243 MADISON ST. MAMARONECK, NY 10543

GENERAL NOTES

1– SCOPE OF WORK FOR 2–FAMILY DWELLING.

2– ALL WORK SHALL CONFORM TO THE REQUIREMENTS. UTILITY COMPANY REQUIREMENTS AND BEST TRADE PRACTICES.

3– BEFORE COMMENCING THE WORK, THE CONTRACTOR SHALL FILE ALL REQUIRED CERTIFICATES OF INSURANCE WITH THE DOB, OBTAIN ALL REQUIRED PERMITS, & PAY ALL FEES REQUIRED BY VILLAGE OF MAMARONECK.

4– THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS IN THE FIELD PRIOR TO COMMENCING WORK, AND SHALL REPORT ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS TO THE ARCHITECT.

5– MINOR DETAILS NOT USUALLY SHOWN OR SPECIFIED,BUT NECESSARY FOR PROPER CONSTRUCTION OF ANY PART OF THE WORK SHALL BE INCLUDED AS IF THEY WERE INDICATED ON THE DRAWINGS.

6– THE CONTRACTOR SHALL COORDINATE ALL WORK PROCEDURES WITH REQUIREMENTS OF LOCAL AUTHORITIES.

7– THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ADJACENT PROPERTIES AND FOR MATERIALS WITHIN THE PROPOSED CONSTRUCTION AREA. THE CONTRACTOR SHALL DESIGN AND INSTALL ADEQUATE SHORING & BRACING FOR EXCAVATIONS OR REMOVAL TASKS.

8– THE CONTRACTOR SHALL HAVE SOLE RESPONSIBILITY FOR ANY DAMAGES, INJURIES CAUSED BY OR DURING THE EXECUTION OF THE WORK.

9– THE CONTRACTOR SHALL LAY OUT HIS OWN WORK. AND SHALL PROVIDE ALL DIMENSIONS REQUIRED FOR OTHER TRADES (PLUMBING ELECTRICAL, MECHANICAL)

10– PLUMBING/ELECTRICAL WORK SHALL BE PERFORMED BY CONTRACTOR LICENSED IN THEIR TRADES, AND WHO SHALL ARRANGE FOR AND OBTAIN INSPECTIONS AND REQUIRED SIGN–OFFS.

11– THE CONTRACTOR SHALL DO ALL CUTTING, PATCHING, REPAIRING AS REQUIRED TO PERFORM ALL OF THE WORK INDICATED ON THE DRAWINGS. AND ALL OTHER WORK THAT MAY BE REQUIRED TO COMPLETE THE JOB.

12– THE CONTRACTOR. UPON COMPLETION OF THE WORK, SHALL ARRANGE FOR DEPARTMENT OF BUILDINGS INSPECTIONS AND SIGN–OFFS AS REQUIRED.

13– CONTRACTOR SHALL PERFORM ALL OPERATIONS OF DEMOLITION AND REMOVAL INDICATED ON THE DRAWINGS AND AS MAY BE REQUIRED BY THE WORK. ALL WORK SHALL BE DONE CAREFULLY AND NEATLY, IN A SYSTEMATIC MANNER.

14– NO DEBRIS SHALL BE ALLOWED TO ACCUMULATE ON THE SITE. DEBRIS SHALL BE REMOVED BY THE CONTRACTOR AS THE JOB PROCEEDS. THE SITE SHALL BE LEFT CLEAN AT THE COMPLETION OF THE DEMOLITION OF EXISTING BUILDING.

15– ALL ADJOINING PROPERTY AFFECTED BY ANY OPERATIONS OF DEMOLITION SHALL BE PROTECTED.

16– THE CONTRACTOR SHALL PROVIDE. ERECT AND MAINTAIN AL TEMPORARY SHORING AND BRACING AS REQUIRED BY DEPARTMENT OF BUILDINGS.

17– THE CONTRACTOR SHALL PROVIDE ADEQUATE WEATHER PROTECTION FOR THE CONSTRUCTION AND ITS CONTENTS DURING THE COURSE OF THE WORK. ALL OPENINGS IN ANY WALL SHALL BE PROTECTED FROM ALL FORMS OF WEATHER OR WATER PENETRATION.

18– THE CONTRACTOR SHALL FILE ALL NECESSARY CERTIFICATES OF INSURANCE WITH THE DEPARTMENT OF BUILDINGS, PAY ALL FEES. OBTAIN ALL PERMITS, AND PROVIDE ANY AND ALL BONDS REQUIRED BY VILLAGE AGENCIES IN ORDER TO DO THE WORK HEREIN DESCRIBED.

19– CONTRACTOR TO PROVIDE CONSTRUCTION NOISE MITIGATION PLAN TO MANAGEMENT PRIOR TO START OF CONSTRUCTION

20– AT PROJECT COMPLETION THE ARCHITECT SHALL PROVIDE COPIES OF ALL "SIGN–OFFS" A) INDICATING COMPLETION OF FINAL SIGN–OFF B) COPIES OF PLUMBING SIGN–OFFS, AND C) COPIES OF ELECTRICAL SIGN–OFFS.

VILLAGE OF MAMARONECK–SCHEDULE OF MINIMUM REQUIREMENTS FOR RESIDENTIAL DISTRICTS

MINIMUM LOT AREA (SQUARE FEET)
REQUIRED: 2,500 S.F. PER DWELLING UNIT
PROVIDED: 99.4X50.0 = 4,970 S.F. – ALLOWS 2 DWELLING UNITS

MINIMUM LOT WIDTH (FEET)
REQUIRED: 50 FEET
PROVIDED: 50 FEET

MINIMUM LOT DEPTH (FEET)
REQUIRED: 100 FEET
PROVIDED: 99.4 FEET

MINIMUM HABITABLE FLOOR AREA (SQUARE FEET)
REQUIRED: 900 S.F. EACH DWELLING UNIT
PROVIDED: 1,739 S.F. EACH DWELLING UNITS

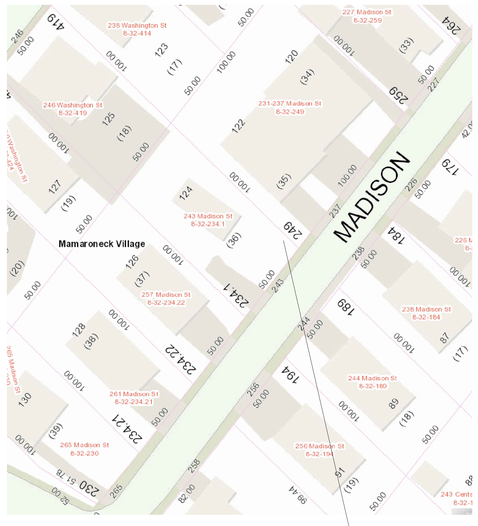
MAXIMUM HEIGHT OF PRINCIPAL BUILDING
STORIES: 2/12 STORIES
PROVIDED: 2 STORIES OVER CELLAR
FEET 35 FEET
PROPOSED: 20 FEET

MINIMUM REQUIRED YARDS
FRONT YARD: 20 FEET REQUIRED; 22.71 FEET PROVIDED
LESSER SIDE YARD: 6 FEET REQUIRED; 6 FEET PROVIDED
2 COMBINED YARDS: 16 FEET REQUIRED; 16 FEET PROVIDED
REAR YARD: 25 FEET REQUIRED; 25 FEET PROVIDED

MAXIMUM LOT COVERAGE (ALL BUILDINGS AS PERCENTAGE OF LOT AREA)
REQUIRED: 35% MAXIMUM = 0.35 X 4,970' = 1739.5 S.F.
PROVIDED: 51.67' X 34' – 17.78' = 1,739 S.F.

MAXIMUM FLOOR AREA RATIO
REQUIRED: 0.70 = 4,970' X 0.7 = 3,479 S.F.
PROVIDED: 0.70 = 3,478 S.F.

OTHER REQUIREMENTS
NOTE 6: OFF–STREET PARKING – SEE ARTICLE VIII
NOTE 11: ACCESSORY BUILDING – N/A, NO ACCESSORY BUILDINGS



N 1 T-101 DIGITAL TAX MAP
SCALE: N.T.S.

SCHEDULE OF DRAWINGS

ARCHITECTURAL
1. T –101.00 GENERAL NOTES, ZONING, CODES
2. T –102.00 EXISTING & PROPOSED PLOT PLAN; ZONING MAP; FLOOD PLAIN MAP
3. EN–101.00 ENERGY NOTES
4. EN–102.00 ENERGY NOTES
5. EN–103.00 ENERGY AREA CALCULATIONS & ENVELOPE SCHEMES
6. EN–104.00 RESCHECK
7. A –201.00 CELLAR/SITE PLAN & REFLECTED CEILING PLAN
8. A –202.00 1ST FLOOR PLAN & REFLECTED CEILING PLAN
9. A –203.00 2ND FLOOR PLAN & REFLECTED CEILING PLAN
10. A –204.00 ROOF PLAN & REFLECTED CEILING PLAN
11. A –301.00 BUILDING ELEVATIONS
12. A –401.00 BUILDING SECTIONS
13. A –501.00 EXTERIOR WALL AND ROOF DETAILS
14. A –601.00 WALL TYPES AND DETAILS
15. A –602.00 DOOR SCHEDULE AND DETAILS
16. A –603.00 WINDOW SCHEDULE AND DETAILS
17. A –701.00 STAIR SECTION AND DETAILS
18. A –801.00 HANDICAP DETAILS

STRUCTURAL
19. S –101.00 STRUCTURAL NOTES
20. S –102.00 STRUCTURAL FOUNDATION & 1ST FLOOR PLANS
21. S –103.00 STRUCTURAL PLAN – 2nd FLOOR & ROOF
22. S –104.00 STRUCTURAL DETAILS

MECHANICAL – HVAC
23. M –101.00 HVAC SYSTEM NOTES
24. M –102.00 HVAC – CELLAR AND 1ST FLOOR PLANS
25. M –103.00 HVAC – 2ND FLOOR AND ROOF PLANS
26. M –104.00 HVAC RISER DIAGRAM

PLUMBING
27. P –101.00 PLUMBING NOTES
28. P –102.00 PLUMBING PLANS
29. P –103.00 PLUMBING PLANS
30. P –104.00 WATER AND SANITARY RISER DIAGRAM
31. P –105.00 GAS AND STORM WATER RISER DIAGRAM

SPRINKLER
NONE

ELECTRICAL
32. E –101.00 ELECTRICAL NOTES & LIGHTING SCHEDULE
33. E –102.00 ELECTRICAL PLANS
34. E –103.00 ELECTRICAL PLANS
35. E –104.00 ELECTRICAL RISER DIAGRAMS

APPLICATION NOTES

- APPLICATION FILED FOR NEW 2–FAMILY BUILDING
- EXISTING 1–FAMILY BUILDING TO BE DEMOLISHED
- CONSTRUCTION TYPE III
- APPLICABLE CODES: NEW YORK UNIFORM BUILDING CODE AND NY STATE ENERGY CONSERVATION CONSTRUCTION CODE 2020 EDITION
- NEW CO REQUIRED

WORK UNDER THIS APPLICATION

- GENERAL CONSTRUCTION
- MECHANICAL
- ELECTRICAL
- PLUMBING
- STORM WATER DETENTION/RETENTION
- CURB CUTOUT

WORK TO BE FILED UNDER SEPARATE APPLICATION

- BPP
- DEMOLITION
- BLASTING ROCK
- REMOVE OIL TANK

§126–5 CONSTRUCTION INSPECTION

A. WORK TO REMAIN ACCESSIBLE AND EXPOSED. WORK SHALL REMAIN ACCESSIBLE AND EXPOSED UNTIL INSPECTED AND ACCEPTED BY THE BUILDING INSPECTOR OR BY AN INSPECTOR AUTHORIZED BY THE CODE ENFORCEMENT OFFICER. THE PERMIT HOLDER SHALL NOTIFY THE BUILDING INSPECTOR WHEN ANY ELEMENT OF WORK DESCRIBED IN SUBSECTION B OF THIS SECTION IS READY FOR INSPECTION.

B. ELEMENTS OF WORK TO BE INSPECTED. THE FOLLOWING ELEMENTS OF THE CONSTRUCTION PROCESS SHALL BE INSPECTED, WHERE APPLICABLE:

1. WORK SITE PRIOR TO THE ISSUANCE OF A BUILDING PERMIT;

2. FOOTING AND FOUNDATION;

3. PREPARATION FOR CONCRETE SLAB;

4. FRAMING;

5. BUILDING SYSTEMS, INCLUDING UNDERGROUND AND ROUGH–IN;

6. FIRE–RESISTANT CONSTRUCTION;

7. FIRE–RESISTANT PENETRATIONS;

8. SOLID–FUEL–BURNING HEATING APPLIANCES, CHIMNEYS, FLUES OR GAS VENTS;

9. ENERGY CODE COMPLIANCE; AND

10. A FINAL INSPECTION AFTER ALL WORK AUTHORIZED BY THE BUILDING PERMIT HAS BEEN COMPLETED.

C. INSPECTION RESULTS. AFTER INSPECTION, THE WORK OR A PORTION THEREOF SHALL BE NOTED AS SATISFACTORY AS COMPLETED, OR THE PERMIT HOLDER SHALL BE NOTIFIED AS TO WHERE THE WORK FAILS TO COMPLY WITH THE UNIFORM CODE OR ENERGY CODE. WORK NOT IN COMPLIANCE WITH ANY APPLICABLE PROVISION OF THE UNIFORM CODE OR ENERGY CODE SHALL REMAIN EXPOSED UNTIL SUCH WORK SHALL HAVE BEEN BROUGHT INTO COMPLIANCE WITH ALL APPLICABLE PROVISIONS OF THE UNIFORM CODE AND THE ENERGY CODE, RE–INSPECTED, AND FOUND SATISFACTORY AS COMPLETED.

D. FEE. THE FEE SPECIFIED IN CHAPTER A347 OF THIS CODE MUST BE PAID PRIOR TO OR AT THE TIME OF EACH INSPECTION PERFORMED PURSUANT TO THIS SECTION.

§ 126–7. CERTIFICATES OF OCCUPANCY CERTIFICATES OF COMPLIANCE.

A. CERTIFICATES OF OCCUPANCY OR CERTIFICATES OF COMPLIANCE REQUIRED. A CERTIFICATE OF OCCUPANCY OR CERTIFICATE OF COMPLIANCE SHALL BE REQUIRED FOR ANY WORK WHICH IS THE SUBJECT OF A BUILDING PERMIT AND FOR ALL STRUCTURES, BUILDINGS, OR PORTIONS THEREOF, WHICH ARE CONVERTED FROM ONE USE OR OCCUPANCY CLASSIFICATION OR SUB–CLASSIFICATION TO ANOTHER. PERMISSION TO USE OR OCCUPY A BUILDING OR STRUCTURE, OR PORTION THEREOF, FOR WHICH A BUILDING PERMIT WAS PREVIOUSLY ISSUED SHALL BE GRANTED ONLY BY ISSUANCE OF A CERTIFICATE OF OCCUPANCY OR CERTIFICATE OF COMPLIANCE.

B. ISSUANCE OF CERTIFICATES OF OCCUPANCY OR CERTIFICATE OF COMPLIANCE. THE BUILDING INSPECTOR SHALL ISSUE A CERTIFICATE OF OCCUPANCY OR CERTIFICATE OF COMPLIANCE IF THE WORK WHICH WAS THE SUBJECT OF THE BUILDING PERMIT WAS COMPLETED IN ACCORDANCE WITH ALL APPLICABLE PROVISIONS OF THE UNIFORM CODE AND ENERGY CODE AND, IF APPLICABLE, THE STRUCTURE, BUILDING OR PORTION THEREOF THAT WAS CONVERTED FROM ONE USE OR OCCUPANCY CLASSIFICATION OR SUBCLASSIFICATION TO ANOTHER COMPLIES WITH ALL APPLICABLE PROVISIONS OF THE UNIFORM CODE AND ENERGY CODE. THE BUILDING INSPECTOR OR AN INSPECTOR AUTHORIZED BY THE BUILDING INSPECTOR SHALL INSPECT THE BUILDING, STRUCTURE OR WORK PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY OR CERTIFICATE OF COMPLIANCE. IN ADDITION, WHERE APPLICABLE, THE FOLLOWING DOCUMENTS, PREPARED IN ACCORDANCE WITH THE PROVISIONS OF THE UNIFORM CODE BY SUCH PERSON OR PERSONS AS MAY BE DESIGNATED BY OR OTHERWISE ACCEPTABLE TO THE BUILDING INSPECTOR, AT THE EXPENSE OF THE APPLICANT FOR THE CERTIFICATE OF OCCUPANCY OR CERTIFICATE OF COMPLIANCE, SHALL BE PROVIDED TO THE BUILDING INSPECTOR PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY OR CERTIFICATE OF COMPLIANCE:

1. A WRITTEN STATEMENT OF STRUCTURAL OBSERVATIONS AND/OR A FINAL REPORT OF SPECIAL INSPECTIONS; AND

2. FLOOD HAZARD CERTIFICATIONS.

C. CONTENTS OF CERTIFICATES OF OCCUPANCY OR CERTIFICATES OF COMPLIANCE. A CERTIFICATE OF OCCUPANCY OR CERTIFICATE OF COMPLIANCE SHALL CONTAIN THE FOLLOWING INFORMATION:

1. THE BUILDING PERMIT NUMBER, IF ANY;

2. THE DATE OF ISSUANCE OF THE BUILDING PERMIT, IF ANY;

3. THE NAME, ADDRESS AND TAX MAP NUMBER OF THE PROPERTY;

4. IF THE CERTIFICATE IS NOT APPLICABLE TO AN ENTIRE STRUCTURE, A DESCRIPTION OF THAT PORTION OF THE STRUCTURE FOR WHICH THE CERTIFICATE IS ISSUED;

5. THE USE AND OCCUPANCY CLASSIFICATION OF THE STRUCTURE;

6. THE TYPE OF CONSTRUCTION OF THE STRUCTURE;

7. THE ASSEMBLY OCCUPANT LOAD OF THE STRUCTURE, IF ANY;

8. IF AN AUTOMATIC SPRINKLER SYSTEM IS PROVIDED, A NOTATION AS TO WHETHER THE SPRINKLER SYSTEM IS REQUIRED;

9. ANY SPECIAL CONDITIONS IMPOSED IN CONNECTION WITH THE ISSUANCE OF THE BUILDING PERMIT; AND

10. THE SIGNATURE OF THE BUILDING INSPECTOR ISSUING THE CERTIFICATE OF OCCUPANCY AND THE DATE OF ISSUANCE.

D. TEMPORARY CERTIFICATE. THE BUILDING INSPECTOR SHALL BE PERMITTED TO ISSUE A TEMPORARY CERTIFICATE ALLOWING THE TEMPORARY OCCUPANCY OF A BUILDING OR STRUCTURE, OR A PORTION THEREOF, PRIOR TO COMPLETION OF THE WORK WHICH IS THE SUBJECT OF A BUILDING PERMIT. HOWEVER, IN NO EVENT SHALL THE BUILDING INSPECTOR ISSUE A TEMPORARY CERTIFICATE UNLESS THE BUILDING INSPECTOR DETERMINES THAT THE BUILDING OR STRUCTURE, OR THE PORTION THEREOF COVERED BY THE TEMPORARY CERTIFICATE, MAY BE OCCUPIED SAFELY, THAT ANY FIRE– AND SMOKE–DETECTING OR FIRE PROTECTION EQUIPMENT WHICH HAS BEEN INSTALLED IS OPERATIONAL, AND THAT ALL REQUIRED MEANS OF EGRESS FROM THE BUILDING OR STRUCTURE HAVE BEEN PROVIDED. THE BUILDING INSPECTOR MAY INCLUDE IN A TEMPORARY CERTIFICATE SUCH TERMS AND CONDITIONS AS HE OR SHE DEEMS NECESSARY OR APPROPRIATE TO ENSURE SAFETY OR TO FURTHER THE PURPOSES AND INTENT OF THE UNIFORM CODE. A TEMPORARY CERTIFICATE SHALL BE EFFECTIVE FOR A PERIOD OF TIME, NOT TO EXCEED SIX MONTHS, WHICH SHALL BE DETERMINED BY THE BUILDING INSPECTOR AND SPECIFIED IN THE TEMPORARY CERTIFICATE. DURING THE SPECIFIED PERIOD OF EFFECTIVENESS OF THE TEMPORARY CERTIFICATE, THE PERMIT HOLDER SHALL UNDERTAKE TO BRING THE BUILDING OR STRUCTURE INTO FULL COMPLIANCE WITH ALL APPLICABLE PROVISIONS OF THE UNIFORM CODE AND THE ENERGY CODE.

E. REVOCATION OR SUSPENSION OF CERTIFICATES. IF THE BUILDING INSPECTOR DETERMINES THAT A CERTIFICATE OF OCCUPANCY OR CERTIFICATE OF COMPLIANCE OR A TEMPORARY CERTIFICATE WAS ISSUED IN ERROR BECAUSE OF INCORRECT, INACCURATE OR INCOMPLETE INFORMATION, AND IF THE RELEVANT DEFICIENCIES ARE NOT CORRECTED TO THE SATISFACTION OF THE BUILDING INSPECTOR WITHIN SUCH PERIOD OF TIME AS SHALL BE SPECIFIED BY THE BUILDING INSPECTOR, THE BUILDING INSPECTOR SHALL REVOKE OR SUSPEND SUCH CERTIFICATE.

F. FEE. THE FEE SPECIFIED IN CHAPTER A347 OF THIS CODE MUST BE PAID AT THE TIME OF SUBMISSION OF AN APPLICATION FOR A CERTIFICATE OF OCCUPANCY OR FOR A TEMPORARY CERTIFICATE.

§ 278–7 REQUIRED INSPECTIONS

THERE SHALL BE THE FOLLOWING INSPECTIONS BY THE INSPECTOR OF WORK DONE PURSUANT TO PLANS AND SPECIFICATIONS APPROVED AS HEREINAFTER PROVIDED:

A. THE FIRST INSPECTION SHALL BE MADE WHEN ALL THE LINES OF SOIL, SEWER CONNECTION, WASTE AND VENT PIPES, WITH ALL THEIR RESPECTIVE BRANCHES, ARE IN PLACE AND BEFORE ANY WORK HAS BEEN COVERED OR CONCEALED. AT THIS INSPECTION, THE WORK SHALL BE TESTED BY THE WATER TEST IN THE PRESENCE OF THE INSPECTOR. ANY JOINT APPEARING AT THIS INSPECTION TO BE DEFECTIVE MUST BE MADE TIGHT, AND ANY DEFECTIVE PIPE THEN DISCOVERED MUST BE REPLACED BY SOUND PIPE.

B. AN INSPECTION FOR LEAKS SHALL BE MADE WHEN THE WORK IS COMPLETED.

C. IN CASE THE INSPECTOR, AT FIRST INSPECTION OR AT ANY TIME THEREAFTER, PRIOR TO THE ISSUANCE OF A CERTIFICATE BY THE INSPECTOR HEREINAFTER PROVIDED, SHALL DELIVER TO THE PLUMBER IN CHARGE OF THE WORK A WRITTEN STATEMENT OF ANY PARTICULAR OR PARTICULARS IN WHICH THE WORK VIOLATES ANY PROVISION OR PROVISIONS OF THIS CHAPTER, THERE SHALL BE SUCH INSPECTIONS IN ADDITION TO THOSE HERE IN ABOVE PROVIDED AS SHALL BE NECESSARY FOR THE INSPECTOR TO FIND OUT WHETHER THE VIOLATION HAS BEEN CURED; PROVIDED, HOWEVER, THAT SUCH INSPECTION SHALL, IF POSSIBLE, BE A PART OF THE INSPECTION SPECIFIED IN SUBSECTIONS A AND B ABOVE.

§ 342–14 BUILDING PROJECTIONS

A. PROJECTING ARCHITECTURAL FEATURES (HORIZONTAL). THE SPACE IN ANY REQUIRED YARD SHALL BE OPEN AND UNOBSTRUCTED, EXCEPT FOR THE ORDINARY PROJECTION OF THE WINDOWSILLS, BAY WINDOWS, BELT COURSES, CORNICES, EAVES, EXTERIOR STAIRS AND OTHER ARCHITECTURAL FEATURES; PROVIDED, HOWEVER, THAT SUCH FEATURES SHALL NOT PROJECT MORE THAN THREE FEET INTO ANY REQUIRED YARD, BUT NOT CLOSER THAN FIVE FEET TO THE PROPERTY LINE. THE SUM TOTAL OF SUCH PROJECTIONS IN ANY ONE YARD SHALL NOT EXCEED 25% OF THE OVERALL DIMENSION OF THE WALL FROM WHICH THEY PROJECT. [AMENDED 5–10–2010 BY L.L. NO. 12–2010, EFFECTIVE 5–26–2010]

B. PROJECTING FEATURES ABOVE THE ROOF LEVEL. THE HEIGHT LIMITATIONS OF THIS CHAPTER SHALL NOT APPLY TO CHURCH SPIRES, BELFRIES, CUPOLAS, SILOS AND DOMES NOT USED FOR HUMAN OCCUPANCY NOR TO CHIMNEYS, VENTILATORS, SKYLIGHTS, WATER TANKS, BULKHEADS OR SIMILAR FEATURES AND NECESSARY MECHANICAL APPURTENANCES TO A BUILDING WHICH ARE CARRIED ABOVE THE ROOF LEVEL, EXCEPT AS SUCH MAY BE SPECIFICALLY MODIFIED BY OTHER PROVISIONS OF THIS CHAPTER. RADIO AND TELEVISION ANTENNAS AND SUPPORTING STRUCTURES NO MORE THAN 15 FEET IN HEIGHT ABOVE THE ROOF OF THE BUILDING TO WHICH THEY ARE ATTACHED SHALL BE PERMITTED; OTHER SUCH ANTENNAS AND SUPPORTING STRUCTURES SHALL BE PERMITTED ONLY IF APPROVED BY THE BOARD OF APPEALS. PARAPETS OR CORNICES USED FOR ORNAMENTATION AND WITHOUT WINDOWS MAY EXTEND ABOVE THE ROOF LEVEL NOT MORE THAN THREE FEET. ALL SUCH FEATURES, HOWEVER, SHALL BE ERECTED ONLY TO SUCH HEIGHT AS IS NECESSARY TO ACCOMPLISH THE PURPOSE THEY ARE INTENDED TO SERVE.

C. FENCES, WALLS OR RETAINING WALLS SHALL BE CONSTRUCTED WITH THE FINISHED SIDE FACING OUTWARD FROM THE PROPERTY, AND SHALL NOT EXCEED SIX FEET IN HEIGHT, EXCEPT: [AMENDED 5–10–2010 BY L.L. NO. 12–2010, EFFECTIVE 5–26–2010]

1. ON A CORNER PARCEL, PLACED BEYOND THE FRONT OR SIDE BUILDING LINES, THEY SHALL NOT EXCEED FOUR FEET IN HEIGHT.

2. AN ADDITIONAL SIX INCHES IN HEIGHT MAY BE ALLOWED, AT THE DISCRETION OF THE BUILDING INSPECTOR, TO PROVIDE FOR NECESSARY DISTANCE BETWEEN THE GRADE AND THE BOTTOM OF THE FENCE, FOR GREATER FLEXIBILITY IN MOUNTING.

3. WHERE REQUIRED PURSUANT TO ARTICLE XI.

4. WHERE APPROVED IN CONJUNCTION WITH A SPECIAL PERMIT GRANTED UNDER ARTICLE X.

§ 342–15 UNIFORMITY OF ALIGNMENT WITH EXISTING BUILDINGS

[AMENDED 11–28–2016 BY L.L. NO. 23–2016, EFFECTIVE 12–7–2016]

IN ANY RESIDENTIAL DISTRICT, IF, ON ONE SIDE OF A STREET WITHIN A GIVEN BLOCK AND WITHIN 150 FEET OF ANY LOT, THERE IS A PRONOUNCED UNIFORMITY OF ALIGNMENT OF THE FRONTS OF EXISTING BUILDINGS AND OF THE DEPTH OF FRONT YARDS GREATER OR LESS THAN THE DEPTHS SPECIFIED IN THE SCHEDULES OF REGULATIONS, THE FRONT YARD REQUIRED IN CONNECTION WITH ANY NEW BUILDING SHALL CONFORM AS NEARLY AS PRACTICABLE TO THOSE EXISTING ON THE ADJACENT LOTS, EXCEPT THAT NO SUCH BUILDING SHALL BE REQUIRED TO BE SET BACK FROM THE STREET A DISTANCE GREATER THAN 50 FEET.

§ 342–16 LANDSCAPING GUIDELINES

[AMENDED 9–9–1985 BY L.L. NO. 19–1985, EFFECTIVE 9–26–1985]

A. OBJECTIVE: THE OBJECTIVE OF THIS SECTION IS TO PRESERVE THE NATURAL CHARACTER OF OFF–STREET PARKING AREAS AND CERTAIN OTHER SETBACK AND YARD AREAS OF MULTIFAMILY AND NONRESIDENTIAL DEVELOPMENTS.

B. SPECIFIC GOALS. THE SPECIFIC GOALS OF THIS SECTION ARE:

1. TO PROVIDE NATURAL VISUAL SCREENING OF PARKING AREAS AND ALONG PROPERTY BOUNDARIES TO PRESERVE THE EXISTING VISUAL QUALITY OF ADJACENT LANDS.

2. TO REDUCE SURFACE RUNOFF AND MINIMIZE SOIL EROSION THROUGH THE NATURAL FILTERING CAPABILITY OF LANDSCAPED AREAS.

3. TO PROVIDE NATURAL BUFFERS THAT REDUCE GLARE AND NOISE.

4. TO MODERATE THE MICROCLIMATE OF PARKING AREAS BY PROVIDING SHADE, ABSORBING REFLECTED HEAT FROM PAVED SURFACES AND CREATING NATURAL WIND BREAKS.

5. TO ENHANCE THE OVERALL VISUAL QUALITY OF NEW DEVELOPMENT BY PROVIDING A VARIETY OF PLANT MATERIALS THAT ARE CONSISTENT AND COMPATIBLE WITH THE EXISTING NATURAL VEGETATION OF THE AREA.

D. SUBMISSION REQUIREMENTS. LANDSCAPING PLANS SHALL BE INCLUDED WITH THE PRELIMINARY SITE PLAN AND FINAL SITE PLAN SUBMISSIONS AND SHALL CONSIST OF THE FOLLOWING:

1. PRELIMINARY LANDSCAPING PLAN.

A. A GENERAL CONCEPT OF THE LANDSCAPING, BOTH IN WRITTEN AND GRAPHIC FORM.

B. A LIST OF EXISTING VEGETATION, WITH THE LOCATION, TYPE AND SIZE OF EXISTING TREES.

C. PROPOSALS TO PRESERVE AND PROTECT EXISTING VEGETATION DURING AND AFTER CONSTRUCTION.

D. THE LOCATION OF EXISTING NATURAL FEATURES, SUCH AS STREAMS, WETLANDS AND ROCK OUTCROPPINGS.

2. FINAL LANDSCAPING PLAN.

A. ALL PROPOSED PHYSICAL IMPROVEMENTS, SUCH AS BUILDINGS, WALLS, PARKING AREAS, SIDEWALKS, ETC.

B. PROPOSED LANDSCAPING MATERIALS, INCLUDING:

1. EXISTING VEGETATION TO REMAIN.

2. TYPES OF NEW PLANT MATERIALS, IDENTIFIED BY COMMON NAME AND BOTANICAL NAME.

3. SIZES OF ALL NEW PLANT MATERIALS BY HEIGHT AND/OR DIAMETER.

4. QUANTITIES OF EACH OF THE PLANTING MATERIALS.

5. TREATMENT OF GROUND SURFACES (PAVING, SEEDING AND GROUND COVER).

C. METHODS FOR CONTROLLING EROSION AND PROTECTING LANDSCAPED AREAS.

D. A GRADING AND DRAINAGE PLAN.

E. AN IRRIGATION PLAN OR LOCATION OF WATER OUTLETS.

§ 342–18 EXTERIOR LIGHTING

ALL EXTERIOR LIGHTING IN MANUFACTURING, COMMERCIAL, OFFICE AND MULTIPLE RESIDENCE DISTRICTS AND IN CONNECTION WITH ALL NONRESIDENTIAL USES IN ALL OTHER RESIDENCE DISTRICTS SHALL BE OF SUCH TYPE AND LOCATION AND SHALL HAVE SUCH SHIELDING AS WILL DIRECT THE LIGHT DOWNWARD AND WILL PREVENT THE SOURCE OF THE LIGHT FROM BEING VISIBLE FROM ANY ADJACENT RESIDENTIAL PROPERTY OR STREET. "SOURCE OF LIGHT" SHALL BE DEEMED TO INCLUDE ANY TRANSPARENT OR TRANSLUCENT LIGHTING WHICH IS AN INTEGRAL PART OF THE LIGHTING FIXTURE OR FIXTURES.

§ 342–19 INTERPRETATION OF DISTRICT REGULATIONS

THE ACCOMPANYING SCHEDULES OF REGULATIONS[1] AND ARTICLES V, VI AND VII LIST THE PERMITTED USES OF LAND AND BUILDINGS AND THE STANDARDS AND REQUIREMENTS APPLYING TO SUCH USES FOR THE VARIOUS DISTRICTS OF THIS CHAPTER. UNLESS OTHERWISE INDICATED, REQUIREMENTS SHALL BE DEEMED TO BE THE MINIMUM IN EVERY INSTANCE OF THEIR APPLICATION.

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cell. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

243 MADISON ST.
MAMARONECK, NY 10543

DRAWING TITLE

GENERAL NOTES; ZONING CODES

B–SCAN JOB STICKER

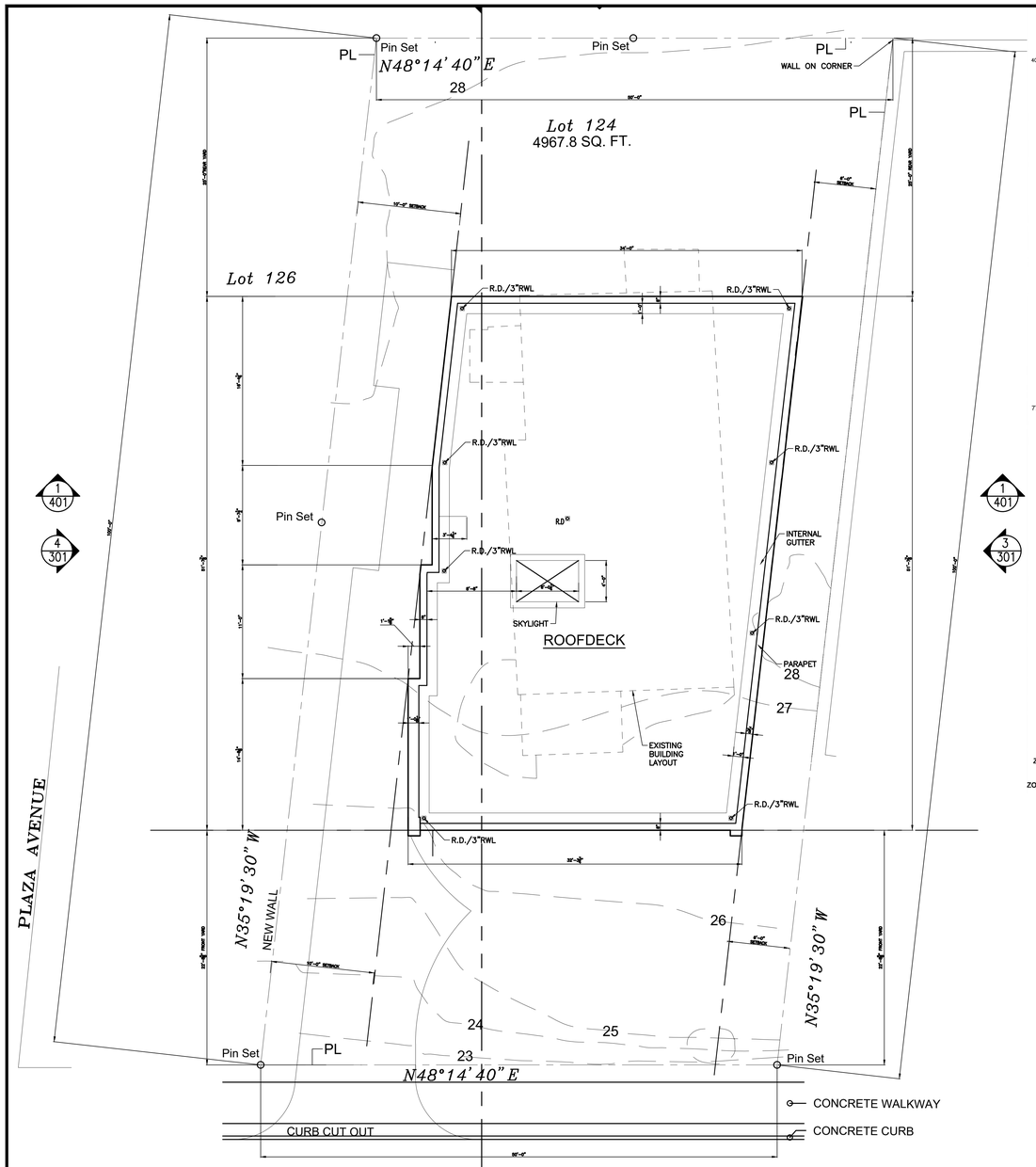
NYC DOB IDENTIFICATION NUMBER

SEAL & SIGNATURE

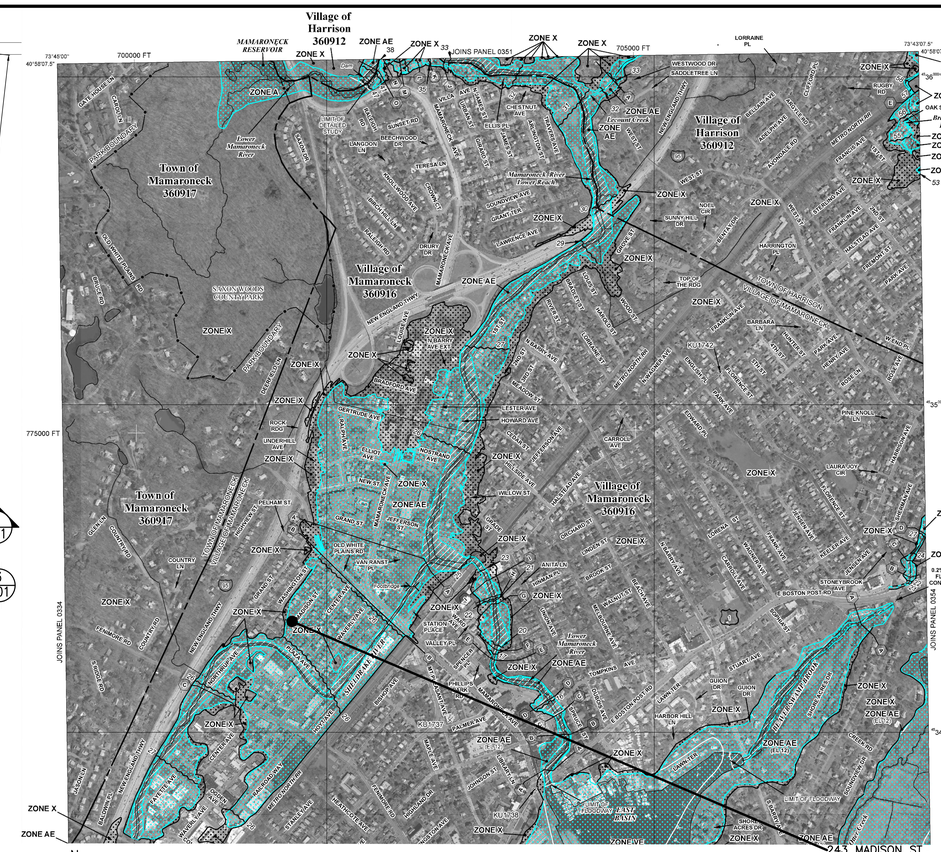
DATE: 9/26/19
PROJECT #:09-2019
DRAWN BY: RU
CHECK BY: AY

DWG. No.
T-101.00

SHEET 01 of 36



1 T-101 PLOT PLAN
SCALE: 3/16" = 1'-0"



2 T-101 FIRM MAP (PANEL 0353F)
SCALE: N.T.S.

LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X — Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X — Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D — Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% annual chance floodplain boundary

0.2% annual chance floodplain boundary

Floodway boundary

Zone D boundary

CBRS and OPA boundary

Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.

513 — Base Flood Elevation line and value; elevation in feet*

(EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988

A — A — Cross section line

2 — 2 — Limited-detail cross section line

20 — 20 — Transect line

87° 07' 45", 32° 22' 30" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere

4276000 m N — 1000-meter Universal Transverse Mercator grid values, zone 18N

600000 FT — 5000-foot grid ticks: New York State Plane coordinate system, East zone (FIPSZONE 3101), Transverse Mercator projection

DX5510 × — Bench mark (see explanation in Notes to Users section of this FIRM panel)

● M1.5 — River Mile

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index

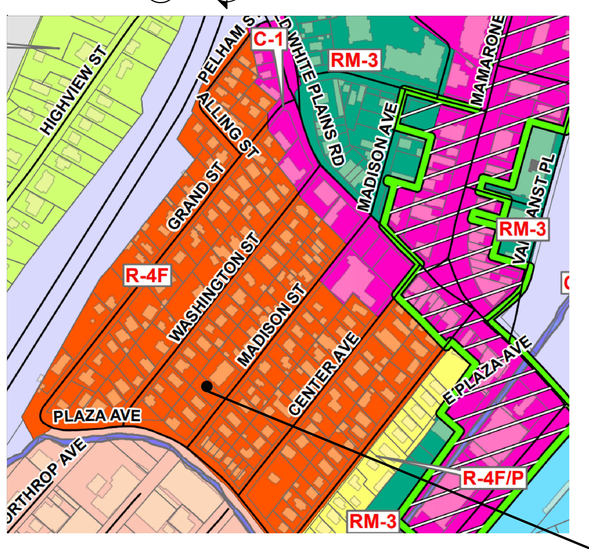
EFFECTIVE DATE OF COUNTYWIDE
FLOOD INSURANCE RATE MAP
September 28, 2007

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

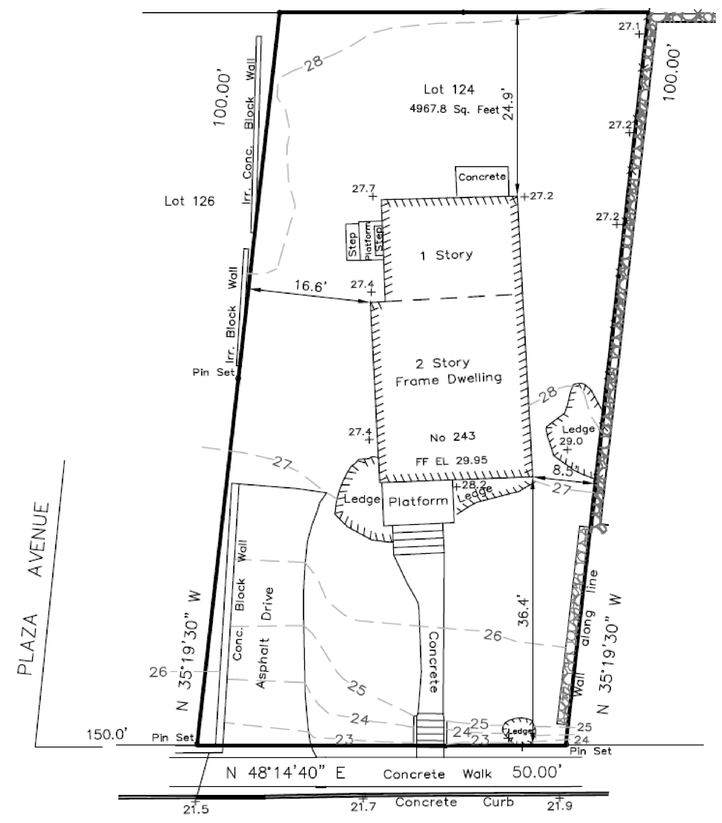
For community-map-revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'
250 0 500 1000 FEET
150 0 150 300 METERS



3 T-101 ZONING MAP
SCALE: N.T.S.



MADISON STREET
(formerly Jefferson St)

4 T-101 EXISTING PLOT PLAN
SCALE: 1/8" = 1'-0"

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cel. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

243 MADISON ST.
MAMARONECK, NY 10543

DRAWING TITLE
EXISTING & PROPOSED PLOT PLAN; ZONING MAP; FLOOD PLAIN MAP

B-SCAN JOB STICKER

NYC DOB IDENTIFICATION NUMBER
SEAL & SIGNATURE

DATE: 9/26/19
PROJECT #: 09-2019
DRAWN BY: RU
CHECK BY: AY

DWG No. T-102.00
SHEET 02 of 36

2020 ENERGY CONSERVATION CODE

CHAPTER R4 RESIDENTIAL ENERGY EFFICIENCY

SECTION ECC R401GENERAL

R401.1 SCOPE. THIS CHAPTER APPLIES TO RESIDENTIAL BUILDINGS.

R401.2 COMPLIANCE. PROJECTS SHALL COMPLY WITH ONE OF THE FOLLOWING:

1. SECTIONS R401 THROUGH R404.
2. FOR GROUP R-2 AND GROUP R-3 BUILDINGS, THE PROVISIONS OF SECTION R405 AND THE PROVISIONS OF SECTIONS R401 THROUGH R404 LABELED "MANDATORY." THE BUILDING ENERGY COST SHALL BE EQUAL TO OR LESS THAN 80PERCENT OF THE STANDARD REFERENCE DESIGN BUILDING.
3. THE PROVISIONS OF SECTION SECTION R406.

R401.3 CERTIFICATE (MANDATORY). A PERMANENT CERTIFICATE SHALL BE COMPLETED BY THE BUILDER OR OTHER APPROVED PARTY AND POSTED ON A WALL IN THE SPACE WHERE THE FURNACE IS LOCATED, A UTILITY ROOM OR AN APPROVED LOCATION INSIDE THE BUILDING. WHERE LOCATED ON AN ELECTRICAL PANEL, THE CERTIFICATE SHALL NOT COVER OR OBSTRUCT THE VISIBILITY OF THE CIRCUIT DIRECTORY LABEL, SERVICE DISCONNECT LABEL OR OTHER REQUIRED LABELS. THE CERTIFICATE SHALL INDICATE THE PREDOMINANT R-VALUES OF INSULATION INSTALLED IN OR ON CEILINGS, ROOFS, WALLS, FOUNDATION COMPONENTS SUCH AS SLABS, BASEMENT WALLS, CRAWL SPACE WALLS AND FLOORS AND DUCTS OUTSIDE CONDITIONED SPACES; U-FACTORS OF FENESTRATION AND THE SOLAR HEAT GAIN COEFFICIENT (SHGC) OF FENESTRATION, AND THE RESULTS FROM ANY REQUIRED DUCT SYSTEM AND BUILDING ENVELOPE AIR LEAKAGE TESTING PERFORMED ON THE BUILDING. WHERE THERE IS MORE THAN ONE VALUE FOR EACH COMPONENT, THE CERTIFICATE SHALL INDICATE THE VALUE COVERING THE LARGEST AREA. THE CERTIFICATE SHALL INDICATE THE TYPES AND EFFICIENCIES OF HEATING, COOLING AND SERVICE WATER HEATING EQUIPMENT. WHERE A GAS-FIRED UNVENTED ROOM HEATER, ELECTRIC FURNACE OR BASEBOARD ELECTRIC HEATER IS INSTALLED IN THE RESIDENCE, THE CERTIFICATE SHALL INDICATE "GAS-FIRED UNVENTED ROOM HEATER," "ELECTRIC FURNACE" OR "BASEBOARD ELECTRIC HEATER," AS APPROPRIATE. AN EFFICIENCY SHALL NOT BE INDICATED FOR GAS-FIRED UNVENTED ROOM HEATERS, ELECTRIC FURNACES AND ELECTRIC BASEBOARD HEATERS.

SECTION R402 BUILDING THERMAL ENVELOPE

R402.1 GENERAL (PRESCRIPTIVE)

THE BUILDING THERMAL ENVELOPE SHALL COMPLY WITH THE REQUIREMENTS OF SECTIONS R402.1.1 THROUGH R402.1.5.

EXCEPTIONS:

1. THE FOLLOWING LOW-ENERGY BUILDINGS, OR PORTIONS THEREOF, SEPARATED FROM THE REMAINDER OF THE BUILDING BY BUILDING THERMAL ENVELOPE ASSEMBLIES COMPLYING WITH THIS SECTION SHALL BE EXEMPT FROM THE BUILDING THERMAL ENVELOPE PROVISIONS OF SECTION R402.

1.1 THOSE WITH A PEAK DESIGN RATE OF ENERGY USAGE LESS THAN 3.4 BTU/H • FT2 (10.7 W/M2) OR 1.0 WATT/FT2 OF FLOOR AREA FOR SPACE-CONDITIONING PURPOSES.

1.2 THOSE THAT DO NOT CONTAIN CONDITIONED SPACE.

2. LOG HOMES DESIGNED IN ACCORDANCE WITH ICC 400.

R402.1.1 VAPOR RETARDER

WALL ASSEMBLIES IN THE BUILDING THERMAL ENVELOPE SHALL COMPLY WITH THE VAPOR RETARDER REQUIREMENTS OF SECTION R702.7 OF THE RESIDENTIAL CODE OF NEW YORK STATE OR SECTION 1404.3 OF THE BUILDING CODE OF NEW YORK STATE, AS APPLICABLE.

R402.1.2 INSULATION AND FENESTRATION CRITERIA

THE BUILDING THERMAL ENVELOPE SHALL MEET THE REQUIREMENTS OF TABLE R402.1.2, BASED ON THE CLIMATE ZONE SPECIFIED IN CHAPTER R3.

TABLE 402.1.2
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT

CLIMATE ZONE	FENESTRATION U-FACTOR[a]	SKYLIGHT[b] U-FACTOR	GLAZED FENESTRATION SHGC[a]	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE	FLOOR R-VALUE	BASEMENT WALL R- VALUE	SLAB[f] R-VALUE & DEPTH	CRAWL SPACE[c] WALL R- VALUE
4	0.32	0.55	0.40	0.49	20+5 OR 13+5[i]	8 / 13	19	10 / 13	10, 2 FT	10 / 13
5	0.30	0.55	NR	0.49	20+5 OR 13+5[i]	13 / 17	30[g]	15 / 19	10, 2 FT	15 / 19
6	0.30	0.55	NR	0.49	20+5[i] OR 13+10[i]	15 / 20	30[g]	15 / 19	10, 4 FT	15 / 19

NR = NOT REQUIRED
FOR SI: 1 FOOT = 304.8 MM.

a. R-VALUES ARE MINIMUMS. U-FACTORS AND SHGC ARE MAXIMUMS. WHERE INSULATION IS INSTALLED IN A CAVITY THAT IS LESS THAN THE LABEL OR DESIGN THICKNESS OF THE INSULATION, THE INSTALLED R-VALUE OF THE INSULATION SHALL BE NOT LESS THAN THE R-VALUE SPECIFIED IN THE TABLE. FPR STEEL FRAMED ASSEMBLIES SEE SECTION R402.2.6
b. THE FENESTRATION U-FACTOR COLUMN EXCLUDES SKYLIGHTS. THE SHGC COLUMN APPLIES TO ALL GLAZED FENESTRATION.
c. "10/13" MEANS R-10 CONTINUOUS INSULATION ON THE INTERIOR OR EXTERIOR OF THE HOME OR R-13 CAVITY INSULATION ON THE INTERIOR OF THE BASEMENT WALL. "15/19" MEANS R-15 CONTINUOUS INSULATION ON THE INTERIOR OR EXTERIOR OF THE HOME OR R-19 CAVITY INSULATION AT THE INTERIOR OF THE BASEMENT WALL. ALTERNATIVELY, COMPLIANCE WITH "15/19" SHALL BE R-13 CAVITY INSULATION ON THE INTERIOR OF THE BASEMENT WALL PLUS R-5 CONTINUOUS INSULATION ON THE INTERIOR OR EXTERIOR OF THE HOME.
d. R-10 INSULATION SHALL BE PROVIDED UNDER THE FULL SLAB AREA OF A HEATED SLAB IN ADDITION TO THE REQUIRED SLAB EDGE INSULATION R-VALUE FOR SLABS. AS INDICATED IN THE TABLE. THE SLAB EDGE INSULATION FOR HEATED SLABS SHALL NOT BE REQUIRED TO EXTEND BELOW THE SLAB.
e. NOT USED.
f. NOT USED
g. ALTERNATIVELY, IN ALTERATION OF EXISTING BUILDINGS, INSULATION SUFFICIENT TO FILL THE FRAMING CAVITY AND PROVIDING NOT LESS THAN AN R-VALUE OF R-19.
h. THE FIRST VALUE IS CAVITY INSULATION, THE SECOND VALUE IS CONTINUOUS INSULATION. THEREFORE, AS AN EXAMPLE, "13+10" MEANS R-13 CAVITY INSULATION PLUS R-10 CONTINUOUS INSULATION.
i. MASS WALLS SHALL BE IN ACCORDANCE WITH SECTION R402.2.5. THE SECOND R-VALUE APPLIES WHERE MORE THAN HALF OF THE INSULATION IS ON THE INTERIOR OF THE MASS WALL.

R402.1.3 R -VALUE COMPUTATION

INSULATION MATERIAL USED IN LAYERS, SUCH AS FRAMING CAVITY INSULATION OR CONTINUOUS INSULATION, SHALL BE SUMMED TO COMPUTE THE CORRESPONDING COMPONENT R-VALUE. THE MANUFACTURER'S SETTLED R-VALUE SHALL BE USED FOR BLOWN-IN INSULATION. COMPUTED R-VALUES SHALL NOT INCLUDE AN R-VALUE FOR OTHER BUILDING MATERIALS OR AIR FILMS. WHERE INSULATED SIDING IS USED FOR THE PURPOSE OF COMPLYING WITH THE CONTINUOUS INSULATION REQUIREMENTS OF TABLE R402.1.2, THE MANUFACTURER'S LABELED R-VALUE FOR THE INSULATED SIDING SHALL BE REDUCED BY R-0.6.

R402.1.4 U- FACTOR ALTERNATIVE

AN ASSEMBLY WITH A U-FACTOR EQUAL TO OR LESS THAN THAT SPECIFIED IN TABLE R402.1.4 SHALL BE AN ALTERNATIVE TO THE R-VALUE IN TABLE R402.1.2.

TABLE 402.1.4
EQUIVALENT U-FACTORS[a]

CLIMATE ZONE	FENESTRATION U-FACTOR	SKYLIGHT U-FACTOR	CEILING R-VALUE	FRAME WALL U-FACTOR	MASS WALL U-FACTOR	FLOOR U-FACTOR	BASEMENT WALL U-FACTOR	CRAWL SPACE WALL U-FACTOR
4	0.32	0.55	0.26	0.060	0.098	0.047	0.059	0.065

a. NONFENESTRATION U-FACTORS SHALL BE OBTAINED FROM MEASUREMENT, CALCULATION OR AN APPROVED SOURCE. FOR STEEL-FRAMED ASSEMBLIES, SEE SECTION R402.2.6
b. MASS WALLS SHALL BE IN ACCORDANCE WITH SECTION R402.2.5. WHERE MORE THAN HALF THE INSULATION IS ON THE INTERIOR, THE MASS WALL U-FACTORS SHALL NOT EXCEED 0.056.

R402.1.5 TOTAL UA ALTERNATIVE

WHERE THE TOTAL BUILDING THERMAL ENVELOPE UA, THE SUM OF U-FACTOR TIMES ASSEMBLY AREA, IS LESS THAN OR EQUAL TO THE TOTAL UA RESULTING FROM MULTIPLYING THE U-FACTORS IN TABLE R402.1.4 BY THE SAME ASSEMBLY AREA AS IN THE PROPOSED BUILDING, THE BUILDING SHALL BE CONSIDERED TO BE IN COMPLIANCE WITH TABLE R402.1.2. THE UA CALCULATION SHALL BE PERFORMED USING A METHOD CONSISTENT WITH THE ASHRAE HANDBOOK OF FUNDAMENTALS AND SHALL INCLUDE THE THERMAL BRIDGING EFFECTS OF FRAMING MATERIALS. IN ADDITION TO UA COMPLIANCE, THE SHGC REQUIREMENTS SHALL BE MET.

R402.2 SPECIFIC INSULATION REQUIREMENTS (PRESCRIPTIVE)

IN ADDITION TO THE REQUIREMENTS OF SECTION R402.1, INSULATION SHALL MEET THE SPECIFIC REQUIREMENTS OF SECTIONS R402.2.1 THROUGH R402.2.13.

R402.2.1 CEILINGS WITH ATTIC SPACES

WHERE SECTION R402.1.2 REQUIRES R-38 INSULATION IN THE CEILING, INSTALLING R-30 OVER 100 PERCENT OF THE CEILING AREA REQUIRING INSULATION SHALL SATISFY THE REQUIREMENT FOR R-38 WHEREVER THE FULL HEIGHT OF UNCOMPRESSED R-30 INSULATION EXTENDS OVER THE WALL TOP PLATE AT THE EAVES. WHERE SECTION R402.1.2 REQUIRES R-49 INSULATION IN THE CEILING, INSTALLING R-38 OVER 100 PERCENT OF THE CEILING AREA REQUIRING INSULATION SHALL SATISFY THE REQUIREMENT FOR R-49 INSULATION WHEREVER THE FULL HEIGHT OF UNCOMPRESSED R-38 INSULATION EXTENDS OVER THE WALL TOP PLATE AT THE EAVES. THIS REDUCTION SHALL NOT APPLY TO THE U-FACTOR ALTERNATIVE APPROACH IN SECTION R402.1.4 AND THE TOTAL UA ALTERNATIVE IN SECTION R402.1.5.

R402.2.2 CEILINGS WITHOUT ATTIC SPACES

WHERE SECTION R402.1.2 REQUIRES INSULATION R-VALUES GREATER THAN R-30 IN THE CEILING AND THE DESIGN OF THE ROOF/CEILING ASSEMBLY DOES NOT ALLOW SUFFICIENT SPACE FOR THE REQUIRED INSULATION, THE MINIMUM REQUIRED INSULATION R-VALUE FOR SUCH ROOF/CEILING ASSEMBLIES SHALL BE R-30. INSULATION SHALL EXTEND OVER THE TOP OF THE WALL PLATE TO THE OUTER EDGE OF SUCH PLATE AND SHALL NOT BE COMPRESSED. THIS REDUCTION OF INSULATION FROM THE REQUIREMENTS OF SECTION R402.1.2 SHALL BE LIMITED TO 500 SQUARE FEET (46 M2) OR 20 PERCENT OF THE TOTAL INSULATED CEILING AREA, WHICHEVER IS LESS. THIS REDUCTION SHALL NOT APPLY TO THE U-FACTOR ALTERNATIVE APPROACH IN SECTION R402.1.4 AND THE TOTAL UA ALTERNATIVE IN SECTION R402.1.5.

