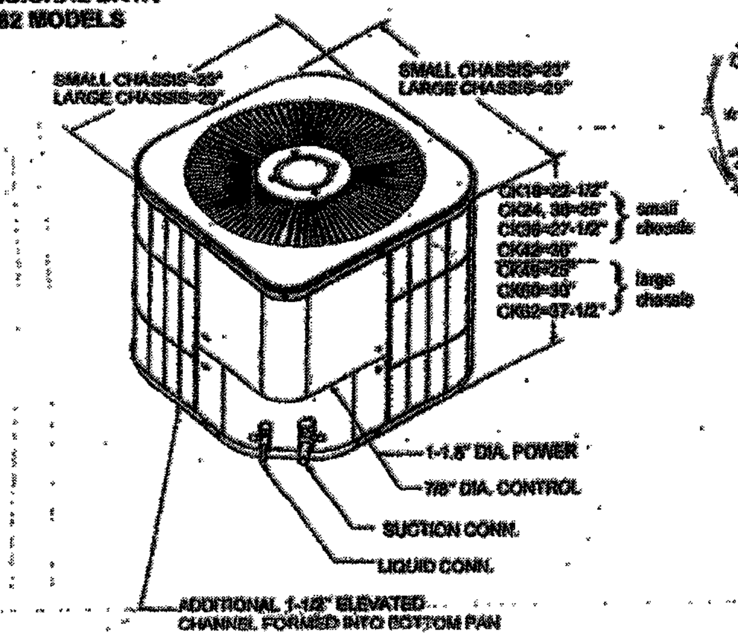
NOTES:

1. STOP VALVES ON EACH FIXTURE, TYPICAL
2. FLOW CONTROL FITTINGS AT LAV'S
3. AERATOR ON SINK
4. FOR DISHWASHER, SUPPLY WITH VALVE AND DECK MOUNTED AIR GAP FITTING WITH INLET HOSE CONNECTED TO DISHWASHER DISCHARGE AND OUTLET HOSE CONNECTED TO DISPOSER
5. AT SHOWER (& TUB/SHOWER), INSTALL 1/2" PIPING FROM FAUCET TO SHOWER HEAD.
6. AT WASHING MACHINE, PROVIDE RECESSED OUTLET BOX WITH WATER HOSE BIBBS AND DRAIN FITTING

## Physical Data

| Model | Liquid Connection | Suction Connection | Type | Approx. Shipping Weight |
|---|---|---|---|---|
| CK18-1 | 3/8 | 3/4 | Sweat | 125 |
| CK24-1 | 3/8 | 3/4 | Sweat | 135 |
| CK30-1 | 3/8 | 3/4 | Sweat | 140 |
| CK36-1/-3 | 3/8 | 3/4 | Sweat | 150 |
| CK42-1 | 3/8 | 7/8 | Sweat | 160 |
| CK49-1/-3 | 3/8 | 7/8 | Sweat | 176 |
| CK60-1/-3/-4 | 3/8 | 7/8 | Sweat | 208 |
| CK62-1/-1A | 3/8 | 7/8 | Sweat | 258 |

DIMENSIONAL DATA
CK18-62 MODELS




DISTRICT OF COLUMBIA
GEORGE I. WORMLEY JR.
No 3795
REGISTERED
PROFESSIONAL ENGINEER

## PLUMBING NOTES & SPECIFICATIONS

1. ALL DRAWINGS, I.E. ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING, FIRE PROTECTION AND ELECTRICAL ARE COMPLIMENTARY AND MUST BE USED IN COMBINATION TO OBTAIN COMPLETE CONSTRUCTION INFORMATION.
2. ANY INFORMATIONAL CONFLICTS WITHIN THE DRAWINGS SHALL BE BROUGHT TO THE ARCHITECTS ATTENTION. THE CONTRACTOR SHALL NOT PROCEED WITH ANY WORK UNTIL ALL CONFLICTS ARE RESOLVED AND THE CLARIFYING INFORMATION IS ISSUED TO THE CONTRACTOR BY THE ARCHITECT.
3. ALL SANITARY SEWER PIPING SHALL BE INSTALLED WITH A 1/4" PER FOOT GRADE UNLESS NOTED OR AS INDICATED OTHERWISE. PROVIDE CLEANOUTS ON ALL SEWER PIPING (HORIZONTAL AND VERTICAL) WHERE INDICATED AND/OR REQUIRED BY LOCAL PLUMBING CODE.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MEASUREMENT AND COORDINATE ALL PIPING TO BE INSTALLED WITH ALL OTHER TRADES, TO ASSURE THAT ALL PIPING SYSTEMS ARE INSTALLED ABOVE FINISHED CEILING OR IN A CONCEALED SPACE. ALL CEILING HEIGHTS INDICATED ON ARCHITECTURAL DRAWINGS AND MINIMUM CLEARANCES REQUIRED BY LOCAL CODES SHALL BE MAINTAINED THROUGHOUT THE BUILDING.
5. ALL CUTTING, DRILLING, AND PATCHING OF WALLS, FLOORS AND/OR STRUCTURAL MEMBERS OF THE INSTALLATION OF THE SYSTEMS SHALL BE COORDINATED WITH THE PROJECT STRUCTURAL ENGINEER. STRUCTURAL COMPONENTS SHALL NOT BE CUT, DRILLED OR MODIFIED IN ANY WAY WITHOUT THE STRUCTURAL ENGINEER'S REVIEW AND PRIOR APPROVAL.
6. ALL PIPING SYSTEMS, VALVES, AND EQUIPMENT SHALL BE PROPERLY IDENTIFIED.
7. ALL PLUMBING EQUIPMENT SHALL CONFORM TO ALL REQUIREMENTS OF THE LOCAL ENERGY CONSERVATION AND PLUMBING CODES.
8. THE PLUMBING CONTRACTOR SHALL VERIFY EXISTING BUILDING CONDITIONS AND COORDINATE HIS WORK WITH EXISTING CONDITIONS. ANY CONFLICTS BETWEEN HIS WORK AND EXISTING CONDITIONS THAT WILL NOT ALLOW HIM TO COMPLETE HIS WORK SHALL BE REPORTED IN WRITING TO THE ARCHITECT AND ENGINEER PRIOR TO STARTING.
9. PLUMBING CONTRACTOR SHALL VERIFY EXISTING INVERT'S AND VERIFY THAT ALL FINAL CONNECTIONS CAN BE MADE BEFORE COMMENCING WORK.
10. THE PLUMBING CONTRACTOR SHALL MAKE ALL ARRANGEMENTS AND PAY FOR ALL FEES, CHARGES AND PERMITS REQUIRED, AS WELL AS FOR HAULING, RIGGING AND TRANSPORTATION CHARGES.
11. ALL WORK SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT AND OWNER.