R402.2.3 EAVE BAFFLE - N/A - NONE

R402.2.4 ACCESS HATCHES AND DOORS

ACCESS DOORS FROM CONDITIONED SPACES TO UNCONDITIONED SPACES SUCH AS ATTICS AND CRAWL SPACES SHALL BE WEATHERSTRIPPED AND INSULATED TO A LEVEL EQUIVALENT TO THE INSULATION ON THE SURROUNDING SURFACES. ACCESS THAT PREVENTS DAMAGING OR COMPRESSING THE INSULATION SHALL BE PROVIDED TO ALL EQUIPMENT. WHERE LOOSE-FILL INSULATION IS INSTALLED, A WOOD-FRAMED OR EQUIVALENT BAFFLE OR RETAINER SHALL BE INSTALLED TO PREVENT THE LOOSE-FILL INSULATION FROM SPILLING INTO THE LIVING SPACE WHEN THE ATTIC ACCESS IS OPENED. THE BAFFLE OR RETAINER SHALL PROVIDE A PERMANENT MEANS OF MAINTAINING THE INSTALLED R-VALUE OF THE LOOSE-FILL INSULATION.

EXCEPTION: VERTICAL DOORS PROVIDING ACCESS FROM CONDITIONED SPACES TO UNCONDITIONED SPACES COMPLY WITH THE FENESTRATION REQUIREMENTS OF TABLE R402.1.2 BASED ON THE APPLICABLE CLIMATE ZONE SPECIFIED IN CHAPTER 3.

R402.2.5 MASS WALLS - N/A - NONE

R402.2.6 STEEL-FRAME CEILINGS, WALLS AND FLOORS - N/A - NONE

TABLE 402.2.6
STEEL FRAME CEILING, WALL AND FLOOR INSULATION R-VALUES

WOOD FRAME R-VALUE REQUIREMENT	COLD-FORMED STEEL-FRAME EQUIVALENT R-VALUE[a]
	STEEL TRUSS CEILINGS[b]
R-30	R-38 OR R-30 + 3 OR R-26 + 5
R-38	R-38 OR R-30 + 3 OR R-26 + 5
R-49	R-38 OR R-30 + 3 OR R-26 + 5
	STEEL JOIST CEILINGS[b]
R-30	R-38 IN 2 X 4 OR 2 X 6 OR 2 X 8 R-49 IN ANY FRAME
R-38	R-49 IN 2 X 4 OR 2 X 6 OR 2 X 8 OR 2 X 10
	STEEL-FRAMED WALL, 16 INCHES ON CENTER
R-13	R-13 + 4.2 OR R-21 + 2.8 ORR-0 + 9.3 OR R-15 + 3.8 OR R-21 + 3.1
R-13 + 3	R-0 + 11.2 OR R-13 + 6.1 OR R-15 + 5.7 ORR-19 + 5.0 OR R-21 + 4.7
R-20	R-0 + 14.0 OR R-13 + 8.9 OR R-15 + 8.5 OR R-19 + 7.8 OR R-19 + 6.2 OR R-21 + 7.5
R-20 + 5	R-13 + 12.7 OR R-15 + 12.3 OR R-19 + 11.6 OR R-21 + 11.3 OR R-25 + 10.9
R-21	R-0 + 14.6 OR R-13 + 9.5 OR R-15 + 9.1 ORR-19 + 8.4 OR R-21 + 8.1 OR R-25 + 7.7
	STEEL-FRAMED WALL, 24 INCHES ON CENTER
R-13	R-0 + 9.3 OR R-13 + 3.0 OR R-15 + 2.4
R-13 + 3	R-0 + 11.2 OR R-13 + 4.9 OR R-15 + 4.3 ORR-19 + 3.5 OR R-21 + 3.1
R-20	R-0 + 14.0 OR R-13 + 7.7 OR R-15 + 7.1 ORR-19 + 6.3 OR R-21 + 5.9
R-20 + 5	R-13 + 11.5 OR R-15 + 10.9 OR R-19 + 10.1 ORR-21 + 9.7 OR R-25 + 9.1
R-21	R-0 + 14.6 OR R-13 + 8.3 OR R-15 + 7.7 ORR-19 + 6.9 OR R-21 + 6.5 OR R-25 + 5.9
	STEEL JOIST FLOOR
R-13	R-19 IN 2 × 6, OR R-19 + 6 IN 2 × 8 OR 2 × 10
R-19	R-19 + 6 IN 2 × 6, OR R-19 + 12 IN 2 × 8 OR 2 × 10

a. THE FIRST VALUE IS CAVITY INSULATION R-VALUE, THE SECOND VALUE IS CONTINUOUS INSULATION R-VALUE. THEREFORE, FOR EXAMPLE, "R-30+3" MEANS R-30 CAVITY INSULATION PLUS R-3 CONTINUOUS INSULATION.
b. INSULATION EXCEEDING THE HEIGHT OF THE FRAMING SHALL COVER THE FRAMING.

R402.2.7 WALLS WITH PARTIAL STRUCTURAL SHEATHING

WHERE SECTION R402.1.2 REQUIRES CONTINUOUS INSULATION ON EXTERIOR WALLS AND STRUCTURAL SHEATHING COVERS 40 PERCENT OR LESS OF THE GROSS AREA OF ALL EXTERIOR WALLS, THE REQUIRED CONTINUOUS INSULATION R-VALUE SHALL BE PERMITTED TO BE REDUCED BY AN AMOUNT NECESSARY, BUT NOT MORE THAN R-3 TO RESULT IN A CONSISTENT TOTAL SHEATHING THICKNESS ON AREAS OF THE WALLS COVERED BY STRUCTURAL SHEATHING. THIS REDUCTION SHALL NOT APPLY TO THE U-FACTOR ALTERNATIVE IN SECTION R402.1.4 AND THE TOTAL UA ALTERNATIVE IN SECTION R402.1.5.

R402.2.8 FLOORS

FLOOR FRAMING-CAVITY INSULATION SHALL BE INSTALLED TO MAINTAIN PERMANENT CONTACT WITH THE UNDERSIDE OF THE SUBFLOOR DECKING.

EXCEPTION: AS AN ALTERNATIVE, THE FLOOR FRAMING-CAVITY INSULATION SHALL BE IN CONTACT WITH THE TOPSIDE OF SHEATHING OR CONTINUOUS INSULATION INSTALLED ON THE BOTTOM SIDE OF FLOOR FRAMING WHERE COMBINED WITH INSULATION THAT MEETS OR EXCEEDS THE MINIMUM WOOD FRAME WALL R-VALUE IN TABLE R402.1.2 AND THAT EXTENDS FROM THE BOTTOM TO THE TOP OF ALL PERIMETER FLOOR FRAMING MEMBERS.

R402.2.9 BASEMENT WALLS

WALLS ASSOCIATED WITH CONDITIONED BASEMENTS SHALL BE INSULATED FROM THE TOP OF THE BASEMENT WALL DOWN TO 10 FEET (3048 MM) BELOW GRADE OR TO THE BASEMENT FLOOR, WHICHEVER IS LESS. WALLS ASSOCIATED WITH UNCONDITIONED BASEMENTS SHALL COMPLY WITH THIS REQUIREMENT EXCEPT WHERE THE FLOOR OVERHEAD IS INSULATED IN ACCORDANCE WITH SECTIONS R402.1.2 AND R402.2.8.

R402.2.10 SLAB-ON-GRADE FLOORS

SLAB-ON-GRADE FLOORS WITH A FLOOR SURFACE LESS THAN 12 INCHES (305 MM) BELOW GRADE SHALL BE INSULATED IN ACCORDANCE WITH TABLE R402.1.2. THE INSULATION SHALL EXTEND DOWNWARD FROM THE TOP OF THE SLAB ON THE OUTSIDE OR INSIDE OF THE FOUNDATION WALL. INSULATION LOCATED BELOW GRADE SHALL BE EXTENDED THE DISTANCE PROVIDED IN TABLE R402.1.2 BY ANY COMBINATION OF VERTICAL INSULATION, INSULATION EXTENDING UNDER THE SLAB OR INSULATION EXTENDING OUT FROM THE BUILDING. INSULATION EXTENDING AWAY FROM THE BUILDING SHALL BE PROTECTED BY PAVEMENT OR BY NOT LESS THAN 10 INCHES (254 MM) OF SOIL. THE TOP EDGE OF THE INSULATION INSTALLED BETWEEN THE EXTERIOR WALL AND THE EDGE OF THE INTERIOR SLAB SHALL BE PERMITTED TO BE CUT AT A 45-DEGREE (0.79 RAD) ANGLE AWAY FROM THE EXTERIOR WALL. SLAB-EDGE INSULATION IS NOT REQUIRED IN JURISDICTIONS DESIGNATED BY THE BUILDING OFFICIAL AS HAVING A VERY HEAVY TERMITE INFESTATION.

R402.2.11 CRAWL SPACE WALLS - N/A - NONE

R402.2.12 MASONRY VENEER - N/A - NONE

R402.2.13 SUNROOM INSULATION - N/A - NONE

R402.3 FENESTRATION (PRESCRIPTIVE)

IN ADDITION TO THE REQUIREMENTS OF SECTION R402, FENESTRATION SHALL COMPLY WITH SECTIONS R402.3.1 THROUGH R402.3.5.

R402.3.1 U -FACTOR

AN AREA-WEIGHTED AVERAGE OF FENESTRATION PRODUCTS SHALL BE PERMITTED TO SATISFY THE U-FACTOR REQUIREMENTS.

R402.3.2 GLAZED FENESTRATION SHGC

AN AREA-WEIGHTED AVERAGE OF FENESTRATION PRODUCTS MORE THAN 50-PERCENT GLAZED SHALL BE PERMITTED TO SATISFY THE SHGC REQUIREMENTS.

DYNAMIC GLAZING SHALL BE PERMITTED TO SATISFY THE SHGC REQUIREMENTS OF TABLE R402.1.2 PROVIDED THAT THE RATIO OF THE HIGHER TO LOWER LABELED SHGC IS GREATER THAN OR EQUAL TO 2.4, AND THE DYNAMIC GLAZING IS AUTOMATICALLY CONTROLLED TO MODULATE THE AMOUNT OF SOLAR GAIN INTO THE SPACE IN MULTIPLE STEPS. DYNAMIC GLAZING SHALL BE CONSIDERED SEPARATELY FROM OTHER FENESTRATION, AND AREA-WEIGHTED AVERAGING WITH OTHER FENESTRATION THAT IS NOT DYNAMIC GLAZING SHALL BE PROHIBITED.

EXCEPTION: DYNAMIC GLAZING SHALL NOT BE REQUIRED TO COMPLY WITH THIS SECTION WHERE BOTH THE LOWER AND HIGHER LABELED SHGC COMPLY WITH THE REQUIREMENTS OF TABLE R402.1.2.

R402.3.3 GLAZED FENESTRATION EXEMPTION

NOT GREATER THAN 15 SQUARE FEET (1.4 M2) OF GLAZED FENESTRATION PER DWELLING UNIT SHALL BE EXEMPT FROM THE U-FACTOR AND SHGC REQUIREMENTS IN SECTION R402.1.2. THIS EXEMPTION SHALL NOT APPLY TO THE U-FACTOR ALTERNATIVE IN SECTION R402.1.4 AND THE TOTAL UA ALTERNATIVE IN SECTION R402.1.5.

R402.3.4 OPAQUE DOOR EXEMPTION

ONE SIDE-HINGED OPAQUE DOOR ASSEMBLY NOT GREATER THAN 24 SQUARE FEET (2.22 M2) IN AREA SHALL BE EXEMPT FROM THE U-FACTOR REQUIREMENT IN SECTION R402.1.2. THIS EXEMPTION SHALL NOT APPLY TO THE U-FACTOR ALTERNATIVE IN SECTION R402.1.4 AND THE TOTAL UA ALTERNATIVE IN SECTION R402.1.5.

R402.3.5 SUNROOM FENESTRATION - N/A - NONE

R402.4 AIR LEAKAGE (MANDATORY)

THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS R402.4.1 THROUGH R402.4.6.

R402.4.1 BUILDING THERMAL ENVELOPE

THE BUILDING THERMAL ENVELOPE SHALL COMPLY WITH SECTIONS R402.4.1.1 AND R402.4.1.2. THE SEALING METHODS BETWEEN DISSIMILAR MATERIALS SHALL ALLOW FOR DIFFERENTIAL EXPANSION AND CONTRACTION.

R402.4.1.1 INSTALLATION

THE COMPONENTS OF THE BUILDING THERMAL ENVELOPE AS INDICATED IN TABLE R402.4.1.1 SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE CRITERIA INDICATED IN TABLE R402.4.1.1, AS APPLICABLE TO THE METHOD OF CONSTRUCTION. WHERE REQUIRED BY THE BUILDING OFFICIAL, AN APPROVED THIRD PARTY SHALL INSPECT ALL COMPONENTS AND VERIFY COMPLIANCE.

AIR BARRIER AND INSULATION INSTALLATION

COMPONENT	AIR BARRIER CRITERIA	INSULATION INSTALLATION CRITERIA
GENERAL REQUIREMENTS	A CONTINUOUS AIR BARRIER SHALL BE INSTALLED IN THE BUILDING ENVELOPE. THE EXTERIOR THERMAL ENVELOPE CONTAINS A CONTINUOUS AIR BARRIER.BREAKS OR JOINTS IN THE AIR BARRIER SHALL BE SEALED.	AIR-PERMEABLE INSULATION SHALL NOT BE USED AS A SEALING MATERIAL. INSULATION INSTALLED IN A CAVITY MUST UNIFORMLY FILL EACH CAVITY SIDE TO SIDE AND TOP-TO-BOTTOM WITHOUT SUBSTANTIAL GAPS OR VOIDS AROUND OBSTRUCTIONS, AND SHALL BE SPLIT OR FITTED TIGHTLY AROUND WIRING AND OTHER PENETRATIONS IN THE CAVITY. NOT MORE THAN 2 PERCENT OF THE TOTAL INSULATED AREA SHALL BE COMPRESSED BELOW THICKNESS REQUIRED TO ATTAIN THE LABELED R VALUE OR CONTAIN GAPS OR VOIDS IN THE INSULATION.
CEILING/ATTIC	THE AIR BARRIER IN ANY DROPPED CEILING OR SOFFIT SHALL BE ALIGNED WITH THE INSULATION AND ANY GAPS IN THE AIR BARRIER SHALL BE SEALED. ACCESS OPENINGS, DROP DOWN STAIRS OR KNEE WALL DOORS TO UNCONDITIONED ATTIC SPACES SHALL BE SEALED.	THE INSULATION IN ANY DROPPED CEILING/SOFFIT SHALL BE ALIGNED WITH THE AIR BARRIER.
WALLS	THE JUNCTION OF THE FOUNDATION AND SILL PLATE SHALL BE SEALED. THE JUNCTION OF THE TOP PLATE AND THE TOP OF EXTERIOR WALLS SHALL BE SEALED. KNEE WALLS SHALL BE SEALED.	CAVITIES WITHIN CORNERS AND HEADERS OF FRAME WALLS SHALL BE INSULATED BY COMPLETELY FILLING THE CAVITY WITH A MATERIAL HAVING A THERMAL RESISTANCE, R-VALUE, OF NOT LESS THAN R-3 PER INCH. EXTERIOR THERMAL ENVELOPE INSULATION FOR FRAMED WALLS SHALL BE INSTALLED IN SUBSTANTIAL CONTACT AND CONTINUOUS ALIGNMENT WITH THE AIR BARRIER.
WINDOWS, SKYLIGHTS AND DOORS	THE SPACE BETWEEN FRAMING AND SKYLIGHTS, AND THE JAMBSOF WINDOWS AND DOORS, SHALL BE SEALED.	-
RIM JOISTS	RIM JOISTS SHALL INCLUDE THE AIR BARRIER.	RIM JOISTS SHALL BE INSULATED COMPLETELY FILING THE CAVITY WITH A MATERIAL HAVING THERMAL RESISTANCE, R-VALUE, OF NOT LESS THAN R-3 PER INCH.
FLOORS, INCLUDING CANTILEVERED FLOORS AND FLOORS ABOVE GARAGES	THE AIR BARRIER SHALL BE INSTALLED AT ANY EXPOSED EDGE OF INSULATION.	FLOOR FRAMING CAVITY INSULATION SHALL BE INSTALLED TO MAINTAIN PERMANENT CONTACT WITH THE UNDERSIDE OF SUBFLOOR DECKING, ALTERNATIVELY, FLOOR FRAMING CAVITY INSULATION SHALL BE IN CONTACT WITH THE TOP SIDE OF SHEATHING, OR CONTINUOUS INSULATION INSTALLED ON THE UNDERSIDE OF FLOOR FRAMING; AND SHALL EXTEND FROM THE BOTTOM TO THE TOP OF ALL PERIMETER FLOOR FRAMING MEMBERS.
CRAWL SPACE WALLS	EXPOSED EARTH IN UNVENTED CRAWL SPACES SHALL BE COVERED WITH A CLASS I VAPOR RETARDER WITH OVERLAPPING JOINTS TAPED.	CRAWL SPACE INSULATION, WHERE PROVIDED INSTEAD OF FLOOR INSULATION, SHALL BE PERMANENTLY ATTACHED TO THE WALLS.
SHAFTS, PENETRATIONS	DUCT SHAFTS, UTILITY PENETRATIONS, AND FLUE SHAFTS OPENING TO EXTERIOR OR UNCONDITIONED SPACE SHALL BE SEALED.	-
NARROW CAVITIES	-	BATTS TO BE INSTALLED IN NARROW CAVITIES SHALL BE CUT TO FIT OR NARROW CAVITIES SHALL BE FILLED WITH INSULATION THAT ON INSTALLATION READILY CONFORMS TO THE AVAILABLE CAVITY SPACE
GARAGE SEPARATION	AIR SEALING SHALL BE PROVIDED BETWEEN THE GARAGE AND CONDITIONED SPACES.	-
RECESSED LIGHTING	RECESSED LIGHT FIXTURES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE SEALED TO THE FINISHED SURFACE.	RECESSED LIGHT FIXTURES PENETRATING THE BUILDING THERMAL ENVELOPE SHALL BE AIR TIGHT AND IC RATED.
PLUMBING AND WIRING	-	IN EXTERIOR WALLS, BATT INSULATION SHALL BE CUT NEATLY TO FIT AROUND WIRING AND PLUMBING, OR INSULATION, THAT ON INSTALLATION READILY CONFORMS TO AVAILABLE SPACE, SHALL EXTEND BEHIND PIPING AND WIRING.
SHOWER/TUB ON EXTERIOR WALL	THE AIR BARRIER INSTALLED AT EXTERIOR WALLS ADJACENT TO SHOWERS AND TUBS SHALL SEPARATE THE WALL FROM THE SHOWER OR TUB.	EXTERIOR WALLS ADJACENT TO SHOWERS AND TUBS SHALL BE INSULATED.
ELECTRICAL/PHONE BOX ON EXTERIOR WALLS	THE AIR BARRIER SHALL BE INSTALLED BEHIND ELECTRICAL AND COMMUNICATION BOXES. ALTERNATIVELY, AIR-SEALED BOXES SHALL BE INSTALLED.	-
HVAC REGISTER BOOTS	HVAC SUPPLY AND RETURN REGISTER BOOTS THAT PENETRATE BUILDING THERMAL ENVELOPE SHALL BE SEALED TO THE SUBFLOOR, WALL COVERING OR CEILING PENETRATED BY THE BOOT.	-
CONCEALED SPRINKLERS	WHERE REQUIRED TO BE SEALED, CONCEALED FIRE SPRINKLERS SHALL ONLY BE SEALED IN A MANNER THAT IS RECOMMENDED BY THE MANUFACTURER. CAULKING OR OTHER ADHESIVE SEALANTS SHALL NOT BE USED TO FILL VOIDS BETWEEN FIRE SPRINKLER COVER PLATES AND WALLS OR CEILINGS.	-

a. INSPECTION OF LOG WALLS SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF ICC 400.

R402.4.1.2 TESTING - N/A - NOT USED

R402.4.1.3 OPTIONAL TESTING PROCEDURE FOR BUILDINGS WITH TWO OR MORE DWELLING UNITS WITHIN THE BUILDING THERMAL ENVELOPE

WHERE TWO OR MORE DWELLING UNITS ARE LOCATED WITHIN THE BUILDING THERMAL ENVELOPE OF A BUILDING, THE TESTING PROCEDURE SPECIFIED IN SECTION R402.4.1.3 SHALL BE PERMITTED AS AN ALTERNATIVE TO COMPLIANCE WITH SECTION R402.4.1.2.

IN THIS SECTION, EACH DWELLING UNIT AND EACH OTHER CONDITIONED OCCUPIED SPACE LOCATED WITHIN THE BUILDING THERMAL ENVELOPE OF THE BUILDING SHALL BE REFERRED TO AS A "TESTING UNIT," AND THE "ENCLOSURE SURFACE AREA" WITHIN A TESTING UNIT SHALL BE EQUAL TO THE SUM OF THE AREAS OF (I) EACH EXTERIOR WALL IN SUCH TESTING UNIT, (II) EACH INTERIOR WALL IN SUCH TESTING UNIT THAT ABUTS OTHER TESTING UNIT(S), (III) EACH CEILING IN SUCH TESTING UNIT THAT ABUTS OTHER TESTING UNIT(S) OR ABUTS UNCONDITIONED SPACE, AND (IV) EACH FLOOR IN SUCH TESTING UNIT THAT ABUTS OTHER TESTING UNIT(S) OR ABUTS UNCONDITIONED SPACE.

EACH TESTING UNIT SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE NOT EXCEEDING 0.3 CUBIC FEET PER MINUTE PER SQUARE FOOT OF ENCLOSURE SURFACE AREA WITHIN THE TESTING AREA. TESTING SHALL BE CONDUCTED WITH A BLOWER DOOR AT A PRESSURE OF 0.2 INCHES W.G. (50 PASCALS). AND SHALL BE CONDUCTED IN ACCORDANCE WITH ASTM E779. TESTING SHALL BE PERFORMED AT ANY TIME AFTER CREATION OF ALL PENETRATIONS OF THE BUILDING THERMAL ENVELOPE.

DURING TESTING:

1. EXTERIOR WINDOWS AND DOORS, FIREPLACE AND STOVE DOORS SHALL BE CLOSED, BUT NOT SEALED, BEYOND THE INTENDED WEATHER-STRIPPING OR OTHER INFILTRATION CONTROL MEASURES.
2. DAMPERS INCLUDING EXHAUST, INTAKE, MAKEUP AIR, BACKDRAFT AND FLUE DAMPERS SHALL BE CLOSED, BUT NOT SEALED BEYOND INTENDED INFILTRATION CONTROL MEASURES.
3. INTERIOR DOORS, IF INSTALLED AT THE TIME OF THE TEST, SHALL BE OPEN.
4. EXTERIOR DOORS FOR CONTINUOUS VENTILATION SYSTEMS AND HEAT RECOVERY VENTILATORS SHALL BE CLOSED AND SEALED.
5. HEATING AND COOLING SYSTEMS, IF INSTALLED AT THE TIME OF THE TEST, SHALL BE TURNED OFF.
6. SUPP

TABLE R403.6.1
WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM FAN EFFICACY[a]

FAN LOCATION	AIR FLOW RATE MINIMUM (CFM)	MINIMUM EFFICACY (CFM/WATT)	AIR FLOW RATE MAXIMUM(CFM)
HRV OR ERV	ANY	1.2 CFM/WATT	ANY
RANGE HOODS	ANY	2.8 CFM/WATT	ANY
IN-LINE FAN	ANY	2.8 CFM/WATT	ANY
BATHROOM UTILITY ROOM	10	1.4 CFM/WATT	<90
BATHROOM UTILITY ROOM	90	2.8 CFM/WATT	ANY

a. WHEN TESTED IN ACCORDANCE WIHHVI STANDARD 916

R403.7 EQUIPMENT SIZING AND EFFICIENCY RATING (MANDATORY)

HEATING AND COOLING EQUIPMENT SHALL BE SIZED IN ACCORDANCE WITH ACCA MANUAL S BASED ON BUILDING LOADS CALCULATED IN ACCORDANCE WITH ACCA MANUAL J OR OTHER APPROVED HEATING AND COOLING CALCULATION METHODOLOGIES. NEW OR REPLACEMENT HEATING AND COOLING EQUIPMENT SHALL HAVE AN EFFICIENCY RATING EQUAL TO OR GREATER THAN THE MINIMUM REQUIRED BY FEDERAL LAW FOR THE GEOGRAPHIC LOCATION WHERE THE EQUIPMENT IS INSTALLED.

R403.8 SYSTEMS SERVING MULTIPLE DWELLING UNITS (MANDATORY)

SYSTEMS SERVING MULTIPLE DWELLING UNITS SHALL COMPLY WITH SECTIONS C403 AND C404 OF THE ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE—COMMERCIAL PROVISIONS INSTEAD OF SECTION R403.

R403.9 SNOW MELT AND ICE SYSTEM CONTROLS (MANDATORY)

SNOW- AND ICE-MELTING SYSTEMS, SUPPLIED THROUGH ENERGY SERVICE TO THE BUILDING, SHALL INCLUDE AUTOMATIC CONTROLS CAPABLE OF SHUTTING OFF THE SYSTEM WHEN THE PAVEMENT TEMPERATURE IS GREATER THAN 50°F (10°C) AND PRECIPITATION IS NOT FALLING, AND AN AUTOMATIC OR MANUAL CONTROL THAT WILL ALLOW SHUTOFF WHEN THE OUTDOOR TEMPERATURE IS GREATER THAN 40°F (4.8°C).

R403.10 POOLS AND PERMANENT SPA ENERGY CONSUMPTION (MANDATORY) - N/A - NOT USED

R403.11 PORTABLE SPAS (MANDATORY) - N/A - NOT USED

R403.12 RESIDENTIAL POOLS AND PERMANENT RESIDENTIAL SPAS

RESIDENTIAL SWIMMING POOLS AND PERMANENT RESIDENTIAL SPAS THAT ARE ACCESSORY TO DETACHED ONE- AND TWO-FAMILY DWELLINGS AND TOWNHOUSES THREE STORIES OR LESS IN HEIGHT ABOVE GRADE PLANE AND THAT ARE AVAILABLE ONLY TO THE HOUSEHOLD AND ITS GUESTS SHALL BE IN ACCORDANCE WITH APSP 15A.

SECTION R404 ELECTRICAL POWER AND LIGHTING SYSTEMS

R404.1 LIGHTING EQUIPMENT (MANDATORY)

NOT LESS THAN 90 PERCENT OF THE PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL CONTAIN ONLY HIGH-EFFICACY LAMPS.

R404.1.1 LIGHTING EQUIPMENT (MANDATORY)

FUEL GAS LIGHTING SYSTEMS SHALL NOT HAVE CONTINUOUSLY BURNING PILOT LIGHTS.

SECTION R405 SIMULATED PERFORMANCE ALTERNATIVE (PERFORMANCE - N/A - NOT USED

"LOCATION OF PERMANENT CERTIFICATE" - SEE EN-104.

CHAPTER R5 EXISTING BUILDING

SECTION R501GENERAL

R501.1 SCOPE

THE PROVISIONS OF THIS CHAPTER SHALL CONTROL THE ALTERATION, REPAIR, ADDITION AND CHANGE OF OCCUPANCY OF EXISTING BUILDINGS AND STRUCTURES.

R501.1.1 ADDITIONS, ALTERATIONS, OR REPAIRS: GENERAL

ADDITIONS, ALTERATIONS, OR REPAIRS TO AN EXISTING BUILDING, BUILDING SYSTEM OR PORTION THEREOF SHALL COMPLY WITH SECTION R502, R503 OR R504. UNALTERED PORTIONS OF THE EXISTING BUILDING OR BUILDING SUPPLY SYSTEM SHALL NOT BE REQUIRED TO COMPLY WITH THIS CODE.

R501.2 EXISTING BUILDINGS

EXCEPT AS SPECIFIED IN THIS CHAPTER, THIS CODE SHALL NOT BE USED TO REQUIRE THE REMOVAL, ALTERATION OR ABANDONMENT OF, NOR PREVENT THE CONTINUED USE AND MAINTENANCE OF, AN EXISTING BUILDING OR BUILDING SYSTEM LAWFULLY IN EXISTENCE AT THE TIME OF ADOPTION OF THIS CODE.

R501.3 MAINTENANCE

BUILDINGS AND STRUCTURES, AND PARTS THEREOF, SHALL BE MAINTAINED IN A SAFE AND SANITARY CONDITION. DEVICES AND SYSTEMS THAT ARE REQUIRED BY THIS CODE SHALL BE MAINTAINED IN CONFORMANCE TO THE CODE EDITION UNDER WHICH INSTALLED. THE OWNER OR THE OWNER'S AUTHORIZED AGENT SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF BUILDINGS AND STRUCTURES. THE REQUIREMENTS OF THIS CHAPTER SHALL NOT PROVIDE THE BASIS FOR REMOVAL OR ABROGATION OF ENERGY CONSERVATION, FIRE PROTECTION AND SAFETY SYSTEMS AND DEVICES IN EXISTING STRUCTURES.

[NY] R501.4 COMPLIANCE

ALTERATIONS, REPAIRS, ADDITIONS AND CHANGES OF OCCUPANCY TO, OR RELOCATION OF, EXISTING BUILDINGS AND STRUCTURES SHALL COMPLY WITH THE PROVISIONS FOR ALTERATIONS, REPAIRS, ADDITIONS AND CHANGES OF OCCUPANCY OR RELOCATION, RESPECTIVELY, IN THIS CODE AND THE RESIDENTIAL CODE OF NEW YORK STATE, BUILDING CODE OF NEW YORK STATE, EXISTING BUILDING CODE OF NEW YORK STATE, FIRE CODE OF NEW YORK STATE, FUEL GAS CODE OF NEW YORK STATE, MECHANICAL CODE OF NEW YORK STATE, PLUMBING CODE OF NEW YORK STATE, PROPERTY MAINTENANCE CODE OF NEW YORK STATE AND NFPA 70.

EXCEPTION: IN THE CASE OF A BUILDING THAT IS SUBJECT TO THE NEW YORK CITY CONSTRUCTION CODES, ALTERATIONS, REPAIRS, ADDITIONS AND CHANGES OF OCCUPANCY TO, OR RELOCATION OF, EXISTING BUILDINGS AND STRUCTURES SHALL COMPLY WITH (I) ALL APPLICABLE PROVISIONS OF THE RESIDENTIAL CODE OF NEW YORK STATE (II) THE PROVISIONS FOR ALTERATIONS, REPAIRS, ADDITIONS AND CHANGES OF OCCUPANCY OR RELOCATION, RESPECTIVELY, IN THE NEW YORK CITY CONSTRUCTION CODES, AND (III) THE NEW YORK CITY ELECTRICAL CODE.

R501.5 NEW AND REPLACEMENT MATERIALS

EXCEPT AS OTHERWISE REQUIRED OR PERMITTED BY THIS CODE, MATERIALS PERMITTED BY THE APPLICABLE CODE FOR NEW CONSTRUCTION SHALL BE USED. LIKE MATERIALS SHALL BE PERMITTED FOR REPAIRS, PROVIDED THAT HAZARDS TO LIFE, HEALTH OR PROPERTY ARE NOT CREATED. HAZARDOUS MATERIALS SHALL NOT BE USED WHERE THE CODE FOR NEW CONSTRUCTION WOULD NOT ALLOW THEIR USE IN BUILDINGS OF SIMILAR OCCUPANCY, PURPOSE AND LOCATION.

[NY] R501.6 HISTORIC BUILDINGS

PROVISIONS OF THIS CODE RELATING TO THE CONSTRUCTION, REPAIR, ALTERATION, RESTORATION AND CHANGE OF OCCUPANCY SHALL NOT BE MANDATORY FOR HISTORIC BUILDINGS.

SECTION R502 ADDITIONS

R502.1 GENERAL

ADDITIONS TO AN EXISTING BUILDING, BUILDING SYSTEM OR PORTION THEREOF SHALL CONFORM TO THE PROVISIONS OF THIS CODE AS THOSE PROVISIONS RELATE TO NEW CONSTRUCTION WITHOUT REQUIRING THE UNALTERED PORTION OF THE EXISTING BUILDING OR BUILDING SYSTEM TO COMPLY WITH THIS CODE. ADDITIONS SHALL NOT CREATE AN UNSAFE OR HAZARDOUS CONDITION OR OVERLOAD EXISTING BUILDING SYSTEMS. AN ADDITION SHALL BE DEEMED TO COMPLY WITH THIS CODE WHERE THE ADDITION ALONE COMPLIES, WHERE THE EXISTING BUILDING AND ADDITION COMPLY WITH THIS CODE AS A SINGLE BUILDING, OR WHERE THE BUILDING WITH THE ADDITION DOES NOT USE MORE ENERGY THAN THE EXISTING BUILDING. ADDITIONS SHALL BE IN ACCORDANCE WITH SECTION R502.1.1 OR R502.1.2.

R502.1.1 PRESCRIPTIVE COMPLIANCE

ADDITIONS SHALL COMPLY WITH SECTIONS R502.1.1.1 THROUGH R502.1.1.4.

[NY] R502.1.1.1 BUILDING ENVELOPE

NEW BUILDING ENVELOPE ASSEMBLIES THAT ARE PART OF THE ADDITION SHALL COMPLY WITH SECTIONS R402.1, R402.2, R402.3.1 THROUGH R402.3.5.

EXCEPTION: WHERE UNCONDITIONED SPACE IS CHANGED TO CONDITIONED SPACE, THE BUILDING ENVELOPE OF THE ADDITION SHALL COMPLY WHERE THE TOTAL UA, AS DETERMINED IN SECTION R402.1.5, OF THE EXISTING BUILDING AND THE ADDITION, AND ANY ALTERATIONS THAT ARE PART OF THE PROJECT, IS LESS THAN OR EQUAL TO THE TOTAL UA GENERATED FOR THE EXISTING BUILDING.

R502.1.1.2 HEATING AND COOLING SYSTEMS

NEW HEATING, COOLING AND DUCT SYSTEMS THAT ARE PART OF THE ADDITION SHALL COMPLY WITH SECTION R403.

EXCEPTION: WHERE DUCTS FROM AN EXISTING HEATING AND COOLING SYSTEM ARE EXTENDED TO AN ADDITION, DUCT SYSTEMS WITH LESS THAN 40 LINEAR FEET (12.19 M) IN UNCONDITIONED SPACES SHALL NOT BE REQUIRED TO BE TESTED IN ACCORDANCE WITH SECTION R403.3.3.

R502.1.1.3 SERVICE HOT WATER SYSTEMS

NEW SERVICE HOT WATER SYSTEMS THAT ARE PART OF THE ADDITION SHALL COMPLY WITH SECTION R403.5.

R502.1.1.4 LIGHTING

NEW LIGHTING SYSTEMS THAT ARE PART OF THE ADDITION SHALL COMPLY WITH SECTION R404.1.

R502.1.2 EXISTING PLUS ADDITION COMPLIANCE (SIMULATED PERFORMANCE ALTERNATIVE)

WHERE UNCONDITIONED SPACE IS CHANGED TO CONDITIONED SPACE, THE ADDITION SHALL COMPLY WHERE THE ANNUAL ENERGY COST OR ENERGY USE OF THE ADDITION AND THE EXISTING BUILDING, AND ANY ALTERATIONS THAT ARE PART OF THE PROJECT, IS LESS THAN OR EQUAL TO THE ANNUAL ENERGY COST OF THE EXISTING BUILDING WHEN MODELED IN ACCORDANCE WITH SECTION R405. THE ADDITION AND ANY ALTERATIONS THAT ARE PART OF THE PROJECT SHALL COMPLY WITH SECTION R405 IN ITS ENTIRETY.

SECTION R503 ALTERATIONS

R503.1 GENERAL

ALTERATIONS TO ANY BUILDING OR STRUCTURE SHALL COMPLY WITH THE REQUIREMENTS OF THE CODE FOR NEW CONSTRUCTION. ALTERATIONS SHALL BE SUCH THAT THE EXISTING BUILDING OR STRUCTURE IS NOT LESS CONFORMING TO THE PROVISIONS OF THIS CODE THAN THE EXISTING BUILDING OR STRUCTURE WAS PRIOR TO THE ALTERATION.

ALTERATIONS TO AN EXISTING BUILDING, BUILDING SYSTEM OR PORTION THEREOF SHALL CONFORM TO THE PROVISIONS OF THIS CODE AS THEY RELATE TO NEW CONSTRUCTION WITHOUT REQUIRING THE UNALTERED PORTIONS OF THE EXISTING BUILDING OR BUILDING SYSTEM TO COMPLY WITH THIS CODE. ALTERATIONS SHALL NOT CREATE AN UNSAFE OR HAZARDOUS CONDITION OR OVERLOAD EXISTING BUILDING SYSTEMS. ALTERATIONS SHALL BE SUCH THAT THE EXISTING BUILDING OR STRUCTURE DOES NOT USE MORE ENERGY THAN THE EXISTING BUILDING OR STRUCTURE PRIOR TO THE ALTERATION. ALTERATIONS TO EXISTING BUILDINGS SHALL COMPLY WITH SECTIONS R503.1.1 THROUGH R503.2.

[NY] R503.1.1 BUILDING ENVELOPE

BUILDING ENVELOPE ASSEMBLIES THAT ARE PART OF THE ALTERATION SHALL COMPLY WITH SECTION R402.1.2 OR R402.1.4, SECTIONS R402.2.1 THROUGH R402.2.13, R402.3.1, R402.3.2, R402.4.3 AND R402.4.5.

EXCEPTION: THE FOLLOWING ALTERATIONS SHALL NOT BE REQUIRED TO COMPLY WITH THE REQUIREMENTS FOR NEW CONSTRUCTION PROVIDED THAT THE ENERGY USE OF THE BUILDING IS NOT INCREASED:

1. STORM WINDOWS INSTALLED OVER EXISTING FENESTRATION.\
2. EXISTING CEILING, WALL OR FLOOR CAVITIES EXPOSED DURING CONSTRUCTION PROVIDED THAT THESE CAVITIES ARE FILLED WITH INSULATION.
3. CONSTRUCTION WHERE THE EXISTING ROOF, WALL OR FLOOR CAVITY IS NOT EXPOSED.
4. ROOF RE-COVER.
5. ROOFS WITHOUT INSULATION IN THE CAVITY AND WHERE THE SHEATHING OR INSULATION IS EXPOSED DURING REROOFING SHALL BE INSULATED EITHER ABOVE OR BELOW THE SHEATHING.
6. SURFACE-APPLIED WINDOW FILM INSTALLED ON EXISTING SINGLE PANE FENESTRATION ASSEMBLIES TO REDUCE SOLAR HEAT GAIN PROVIDED THAT THE CODE DOES NOT REQUIRE THE GLAZING OR FENESTRATION ASSEMBLY TO BE REPLACED.
7. ALTERATIONS WHICH REPLACE LESS THAN 50 PERCENT OF THE LUMINARIES WITHIN A SPACE, PROVIDED THAT SUCH ALTERATIONS DO NOT INCREASE THE INSTALLED INTERIOR LIGHTING POWER.

R503.1.1.1 REPLACEMENT FENESTRATION

WHERE SOME OR ALL OF AN EXISTING FENESTRATION UNIT IS REPLACED WITH A NEW FENESTRATION PRODUCT, INCLUDING SASH AND GLAZING, THE REPLACEMENT FENESTRATION UNIT SHALL MEET THE APPLICABLE REQUIREMENTS FOR U-FACTOR AND SHGC AS SPECIFIED IN TABLE R402.1.2. WHERE MORE THAN ONE REPLACEMENT FENESTRATION UNIT IS TO BE INSTALLED, AN AREA-WEIGHTED AVERAGE OF THE U-FACTOR, SHGC OR BOTH OF ALL REPLACEMENT FENESTRATION UNITS SHALL BE AN ALTERNATIVE THAT CAN BE USED TO SHOW COMPLIANCE.

R503.1.2 HEATING AND COOLING SYSTEMS - N/A

R503.1.3 SERVICE HOT WATER SYSTEMS

NEW SERVICE HOT WATER SYSTEMS THAT ARE PART OF THE ALTERATION SHALL COMPLY WITH SECTION R403.5.

R503.1.4 LIGHTING

NEW LIGHTING SYSTEMS THAT ARE PART OF THE ALTERATION SHALL COMPLY WITH SECTION R404.1.

EXCEPTION: ALTERATIONS THAT REPLACE LESS THAN 50 PERCENT OF THE LUMINAIRES IN A SPACE, PROVIDED THAT SUCH ALTERATIONS DO NOT INCREASE THE INSTALLED INTERIOR LIGHTING POWER.

R503.2 CHANGE IN SPACE CONDITIONING - N/A

SECTION R504 REPAIRS

R504.1 GENERAL

BUILDINGS, STRUCTURES AND PARTS THEREOF SHALL BE REPAIRED IN COMPLIANCE WITH SECTION R501.3 AND THIS SECTION. WORK ON NONDAMAGED COMPONENTS NECESSARY FOR THE REQUIRED REPAIR OF DAMAGED COMPONENTS SHALL BE CONSIDERED TO BE PART OF THE REPAIR AND SHALL NOT BE SUBJECT TO THE REQUIREMENTS FOR ALTERATIONS IN THIS CHAPTER. ROUTINE MAINTENANCE REQUIRED BY SECTION R501.3, ORDINARY REPAIRS EXEMPT FROM PERMIT, AND ABATEMENT OF WEAR DUE TO NORMAL SERVICE CONDITIONS SHALL NOT BE SUBJECT TO THE REQUIREMENTS FOR REPAIRS IN THIS SECTION.

R504.2 APPLICATION

FOR THE PURPOSES OF THIS CODE, THE FOLLOWING SHALL BE CONSIDERED TO BE REPAIRS:
GLASS-ONLY REPLACEMENTS IN AN EXISTING SASH AND FRAME.
ROOF REPAIRS.
REPAIRS WHERE ONLY THE BULB, BALLAST OR BOTH WITHIN THE EXISTING LUMINAIRES IN A SPACE ARE REPLACED PROVIDED THAT THE REPLACEMENT DOES NOT INCREASE THE INSTALLED INTERIOR LIGHTING POWER.
REPLACEMENT OF EXISTING DOORS THAT SEPARATE CONDITIONED SPACE FROM THE EXTERIOR SHALL NOT REQUIRE THE INSTALLATION OF A VESTIBULE PROVIDED, HOWEVER, THAT AN EXISTING VESTIBULE THAT SEPARATES CONDITIONED SPACE FROM THE EXTERIOR SHALL NOT BE REMOVED.

SECTION R505 CHANGE OF OCCUPANCY OR USE

R505.1 GENERAL

SPACES UNDERGOING A CHANGE IN OCCUPANCY THAT WOULD RESULT IN AN INCREASE IN DEMAND FOR EITHER FOSSIL FUEL OR ELECTRICAL ENERGY SHALL COMPLY WITH THIS CODE.

R505.2 GENERAL

ANY SPACE THAT IS CONVERTED TO A DWELLING UNIT OR PORTION THEREOF FROM ANOTHER USE OR OCCUPANCY SHALL COMPLY WITH THIS CODE.

EXCEPTION: WHERE THE SIMULATED PERFORMANCE OPTION IN SECTION R405 IS USED TO COMPLY WITH THIS SECTION, THE ANNUAL ENERGY COST OF THE PROPOSED DESIGN IS PERMITTED TO BE 110 PERCENT OF THE ANNUAL ENERGY COST ALLOWED BY SECTION R405.3.

1 RCNY §5000-01 - GENERAL

1. SUPPORTING DOCUMENTATION. THE CONSTRUCTION DRAWINGS SUBMITTED FOR APPROVAL SHALL PROVIDE ALL ENERGY DESIGN ELEMENTS AND SHALL MATCH OR EXCEED THE ENERGY EFFICIENCY OF EACH VALUE IN EACH PART OF THE ENERGY ANALYSIS - ENVELOPE, MECHANICAL/SERVICE WATER HEATING AND LIGHTING/POWER. IN ADDITION, OTHER MANDATORY ENERGY CODE REQUIREMENTS SHALL BE PROVIDED AS DESCRIBED IN PARAGRAPHS 1 THROUGH 5 OF THIS SUBDIVISION. FURTHER, SUPPORTING DOCUMENTATION SHALL PROVIDE ALL INFORMATION NECESSARY FOR A PROGRESS INSPECTOR TO VERIFY DURING CONSTRUCTION THAT THE BUILDING HAS BEEN BUILT IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS TO MEET THE REQUIREMENTS OF THE ENERGY CODE. FOR ADDITIONS AND ALTERATIONS, THE APPLICANT MUST CLEARLY SHOW THOSE PHYSICAL PORTIONS OF THE SYSTEMS THAT ARE BEING BROUGHT UP TO CODE AND THOSE THAT ARE NOT BEING UPGRADED.

2. MANDATORY REQUIREMENTS. THE CONSTRUCTION DOCUMENTS SHALL COMPLY WITH ALL MANDATORY REQUIREMENTS OF THE ENERGY CODE. FOR RESIDENTIAL BUILDINGS COMPLYING WITH ECC CHAPTER 4 PROVISIONS, REFERENCES FOR SUCH REQUIREMENTS ARE LISTED THROUGHOUT CHAPTER 4.

3. DEFERRED SUBMITTALS. DRAWINGS SHOWING DESIGN INTENT AND PERFORMANCE CRITERIA MATCHING THOSE IN THE ENERGY ANALYSIS MAY BE SUBMITTED AS SUPPORTING DOCUMENTATION PROVIDED THAT, IN ACCORDANCE WITH SECTION 28-104.2.6 OF THE ADMINISTRATIVE CODE, THE APPLICANT LISTS SUCH DEFERRED SUBMITTALS IN THE CONSTRUCTION DRAWINGS AND SUBMITS THEM FOR APPROVAL PRIOR TO INSTALLATION OR CONSTRUCTION. IF REQUIRED, THE ENERGY ANALYSIS MUST BE UPDATED WHEN DEFERRED SUBMITTALS ARE PROVIDED FOR APPROVAL.

ENERGY CODE COMPLIANCE REQUIRED PROGRESS INSPECTIONS

1. REQUIRED PROGRESS INSPECTIONS. SUPPORTING DOCUMENTATION SHALL ALSO SET FORTH ALL APPLICABLE REQUIRED PROGRESS INSPECTIONS IN ACCORDANCE WITH THE ENERGY CODE, 1 RCNY §101-07 AS SEEN BELOW.

2. CONSTRUCTION SCHEDULING INSTRUCTIONS. IN ACCORDANCE WITH ARTICLE 116 OF TITLE 28 AND SECTION BC 109, CONSTRUCTION SHALL BE SCHEDULED TO ALLOW REQUIRED PROGRESS INSPECTIONS TO TAKE PLACE, AND THAT ROOFS, CEILINGS, EXTERIOR WALLS, INTERIOR WALLS, FLOORS, FOUNDATIONS, BASEMENTS AND ANY OTHER CONSTRUCTION SHALL NOT BE COVERED OR ENCLOSED UNTIL REQUIRED PROGRESS INSPECTIONS ARE COMPLETED OR THE PROGRESS INSPECTOR INDICATES THAT SUCH COVERING OR ENCLOSURE MAY PROCEED, AT EACH STAGE OF CONSTRUCTION, AS APPLICABLE.

3. RESIDENTIAL BUILDING REFERENCE STANDARDS AND CITATIONS. PROGRESS INSPECTION REFERENCE STANDARDS AND CITATIONS SHALL CONFORM TO THE RESPECTIVE REQUIREMENTS OF ECC CHAPTER 4 OR ASHRAE 90.1 AS USED FOR DESIGN, IN ACCORDANCE WITH THE FOLLOWING:

A. WHEN ECC CHAPTER 4 HAS BEEN USED FOR THE PROJECT DESIGN, AS REFLECTED IN THE ENERGY ANALYSIS, THE APPLICANT SHALL LIST ON THE DRAWINGS THE RESPECTIVE REFERENCES AND CITATIONS FOR ECC FOR THE PROGRESS INSPECTION.

B. WHEN ASHRAE 90.1 HAS BEEN USED FOR THE PROJECT DESIGN, AS REFLECTED IN THE ENERGY ANALYSIS, THE APPLICANT SHALL LIST ON THE DRAWINGS THE RESPECTIVE REFERENCES AND CITATIONS FOR ASHRAE 90.1 FOR THE PROGRESS INSPECTION

4. LIST OF PROGRESS INSPECTIONS REQUIRED. THE FOLLOWING PROGRESS INSPECTIONS AND/OR TESTING SHALL BE REQUIRED WHEN APPLICABLE TO THE SCOPE OF WORK. ENERGY CODE SECTIONS CITED IN TABLES I SHALL BE UNDERSTOOD TO INCLUDE THE SECTION, ALL SUBSECTIONS, ALL TABLES AND, WHEN ASHRAE 90.1 IS USED, APPENDICES RELATED TO THE CITED ENERGY CODE SECTION.

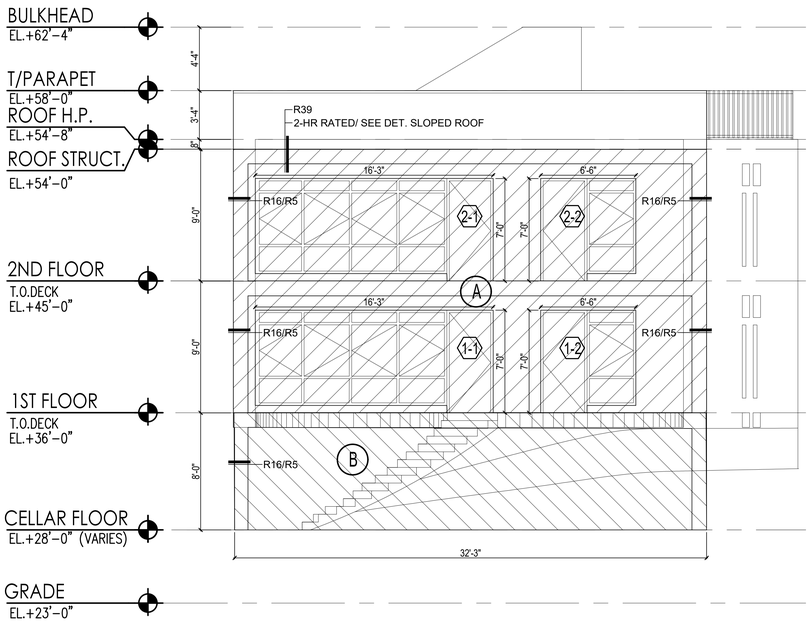
5. RESIDENTIAL BUILDINGS. THE PROGRESS INSPECTIONS AND TESTS DESCRIBED IN TABLE I SHALL BE PERFORMED FOR BUILDINGS REGULATED BY EITHER ECC CHAPTER 4 OR ASHRAE 90.1 AS APPLICABLE.

6. INSPECTION OR TEST FAILURE. IN ACCORDANCE WITH SECTION BC 109.9 AND ECC 104.2.3, WHERE AN INSPECTION OR TEST FAILS, THE CONSTRUCTION SHALL BE CORRECTED AND MUST BE MADE AVAILABLE FOR REINSPECTION AND/OR RETESTING BY THE PROGRESS INSPECTOR UNTIL IT COMPLIES. FOR ADDITIONS AND ALTERATIONS, THE APPLICANT MUST CLEARLY INDICATE WHAT PORTIONS OF THE ALTERED SYSTEMS SHOULD BE INSPECTED AND/OR TESTED, AND WHAT INSPECTION AND/OR TESTING MAY BE OUTSIDE THE SCOPE OF THE WORK.

7. ENERGY ANALYSIS OF CONSTRUCTED CONDITIONS. IN ACCORDANCE WITH SECTION 28-104.3 OF THE ADMINISTRATIVE CODE AND SECTION ECC 103.4, IF CONSTRUCTED WORK DIFFERS FROM THE LAST-APPROVED FULL ENERGY ANALYSIS, AN AS-BUILT ENERGY ANALYSIS SHALL BE SUBMITTED TO THE DEPARTMENT, LISTING THE ACTUAL VALUES USED IN THE BUILDING FOR ALL APPLICABLE ENERGY CODE-REGULATED ITEMS AND DEMONSTRATING THAT THE BUILDING COMPLIES WITH THE ENERGY CODE. SUCH ENERGY ANALYSIS SHALL BE SIGNED AND SEALED BY A REGISTERED DESIGN PROFESSIONAL. THE PROGRESS INSPECTOR SHALL CERTIFY THAT TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF THE BUILDING AS BUILT COMPLIES WITH SUCH SIGNED AND SEALED ENERGY ANALYSIS AND CONSTRUCTION DRAWINGS FOR ENERGY CODE COMPLIANCE; WHERE NO TRADE-OFFS HAVE BEEN USED AMONG DISCIPLINES, MORE THAN ONE REGISTERED DESIGN PROFESSIONAL MAY SIGN AND SEAL THE ELEMENTS OF THE ENERGY ANALYSIS. THE ENERGY ANALYSIS SHALL BE APPROVED OR ACCEPTED BY THE DEPARTMENT PRIOR TO SIGN-OFF.

TABLE I
PROGRESS INSPECTIONS FOR ENERGY CODE COMPLIANCE
RESIDENTIAL BUILDINGS

	INSPECTION/TEST	PERIODIC (MINIMUM)	REFERENCE STANDARD (SEE ECC CHAPTER 6) OR OTHER CRITERIA	ECC OR OTHER CITATION
IA	ENVELOPE INSPECTIONS			
IA1	PROTECTION OF EXPOSED FOUNDATION INSULATION: INSULATION SHALL BE VISUALLY INSPECTED TO VERIFY PROPER PROTECTION WHERE APPLIED TO THE EXTERIOR OF BASEMENT OR CELLAR WALLS, CRAWL-SPACE WALLS AND/OR THE PERIMETER OF SLAB-ON-GRADE FLOORS.	PRIOR TO BACKFILL	APPROVED CONSTRUCTION DOCUMENTS	303.2.1
IA2	INSULATION PLACEMENT AND R-VALUES: INSTALLED INSULATION FOR EACH COMPONENT OF THE CONDITIONED SPACE ENVELOPE AND AT JUNCTIONS BETWEEN COMPONENTS SHALL BE VISUALLY INSPECTED TO ENSURE THAT THE R-VALUES ARE MARKED, THAT SUCH R-VALUES CONFORM TO THE RVALUES IDENTIFIED IN THE CONSTRUCTION DOCUMENTS AND THAT THE INSULATION IS PROPERLY INSTALLED. CERTIFICATIONS FOR UNMARKED INSULATION SHALL BE SIMILARLY VISUALLY INSPECTED	AS REQUIRED TO VERIFY CONTINUOUS ENCLOSURE WHILE WALLS, CEILINGS AND FLOORS ARE OPEN	APPROVED CONSTRUCTION DOCUMENTS	303.1, 303.1.1, 303.1.2, 402.1, 402.2, 402.4.2.2, TABLE 402.4.2
IA3	FENESTRATION U-FACTOR AND PRODUCT RATINGS: U-FACTORS OF INSTALLED FENESTRATION SHALL BE VERIFIED BY VISUAL INSPECTION FOR CONFORMANCE WITH THE U-FACTORS IDENTIFIED IN THE CONSTRUCTION DRAWINGS, EITHER BY VERIFYING THE MANUFACTURER'S NFRC LABELS OR, WHERE NOT LABELED, USING THE RATINGS IN ECC TABLES 303.1.3(1)AND (2).	AS REQUIRED DURING INSTALLATION	APPROVED CONSTRUCTION DOCUMENTS; NFRC 100	303.1; 303.1.3, 402.1, 402.3, 402.62
IA4	FENESTRATION AIR LEAKAGE: WINDOWS, SKYLIGHTS AND SLIDING GLASS DOORS, EXCEPT SITEBUILT WINDOWS, SKYLIGHTS AND DOORS, SHALL BE VISUALLY INSPECTED TO VERIFY THAT INSTALLED ASSEMBLIES ARE LISTED AND LABELED TO THE REFERENCED STANDARD	AS REQUIRED DURING INSTALLATION	NFRC 400, AAMA/WDMA/CSA 101/I.S.2/A440	402.4.4
IA5	FENESTRATION AREAS: DIMENSIONS OF WINDOWS, DOORS AND SKYLIGHTS SHALL BE VERIFIED BY VISUAL INSPECTION.	PRIOR TO FINAL CONSTRUCTION INSPECTION	APPROVED CONSTRUCTION DOCUMENTS	402.3
IA6	AIR SEALING AND INSULATION – VISUAL INSPECTION: OPENINGS AND PENETRATIONS IN THE BUILDING ENVELOPE, INCLUDING SITE-BUILT FENESTRATION AND DOORS, SHALL BE VISUALLY INSPECTED TO VERIFY THAT THEY ARE PROPERLY SEALED, IN ACCORDANCE WITH TABLE 402.4.2.	AS REQUIRED DURING ENVELOPE CONSTRUCTION	APPROVED CONSTRUCTION DOCUMENTS; ASTM E283; ASTM E84; RCNYS	402.4.1, 402.4.2.2, 402.4.3
IA7	AIR SEALING AND INSULATION– TESTING: TESTING SHALL BE PERFORMED IN ACCORDANCE WITH SECTION ECC 402.4.2.1 AND SHALL BE ACCEPTED IF THE BUILDING MEETS THE REQUIREMENTS DETAILED IN SUCH SECTION. TEST RESULTS SHALL BE RETAINED IN ACCORDANCE WITH THE PROVISIONS OF TITLE 28.	PRIOR TO FINAL CONSTRUCTION INSPECTION	ASHRAE/ASTM E779; ANSI Z265; APPROVED CONSTRUCTION DOCUMENTS	402.4.2.1
IB	MECHANICAL AND SERVICE WATER HEATING INSPECTIONS			
IB1	FIREPLACES: PROVISION OF COMBUSTION AIR AND TIGHT-FITTING FIREPLACE DOORS SHALL BE VERIFIED BY VISUAL INSPECTION.	PRIOR TO FINAL CONSTRUCTION INSPECTION	APPROVED CONSTRUCTION DOCUMENTS; ANSI Z21.60 (SEE ALSO MC 904), ANSI Z21.5	303.1.5; BC 2111; MC CHAPTERS 7, 8, 9; FGC CHAPTER 6
IB2	SHUTOFF DAMPERS: NOT LESS THAN 20% OF INSTALLED AUTOMATIC OR GRAVITY DAMPERS, AND A MINIMUM OF ONE OF EACH TYPE, SHALL BE VISUALLY INSPECTED AND PHYSICALLY TESTED FOR PROPER OPERATION.	PRIOR TO FINAL CONSTRUCTION INSPECTION	APPROVED CONSTRUCTION DOCUMENTS	403.5; 403.7, C403
IB3	HVAC AND SERVICE WATER HEATING EQUIPMENT: HEATING AND COOLING EQUIPMENT SHALL BE VERIFIED BY VISUAL INSPECTION FOR PROPER SIZING. POOL HEATERS AND COVERS SHALL BE VERIFIED BY VISUAL INSPECTION.	PRIOR TO FINAL PLUMBING AND CONSTRUCTION INSPECTION	ACCA MANUAL J; APPROVED CONSTRUCTION DOCUMENTS, INCLUDING ENERGY ANALYSIS	403.6, 403.7, 403.9, C403
IB4	HVAC AND SERVICE WATER HEATING SYSTEM CONTROLS: SYSTEM CONTROLS SHALL BE INSPECTED TO VERIFY THAT EACH DWELLING IS PROVIDED WITH AT LEAST ONE INDIVIDUAL PROGRAMMABLE THERMOSTAT WITH CAPABILITIES AS DESCRIBED IN ECC 403.1.1, AND THAT SUCH CONTROLS ARE SET AND OPERATE AS SPECIFIED IN ECC 403.1.1. CONTROLS FOR SUPPLEMENTARY ELECTRIC-RESISTANCE HEAT PUMPS SHALL BE INSPECTED TO VERIFY THAT SUCH CONTROLS PREVENT SUPPLEMENTAL HEAT OPERATION WHEN THE HEAT PUMP COMPRESSOR CAN MEET THE HEATING LOAD. CONTROLS FOR SNOW- AND ICE-MELTING SYSTEMS AND POOLS SHALL BE INSPECTED FOR PROPER OPERATION. NOT LESS THAN 20% OR ONE OF EACH CONTROL TYPE, WHICHEVER IS MORE, SHALL BE INSPECTED. CONTROLS FOR TURNING OFF CIRCULATING HOT WATER PUMPS WHEN NOT IN USE SHALL BE INSPECTED FOR AN AUTOMATIC OR MANUAL SWITCH.	PRIOR TO FINAL ELECTRICAL AND CONSTRUCTION INSPECTION	APPROVED CONSTRUCTION DOCUMENTS, INCLUDING CONTROL SYSTEM NARRATIVES	403.1, 403.4, 403.7, 403.8, 403.9
IB5	HVAC INSULATION AND SEALING: INSTALLED DUCT AND PIPING INSULATION SHALL BE VISUALLY INSPECTED TO VERIFY CORRECT INSULATION PLACEMENT AND VALUES. DUCTS, AIR HANDLERS, FILTER BOXES AND BUILDING CAVITIES USED AS DUCTS SHALL BE VISUALLY INSPECTED FOR PROPER SEALING.	PRIOR TO CLOSING CEILINGS AND WALLS AND PRIOR TO FINAL CONSTRUCTION INSPECTION	APPROVED CONSTRUCTION DOCUMENTS; RCNYS M1601.3.1	403.2.1, 403.2.2, 403.3, 403.4, 403.7; MC 603.9
IB6	DUCT LEAKAGE TESTING: WHERE THE AIR HANDLER AND/OR SOME DUCTWORK IS IN UNCONDITIONED SPACE, DUCT-LEAKAGE TESTING SHALL BE PERFORMED EITHER AFTER ROUGH-IN OR POST-CONSTRUCTION TO ENSURE COMPLIANCE WITH ECC 403.2.2. NOT LESS THAN 20% OF SUCH DUCTWORK SHALL BE TESTED.	PRIOR TO CLOSING CEILINGS AND WALLS AND PRIOR TO FINAL CONSTRUCTION INSPECTION	APPROVED CONSTRUCTION DOCUMENTS; ANSI/ASHRAE 152, ASTM E1554 TEST METHOD A	403.2.2, 403.7
IC	ELECTRICAL POWER AND LIGHTING SYST

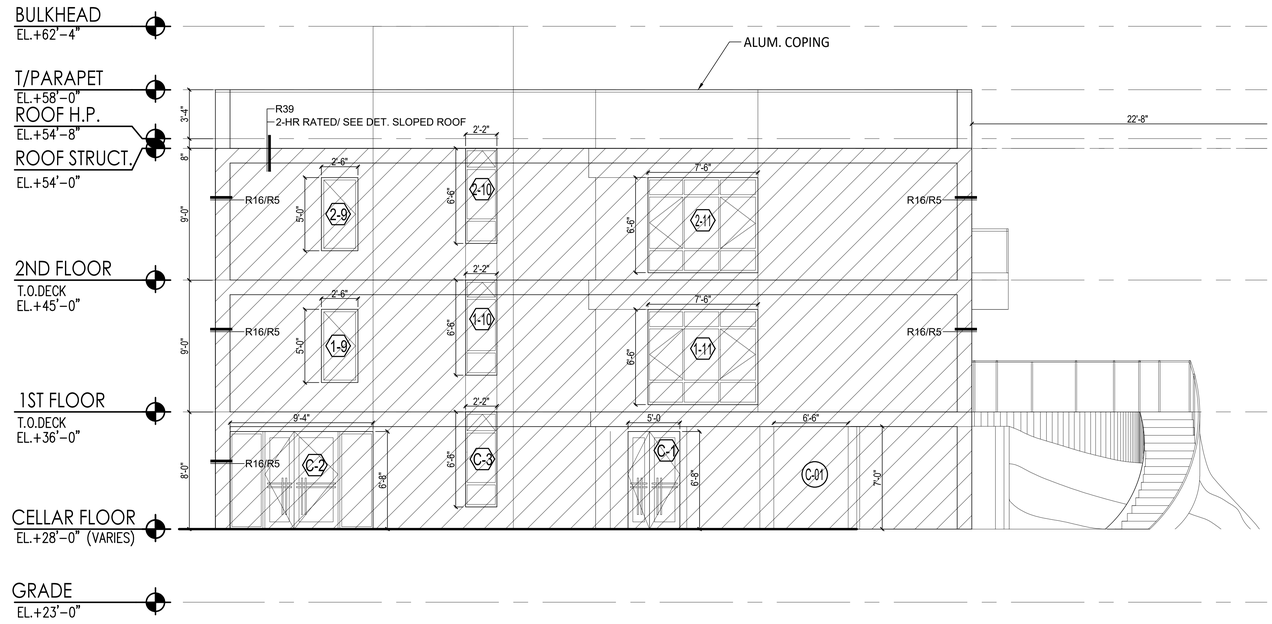


WALLS ABOVE GROUND
(A) 32'-3" X 18'-0" = 580.5 SF

WALL BELOW GROUND DOWN TO BOTTOM OF SLAB
(B) 32'-3" X 8'-0" = 258.0 SF

WINDOW AREAS:
(1-1) 13'-0" X 6'-6" + 3'-3" X 7'-0" = 107.3 SF
(2-1) 13'-0" X 6'-6" + 3'-3" X 7'-0" = 107.3 SF
(1-2) 3'-3" X 6'-6" + 3'-3" X 7'-0" = 43.9 SF
(2-2) 3'-3" X 6'-6" + 3'-3" X 7'-0" = 43.9 SF
= 302.4 SF

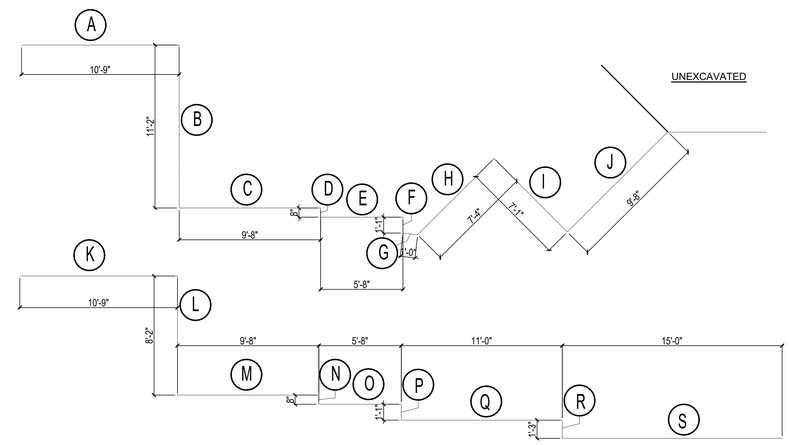
1 FRONT: SOUTH-WEST WALL AREA/THERMAL ENVELOPE
EN-103 SCALE: 1/4"=1'-0"



WALLS ABOVE GROUND AREA:
(A) 10-9" X 8'-0" = 86.0 SF
(B) 11'-2" X 8'-0" = 89.3 SF
(C) 9'-8" X 8'-0" = 77.3 SF
(D) 0-8" X 8'-0" = 5.3 SF
(E) 5'-8" X 8'-0" = 45.3 SF
(F) 1'-1" X 8'-0" = 8.7 SF
(G) 1'-0" X 8'-0" = 8.0 SF
(H) 7'-4" X 8'-0" = 58.7 SF
(I) 7'-1" X 8'-0" = 56.7 SF
(J) 9'-8" X 8'-0" = 77.3 SF
(K) 10'-9" X 18'-0" = 193.5 SF
(L) 8'-2" X 18'-0" = 147.0 SF
(M) 9'-8" X 18'-0" = 174.0 SF
(N) 0'-8" X 18'-0" = 12.0 SF
(O) 5'-8" X 18'-0" = 102.0 SF
(P) 1'-1" X 18'-0" = 19.5 SF
(Q) 11'-0" X 18'-0" = 198.0 SF
(R) 1'-3" X 18'-0" = 22.5 SF
(S) 15'-0" X 18'-0" = 270.0 SF
= 1,651.1 SF

WINDOW AREA:
(C-2) 9'-4" X 6'-10" = 63.8 SF
(1-9) 2'-6" X 5'-0" = 12.5 SF
(2-9) 2'-6" X 5'-0" = 12.5 SF
(C-3) 2'-2" X 6'-6" = 14.1 SF
(1-10) 2'-2" X 6'-6" = 14.1 SF
(2-10) 2'-2" X 6'-6" = 14.1 SF
(C-1) 5'-0" X 6'-10" = 34.2 SF
(1-11) 7'-6" X 6'-6" = 48.8 SF
(2-11) 7'-6" X 6'-6" = 48.8 SF
= 262.9 SF

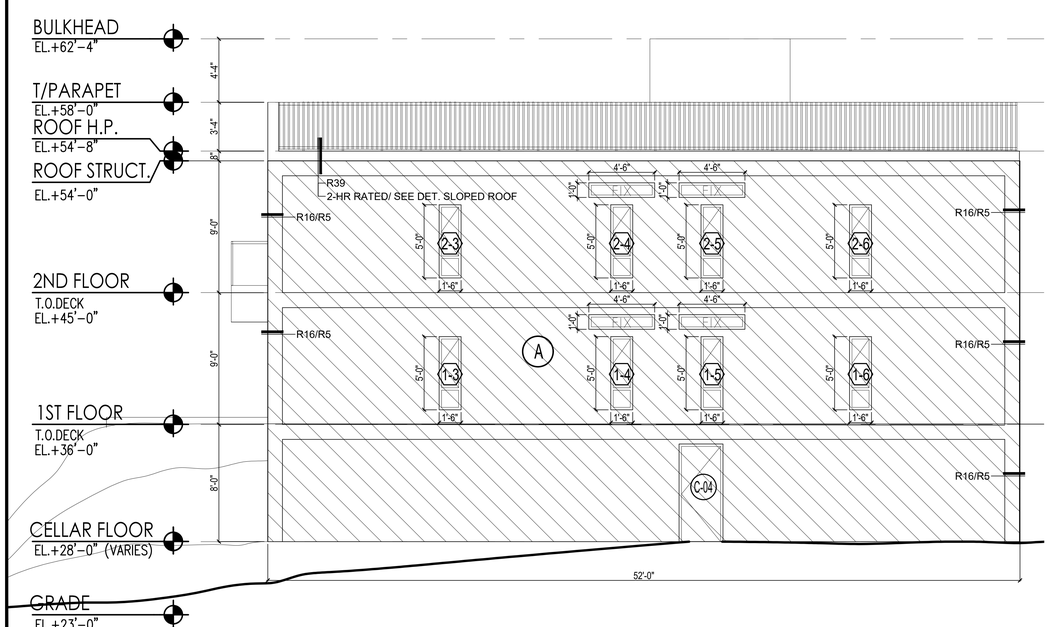
DOOR AREA:
(C-01) 6'-6" X 7'-0" = 45.5 SF



2 SIDE: WEST WALL AREA/THERMAL ENVELOPE
EN-103 SCALE: 1/4"=1'-0"

NOTES:
1) ALL VERTICAL WALL SURFACES COVERED BY CONTINUOUS EXTERIOR INSULATION DOWN THROUGH CELLAR AND BOTTOM OF FOOTINGS: R16 STRUCTURAL INSULATED SHEATHING IS USED FOR 1) 2 HR FIRE RATING, 2) R16-VALUE AND 3) SOUND ATTENUATION. 4" WOOD STUD WALLS WITH ADDITIONAL R5 CAVITY INSULATION.

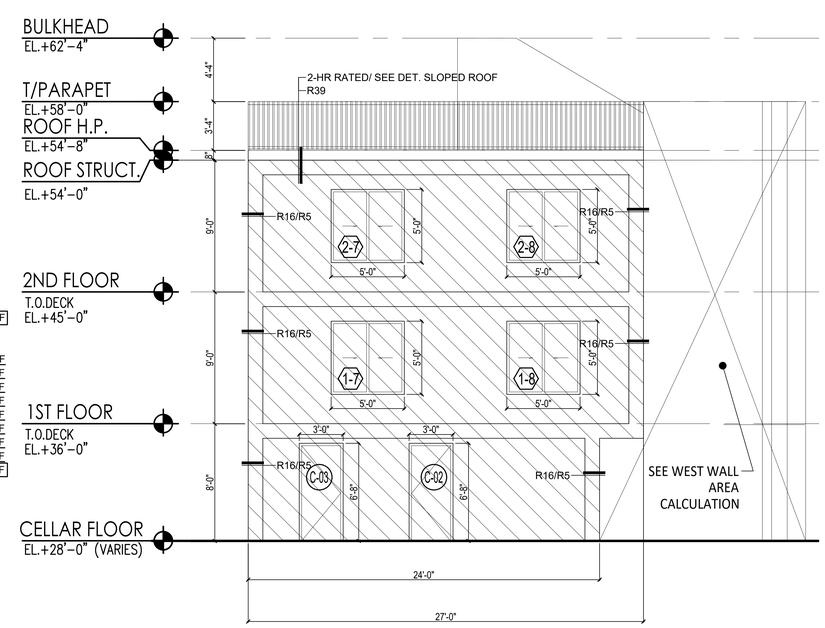
ADDITIONAL WALL INSULATION IN CELLAR PROVIDED BY CORE FILLED INSULATION AND INSULATED CMU



WALLS ABOVE GROUND
(A) 52-0" X 26'-0" = 1352.0 SF

WINDOW AREA:
(1-3) 1'-6" X 5'-0" = 7.5 SF
(2-3) 1'-6" X 5'-0" = 7.5 SF
(1-6) 1'-6" X 5'-0" = 7.5 SF
(2-6) 1'-6" X 5'-0" = 7.5 SF
(1-4) (1'-6" X 5'-0") + (1'0" X 4'-6") = 12.0 SF
(2-4) (1'-6" X 5'-0") + (1'0" X 4'-6") = 12.0 SF
(1-5) (1'-6" X 5'-0") + (1'0" X 4'-6") = 12.0 SF
(2-5) (1'-6" X 5'-0") + (1'0" X 4'-6") = 12.0 SF
= 78.0 SF

3 SIDE: EAST WALL AREA/THERMAL ENVELOPE
EN-103 SCALE: 1/4"=1'-0"



WALLS ABOVE GROUND
(A) 24-0" X 8'-0" = 192.0 SF
(B) 27-0" X 18'-0" = 486.0 SF
= 678.0 SF

WINDOW AREA:
(1-3) 5'-0" X 5'-0" = 25.0 SF
(2-3) 5'-0" X 5'-0" = 25.0 SF
(1-6) 5'-0" X 5'-0" = 25.0 SF
(2-6) 5'-0" X 5'-0" = 25.0 SF
= 100.0 SF

DOOR AREA:
(C-04) 3'-0" X 6'-8 = 20.0 SF
(C-04) 3'-0" X 6'-8 = 20.0 SF
= 40.0 SF

4 REAR: NORTH-EAST WALL AREA/THERMAL ENVELOPE
EN-103 SCALE: 1/4"=1'-0"

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cell. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

243 MADISON ST.
MAMARONECK, NY 10543

DRAWING TITLE
ENERGY AREA CALCULATION
QND ENVELOPE SCHEMES/
PERMANENT SCHEMES

B-SCAN JOB STICKER

NYC DOB IDENTIFICATION NUMBER
SEAL & SIGNATURE

DATE: 9/26/19
PROJECT # 09-2019
DRAWN BY: RU
CHECK BY: AY
DWG No. EN- 103 .00
SHEET 05 of 35

REScheck Software Version 4.7.1

Compliance Certificate

Project NEW 2-FAMILY RESIDENTIAL BUILDING

Energy Code: **2020 New York City Energy Conservation Code**
Location: **New York, New York**
Construction Type: **Single-family**
Project Type: **New Construction**
Conditioned Floor Area: **3,404 ft2**
Glazing Area **17%**
Climate Zone: **4 (5362 HDD)**
Permit Date:
Permit Number:

Construction Site:
243 Madison St.
Mamaroneck, NY 10543

Owner/Agent:

Designer/Contractor:
Arthur Yellin
Office for Architecture Planning
Design P.C.
4 Governors Court
Great Neck, NY 11023
(516)773-3862
arthuryellin@oapdarchitecture.com

Compliance: Passes using UA trade-off

Compliance: **1.3% Better Than Code** Maximum UA: **519** Your UA: **512** Maximum SHGC: **0.40** Your SHGC: **0.40**

The % Better or Worse Than Code Index reflects how close to compliance the house is based on code trade-off rules. It DOES NOT provide an estimate of energy use or cost relative to a minimum-code home.

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	U-Factor	UA
Ceiling 1: Flat Ceiling or Scissor Truss	1,702	29.0	20.0	0.021	35
Skylight 1: Metal Frame:Double Pane with Low-E SHGC: 0.40	24			0.320	8
South-West Wall: Wood Frame, 24" o .c.	581	16.0	5.0	0.048	13
Window 1: Metal Frame with Thermal Break:Double Pane with Low-E SHGC: 0.40	302			0.320	97
Basement Wall 1: Masonry Block with Integral Insulation Wall height: 8.0' Depth below grade: 1.0' Insulation depth: 8.0'	258	0.0	5.0	0.133	34
West Wall: Wood Frame, 24" o .c.	1,651	29.0	20.0	0.022	30
Window 2: Metal Frame with Thermal Break:Double Pane with Low-E SHGC: 0.40	263			0.320	84
Door 1: Solid	46			0.320	15
Wall 3: Wood Frame, 24" o .c.	1,352	29.0	20.0	0.022	28
Window 3: Metal Frame with Thermal Break:Double Pane with Low-E SHGC: 0.40	78			0.320	25
Wall 4: Wood Frame, 24" o .c.	678	29.0	20.0	0.022	12
	100			0.320	32

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	U-Factor	UA
Door 2: Solid	40			0.320	13
Floor 1: Slab-On-Grade:Unheated : Vertical insulation Insulation depth: 1.5'	149		5.0	0.580	86

Compliance Statement: The proposed building design described here is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the 2020 New York City Energy Conservation Code requirements in REScheck Version 4.7.1 and to comply with the mandatory requirements listed in the REScheck Inspection Checklist.

Name - Title Signature Date

REScheck Software Version 4.7.1

Inspection Checklist

Energy Code: 2020 New York City Energy Conservation Code

Requirements: 34.0% were addressed directly in the REScheck software

Text in the "Comments/Assumptions" column is provided by the user in the REScheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Pre-Inspection/Plan Review	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
103.1, 103.2 [PR1][1]	Construction drawings and documentation demonstrate energy code compliance for the building envelope. Thermal envelope represented on construction documents.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
103.1, 103.2, 403.7 [PR3][1]	Construction drawings and documentation demonstrate energy code compliance for lighting and mechanical systems. Systems serving multiple dwelling units must demonstrate compliance with the NYCECC Commercial Provisions.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
402.6 [PR4][1]	Construction document include documentation of thermal bridges per section details of: 1) R402.6.1 Clear field thermal bridges., 2) R402.6.2 Point thermal bridges, and 3) R402.6.3 Linear thermal bridges.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement is not applicable.
302.1, 403.7 [PR2][1]	Heating and cooling equipment is sized per ACCA Manual s based on loads calculated per ACCA Manual j or other methods approved by the code official.	Heating: Btu/hr____ Cooling: Btu/hr____	Heating: Btu/hr____ Cooling: Btu/hr____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Foundation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.2 [F01][1]	Slab edge insulation R-value.	R-____ ☐ Unheated ☐ Heated	R-____ ☐ Unheated ☐ Heated	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
402.1.2 [F03][1]	Slab edge insulation depth/length.	____ft	____ ft	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
402.1.1 [F04][1]	Conditioned basement wall insulation R-value. Where interior insulation is used, verification may need to occur during Insulation Inspection. Not required in warm-humid locations in Climate Zone 3.	R-____ R-____	R-____ R-____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
303.2 [F05][1]	Conditioned basement wall insulation installed per manufacturer's instructions.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
402.2.9 [F06][1]	Conditioned basement wall insulation depth of burial or distance from top of wall.	____ ft	____ ft	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
303.2.1 [F011][1]	A protective covering is installed to protect exposed exterior insulation and extends a minimum of 6 in. below grade.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
403.9 [F012][1]	Snow- and ice-melting system controls installed.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Framing / Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.1, 402.3.4 [FR1][1]	Door U-factor.	U-____	U-____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
402.1.1, 402.3.1, 402.3.3, 402.5 [FR2][1]	Glazing U-factor (area-weighted average).	U-____	U-____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
303.1.3 [FR4][1]	U-factors of fenestration products are determined in accordance with the NFRC test procedure or taken from the default table.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
402.1.1, 402.3.3, 402.3.6, 402.5 [FR5][1]	Skylight U-factor.	U-____	U-____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
402.4.1.1 [FR23][1]	Air barrier and thermal barrier installed per manufacturer's instructions. An approved third-party will inspect all components and verify compliance. See section details and guidance from Table R402.4.1.1.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
402.4.3 [FR20][1]	Fenestration that is not site built is listed and labeled as meeting AAMA /WDMA/CSA 101/I.S.2/A440 or has infiltration rates per NFRC 400 that do not exceed code limits.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
402.4.5 [FR16][1]	IC-rated recessed lighting fixtures sealed at housing/interior finish and labeled to indicate ≤2.0 cfm leakage at 75 Pa.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
403.3.1 [FR12][1]	Supply and return ducts in attics insulated >= R-8 where duct is >= 3 inches in diameter and >= R-6 where < 3 inches. Supply and return ducts in other portions of the building insulated >= R-6 for diameter >= 3 inches and R-4.2 for < 3 inches in diameter.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.3.2 [FR13][1]	Ducts, air handlers and filter boxes are sealed with joints/seams compliant with New York City Mechanical Code.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.3	Duct system in new buildings and			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	cated in a ce in accordance 103.3.7 (1-2).
	in accordance ial D and sections			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Framing / Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
403.3.5 [FR15][1]	Building cavities are not used as ducts or plenums.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.3.7 [FR20][1]	Ducts located in conditioned space are either: 1) completely within the continuous air barrier and within the building thermal envelope, 2) buried within ceiling insulation in accordance with Section R403.3.6 and the air handler is located completely within the continuous air barrier and within the building thermal envelope and the duct leakage is <= 1.5 cfm / 100 sf of conditioned floor area served by the duct system, or 3) the ceiling insulation R-value installed against and above the insulated duct >= to the proposed ceiling insulation R-value. less the R-value of the insulation on the duct.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.4 [FR17][1]	HVAC piping insulation insulated in accordance with Table R403.4. The thickness and conductivity of the insulation >= R-3.	R-____	R-____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.4.1 [FR24][1]	Protection of insulation on HVAC piping.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.5.3 [FR18][1]	Hot water pipes are insulated to ≥R-3.	R-____	R-____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.5 [FR29][1]	Energy conservation measures for SWH systems follow guidelines in section R403.5.1-5.	R-____	R-____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.6 [FR19][1]	Automatic or gravity dampers are installed on all outdoor air intakes and exhausts.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Insulation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
303.1, [IN13][1]	All installed insulation is labeled or the installed R-values provided.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
402.1.1, 402.2.5, 402.2.6 [IN3][1]	Wall insulation R-value. If this is a mass wall with at least ½ of the wall insulation on the wall exterior, the exterior insulation requirement applies (FR10).	R-____ ☐ Wood ☐ Mass ☐ Steel	R-____ ☐ Wood ☐ Mass ☐ Steel	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
303.2 [IN4][1]	Wall insulation is installed per manufacturer's instructions.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
402.4.6 [IN14][1]	Fire separations between dwelling units in two-family dwellings and multiple single-family dwellings (townhouses) insulated >= R-10 and walls are air sealed in accordance with Section R402.4.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement is not applicable.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.1, 402.2.1, 402.2.2, 402.2.6 [FI1][1]	Ceiling insulation R-value.	R-____ ☐ Wood ☐ Steel	R-____ ☐ Wood ☐ Steel	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
303.1.1.1, 303.2 [FI2][1]	Ceiling insulation installed per manufacturer's instructions. Blown insulation marked every 300 ft².			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
402.2.3 [FI22][1]	Vented attics with air permeable insulation include baffle adjacent to soffit and eave vents that extends over insulation.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement is not applicable.
402.2.4 [FI3][1]	Attic access hatch and door insulation ≥R-value of the adjacent assembly.	R-____	R-____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
402.4.1.2 [FI17][1]	Blower door test @ 50 Pa. <=5 ach in Climate Zones 1-2. and <=3 ach in Climate Zones 3-8.	ACH 50 =____	ACH 50 =____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
403.3.3 [FI27][1]	Ducts are pressure tested to determine air leakage with either: Rough-in test: Total leakage measured with a pressure differential of 0.1 inch w.g. across the system including the manufacturer's air handler enclosure if installed at time of test. Postconstruction test: Total leakage measured with a pressure differential of 0.1 inch w.g. across the entire system including the manufacturer's air handler enclosure.	____ cfm/100 ft²	____ cfm/100 ft²	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.3.4 [FI4][1]	Duct tightness test result of <=4 cfm/100 ft2 across the system or <=3 cfm/100 ft2 without air handler @ 25 Pa. For rough-in tests, verification may need to occur during Framing Inspection.	____ cfm/100 ft²	____ cfm/100 ft²	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.3.2.1 [FI24][1]	Air handler leakage designated by manufacturer at <=2% of design air flow.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.1.1 [FI9][1]	Programmable thermostats installed for control of primary heating and cooling systems and initially set by manufacturer to code specifications.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.1.2 [FI10][1]	Heat pump thermostat installed on heat pumps.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.5.1 [FI11][1]	Circulating service hot water systems have automatic or accessible manual controls.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
403.6.1 [FI25][1]	All mechanical ventilation system fans not part of tested and listed HVAC equipment meet efficacy and air flow limits per Table R403.6.1.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.6.2 [FI24][1]	Every dwelling unit is served by a heat recovery ventilator (HRV) or energy recovery ventilator (ERV) installed per manufacturer's instructions. The HRV/ERV is listed and sized adequately for the specific application, which will include the building's conditioned area, and number of occupants.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.6.3 [FI35][1]	Installed performance of the mechanical ventilation system is tested and verified by an approved agency and measured using a flow hood, flow grid, or other airflow measuring device.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.2 [FI26][1]	Hot water boilers supplying heat through one- or two-pipe heating systems have outdoor setback control to lower boiler water temperature based on outdoor temperature.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.5.1.1 [FI28][1]	Heated water circulation systems have a circulation pump. The system return pipe is a dedicated return pipe or a cold water supply pipe. Gravity and thermo-syphon circulation systems are not present. Controls for circulating hot water system pumps start the pump with signal for hot water demand within the occupancy. Controls automatically turn off the pump when water is in circulation loop is at set-point temperature and no demand for hot water exists.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.5.1.2 [FI29][1]	Electric heat trace systems comply with IEEE 515.1 or UL 515. Controls automatically adjust the energy input to the heat tracing to maintain the desired water temperature in the piping.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.5.2 [FI30][1]	Demand recirculation water systems have controls that manage operation of the pump and limit the temperature of the water entering the cold water piping to <= 104ºF.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
403.5.4 [FI33][1]	Drain water heat recovery units have >= 40 percent efficiency if installed for equal flow or >=52 percent efficiency if installed for unequal flow. Vertical drain water heat recovery units comply with CSA B55.2 and tested and labeled in accordance with CSA B55.1. Sloped drain water heat recovery units may be used when approved by the department. Potable water-side pressure loss of drain water heat recovery units are < 3 psi for individual units connected to one or two showers. Potable water-side pressure loss of drain water heat recovery units are < 2 psi for individual units connected to three or more showers.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.5.5(1-4) [FI33][1]	Heated water supply piping is in accordance with one of the following: 1) Maximum allowable pipe length method, 2) Maximum allowable pipe volume method, 3) Drain water heat recovery units, or 4) Recirculation Systems.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
404.1 [FI6][1]	90% or more of permanent fixtures have lamps with an efficacy >= 65 lumens/watt or have a total luminaire efficacy >= 45 lumens/watt.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
404.2 [FI35][1]	Buildings with individual dwelling units have provisions determine the electrical energy consumed by each unit by separately metering the units.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
404.3 [FI36][1]	One or two-family dwellings and townhouses with parking area provided on the building site shall have a 208/240V 40-amp outlet for each dwelling unit or panel capacity and conduit for the future installation of such an outlet. See section details.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
404.1.1 [FI23][1]	Fuel gas lighting systems have no continuous pilot light.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
401.3 [FI7][1]	Compliance certificate posted.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
303.3 [FI18][1]	Manufacturer manuals for mechanical and water heating systems have been provided.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

2020 New York City Energy Conservation Code Energy Efficiency Certificate

Insulation Rating	R-Value
Above-Grade Wall	49.00
Below-Grade Wall	5.00
Floor	5.00
Ceiling / Roof	49.00
Ductwork (unconditioned spaces):	____

Glass & Door Rating	U-Factor	SHGC
Window	0.32	0.40
Door	0.32	
Skylight	0.32	0.40

Heating & Cooling Equipment	Efficiency
Heating System:_____	_____
Cooling System:_____	_____
Water Heater:_____	_____

Name: _____ Date:_____
Comments

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cel. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

243 MADISON ST.
MAMARONECK, NY 10543

DRAWING TITLE
RESCHECK

B-SCAN JOB STICKER

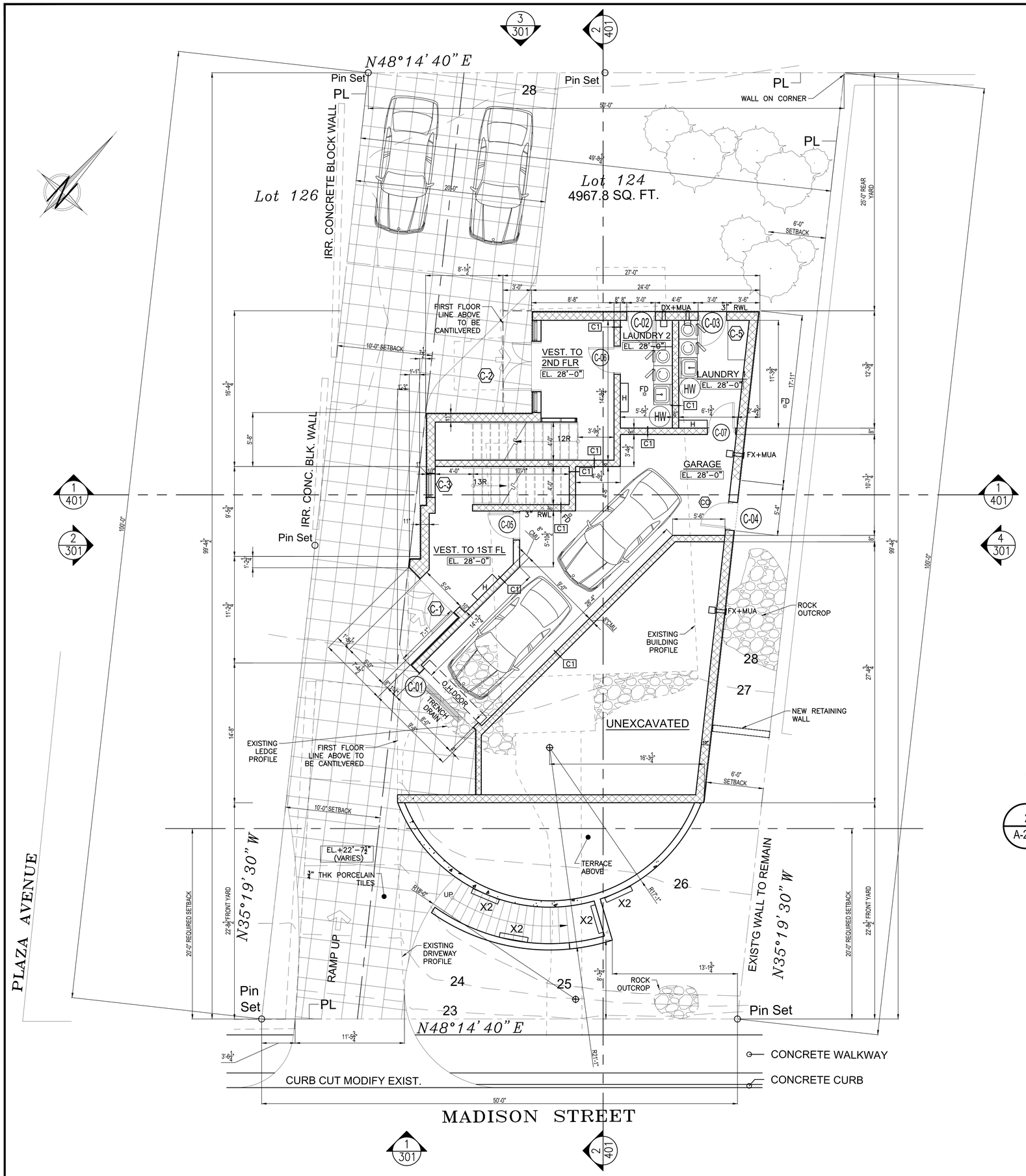
NYC DOB IDENTIFICATION NUMBER

SEAL & SIGNATURE

DATE: 9/26/19
PROJECT #: 09-2019
DRAWN BY: RJ
CHECK BY: AY

DWG No. EN- 104.00

SHEET 06 of 35



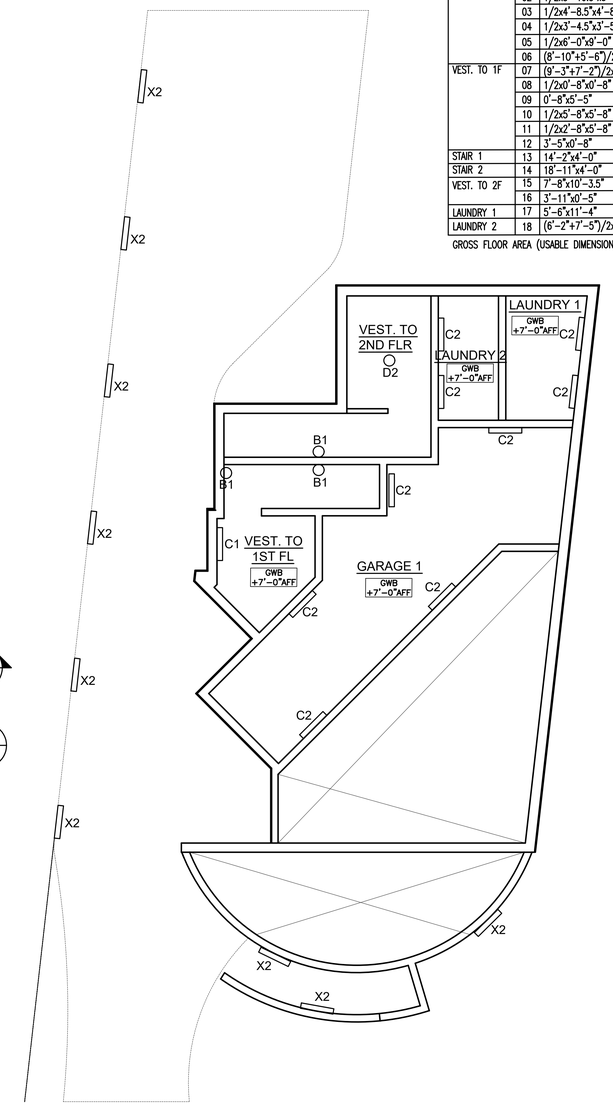
1 / A-201 CELLAR FLOOR PLAN

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

AREA CALCULATION DIAGRAM

ROOM NAME	AREA TAG	CALCULATION	AREA (FT2)	ROOM AREA (FT2)
GARAGE	01	28'-4"x9'-0"	337.4	437.0
	02	1/2x5'-10.5"x5'-10.5"	4.3	
	03	1/2x4'-8.5"x4'-8.5"	4.0	
	04	1/2x3'-4.5"x3'-5"	5.0	
	05	1/2x6'-0"x9'-0"	10.3	
	06	(8'-10"+5'-6")/2x10'-7.5"	76.1	
VEST. TO 1F	07	(9'-3"+7'-2")/2x5'-10"	47.9	77.5
	08	1/2x0'-8"x0'-8"	0.2	
	09	0'-8"x5'-5"	3.6	
	10	1/2x5'-8"x5'-8"	16.0	
	11	1/2x2'-8"x5'-8"	7.5	
	12	3'-5"x0'-8"	2.3	
STAIR 1	13	14'-2"x4'-0"	56.7	56.7
STAIR 2	14	18'-11"x4'-0"	75.7	75.7
VEST. TO 2F	15	7'-8"x10'-3.5"	79.9	81.5
	16	3'-11"x0'-5"	1.6	
LAUNDRY 1	17	5'-6"x11'-4"	62.3	62.3
LAUNDRY 2	18	(6'-2"+7'-5")/2x11'-4"	77.0	77.0

GROSS FLOOR AREA (USABLE DIMENSION) = 867.7 FT2



2 / A-201 CELLAR FLOOR REFLECTED CEILING AND LIGHTING PLAN

SCALE: 3/16"=1'-0"

LEGEND:

FD	FLOOR DRAIN
SST	STRUCTURAL STEEL TUBE
HW	HOT WATER TANK
	10" OR 8" CMU
	CONCRETE WALL
	COMPOSITE WALL
CO	CARBON MONOXIDE SENSOR
WS	WOOD SADDLE
AS	ALUM SADDLE
MS	MARBLE SADDLE
DX	DRYER EXHAUST
FX	EHAUST FAN
MUA	MAKE-UP AIR
	VENT (NATURAL)
H	ELECTRIC WALL MOUNTED HEATER

INTERIOR LIGHT SCHEDULE

A1	CEILING SURFACE MOUNTED DECORATIVE LED (24"X24" BR)
A2	CEILING SURFACE MOUNTED DECORATIVE LED (18"X18"LIV.RM)
B1	CEILING SURFACE MOUNTED DOWNLIGHTS
C1	LINEAL WALL MOUNTED -DECORATIVE
C2	LINEAL WALL MOUNTED -UTILITY
C3	LINEAL WALL MOUNTED -CLOSETS
D1	PENDANT - SMALL (LIVING ROOM)
D2	PENDANT - LARGE (UPPER LOBBY)
E1	UNDERCOUNTER LIGHTING - LED (KITCHEN)
F1	CONTINUOUS LED (COVE)
G1	MIRROR LIGHT - LED (BATHROOM)

EXTERIOR LIGHT SCHEDULE

X1	SURFACE/WALL MOUNTED ON BUILDING
X2	STEPS LIGHT

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cel. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

243 MADISON ST.
MAMARONECK, NY 10543

DRAWING TITLE
CELLAR / SITE PLAN AND REFLECTED CEILING PLAN

B-SCAN JOB STICKER

NYC DOB IDENTIFICATION NUMBER

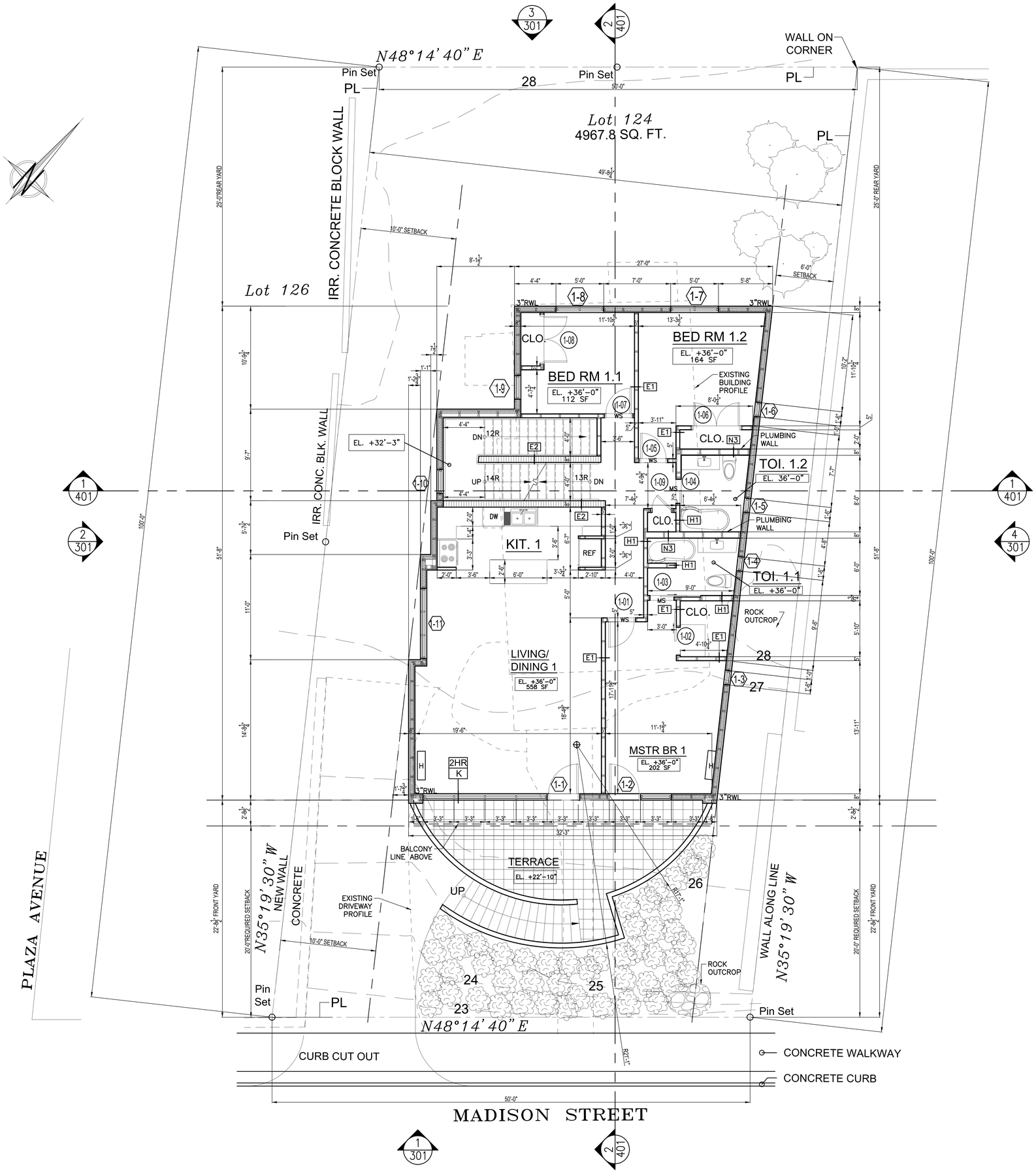
SEAL & SIGNATURE

REGISTERED ARCHITECT ALVER YU OF NEW YORK STATE

DATE: 9/26/19
PROJECT #: 09-2019
DRAWN BY: RU
CHECK BY: AY

DWG No. A-201.00

SHEET 05 of 36

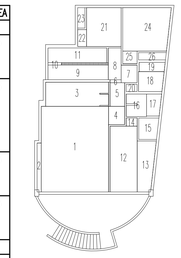


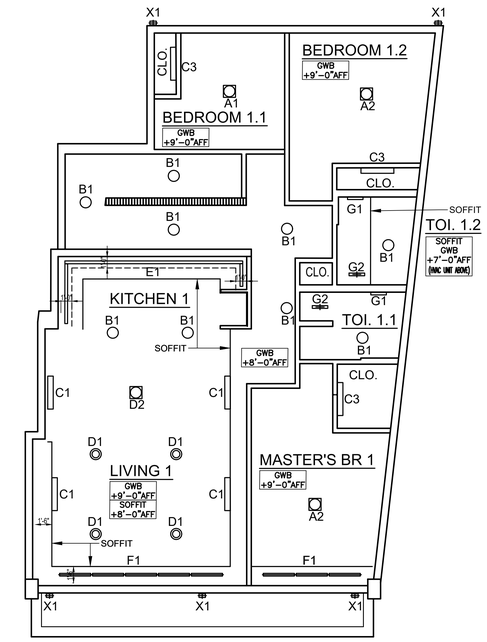
1 / A-202 FIRST FLOOR PLAN
SCALE: 1/4"=1'-0"

AREA CALCULATION DIAGRAM

ROOM NAME	AREA TAG	CALCULATION	AREA (FT2)	ROOM AREA (FT2)
LIVING/ DINING/ KITCHEN 1	01	23'-5"x18'-4.5"	430.2	558.6
	02	13'-5"x1'-1.5"	15.1	
	03	6'-7"x17'-2.5"	113.3	
HALLWAY	04	5'-0"x4'-5"	22.1	101.6
	05	6'-5.5"X4'-0"	25.8	
	06	0'-10"x3'-0.5"	2.5	
	07	4'-10"x4'-4"	20.9	
	08	8'-8"x3'-6"	30.3	
STAIR	09	16'-6"x4'-0"	66.0	160.3
	10	8'-0"x3'-9"	30.0	
	11	16'-1"x4'-0"	64.3	
MASTER BR	12	18'-0"x7'-5"	133.5	202.3
	13	(3'-8"+5'-3")/2x13'-11"	62.0	
	14	2'-3"x3'-0"	6.8	
MASTER BR CLO.	15	5'-10"x5'-6.5"	32.2	32.2
TOILET 1.1	16	6'-2"x5'-7"	34.4	77.2
	17	(3'-5.5"+4'-1.5")/2x6'-0"	42.8	
TOILET 1.2	18	(6'-4.5"+7'-0")/2x5'-6"	36.8	54.6
	19	(6'-10.5"+7'-1.5")/2x2'-6.5"	17.8	
CLOSET	20	2'-0.5"x2'-11.5"	6.0	6.0
BED RM 1.1	21	10'-7.5"x9'-5.5"	100.5	111.7
	22	4'-7.5"x2'-5"	11.2	
BR 1.1 CLOSET	23	2'-0"x5'-7"	11.2	11.2
BED RM 1.2	24	(11'-11.5"+13'-3.5")/2x11'-10.5"	150.0	163.7
	25	3'-5.5"x3'-11.5"	13.7	
BR 1.2 CLOSET	26	(7'-7"+7'-4.5")/2x2'-0"	15.0	15.0

GROSS FLOOR AREA (USABLE DIMENSION) = 1494 FT2





2 / A-202 1ST FL. REFLECTED CEILING AND LIGHTING PLAN
SCALE: 3/16"=1'-0"

LEGEND:

FD	FLOOR DRAIN
SST	STRUCTURAL STEEL TUBE
HW	HOT WATER TANK
	10" OR 8" CMU
	CONCRETE WALL
	COMPOSITE WALL
CO	CARBON MONOXIDE SENSOR
WS	WOOD SADDLE
AS	ALUM SADDLE
MS	MARBLE SADDLE
DX	DRYER EXHAUST
FX	EHAUST FAN
MUA	MAKE-UP AIR
	VENT (NATURAL)
H	ELECTRIC WALL MOUNTED HEATER

INTERIOR LIGHT SCHEDULE

A1	CEILING SURFACE MOUNTED DECORATIVE LED (24"X24" BR)
A2	CEILING SURFACE MOUNTED DECORATIVE LED (18"X18"LIV.RM)
B1	CEILING SURFACE MOUNTED DOWNLIGHTS
C1	LINEAL WALL MOUNTED -DECORATIVE
C2	LINEAL WALL MOUNTED -UTILITY
C3	LINEAL WALL MOUNTED -CLOSETS
D1	PENDANT - SMALL (LIVING ROOM)
D2	PENDANT - LARGE (UPPER LOBBY)
E1	UNDERCOUNTER LIGHTING - LED (KITCHEN)
F1	CONTINUOUS LED (COVE)
G1	MIRROR LIGHT - LED (BATHROOM)

EXTERIOR LIGHT SCHEDULE

X1	SURFACE/WALL MOUNTED ON BUILDING
X2	STEPS LIGHT

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cel. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

243 MADISON ST.
MAMARONECK, NY 10543

DRAWING TITLE
FIRST FLOOR PLAN AND REFLECTED CEILING PLAN

B-SCAN JOB STICKER

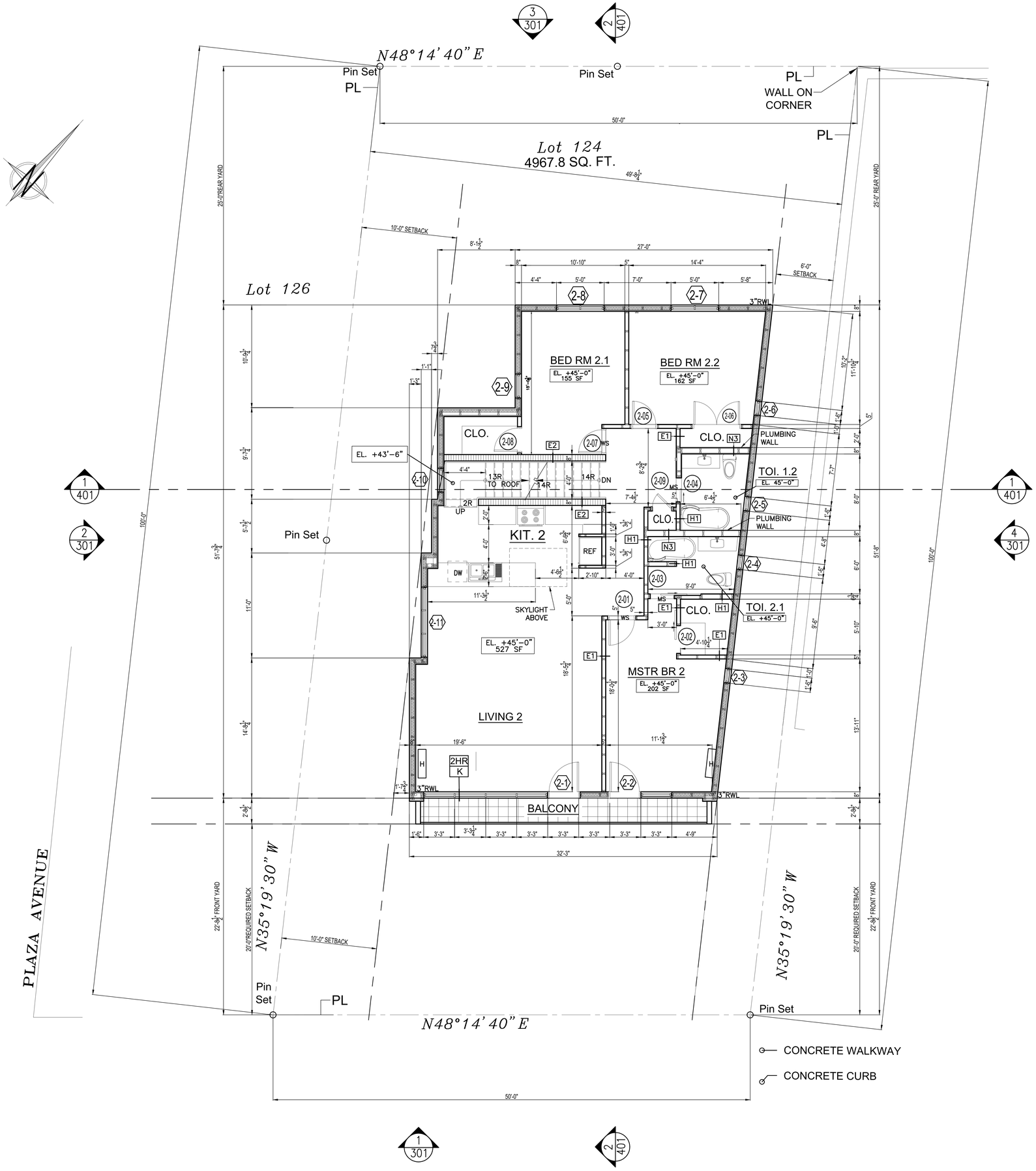
NYC DOB IDENTIFICATION NUMBER

SEAL & SIGNATURE

DATE: 9/26/19
PROJECT #:09-2019
DRAWN BY: RU
CHECK BY: AY

DWG No. A- 202 .00

SHEET 06 of 36

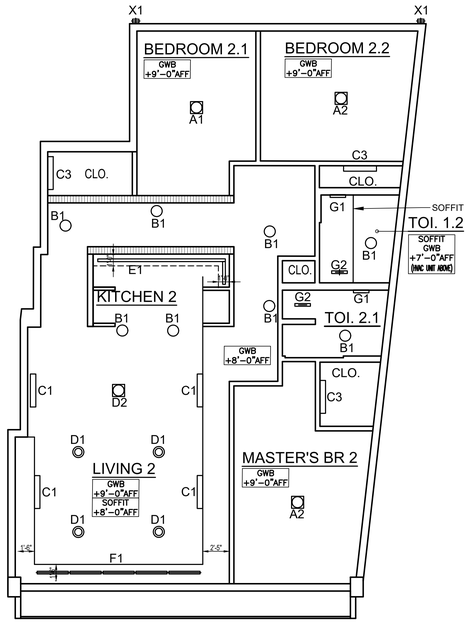


1 A-203 SECOND FLOOR PLAN
SCALE: 1/4"=1'-0"

AREA CALCULATION DIAGRAM

ROOM NAME	AREA TAG	CALCULATION	AREA (FT2)	ROOM AREA (FT2)
LIVING/ DINING/ KITCHEN 2	01	23'-5"x18'-4.5"	430.2	527
	02	13'-5"x1'-1.5"	15.1	
	03	6'-7"x12'-5"	81.7	
HALLWAY	04	5'-0"x4'-5"	22.1	108.7
	05	6'-5.5"x4'-0"	25.8	
	06	8'-3"x7'-4.5"	60.8	
STAIR	07	6'-7"x4'-3.5"	28.3	98.7
	08	4'-8.5"x3'-7.5"	17.1	
	09	13'-4"x4'-0"	53.3	
MASTER BR	10	18'-0"x7'-5"	133.5	202.3
	11	(3'-8"+5'-3")/2x13'-11"	62.0	
	12	2'-3"x3'-0"	6.8	
MASTER BR CLO.	13	5'-10"x5'-6.5"	32.2	32.2
TOILET 2.1	14	6'-2"x5'-7"	34.4	77.2
	15	(3'-5.5"+4'-1.5")/2x6'-0"	42.8	
TOILET 2.2	16	(6'-4.5"+7'-0")/2x5'-6"	36.8	54.6
	17	(6'-10.5"+7'-1.5")/2x2'-6.5"	17.8	
CLOSET	18	2'-0.5"x2'-11.5"	6.0	6.0
BED RM 2.1	19	11'-10.5"x10'-10"	128.6	155.3
	20	3'-2"x8'-5"	26.7	
BR 2.1 CLOSET	21	4'-0"x7'-8.5"	30.8	30.8
BED RM 2.2	22	(14'-4"+13'-0")/2x11'-10"	161.7	161.7
BR 2.2 CLOSET	23	(7'-7"+7'-4.5")/2x2'-0"	15.0	15.0

GROSS FLOOR AREA (USABLE DIMENSION) = 1470 FT2



2 A-203 2ND FL. REFLECTED CEILING AND LIGHTING PLAN
SCALE: 3/16"=1'-0"

LEGEND:

FD	FLOOR DRAIN
SST	STRUCTURAL STEEL TUBE
HW	HOT WATER TANK
	10" OR 8" CMU
	CONCRETE WALL
	COMPOSITE WALL
CO	CARBON MONOXIDE SENSOR
WS	WOOD SADDLE
AS	ALUM SADDLE
MS	MARBLE SADDLE
DX	DRYER EXHAUST
FX	EHAUST FAN
MUA	MAKE-UP AIR
	VENT (NATURAL)
H	ELECTRIC WALL MOUNTED HEATER

INTERIOR LIGHT SCHEDULE

A1	CEILING SURFACE MOUNTED DECORATIVE LED (24"X24" BR)
A2	CEILING SURFACE MOUNTED DECORATIVE LED (18"X18"LIV.RM)
B1	CEILING SURFACE MOUNTED DOWNLIGHTS
C1	LINEAL WALL MOUNTED -DECORATIVE
C2	LINEAL WALL MOUNTED -UTILITY
C3	LINEAL WALL MOUNTED -CLOSETS
D1	PENDANT - SMALL (LIVING ROOM)
D2	PENDANT - LARGE (UPPER LOBBY)
E1	UNDERCOUNTER LIGHTING - LED (KITCHEN)
F1	CONTINUOUS LED (COVE)
G1	MIRROR LIGHT - LED (BATHROOM)

EXTERIOR LIGHT SCHEDULE

X1	SURFACE/WALL MOUNTED ON BUILDING
X2	STEPS LIGHT

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cel. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