SANITARY DRAIN

VENT PIPE

## GENERAL NOTES

1. ALL ELECTRICAL WORK SHALL COMPLY WITH THE LATEST NATIONAL ELECTRICAL CODE, THE LIFE SAFETY CODE AND ALL LOCAL CODE AUTHORITIES HAVING JURISDICTION.
2. ALL NEW ELECTRICAL EQUIPMENT SHALL BE LABELED BY U.L. OR OTHER ACCREDITED AUTHORITATIVE AGENCIES AND TESTING ORGANIZATIONS.
3. CONTRACTOR SHALL GUARANTEE ALL MATERIALS, EQUIPMENT AND RELATED ITEMS FOR TWELVE MONTHS AFTER FINAL COMPLETION OF WORK AND REPLACE ANY DEFECTIVE MATERIALS, EQUIPMENT AND RELATED ITEMS WITHIN THE GUARANTEE PERIOD.
4. CONTRACTOR SHALL VISIT THE SITE TO DETERMINE CONDITIONS WHICH MAY AFFECT THE BID.
5. CONTRACTOR SHALL OBTAIN PERMITS AND PAY ALL FEES. PERMITS SHALL BE GIVEN TO THE OWNER WHEN THE PROJECT IS COMPLETED.
6. WIRE, CONNECT AND ENERGIZE ALL EQUIPMENT, DEVICES AND APPLIANCES INDICATED, INCLUDING THE MODULAR FURNITURE.
7. ALL NEW OUTLET BOXES SHALL BE LOCATED IN OR ON CLEAR WALL SPACES, NOT IN SHELVES, BEHIND DOORS, CABINETS, ETC. ITEMS IMPROPERLY LOCATED WILL BE RELOCATED AT CONTRACTOR'S EXPENSE.
8. ALL ELECTRICAL SYSTEMS, DEVICES AND RELATED ITEMS SHALL BE TESTED. REPLACE ANY AND ALL DEFECTIVE DEVICES, ITEMS OR SYSTEMS BEFORE COMPLETION OF THE PROJECT.
9. EQUIPMENT, ITEMS AND APPLIANCES REQUIRING INSPECTION, MAINTENANCE, OR MANUAL OPERATION SHALL NOT BE INSTALLED IN INACCESSIBLE LOCATIONS.
10. VERIFY THE TYPE OF CEILING SYSTEM WITH THE GENERAL CONTRACTOR OR CEILING CONTRACTOR TO INSURE THAT ALL LIGHTING FIXTURES ARE COMPATIBLE WITH THE CEILING SYSTEM BEING INSTALLED. DO NOT ORDER LIGHTING FIXTURES UNTIL CEILING TYPE HAS BEEN VERIFIED.
11. SUPPORT CEILING MOUNTED LIGHTING FIXTURES DIRECTLY FROM THE BUILDING STRUCTURES. DO NOT SUPORT FIXTURES FROM PIPING, DUCTWORK OR ANY OTHER EQUIPMENT INSTALLED IN THE CEILING PLENUM.
12. INSTALL NEW BREAKERS IN EXISTING PANELBOARDS AS NECESSARY. NEW BREAKERS TO MATCH EXISTING CONDITIONS. REARRANGE EXISTING CIRCUITS WITHIN EXISTING PANELS AS NECESSARY. NEW PANELBOARD SHALL BE EQUIPPED WITH COPPER PHASE, NEUTRAL AND GROUND BUS WITH BOLT ON CIRCUIT BREAKERS AND TYPEWRITTEN DIRECTORY.
13. ALL WIRE/CABLE SHALL BE COPPER AND ALL WIRE SIZES ARE BASED ON COPPER CONDUCTORS UNLESS OTHERWISE INDICATED. PROVIDE INSULATION TYPE EQUAL TO OR EXCEEDING THE TEMPERATURE RATING OF THE FIXTURES TO WHICH IT CONNECTS.
14. MINIMUM SIZE FOR NEW RACEWAY SHALL BE 3/4" C.
15. ALL EMPTY CONDUITS SHALL BE EQUIPPED WITH PULL WIRES.
16. ALL CONDUITS SHALL BE CAREFULLY SECURED FROM THE BUILDING STRUCTURE.
17. EXCEPT AS OTHERWISE INDICATED, PANELBOARD CABINETS SHALL NOT BE USED FOR OTHER PURPOSES THAN CIRCUIT PROTECTION AND DISTRIBUTION POINTS AND SHALL NOT BE USED AS JUNCTION BOXES. PROVIDE JUNCTION BOXES OUTSIDE THE PANEL AS REQUIRED.
18. FOR ELECTRICAL HOMERUNS AND WIRING, CONDUITS SHALL BE EMT OR MC AS PERMITTED BY CODES. ALL CONNECTIONS TO EQUIPMENT SUBJECT TO VIBRATION SHALL BE MADE VIA A W.P. FLEXIBLE METAL CONDUIT. MC MAY BE USED WHERE PERMITED BY CODE.
19. PROVIDE AS-BUILT DRAWINGS TO THE OWNER UPON COMPLETION OF PROJECT.
20. PROVIDE 3 MAINTENANCE AND OPERATING MANUALS AND WARRANTIES FOR ALL EQUIPMENT TO THE OWNER UPON COMPLETION OF THE PROJECT.

MP1

## SOIL EROSION AND SEDIMENT CONTROL NOTES

1. ALL APPLICABLE EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN PLACE PRIOR TO ANY GRADING OPERATION AND/OR INSTALLATION OF PROPOSED STRUCTURES OR UTILITIES.

2. SOIL EROSION AND SEDIMENT CONTROL PRACTICES ON THIS PLAN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN LOCAL GOVERNMENT AGENCY.

3. APPLICABLE EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE LEFT IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND/OR THE AREA IS STABILIZED.

4. THE CONTRACTOR SHALL PERFORM ALL WORK, FURNISH ALL MATERIALS AND INSTALL ALL MEASURES REQUIRED TO REASONABLY CONTROL SOIL EROSION RESULTING FROM CONSTRUCTION OPERATIONS AND PREVENT EXCESSIVE FLOW OF SEDIMENT FROM THE CONSTRUCTION SITE.