243 MADISON ST.
MAMARONECK, NY 10543

DRAWING TITLE
SECOND FLOOR PLAN AND REFLECTED CEILING PLAN

B-SCAN JOB STICKER

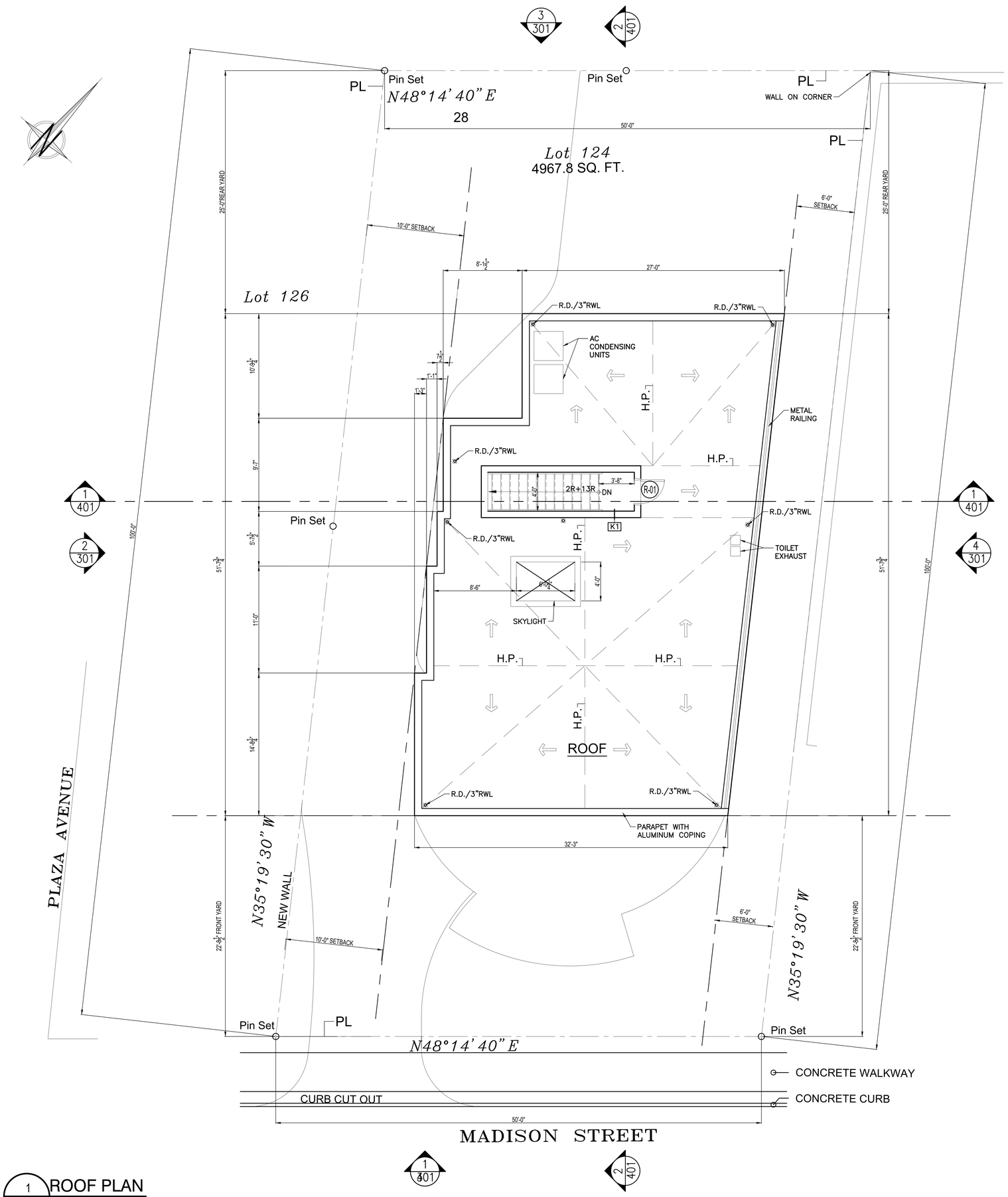
NYC DOB IDENTIFICATION NUMBER

SEAL & SIGNATURE

DATE: 9/26/19
PROJECT #:09-2019
DRAWN BY: RU
CHECK BY: AY

DWG No. A-203.00

SHEET 07 of 36

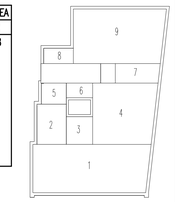


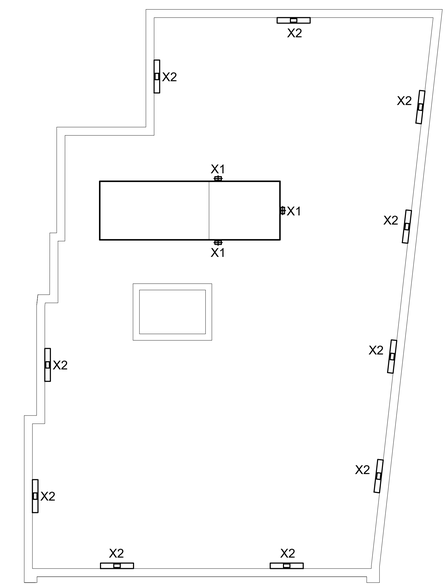
1 A-204 ROOF PLAN
SCALE: 1/4"=1'-0"

AREA CALCULATION DIAGRAM

ROOM NAME	AREA TAG	CALCULATION	AREA (FT2)	ROOM AREA (FT2)
ROOFDECK	01	(13'-10.5"+32'-4")/2x13'-2.5"	305.2	984.8
	02	11'-0"x8'-0.5"	88.5	
	03	7'-7.5"x7'-2.5"	55.0	
	04	(16'-0"+17'-10.5")/2x16'-9"	283.7	
	05	5'-9"x6'-10"	32.3	
	06	4'-0"x7'-2.5"	28.8	
	07	(11'-8"+12'-3.5")/2x5'-4"	63.9	
	08	4'-2.5x8'-1.5"	34.2	
	09	(23'-3.5"+11'-8")/2x5'-4"	93.2	

GROSS USABLE FLOOR AREA = 985 FT2





2 A-203 ROOFDECK LIGHTING PLAN
SCALE: 3/16"=1'-0"

LEGEND:

FD	FLOOR DRAIN
SST	STRUCTURAL STEEL TUBE
HW	HOT WATER TANK
	10" OR 8" CMU
	CONCRETE WALL
	COMPOSITE WALL
CO	CARBON MONOXIDE SENSOR
WS	WOOD SADDLE
AS	ALUM SADDLE
MS	MARBLE SADDLE
DX	DRYER EXHAUST
FX	EHAUST FAN
MUA	MAKE-UP AIR
	VENT (NATURAL)
H	ELECTRIC WALL MOUNTED HEATER

INTERIOR LIGHT SCHEDULE

A1	CEILING SURFACE MOUNTED DECORATIVE LED (24"X24" BR)
A2	CEILING SURFACE MOUNTED DECORATIVE LED (18"X18"LIV.RM)
B1	CEILING SURFACE MOUNTED DOWNLIGHTS
C1	LINEAL WALL MOUNTED -DECORATIVE
C2	LINEAL WALL MOUNTED -UTILITY
C3	LINEAL WALL MOUNTED -CLOSETS
D1	PENDANT - SMALL (LIVING ROOM)
D2	PENDANT - LARGE (UPPER LOBBY)
E1	UNDERCOUNTER LIGHTING - LED (KITCHEN)
F1	CONTINUOUS LED (COVE)
G1	MIRROR LIGHT - LED (BATHROOM)

EXTERIOR LIGHT SCHEDULE

X1	SURFACE/WALL MOUNTED ON BUILDING
X2	STEPS LIGHT

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cel. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

243 MADISON ST.
MAMARONECK, NY 10543

DRAWING TITLE
ROOF PLAN AND ROOFDECK REFLECTED CEILING PLAN

B-SCAN JOB STICKER

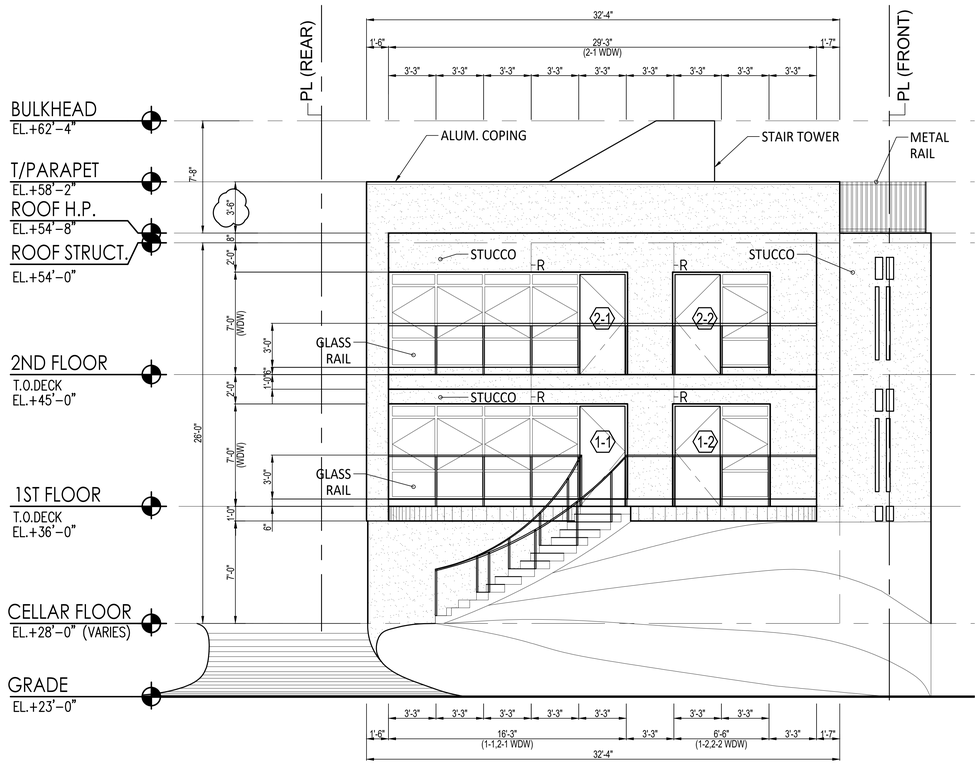
NYC DOB IDENTIFICATION NUMBER

SEAL & SIGNATURE

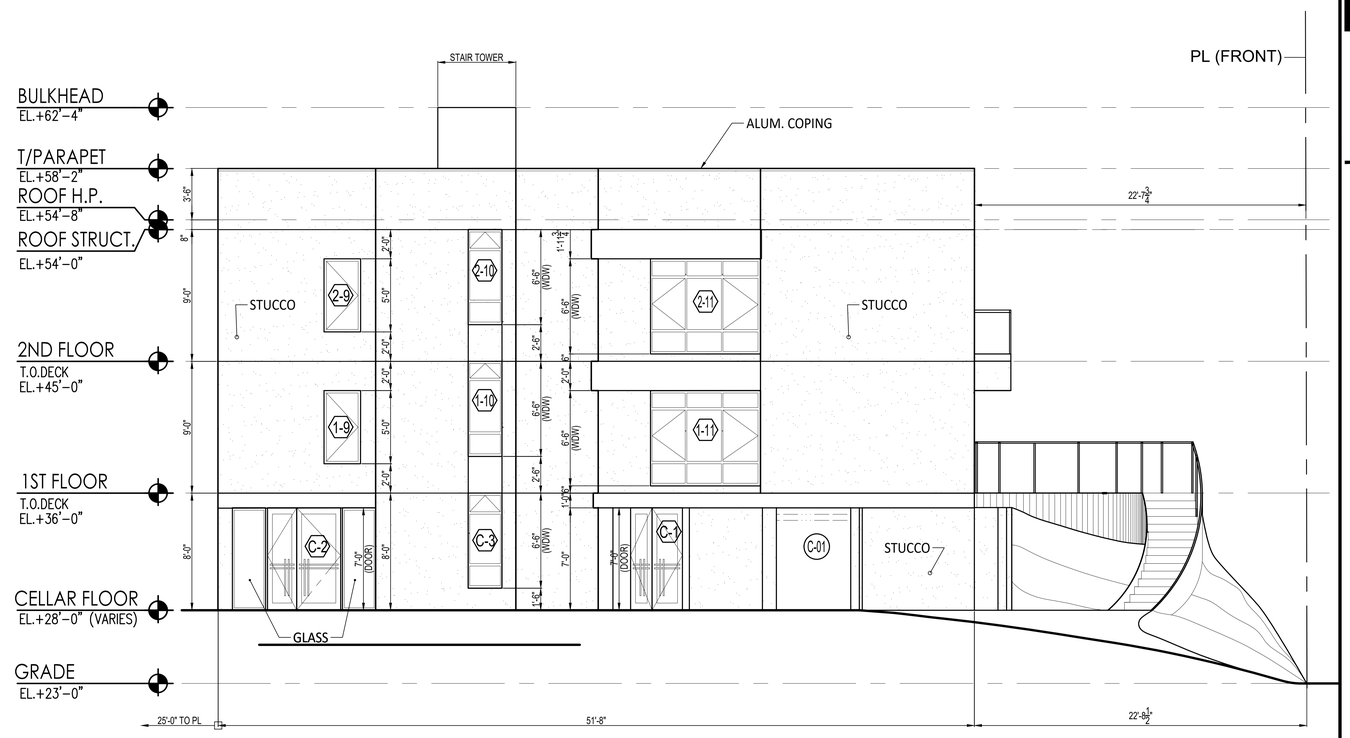
DATE: 9/26/19
PROJECT #09-2019
DRAWN BY: RU
CHECK BY: AY

DWG No.
A-204.00

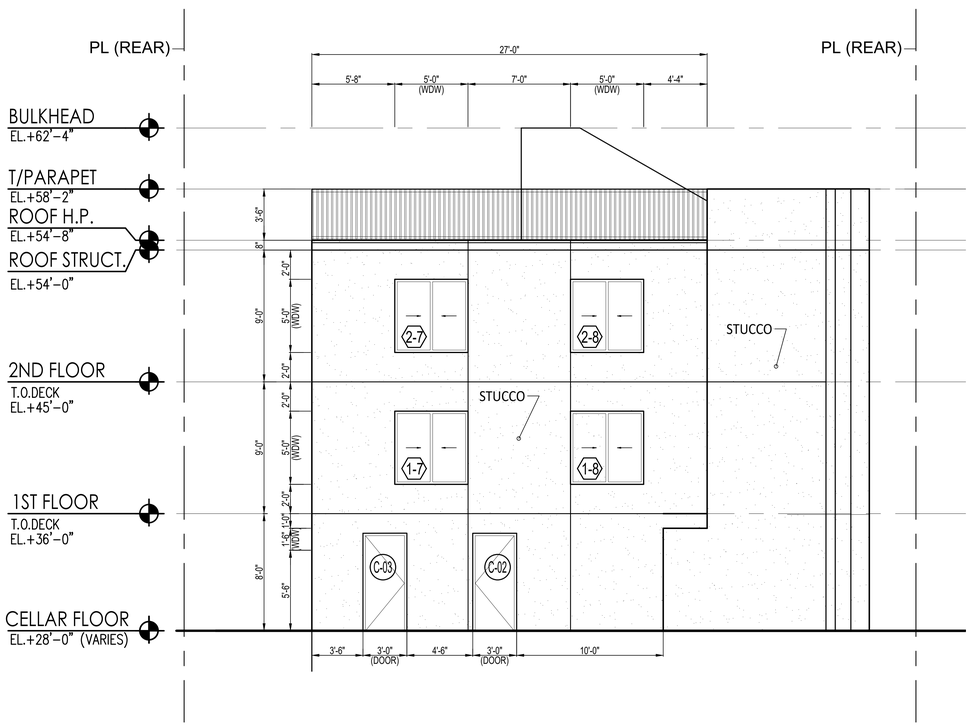
SHEET 08 of 36



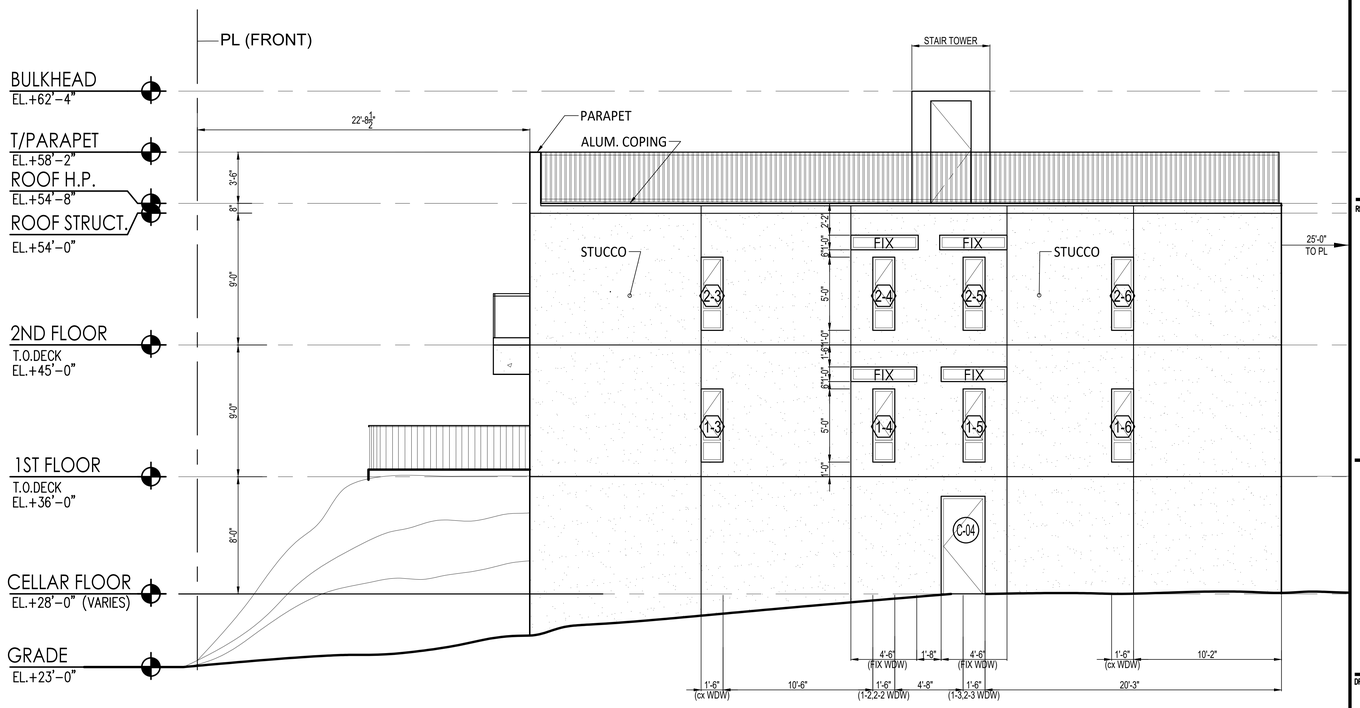
1 A-301 FRONT ELEVATION
SCALE: 1/4"=1'-0"



2 A-301 WEST SIDE ELEVATION
SCALE: 1/4"=1'-0"



3 A-301 REAR ELEVATION
SCALE: 1/4"=1'-0"



4 A-301 EAST SIDE ELEVATION
SCALE: 1/4"=1'-0"

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cell. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

243 MADISON ST.
MAMARONECK, NY 10543

DRAWING TITLE
BUILDING ELEVATIONS

B-SCAN JOB STICKER

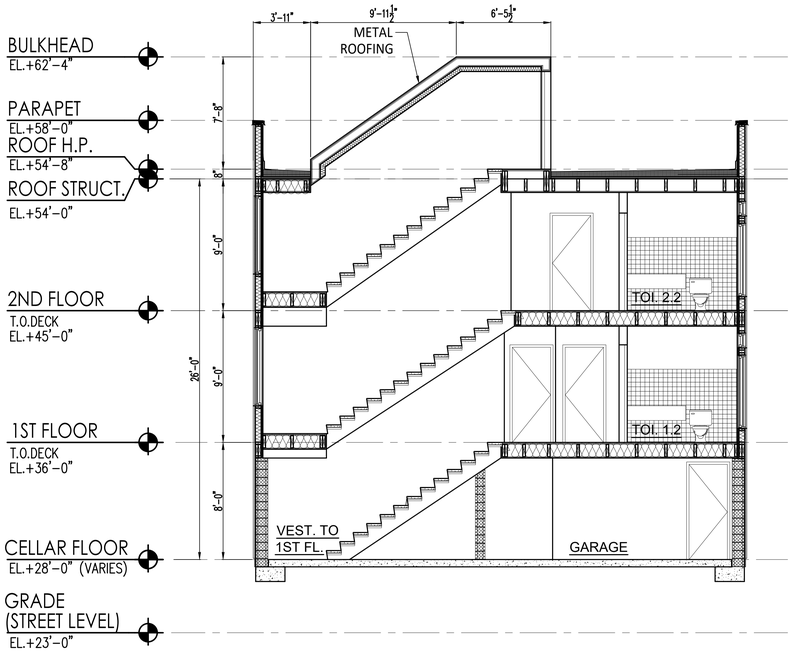
NYC DOB IDENTIFICATION NUMBER

SEAL & SIGNATURE

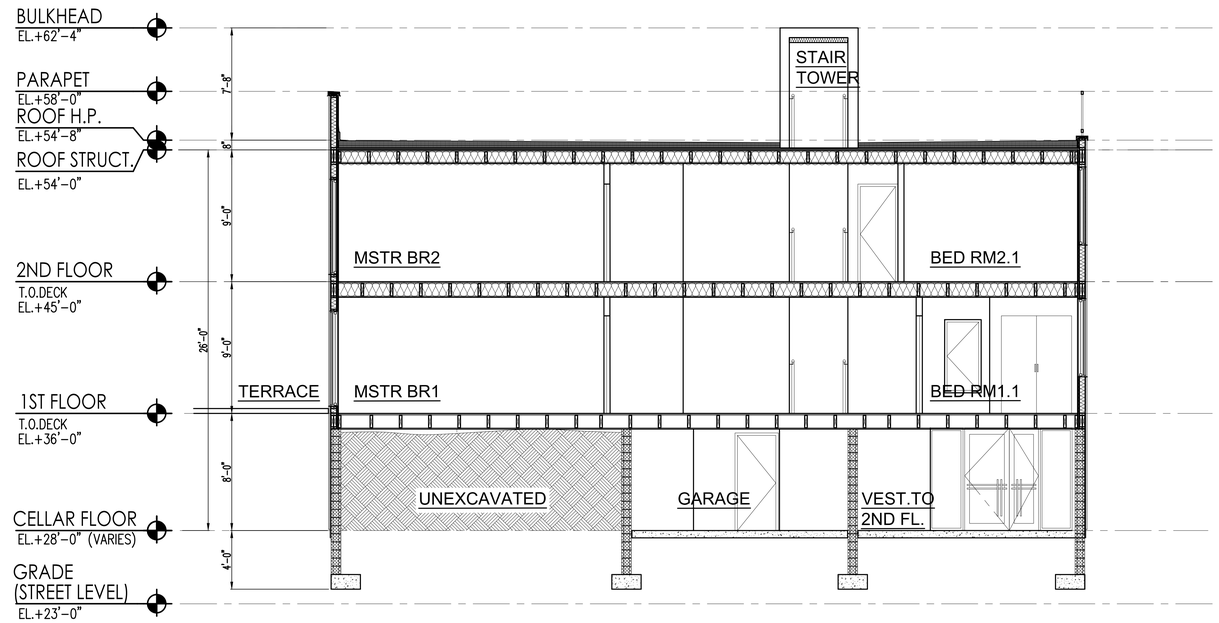
DATE: 9/26/19
PROJECT #:09-2019
DRAWN BY: RIJ
CHECK BY: AY

DWG No. A- 301 .00

SHEET 10 of 36



1 A-301 SECTION 1-1
SCALE: 1/4"=1'-0"



2 A-301 SECTION 2-2
SCALE: 1/4"=1'-0"

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cel. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

243 MADISON ST.
MAMARONECK, NY 10543

DRAWING TITLE

BUILDING SECTIONS

B-SCAN JOB STICKER

NYC DOB IDENTIFICATION NUMBER

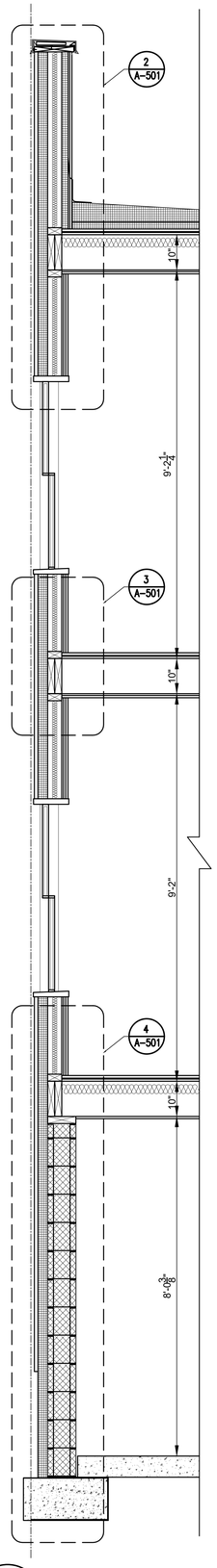
SEAL & SIGNATURE

REGISTERED ARCHITECT ANTHONY YEUNG STATE OF NEW YORK

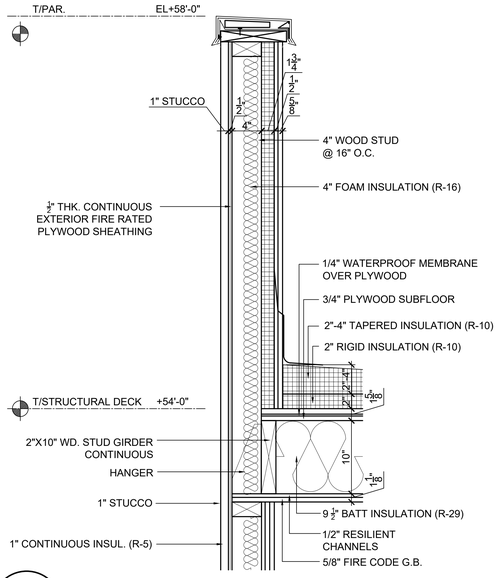
DATE: 9/26/19
PROJECT #:09-2019
DRAWN BY: RIJ
CHECK BY: AY

DWG NO.
A- 401 .00

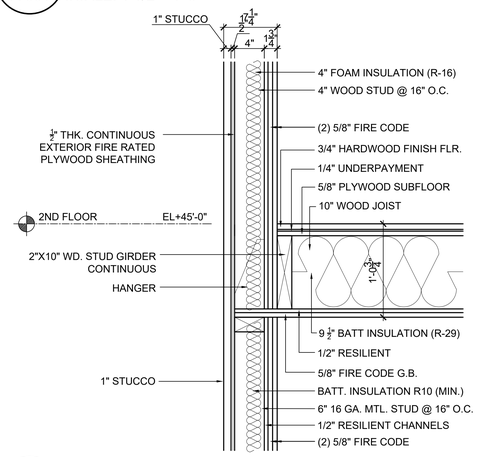
SHEET 11 of 36



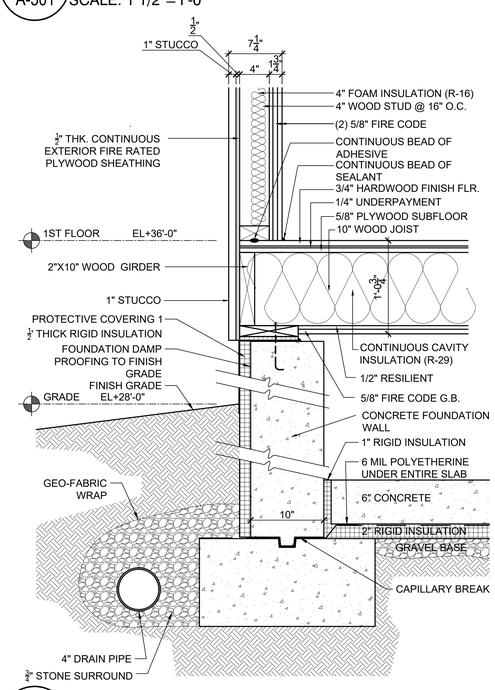
1 WALL SECTION
501 SCALE: 3/4"=1'-0"



2 PARAPET SECTION
A-501 SCALE: 1 1/2"=1'-0"

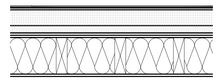


3 2-HR RATED EXTERIOR WALL SECTION
A-501 SCALE: 1 1/2"=1'-0"



4 TYPICAL FOUNDATION WALL DETAIL
A-501 SCALE: 1 1/2"=1'-0"

ROOF ASSEMBLY
- 2 PLY SIBS MEMBRANE
- RECOVERY BOARD
- TAPERED INSULATION (2"-4")
- 2" RIGID INSULATION
- 3/4" PLYWOOD
- 9½" BATT INSULATION



R VALUE CALCULATION
NEW 2" RIGID INSULATION: R-10
TAPERED INSULATION 2" TO 4" : R-10
NEW 9½" BATT INSULATION: R-29
TOTAL R VALUE: R-49
CODE PRESCRIPTIVE VALUE: CLIMATE ZONE 4,
MIN. R-30 (TABLE 402.1.3)

R-49 > R-30, THEREFORE ROOF IS IN COMPLIANCE.

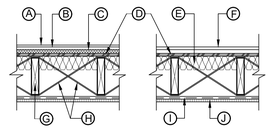
NEW WALL ASSEMBLY (ABOVE GRADE)

- STUCCO
- 1" RIGID INSULATION (CONTINUOUS) OVER 4" WOOD STUD
- 4" FOAM (CAVITY)

R VALUE CALCULATION
NEW 1" RIGID INSULATION: R-5
NEW 4" FOAM INSULATION: R-16
CODE PRESCRIPTIVE VALUE: CLIMATE ZONE 4
R-16 CAVITY + R-5 CONTINUOUS

R-16 (CAVITY) + R-5 (CONTINUOUS) > R-13 (CAVITY) + R-3.8 (CONTINUOUS)

THEREFORE NEW WALL TYPE 1 IS IN COMPLIANCE.

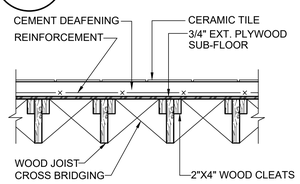


S.T.C. 58 INR+4 1-HR. RATING MEA #64-72 M-ASSEMBLY-1

A. 3/32" VINYL TILE OR APP'D EQUAL.
B. 1/2" HARDWOOD FLOOR.
C. 1/4" MONSANTO SILENT CORPOLYSTYRENE UNDERLAYMENT.
D. 5/8" PLYWOOD SUBFLOOR.
E. 3 5/8" FIBERGLASS INSULATION.
F. HARDWOOD FINISH FLOOR.
G. WOOD JOISTS.
H. BRIDGING REFER TO GENERAL NOTES.
I. 1/2" RESILENT CHANNEL CLIPS-24" O.C.
J. 5/8" FLAMEBOARD PLASTERBOARD TYPE "X".

NOTE:
ENT. FL. & CLG. PERIMETER OPNG'S TO BE CAULKED DURING CONSTRUCTION.

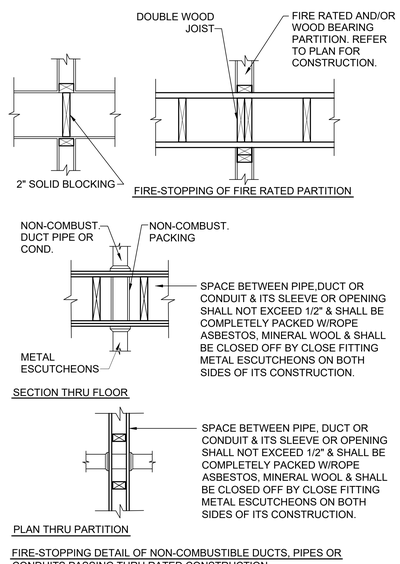
5 TYPICAL FLOOR CONSTRUCTION
A-501 SCALE: 3/4"=1'-0"



NEW CERAMIC TILE FLOOR NOTES:

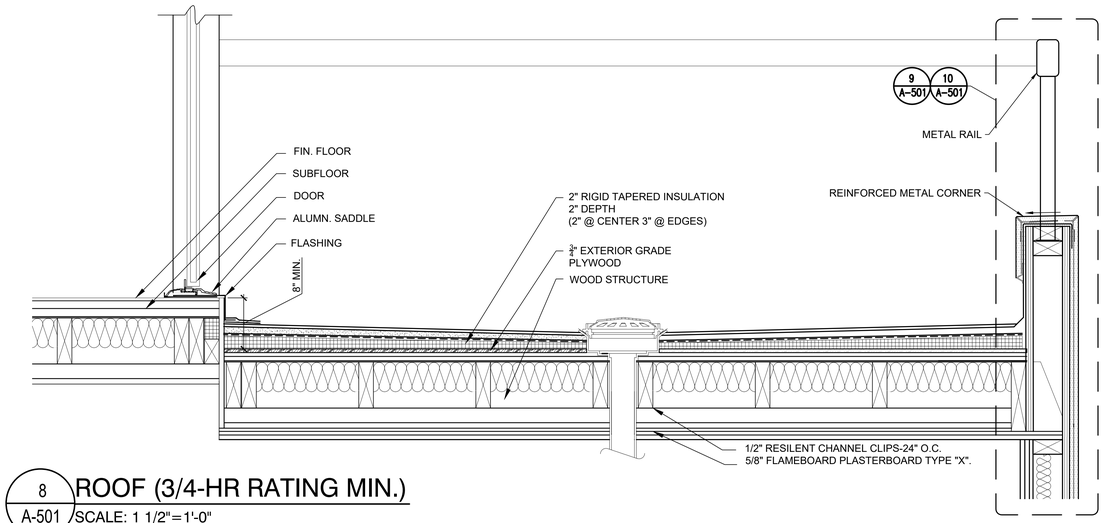
1. MORTAR: ONE PART PORTLAND CEMENT, 6 PARTS DAMP SAND BY VOLUME.
2. BOND COAT DRY SET MORTAR.
3. REINFORCING GAUGE WELDED WIRE MESH OR EQUIVALENT.
4. CLEAVAGE MEMBRANE: 15 LB. ROOF FELT.
5. INSTALLATION TO COMPLY W/MFG'S SPECS. & LATEST A.N.S.I. SPECS.
6. REFER TO DETAIL WHERE SOUNDPROOFING IS REQUIRED.

6 CERAMIC TILE FLOOR
A-501 SCALE: 3/4"=1'-0"

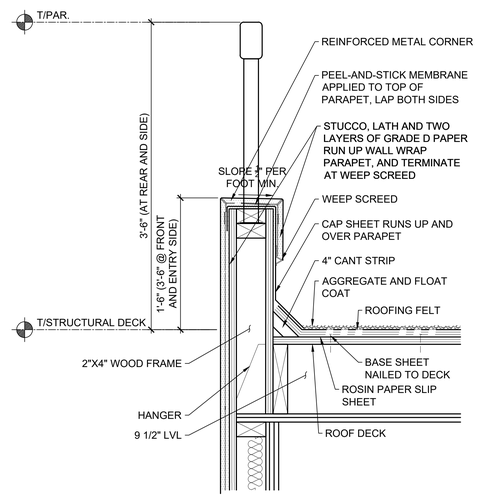


FIRE-STOPPING DETAIL OF NON-COMBUSTIBLE DUCTS, PIPES OR CONDUITS PASSING THRU RATED CONSTRUCTION

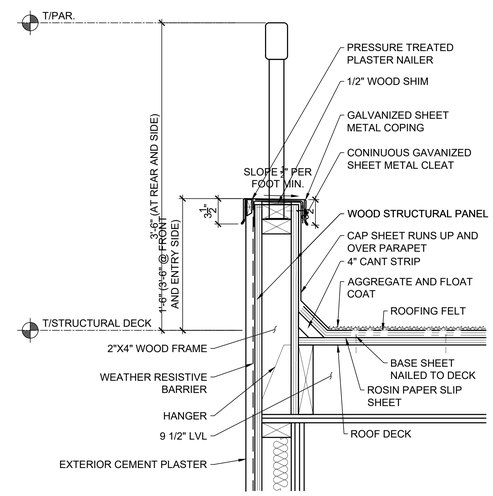
7 FIRE STOPPING DETAIL
A-501 SCALE: 3/4"=1'-0"



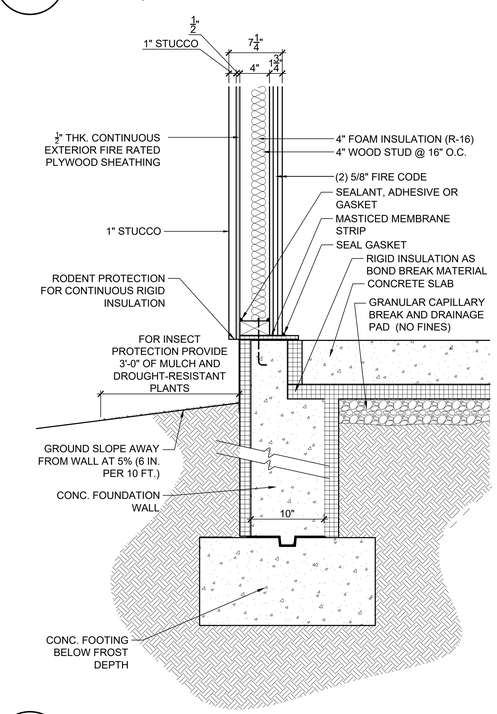
8 ROOF (3/4-HR RATING MIN.)
A-501 SCALE: 1 1/2"=1'-0"



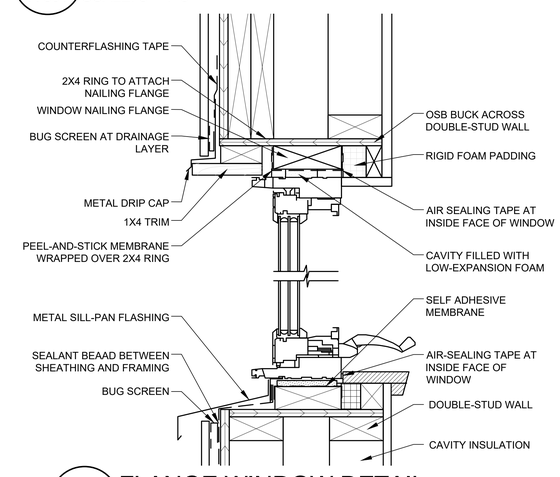
9 STUCCO PARAPET AND COPING
A-501 SCALE: 1 1/2"=1'-0"



10 ALUMINUM PARAPET COPING
A-501 SCALE: 3"=1'-0"



11 STUCCO PARAPET AND COPING
A-501 SCALE: 1 1/2"=1'-0"



12 FLANGE WINDOW DETAIL
A-501 SCALE: 3"=1'-0"

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cell. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

243 MADISON ST.
MAMARONECK, NY 10543

DRAWING TITLE
EXTERIOR WALL ROOF DETAILS

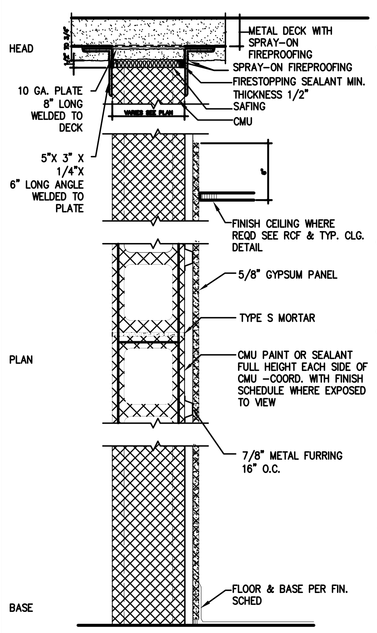
B-SCAN JOB STICKER

NYC DOB IDENTIFICATION NUMBER
SEAL & SIGNATURE

DATE: 9/26/19
PROJECT #:09-2019
DRAWN BY: RU
CHECK BY: AY

DWG No.
A- 501 .00

SHEET 12 of 36



D1 FINISHED MASONRY PARTITION
8" X 8" X 16" NOM. 75% SOLID C.M.U. COMPLYING WITH ASTM C 140 LAID RUNNING BOND PATTERN IN TYPE S MORTAR WITH GALV. WIRE HORIZONTAL TRUSS REINFORCEMENT, TRUSSWALL OR APPROVED EQUAL AT ALTERNATE COURSES (LAP ALL CORNERS) AND VERTICAL REBARS AT 4'-0" O.C. ANCHORED TO STRUCTURE ABOVE AND BELOW -2 HOUR RATING, U.L. DESIGN U905 WITH 7/8" 20 GA FURRING CHANNEL FULL HEIGHT, 16" O.C. SHEATHED AS INDICATED WITH 1-LAYER 5/8" GYPSUM WALL BD. TO FULL EXPOSED HEIGHT, (4" ABOVE FINISHED CEILING, OR TO DECK AS INDICATED IN FINISH SCHEDULE).

D2 FINISHED MASONRY PARTITION
SIMILAR TO D1 EXCEPT
6" X 8" X 16" NOM. C.M.U.'S

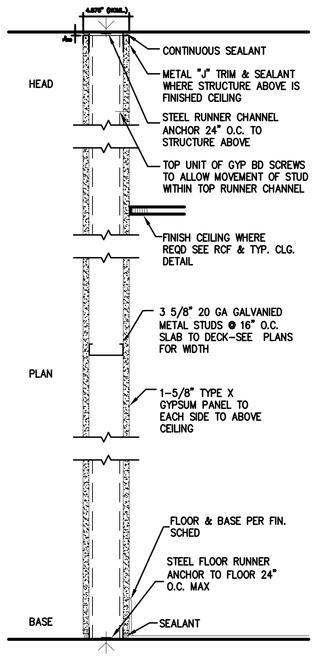
D3 FINISHED MASONRY PARTITION
SIMILAR TO D2 EXCEPT
4" X 8" X 16" NOM. C.M.U.'S

L1 INTERIOR FURRING
7/8" 20 GA GALVANIZED METAL FURRING CHANNELS 16" O.C. FASTENED WITH MASONRY CUT NAILS TO EXIST. CONC. BLOCK WALL 1-LAYER 5/8" GWB SHEATHING.

L2 INTERIOR FURRING
SIMILAR TO L1 EXCEPT
1 5/8" 20 GA GALVANIZED METAL FURRING CHANNELS 16" O.C.

L3 INTERIOR FURRING
SIMILAR TO L1 EXCEPT
2 1/2" 20 GA GALVANIZED METAL FURRING CHANNELS 16" O.C.

1 PARTITION TYPE



E1 1-HR. RATING (4.875")
3 5/8" 20 GA GALVANIZED METAL STUDS 16" O.C. SLAB TO DECK
1-LAYER 5/8" TYPE X GYPSUM WALL BD. EACH SIDE SLAB TO DECK
HEAD AND SILL TRACK FASTENED IN SEALANT (SCRIBE-FIT PENETRATIONS); 3 COATS VINYL SPACKLING COMPOUND AT TAPE JOINTS, SANDED SMOOTH TO 4" ABOVE FINISHED CEILING. (NO HORIZONTAL JOINTS PERMITTED BELOW CEILING LINE). DESIGN WP 1200 (GYPSUM ASSOCIATION).

E2 2-HR. RATING (4.875")
SIMILAR TO E1 EXCEPT
3 5/8" 20 GA GALVANIZED METAL STUDS 16" O.C.
2-LAYER 5/8" TYPE X GYPSUM WALL BD. EACH SIDE SLAB TO DECK. TAPE JOINTS STAGGERED. DESIGN WP 1711 (GYPSUM ASSOCIATION).

E3 NO RATING (4.875")
3 5/8" 20 GA GALVANIZED METAL STUDS 16" O.C. SLAB TO FINISHED CEILING
1-LAYER 5/8" GYPSUM WALL BD. SLAB TO FINISHED CEILING; (PROVIDE TAPING-J BEAD AT HEAD BOTHSIDES); 3 COATS VINYL SPACKLING COMPOUND AT TAPE JOINTS SANDED SMOOTH FULL HEIGHT. (NO HORIZONTAL JOINTS PERMITTED).

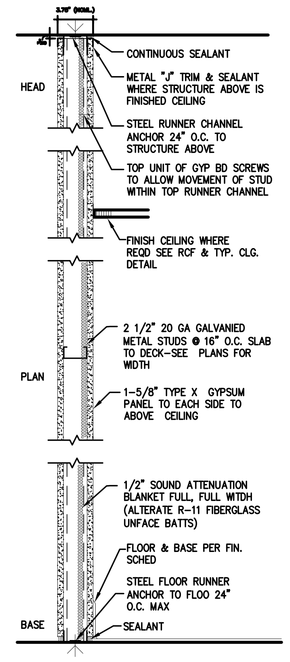
E4 1-HR. RATING (4.875")
SIMILAR TO E1 EXCEPT
2-LAYER 5/8" TYPE X GYPSUM WALL BD. ON CORRIDOR SIDE SLAB TO DECK

F NO RATING (4.875")
SIMILAR TO E3 EXCEPT
2 1/2" 20 GA GALVANIZED METAL STUDS 16" O.C. SLAB TO DECK

H 1-HR. RATING (4.875")
SIMILAR TO E1 EXCEPT
1-LAYER 5/8" WATER RESISTANT GYPSUM WALL BD. SHEATHING ON ONE SIDE SLAB TO DECK

I 1-HR. RATING (4.875")
SIMILAR TO E1 EXCEPT
1-LAYER 5/8" POLYESTER FABRIC REINFORCED WATER RESISTANT CEMENT HARDBOARD WALL BD. ON ONE SIDE SLAB TO DECK

2 PARTITION TYPE

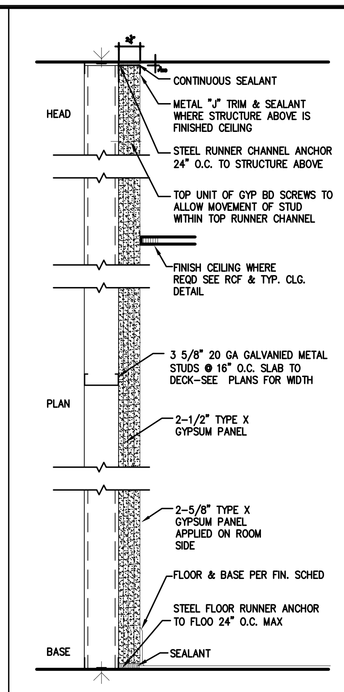


G NO RATING (4.875") ACOUSTIC INSULATED
SIMILAR TO E3 EXCEPT
1/2" SOUND ATTENUATION BLANKET FULL, FULL WITDH (ALTERATE R-11 FIBERGLASS UNFACE BATTS)

J 1-HR. RATING (4.875")
SOUND RATE DRT WALL ASSEMBLY
SIMILAR TO I EXCEPT
PREMOLDED RIBORM POLYURETHANE CLOSEURE AT ALL DECKING FULTES ABOVE HEAD TRACK.
(NOTE: APPLICATION LIMITED TO USE WITH DUCTED RETURN AIR SYSTEM OR ACOUSTICALLY LINE DOUBLE-ELBOW TRANSFER DUCT),SEE MECHANICAL DRAWINGS.
1/2" GLASS FIBER BATT SOUND ATTENUATION BLANKET SUSPENDED FROM ABOVE BETWEEN STUDS, FULL HEIGHT. TYPE-X DESIGNATION OF GWB IS OPTIONAL WHERE FIRE RATING IS NOT INDICATED.

K 1-HR. RATING (4.875")
PERIMETER FURRING/VAPOR BARRIER
3 5/8" 20 GA GALVANIZED METAL STUDS 16" O.C. ON SILL TRACK SECURED WITH POWDER ACTUATED FASTENERS; SHEATHING ONE SIDE FULL HEIGHT 1- LAYER 5/8" GWB; TAPE,THREE COAT VINYL SPACKLING COMPOUND AND PREP FOR PAINT TO 4" ABOVE FINISHED CLG.
NOTE: INSTALL FOIL-FACED R-11 GLASS FIBER BATTS FULL HEIGHT BETWEEN ALL STUDS WITH FACING TO INTERIOR; LAP AND TAPE ALL FOIL SEAMS WITH FOIL-BACKED REINFORCED DUCT TAPE FULL HEIGHT.

3 PARTITION TYPE



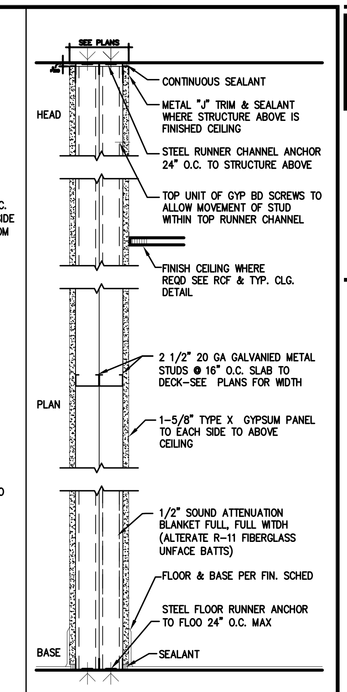
M1 2-HR. RATING (2.25") SHAFT WALL
3 5/8" 20 GA GALVANIZED METAL STUDS 16" O.C. 2-LAYER 1/2" TYPE X GYPSUM WALL BD. EACH SIDE 2-LAYER 5/8" TYPE X GYPSUM WALL BD. EACH SIDE SLAB TO DECK-SEE PLANS FOR WIDTH 2 1/4" THICK, WP7210 (GYPSUM ASSOCIATION).

M2 3-HR. RATING (4.125") SHAFT WALL
3 5/8" 20 GA GALVANIZED METAL STUDS 16" O.C. 3-LAYER 3/4" TYPE X GYPSUM WALL BD. EACH SIDE 3-LAYER 5/8" TYPE X GYPSUM WALL BD. ON ROOM SIDE SLAB TO DECK-SEE PLANS FOR WIDTH 4 1/8" THICK, WP7210 (GYPSUM ASSOCIATION).

N1 NO RATING CHASE WALL ASSEMBLY
2- 2 1/2" 20 GA GALVANIZED METAL STUDS 20" O.C.
1-LAYER 5/8" TYPE X GYPSUM WALL BD. SLAB TO FINISHED CEILING ON EXTERIOR SURFACES - THICKNESS AS NOTED ON PLAN.

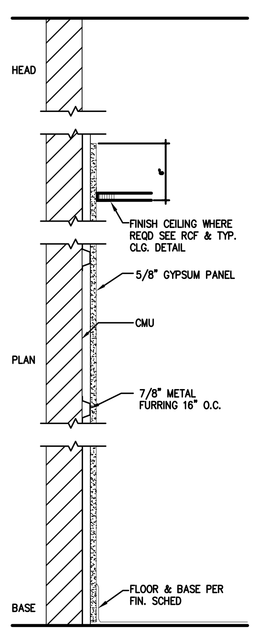
N2 2-HR. RATING CHASE WALL ASSEMBLY
2- 2 1/2" 20 GA GALVANIZED METAL STUDS 20" O.C.
2-LAYER 5/8" TYPE X GYPSUM WALL BD. SLAB TO EACH SIDE OF DECK; TAPE JOINTS STAGGERED -- THICKNESS AS NOTED ON PLAN.

4 PARTITION TYPE



5 PARTITION TYPE

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9347
Fax (516) 773-3879 Cell. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

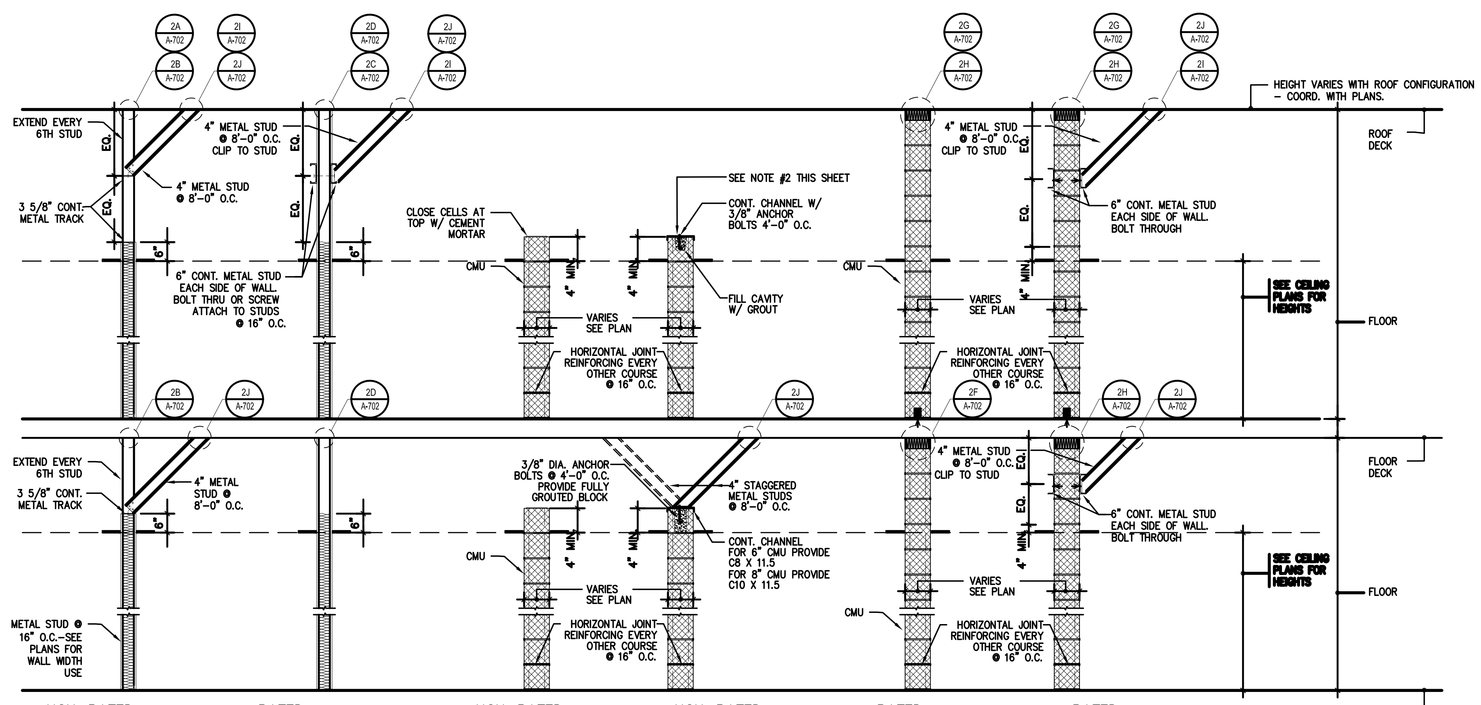


L1 INTERIOR FURRING
7/8" 20 GA GALVANIZED METAL FURRING CHANNELS 16" O.C. FASTENED WITH MASONRY CUT NAILS TO EXIST. CONC. BLOCK WALL 1-LAYER 5/8" GWB SHEATHING.

L2 INTERIOR FURRING
SIMILAR TO L1 EXCEPT
1 5/8" 20 GA GALVANIZED METAL FURRING CHANNELS 16" O.C.

L3 INTERIOR FURRING
SIMILAR TO L1 EXCEPT
2 1/2" 20 GA GALVANIZED METAL FURRING CHANNELS 16"

6 PARTITION TYPE



1A NON-RATED GYPSUM PARTITION SCALE: 1/2" = 1'-0"

1B RATED GYPSUM PARTITION SCALE: 1/2" = 1'-0"

1C NON-RATED CMU PARTITION SCALE: 1/2" = 1'-0"

1D NON-RATED CMU PARTITION SCALE: 1/2" = 1'-0"
WHERE DISTANCE BETWEEN CROSS WALLS EXCEED 16'-0" FOR 6" CMU AND 24'-0" FOR 8" CMU

1E RATED CMU PARTITION SCALE: 1/2" = 1'-0"

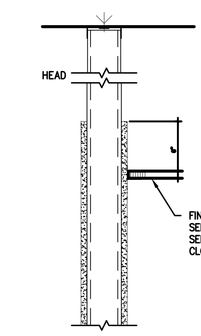
1F RATED CMU PARTITION SCALE: 1/2" = 1'-0"
WHERE DISTANCE BETWEEN CROSS WALLS EXCEED 16'-0" FOR 6" CMU AND 24'-0" FOR 8" CMU

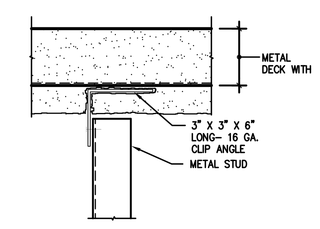
NOTES:

1. PROVIDE HORIZONTAL BRIDGING AT ALL GWB PARTITIONS AS RECOMMENDED BY MFG.
2. PROVIDE C8 X 11.5 FOR 6" CMU OR C10 X 15.3 FOR 8" CMU. MAXIMUM SUPPORT SPAN IS 30 FT. FOR C10 X 15.3 AND 24 FT. FOR C8 X 11.5. SUPPORTS FOR C-SECTIONS MAY BE ATTAINED VIA CROSS WALLS, STEEL COLUMNS, OR STEEL TIES BETWEEN WALLS. MAXIMUM SPACING BETWEEN SUPPORTS TO BE AS NOTED ABOVE. WHERE THE MAXIMUM SPANS NOTED ABOVE ARE EXCEEDED PROVIDE A C8 X 11.5 DIAGONALLY LOCATED IN THE HORIZONTAL PLANE TO KEEP WITHIN MAXIMUM DISTANCES. ATTACH TO ADJACENT WALL OR COLUMN. ANCHOR WITH MINIMUM 1/2" ANCHOR BOLTS AND GROUT CELL FULLY AT ATTACHMENT OR WELD CHANNEL TO COLUMN.
3. DO NOT EXCEED MANUFACTURES DATA FOR MAX UNBRACED LENGTH OF STUDS L/120. PROVIDE BRACES AS INDICATED.
4. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS MASONRY PARTITIONS.

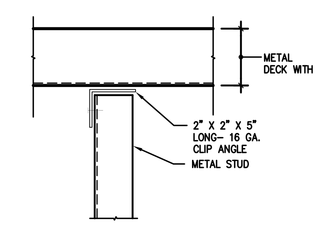
NOTES

1. WHERE PARTITIONS ARE PERPENDICULAR TO BEAMS CUT WALL CONSTRUCTION AROUND BEAM A DISTANCE OF 1/2" TO 3/4" AND FILL CAVITIES WITH SAFING MATERIAL AND FILL JOINTS WITH SEALANT.
2. WHERE PARTITIONS ARE PARALLEL AND UNDER A BEAM, FILL CAVITIES BETWEEN BEAM AND DECK WITH SAFING MATERIAL AND STOP WALL CONSTRUCTION 1/2" TO 3/4" AND FILL GAP WITH SAFING MATERIAL AND JOINTS ON EITHER SIDE WITH SEALANT.
3. RATED PARTITIONS NOTED ABOVE - USE SIMILAR DETAIL AT ALL ACOUSTIC PARTITION.

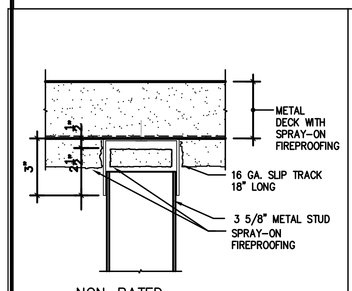




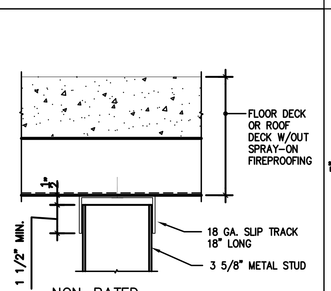
2I DETAIL SCALE: 3" = 1'-0"



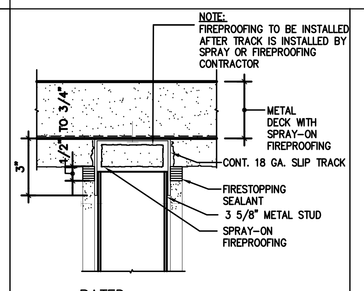
2J DETAIL SCALE: 3" = 1'-0"



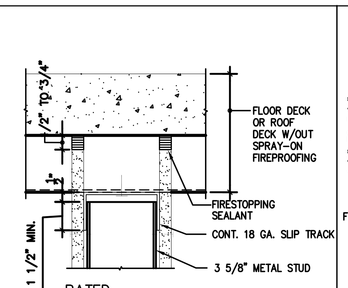
2A NON-RATED GYPSUM DETAIL SCALE: 3" = 1'-0"



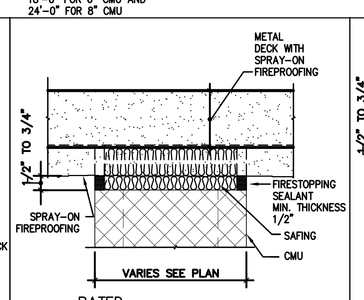
2B NON-RATED GYPSUM DETAIL SCALE: 3" = 1'-0"



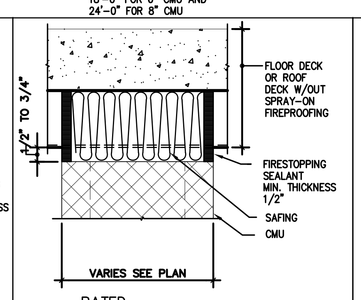
2C RATED GYPSUM DETAIL SCALE: 3" = 1'-0"



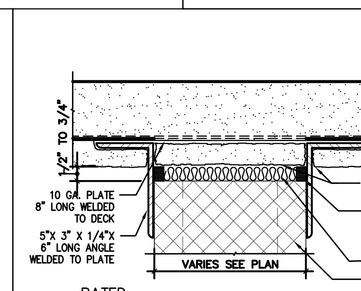
2D RATED GYPSUM DETAIL SCALE: 3" = 1'-0"



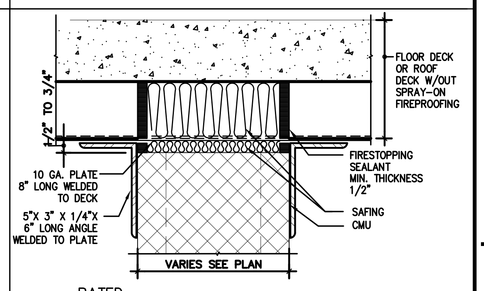
2E RATED CMU DETAIL SCALE: 3" = 1'-0"



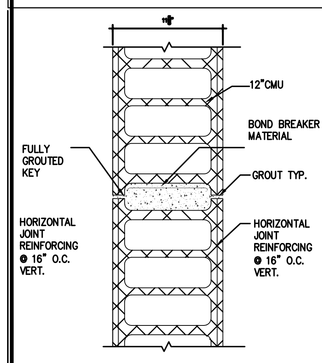
2F RATED CMU DETAIL SCALE: 3" = 1'-0"



2G RATED CMU DETAIL SCALE: 3" = 1'-0"



2H RATED CMU DETAIL SCALE: 3" = 1'-0"



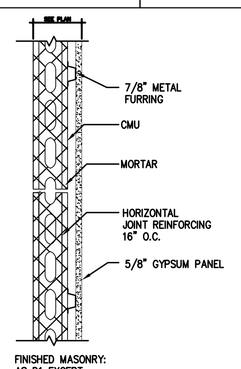
SEE STRUCTURAL DRAWINGS FOR ADD'L INFORMATION

NOTE:
FOR RATED PARTITIONS COMPLY W/ CONSTRUCTION REQUIREMENTS DESIGNATED BY UL ASSEMBLY.

REQUIRED RATINGS	
RATING	UL NO.
4HR.	U901

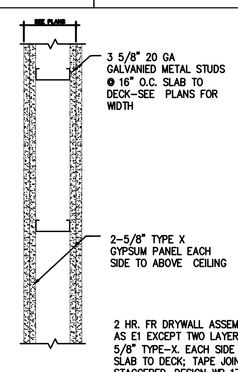
12", 75% SOLID LOAD BEARING, C.M.U. WALL-4 HOUR RATING, U.L. DESIGN U901

B1 TYP. 75% SOLID LOAD BEARING-4HR.
SCALE : 1 1/2" = 1'-0"



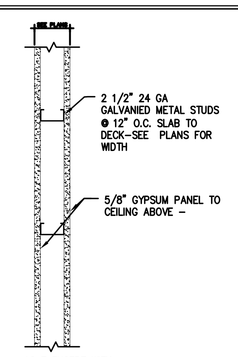
FINISHED MASONRY: AS D1 EXCEPT 4" X 8" X 16" NOM. C.M.U.'S

D3 FINISH MASONRY PARTITION
SCALE : 1 1/2" = 1'-0" 4"x8"x16" NOM.C.M.U.



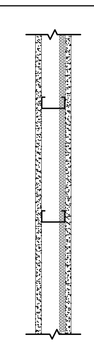
2 HR. FR DRYWALL ASSEMBLY: AS E1 EXCEPT TWO LAYERS 5/8" TYPE-X, EACH SIDE SLAB TO DECK; TAPE JOINTS STAGGERED. DESIGN WP 1711 (GYPSUM ASSOCIATION).

E2 TYP.2HR. RATED PART.
SCALE : 1 1/2" = 1'-0"



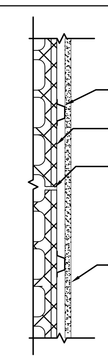
AS E EXCEPT WITH 2-1" 20 GA. GALVANIZED METAL STUDS 12" O.C.

F 2-1/2" STUD ATTRIBUTE
SCALE : 1 1/2" = 1'-0"



ACOUSTIC INSULATED DRYWALL PARTITION: 1/2" SOUND ATTENUATION BLANKET FULL HEIGHT, FULL WIDTH (ALTERNATE R-11 FIBERGLASS UNFACED BATTS).

G ACOUSTIC ATTRIBUTE
SCALE : 1 1/2" = 1'-0"



L1 INTERIOR FURRING: 7/8" 20 GA GALVANIZED METAL FURRING CHANNELS 16" O.C. FASTENED WITH MASONRY CUT NAILS TO EXISTING CONCRETE BLOCK WALL WITH 5/8" GWB SHEATHING.

L1 INTERIOR FURRING
SCALE : 1 1/2" = 1'-0" 7/8" 20 GA

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

243 MADISON ST.
MAMARONECK, NY 10543

DRAWING TITLE
WALL TYPES AND DETAILS

B-SCAN JOB STICKER

NYC DOB IDENTIFICATION NUMBER

SEAL & SIGNATURE

REGISTERED ARCHITECT ANTHONY YU STATE OF NEW YORK

DATE: 9/26/19
PROJECT #:09/2019
DRAWN BY: RU
CHECK BY: AY

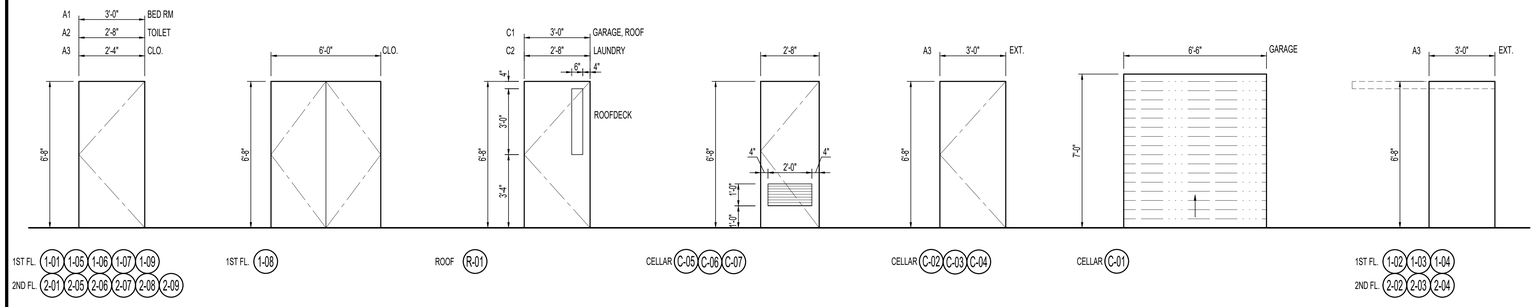
DWG No.
A- 601 .00

SHEET 15 of 26

DOOR SCHEDULE

	TAG #	LOCATION FROM	LOCATION TO	DOOR TYPE	SIZE W	SIZE H	SIZE T	FIRE RATING	MAT'L/ GAUGE	ELEVATION	HAND	ACCESSORIES	FRAME MAT'L/ GAUGE	NECK SIZE	WALL THICKNESS	FIRE RATING	DETAIL	HARDWARE FUNCTION	HDWR SET	SADDLE TYPE	SADDLE MAT'L	STOPPER	REMARKS
CELLAR	C-01	EXTERIOR	GARAGE	-	7'-0"	6'-6"	-	1 1/2 HR F.P.S.C.	ALUM	E	-	-	ALUM	-	-	1 1/2 HR	-	-	-	-	-	-	OVERHEAD GARAGE DOOR
	C-02	EXTERIOR	LAUNDRY 2	SINGLE	3'-0"	6'-8"	1 3/4"	1 1/2 HR F.P.S.C.	H.M. 16 GA	C	L	-	H.M. 14 GA.	-	-	1 1/2 HR	-	-	-	-	-	-	
	C-03	EXTERIOR	LAUNDRY 1	SINGLE	3'-0"	6'-8"	1 3/4"	1 1/2 HR F.P.S.C.	H.M. 16 GA	C	R	-	H.M. 14 GA.	-	-	1 1/2 HR	-	-	-	-	-	-	
	C-04	EXTERIOR	GARAGE	SINGLE	3'-0"	6'-8"	1 3/4"	1 1/2 HR F.P.S.C.	H.M. 16 GA	C	L	-	H.M. 14 GA.	-	-	1 1/2 HR	-	-	-	-	-	-	
	C-05	GARAGE	VESTIBULE TO 1ST FLOOR	SINGLE	3'-0"	6'-8"	1 3/4"	-	WD-S	A	R	-	WD	-	-	-	-	-	-	C1	WOOD	-	
	C-06	VESTIBULE TO 2ND FLOOR	LAUNDRY 2	SINGLE	3'-0"	6'-8"	1 3/4"	-	WD-S	A	R	-	WD	-	-	-	-	-	-	C1	WOOD	-	
	C-07	GARAGE	LAUNDRY 1	SINGLE	3'-0"	6'-8"	1 3/4"	-	WD-S	A	R	-	WD	-	-	-	-	-	-	C1	WOOD	-	
1ST FLOOR	1-01	LIVING	MASTER BR-1	SINGLE	3'-0"	6'-8"	1 3/4"	-	WD-S	A	R	-	WD	-	-	-	-	-	-	C1	WOOD	-	
	1-02	MASTER BED ROOM 1	CLOSET	SINGLE	2'-8"	6'-8"	1 3/4"	-	WD-S	F	-	-	WD	-	-	-	-	-	-	D1	-	-	SLIDING DOOR
	1-03	MASTER BED ROOM 1	TOILET 1.1	SINGLE	2'-8"	6'-8"	1 3/4"	-	WD-S	F	-	-	WD	-	-	-	-	-	-	D1	-	-	SLIDING DOOR
	1-04	CORRIDOR	TOILET 1.2	SINGLE	2'-8"	6'-8"	1 3/4"	-	WD-S	F	-	-	WD	-	-	-	-	-	-	D1	-	-	SLIDING DOOR
	1-05	CORRIDOR	BED ROOM 1.2	SINGLE	3'-0"	6'-8"	1 3/4"	-	WD-S	A	L	-	WD	-	-	-	-	-	-	C1	WOOD	-	
	1-06	BEDROOM 1.2	CLOSET	SINGLE	(2) 3'-0"	6'-8"	1 3/4"	-	WD-S	B	-	-	WD	-	-	-	-	-	-	-	-	-	
	1-07	CORRIDOR	BEDROOM 1.1	SINGLE	3'-0"	6'-8"	1 3/4"	-	WD-S	A	R	-	WD	-	-	-	-	-	-	C1	WOOD	-	
	1-08	BEDROOM 1.1	CLOSET	SINGLE	(2) 3'-0"	6'-8"	1 3/4"	-	WD-S	B	-	-	WD	-	-	-	-	-	-	-	-	-	
	1-09	CORRIDOR	CLOSET	SINGLE	3'-0"	6'-8"	1 3/4"	-	WD-S	A	R	-	WD	-	-	-	-	-	-	-	-	-	
2ND FLOOR	2-01	LIVING	MASTER BR-2	SINGLE	3'-0"	6'-8"	1 3/4"	-	WD-S	A	R	-	WD	-	-	-	-	-	-	C1	WOOD	-	
	2-02	MASTER BED ROOM 2	CLOSET	SINGLE	2'-8"	6'-8"	1 3/4"	-	WD-S	F	-	-	WD	-	-	-	-	-	-	D1	-	-	SLIDING DOOR
	2-03	MASTER BED ROOM 2	TOILET 2.1	SINGLE	2'-8"	6'-8"	1 3/4"	-	WD-S	F	-	-	WD	-	-	-	-	-	-	D1	-	-	SLIDING DOOR
	2-04	CORRIDOR	TOILET 2.2	SINGLE	2'-8"	6'-8"	1 3/4"	-	WD-S	F	-	-	WD	-	-	-	-	-	-	D1	-	-	SLIDING DOOR
	2-05	CORRIDOR	BED ROOM 2.2	SINGLE	3'-0"	6'-8"	1 3/4"	-	WD-S	A	L	-	WD	-	-	-	-	-	-	C1	WOOD	-	
	2-06	BEDROOM 2.2	CLOSET	SINGLE	(2) 3'-0"	6'-8"	1 3/4"	-	WD-S	B	-	-	WD	-	-	-	-	-	-	-	-	-	
	2-07	CORRIDOR	BEDROOM 2.1	SINGLE	3'-0"	6'-8"	1 3/4"	-	WD-S	A	R	-	WD	-	-	-	-	-	-	C1	WOOD	-	
	2-08	BEDROOM 2.1	CLOSET	SINGLE	3'-0"	6'-8"	1 3/4"	-	WD-S	B	-	-	WD	-	-	-	-	-	-	-	-	-	
	2-09	CORRIDOR	CLOSET	SINGLE	3'-0"	6'-8"	1 3/4"	-	WD-S	A	R	-	WD	-	-	-	-	-	-	-	-	-	
ROOF	R-01	STAIR	ROOFDECK	SINGLE	3'-0"	6'-8"	1 3/4"	1 1/2 HR F.P.S.C.	H.M. 16 GA	C	L	-	H.M. 14 GA.	-	-	1 1/2 HR	-	-	-	-	-	-	WITH VISION PANEL

DOOR ELEVATIONS



TYPE "A"
WD. FLUSH
SINGLE.
WD. FRAME

TYPE "B"
WD. FLUSH
DOUBLE.

TYPE "C"
H.M./ALUM FLUSH
SINGLE

TYPE "D"
H.M./ALUM FLUSH
SINGLE WITH
LOUVER

TYPE "D"
H.M./ALUM FLUSH
SINGLE

TYPE "E"
H.M./ALUM
OVERHEAD GARAGE DOOR

TYPE "F"
WD. FLUSH
SINGLE.
WD. FRAME, SLIDING

DOOR NOTES:

1. DOORS: HOLLOW METAL SHALL BE HOLLOW METAL WELDED/SEAMLESS CONSTRUCTION WITH 12 GAUGE H.M. REINFORCEMENTS FOR HARDWARE AT RAILS AND STILES; EXPANDED MINERAL SLAG INTERIOR AS REQUIRED TO OBTAIN UL LISTING FOR FIRE RATINGS. SHOP COAT PRIMER, TWO FIELD COATS SATIN-FINISH ALKYD ENAMEL, UNLESS OTHERWISE NOTED. COLOR AS SELECTED BY ARCHITECT.
   WOOD : CLEAR BIRCH VENEER BOTTOM RAIL MINIMUM 1 1/2" TOP RAIL MIN. 1/2" STYLES (WD) MIN 3/4" MINERAL CORE WITH HARDWOOD CROSSBAND MIN. 1/16". FOUR (4) FACES, PROVIDE INCOMBUSTIBLE MINERAL CORE AS REQUIRED TO OBTAIN UL LISTING FOR FIRE RATINGS.
   H.M. HOLLOW METAL
   WD-S SOLID CORE WOOD DOOR
   WD-H HOLLOW CORE WOOD DOOR
   A/G ALUMINUM AND GLASS

2. PROFILE: AB EXTERIOR, NON-RESTRACTING NEOPRENE SWEEP IN EXTRUDED ALUMINUM RETAINER; ZERO WEATHER-STRIP, OR APPROVED EQUAL.
   A ASTRAGAL, SEE SHIELDING SPECIFICATIONS.
   W WEATHER-STRIP; NEOPRENE COMPRESSIBLE GASKET TYPE IN EXTRUDED ALUMINUM RETAINER, POP-REVIT TO THREE SIDES OF HM FRAME. ZERO OR APPROVED TYPE.
   U UNDERCUT AS INDICATED; 1'-4" FOR BULKHEAD, V.O.F.; 3/4" FOR CARPET AS INDICATED.
   K KICKPLATE; 0.05" BRUSHED-FINISH STAINLESS STEEL FULL WIDTH BY 1'-0" HIGH. SURFACE-MOUNTED ON PUSHFACE WITH COUNTERBUNK STAINLESS STEEL FLATHEAD SCREWS.
   V VISION PANEL; 1/4" CLEAR FLOAT GLASS RECESSED IN HM GLAZING STOPS WITH CONCEALED FASTENERS; APPROVED TYPE WIRE GLASS IN RATED DOORS.
   L LOUVER: RECESSED 16 GAUGE LOUVER, 50% FREE AREA; FUSEABLE LINK/FIRE DAMPER AS INDICATED ON RATED DOORS.

3. FRAMES: (H.M.) HOLLOW METAL WELDED-WLD (UNLESS OTHERWISE NOTED AS MITERED KNOCKDOWN TYPE)WITH BACK HAND CONCEALED ATTACHMENTS-MIN. 3 PER JAMB DRYWALL ANCHORS, OR CORRUGATED MASONRY ANCHORS, AS INDICATED. PROVIDE BUTYL SILENCER INSERTS AT STRIKES. SHOP COAT PRIMER, TWO (2) FIELD COAT SATIN FINISH ALKYD ENAMEL, UNLESS OTHERWISE NOTED. COLOR AS SELECTED BY ARCHITECT. NOTE: GROUT FRAME SOLID IN MASONRY INSTALLATION.
   (WD) WOOD

4. HINGES: (1 1/2 PR) SEE DOOR HARDWARE SPECS.

5. CLOSURES: (O.H.D.) SEE DOOR HARDWARE SPECS.

6. SADDLES: MAT'L (A) EXTRUDED ALUMINUM, FULL WIDTH OF BUCK, ZERO WEATHER STRIP #654 OR APPROVED EQUAL.
   MAT'L (B) AS ABOVE WITH ASTRAGAL STOP ZERO #656, OR APPROVED EQUAL.
   MAT'L (C) CAST BRONZE ZERO #678 OR STAINLESS STEEL AS SELECTED BY ARCHITECT. FULL WIDTH.
   MAT'L (M) HONED FINISH MARBLE AS SELECTED BY ARCHITECT.
   MAT'L (W) WOOD

7. STOPS: (F.S.) DOME TYPE FLOOR STOP 26D FINISH (BRUSHED CHROME).
   (D.S.) HEAVY DUTY OVERHEAD DOOR SURFACE. MOUNTED STOP.
   (W.M.) WALL MOUNTED BUMPER

8. FUNCTIONS: STOREROOM (FOR USE AT STOREROOMS, ELECTRICAL, TELEPHONE AND JANITOR CLOSETS, (ST) AND OTHER AREAS AS SCHEDULED). ASSEMBLY (ANSI-FO7) LATCH BY LEVER HANDLE INSIDE. KEY OUTSIDE RETRACTS LATCHBOLT AS PER ANS1-BHMA F707. OUTSIDE LEVER HANDLE ALWAYS RIGID. DEAD LOCKING LATCH.

   PRIVACY FOR TOILET DOORS WITH BREAK-AWAY FEATURE. ASSEMBLY (ANSI-FO2 (PR) AND F19 GRADE 1) LATCH BOLT BY LEVER HANDLE EITHER SIDE EXCEPT WHEN OUTSIDE KNOB IS LOCKED BY PROJECTING DEAD BOLT.

   PASSAGE FOR DOORS THAT DO NOT NEED TO BE LOCKED. ASSEMBLY (ANSI-FO1 GRADE 1)
   (PASS) LATCH BY LEVER HANDLE EITHER SIDE.

   DEADLOCK ASSEMBLY (ANSI-F17) LATCH BOLT BY LEVER EITHER SIDE. DEADLOCKING LATCH.
   (DL) BY KEY OUTSIDE. INSIDE LEVER ALWAYS FREE.

   OFFICE ASSEMBLY (ANSI-FO4 GRADE 1) LATCH BOLT BY KEY OUTSIDE AND LEVER. HANDLE EITHER SIDE UNLESS LEVER HANDLE IS LOCKED BY TOGGLE ACTION STOP AUXILIARY LATCH DEADLOCKS LATCHBOLT AND PREVENTS MANIPULATION OF LOCKED TOGGLE ACTION STOP.

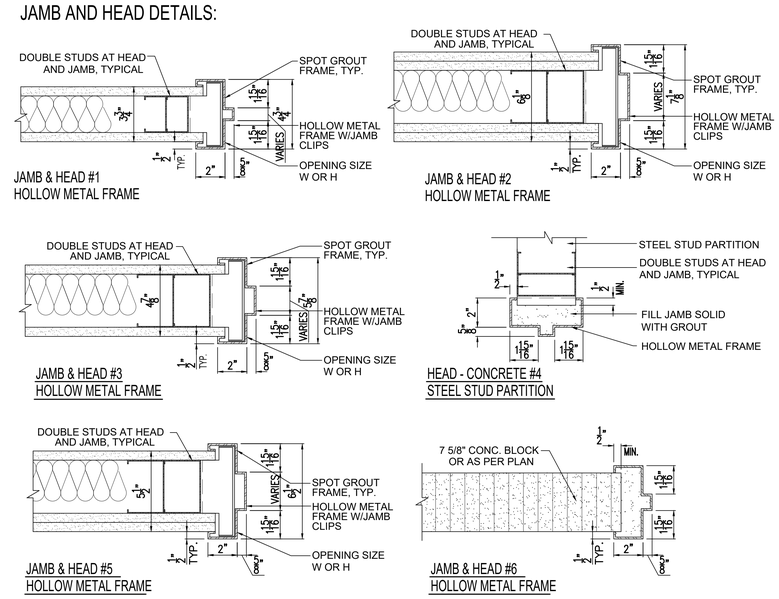
   CORRIDOR ASSEMBLY (ANS1-F20) FOR ENTRANCE (CORR.)

9. LEVERS: SEE DOOR HARDWARE SPECS.

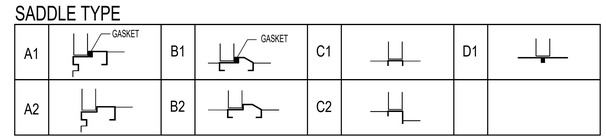
10. LOCK AND LATCHETS: SEE DOOR HARDWARE SPECS

11. ADDITIONAL NOTES:
   * DAYLIGHT OF ALL DOORS SHALL BE 4" FROM NEAREST INSIDE CORNER U.O.N.
   * PROVIDE SHOP DRAWINGS AND HARDWARE SUBMITTALS FOR ALL DOORS.
   * PROVIDE ONE (1) KEY PER CYLINDER PLUS TWO LEVEL MASTERING.
   * CYLINDERS SHALL BE SUPPLIED TO THE ALUMINUM AND GLASS DOORMANUFACTURERS (HINGED AND SLIDING) COMPATIBLE WITH THE LOCK TYPES.
   * H.M. DOORS AND FRAMES TO BE FACTORY PRIMED.
   * H.M. DOORS AND FRAMES TO BE COATED W/ "X" EPOXY PAINT AT WET AREAS.
   * DOORS TO BE EQUIPPED W/CUTOUTS FOR HARDWARE.
   * WEATHERSTRIPPING AND THRESHHOLDS @ EXTERIOR DOORS.
   * HARDWARE TO CONFORM TO AMERICANS WITH DISABILITIES ACT.

JAMB AND HEAD DETAILS:



SADDLE TYPE



O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cell. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

243 MADISON ST.
MAMARONECK, NY 10543

DRAWING TITLE

DOOR SCHEDULE AND DETAILS

B-SCAN JOB STICKER

NYC DOB IDENTIFICATION NUMBER

SEAL & SIGNATURE

REGISTERED ARCHITECT STEVEN A. PIRRO STATE OF NEW YORK

DATE: 9/26/19
PROJECT #: 09-2019
DRAWN BY: RIJ
CHECK BY: AY

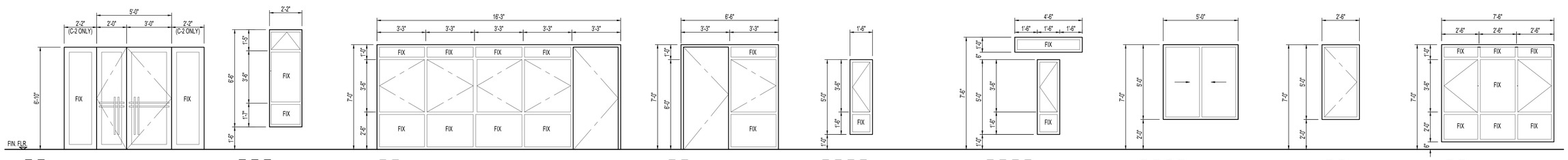
DWG No. A- 602 .00

SHEET 16 of 36

WINDOW SCHEDULE

	TAG #	LOCATION	SIZE (ROUGH OPENING) W	SIZE (ROUGH OPENING) H	HEIGHT (H) SILL HEIGHT FROM FIN. FLR	HEIGHT (H) HEADER HEIGHT FROM FIN. FLR	NO. OF PANE	QTY	TYPE	MATERIAL	FIRE RATING	"U" VALUE	"SGHC" VALUE	OITC RATING	HARDWARE HDWR SET	MANUFACTURER	MODEL	COLOR	REMARKS
CELLAR	C-1	VESTIBULE TO 1ST FLOOR	3'-0"+ 2'-0"	6'-10"	0'-0"	6'-10"	SEE ELEVATION	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.30	-	-	-	PTND	
	C-2	VESTIBULE TO 2ND FLOOR	3'-0"+ 2'-0"+(2)2'-0"	6'-10"	0'-0"	6'-10"	SEE ELEVATION	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.30	-	-	-	PTND	WITH FIX GLASS
	C-3	STAIR	2'-2"	6'-6"	1'-6"	8'-0"	SEE ELEVATION	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.30	-	-	-	PTND	
1ST FLOOR	1-1	LIVING	16'-3"	7'-0"	0'-0"	7'-0"	5	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.30	-	-	-	PTND	
	1-2	MASTER BEDROOM 1	6'-6"	7'-0"	0'-0"	7'-0"	SEE ELEVATION	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.30	-	-	-	PTND	
	1-3	MASTER BEDROOM 1	1'-6"	5'-0"	1'-0"	6'-0"	1	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.30	-	-	-	PTND	
	1-4	TOILET 1.1	4'-6"|1'-6"	1'-0"|5'-0"	6'-6" |1'-0"	7'6"|6'-0"	1	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.30	-	-	-	PTND	
	1-5	TOILET 1.2	4'-6"|1'-6"	1'-0"|5'-0"	6'-6" |1'-0"	7'6"|6'-0"	1	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.30	-	-	-	PTND	
	1-6	BEDROOM 1.2	1'-6"	5'-0"	1'-0"	6'-0"	SEE ELEVATION	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.30	-	-	-	PTND	
	1-7	BEDROOM 1.1	5'-0"	5'-0"	2'-0"	7'-0"	2	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.30	-	-	-	PTND	
	1-8	BEDROOM 1.2	5'-0"	5'-0"	2'-0"	7'-0"	2	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.30	-	-	-	PTND	
	1-9	BEDROOM 1.1	2'-6"	5'-0"	2'-0"	7'-0"	1	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.35	-	-	-	PTND	
	1-10	STAIR	2'-2"	6'-6"	1'-6"	8'-0"	SEE ELEVATION	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.30	-	-	-	PTND	
	2-11	KITCHEN 1	7'-6"	7'-0"	0'-6"	7'-0"	3	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.30	-	-	-	PTND	
2ND FLOOR	2-1	LIVING	16'-3"	7'-0"	0'-0"	7'-0"	5	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.30	-	-	-	PTND	
	2-2	MASTER BEDROOM 2	6'-6"	7'-0"	0'-0"	7'-0"	SEE ELEVATION	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.30	-	-	-	PTND	
	2-3	MASTER BEDROOM 2	1'-6"	5'-0"	1'-0"	6'-0"	1	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.30	-	-	-	PTND	
	2-4	TOILET 2.1	4'-6"|1'-6"	1'-0"|5'-0"	6'-6" |1'-0"	7'6"|6'-0"	1	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.30	-	-	-	PTND	
	2-5	TOILET 2.2	4'-6"|1'-6"	1'-0"|5'-0"	6'-6" |1'-0"	7'6"|6'-0"	1	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.30	-	-	-	PTND	
	2-6	BEDROOM 2.2	1'-6"	5'-0"	1'-0"	6'-0"	SEE ELEVATION	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.30	-	-	-	PTND	
	2-7	BEDROOM 1.1	5'-0"	5'-0"	2'-0"	7'-0"	2	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.30	-	-	-	PTND	
	2-8	BEDROOM 1.2	5'-0"	5'-0"	2'-0"	7'-0"	2	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.30	-	-	-	PTND	
	2-9	BEDROOM 2.1	2'-6"	5'-0"	2'-0"	7'-0"	1	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.35	-	-	-	PTND	
	2-10	STAIR	2'-2"	6'-6"	1'-6"	8'-0"	SEE ELEVATION	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.30	-	-	-	PTND	
	2-11	KITCHEN 2	7'-6"	7'-0"	0'-6"	7'-0"	3	1	SEE ELEVATION	ALUM + GLASS	N/A	0.26	0.40	0.30	-	-	-	PTND	

WINDOW ELEVATIONS:



C-1 C-2
QUANTITY: 2
LOCATION: VESTIBULE TO 1ST AND 2ND FLOOR
TYPE: CUSTOMIZED DOUBLE SWING DOOR

C-3 1-10 2-10
QUANTITY: 3
LOCATION: STAIR
TYPE: CUSTOMIZED DOUBLE SWING DOOR

1-1 2-1
QUANTITY: 2
LOCATION: 1ST AND 2ND FLOOR FRONT WINDOW
TYPE: FIX/SWING GLASS WINDOW

1-2 2-2
QUANTITY: 2
LOCATION: MSTR BR 1, MSTR BR 2
TYPE: FIX/SWING GLASS WINDOW

1-3 1-6 2-3 2-6
QUANTITY: 4
LOCATION: 1F MBR., 2F MBR., BR 1.2, BR 2.2
TYPE: UPPER CASEMENT WITH FBOTTOM FIXED GLASS

1-4 1-5 2-4 2-5
QUANTITY: 4
LOCATION: TOI.1.1, TOI. 1.2, TOI. 2.1, TOI. 2.2
TYPE: UPPER CASEMENT WITH FBOTTOM FIXED GLASS

1-7 1-8 2-7 2-8
QUANTITY: 4
LOCATION: BED RM 1.1, BED RM 1.2, BED RM 2.1, BED RM 2.2
TYPE: SLIDING WINDOW

1-9 2-9
QUANTITY: 2
LOCATION: BED RM 1.1, BED RM 2.1
TYPE: SWING WINDOW

1-11 2-11
QUANTITY: 2
LOCATION: BED RM 1.1, BED RM 2.1
TYPE: SWING WINDOW

LEGEND:

SL. - SLIDER
SW. - SWINGING PANEL
FL. - FOLDING PANEL
FX. - FIXED GLASS (CLEAR U.O.N.)
SP. - SPANDREL PANEL (OPAQUE U.O.N.)
AW. - AWNING TYPE WINDOW
SCR. - SCREEN

S. - SILL (BOTTOM RAIL)
LVR. - LOUVER
INT. - INTERIOR
EXT. - EXTERIOR
DIM. - DIMENSION
GLS. - GLASS

WINDOW NOTES:

1. ALL GLASS TO BE 1" CLEAR INSULATING GLASS, UNLESS OTHERWISE NOTED
2. ALL GLASS BELOW THE HEIGHT OF 1'-6" ABOVE THE FINISHED FLOOR TO BE $\frac{3}{4}$" CLEAR TEMPERED GLASS
3. WINDOW FRAMES TO BE FACTORY PAINTED KINAR FINISH
4. SPANDREL PANELS TO BE OPAQUE GLASS TO MATCH WINDOW FRAMES
5. LOUVER SECTIONS TO BE FIXED BLADE, FACTORY PAINTED KINAR FINISH ALUMINUM
6. ALL ALUMINUM DOORS, WINDOWS AND STOREFRONT FRAMES TO BE COMMERCIAL GRADE WITH THERMAL BREAKS
7. ALL WINDOWS TO HAVE INSECT SCREENS @ INTERIOR SIDE
8. UNLESS OTHERWISE NOTED, DOORS AND WINDOWS AT FLOOR LEVEL ARE TO HAVE BASE PANELS 7-1/4" HIGH
9. ALUMINUM SILLS @ ALL WINDOWS

THE AIR LEAKAGE OF WINDOW AND SLIDING OR SWINGING DOOR ASSEMBLIES THAT ARE PART OF THE BUILDING ENVELOPE SHALL BE DETERMINED IN ACCORDANCE WITH AAMA/WDMA/CSA 101/I.S.2/A440, OR NFRC 400 BY AN ACCREDITED, INDEPENDENT LABORATORY, AND LABELED AND CERTIFIED BY THE MANUFACTURER AND SHALL NOT EXCEED 0.3 CFM PER SQUARE FOOR (1.5L/S/M2), AND SWINGING DOORS NO MORE THAN 0.5 CFM PER SQUARE FOOT (2.6 L/S/M2)

CURTAIN WALL, STOREFRONT GLAZING AND COMMERCIAL-GLAZED SWINGING ENTRANCE DOORS AND REVOLVING DOORS SHALL BE TESTED FOR AIR LEAKAGE AT 1.57 POUNDS PER SQUARE FOOT (PSF) (75 PA) IN ACCORDANCE WITH ASTM E 283.

FOR CURTAIN WALLS AND STOREFRONT GLAZING, THE MAXIMUM AIR LEAKAGE RATE SHALL BE 0.3 CUBIC FOOT PER MINUTE PER SQUARE FOOT (CFM/FT2) (5.5 M3/H X M2) OF FENESTRATION AREA.

FOR COMMERCIAL GLAZED SWINGING ENTRANCE DOORS AND REVOLVING DOORS, THE MAXIMUM AIR LEKAGE RATE SHALL BE 1.00 CFM/FT2 (18.3 M3/H X M2) OF DOOR AREA WHEN TESTED IN ACCORDANCE WITH ASTM E 283.

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cell. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

243 MADISON ST.
MAMARONECK, NY 10543

DRAWING TITLE

SCHEDULE OF WINDOWS

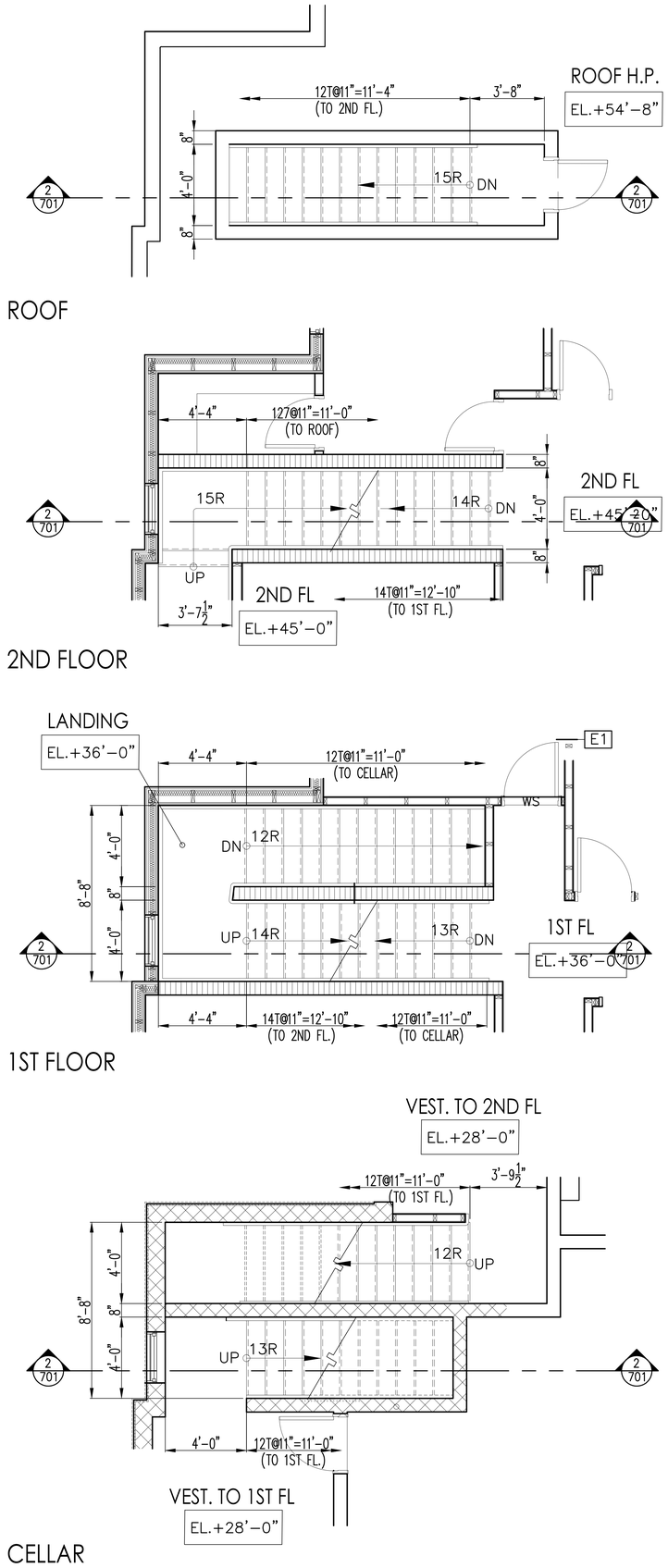
B-SCAN JOB STICKER

NYC DOB IDENTIFICATION NUMBER

SEAL & SIGNATURE

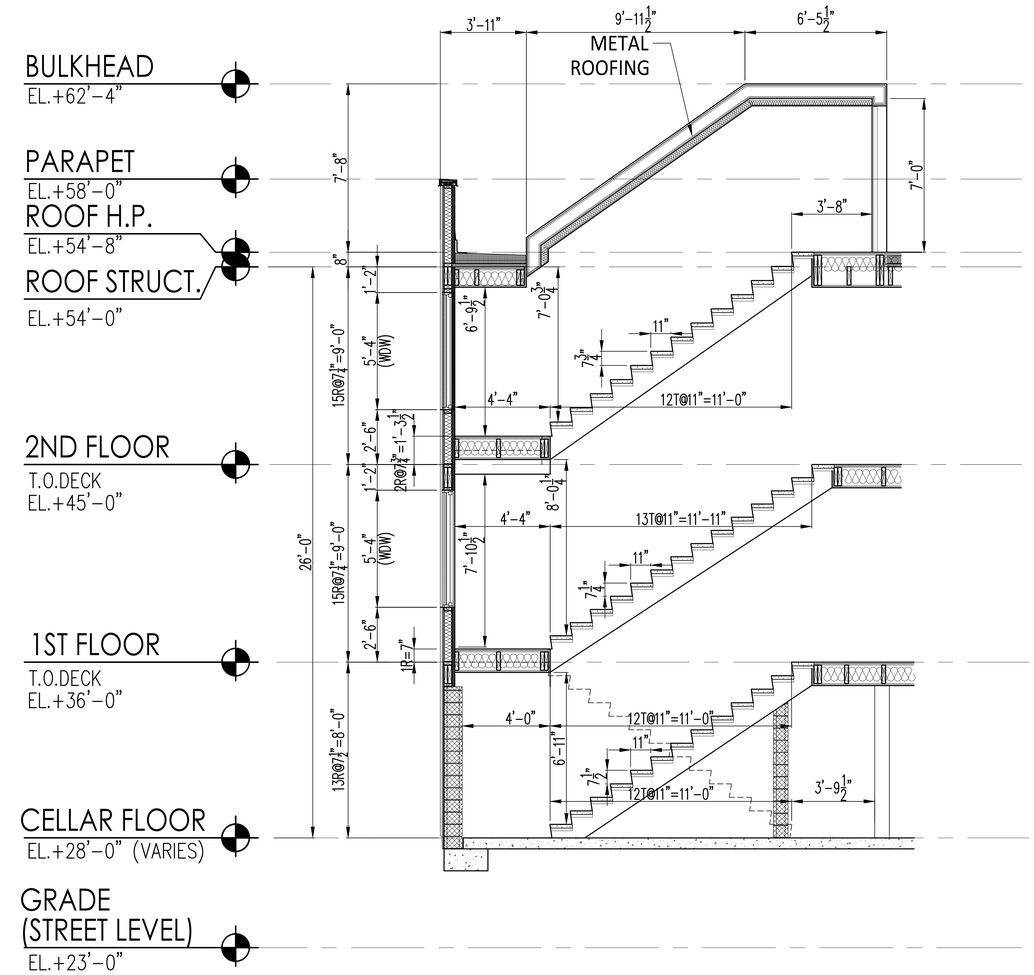
DATE: 9/26/19
PROJECT #:09-2019
DRAWN BY: RU
CHECK BY: AY

DWG No.
A- 603 .00



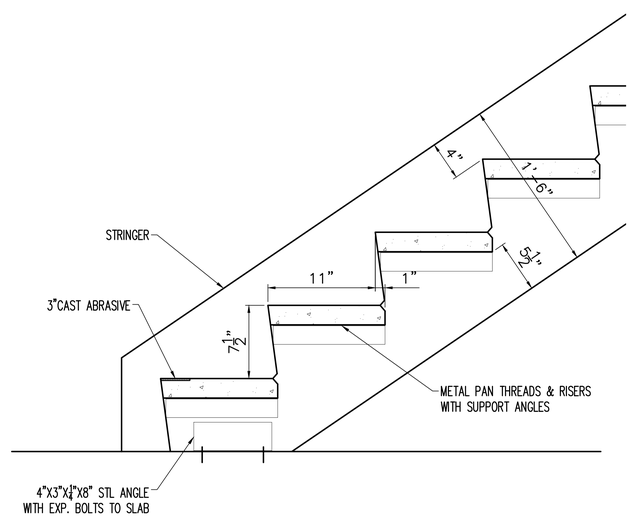
1 A-701 **STAIR - PLAN**

SCALE: 3/8"=1'-0"



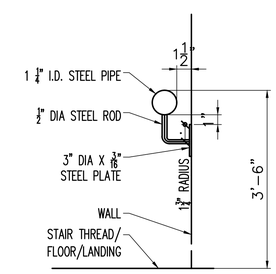
2 A-701 **STAIR - SECTION**

SCALE: 3/8"=1'-0"



3 A-701 **STAIR DETAIL- METAL PAN/ CONCRETE FILL**

SCALE: 2"=1'-0"



4 A-701 **HANDRAIL DETAIL**

SCALE: 2"=1'-0"

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cel. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

243 MADISON ST.
MAMARONECK, NY 10543

DRAWING TITLE

STAIR SECTIONS AND DETAILS

B-SCAN JOB STICKER

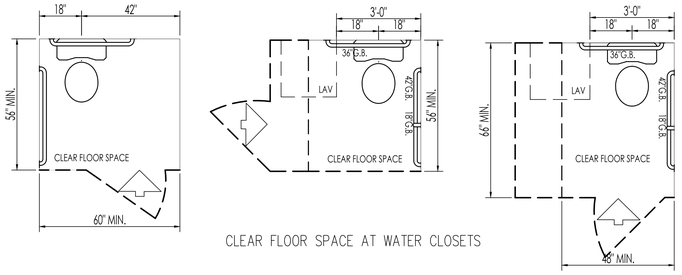
NYC DOB IDENTIFICATION NUMBER

SEAL & SIGNATURE

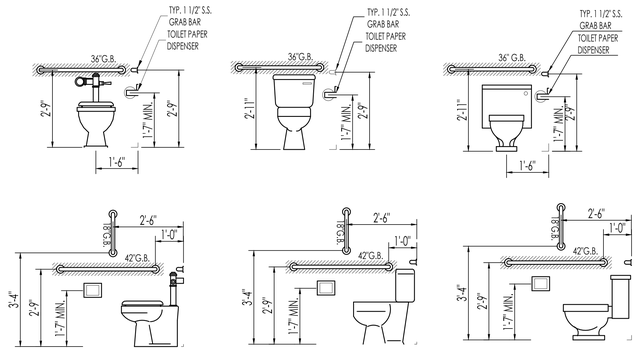
DATE: 9/26/19
PROJECT #: 09-2019
DRAWN BY: RU
CHECK BY: AY

DWG No.
A- 701 .00

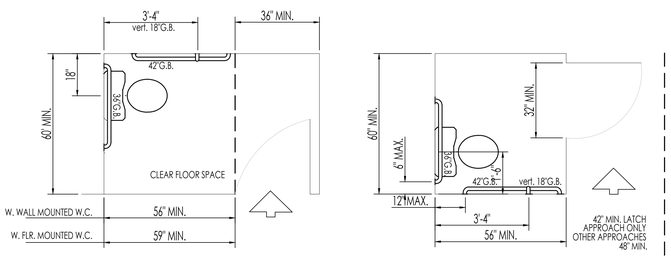
SHEET 18 of 36

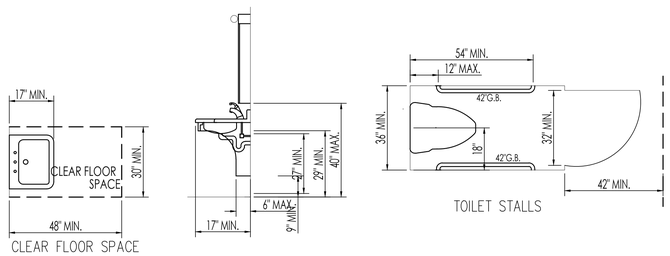


CLEAR FLOOR SPACE AT WATER CLOSETS



GRAB BARS AT WATER CLOSETS

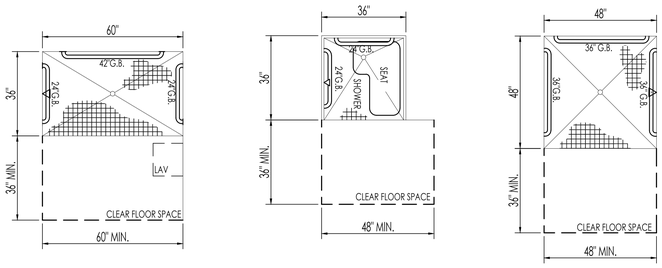




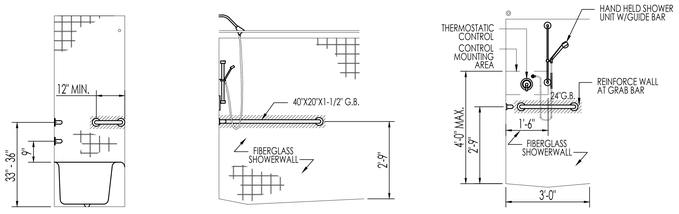
CLEAR FLOOR SPACE AT LAVATORIES

LAVATORY CLEARANCES

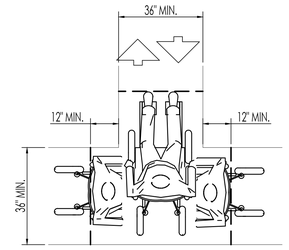
TOILET STALLS



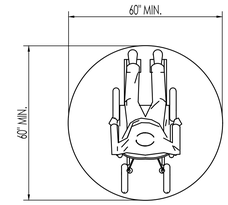
SHOWER SIZE AND CLEARANCES



GRAB BARS AT SHOWER STALLS

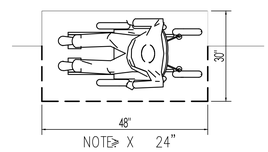


T- SHAPED SPACE FOR 180 DEGREES TURNS.

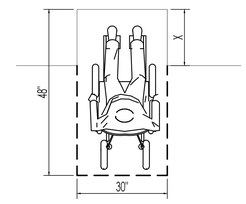


60" DIAMETER SPACE.

WHEELCHAIR TURNING SPACE

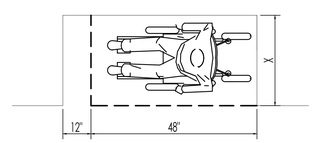


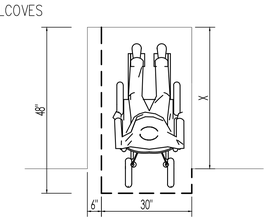
NOTE: X 24"



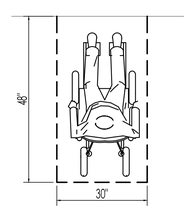
NOTE: X 24"

CLEAR FLOOR SPACE IN ALCOVES



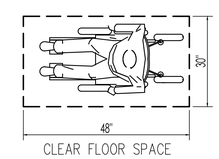


NOTE: "X" > 24" THEN AND ADDITIONAL MANEUVERING CLEARENCE OF 6" SHALL BE PROVIDED AS SHOWN

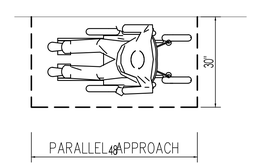


FORWARD APPROACH

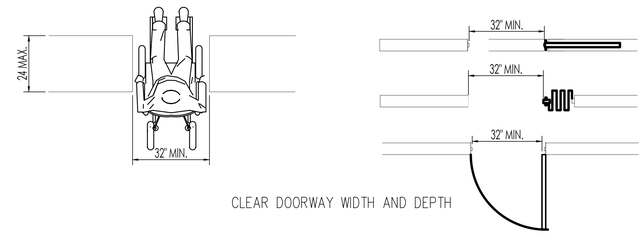
MINIMUN CLEAR FLOOR SPACE
FOR WHEELCHAIRS



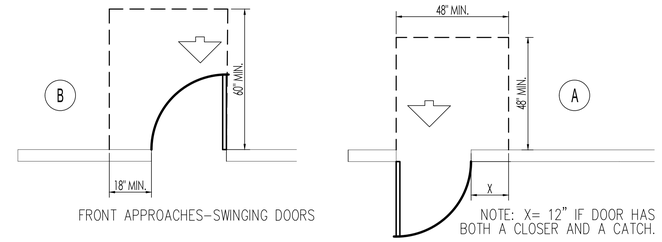
CLEAR FLOOR SPACE



PARALLEL APPROACH

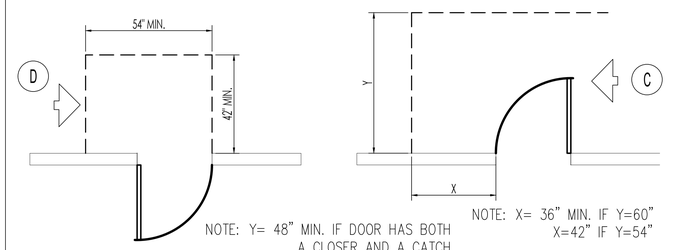


CLEAR DOORWAY WIDTH AND DEPTH



FRONT APPROACHES-SWINGING DOORS

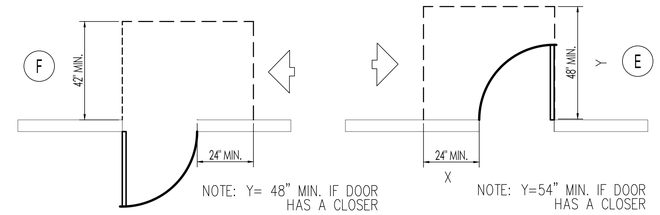
NOTE: X= 12" IF DOOR HAS BOTH A CLOSER AND A CATCH.



NOTE: Y= 48" MIN. IF DOOR HAS BOTH A CLOSER AND A CATCH

NOTE: X= 36" MIN. IF Y=60"
X=42" IF Y=54"

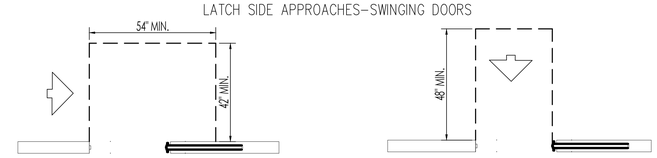
HINGE SIDE APPROACHES-SWINGING DOORS



NOTE: Y= 48" MIN. IF DOOR HAS A CLOSER

NOTE: Y=54" MIN. IF DOOR HAS A CLOSER

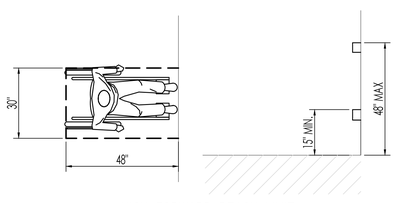
LATCH SIDE APPROACHES-SWINGING DOORS



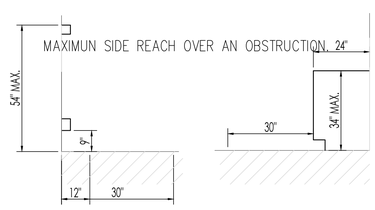
SLIDE SIDE APPROACH: SLIDING DOORS AND FOLDING DOORS

FRONT APPROACH: SLIDING DOORS AND FOLDING DOORS

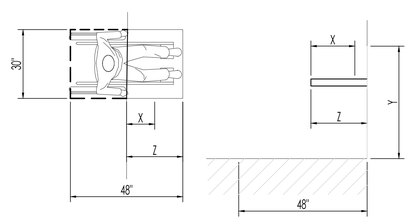
LATCH SIDE APPROACH-SLIDING DOORS AND FOLDING DOORS
MANEUVERING CLEARANCES AT DOORS



HIGH FORWARD REACH LIMIT



MAXIMUN SIDE REACH OVER AN OBSTRUCTION. 24"



NOTE: "X" SHALL BE 25" ; "Z" SHALL BE "X" WHEN "X"=20", THEN "Y" SHALL BE 48" MAX. WHEN "X" IS 20" TO 25", THEN "Y" SHALL BE 44" MAX.

MAXIMUN FORWARD REACH OVER AN OBSTRUCTION.

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cel. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

243 MADISON ST.
MAMARONECK, NY 10543

DRAWING TITLE
HANDICAPPED
DETAILS & NOTES

B-SCAN JOB STICKER

NYC DOB IDENTIFICATION NUMBER

SEAL & SIGNATURE

REGISTERED ARCHITECT
AYVER YOUNG
STATE OF NEW YORK

DATE: 9/26/19
PROJECT #09-2019
DRAWN BY: RU
CHECK BY: AY

DWG No.
A-801 .00

SHEET 19 of 36

GENERAL NOTES:

1. ALL WORK PERTAINING TO SHEETING, BRACING, SUPPORT OF ADJOINING, LOTS AND SIDEWALKS, PLACEMENT OF FOUNDATION CONCRETE ON SOIL SUB-GRADE IS SUBJECT TO INSPECTION. DESIGN FOR SHEETING & BRACING SHALL BE DONE BY ENGINEER IN CHARGE OF CONTROLLED INSPECTION & PAID BY THE CONTRACTOR.

2. PROPER NOTICES SHALL BE GIVEN FOR PERFORMANCE OF THE CONTROLLED INSPECTION IN ACCORDANCE WITH THE REQUIREMENTS OF THE NY STATE BUILDING CODE: "BEFORE ANY WORK IS COMMENCED ON AN ITEM OF CONSTRUCTION REQUIRING CONTROLLED INSPECTION, ALL PERSONS RESPONSIBLE FOR SUCH CONTROLLED INSPECTION SHALL BE NOTIFIED IN WRITING AT LEAST 72 HOURS PRIOR TO SUCH COMMENCEMENT."

3. NOTICE SHALL BE PROVIDED BY THE PROJECTS OWNER TO ADJOINING PROPERTY OWNERS IN ACCORDANCE WITH THE NY STATE BUILDING. CODE: "NO FOUNDATION OF EARTHWORK PERMIT SHALL BE ISSUED UNLESS AND UNTIL AT LEAST FIVE DAYS PRIOR WRITTEN NOTICE OF THE PERMIT APPLICATION SHALL HAVE BEEN GIVEN BY THE APPLICANT TO THE OWNERS OF ALL ADJOINING LOTS, BUILDINGS AND SERVICE FACILITIES WHICH MAY BE AFFECTED BY THE PROPOSED FOUNDATION WORK OR EARTHWORK OPERATIONS."