5. ANY DISTURBED AREA THAT IS TO BE LEFT EXPOSED FOR MORE THAN THIRTY (30) DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING AND FERTILIZATION IN ACCORDANCE WITH THE LOCAL GOVERNMENT AGENCYSTANDARDS AND THEIR RATES SHOULD BE INCLUDED IN THE NARRATIVE. IF THE SEASON PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREAS WILL BE MULCHED WITH SALT HAY OR EQUIVALENT AND ANCHORED IN ACCORDANCE WITH THE LOCAL GOVERNMENT AGENCY STANDARDS (I.E. PEG AND TWINE, MULCH NETTING OR LIQUID MULCH BINDER).

6. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO PROVIDE CONFIRMATION OF LIME, FERTILIZER AND SEED APPLICATION AND RATES OF APPLICATION AT THE REQUEST OF THE GLOUCESTER SOIL CONSERVATION DISTRICT.

7. ALL CRITICAL AREAS SUBJECT TO EROSION WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH AT A RATE OF 2 TONS PER ACRE, ACCORDING TO THE LOCAL GOVERNMENT AGENCY IMMEDIATELY FOLLOWING ROUGH GRADING.

8. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORMWATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.

9. ALL SEDIMENTATION STRUCTURES WILL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS AND AFTER EVERY STORM EVENT.

10. A CRUSHED STONE, TIRE CLEANING PAD WILL BE INSTALLED WHEREVER A CONSTRUCTION ACCESS EXISTS. THE STABILIZED PAD WILL BE INSTALLED ACCORDING TO THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS.

11. ALL DRIVEWAYS MUST BE STABILIZED WITH 2 ½" CRUSHED STONE OR SUBBASE PRIOR TO INDIVIDUAL LOT CONSTRUCTION.
12. PAVED AREAS MUST BE KEPT CLEAN AT ALL TIMES.

13. ALL CATCH BASIN INLETS WILL BE PROTECTED ACCORDING TO THE CERTIFIED PLAN.

14. ALL STORM DRAINAGE OUTLETS WILL BE STABILIZED, AS REQUIRED, BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.

15. ALL DEWATERING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT FILTER AREA. THE SEDIMENT FILTER SHOULD BE COMPOSED OF A SUITABLE SEDIMENT FILTER FABRIC. (SEE DETAIL). THE BASIN MUST BE DEWATERED TO NORMAL POOL WITHIN 10 DAYS OF THE DESIGN STORM.

16. NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE ALL PROVISIONS OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES. ALL SITE WORK FOR THE PROJECT MUST BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE AS A PREREQUISITE TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY.

17. MULCHING IS REQUIRED ON ALL SEEDED AREAS TO INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED TO PROMOTE EARLIER VEGETATION COVER.

18. OFFSITE SEDIMENT DISTURBANCE MAY REQUIRE ADDITIONAL CONTROL MEASURES TO BE DETERMINED BY THE EROSION CONTROL INSPECTOR.

19. A COPY OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN MUST BE MAINTAINED ON THE PROJECT SITE DURING CONSTRUCTION.

20. THE LOCAL GOVERNMENT AGENCY.SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY LAND DISTURBANCE.

21. ANY CONVEYANCE OF THIS PROJECT PRIOR TO ITS COMPLETION WILL TRANSFER FULL RESPONSIBILITY FOR COMPLIANCE WITH THE CERTIFIED PLAN TO ANY SUBSEQUENT OWNERS.

22. IMMEDIATELY AFTER THE COMPLETION OF STRIPPING AND STOCKPILING OF TOPSOIL, THE STOCKPILE MUST BE STABILIZED ACCORDING TO THE STANDARD FOR TEMPORARY VEGETATIVE COVER. STABILIZE TOPSOIL STOCKPILE WITH STRAW MULCH FOR PROTECTION IF THE SEASON DOES NOT PERMIT THE APPLICATION AND ESTABLISHMENT OF TEMPORARY SEEDING. ALL SOIL STOCKPILES ARE NOT TO BE LOCATED WITHIN FIFTY (50) FEET OF A FLOODPLAIN, SLOPE, ROADWAY OR DRAINAGE FACILITY AND THE BASE MUST BE PROTECTED WITH A SEDIMENT BARRIER.

23. ANY CHANGES TO THE SITE PLAN WILL REQUIRE THE SUBMISSION OF A REVISED SOIL EROSION AND SEDIMENT CONTROL PLAN TO THE GLOUCESTER SOIL CONSERVATION DISTRICT. THE REVISED PLAN MUST BE IN ACCORDANCE WITH THE CURRENT LOCAL GOVERNMENT AGENCY FOR SOIL EROSION AND SEDIMENT CONTROL.
24. METHODS FOR THE MANAGEMENT OF HIGH ACID PRODUCING SOILS SHALL BE IN ACCORDANCE WITH THE STANDARDS. HIGH ACID PRODUCING SOILS ARE THOSE FOUND TO CONTAIN IRON SULFIDES OR HAVE A pH OF 4 OR LESS.

25. TEMPORARY AND PERMANENT SEEDING MEASURES MUST BE APPLIED ACCORDING TO THE LOCAL GOVERNMENT AGENCY STANDARDS, AND MULCHED WITH SALT HAY OR EQUIVALENT AND ANCHORED IN ACCORDANCE WITH THE LOCAL GOVERNMENT AGENCY STANDARDS (I.E. PEG AND TWINE, MULCH NETTING OR LIQUID MULCH BINDER).

26. MAXIMUM SIDE SLOPES OF ALL EXPOSED SURFACES SHALL NOT BE CONSTRUCTED STEEPER THAN 3:1 UNLESS OTHERWISE APPROVED BY THE DISTRICT.

27. DUST IS TO BE CONTROLLED BY AN APPROVED METHOD ACCORDING TO THE LOCAL GOVERNMENT AGENCY AND MAY INCLUDE WATERING WITH A SOLUTION OF CALCIUM CHLORIDE AND WATER.

28. ADJOINING PROPERTIES SHALL BE PROTECTED FROM EXCAVATION AND FILLING OPERATIONS ON THE PROPOSED SITE.

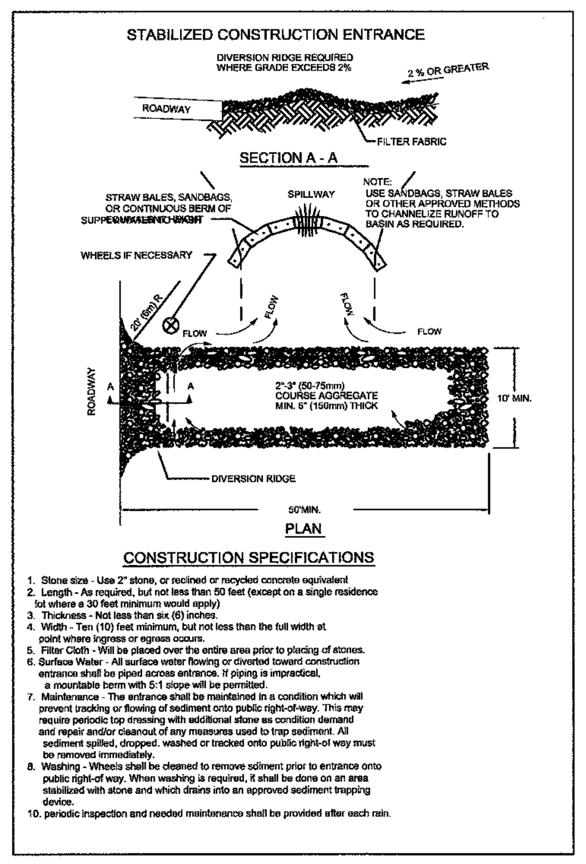
29. USE STAGED CONSTRUCTION METHODS TO MINIMIZE EXPOSED SURFACES, WHERE APPLICABLE.

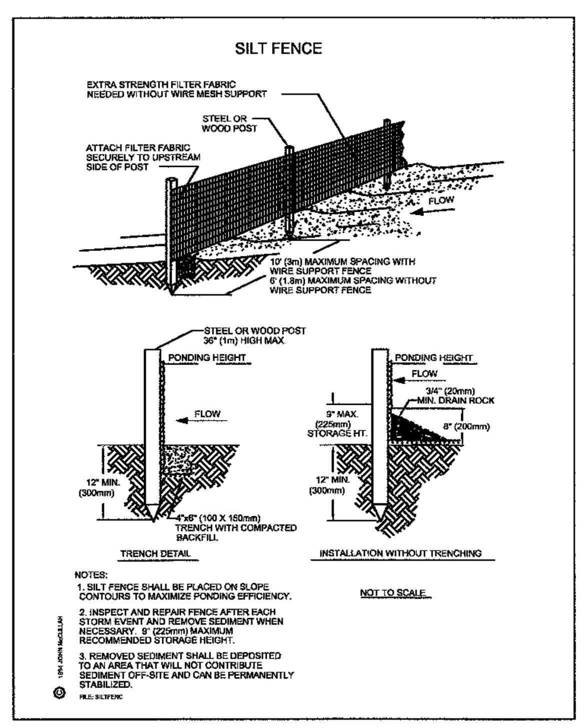
30. ALL VEGETATIVE MATERIAL SHALL BE SELECTED IN ACCORDANCE WITH AMERICAN STANDARDS FOR NURSERY STOCK OF THE AMERICAN ASSOCIATION OF THE NURSERYMAN AND IN ACCORDANCE WITH THE LOCAL GOVERNMENT AGENCYSTANDARDS.

31. NATURAL VEGETATION AND SPECIES SHALL BE RETAINED WHERE SPECIFIED ON THE LANDSCAPING PLAN.

32. THE SOIL EROSION INSPECTOR MAY REQUIRE ADDITIONAL SOIL EROSION MEASURES TO BE INSTALLED, AS DIRECTED BY THE DISTRICT INSPECTOR.

PROJECT NARRATIVE:
This project entails the construction of rear to the building as shown on plan




STANDARDS AND SPECIFICATIONS
FOR
VEHICLE WASH AREA

Definition

Purpose

Conditions Where Practice Applies

Design Criteria

### EROSION CONTROL NOTES

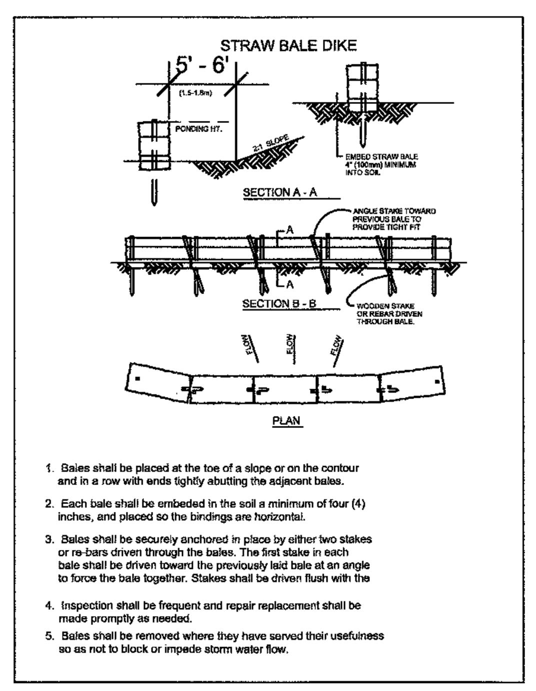
1. THE SEDIMENT AND EROSION CONTROL METHOD SHALL BE INSTALLED BEFORE THE START OF ANY EXCAVATION AND/OR CONSTRUCTION AS PER STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR THE DISTRICT OF COLUMBIA. IF AN
2. ALL DEBRIS IS TO BE REMOVED FROM SITE.
3. ALLEY AND/OR STREET/SIDEWALK SHALL BE SWEPT CLEAN AT ALL TIMES DURING EXCAVATION AND CONSTRUCTION.
4. ALL CATCH BASINS AND DRAIN AREAS SHALL BE PROTECTED DURING EXCAVATION AND CONSTRUCTION.
5. IF ANY CATCH BASIN OR DRAIN BECOME CLOGGED AS A RESULT OF EXCAVATION OR CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS CLEANING.
6. WHEN SEDIMENT TRAP/SEDIMENT TANK HAS BEEN REACHED 67% CAPACITY, CLEAN OUT OF SAME IS REQUIRED.
7. ANY STOCKPILING, REGARDLESS OF LOCATION SHALL STABILIZED AND COVERED WITH PLASTIC OR CANVAS, AFTER ITS ESTABLISHMENT AND FOR THE DURATION OF THE PROJECT.
8. AFTER RAZE OR DEMOLITION, THERE IS THE NEED FOR GROUND-COVER TO PREVENT EROSION AND SEDIMENT RUNOFF FROM OCCURRING. SUCH AS SEED, SOD, PAVE, BRICKBAT OR MULCH, ETC.