4. NOTICE SHALL BE PROVIDED BY THE PROJECTS OWNER TO ADJOINING PROPERTY OWNERS IN ACCORDANCE WITH THE NY STATE BUILDING. CODE: "AT LEAST 24 HOURS WRITTEN NOTICE SHALL BE GIVEN TO COMMISSIONER BEFORE THE COMMENCEMENT OF ANY WORK FOR WHICH A PERMIT HAS BEEN ISSUED."

5. ALL WORK PERFORMED IN CONNECTION WITH SHEETING, BRACING, UNDERPINNING, EXCAVATION SHALL ADHERE TO THE APPLICABLE PROVISIONS OF THE NY STATE BUILDING CODE, REGULATIONS OF THE NEW YORK STATE DEPARTMENT OF LABOR AND OSHA.

6. PRIOR TO COMMENCEMENT OF MASS EXCAVATION, THE ADJOINING PROPERTIES, AND STREETS SHALL BE VISUALLY SURVEYED BY THE CONTRACTOR, SUITABLY MARKED WITH PERMANENT MONITORING POINTS TO BE MEASURED DURING CONSTRUCTION FOR THE PURPOSES OF DETERMINING CONSTRUCTION-RELATED EFFECTS. REPORT WITH PHOTOGRAPHS SHALL BE PROVIDED TO ARCHITECT IN TRIPLICATE COPIES. A PRE-CONSTRUCTION DAMAGE CONDITION SURVEY OF THE ADJOINING PROPERTIES SHALL BE MADE IN WRITTEN AND PICTORIAL FORM, AND TWO COPIES SHALL BE FURNISHED TO THE OWNER'S REPRESENTATIVE.

7. ANY WATER INFLOW INTO THE EXCAVATION SHALL BE CONTROLLED BY SUMPING OR OTHER SUITABLE METHODS. DISPOSAL OF WATER SHALL BE MADE OUT OF THE EXCAVATED AREA IN ACCORDANCE WITH LOCAL REGULATION. THE ELEVATION OF THE WATER LEVELS BEYOND THE LIMITS OF THE PROJECT SITE SHALL NOT BE LOWERED SO AS TO PREVENT DISTRESS TO ADJOINING STRUCTURES.

8. A COMPETENT REPRESENTATIVE OF THE CONTRACTOR SHALL INSPECT THE SUB-GRADE OF THE EXCAVATION, ANY AND ALL BRACING AND BLOCKING, AT THE COMMENCEMENT OF EACH SHIFT, TO ASSURE INTEGRITY, PRIOR TO PERMITTING WORKMEN TO WORK WITHIN ANY EXCAVATED AREA.

9. THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY EXCAVATION RESTRAINT REQUIRED FOR THE CONSTRUCTION OF THE PROJECT. IF A SHEETING OR BRACING SYSTEM IS TO BE UTILIZED, THE DETAILS SHALL BE SHOWN ON SHOP DRAWINGS AND SHALL BE SUBMITTED FOR REVIEW AND APPROVAL BY THE ARCHITECT BEFORE COMMENCEMENT OF WORK.

10. ANY COST FOR REPAIR OF ADJACENT PROPERTIES SHALL BE PAID BY OWNER.

SPECIAL NOTES TO OWNER REGARDING CONCRETE

UNDER NORMAL CONDITIONS, AND FOR CONVENTIONAL BUILDINGS SUCH AS THE SUBJECT MATTER, REINFORCED CONCRETE AS WELL AS CONCRETE BLOCK WALLS DEVELOP CRACKS. THE CRACKS ARE DUE TO INHERENT SHRINKAGE OF CONCRETE, CREEP AND RESTRAINING EFFECTS OF WALLS AND OTHER STRUCTURAL ELEMENTS TO WHICH THE BEAMS/SLABS ARE TIED.

THE CRACKS FORMED ARE NORMALLY COSMETIC.THE SLAB MAINTAINS ITS SERVICEABILITY AND STRENGTH REQUIREMENTS. ITS POSSIBLE THAT A NUMBER OF HAIR CRACKS, WHICH WOULD NORMALLY SPREAD OVER A WIDE AREA, WILL INTEGRATE INTO A SINGLE CRACK WITH A WIDTH EXCEEDING 0.01 INCH. IT IS EMPHASIZED THAT ALTHOUGH SPECIAL EFFORT IS MADE TO REDUCE THE POTENTIAL CAUSES AND NUMBER OF SUCH CRACKS, IT IS NOT PRACTICAL TO PROVIDE TOTAL ARTICULATION BETWEEN THE FLOOR/ROOF SYSTEM AND ITS SUPPORTS AND THEREBY ACHIEVE COMPLETE INHIBITION OF ALL CRACKS.

MOST SUCH CRACKS DEVELOP OVER THE FIRST TWO YEARS OF THE LIFE OF THE FLOOR SYSTEM. CRACKS WHICH ARE WIDER THAN 0.01 INCH MAY NEED TO BE PRESSURE EPOXIED. PROVIDE ALLOWANCE FOR SUCH CRACKS.

THE OBJECT OF THE JOINTS PROVIDED IS TO ALLOW MOVEMENT. MOVEMENTS DUE TO CREEP AND SHRINKAGE MAY BE NOTICEABLE AT JOINTS UP TO TWO YEARS AFTER CONSTRUCTION, BEYOND WHICH MOVEMENTS DUE TO VARIATIONS IN TEMPERATURE WILL PERSIST.

ANY COST REQUIRED TO REPAIR CRACKS SHALL BE PAID BY OWNER PROCEED WITH THIS WORK ONLY AFTER OWNER AGREES TO PAY FOR ALL EXPENSES REQUIRED FOR REAPPEARING ADJACENT BUILDINGS.

FOUNDATION

1. ALL FOOTINGS ARE TO REST ON UNDISTURBED SOIL HAVING A MIN. SAFE BEARING CAPACITY OF 3.0 TONS PER SQUARE FOOT.

2. ISOLATED FOOTINGS SHALL BE LOWERED OR RAISED, AND PIERS SHALL BE ADDED, REDUCED OR INCREASED IN HEIGHT, ALL AS APPROVED BY THE ENGINEER, WHERE UNDISTURBED SOIL OF THE SPECIFIED BEARING CAPACITY IS FOUND AT A LOWER OR HIGHER ELEVATION THAN SHOWN ON THE PLANS.

3. BACKFILLING AGAINST FOUNDATION WALLS SHALL NOT BE DONE UNTIL CONCRETE HAS ATTAINED SUFFICIENT STRENGTH AND WALLS ARE PROPERLY SHORED OR BRACED OBTAIN APPROVAL FROM ENGINEER PRIOR TO BACKFILLING.

4. EDGES OF FOOTINGS SHALL NOT BE PLACED AT A GREATER THAN 1 (VERTICAL) TO 2 (HORIZONTAL) SLOPE WITH RESPECT TO ANY ADJACENT FOOTINGS.

5. THE CONTRACTOR SHALL SAFEGUARD AND PROTECT ALL EXCAVATIONS.

6. THE DESIGN OF THE FOUNDATION IS BASED ON SOIL INVESTIGATION REPORT PREPARED BY TESTING CO.

CONCRETE NOTES

1. ALL CONCRETE WORK SHALL CONFORM WITH THE REQUIREMENTS OF THE CONCRETE INSTITUTE (ACI) 318.98.

2. ALL CONCRETE, EXCEPT AS SPECIFICALLY NOTED HEREIN, SHALL BE STONE CONCRETE HAVING AN ULTIMATE COMPRESSIVE STRENGTH OF 3000 PSI AFTER 28 DAYS AND SHALL HAVE A MINIMUM CEMENT CONTENT OF AT LEAST 5-1/2 BAGS PER CUBIC YARD. CONCRETE FOR SLAB ON GRADE SHALL BE 4000 PSI CONCRETE. CONCRETE ON METAL DECK SHALL BE STONE AGGREGATE, 3000 PSI CONCRETE. CONCRETE FOR FOOTINGS AND FOUNDATIONS, 3000PSI.

3. (A) REINFORCING FOR REINFORCED CONCRETE ELEMENTS, UNLESS OTHERWISE SHOWN OR SPECIFIED, SHALL BE DEFORMED IN ACCORDANCE WITH ASTM-A615, GRADE 60 AND SHALL HAVE A MINIMUM YIELD POINT OF 60,000 PSI.
(B) REINFORCING FOR COLUMN TIES AND BEAM STIRRUPS SHALL BE DEFORMED IN OF 40,000 PSI.

4. WELDED WIRE FABRIC SHALL HAVE A MINIMUM ULTIMATE STRENGTH OF 70,000 PSI.

5. MINIMUM REINFORCEMENT PROTECTION, UNLESS OTHERWISE SHOWN, SHALL BE 3/4" FOR SLABS AND INTERIOR FACES OF WALLS, 1-1/2" FOR BEAMS AND GIRDERS, 2" FOR EXTERIOR FACES OF WALLS, 3" FOR FOOTINGS AND OTHER STRUCTURAL CONCRETE DEPOSITED AGAINST GROUND.

6. NO CONCRETE SHALL BE POURED UNTIL THE REQUIRED PRELIMINARY TESTS HAVE BEEN MADE AND APPROVED.

7. ALL STRUCTURAL MEMBERS SHALL BE POURED FOR THEIR FULL DEPTH IN ONE OPERATION. CONSTRUCTION JOINTS, SUCH AS DAYS POUR JOINTS, SHALL BE LOCATED IN THE MIDDLE THIRD OF THE SPAN. MAIN REINFORCING SHALL RUN THROUGH THE JOINT. ROUGHEN AND PICK JOINTS TO EXPOSE AGGREGATE FOR CHEMICAL BOND. WET THOROUGHLY AND SLUSH JOINT WITH 1:2 MORTAR, 1/2"THICK, NOT MORE THAN 5 MINUTES BEFORE FRESH CONCRETE IS POURED AGAINST SURFACE.

8. ALL OPENINGS IN FOUNDATION WALLS, UNLESS OTHERWISE SHOWN, SHALL HAVE 2 #6 BARS ADDITIONAL ON ALL SIDES AND SHALL EXTEND 2'-6" BEYOND EDGES OF OPENINGS.

9. THE CONTRACTOR SHALL COOPERATE WITH OTHER TRADES AND WHERE REQUIRED, INSTALL ALL BUILT-IN-WORK, SLEEVES, OPENINGS, INSERTS, ETC. AS REQUIRED FOR A CONCRETE JOB. LOCATION OF SLEEVES AND OPENINGS NOT SHOWN ON PLANS IS SUBJECT TO APPROVAL OF STRUCTURAL ENGINEER.

10. PROVIDE VERTICAL DOVETAIL INSERTS AT 2'-0" O.C. MAXIMUM IN ALL CONCRETE SURFACES FACED WITH 1'-3" OR GREATER HEIGHT OF BRICK OR BLOCK.

11. PROVIDE ADDITIONAL CONCRETE WHERE REQUIRED, DUE TO METAL DECK DEFLECTION AT NO EXTRA COST TO THE CLIENT.

MASONRY NOTES

1. MASONRY UNITS SHALL BE CLEARLY IDENTIFIED TO SHOW THE GRADE OF UNIT AND THE COMPRESSIVE STRENGTH WHERE CALLED FOR ON PLANS. REINFORCING BARS SHALL BE ROLLED TO IDENTIFY GRADE OF STEEL AND SIZE, AND TAGGED.

2. MATERIALS SHALL CONFORM TO THE FOLLOWING STANDARDS:

CONCRETE MASONRY UNITS	
SOLID LOADBEARING	ASTM C145
HOLLOW LOADBEARING	ASTM C90
CAST STONE	SS-S-721 1964 FED SPECIFICATION
HOLLOW NON-LOADBEARING	ASTM C 129 (NO EXPOSURE)
METAL ANCHOR AND TIES	
ZINC COATING IN IRON OR STEEL	ASTM A173 1965
ZINC COATING ON WIRE	ASTM A116 1965
COPPER COATED WIRE GRADE 30 HS	ASTM B227 1965

3. PROVIDE STANDARD GALVANIZED DUR-O-WALL REINFORCING EVERY OTHER COURSE, #9 GA. WIRE EA. WAY.

4. CONTROL JOINTS TO BE DUR-O-WALL RAPID CONTROL JOINT, OR APPROVED EQUAL.

5. AT ALL WALL OPENINGS 4'-0" OR GREATER, FILL JAMS SOLID. FILL MASONRY SOLID.

6. MORTAR TO BE TYPE "M" OR "S", ASTM C270.

7. ALL MASONRY TO BE PROPERLY BONDED AND BRACED.

8. BONDING: ALL MULTIPLE WYTHE MASONRY WALLS BY THE FOLLOWING METHODS:
(A) PREFABRICATED JOINT REINFORCEMENT MIN. ONE CROSS WIRE EVERY MAXIMUM VERTICAL SPACING NOT TO EXCEED 16 INCHES.
(B) GROUT BOND, BY PURGING BACK OF BRICK.
(C) BRICK HEADERS WHERE SHOWN ON THE DRAWINGS.

9. INTERSECTING WALLS AND PARTITIONS SHALL BE BONDED BY EITHER A TRUE MASONRY BOND BY LAYING AT LEAST 50% OF THE UNITS 3 IN. ON THE UNIT BELOW OR BY 1/4 IN. BY 1-1/2 IN. METAL ANCHORS, ENDS BENT UP 2 IN. OR CROSS PINS ANCHORS 2 FT. LONG. MAXIMUM VERTICAL SPACING 4 FT. OF OTHER EQUIVALENT.

10. WALLS AT JOINING OR INTERSECTION STRUCTURAL FRAMING SHALL BE ANCHORED WITH FLEXIBLE METAL ANCHORS TI STRUCTURAL MEMBERS.

11. CHASES NOT TO BE DEEPER THAN 1/8 THE WALL THICKNESS.

12. LINTELS TO HAVE MINIMUM BEARING ON WALL AT EACH END FOR AT LEAST 6 IN.

13. PROVIDE TEMPORARY BRACING WHEREVER NECESSARY TO SUPPORT LOADS.

14. MIX MORTAR FOR A MINIMUM OF 5 MIN. MORTAR MAY BE RE- TEMPERED BY ADDING WATER AND REMIXING. MORTAR SHALL BE USED WITHIN 2-1/2 HOURS OF INITIAL MIXING.

15. THICKNESS OF MORTAR BETWEEN MASONRY UNITS AND REINFORCEMENT MIN. 1/4 IN. BARS OR WIRE 1/4 IN. OR LESS IN DIAMETER EMBEDDED IN HORIZONTAL MORTAR JOINS SHALL HAVE AT LEAST 5/8 IN. HORIZONTAL COVER.

16. PROTECT MASONRY DURING FREEZING OR NEAR FREEZING WEATHER. NO FROZEN MATERIALS SHALL BE USED. HEAT SAND OR WATER TO REMOVE FROST. MAINTAIN MIN. 40 DEG. F. AIR TEMP. ON BOTH SIDES FOR A PERIOD OF 48 HOURS IF TYPE N OR O MORTAR IS USED. DO NOT USE CHEMICALS TO LOWER FREEZING TEMPERATURE.

17. STORE MATERIALS IN A MANNER THAT THEY ARE KEPT FREE OF EXCESSIVE DIRT AND WETNESS.

18. MASONRY WORK SHALL PROCEED ONLY AFTER CERTIFICATES IDENTIFYING MASONRY STRENGTH & TYPE HAVE BEEN REVIEWED AND APPROVED BY STRUCTURAL ENGINEER.

19. FILL MASONRY VOIDS SOLID UNDER ALL BEARING PLATES. ALSO ALL JAMBS, AND AT 2 BLOCKS MIN.

20. ALL REINFORCEMENT SPLICES, MIN. 40 RE-BAR DIAMETER.

21. SEISMIC PROVISIONS:
(A) MIN. WALL REINFORCEMENT #4 AT 48 INCHES ON CENTER, VERTICAL.
(B) DUR-O-WAL, #9 GA WIRE @16" O.C.-JOINT REINF..
(C) 2#4 AROUND OPENINGS.

SECTION 6 - WOOD & PLASTICS (CARPENTRY & FRAMING):

1. ALL NEW LUMBER TO BE GRADE MARKED PRIOR TO DELIVERY TO SITE. LUMBER GRADE TO BE TYPE AS NOTED ON PLANS. NEW PLYWOOD SHALL BEAR IDENTIFICATION AS TO GRADE, TYPE, SPECIES OR IDENTIFICATION INDEX 27-618. ALL NEW STRUCTURAL LUMBER SHALL BE STRESS-GRADED (AS PER PLANS) PRIOR TO DELIVERY TO SITE.

2. LVL MEMBERS TO BE AS PER INDUSTRY STANDARDS.

3. THE ENDS OF ALL WOOD BEAMS BEARING ON CONCRETE OR MASONRY WALLS SHALL BE FIRE CUT AS PER SECTION C27-621.0 BUILDING CODE. BEVEL TO BE 3" IN THE DEPTH OF THE BEAM.

4. ALL NEW WOOD BEAMS TO BE NEW WEST COAST HEM-FIR OF SIZE AND SPACING AS INDICATED ON PLANS.
5. ALL STRUCTURAL WOOD MEMBERS SHALL BE ENGINEERED LVL:

6. ALL TIMBER WORK TO BE DONE AS PER "NATIONAL DESIGN STANDARDS" OR "STREET GRADE LUMBER AND ITS FASTENINGS"

7. NOTCHES IN THE END OF WOOD JOISTS AND WOOD BEAMS SHALL COMPLY WITH SECTION C27-617.

8. WOOD JOISTS FRAMING FROM OPPOSITE SIDES AND SUPPORTED ON A BEAM, GIRDER OR PARTITIONS SHALL BE LAPPED AT LEAST 4" AND FASTENED, BUTTED END TO END AND TIED BY METAL STRAPS OR OTHER APPROVED MANNER

9. ALL NEW WOOD BEAMS SHALL BE BRIDGED, ONE LINE OF "X" BRIDGING FOR EACH 8' SPAN. BRIDGING SHALL BE 1 3/4" X 3" LUMBER.

11. ALL WOOD BEAMS TO BE ANCHORED.

12. APPROVED TYPE JOIST HANGERS TO BE USED WHEREVER WOOD MEMBERS FRAME INTO ONE ANOTHER WHICH ARE TO BE FLUSH TOP.

13. HEADERS SHALL BE PROVIDED OVER EACH OPENING IN EXTERIOR WALLS AND BEARING PARTITIONS, (REFER TO PLANS) WHERE THE OPENING DOES NOT EXCEED 3'-0", EACH END OF THE HEADER SHALL BE SUPPORTED ON A STUD OR FRAMING ANCHOR. WHERE THE OPENING EXCEEDS 3'-0" IN WIDTH EACH END OF THE HEADER SHALL BE SUPPORTED ON TWO STUDS.

14. PROVIDE TRIPLE HEADERS AND TRIMMERS AROUND STAIRWELL OPENING. NEW TRIPLE HEADERS AND TRIMMERS TO MATCH EXISTING FLOOR JOISTS, AS TO SIZE AND SPECIES OF WOOD, UNLESS OTHERWISE NOTED.

15. BEARING PARTITIONS ARE TO BE CONSTRUCTED REFERRING TO LEGEND FOR CONSTRUCTION.

16. STUD WALLS RESTING ON CONCRETE OR MASONRY SHALL HAVE SILLS AT LEAST 2" IN NOMINAL THICKNESS, (REFER TO DETAIL ON DRAWING). WHERE SUCH SILLS BEAR ON CONCRETE THEY SHALL BE FASTENED WITH MINIMUM 1/2" DIAMETER BOLTS EMBEDDED AT LEAST 8". EACH SILL PIECE SHALL HAVE AT LEAST TWO ANCHOR BOLTS, WITH ONE BOLT LOCATED AT LEAST 1" FROM EACH END OF THE PLATE, AND WITH INTERMEDIATE SPACING NOT MORE THAN 8 FEET. WHERE SUCH SILLS BEAR ON MASONRY, THEY SHALL BE ANCHORED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS.

17. STUD PARTITIONS THAT REST DIRECTLY OVER EACH OTHER AND ARE NOT PARALLEL TO FLOOR JOISTS OR BEAMS MAY EXTEND DOWN BETWEEN THE JOISTS AND REST ON THE TOP PLATE OF THE PARTITION, PARTITION GIRDER, OR FOUNDATION BELOW, OR MAY BE CONSTRUCTED ON SILL PLATES RUNNING ON TOP OF THE BEAMS OR JOISTS.

18. LOAD BEARING PARTITIONS PERPENDICULAR TO JOISTS SHALL NOT BE OFFSET FROM SUPPORTING GIRDERS, WALLS OR PARTITIONS, UNLESS OTHERWISE NOTED ON PLANS.

19. DOUBLE FLOOR JOIST SHALL BE PROVIDED UNDER PARTITIONS RUNNING PARALLEL TO JOISTS.

20. INTERIOR WALLS AND BEARING PARTITIONS WITH OPENINGS BETWEEN 3'-6" AND 6'-0" SHALL BE PROVIDED WITH DOUBLE STUDS AT THE SIDES OF OPENING; TRIPLE STUDS SHALL BE PROVIDED AT THE UNTIL ALL DUCTS, PIPES, ETC., ARE IN PLACE.

21. ALL STUDS IN EXTERIOR WALLS AND IN BEARING PARTITIONS SHALL BE CAPPED WITH DOUBLE TOP PLATES INSTALLED TO PROVIDE OVERLAPPING AT CORNERS AND AT INTERSECTION WITH OTHER WALLS AND BEARING PARTITIONS. END JOINTS IN DOUBLE TOP PLATES SHALL BE OFFSET AT LEAST 24". FOR PLATFORM FRAME CONSTRUCTION, STUDS SHALL REST ON A SINGLE BOTTOM PLATE.

22. EXTERIOR STUD WALLS SHALL BE BRACED BY 1" X 4" CONTINUOUS DIAGONAL STRIPS LET INTO THE FACE OF THE STUDS AND INTO THE TOP AND BOTTOM PLATES AT EACH CORNER OF THE BUILDING. BRACING MAY ALSO BE PROVIDED BY WOOD BOARD SHEATHING OF 1" NOMINAL THICKNESS, APPLIED DIAGONALLY.

23. CORNER POSTS SHALL BE THREE (3) STUD MEMBERS.

24. FRAME BUILDINGS
(a) CORNER POSTS SHALL BE A MINIMUM THREE (3) STUD MEMBERS. PROVIDE DIAGONAL LET_IN BRACING FOR ALL TWO STORY FRAME EXTENSIONS. MINIMUM 1" X 6" TO BE LAID AT A 40˙_60˙ ANGLE. DIAGONAL BRACING SHALL BE PROVIDED AT EACH TIER OF FRAMING AND AT EACH SIDE OF CORNERS.
(b) TWO (2) 2" X FRAMING SILLS OVER FOUNDATION WALLS TO BE ANCHORED TO FOUNDATION WALLS WITH 2"F X 16" LONG BOLTS 8'-0" O.C.

25. STUDS SHALL BE THE MINIMUM GRADE OR BETTER THAN THE VARIOUS SPECIES ESTABLISHED.

26. NEW CLOTHES CLOSETS SHALL BE PROVIDED WITH ADJUSTABLE LENGTH POLES WITH SHELVING WALL BRACKETS. PROVIDE TWO ROWS OF CLEAR PINE SHELVING 12" WIDE IN EACH CLOSET. LINEN CLOSET PROVIDE A MINIMUM OF FIVE ROWS OF ADJUSTABLE CLEAR PINE SHELVING.

27. INSTALL KITCHEN, (WALL AND BASE CABINETS), DESIGN, MATERIAL AND CONSTRUCTION, AS PER OWNER'S SELECTION. CONTRACTOR TO CHECK AND VERIFY CONDITIONS AND DIMENSIONS PRIOR TO FABRICATION OF CABINETS.

28. ALL WOODWORK WITHIN 1'-0" OF COOKING RANGES SHALL BE FIRE-RETARDED WITH #26 GA. METAL. MAINTAIN 2'-0" CLEAR WORKING SPACE ABOVE COOKING APPARATUS. FIRE-RETARD UNDERSIDE OF CABINET IF LESS THAN 3'-0" ABOVE RANGE.

29. ALL EXISTING FLOORS TO BE LEVELED AND PREPARED TO RECEIVE NEW FINISH FLOOR.

30. ALL WORK REQUIRING PAINTING AND FINISHING SHALL BE KEPT CLEAN, FREE FROM WARP, OPEN JOINTS AND OTHER DEFECTS. NAIL HEADS IN FINISHED WORK SHALL BE NAIL SET. HOLES FILLED WITH PLASTIC WOOD AND SANDED. SCREWS SHALL BE COUNTER SUNK.

31. PROVIDE MEDICINE CABINET WITH LIGHT FIXTURE AND RECEPTACLE IN BATHROOM, AS SELECTED BY OWNER, IN RESIDENTIAL BATHROOMS.

32. PROVIDE AND INSTALL VANITY WITH BASE CABINET IN NEW BATHROOMS, AS SELECTED BY OWNER, IN RESIDENTIAL BATHROOMS.

33. PROVIDE AND INSTALL CLOTHES HAMPERS IN NEW BATHROOMS, AS SELECTED BY OWNER, IN RESIDENTIAL BATHROOMS.

34. TREADS AND LANDINGS SHALL BE BUILT OF/OR SURFACED WITH NON-SKID MATERIALS.

35. MINIMUM STAIR HEADROOM SHALL BE MAINTAINED: 7'-0" (COMMERCIAL) 6'-8" (RESIDENTIAL).

SECTION 7 - THERMAL & MOISTURE PROTECTION

1. SHEATHING
COVER ALL SHEATHING FOR EXTERIOR WALLS AND ROOF WITH MINIMUM 15 POUNDS FELT WITH A MINIMUM 4" LAP. SHEATHING SHALL COVER AND BE WELL SPIKED INTO WOOD FOUNDATION SILL. WALL AND ROOF SHEATHING TO BE MINIMUM 3/4" EXTERIOR GRADE PLYWOOD, UNLESS OTHERWISE NOTED.

2. EXISTING INTERIOR SURFACE FINISH OF EXTERIOR WALLS TO BE 5/8" SHEETROCK (REFER TO DETAIL).

3. INTERIOR WALLS AND CEILING, UNLESS OTHERWISE NOTED, SHALL BE FINISHED WITH 5/8" SHEETROCK. FIRE RESISTIVE RATING TO BE MAINTAINED WHERE APPLICABLE. SHEETROCK SHALL BE LAID UP AS PER MANUFACTURERS SPECIFICATIONS. ALL NEW WALLS FACING BATHROOMS, TOILETS, AND LAUNDRY COMPARTMENTS, SHALL BE FINISHED WITH WATER RESISTANT SHEETROCK, FROM FLOOR TO CEILING.

4. PROVIDE METAL CORNER BEADS AT CORNERS OF ALL NEW SHEETROCK PARTITIONS.

5. EXTERIOR WALLS TO BE PROVIDED WITH FULL THICKNESS INSULATION BETWEEN WOOD STUDS IN CONFORMANCE WITH THE NEW YORK STATE ENERGY CONSERVATION CONSTRUCTION CODE, UNLESS OTHER-WISE NOTED.

6. INSULATION MATERIALS
ALL INSULATION SHALL BE NON-COMBUSTIBLE MATERIAL. ALL MATERIAL, COVERINGS, VAPOR BARRIERS AND ADHESIVES SHALL BE AND HAVE A FLAME SPREAD RATING NO HIGHER THAN 25 AND A SMOKE DEVELOPED RATING NO HIGHER THAN 50.

7. ALL COMBUSTIBLE INSULATION, ACOUSTICAL MATERIALS, EXPANSION JOINT FILLERS WHERE REQUIRE TO BE FIREPROOFED. NO COMBUSTIBLE INSULATION SHALL BE USED.

8. PIPING INSULATION
ALL NEW PIPING INSTALLED TO SERVICE BUILDINGS AND WITHIN BUILDINGS SHALL BE THERMALLY INSULATED AS PER TABLE 4-5 OF THE NEW YORK STATE ENERGY CONSERVATION CONSTRUCTION CODE

9. ALL PLUMBING STACKS, EXHAUST FAN ASSEMBLIES, APPROVED TYPE GAS VENTS, CHIMNEYS, ETC., THAT PIERCE THE ROOF ARE TO BE PROPERLY FLASHED AND MADE WEATHER TIGHT. CONTRACTOR IS TO INSURE THAT THE DESIGNED DIRECTIONAL FLOW OF ROOF DRAINAGE IS MAINTAINED AND NOT IMPEDED BY ANY MATERIAL OR EQUIPMENT THAT PIERCES THE ROOF IN ITS PATH. AT NO TIME IS THERE TO BE ANY BLOCKAGE TO THE FLOW OF STORM WATER ON THE ROOF, CONTRACTOR IS TO REFER TO PLANS FOR FLOW OF DRAINAGE BEFORE PROCEEDING WITH ANY WORK AND BE RESPONSIBLE FOR NOTIFYING THE OWNER IN THE EVENT THERE WILL BE A CONFLICT BETWEEN THE FLOW OF DRAINAGE AND THE INSTALLATION OF ANY MECHANICAL EQUIPMENT AT ROOF.

10. PLACE CONTINUOUS FLASHING UNDER ALL COPINGS, CORNICES, BELT COURSES, AND MULTIPLE PIECE SILLS TO PREVENT ENTRY OF WATER. FLASHING TO BE HIGH GRADE RUST RESISTANT MATERIAL.

INSPECTIONS

1. PRIOR TO BEGINNING ANY WORK, THE OWNER SHALL RETAIN ON BEHALF OF THE OWNER THE SERVICES OF A LICENSED PROFESSIONAL ENGINEER OR TESTING AGENCY WHO SHALL HAVE PROVEN EXPERIENCE ACCEPTABLE TO THE OWNER AND ARCHITECT. MINIMUM REQUIRED QUALIFICATIONS SHALL INCLUDE A PROFESSIONAL LIABILITY INSURANCE COVERAGE OF 1 MILLION DOLLARS AND A MINIMUM PROVEN EXPERIENCE OF 5 YEARS WITH SIMILAR WORK.

2. 2. THE CONTRACTOR'S ENGINEER SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS. HE SHALL PROVIDE INSPECTION SERVICES AS FOLLOWS:
(A) CONCRETE CAST-IN-PLACE
(B) WOOD - INSTALLATIONS OF PREFABRICATED I-JOISTS
(C) SUBGRADE INSPECTION
(D) SUBSURFACE INVESTIGATIONS (BORING/TEST PITS)
(E) VERTICAL MASONRY FOUNDATION ELEMENTS
(F) MECHANICAL SYSTEMS
(G) EXCAVATIONS - SHEETING, SHORING, AND BRACING
(H) DRAINAGE DISPOSAL SYSTEMS AND DETENTION FACILITIES
(I) FIRE RESISTANT PENETRATIONS AND JOINTS
(J) CONCRETE SAMPLING
(K) FOOTING AND FOUNDATION
(L) LOWEST FLOOR ELEVATION
(M) ENERGY CODE COMPLIANCE INSPECTIONS
(N) FIRE RESISTANCE RATED CONSTRUCTION

3. THE CONTRACTOR SHALL PREPARE PLANS, CALCULATIONS, AND NOTES IN THE FORM OF SHOP DRAWINGS, FOR ALL ITEMS OF WORK WHICH DIFFER FROM WHAT IS SHOWN ON THE STRUCTURAL DRAWINGS DUE TO FIELD CONDITIONS. HE SHALL ALSO PREPARE PLANS IN THE FORM OF SHOP DRAWINGS, CALCULATIONS AND NOTES FOR ALL TEMPORARY SHORES AND BRACES AND CLEARLY INDICATE METHOD OF INSTALLATION, SEQUENCE OF OPERATIONS, AND QUALITY CONTROL.

4. THESE SHOP DRAWINGS SHALL BE REVIEWED BY THE ENGINEER OF RECORD AND ARCHITECT PRIOR TO CONSTRUCTION. WORK SHALL BE EXECUTED FROM REVIEWED SHOP DRAWINGS ONLY.

5. COPIES OF SUCH DRAWINGS WHICH INCLUDE THE ARCHITECT'S COMMENTS SHALL BE FILED WITH THE DEPARTMENT OF BUILDINGS ADDITIONALLY, AT COMPLETION OF WORK, ALL INSPECTION REPORTS PREPARED BY THE INSPECTION ENGINEER SHALL BE FILED WITH THE DEPARTMENT OF BUILDINGS.

6. THE INSPECTION ENGINEER SHALL DETERMINE THE FREQUENCY OF INSPECTIONS NEEDED AND WHETHER THEY SHOULD INSPECT THE SITE PERSONALLY OR SEND A PERSON UNDER THEIR DIRECT SUPERVISION.

7. THE INSPECTION ENGINEER, SHALL MAINTAIN A LOG IN HIS OR HER OFFICE WHICH INCLUDES THE FOLLOWING INFORMATION:
(i) ADDRESS OF THE PREMISES, JOB NUMBER, CONTRACTOR NAME AND ADRESS, AND

(ii) DATE AND TIME OF EACH INSPECTION INCLUDING
(A) NAMES OF PERSONNEL WHO INSPECTED THE SITE, AND
(B) ANY NAMES OF PERSONNEL WHO INSPECTED THE SITE, AND RELATING TO ANY OF THE FOLLOWING:
(1) DEVIATIONS FROM THE CONTRACT DOCUMENTS.
(2) ANTICIPATED FIELD CONDITIONS;
(3) PROPER EXECUTION OF THE WORK;
(4) GOOD ENGINEERING PRACTICE;
(5) SAFE JOB-SITE CONDITIONS;
(6) PRECAUTIONS TAKEN TO MAINTAIN SAFE CONDITIONS IF WORK IS STOPPED FOR ANY REASON.

(ii) THE DATE OF AND PARTICIPANTS IN ANY CONVERSATIONS WITH THE INSPECTION ENGINEER OCCURING OFF-SITE AND RELATING TO ANY SIGNIFICANT OBSERVATIONS OR INSTRUCTIONS.

8. THE INSPECTION ENGINEER SHALL RETAIN A COPY OF THE DOCUMENTS DESCRIBED ABOVE IN HIS OR HER OFFICE AND SHALL PROVIDE A COPY TO THE CONTRACTOR AND/OR OWNER TO BE KEPT AT THE CONSTRUCTION SITE.

9. THE INSPECTION ENGINEER SHALL REPORT UNSAFE CONDITIONS TO THE DEPARTMENT OF BUILDINGS AND/OR ANY OTHER AFFECTED PARTIES OR AGENCIES.

10. UPON REQUEST OF THE DEPARTMENT, THE INSPECTION ENGINEER SHALL MAKE AVAILABLE FOR REVIEW BY THE DEPARTMENT DOCUMENTS AND THE LOG DESCRIBED ABOVE.

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cell. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

243 MADISON ST.
MAMARONECK, NY 10543

DRAWING TITLE

STRUCTURAL NOTES

B-SCAN JOB STICKER

NYC DOB IDENTIFICATION NUMBER

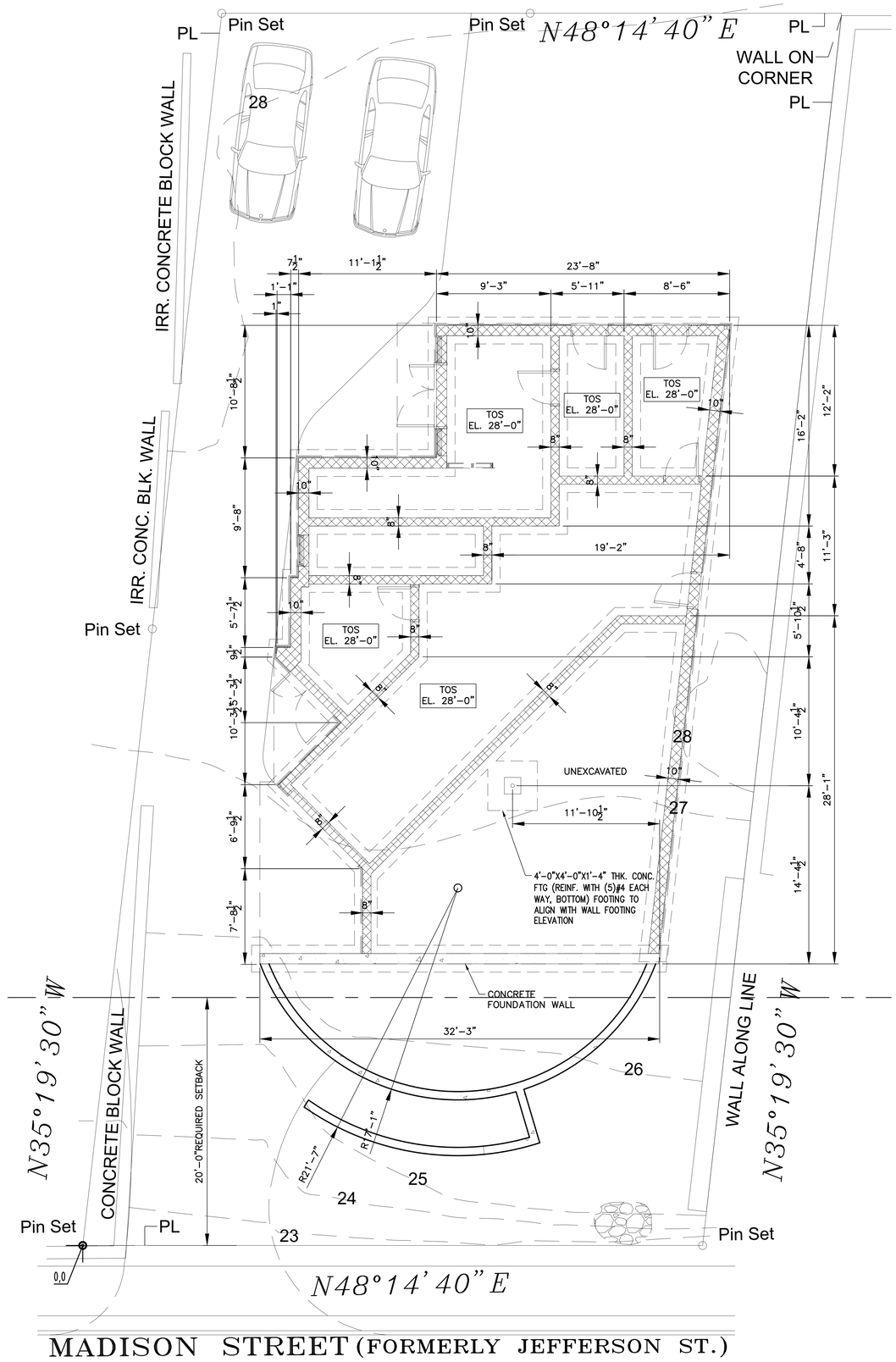
SEAL & SIGNATURE

REGISTERED ARCHITECT AYSEVER YAZICI STATE OF NEW YORK

DATE: 09/20/20
PROJECT #: 09-2019
DRAWN BY: RU
CHECK BY: AY

DWG No.
S 101 .00

SHEET 20 of 36



FOUNDATION PLAN NOTES:

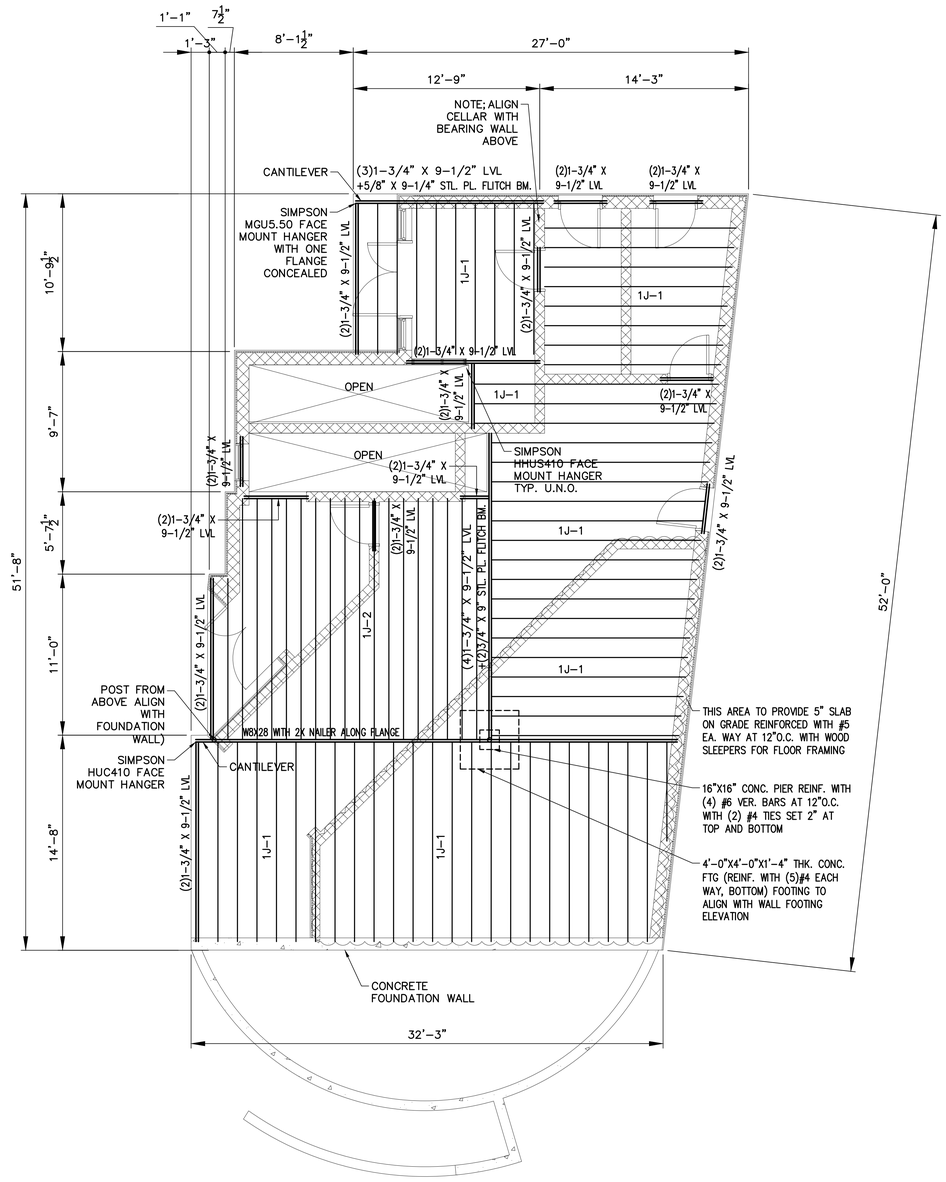
- FOOTINGS SHALL BEAR ON COMPACTED SOIL HAVING A SAFE MINIMUM BEARING CAPACITY OF 1.5 TONS PER SQ. FT. OR INPLACE ROCK.
- SLAB–ON–GRADE SHALL BE 6" STONE CONCRETE ON A 6" LAYER OF CRUSHED STONE AND VAPOR BARRIER
- ALL CONCRETE SLAB ON GRADE SHALL BE NORMAL WEIGHT (STONE) CONCRETE HAVING A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 4000 PSI AFTER 28 DAYS.
- NON–RETAINING FOUNDATION WALLS ARE REINFORCED AND INSULATED CMU. WHERE FOUNDATION IS OVER ROCK OR OVER EXCAVATE ROCK, ADD 12" OF COMPACTED SOIL BETWEEN FOOTING AND LEDGE.

LEGEND

SP/SPA	STEEL POST/ STEEL POST ABOVE
	10" OR 8" CMU
	CONCRETE WALL
	COMPOSITE WALL

1 / S-102 **FOUNDATION PLAN**

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



1ST FLOOR FRAMING PLAN NOTES

- FIRST FLOOR SHEAHING SHALL BE ¾" TONGUE AND GROOVE PLYWOOD.
- WOOD POST MINIMUM SIZE SHALL BE (2)–2X6 IN 2X6 STUD WALL AND (3)–2X4 IN 2X4 STUD WALL, UNLESS OTHERWISE NOTED. PROVIDE POST TO SUPPORT ALL BEAM ENDS (NOT SHOWN ON PLAN FOR CLARITY).
- "1J–1" INDICATES 9–1/2" TJI 230 FLOOR JOISTS AT 16"O.C. WITH SIMPSON IUS2.37/9.5 FACE MOUNT HANGER
- "1J–2" INDICATES 9–1/2" TJI 230 FLOOR JOISTS AT 12"O.C. WITH SIMPSON IUS2.37/9.5 FACE MOUNT HANGER
- NOTE ALL CMU WALLS RETAINING SOIL SHALL BE GROUTED SOLID.
- PROVIDE CMU REINFORCEMENT AS FOLLOWS:
  - –#5 VERTICAL BARS AT 48"O.C., CENTERED IN CELLS.
  - –AT WALLS ENDS, CORNERS AND EACH SIDE OF CONTROL JOINTS PROVIDE (2)#5 BARS.

2 / S-102 **FIRST FLOOR FRAMING PLAN**

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

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cell. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

243 MADISON ST.
MAMARONECK, NY 10543

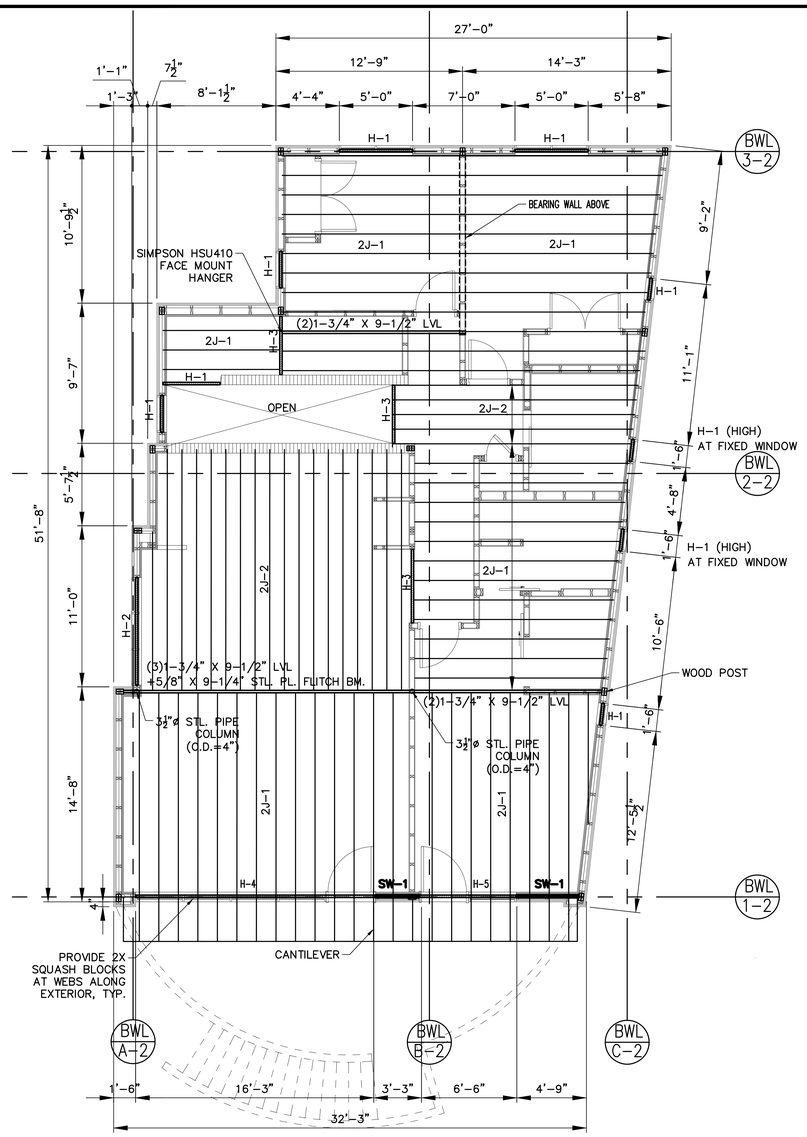
DRAWING TITLE
STRUCTURAL PLANS FOUNDATION AND FIRST FLOOR

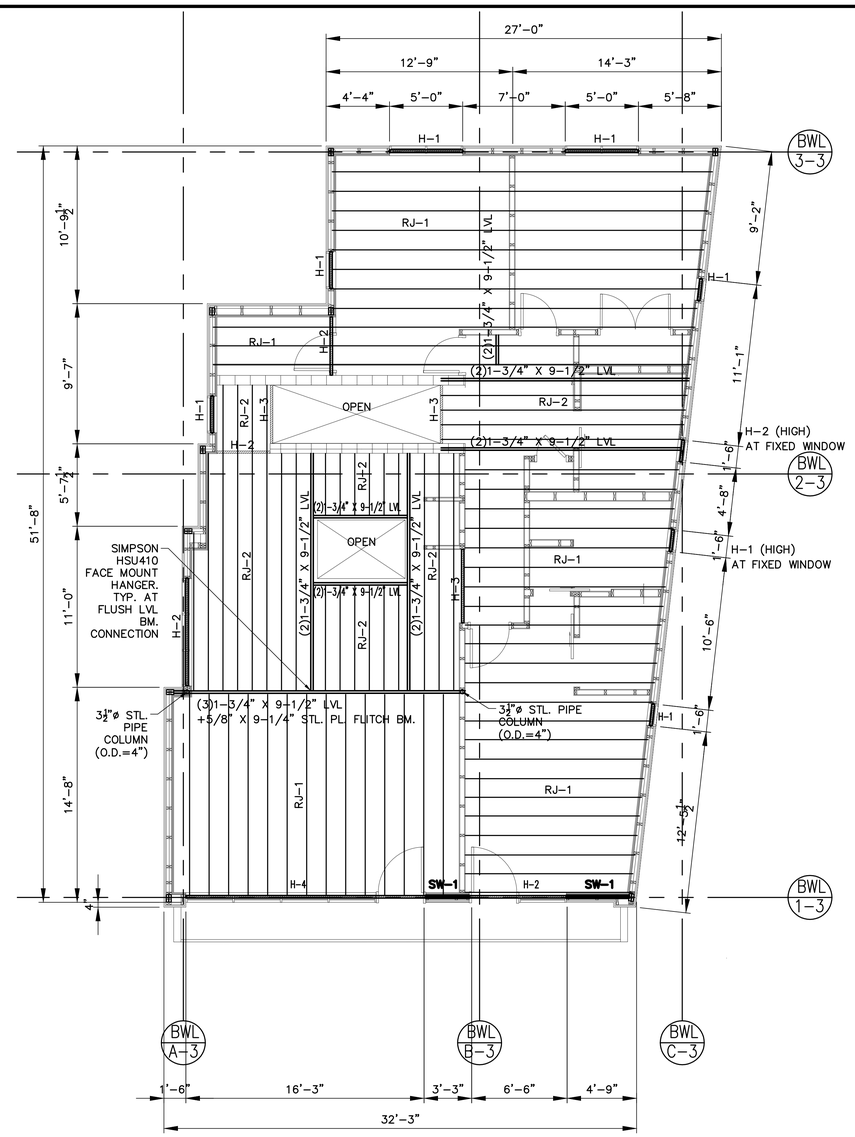
B–SCAN JOB STICKER

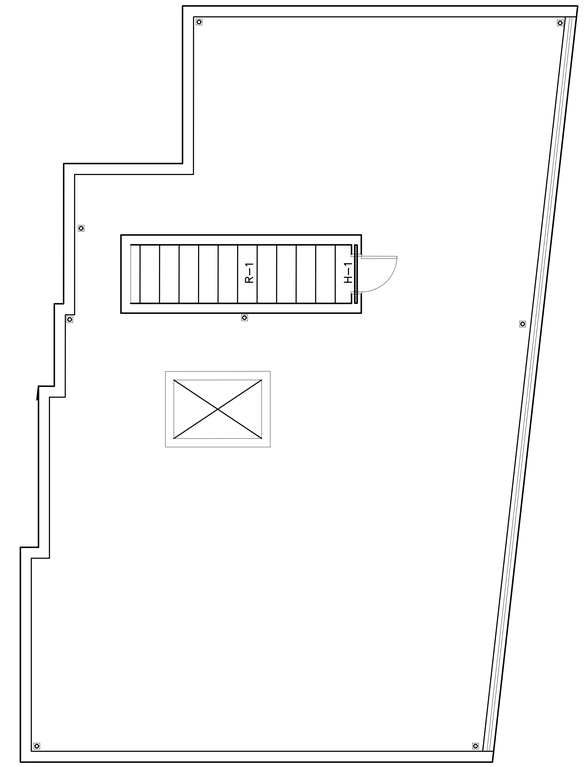
NYC DOB IDENTIFICATION NUMBER
SEAL & SIGNATURE

DATE: 9/26/19
PROJECT #: 09-2019
DRAWN BY: RU
CHECK BY: AY

DWG No. S 102 .00
SHEET 21 of 36







STAIR ROOF FRAMING NOTES

- ROOF SHEAHING SHALL BE 1/2" MIN. PLYWOOD.
- WOOD POST MINIMUM SIZE SHALL BE (2)-2X6 IN 2X6 STUD WALL AND (3)-2X4 IN 2X4 STUD WALL, UNLESS OTHERWISE NOTED. PROVIDE POST TO SUPPORT ALL BEAM ENDS (NOT SHOWN ON PLAN FOR CLARITY).
- "H-1" INDICATES (2) 2X6 HDR. W/ (1) JACK STUD AND (1) KING STUD EA. END.
- "R-1" INDICATES (2) 2X6 RAFTERS AT 16"O.C.

3 / S-103 **STAIR ROOF FRAMING PLAN**
SCALE: 1/4"=1'-0"

2ND FLOOR FRAMING PLAN NOTES

- SECOND FLOOR SHEATHING SHALL BE ¾" TONGUE AND GROOVE PLYWOOD.
- WOOD POST MINIMUM SIZE SHALL BE (2)-2X6 IN 2X6 STUD WALL AND (3)-2X4 IN 2X4 STUD WALL, UNLESS OTHERWISE NOTED. PROVIDE POST TO SUPPORT ALL BEAM ENDS (NOT SHOWN ON PLAN FOR CLARITY).
- "H-1" INDICATES (2) 2X6 HDR. W/ (1) JACK STUD AND (1) KING STUD EA. END.
- "H-2" INDICATES (2) 2X8 HDR. W/ (1) JACK STUD AND (2) KING STUD EA. END.
- "H-3" INDICATES (2) 2X10 HDR. W/ (1) JACK STUD AND (1) KING STUD EA. END.
- "H-4" INDICATES (2) 1 3/4"X14" LVL W/ 3 1/2"X7" PSL JACK STUD AND (4) KING STUDS EA. END.
- "H-5" INDICATES (2) 2X12 W/ (2) JACK STUDS AND (2) KING STUDS EA. END.
- "2J-1" INDICATES 9-1/2" TJI 230 FLOOR JOISTS AT 16"O.C. WITH SIMPSON IUS2.37/9.5 FACE MOUNT HANGER
- "2J-2" INDICATES 9-1/2" TJI 230 FLOOR JOISTS AT 12"O.C. WITH SIMPSON IUS2.37/9.5 FACE MOUNT HANGER
- [=======] INDICATES APPROXIMATE EXTENT OF BEARING WALL ABOVE. PROVIDE 2X SQUASH BLOCKING IN JOISTS WEBS AND LVL BLOCKING BETWEEN FLOOR JOISTS TO ALIGN W/ BEARING WALL ABOVE.
- ▬▬▬ "SW-1" INDICATES PLYWOOD SHEARWALL, SEE SCHEDULE BELOW. PROVIDE HOLDOWN DEVICE AT EACH END OF EACH SHEARWALL SEGMENT.

BRACED WALL LINE SCHEDULE
(REF. NY RESIDENTIAL BUILDING CODE SECTION R602.10)

BRACING LINE	SPACING	BRACING METHOD	REQUIRED L.F. OF BRACING	PROVIDED L.F. OF BRACING
BWL/1-2	29'-0"	ENGR. SW	N/A	N/A
BWL/2-2	29'-0"	GB	20.37'	26'-9"
BWL/3-2	22'-0"	CS-WSP	7.87'	16'-5"
BWL/A-2	20'-3"	CS-WSP	7.41'	30'-0"
BWL/B-2	20'-3"	GB	14.85'	40'-5"
BWL/C-2	13'-6"	CS-WSP	4.96'	40'-5"

NOTES

1. ALL BRACED WALL PANELS USING PLYWOOD/OSB SHEATHING SHALL HAVE 2X BLOCKING ALONG THE HORIZONTAL PANEL JOINTS PER THE NY RESIDENTIAL BUILDING CODE SECTION R602.10.10
2. ALL BRACED WALL PANELS USING METHOD "GB" SHALL HAVE PANELS INSTALLED HORIZONTALLY. IF PANELS ARE INSTALLED VERTICALLY, PROVIDE 2X BLOCKING ALONG THE HORIZONTAL PANEL JOINTS PER NY RESIDENTIAL BUILDING CODE SECTION R602.10.10.

1 / S-103 **2ND FLOOR FRAMING PLAN**
SCALE: 1/4"=1'-0"

ROOF FRAMING PLAN NOTES

- ROOF SHEATHING SHALL BE ¾" MIN. PLYWOOD.
- WOOD POST MINIMUM SIZE SHALL BE (2)-2X6 IN 2X6 STUD WALL AND (3)-2X4 IN 2X4 STUD WALL, UNLESS OTHERWISE NOTED. PROVIDE POST TO SUPPORT ALL BEAM ENDS (NOT SHOWN ON PLAN FOR CLARITY).
- "H-1" INDICATES (2) 2X6 HDR. W/ (1) JACK STUD AND (1) KING STUD EA. END.
- "H-2" INDICATES (2) 2X8 HDR. W/ (2) JACK STUD AND (2) KING STUD EA. END.
- "H-3" INDICATES (2) 2X10 HDR. W/ (1) JACK STUD AND (1) KING STUD EA. END.
- "H-4" INDICATES (2) 1 3/4"X14" LVL W/ 3 1/2"X7" PSL JACK STUD AND (4) KING STUDS EA. END.
- "RJ-1" INDICATES 9-1/2" TJI 230 ROOF JOISTS AT 16"O.C. WITH SIMPSON IUS2.37/9.5 FACE MOUNT HANGER
- "RJ-2" INDICATES 9-1/2" TJI 230 ROOF JOISTS AT 12"O.C. WITH SIMPSON IUS2.37/9.5 FACE MOUNT HANGER
- [=======] INDICATES APPROXIMATE EXTENT OF BEARING WALL ABOVE.
- ▬▬▬ "SW-1" INDICATES PLYWOOD SHEARWALL, SEE SCHEDULE BELOW. PROVIDE HOLDOWN DEVICE AT EACH END OF EACH SHEARWALL SEGMENT.