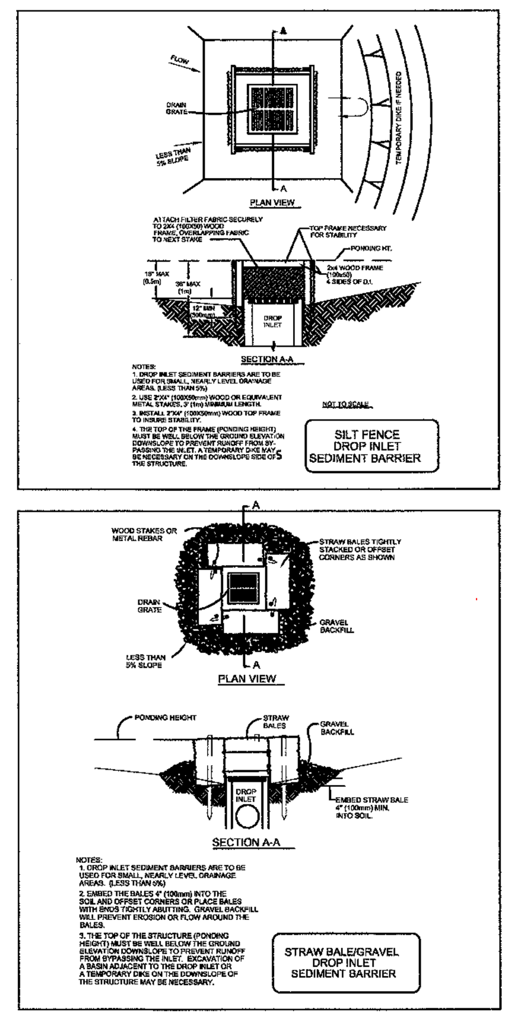
### SEDIMENT CONTROL APPROVAL

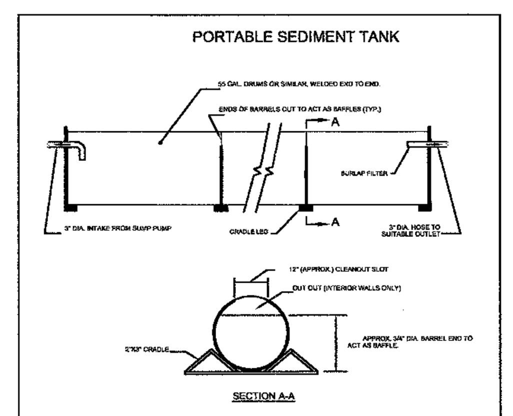
PLAN NUMBER ______________

THIS APPROVAL IS FOR GRADING AND SEDIMENT CONTROL ONLY. PERMITTEE/CONTRACTOR IS REQUIRED TO CONSTRUCT DESIGN FEATURE SHOWN HEREON.
HE SHALL NOTIFY THIS OFFICE AT NUMBER SHOWN AT LEAST 24 HOURS BEFORE START OF GRADING ACTIVITY, AND WITHIN TWO WEEKS AFTER COMPLETION OF PROJECT FOR FINAL INSPECTION.

DATE ______ FLOODING AND EROSION CONTROL SECTION ______



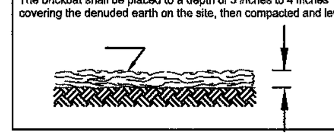



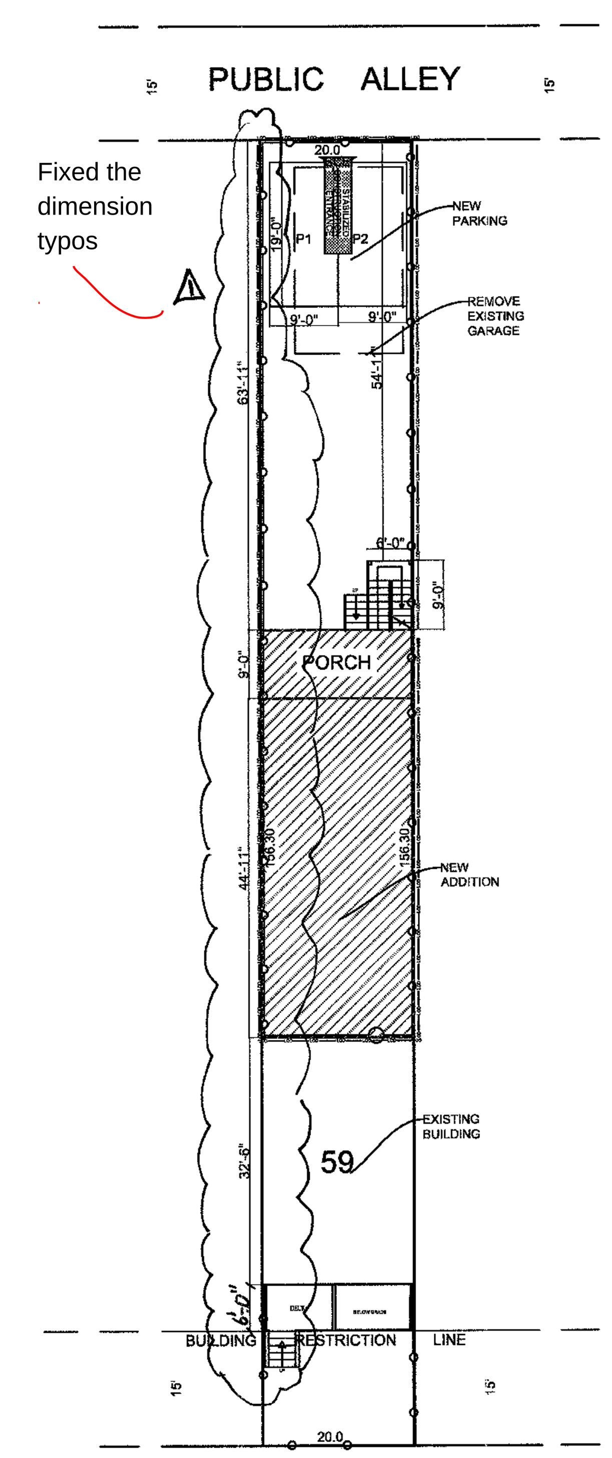

1. CLEAN OUT THE SEDIMENT TANK WHEN ONE THIRD (1/3) FILLED WITH SILT.
2. STEEL DRUMS ARE USED AS AN EXAMPLE DUE TO THEIR READY AVAILIBILITY. ANY TANKS MAY BE USED, PROVIDING THAT THE VOLUME REQUIREMENTS FROM PAGE 20.01 ARE MET.
3. ALL SEDIMENT COLLECTED IN TANK SHALL BE DISPOSED OFF IN A SEDIMENT TRAPPING DEVICE AS APPROVED BY THE INSPECTOR.