BRACED WALL LINE SCHDULE
(REF. NY RESIDENTIAL BUILDING CODE SECTION R602.10)

BRACING LINE	SPACING	BRACING METHOD	REQUIRED L.F. OF BRACING	PROVIDED L.F. OF BRACING
BWL/1-3	29'-0"	ENGR. SW	N/A	N/A
BWL/2-3	29'-0"	GB	8.77'	23'-4"
BWL/3-3	22'-0"	CS-WSP	3.29	16'-5"
BWL/A-3	20'-3"	CS-WSP	3.06'	30'-0"
BWL/B-3	20'-3"	GB	6.13'	36'-7"
BWL/C-3	13'-6"	CS-WSP	2.18'	45'-4"

NOTES

1. ALL BRACED WALL PANELS USING PLYWOOD/OSB SHEATHING SHALL HAVE 2X BLOCKING ALONG THE HORIZONTAL PANEL JOINTS PER THE NY RESIDENTIAL BUILDING CODE SECTION R602.10.10
2. ALL BRACED WALL PANELS USING METHOD "GB" SHALL HAVE PANELS INSTALLED HORIZONTALLY. IF PANELS ARE INSTALLED VERTICALLY, PROVIDE 2X BLOCKING ALONG THE HORIZONTAL PANEL JOINTS PER NY RESIDENTIAL BUILDING CODE SECTION R602.10.10.

2 / S-103 **ROOF FRAMING PLAN**
SCALE: 1/4"=1'-0"

SHEARWALL SCHEDULE

MARK	EXTERIOR	SHEATHING PANEL		ANCHORAGE OF P.T. SILL PLATE TO TOP OF FOUND'N WALL/ HAUNCH SLAB	NAILING PATTERN "A"	NAILING PATTERN "B"	SIMPSON HOLDOWN			
		THICKNESS	BOTH SIDES OF WALL		SHEATHING PANEL EDGES TO VER. STUDS AND HOR. 2X BLOCKING	2X BOTTOM PLATE AND FLOOR SHEATHING TO LVL BLOCKING/ LVL	MODEL	ANCHOR TO FOUND'N/ WALL BELOW	DRILLED IN AND EPOXY ANCHORED EMBEDMENT DEPTH (MIN.)	END POST SCREWS/ WOOD POST SIZE (MIN.)
SW-1	EXT	15/32"	N	1/2"ø HOOKED ANCHOR RODS AT 4'-0" O.C.	8d AT 6"O.C.	10D AT 6"O.C.	HDUB-5D 52.5	7/8"ø ATR	15"	(20)-5D5 1/4X2 1/2//(2)-2X4

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cell. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

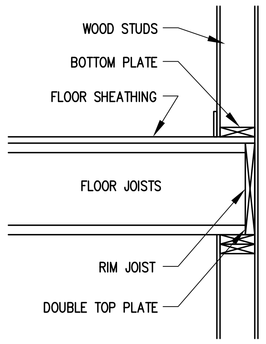
243 MADISON ST.
MAMARONECK, NY 10543

DRAWING TITLE
STRUCTURAL PLANS
SECOND FLOOR
AND ROOF

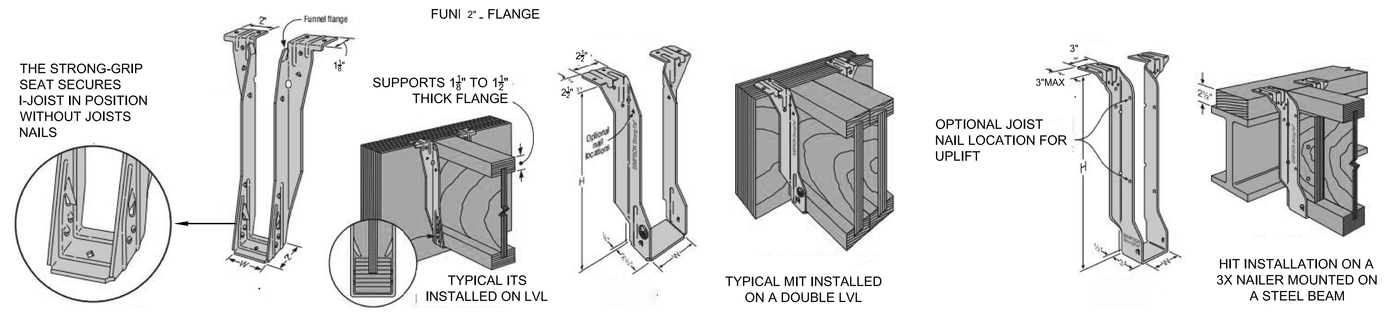
B-SCAN JOB STICKER

NYC DOB IDENTIFICATION NUMBER
SEAL & SIGNATURE

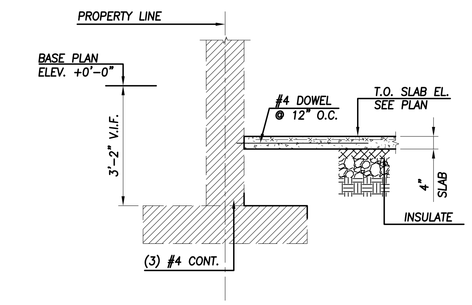
DATE: 9/26/19
PROJECT #: 09-2019
DRAWN BY: RU
CHECK BY: AY
DWG No. S 103 .00
SHEET 22 of 36



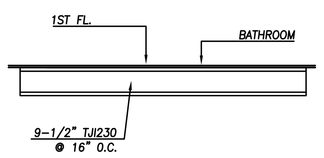
1 / 104 PLATFORM FRAMING DETAIL (TYP.)
SCALE: 1"=1'-0"



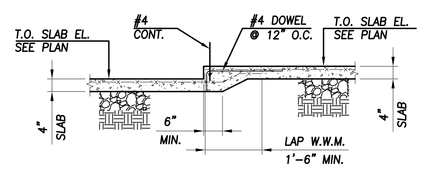
2 / 104 TOP FLASH HANGER
SCALE: N.D.S.



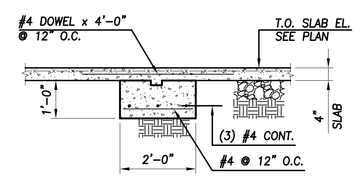
3 / 104 SECTION
SCALE: 1/2"=1'-0"



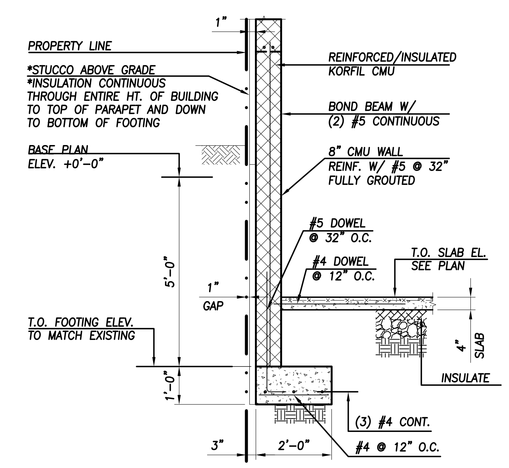
4 / 104 SECTION
SCALE: 1/2"=1'-0"



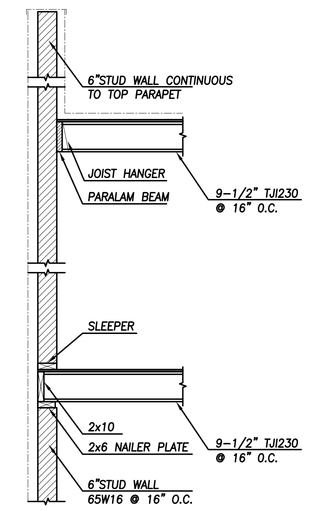
5 / 104 SECTION @ PARKING
SCALE: 1/2"=1'-0"



6 / 104 SECTION CELLAR SLAB (AS NEEDED)
SCALE: 1/2"=1'-0"



7 / 104 SECTION @ CELLAR
SCALE: 1/2"=1'-0"



8 / 104 EXTERIOR WALL SECTION
SCALE: 1/2"=1'-0"

9 / 104 TYPICAL CS-WSP/WSP BRACING PANEL DETAIL
SCALE: 1/2"=1'-0"

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cel. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

243 MADISON ST.
MAMARONECK, NY 10543

DRAWING TITLE
STRUCTURAL DETAILS

B-SCAN JOB STICKER

NYC DOB IDENTIFICATION NUMBER

SEAL & SIGNATURE

DATE: 09/20/20
PROJECT #: 09-2019
DRAWN BY: RU
CHECK BY: AY

DWG NO.
S 104 .00

SHEET 23 of 36

NOTES

GENERAL NOTES - HVAC

1. THE SCOPE OF WORK SHALL INCLUDE PROVIDING HEATING, VENTILATING AND AIR CONDITIONING FOR THE PREMISES IN ACCORDANCE WITH THESE DRAWINGS AND SPECIFICATIONS.
2. THE CONTRACTOR WILL BE HELD TO HAVE VISITED THE PREMISES PRIOR TO SUBMITTING HIS BID AND TO HAVE THOROUGHLY EXAMINED ALL EXISTING CONDITIONS INCLUDING ENTRANCE AND EXIT FACILITIES, HOURS PERMITTED BY THE BUILDING FOR THE TRANSPORTATION OF EQUIPMENT AND MATERIALS, AND SATISFIED HIMSELF AS TO THE CONDITIONS AND WORK SHOWN ON THE PLANS OF THE ARCHITECT WHICH WOULD IN ANY MANNER AFFECT THE WORK UNDER HIS CONTRACT AND ITS COMPLETION DATE. NO LATTER CLAIM FOR EXTRA COMPENSATION FOR WORK WHICH COULD HAVE BEEN FORESEEN BY SUCH VISIT OR INVESTIGATION SHALL BE RECOGNIZED. THE CONTRACTOR SHALL EXAMINE WALL EXISTING STRUCTURAL CONDITIONS, TAKE ALL NECESSARY MEASUREMENTS FOR HIS WORK AT THE SITE AND SHALL VERIFY ALL DIMENSIONS GIVEN ON THE DRAWINGS OF THE WORK AND THE REFERENCE DRAWINGS. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE AND LATER CLAIMS FOR LABOR, EQUIPMENT OR MATERIALS REQUIRED OR FOR DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN HAD SUCH AN EXAMINATION BEEN MADE, WILL NOT BE RECOGNIZED.
3. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS NECESSARY FOR THE INSTALLATION OF THE WORK AND FOR ALL CERTIFICATES OF INSPECTION AND APPROVAL REQUIRED BY THE AUTHORITIES HAVING JURISDICTION. NO WORK IS TO PROCEED WITHOUT A BUILDING DEPARTMENT PERMIT.
4. ENTIRE INSTALLATION SHALL BE COMPLETE, READY FOR OPERATION IN ACCORDANCE WITH THE NEW YORK STATE BUILDING CODE, LOCAL CODES AND ALL OTHER RULES AND REGULATIONS PERTAINING TO THIS WORK.
5. THE CONTRACTOR SHALL GUARANTEE ALL WORK PERFORMED AND MATERIAL INSTALLED BY HIM TO BE FREE FROM INHERENT DEFECTS, AND SHALL REPAIR OR REPLACE ANY DEFECTIVE MATERIALS OR WORKMANSHIP, FREE OF COST TO OWNER, FOR A PERIOD OF ONE(1) YEAR FROM THE DATE OF PLACING IN OPERATION AND ACCEPTANCE BY THE OWNER. PROVIDE ADDITIONAL FOUR (4) YEAR COMPRESSOR WARRANTY.
6. THE CONTRACTOR SHALL MAINTAIN SUCH INSURANCE AS WILL PROTECT HIMSELF AND/OR THE OWNER FROM DIRECT, ASSUMED AND CONTINGENT LIABILITY FROM CLAIMS FOR DAMAGES, FOR PERSONAL INJURIES, INCLUDING DEATH, AND/OR DAMAGE TO PROPERTY, WHICH MAY ARISE FROM OPERATION UNDER HIS CONTRACT WHETHER SUCH OPERATIONS BE BY HIMSELF, OR ANY SUBCONTRACTOR, OR ANYONE DIRECTLY EMPLOYED BY WITHER OF THEM.
7. ANY LOSS OF, OR DAMAGE TO ANY EQUIPMENT, OR MATERIALS SUPPLIED BY THE CONTRACTOR, OR BY THE BUILDING FOR THE INSTALLATION SHALL BE THE SOLE RESPONSIBILITY OF THIS CONTRACTOR, UNTIL SUCH TIME AS COMPLETED JOB HAS BEEN APPROVED AND ACCEPTED BY THE OWNER, NOR SHALL COMPLETION DATES BE AFFECTED BY SUCH LOSS, OR DAMAGE.
8. CONTRACTOR SHALL PREPARE DETAILED SHOP DRAWINGS OF TE EQUIPMENT, DUCTWORK, TEMPERATURE CONTROLS WITH WIRING DIAGRAMS, SEQUENCE OF OPERATIONS AND COMPONENTS CUTS TO BE FURNISHED BY HIM. FIVE (5) COPIES SHALL BE SUBMITTED TO THE ENGINEER FOR HIS APPROVAL. NO WORK SHALL PROCEED WITHOUT APPROVED SHOP DRAWINGS.
9. AIR CONDITIONING UNITS, INCLUDING ALL COMPONENTS, SHALL BE TESTED, REFRIGERANT CHARGED, CLEANED, OILED AND ADJUSTED AS REQUIRED FOR OPTIMUM OPERATION.
10. AIR OUTLETS SHALL BE BALANCED AND CERTIFIED AIR READINGS SHALL BE SUBMITTED FOR APPROVAL. THE CONTRACTOR SHALL ALLOW FOR A SECOND VISIT TO ADJUST AIR QUANTITIES AND THROW ONCE SPACE IS OCCUPIED. THE WORK WILL NOT BE CONSIDERED COMPLETE WITHOUT APPROVED BALANCING REPORT.
11. CONTRACTOR SHALL COORDINATE HIS WORK WITH ARCHITECTURAL DRAWINGS, FINAL CEILING / LIGHTING LAYOUTS AND WORK OF ALL OTHER TRADE. ALL MECHANICAL DRAWINGS ARE DIAGRAMMATIC. CONTRACTOR SHALL RAISE OR CHANGE EXISTING DUCTWORK LOCATIONS IN ORDER TO ACCOMMODATE CEILING HEIGHTS AND NEW LIGHTING FIXTURES INSTALLATION AS SHOWN ON ARCHITECTURAL DRAWINGS. THIS WORK SHALL BE INCLUDED IN HIS PROPOSAL. NO ADDITIONAL CHARGE WILL BE APPROVED FOR LACK OF EXAMINATION AND COORDINATION WITH EXISTING CONDITIONS AND WORK OF ALL OTHER TRADES. AIR OUTLETS LOCATION IS APPROXIMATE, FOR EXACT LOCATION, SEE ARCHITECT'S REFLECTED CEILING PLAN AND OBTAIN FINAL ARCHITECT'S APPROVAL BEFORE INSTALLATION.
12. CONTRACTOR SHALL FURNISH "AS BUILT" RECORD DRAWINGS AND OPERATING AND MAINTENANCE INSTRUCTIONS AT THE COMPLETION OF THE INSTALLATION.
13. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR CONDUCTING ALL CONTROL INSPECTIONS PERTAINING TO THE MECHANICAL WORK AS REQUIRED BY GOVERNING AUTHORITIES. CONTRACTOR SHALL HIRE A PROFESSIONAL ENGINEER OR A REGISTERED ARCHITECT TO PERFORM THIS INSPECTION. CONTRACTOR SHALL OBTAIN ALL APPROVALS AND PERMITS AND PAY ALL NECESSARY FEES FOR ALL WORK PERTAINING TO THIS PROJECT. ALL AGENCIES HAVING JURISDICTION INCLUDING VILLAGE OF MAMARONECK BUILDING DEPARTMENT SHALL BE COMPLIED WITH.
14. ALL DUCTWORK SHALL BE SEALED NOT TO EXCEED 5 % AIR LEAKAGE. SEAL DUCTS IN ACCORDANCE WITH SEAL CLASS "B, FOR 2" WG STATIC PRESSURE AS PER SMACNA STANDARDS. SEAL ALL JOINTS AND LOCATIONS WHERE DIFFUSER COLLAR MEETS BRACH DUCT. CONTRACTOR SHALL GUARANTEE THAT TOTAL AIR OUTLET VOLUME MEASURED BY MEANS OF A BELOMETER, SHALL BE AT LEAST 98% OF ACTUAL FAN SUPPLY (MEASURED BY MEANS OF A DUCT TRAVERSED TAKEN WITH A PIVOT TUBE AND WATER MANOMETER).
15. ALL SHEET METAL WORK, UNLESS OTHERWISE SPECIFIED, SHALL BE CONSTRUCTED OF GALVANIZED SHEET STEEL, OF UNIFORM THICKNESS IN ACCORDANCE WITH SMACNA REQUIREMENTS. METAL DUCTS SHALL BE OF THE FOLLOWING GAUGES. LARGEST DIMENSION U.S. GAUGE - UP TO 12 INCHES 26 AND 12 TO 30 INCHES 24.
16. DUCT ELBOWS SHALL BE EITHER FULL 1 1/2 DUCT WIDTH RADIUS TYPE, OR SQUARE ELBOWS WITH DOUBLE THICKNESS TURNING VANES.
17. PROVIDE AND INSTALL ACCESS DOORS IN SHEET METAL CASINGS AND DUCTWORK TO PERMIT ACCESS TO ALL OPERATING PARTS, ELECTRICAL OUTLETS, AND CONTROLS. ACCESS DOORS SHALL BE OF SHEET METAL AND FASTENED USING APPROVED METHODS.
18. PROVIDE ND INSTALL ALL DAMPERS INDICATED ON DRAWINGS AS REQUIRED FOR PROPER BALANCING OF THE SYSTEM (AT EVERY BRANCH TAKE-OF AND AT EVERY BOTTOM TAPPED CEILING DIFFUSER).
19. SHEET METAL DUCTWORK CONNECTED TO ALL ROTATING EQUIPMENT SHALL BE PROVIDED WITH FLEXIBLE CONNECTORS MADE OF HEAVY GLASS FABRIC, COATED WITH NEOPRENE. FLEXIBLE DUCT CONNECTORS SHALL BE NON-COMBUSTIBLE.
20. ALL DUCTWORK SHALL BE KEPT AS HIGH A POSSIBLE ABOVE FINISHED FLOOR. TO MANTAIN CEILING HEIGHTS INDICATED ON ARCHITECTURAL DRAWINGS, THIS CONTRACTOR IS REQUESTED TO CHANGE DUCT DIMENSIONS WITHOUT ADDITIONAL CHARGE TO THE OWNER.
21. ALL DUCTS MUST BE HUNG FROM REINFORCING WIRES, OR SHALL BE SUPPORTED IN OTHER MANNER INDICATED ON DRAWINGS, OR AS APPROVED BY THE NEW YORK STATE BUILDING CODES. IN NO CASE SHALL DUCTS BE HUNG FROM, OR REST ON CEILINGS.
22. ALL SUPPLY AIR DUCTWORK (EXCEPT WHERE ACOUSTICALLY LINED) SHALL BE INSULATED WITH 1" THICK 3/4" LB. DENSITY FIBERGLASS BLANKET TYPE INSULATION WITH VAPOR BARRIER. INSULATION SHALL HAVE FLAME SPREAD OF LESS THAN 25 WITHOUT EVIDENCE OF CONTINUED PROGRESSIVE COMBUSTION AND SMOKE DEVELOPMENT RATING NOT HIGHER THAN 50 AS TESTED BY U.L. LABORATORIES AND BE ACCEPTABLE UNDER NFPA STANDARDS #90A AND 90B.
23. CONDENSATE DRAIN PIPING SHALL BE TYPE "L" COPPER, PROVIDE TRAP AND VENT AT AIR CONDITIONING UNIT. INSULATE PIPING W/ 1" FIBERGLASS W/ VAPOR BARRIER.
24. CONTRACTOR SHALL INSURE THAT AIRFLOW IS NOT OBSTRUCTED BY PARTITIONS UP TO SLAB. PROVIDE OPENINGS ABOVE HUNG CEILING TO MAINTAIN RETURN AIR.
25. ROOF MOUNTED AIR CONDITIONING UNITS SHALL BE INSTALLED ON STEEL DUNNAGE (STEEL BY OTHERS) WITH VIBRATION ISOLATORS.
26. REFRIGERANT PIPING SHALL BE TYPE "L" COPPER HIGH TEMPERATURE, HARD SOLDERED. INSULATE REFRIGERANT SUCTION W/ 1" ARMAFLEX.
27. ALL DUCT SIZES SHOWN ARE CLEAR INSIDE, WHERE ACOUSTICAL LINING IS BEING USED, INCREASE DUCT SIZES ACCORDINGLY.
28. BOILER FLUE SHALL BE DOUBLE WALL TYPE "B" VENT, TERMINATE WITH APPROVED VENT CAP.
29. PROVIDE EXHAUST GRILLES WITH 1/2" X 1/2" EGG CRATE CORES FOR TOILET, KITCHEN AND GARBAGE ROOM EXHAUST DUCTS.
30. PROVIDE TWO OPENINGS ON CLOSET WHERE HOT WATER HEATER LOCATES, ONE WITHIN 12" FROM THE CEILING, ONE WITHIN 12" FROM THE FLOOR (LOUVER AT CLOSET DOOR), EACH W/ MINIMUM NET OPENING OF 100 SQ. IN.
(40,000 BTU/HR ÷1,000 BTU/HR = 40 SQ. IN. < 100 SQ. IN., USE 100 SQ. IN. MIN.)

MECHANICAL EQUIPMENT

RESIDENTIAL

1. APARTMENT A & B (FLOORS 1 & 2)

AC-1 & AC-2 **3.0 TON INDOOR "MITSUBSHI HORIZONTA - DUCTED HEAT PUMP SYSTEM"**
36.000/ 38.000 BTU COOLING/ HEATING; POWER: 208-230V / 60 Hz / 1 PH; COOLING: 3.0 kW; HEATING: 2.41 kW; WEIGHT: 86 lbs.; SOUND PRESSURE: dBA 33/38/42; WxDxH: 55-1/8" x 28-7/8" x 9-7/8".

ALL THERMOSTATS FOR THE RESIDENTIAL UNITS SHALL BE "MITSUBISHI WALL MOUNTED MODEL MHK1 - PROGRAMMABLE THERMOSTAT"

2. CELLAR

——

3. ACC-1 & 2
3 TON HEAT PUMP ROOFTOP UNIT "MITSUBISHI" MODEL PUZ-A36NKA7, INVERTER-DRIVEN TWIN ROTARY COMPRESSOR; COOLING INTAKE AIR TEMP (MAXIMUM / MINIMUM) 115°F DB/0° DB; HEATING AIR INTAKE AIR TEMP (MAXIMUM / MINIMUM) 70°F DB/0, 59°F WB / 12°F DB/0, 10°F WB; THERMAL LOCK-OUT / RE-START TEMPERATURE 8°F / 4°F, WEIGHT: 214 LBS., WXDXH: 42-15/16" X 17-11/16" X 56-1/16".

4. ACC-CELLAR

——

5. EXHAUSTS - RESIDENTIAL (KITCHEN & BATHROOMS):
INDIVIDUAL APARMENT INDOOR EXHAUST FANS
CEILING EXHAUST FANS " COOK GEMINI" 100 SERIES, MODEL GC, 120 VOLTS/1 PHASE. PROVIDE ALUMINUM GRILLE, SPEED CONTROLLER, 100 SERIES DAMPER AND RC-75 VIBRATION ISOLATORS. SCHEDULE TO BE AS FOLLOWS:
-TX FAN SIZE 144, 50 CFM @ 0.25" SP
-KX FAN SIZE 164, 100 CFM @ 0.25" SP

6. ROOF EXHAUST FANS
DOWNBLAST CENTRIFUGAL ROOF MOUNTED DIRECT DRIVE ELECTRONICALLY COMMUTATED MOTOR EXHAUST FANS "COOK" MODEL ACED-EC, 120 VOLTS/1 PHASE. PROVIDE GRAVITY BACKDRAFT DAMPER, ROOF CURB, DISCONNECT SWITCH AND CONSTANT PRESSURE CONTROL SYSTEM. SCHEDULE TO BE AS FOLLOWS:
-TX FAN SIZE 90C17DEC, 200 CFM @ 0.5" SP, 1/4 HP
-KX FAN SIZE 100C17DEC, 400 CFM @ 0.5" SP, 1/4 HP

7. VENTILATION FAN

8. GRAVITY DAMPER
"S & P" SERIES MODEL 502 AUTOMATIC WALL SHUTTER. 10"X10"-20 GAUGE GALVANIZED STEEL; 2000 FPM MAXIMUM VELOCITY. TEMPERATURE: -40°F TO 180°F.

MECHANICAL
1. MECHANICAL/SERVICE WATER HEATING. MECHANICAL SYSTEM DESIGN CRITERIA, AND MECHANICAL AND SERVICE WATER HEATING SYSTEM AND EQUIPMENT TYPES, SIZES AND EFFICIENCIES SHALL BE PROVIDED. SPACE HEATING AND COOLING EQUIPMENT, ENERGY RECOVERY EQUIPMENT, ECONOMIZERS, VENTILATION EQUIPMENT, SERVICE WATER HEATING EQUIPMENT, AND MANDATORY REQUIREMENTS INCLUDING CONTROL SYSTEMS, DUCT SEALING AND DUCT AND PIPING INSULATION SHALL BE SHOWN ON THE CONSTRUCTION DRAWINGS AND SHALL BE EQUAL TO OR GREATER THAN THE ENERGY EFFICIENCY REQUIREMENTS ESTABLISHED IN THE ENERGY ANALYSIS, THE ENERGY CODE AND/OR THIS SECTION, AS APPLICABLE. A NARRATIVE SHALL BE PROVIDED FOR EACH MANDATORY CONTROL SYSTEM DESCRIBING ITS FUNCTION AND OPERATION AND SPECIFYING PROPER SETPOINTS OF EQUIPMENT AND CONTROLS.

2. MINIMUM PIPE INSULATION (THICKNESS IN INCHES)

Fluid	Nominal Pipe Diamter	
	≤ 1.5"	≥ 1.5"
Heating Water	1.5"	2"
Chilled Water, Refrigerant, Brine	1.5"	1.5"
Domestic Hot Water	1"	1"
Based on insulation having conducticity (k) not exceeding 0.27 Btu per inch/hr•ft2•°F)		

3. DUCT AND PLENUM INSULATION AND SEALING

Duct Location	Insulation R-value
Unconditioned Space	R-5
Outside the building or within a building envelope assembly	R-8

EXCEPTIONS:
A. WHEN LOCATED WITHIN EQUIPMENT.
B. WHEN THE DESIGN TEMPERATURE DIFFERENT BETWEEN THE INTERIOR AND EXTERIOR OF THE DUCT OR PLENUM DOES NOT EXCEED 15 °F (8°C)

4. ALL DUCTS, AIR HANDLERS AND FILTER BOXES SHALL BE SEALED. JOINTS AND SEAMS SHALL COMPLY WITH SECTION 603.9 OF THE MECHANICAL CODE.

5. MAINTENANCE INFORMATION AND MANUALS
A. MAINTENANCE INSTRUCTIONS SHALL BE FURNISHED FOR EQUIPMENT AND SYSTEMS THAT REQUIRE PREVENTIVE MAINTENANCE. REQUIRED REGULAR MAINTENANCE ACTIONS SHALL BE CLEARLY STATED AND INCORPORATED ON A READILY ACCESSIBLE LABEL. THE LABEL SHALL INCLUDE THE TITLE OR PUBLICATION NUMBER FOR THE OPERATION AND MAINTENANCE MANUAL FOR THAT PARTICULAR MODEL AND TYPE OF PRODUCT.
B. AN OPERATING AND MAINTENANCE MANUAL MUST BE PROVIDED TO THE BUILDING OWNER BY THE MECHANICAL CONTRACTOR. THE MANUAL SHALL INCLUDE, AT LEAST, THE FOLLOWING:
I. EQUIPMENT CAPACITY (INPUT AND OUTPUT) AND REQUIRED MAINTENANCE ACTIONS.
II. EQUIPMENT OPERATION AND MAINTENANCE MANUALS.
III. SYSTEM CONTROL MAINTENANCE AND CALIBRATION INFORMATION, INCLUDING WIRING DIAGRAMS, SCHEMATICS, AND CONTROL
SEQUENCE DESCRIPTIONS. DESIRED OR FIELD-DETERMINED SET POINTS SHALL BE PERMANENTLY RECORDED ON CONTROL DRAWINGS.
AT CONTROL DEVICES OR, FOR DIGITAL CONTROL SYSTEMS, IN PROGRAMMING COMMENTS.
IV. A COMPLETE WRITTEN NARRATIVE OF HOW EACH SYSTEM IS INTENDED TO OPERATE.

VENTILATION
1. OUTDOOR AIR INTAKES AND EXHAUST OPENINGS - AIR TIGHTNESS: STAIR AND ELEVATOR SHAFT VENTS AND OTHER OUTDOOR AIR INTAKES AND EXHAUST OPENINGS INTEGRAL TO THE BUILDING ENVELOPE SHALL BE EQUIPPED WITH NOT LESS THAN A CLASS I MOTORIZED, LEAKAGERATED DAMPER WITH A MAXIMUM LEAKAGE RATE OF 4 CFM PER SQUARE FOOT (6.8 L/S · M2) AT 1.0 INCH WATER GAUGE (W.G.) (1250 PA) WHEN TESTED IN ACCORDANCE WITH AMCA 500D. EXCEPTION: GRAVITY (NONMOTORIZED) DAMPERS ARE PERMITTED TO BE USED IN BUILDINGS LESS THAN THREE STORIES IN HEIGHT ABOVE GRADE.
2. SHUTOFF DAMPER CONTROLS - WHEN SYSTEM/SPACE NOT IN USE: BOTH OUTDOOR AIR SUPPLY AND EXHAUST DUCTS SHALL BE EQUIPPED WITH MOTORIZED DAMPERS THAT WILL AUTOMATICALLY SHUT WHEN THE SYSTEMS OR SPACES SERVED ARE NOT IN USE.
EXCEPTIONS:
I. GRAVITY DAMPERS SHALL BE PERMITTED IN BUILDINGS LESS THAN THREE STORIES IN HEIGHT.
II. GRAVITY DAMPERS SHALL BE PERMITTED FOR OUTSIDE AIR INTAKE OR EXHAUST AIRFLOWS OF 300 CFM (.14 M3/S) OR LESS.

MECHANICAL EQUIPMENT AND BUILDING SYSTEMS SHALL BE CONSTRUCTED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH CODES.

HVAC LEGEND

- SUPPLY DUCT LINE (IN CEILING)
- SUPPLY DUCT LINE (BELOW FLOOR)
- EXHAUST DUCT FOR BATH / TOILET
- VENT FOR DRYER / GAS BOILER
- REFRIGERANT PIPING
- COMBUTION AIR DUCT
- VENT PIPE DOWN
- VENT PIPE UP
- 4 WAY CEILING DIFFUSER
- 3 WAY CEILING DIFFUSER
- 2 WAY CEILING DIFFUSER
- 2 WAY CEILING DIFFUSER
- EXHAUST GRILLE / RETURN REGISTER
- SUPPLY AIR DUCT SECTION
- RETURN /EXHAUST AIR DUCT SECTION
- SUPPLY AIR DUCT DOWN
- RETURN / EXHAUST AIR DUCT DOWN
- LIGHTING FIXTURE TAG
- SUPPLY AIR FLOW
- EXHAUST AIR
- UNDERCUT DOOR
- THERMOSTATIC CONTROL, 48" A.F.F. (TYP.)
- FLEXIBLE CONNECTION

HVAC ABBREVIATION

LD	LINEAR DIFFUSER
CR	CEILING REGISTER
WR	WALL REGISTER
FR	FLOOR REGISTER
RR	RETURN AIR REGISTER
CFM	CUBIC FEET PER MINUTE
AC	AIR CONDITIONING UNIT/ FURNACE
ACC	AIR COOLED CONDENSING
TX	TOILET EXHAUST FAN
DXN	DRYER EXHAUST FAN
KX	KITCHEN EXHAUST FAN
FLFD	U.L. FIRE DAMPER
FLFD W/ AD	U.L. FIRE DAMPER WITH ACCESS DOOR
VCD	VOLUME CONTROL DAMPER
W/WMS	WITH WIRE MESH SCREEN
FSD	COMBINATION FIRE SMOKE DAMPER
W/AD	WITH ACCESS DOOR
ADD	MOTORIZED DAMPER

DRAWING LIST

M–101 HVAC NOTES, LEGEND, SYMBOLS AND ABBREVIATION
M–102 HVAC PLANS
M–103 HVAC PLANS
M–104 HVAC RISER

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cell. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

NO	DATE	ISSUE/REVISION
#4	DATE REV 4	ISSUE/REVISION 4
#3	DATE REV 3	ISSUE/REVISION 3
#2	DATE REV 2	ISSUE/REVISION 2

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

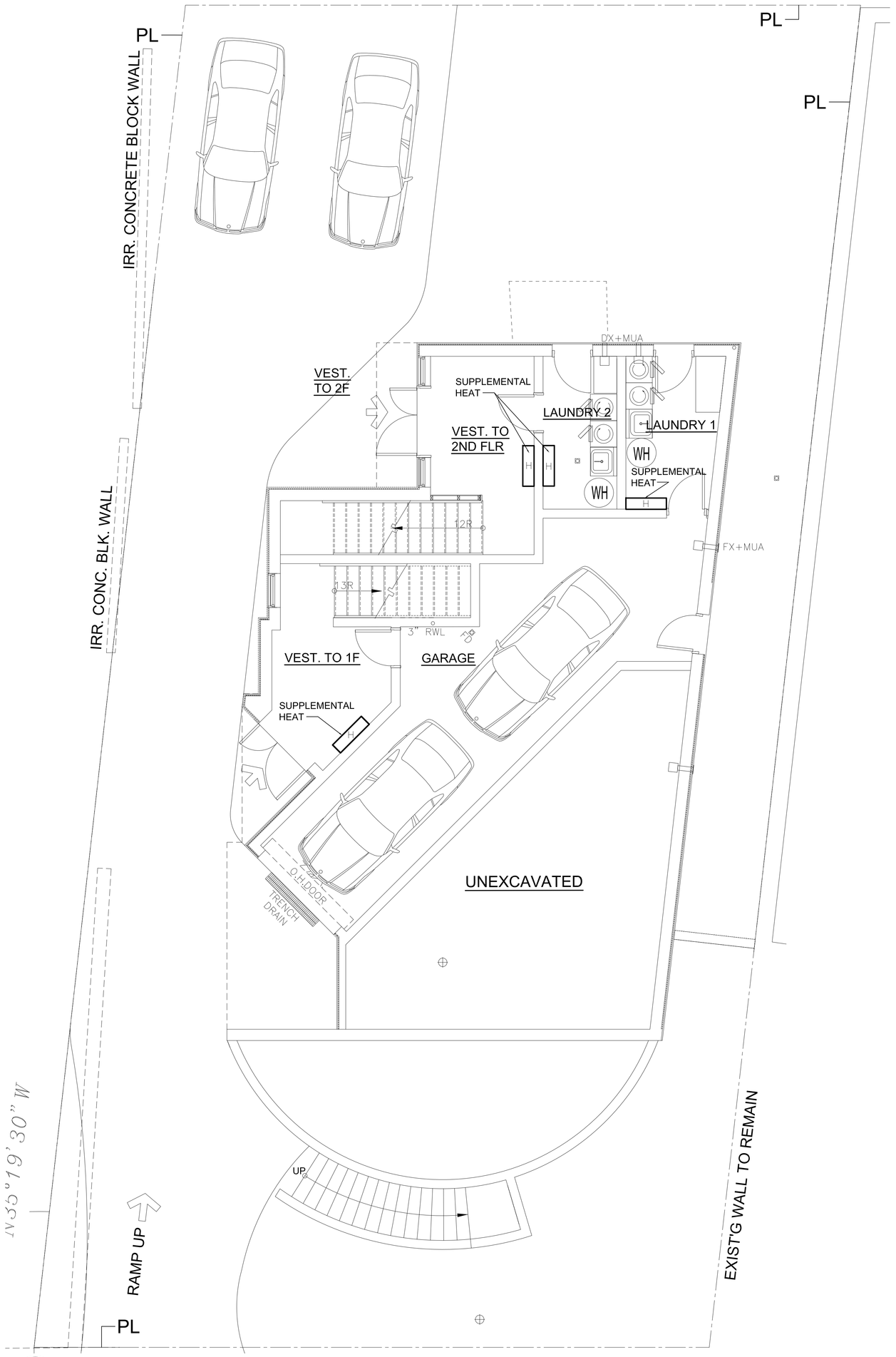
243 MADISON STREET
MAMARONECK, NY 10543

DRAWING TITLE
HVAC NOTES SPECS, LEGEND & VENT RISE DIAGRAM

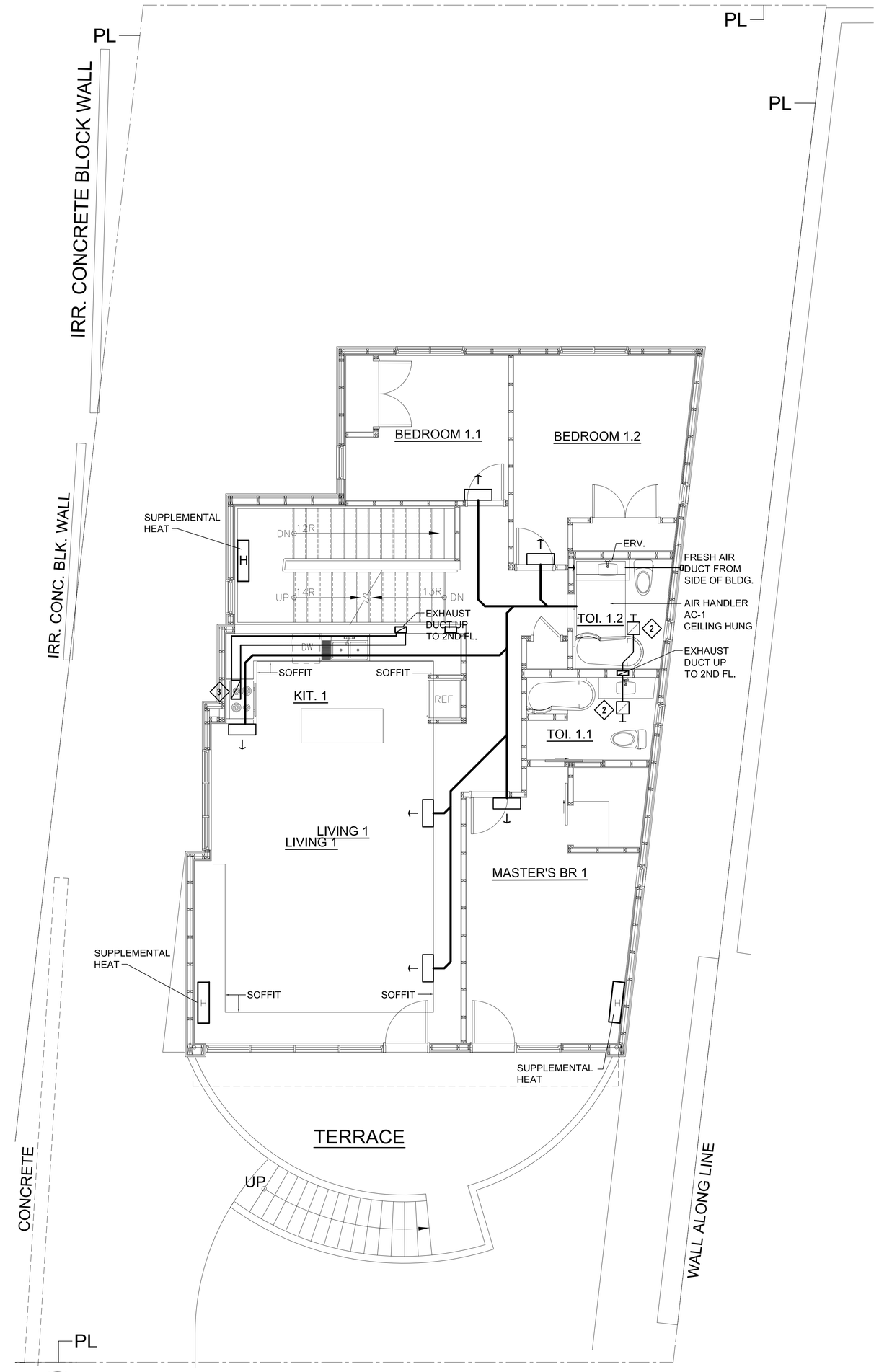
B-SCAN JOB STICKER

NYC DOB IDENTIFICATION NUMBER:
SEAL & SIGNATURE

DATE: 09/18/20
PROJECT #: 2020-02
DRAWN BY: EH
CHECK BY: AY
DWG No.
M- 101.00
SHEET 01 of 04



1 M-103 CELLAR (HVAC PROPOSED)
SCALE: 1/4" = 1'-0"



2 M-103 1st FL PLAN (HVAC PROPOSED)
SCALE: 1/4" = 1'-0"

MECHANICAL SCHEDULE

ROOF

UNIT	LOCATION	VOLTS / HZ / PHASE	COOLING / HEATING BTU	COOLING	HEATING	MANUFACTURER	MODEL	SOUND PRESSURE	WEIGHT / DIMENSIONS
HP-2	ROOF	208-230/60/1PH	36,000 / 40,000	3.0 KW	2.41 KW	MITSUBISHI	PUZ-A36NKA7(-BS)	dBA 52 / 53	214 LBS / 41-5/16" X 14-33/16" X 52-11/16"
HP-1	ROOF	208-230/60/1PH	36,000 / 40,000	3.0 KW	2.41 KW	MITSUBISHI	PUZ-A36NKA7(-BS)	dBA 52 / 53	214 LBS / 41-5/16" X 14-33/16" X 52-11/16"

2ND FLOOR

UNIT	LOCATION	VOLTS / HZ / PHASE	COOLING / HEATING BTU	COOLING	HEATING	MANUFACTURER	MODEL	SOUND PRESSURE	WEIGHT / DIMENSIONS
AH-2	CLG MOUNTED	208-230/60/1PH	36,000 / 40,000	3.0 KW	2.41 KW	MITSUBISHI	PEAD-A36AA7	dBA 42 / 40 / 37	86 LBS / 55-1/8" X 28-7/8" X 9-7/8"

1ST FLOOR

UNIT	LOCATION	VOLTS / HZ / PHASE	COOLING / HEATING BTU	COOLING	HEATING	MANUFACTURER	MODEL	SOUND PRESSURE	WEIGHT / DIMENSIONS
AH-1	CLG MOUNTED	208-230/60/1PH	36,000 / 40,000	3.0 KW	2.41 KW	MITSUBISHI	PEAD-A36AA7	dBA 42 / 40 / 37	86 LBS / 55-1/8" X 28-7/8" X 9-7/8"

INDOOR EXHAUST FANS FOR KITCHENS, BATHROOMS AND DRYERS

UNIT	LOCATION	VOLTS/PHASE	DAMPER	VIBRATION ISOLATORS	FAN SIZE	MANUFACTURER	MODEL	REMARKS
TX	CEILING	120/1 PHASE	100 SERIES	RC-75	144, 50 CFM @ 0.25" SP	COOK GEMINI	100 SERIES , GC	
DX	CEILING	120/1 PHASE	100 SERIES	RC-75	144, 50 CFM @ 0.25" SP	COOK GEMINI	100 SERIES , GC	
KX	CEILING	120/1 PHASE	100 SERIES	RC-75	164, 100 CFM @ 0.25" SP	COOK GEMINI	100 SERIES , GC	

ROOF EXHAUST FANS FOR KITCHENS, BATHROOMS AND DRYERS

UNIT	LOCATION	VOLTS/PHASE	DAMPER	FAN SIZE	MANUFACTURER	MODEL	REMARKS
TX	ROOF	120/1 PHASE	BACKDRAFT	90C17DEC, 200 CFM @ 0.5" SP, 1/4 HP	COOK GEMINI	ACED -EC	
DX	ROOF	120/1 PHASE	BACKDRAFT	500 CFM @ 0.375" SP, 1/6 HP	COOK GEMINI	ACEB80C2B	
KX	ROOF	120/1 PHASE	BACKDRAFT	100C17DEC, 400 CFM @ 0.5" SP, 1/4 HP	COOK GEMINI		

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cell. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

243 MADISON STREET
MAMARONECK, NY 10543

DRAWING TITLE

HVAC PLAN AND
MECHANICAL SCHEDULE
ENERGY ANALYSIS

B-SCAN JOB STICKER

NYC DOB IDENTIFICATION NUMBER

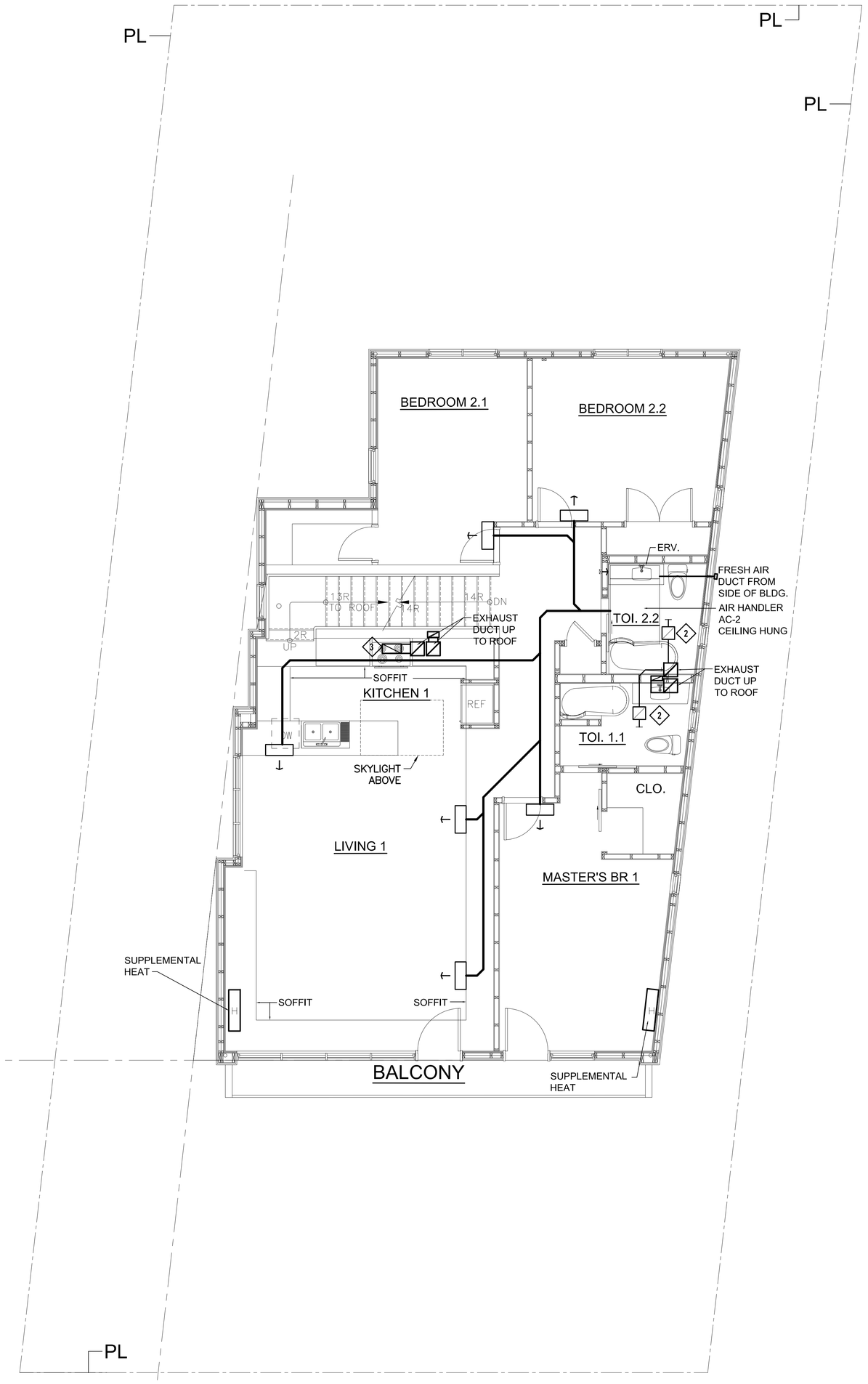
SEAL & SIGNATURE

REGISTERED ARCHITECT YOUR NAME STATE OF NEW YORK

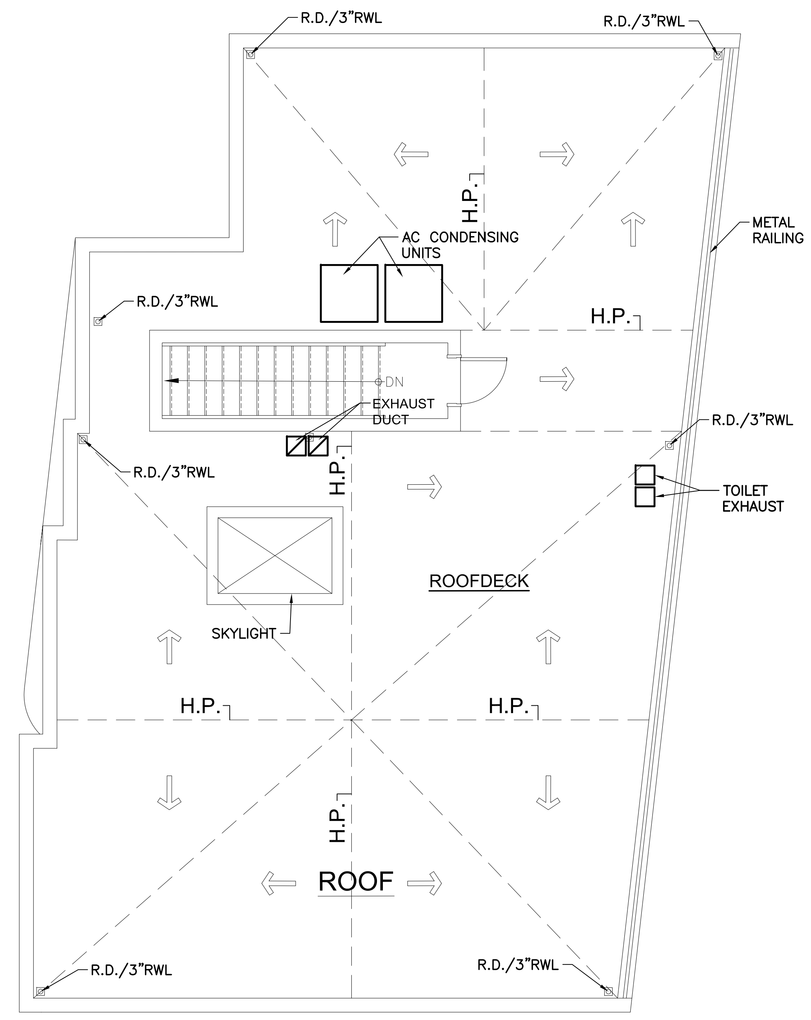
DATE: 09/18/20
PROJECT #: 2020-02
DRAWN BY: EH
CHECK BY: AY

DWG No.
M - 102.00 04

SHEET 02 of 04



1 M-104 2nd FL PLAN (HVAC PROPOSED)
SCALE: 1/4" = 1'-0"



2 M-104 ROOF PLAN (HVAC PROPOSED)
SCALE: 1/4" = 1'-0"

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cell. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

243 MADISON STREET
MAMARONECK, NY 10543

DRAWING TITLE

HVAC PLAN AND
MECHANICAL SCHEDULE
ENERGY ANALYSIS

B-SCAN JOB STICKER

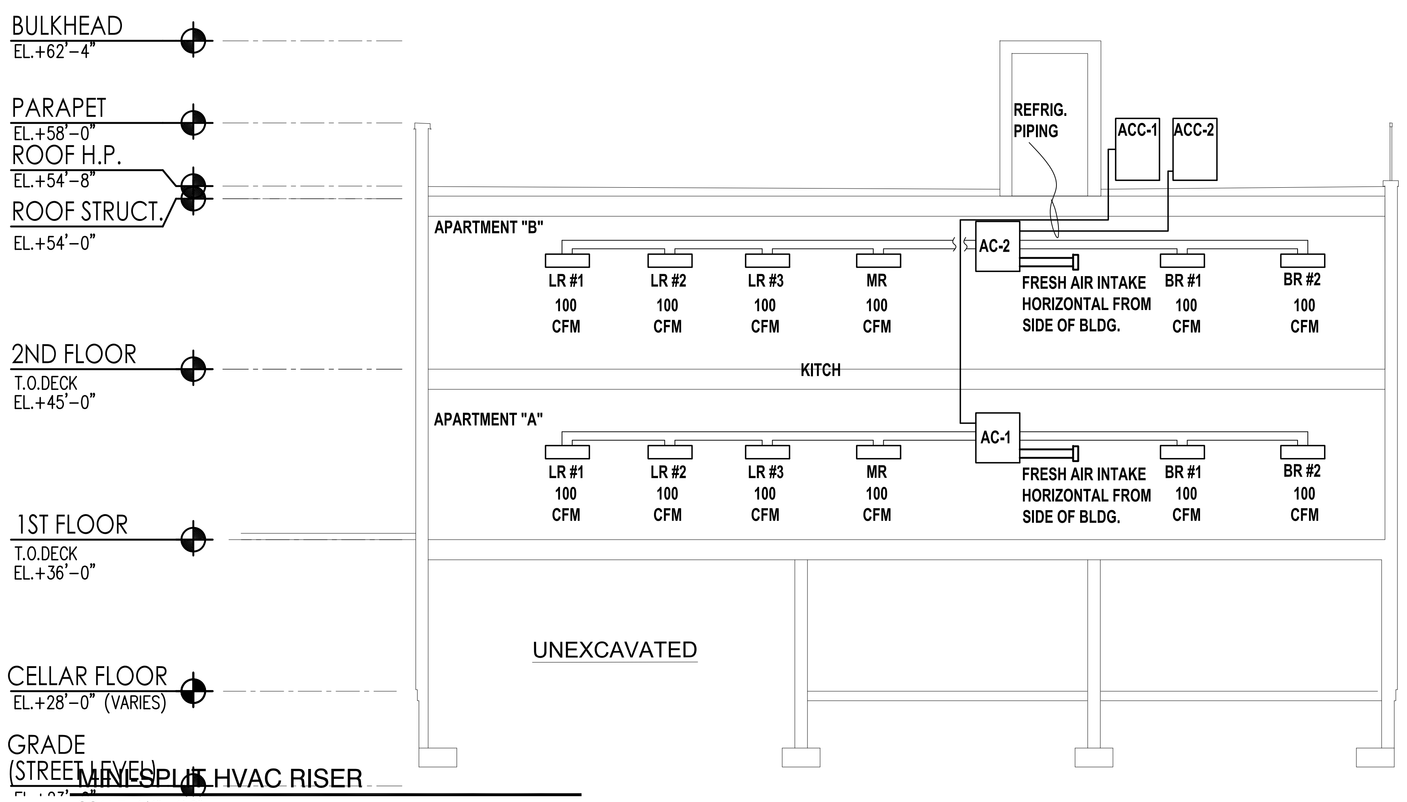
NYC DOB IDENTIFICATION NUMBER:
SEAL & SIGNATURE

REGISTERED ARCHITECT
EDWARD YUR HSIEH
STATE OF NEW YORK

DATE: 09/18/20
PROJECT #: 2020-02
DRAWN BY: EH
CHECK BY: AY

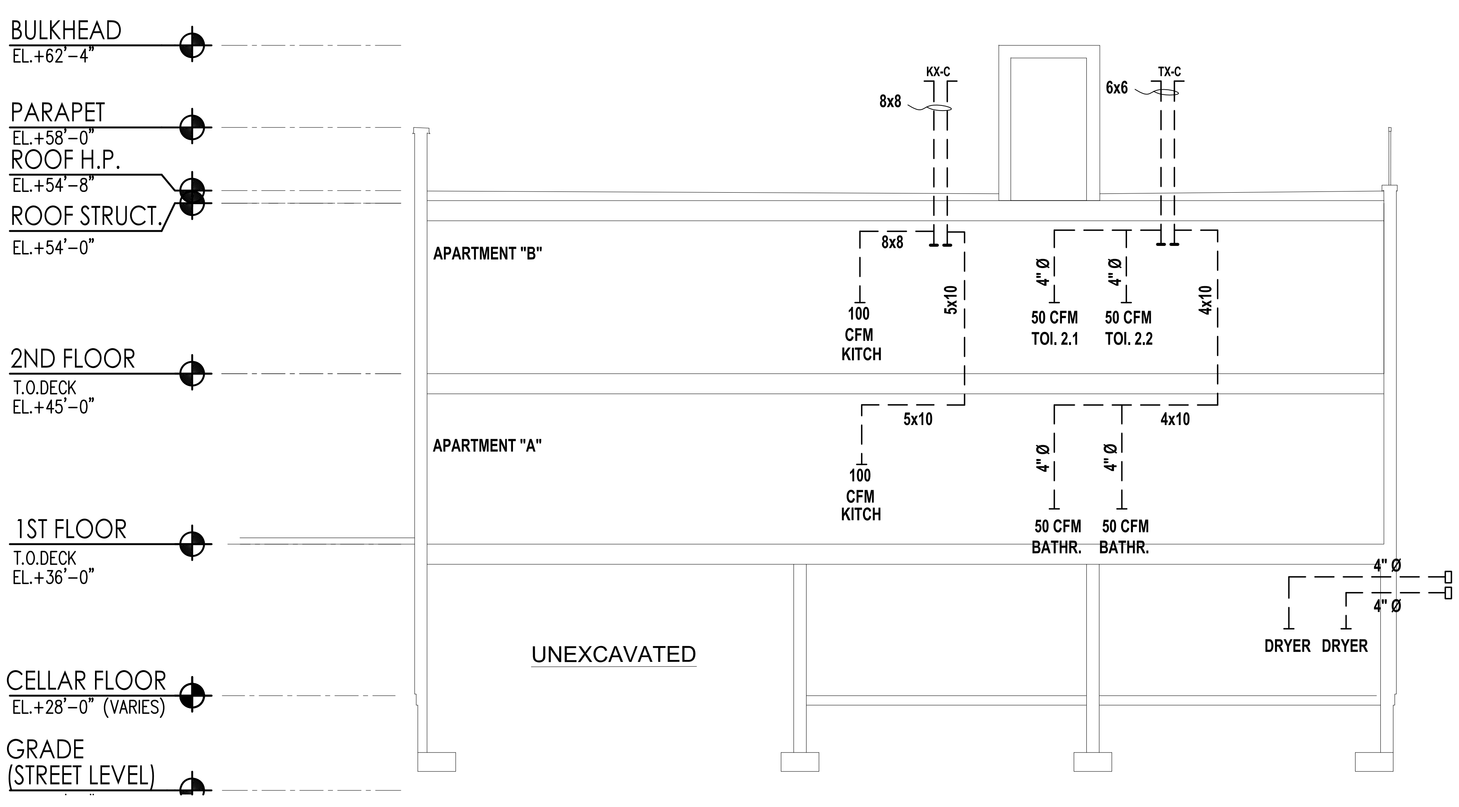
DWG No.
M - 103.00

SHEET 03 of 04



MINI SPLIT HVAC RISER

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

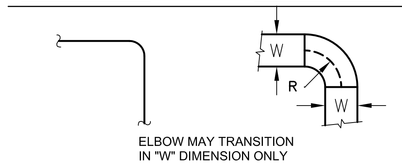


EXHAUST DIAGRAMS

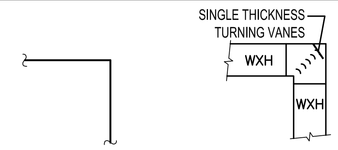
SCALE: 1/4"=1'-0"

DUCT DETAILS

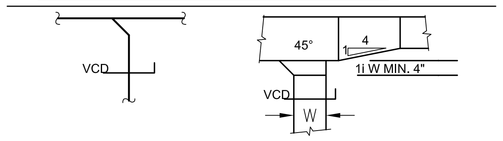
SINGLE LINE | DOUBLE LINE



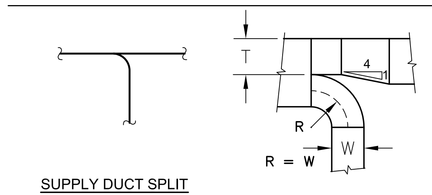
SUPPLY, RETURN OR EXHAUST ROUND ELBOW



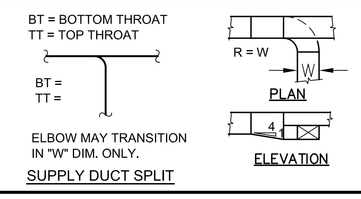
SUPPLY, RETURN OR EXHAUST SQUARE ELBOW



SUPPLY, RETURN OR EXHAUST DUCT BRANCH



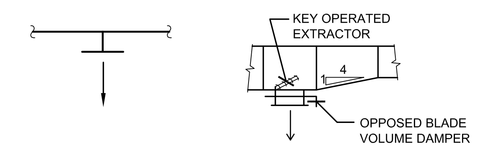
SUPPLY DUCT SPLIT



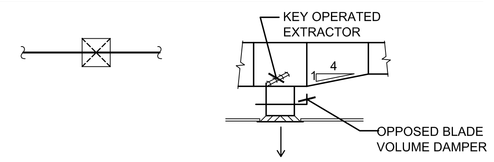
SUPPLY DUCT SPLIT

DUCT DETAILS

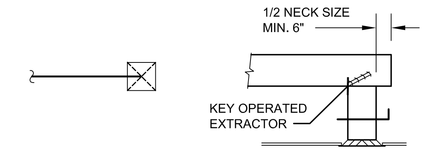
SINGLE LINE | DOUBLE LINE



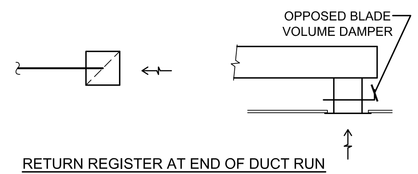
SUPPLY REGISTER CONNECTION



SUPPLY DIFFUSER CONNECTION



SUPPLY DIFFUSER AT END OF DUCT RUN



RETURN REGISTER AT END OF DUCT RUN

R403.6 MECHANICAL VENTILATION (MANDATORY).
THE BUILDING SHALL BE PROVIDED WITH VENTILATION THAT MEETS THE REQUIREMENTS OF THE NEW YORK STATE MECHANICAL CODE AS APPLICABLE, OR WITH OTHER APPROVED MEANS OF VENTILATION. OUTDOOR AIR INTAKES AND EXHAUSTS SHALL HAVE AUTOMATIC OR GRAVITY DAMPERS THAT CLOSE WHEN VENTILATION SYSTEM IS NOT OPERATING.