STANDARDS AND SPECIFICATIONS
FOR
BRICKBAT GROUND COVER

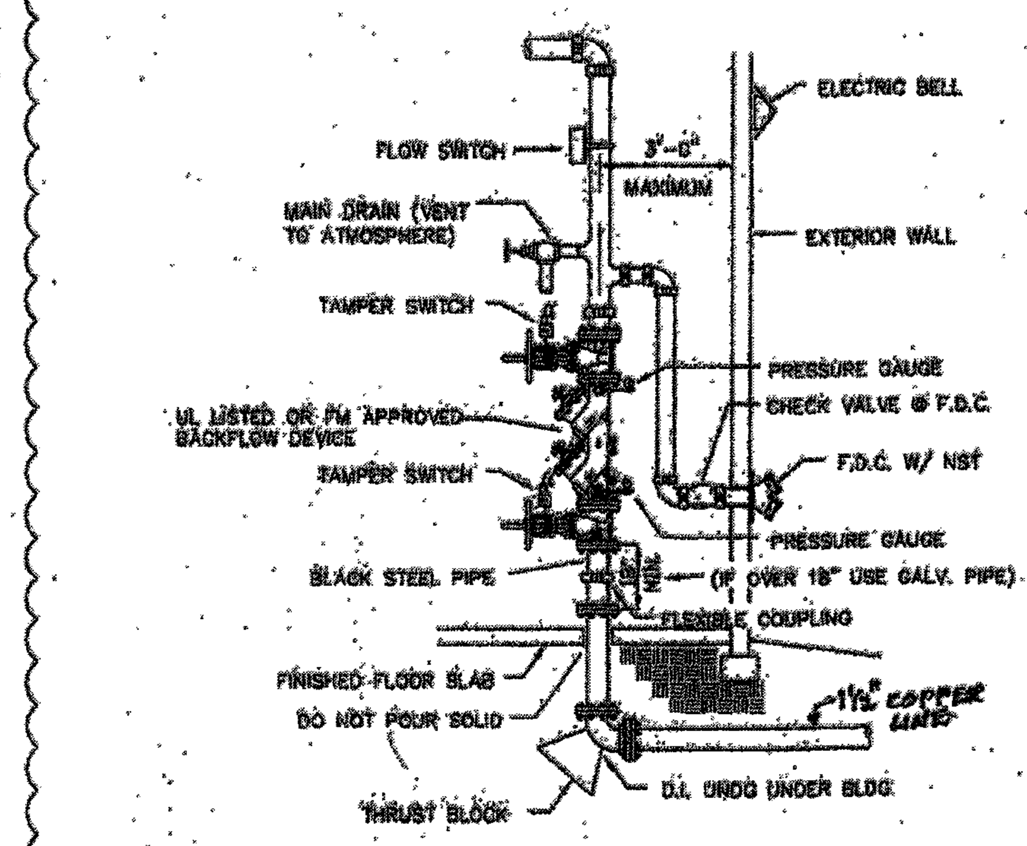
Definition
Temporary ground covering consisting of broken brick (1/2 piece or smaller) placed over denuded earth.
Purpose
Brickbat provide a temporary ground cover over dended urban earth to prevent the transportation of sediment from the site.
Conditions Where Practice Applies
Brickbat may be used on site in need of temporary ground coved.
Design Criteria
The brickbat shall be placed to a depth of 3 inches to 4 inches covering the denuded earth on the site, then compacted and leveled.



EROSION AND SEDIMEN CONTROL NARRATIVE:
Total disturance are is less than 5,000 sf, Therefore Stormwater is not required




SCALE: 1"=20'



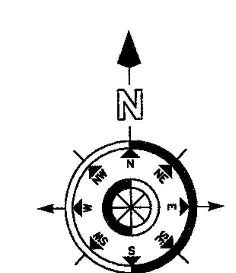

GENERAL NOTES

*1. BACKFLOW PREVENTER SHALL BE TESTED FOR PROPER OPERATION PER CITY OF SCOTTSDALE REQUIREMENTS BY A CERTIFIED TESTER RECOGNIZED BY THE CITY, BEFORE A TEMPORARY CERTIFICATE OF OCCUPANCY IS ISSUED.
2. ADEQUATE CLEARANCE SHALL BE PROVIDED AROUND FIRE RISER. DIMENSIONS FROM FACE OF PIPE SHALL MEASURE A MINIMUM OF 12" OFF THE BACK WALL, 18" ON EACH SIDE AND 36" CLEAR IN FRONT WITH A FULL HEIGHT DOOR. THE FIRE LINE SHALL EXTEND A MAXIMUM OF 3' INTO THE BUILDING FROM INSIDE FACE OF WALL TO CENTER OF PIPE.
3. RISER SHALL BE HYDROSTATICALLY TESTED AT 200 PSI FOR TWO HOURS.
4. AT #1 & #4 TEST PORTS INSTALL A 1/2" BRASS NIPPLE, TEE & PLUGS W/1/2" x 1/4" MALE FLARED CONNECTION W/ CAP ( INSTALL PRESSURE GAUGE ON TEE OUTLET)
5. HYDRAULIC DESIGN AND SUMMARY INFORMATION PER NFPA SHALL BE ATTACHED TO RISER.
6. SPARE HEAD BOX SHALL BE MOUNTED IN AREA.

* REDUCED-PRESSURE BACKFLOW REQUIRED WHEN F.D. CONNECTION IS WITHIN 1700 FEET OF AN AUXILIARY SUPPLY.

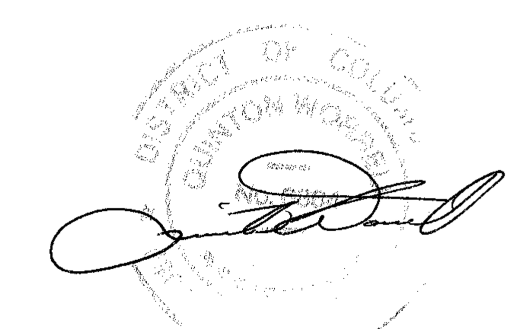
## FIRE SPRINKLER RISER DETAIL WITH WALL MOUNT FD CONECTION

SCALE: NOT TO SCALE




| | | |
|---|---|---|
| | | PROPERTY BOUNDARY |
| SCE | SCE | STABILIZED CONSTRUCTION ENTRANCE |
| | SF | SILT FENCE |
| | LOD | LIMIT OF DIST |
| SS | | STOCKPILED SOILS |
| | | CONTOUR LINE |

LOT AREA: 3126 SF
LIMIT OF DIST = 2366SF
VOLUME OF CUT = 0
LIMIT OF FILL = 0
LOT COVERAGE EXIST: 914 SF
LOT COVERAGE PROPOSED: 1,768.2 SF



HOUSE RENOVATION
AND ADDITION
1117 ALLISON STREET N.W

C1

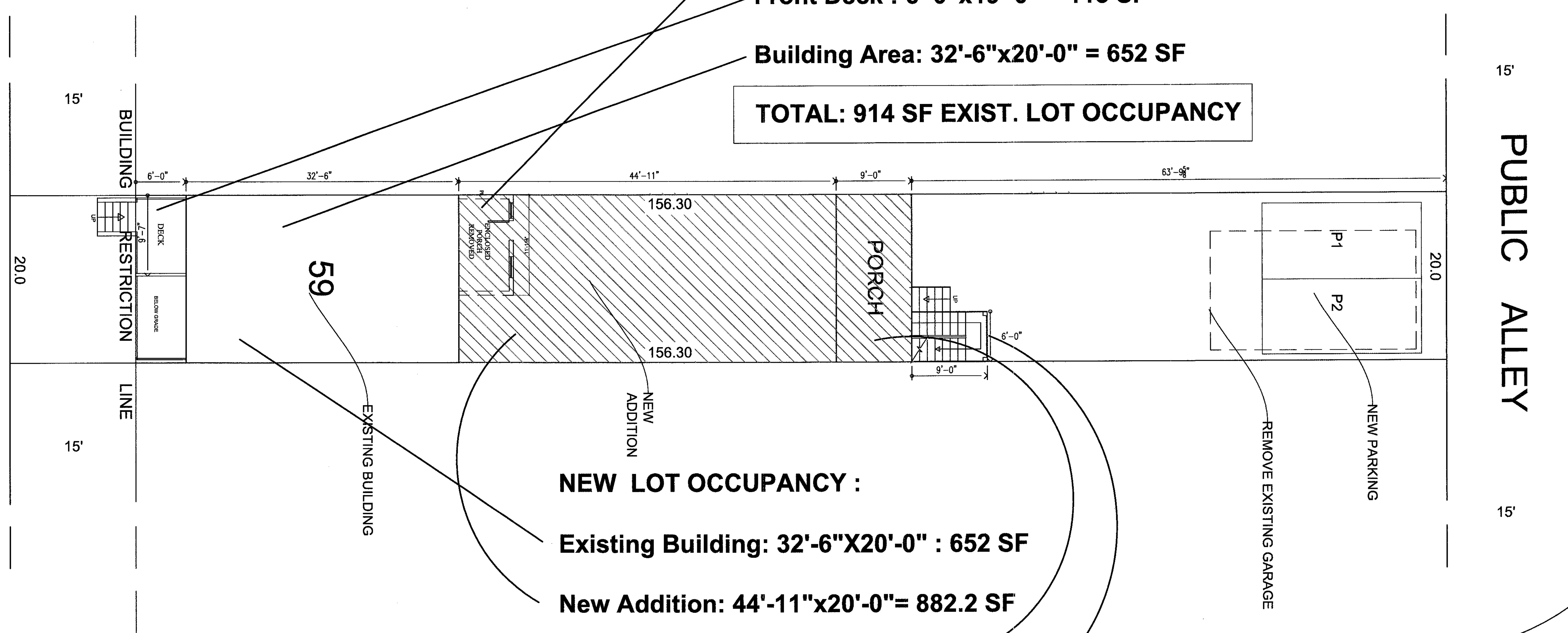
**EXISTING AREA:**

**Porch : 6'-6"x11'-11" = 73 SF**

**Front Deck : 6'-0"x19'-0" = 115 SF**

**Building Area: 32'-6"x20'-0" = 652 SF**

**TOTAL: 914 SF EXIST. LOT OCCUPANCY**




**NEW LOT OCCUPANCY :**

**Existing Building: 32'-6"X20'-0" : 652 SF**

**New Addition: 44'-11"x20'-0"= 882.2 SF**

**Porch: 9'-0"x20'-0" = 180 SF**

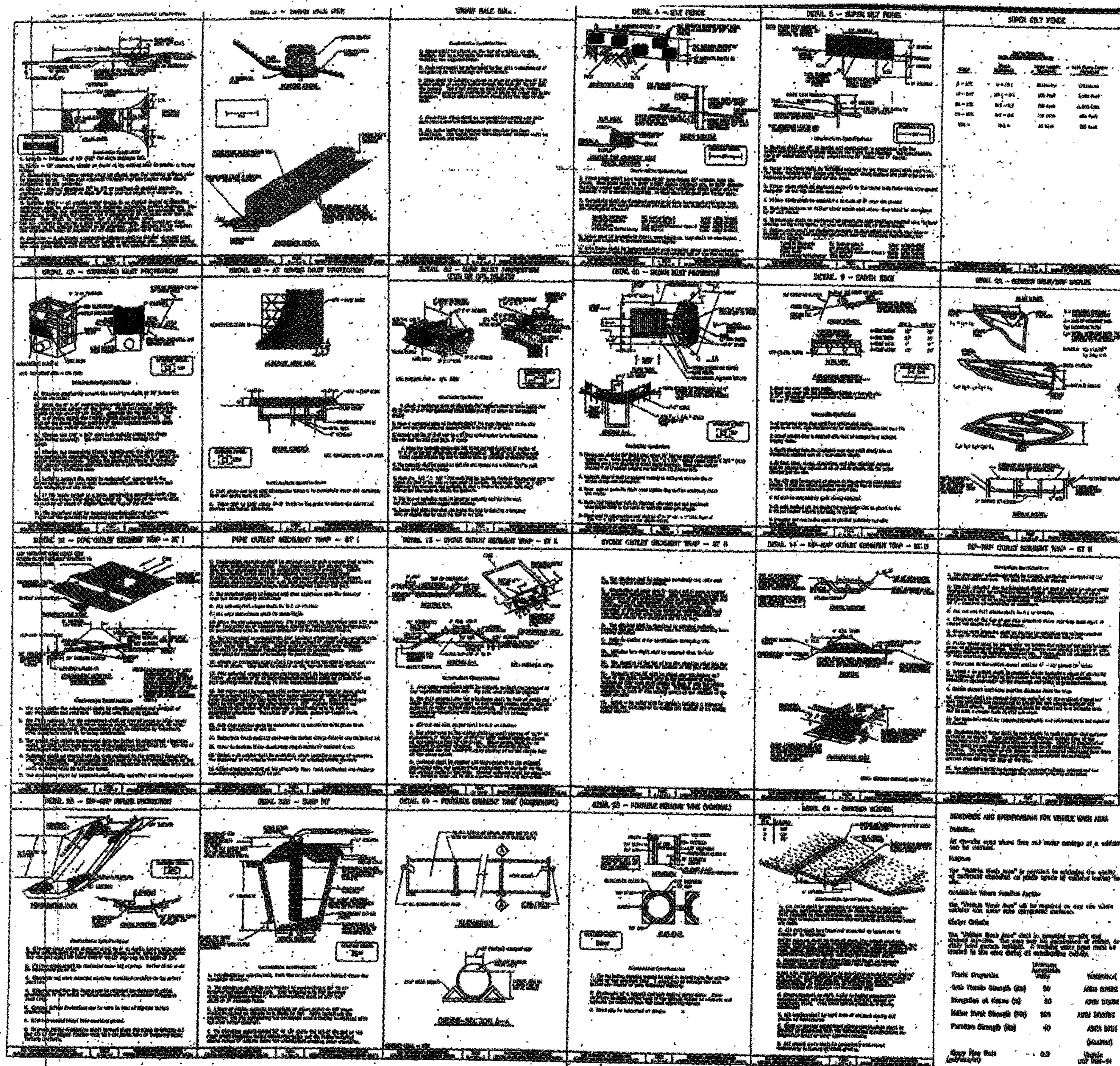
**Rear Stair: 6'-0"x9'-0" = 54 SF**

**TOTAL: 1,768.2 SF**

* It's same as SHEET C-1. 'C-1 Copy' created to make more readable.

SCALE: 1/8"= 1'-00

C1-COPY




## STANDARD AND SPECIFICATIONS FOR DUST CONTROL

1. The contractor shall conduct operations and maintain the project site so as to minimize the creation and dispersion of dust. Dust control shall be used throughout the work at the site.
2. The contractor must provide clean water, free from salt, oil and other deleterious material to be used for on-site dust control.
3. The contractor shall supply water spraying equipment capable of accessing all work areas.
4. The contractor shall implement strict dust control measures during active construction periods on-site. These control measures will generally consist of water applications that shall be applied a minimum of once per day during dry weather or more often as required to prevent dust emissions.
5. For water application to undisturbed soil surfaces, the contractor shall:
   - A. Apply water with equipment consisting of tank, spray bar, pump with discharge pressure gauge.
   - B. Arrange the spray bar height, nozzle spacing and spray pattern to provide complete coverage of the ground with the water.
   - C. Disperse water through nozzles on spray bar at 20 PSI (137.9 kPa), minimum. Keep areas damp without creating nuisance conditions such as ponding.
6. For water application to soil surfaces during demolition and/or excavation, the contractor shall:
   - A. Apply water with equipment consisting of a tank, pump with discharge gauge, hoses and mist nozzles.
   - B. Locate the tank and spraying equipment so that the entire excavation area can be misted without interfering with the demolition and/or excavation equipment or operations. Keep areas damp without creating nuisance conditions such as ponding.
   - C. Apply water spray in a manner to prevent movement of spray beyond the site boundaries.

## DISTRICT OF COLUMBIA

### STANDARD SEDIMENT CONTROL NOTES

1. All sediment and erosion control methods shall be installed before the start of an excavation and/or construction as per Standards and Specifications for Soil Erosion and Sediment Control for the District of Columbia. If on on-site inspection reveals further erosion control measures are necessary the same shall be provided.
2. All debris to be removed from site.
3. Alley and/or streets shall be swept clean at all times during excavation and construction.
4. All catch basins and area drains shall be protected during excavation and construction.
5. If any catch basin or drain becomes clogged as a result of excavation or construction, the contractor shall be responsible for its cleaning.
6. When a sediment trap/sediment tank has reached 50% capacity, clean out of same is required.
7. Any stockpiling, regardless of location on the site, shall be stabilized within 20 days after its establishment and for the duration of the project.

## STANDARDS AND SPECIFICATIONS FOR VEHICLE WASH AREA

**Definition**

An on-site area where tires and under carriage of a vehicle can be washed.

**Purpose**

The "Vehicle Wash Area" is provided to minimize the quantity of sediment deposited on public spaces by vehicles leaving the site.

**Conditions Where Practice Applies**

The "Vehicle Wash Area" will be required on any site where vehicles can enter onto unimproved surfaces.

**Design Criteria**

The "Vehicle Wash Area" shall be provided on-site and drained on-site. The area may be constructed of rubble, or other hard porous material. A working water hose must be located in the area during all construction activity.

1.

| Fabric Properties | Minimum Acceptable Value | Test Method |
|---|---|---|
| Grab Tensile Strength (lbs) | 90 | ASTM D1682 |
| Elongation at Failure (%) | 50 | ASTM D1682 |
| Mullen Burst Strength (PSI) | 190 | ASTM MD3786 |
| Puncture Strength (lbs) | 40 | ASTM D751 (Modified) |
| Slurry Flow Rate (gal/min/sf) | 0.3 | Virginia DOT VTM-51 |
| Equivalent Opening Size | 40–80 | US Std Sieve CW-02215 |
| Ultraviolet Radiation Stability % | 90 | ASTM G-26 |

2. Fence Post (for fabricated units): The length shall be a minimum of 36 inches long. Wood posts will be of sound quality hardwood with a minimum cross sectional area of 3.0 square inches. Steel posts will be standard T and U section weighing not less than 1.00 pound per linear foot.

3. Wire Fence (for fabricated units): Wire fencing shall be a minimum of 14 gauge with a maximum 6" mesh opening, or as approved.

4. Prefabricated Units: Envirofence or approved equivalent may be used in lieu of the above method providing the unit is installed per manufacturer's instructions.

## [illegible] STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

[illegible]

DISTRICT OF COLUMBIA
QUINTON WORRELL
No. 6864
PROFESSIONAL ENGINEER

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