R406.1 WHOLE- HOUSE MECHANICAL VENTILATION SYSTEM FAN EFFICACY.
MECHANICAL VENTILATION SYSTEM FANS SHALL MEET EFFICACY REQUIREMENTS OF TABLE R403.6.1

EXCEPTION: WHERE MECHANICAL VENTILATION FANS ARE INTEGRAL TO TESTED AND LISTED HVAC EQUIPMENT, THEY SHALL BE POWERED BY AN ELECTRONICALLY COMMUTATED MOTOR.

TABLE R403.6.1
MECHANICAL VENTILATION SYSTEM FAN EFFICACY

FAN LOCATION	AIR FLOW RATE MINIMUM	MINIMUM EFFICACP	AIR FLOW RATE MAXIMUM
RANGE HOODS	ANY	2.8 CFM / WATT	ANY
IN-LINE FAN	ANY	2.8 CFM / WATT	ANY
BATHROOM, UTILITY ROOM	10	1.4 CFM / WATT	< 90
BATHROOM, UTILITY ROOM	50	2.8 CFM / WATT	ANY

S&P

COMMERCIAL

S&P Series FGS Rear Flanged FIBREGLASS Shutter

The **Model FGS is a rear flanged exhaust shutter for areas where corrosion is a known problem**. The frame and blades are a heavy duty fiberglass pultrusion with stainless steel tie rods. Ideal for use with direct-drive or belt-driven exhaust fans in chemical plants and poultry/swine confinement operations. Recommended for vertical mount exhaust applications only.

FEATURES:
- **Fiberglass pultrusion construction**.
- Integrated weather stripping incorporated into frame for additional strength and weather protection.
- **Maximum recommended velocity is 2,500 FPM**. Temperature: -40 F to 180 F
- 304 stainless steel screws, pins, rivets and bushings.

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cell. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

REVISIONS

NO	DATE	ISSUE/REVISION

NEW 2-FAMILY RESIDENTIAL BUILDING

243 MADISON STREET
MAMARONECK, NY 10543

DRAWING TITLE

HVAC RISER DIAGRAM AND NOTES

B-SCAN JOB STICKER

NYC DOB IDENTIFICATION NUMBER

SEAL & SIGNATURE

DATE: 09/18/20
PROJECT #: 2020-02
DRAWN BY: EH
CHECK BY: AY

DWG No.
M - 104.00

SHEET 04 of 04

GENERAL NOTES:

1. ALL MATERIALS, APPARATUS, WORKMANSHIP AND PROCUREMENT OF PERMITS AND CERTIFICATES FOR THESE SYSTEMS SHALL BE IN ACCORDANCE WITH ALL LAWS, RULES AND REGULATIONS OF THE NEW YORK CITY BUILDING CODE, AND ALL OTHER AUTHORITIES HAVING JURISDICTION.
2. ALL CUTTING, ROUGH PATCHING AND CORE DRILLING FOR THIS WORK TO BE DONE BY PLUMBING CONTRACTOR.
3. PRIOR TO SUBMITTING BID PROPOSAL, PLUMBING CONTRACTOR TO VISIT SITE AND VERIFY EXISTING CONDITIONS. A BID PROPOSAL WOULD BE CONSTRUED AS EVIDENCE OF HAVING DONE SO.
4. LOCATIONS AND SIZES OF EXISTING PIPING ARE APPROXIMATE. EXACT SIZES AND LOCATIONS OF EXISTING PIPING SHALL BE VERIFIED AT THE PROJECT SITE.

BUILDING DEPARTMENT NOTES

1. ALL PLUMBING SYSTEMS (SANITARY, WASTE, VENT AND WATER DISTRIBUTION PIPING SYSTEMS) AND ASSOCIATED EQUIPMENT SHALL BE INSTALLED, OPERATED AND MAINTAINED IN ACCORDANCE ACCORDANCE WITH THE REQUIREMENTS OF THE 2015 NEW YORK STATE PLUMBING CODE.
2. INSTALLATION OF UNDERGROUND PIPING SHALL BE IN ACCORDANCE WITH CODE REQUIREMENTS.
3. PROTECTION OF PIPING PASSING UNDER OR THROUGH FOUNDATION WALLS AS PER CODE REQUIREMENTS.
4. TRENCHING, EXCAVATION AND BACKFILL AS PER CODE.
5. RAT PROOFING AS PER CODE.
6. MATERIALS USED IN PLUMBING SYSTEMS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF NYS PLUMBING CODE.
7. EQUIPMENT CONNECTIONS AND JOINING OF PIPING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF NYS PLUMBING CODE.
8. DEEP SEAL TRAPS FOR FLOOR DRAINS, AND CLEAN-OUTS SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF NYS PLUMBING CODE.
9. BUILDING HOUSE TRAPS SHALL BE PROVIDED AS PER PLUMBING CODE.
10. DRAINAGE PIPE CLEANOUTS AS PLUMBING CODE.
11. VERTICAL AND HORIZONTAL PIPING SHALL BE SUPPORTED IN ACCORDANCE WITH THE REQUIREMENTS OF PLUMBING CODE.
12. WATER SUPPLY SYSTEMS SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE REQUIREMENTS OF NYS PLUMBING CODE.
13. THE SANITARY DRAINAGE SYSTEM SHALL BE SIZED AND INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF NYS PLUMBING CODE.
14. VENT PIPING FOR THE SANITARY DRAINAGE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF NYS PLUMBING CODE.
15. THE STORM DRAINAGE PIPING SHALL BE SIZED AND INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF NYS PLUMBING CODE.
16. INSPECTION AND TESTING OF PLUMBING PIPING SYSTEM SHALL BE IN ACCORDANCE WITH NYS PLUMBING CODE.

PLUMBING SPECIFICATIONS

1. THE CONTRACTOR SHALL FURNISH AND INSTALL A PLUMBING SYSTEM COMPLETE WITH ALL EQUIPMENT, PIPING, VALVES, INSULATION, CONTROLS, ACCESSORIES AND ASSOCIATED WORK IN ACCORDANCE WITH THE BUILDING CODE, ALL AUTHORITIES HAVING JURISDICTION, AND THIS SPECIFICATION. CONTRACTOR TO OBTAIN AND ADHERE TO ALL BASE BUILDING DESIGN GUIDELINES AND CONSTRUCTION SPECIFICATIONS.
2. THE WORK SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, HOISTING AND RIGGING, SCAFFOLDING, AND SERVICES TO COMPLETE THE SYSTEM AND PROVIDE THE OWNER WITH A FULLY OPERATIONAL SYSTEM.
3. ALL WORK SHALL BE PROPERLY COORDINATED WITH THE OTHER TRADES TO AVOID CONFLICTS. REFER TO THE ARCHITECTURAL DRAWINGS FOR REQUIRED CEILING ELEVATIONS, SPACE CLEARANCES AND DETAILS.
4. ALL NECESSARY CUTTING AND PATCHING IN FLOOR SLABS, ROOF SLABS, WALLS AND CEILINGS FOR THE PLUMBING WORK SHALL BE PERFORMED BY THIS CONTRACTOR. RESTORE TO MATCH EXISTING CONDITIONS.
5. BIDDERS, BEFORE SUBMITTING PROPOSALS, SHALL VISIT AND CAREFULLY EXAMINE THE AREA AFFECTED BY THIS WORK TO FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS AND THE DIFFICULTIES THAT WILL ATTEND THE EXECUTION OF THIS WORK. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE, AND LATER CLAIMS WILL NOT BE RECOGNIZED FOR EXTRA LABOR, EQUIPMENT, OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN HAD SUCH AN EXAMINATION BEEN MADE.
6. ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE OF THIS WORK. ENGAGE THE SERVICES OF VARIOUS MANUFACTURERS SUPPLYING THE EQUIPMENT FOR THE PROPER START-UP AND OPERATION OF THE PLUMBING SYSTEMS. INSTRUCT THE OWNER'S PERSONNEL IN THE PROPER OPERATION AND SERVICING OF THE SYSTEM.
7. THIS CONTRACTOR SHALL SECURE ALL REQUIRED PERMITS AND APPROVALS AND TRANSMIT SAME TO THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES.
8. SUBMIT A SEPIA AND TWO PRINTS OF THE PLUMBING LAYOUT SHOP DRAWINGS, CERTIFIED BY ALL TRADES THAT COORDINATION HAS BEEN ESTABLISHED. SUBMIT PLUMBING FIXTURE CUTS WITH TRIM, INSULATION, VALVES AND FITTINGS, PIPE MATERIALS AND CERTIFIED EQUIPMENT CUTS WITH CONSTRUCTION WIRING DIAGRAM. SUBMIT FOUR (4) BOOKBOUND OPERATING AND SERVICE MANUALS WHICH SHALL INCLUDE COPIES OF ALL SHOP DRAWINGS. ALL APPROVED DRAWINGS AND SUBMITTALS TO BE COPIED TO THE OFFICE OF THE BUILDING AT THE TIME OF APPROVAL.
9. SLEEVES & ESCUTCHEONS FOR PIPING:
   - A. PROVIDE SLEEVES FOR PIPES PASSING THROUGH WALL PARTITIONS AND FLOORS.
   - B. CAULK SPACE BETWEEN PIPE OR PIPE INSULATION WITH INCOMBUSTIBLE MINERAL WOOL TO WITHIN 1/2" OF WALL FACES AND FILL WITH CAULKING COMPOUND TO WALL SPACES.
   - C. PROVIDE ESCUTCHEONS ON EXPOSED PIPING THROUGH WALLS OR FLOORS WITH SET SCREWS OR INTERNAL SPRING TENSION.
10. CLEANOUTS:
    - A. CAST IRON WITH BRONZE PLUG, FULL SIZE UP TO 4" AND AT LEAST HALF SIZE FOR LARGER PIPES WITH 4" MINIMUM. CONFORMING TO ANSI A112.36.2.
      - 1. CLEANOUT DECKPLATES: J.R. SMITH 4120 OR 4140 SERIES.
      - 2. CLEANOUTS IN FINISHED AREAS: J.R. SMITH 4020 SERIES.
11. TESTING:
    - A. TEST NEW DRAINAGE, VENT, GAS AND WATER PIPING AS PER NYC BUILDING CODE. REPLACE DEFECTIVE PIPING AND RETEST.
13. PIPE, FITTINGS AND VALVES FOR HOT AND COLD WATER:
    - A. HOT AND COLD WATER PIPING: COPPER TUBING, TYPE "L". FITTINGS: WROUGHT OR BRONZE. JOINTS: 95-5 (TIN AND ANTIMONY) SOLDER.
    - B. BALL VALVES: BRONZE BODY, ASTM-B62, FULL PORT, 3 PIECE, PTFE TRIM, 400 PSI WOG, SOLDER ENDS. SIMILAR TO MILWAUKEE BA-350.
    - C. EXPOSED PIPING AT FIXTURES: CHROME PLATED BRASS.
    - D. WATER HAMMER ARRESTERS: HYDROTROL FIG. No. 5005 OR APPROVED EQUAL.
    - E. PRV: BRONZE BODY, STAINLESS TRIM, INTEGRAL CHECK. CLA-VAL MODEL 991. PROVIDE PRESSURE GAUGE.
    - F. BACKFLOW PREVENTER:
      - 1. PROVIDE WHERE NOTED ON DRAWINGS.
        - a. BRONZE BODY, STAINLESS STEEL SPRINGS, BUNA-N SEALS.
        - b. WATTS SERIES 7 DOUBLE CHECK VALVE.
14. SANITARY, VENT PIPE & FITTINGS (AND STORM WATER PIPING):
    - A. HUBLESS CAST IRON SOIL PIPE AND FITTINGS CONFORMING TO CISPI STANDARD 301-72.
15. GAS PIPING & FITTINGS:
    - A. SCHEDULE 40 STEEL PIPE WITH THREADED MALLEABLE IRON FITTINGS.
    - B. FUEL GAS VALVES:
      - 1. 2" AND SMALLER: 125PSI, BRONZE NON-LUBRICATED PLUG GAS COCKS. CRANE No. 250.
16. PROVIDE ACCESS DOORS TO BE INSTALLED IN GENERAL CONSTRUCTION WHICH WILL BE REQUIRED FOR THE PROPER OPERATION AND MAINTENANCE OF ALL CONCEALED EQUIPMENT, VALVES, AND OTHER SIMILAR DEVICES. PREPARE A LIST AND SUBMIT TO THE GENERAL CONTRACTOR FOR HIS INSTALLATION.
    - A. MINIMUM SIZE: 12"x12". PIANO HINGE TYPE. FIRE RATED FOR RATED WALLS.
17. INSULATION:
    - A. ALL HORIZONTAL STORM DRAINAGE ABOVE GRADE, ALL HOT AND COLD WATER PIPE AND FITTINGS SHALL BE INSULATED WITH 1" FIBERGLASS AND COVERED WITH ALL SERVICE JACKET. COLD WATER PIPING WITH VAPOR BARRIER. INSULATION: MANVILLE MICRO-LOK 25/50.
    - B. PROVIDE 12" LONG x 180° SADDLE WITH INCOMPRESSIBLE BLOCK AT HANGERS.
18. HANGERS AND SUPPORTS:
    - A. UL LISTED AND FM APPROVED.
    - B. HORIZONTAL CAST IRON SOIL PIPE: CLEVIS TYPE HANGERS WITH STEEL RODS AND SPACED 5'-0" ON CENTERS. PIPING 1-1/4" AND SMALLER AND SHALL BE SUPPORTED EVERY 8'-0" MAXIMUM. THERE SHALL BE NO METAL-TO-METAL CONTACT AT SUPPORTS. PROVIDE SADDLE UNDER INSULATED PIPING. PROVIDE EXPANSION SHIELDS SIMILAR TO HILTI FOR FASTENING HANGER RODS.
    - C. WHERE OVERHEAD CONSTRUCTION DOES NOT PERMIT FASTENING OF HANGER RODS IN REQUIRED LOCATIONS, PROVIDE ADDITIONAL STEEL FRAMING AS REQUIRED AND APPROVED. PIPING SHALL NOT BE HUNG FROM OTHER PIPING.
    - D. PAINT HANGERS AND SUPPORTS INCLUDING RODS AND INSERTS WITH ZINC CHROMATE PRIMER BEFORE INSTALLATION.
    - E. PROVIDE APPROVED FLOOR STANDS, WALL BRACKETS OR MASONRY PIERS FOR ALL LINES RUNNING NEAR THE FLOORS AND WHICH CAN BE PROPERLY SUPPORTED BY THE FLOORS OR WALLS.
    - F. ALL PIPES TO BE SUPPORTED IN CONFORMANCE WITH SEISMIC RESTRAINT REQUIREMENTS.
20. INSTALLATION:
    - A. DURING THE COURSE OF CONSTRUCTION, EXPOSED FITTINGS SHALL BE PROPERLY COVERED WITH VASELINE AND BURLAP. FIXTURES SHALL BE COVERED WITH WOODEN PROTECTION HOUSINGS. FIXTURES AND FITTINGS SHALL BE UNCOVERED AND THOROUGHLY CLEANED UPON COMPLETION OF CONSTRUCTION. FIXTURES SHALL BE IN PERFECT CONDITION AT COMPLETION OF PROJECT. ANY DAMAGED MATERIALS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER.
    - B. THOROUGHLY CLEAN PRIOR TO CONSTRUCTION, ALL SANITARY AND WASTE LINES.
    - C. ALL PIPING TO HAVE PIPE MARKERS AND DIRECTIONAL FLOW ARROWS.
    - D. PROVIDE TAGS AND CHARTS FOR ALL NEW VALVES.

PLUMBING SYMBOLS

SYMBOL	DESCRIPTION
	GATE VALVE/BALL VALVE
	OS&Y GATE VALVE
	GLOBE VALVE
	BALANCING VALVE
	CHECK VALVE
	GAS COCK
SV	GAS SOLENOID VALVE
	UNION
FS	WATER FLOW SWITCH
TS	TAMPER SWITCH
COF	FLOOR MOUNTED CLEANOUT
COG	CLEANOUT MOUNTED AT GRADE
CODP	CLEANOUT DECK PLATE
CO	CLEANOUT
M	WATER METER ON PLAN
	WATER METER IN RISER DIAGRAM
	GAS METER ON PLAN
G	GAS METER IN RISER DIAGRAM
P –	SANITARY STACK RISER DESIGNATION
L –	STORM LEADER NUMBER DESIGNATION
R –	COLD WATER RISER DESIGNATION
G –	GAS RISER DESIGNATION
FD	FLOOR DRAIN
AD	AREA DRAIN
RD	ROOF DRAIN
	WALL HYDRANT
	HOSE BIB
	VENT PIPING
	COLD WATER PIPING
	110° HOT WATER PIPING
	HOT WATER RETURN PIPING
G	GAS PIPING
	HOUSE TRAP (IN RISER DIAGRAM)
	HOUSE TRAP (ON PLAN)
	SANITARY SEWER PIPING BELOW FLOOR (ON PLAN)
	SANITARY SEWER PIPING ABOVE FLOOR (ON PLAN OR RISER DIAGRAMS)
S	STORM DRAIN ABOVE FLOOR (ON PLAN OR RISER DIAGRAMS)
S	STORM DRAIN BELOW FLOOR (ON PLAN)

SYMBOL LIST NOTES:

SYMBOL LIST SHOWN IS FOR GENERAL REFERENCE ONLY. THE PRESENCE OF A SYMBOL DOES NOT IMPLY ITS USE ON THIS PROJECT. REFER TO DRAWINGS FOR SPECIFIC SYMBOLS USED.

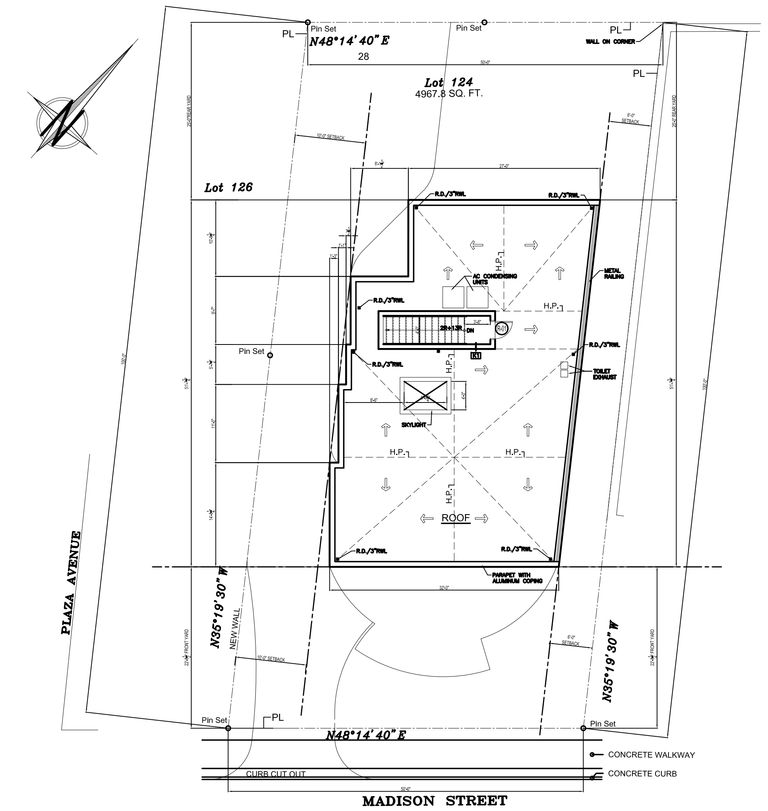
SPECIFICATIONS

TANKLESS ELECTRIC WATER HEATER
STIEBEL ELTRON 223424 TEMPRA 24 WHOLE HOUSE TANKLESS ELECTRIC WATER HEATER INSTANTLY PROVIDES HOT WATER TO UP TO FOUR MEDIUM FLOW SINKS! ENERGY-EFFICIENT UNIT WORKS AS A 2-IN-1 MODEL THAT CAN USE 24 KW OF POWER WITH 240V SERVICE AND 18 KW OF POWER WITH 208V SERVICE TO HEAT THE WATER AS IT FLOWS THROUGH THE MACHINE FOR COMPLETE ELIMINATION OF STANDBY HEAT LOSS. ACTIVATED BY A MINIMUM 0.58 GPM FLOW RATE, TEMPRA 24 FEATURES AN ERGONOMIC CONTROL KNOB THAT ALLOWS TO ADJUST THE WATER TEMPERATURE FROM 86 TO 140 DEGREES FAHRENHEIT.

INSULATION (PIPE AND FITTINGS) SPECIFICATIONS

A. PIPING
ALL COLD, HOT AND HOT WATER RETURN PIPING AND HORIZONTAL STORM WATER PIPING SHALL BE INSULATED WITH MANVILLE MICRO-LOK FIBERGLASS PIPE INSULATION TYPE AP-T PLUS, OR APPROVED EQUAL, 1" THICK FOR HOT WATER, 1/2" THICK FOR COLD AND STORM WATER, WITH ALL SERVICE JACKET (ASJ), FIRE AND SMOKE HAZARD RATING SHALL NOT EXCEED A FLAME SPREAD OF 25 OR SMOKE DEVELOPMENT OF 50.

B. FITTINGS AND VALVES
SHALL BE INSULATED WITH MANVILLE FACTORY PRECUT HI-LO TEMP FIBERGLASS INSULATION AND ZESTON 25/50 RATED PVC INSULATED FITTING COVERS. EPOLUX 670 WHITE VAPOR BARRIER COATING, OR APPROVED EQUAL, SHALL BE APPLIED AROUND THE EDGES OF THE ADJOINING PIPE INSULATION AND ON THE FITTING COVER THROAT. OVERLAP SEAM. THE FITTING COVER SHALL BE SECURED WITH PRESSURE SENSITIVE PEARL GRAY Z-TAPE ALONG THE CIRCUMFERENTIAL EDGES. THE TAPE SHALL EXTEND OVER THE ADJACENT PIPE INSULATION WITH AN OVERLAP ON ITSELF OF 2".



PLOT PLAN

SCALE: 3/32" = 1'-0"

NOTE: PLUMBING SYSTEM AND EQUIPMENT SHALL BE CONSTRUCTED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE 2015 PLUMBING CODE OF NEW YORK STATE.

PLUMBING ABBREVIATIONS

IDENTIFIER	DESCRIPTION		
BT	BATHTUB	LAV	LAVATORY
BTU	BRITISH THERMAL UNIT	RD	ROOF DRAIN
CO	CLEANOUT	TD	TRENCH DRAIN
CFH	CUBIC FEET PER HOUR	SAN	SANITARY
CW	COLD WATER	SK	SINK / KITCHEN SINK
DR	DRYER	SP	SPRINKLER
DW	DISHWASHER	SS	SERVICE SINK
FCO	FLOOR CLEANOUT	STM	STORM
FD	FLOOR DRAIN	SEP	SEWERAGE EJECTION PUMP
FU	FIXTURE UNIT	SP	SUMP PUMP
G	GAS	V	VENT
GPH	GALLONS PER HOUR	VTR	VENT THROUGH ROOF
GPM	GALLONS PER MINUTE	W	WASTE
HB	HOSE BIBB	WC	WATER CLOSET
HW	HOT WATER	WH	WALL HYDRANT
HWR	HOT WATER RETURN	WM	WASHER MACHINE
INV	INVERT	W/D	WASHER & DRYER

DRAWING LIST

DWG. #	TITLE
P-101	SITE PLAN, GENERAL NOTES, PLUMBIING NOTES & LEGEND
P-102	PLUMBING PLANS
P-103	PLUMBING PLANS
P-104	RISER DIAGRAM
P-105	RISER DIAGRAM

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cel. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

CONSULTANTS

REMARKS

REVISIONS

NO	DATE	ISSUE/REVISION

PROJECT

NEW 2-FRAMILY RESIDENTIAL BUILDING

243 MADISON STREET
MAMARONECK, NY 10543

DRAWING TITLE

SITE PLAN, NOTES, SYMBOLS & LEGEND

B-SCAN JOB STICKER

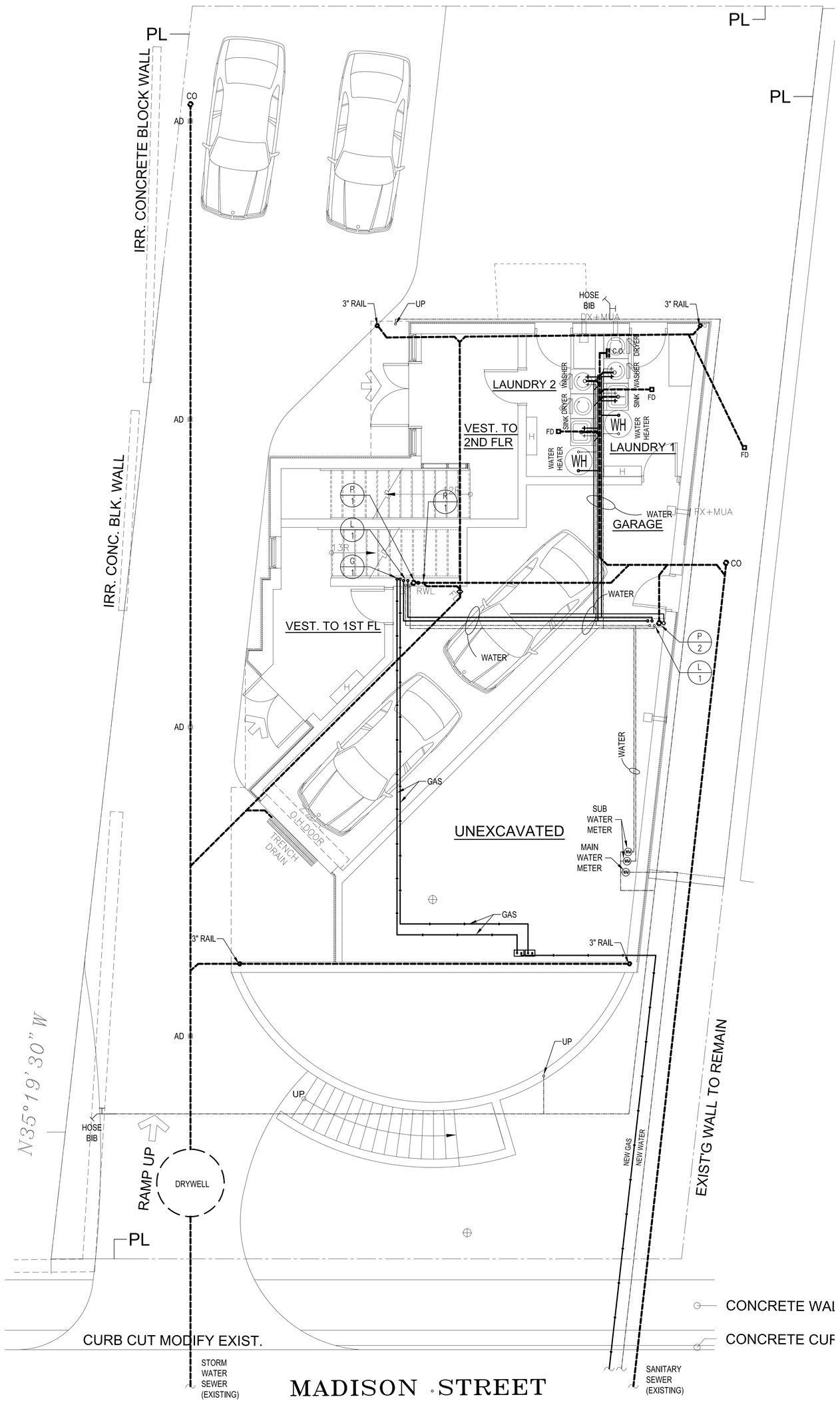
SEAL & SIGNATURE

REGISTERED ARCHITECT AYKUT YENER STATE OF NEW YORK ©1997

DATE: 09/16/20
PROJECT #: 2020-01
DRAWN BY: EH
CHECK BY: AY

DWG No.
P - 101.00

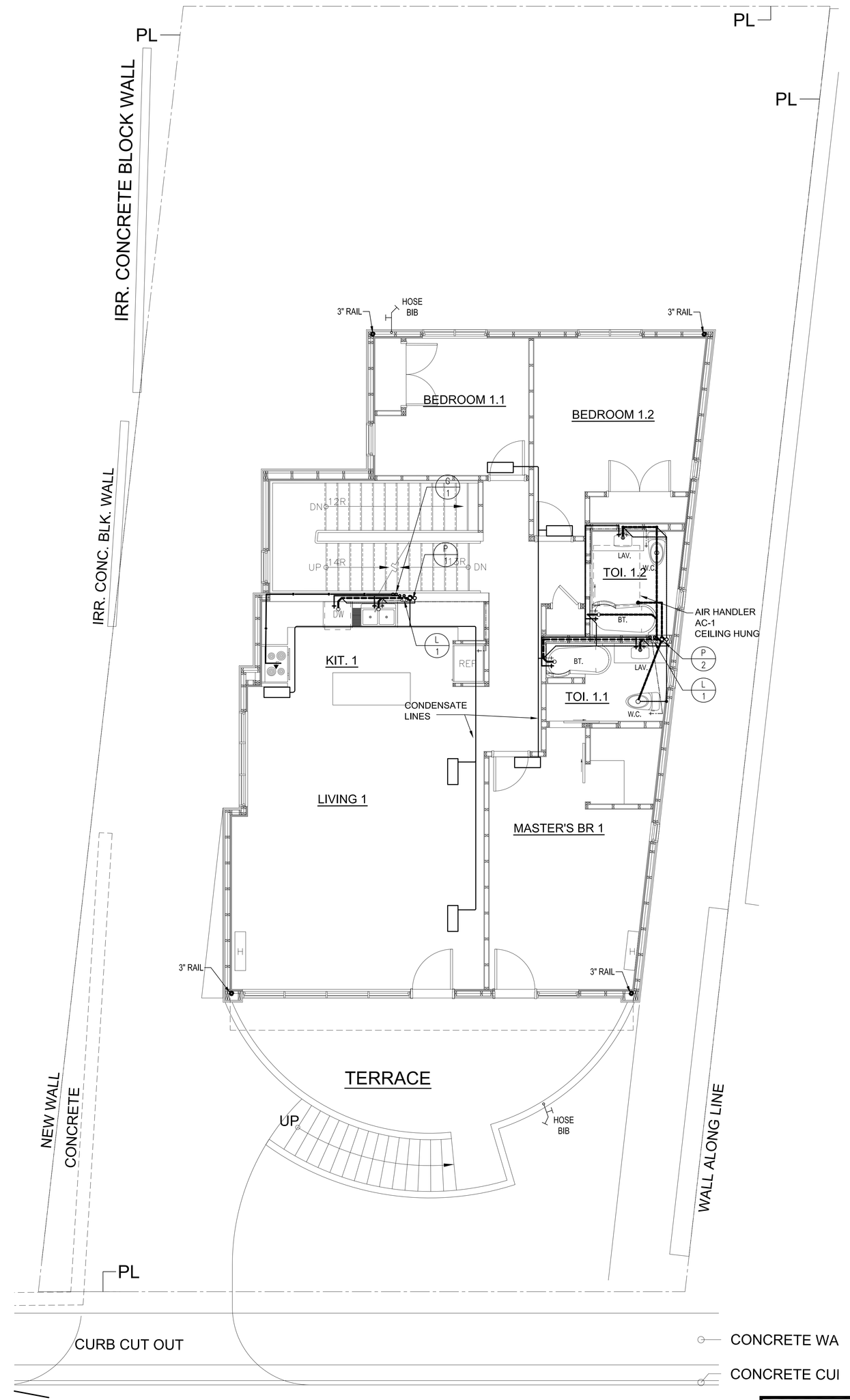
SHEET 01 of 05



1 P-102 CELLAR PLUMBING PLAN

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

NOTE:
CONNECT TRENCH DRAIN TO DETENTION TANK.



2 P-102 1ST FL. PLUMBING PLAN

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

NOTE:
HEAT AND COOLING TO BE PROVIDED BY DUCTLESS SPLIT SYSTEM.

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cel. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

CONSULTANTS

REMARKS

REVISIONS

NO	DATE	ISSUE/REVISION

PROJECT

NEW 2-FRAMILY RESIDENTIAL BUILDING

243 MADISON STREET
MAMARONECK, NY 10543

DRAWING TITLE

PLUMBING PLAN

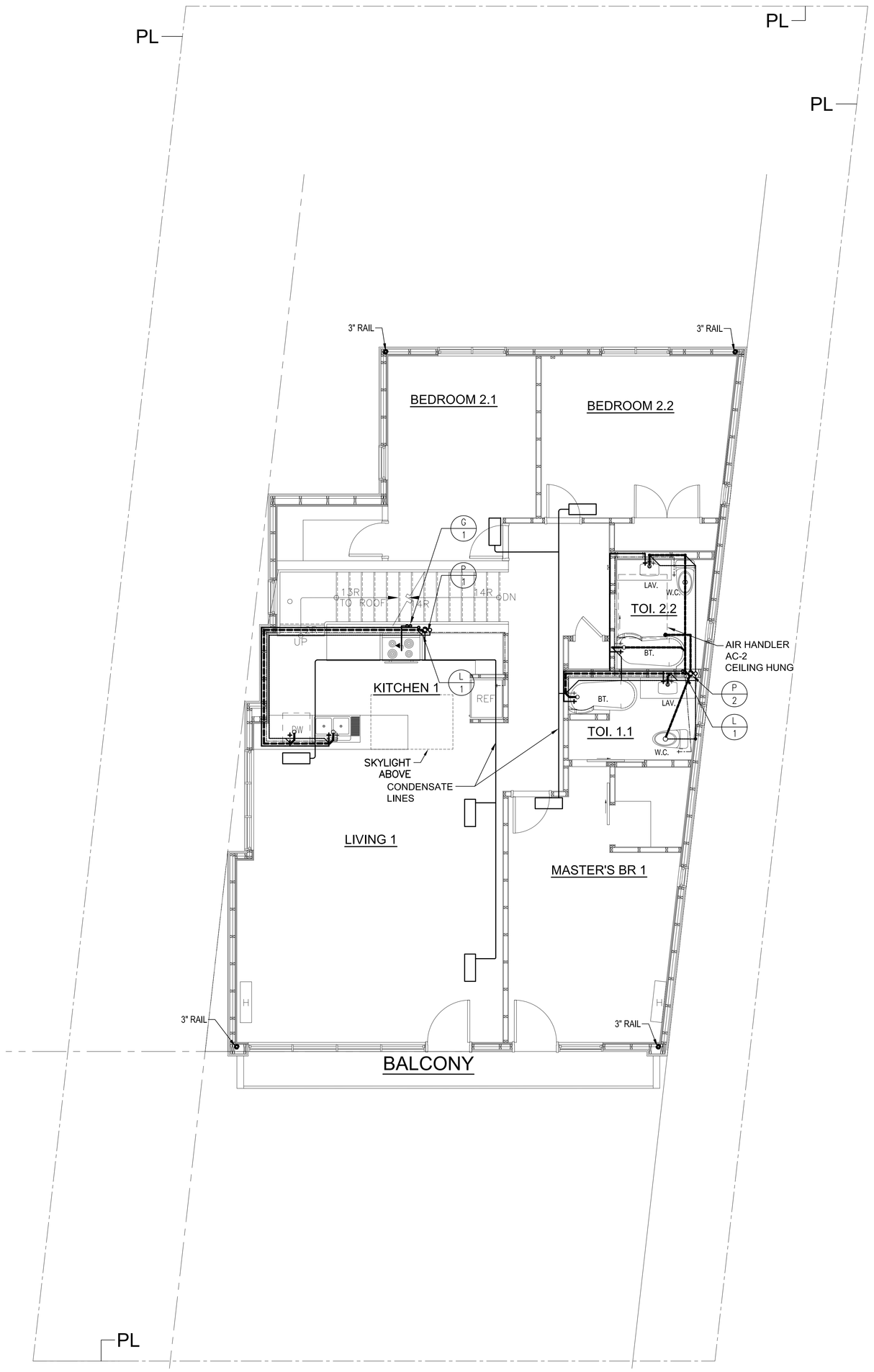
B-SCAN JOB STICKER

SEAL & SIGNATURE

DATE: 09/16/20
PROJECT #: 2020-01
DRAWN BY: EH
CHECK BY: AY

DWG No. P - 102.00

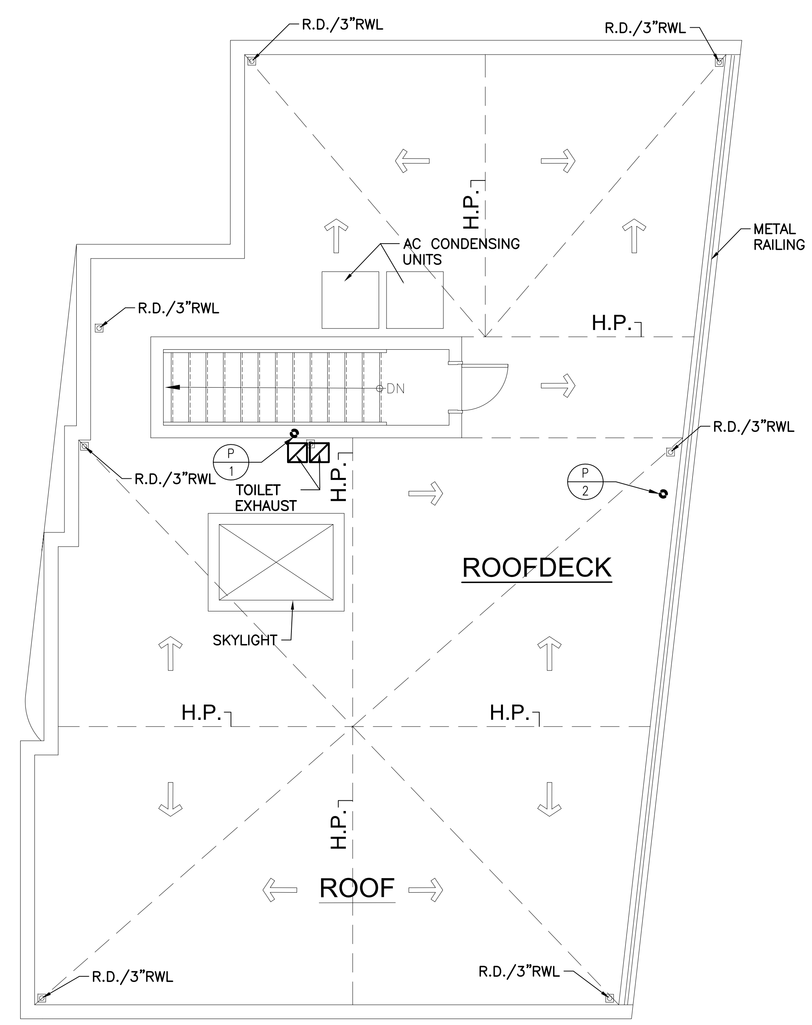
SHEET 02 of 05



1 P-103 2ND FL. PLUMBING PLAN

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

NOTE:
HEAT AND COOLING TO BE PROVIDED BY
DUCTLESS SPLIT SYSTEM.



2 P-103 ROOF PLUMBING PLAN

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

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cel. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

CONSULTANTS

REMARKS

REVISIONS

NO	DATE	ISSUE/REVISION

PROJECT

NEW 2-FRAMILY RESIDENTIAL BUILDING

243 MADISON STREET
MAMARONECK, NY 10543

DRAWING TITLE

PLUMBING PLAN

B-SCAN JOB STICKER

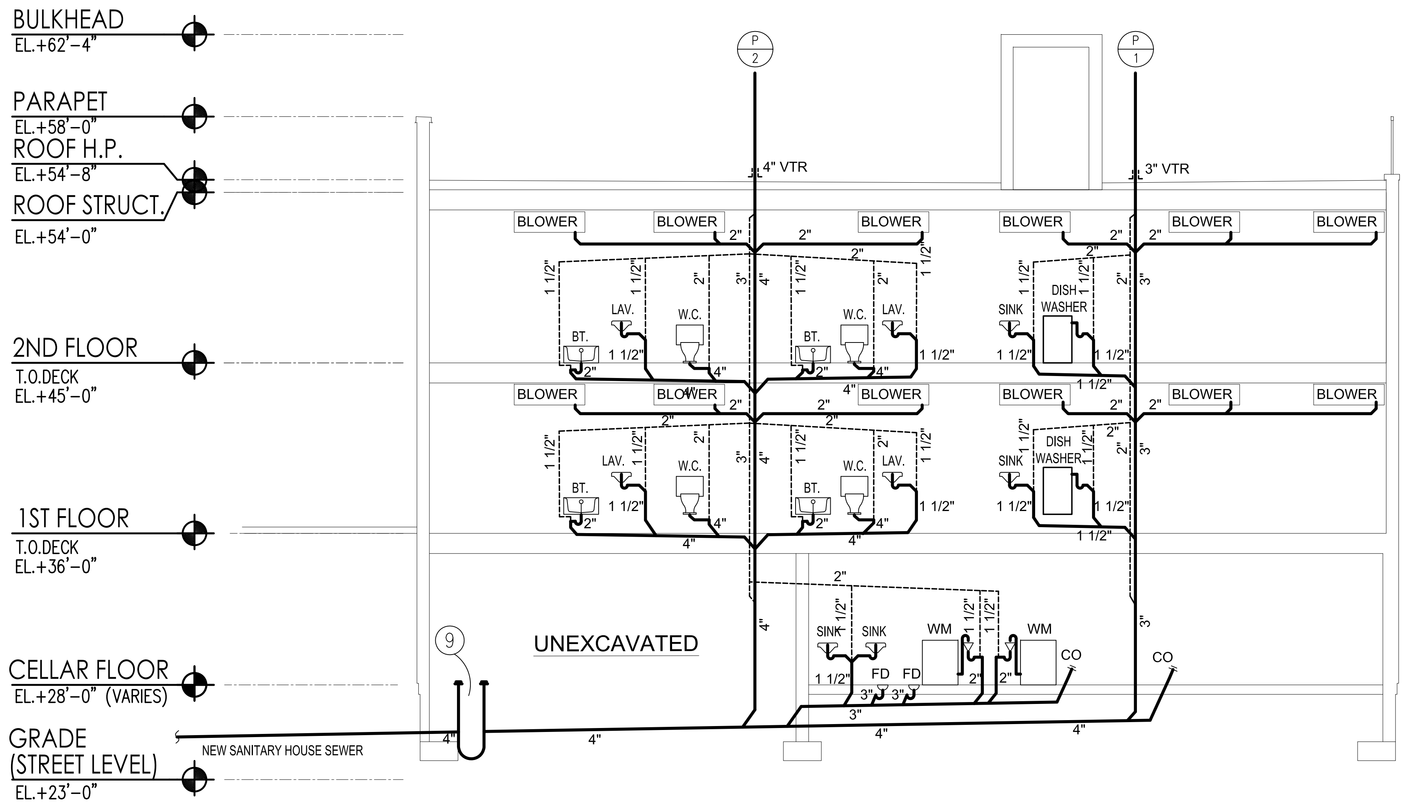
SEAL & SIGNATURE

REGISTERED ARCHITECT ANTHONY YU 019931 STATE OF NEW YORK

DATE: 09/16/20
PROJECT #: 2020-01
DRAWN BY: EH
CHECK BY: AY

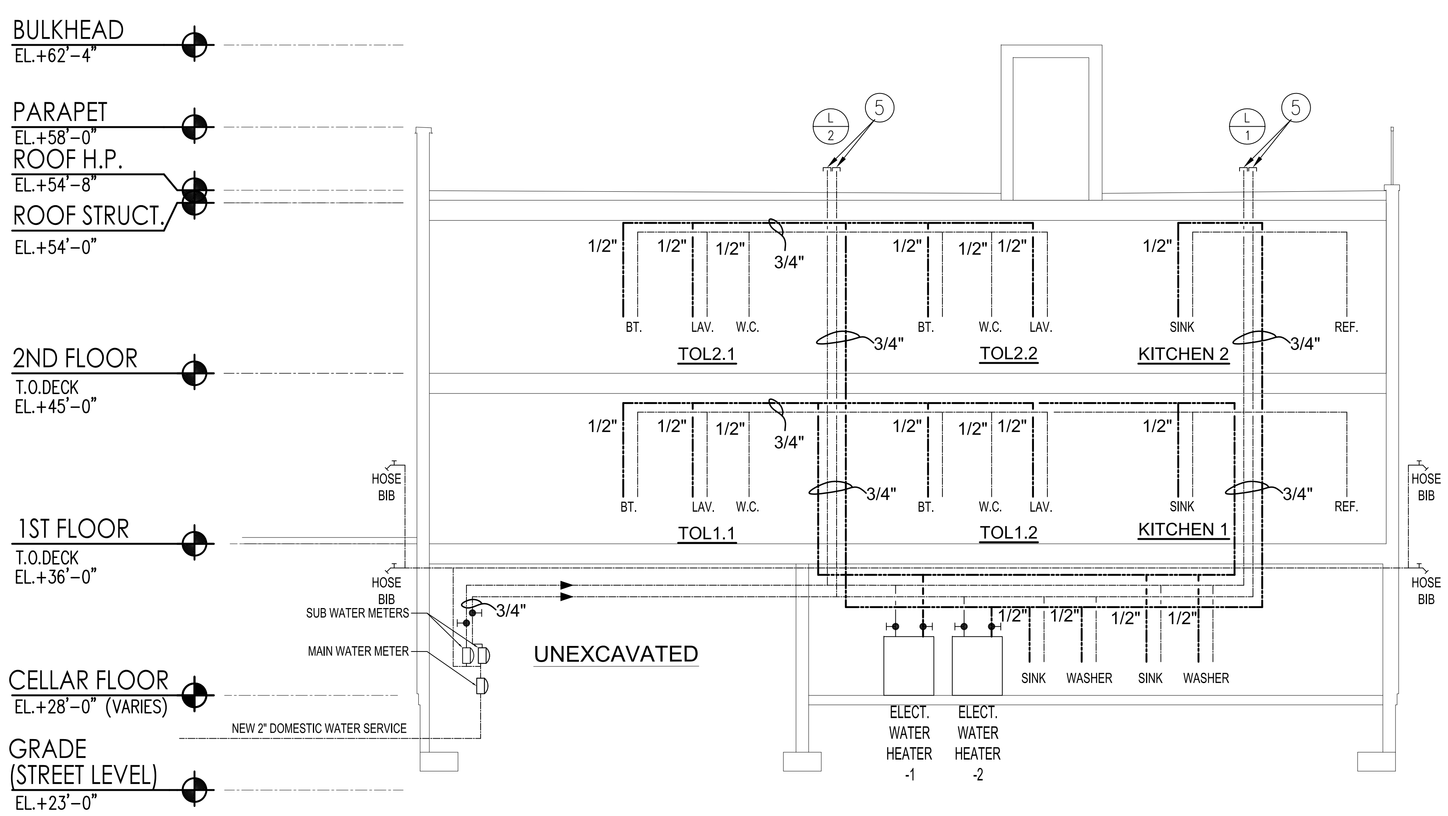
DWG No.
P - 103.00

SHEET 03 of 05



SANITARY RISER DIAGRAM

SCALE: N.T.S.



WATER RISER DIAGRAM

SCALE: N.T.S.

GENERAL NOTES

1. SEE SYMBOL LIST ON DWG P-1.
2. FOR PIPING CONNECTION TO PLUMBING FIXTURES & EQUIPMENT SEE SCHEDULE ON P-5.

KEY NOTES (SYMBOLS (1), (2), ETC.)

1. SLEEVE
2. NEW 4" COMB. BUILDING SEWER @ 5% SLOPE
3. CLEANOUT REQUIRED AT EACH CHANGE OF DIRECTION OVER 45°
4. ALL HORIZONTAL BRANCHES AND PIPING SLOPE @ 2% MIN. UNLESS OTHERWISE NOTED.
5. PIPING CONNECTION a, b, c ...
6. —
7. —
8. NEW STORM DRAIN
9. HOUSE TRAP
10. DESIGN RAINFALL RATE = 3 INCHES PER HOUR.

HOT AND COLD WATER, FLOW LOADS

FIXTURE TYPE		LOAD VALUE IN WATER SUPPLY FLU		
FIXTURE	USAGE	COLD WATER	HOT WATER	TOTAL
WATER CLOSET (WC)	PRIVATE	3.0	--	3.0
	PUBLIC	5.0	--	5.0
LAVATORY (LAV)	PRIVATE	1.5	1.5	2.0
	PUBLIC	3.0	3.0	4.0
BATHTUB (BT)	--	1.5	1.5	2.0
SHOWER (SH)	PRIVATE	1.5	1.5	2.0
	PUBLIC	3.0	3.0	4.0
KITCHEN SINK (SK)	PRIVATE	1.5	1.5	2.0
SERVICE SINK (SS)	PRIVATE	1.5	1.5	2.0
	PUBLIC	3.0	3.0	4.0
REFRIGERATOR (REF)	--	1.0	--	1.0
HOUSE BIBB (HB)	PUBLIC	3.0	--	3.0
WASH/DRYER (W/D)	PRIVATE	3.0	3.0	4.0
DISHWASHER (DW)	PRIVATE	--	2.0	2.0

GENERAL NOTES

1. SEE SYMBOL LIST ON DWG P-1.
2. FOR PIPING CONNECTION TO PLUMBING FIXTURES & EQUIPMENT SEE SCHEDULE ON P-5.

KEY NOTES (SYMBOLS (1), (2), ETC.)

1. ONE CONTROL VALVE FOR EACH APARTMENT
2. ELEC. CONTROL SWITCH
3. HOT WATER RECIRCULATING PUMP
4. CHECK VALVE
5. AIR CHAMBER 12" LONG AT TOP OF EACH RISER
6. WATER HAMMER ARRECTER
7. PROVIDE ADJUSTABLE JACK STANDS AS REQ'D
8. 4.4 GAL EXPANSION TANK
9. P&T RELIEF VALVE
10. DRAIN

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cel. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

CONSULTANTS

REMARKS

REVISIONS

NO	DATE	ISSUE/REVISION

PROJECT

NEW 2-FRAMILY RESIDENTIAL BUILDING

243 MADISON STREET
MAMARONECK, NY 10543

DRAWING TITLE

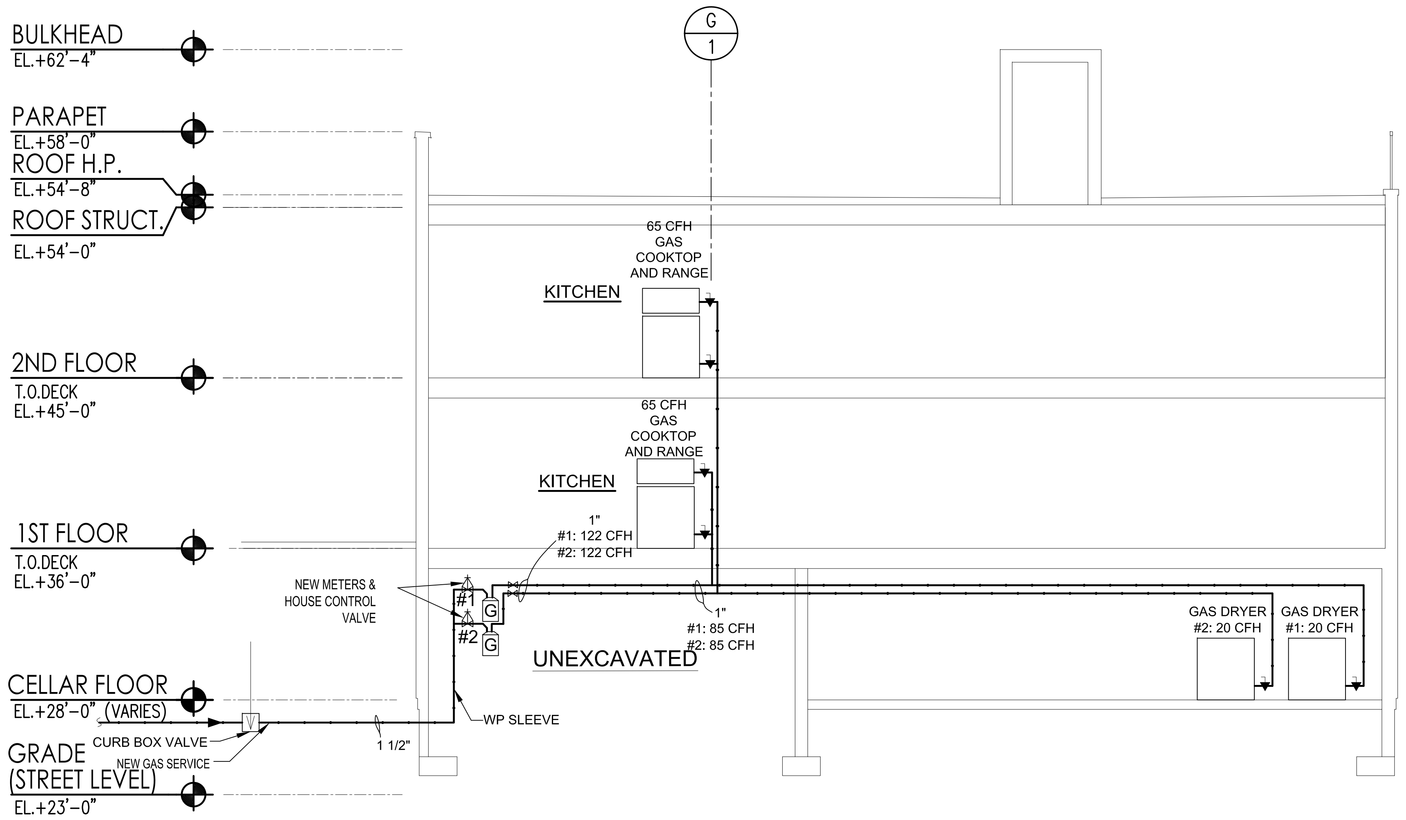
SANITARY RISER DIAGRAM
WATER RISER DIAGRAM

B-SCAN JOB STICKER

SEAL & SIGNATURE

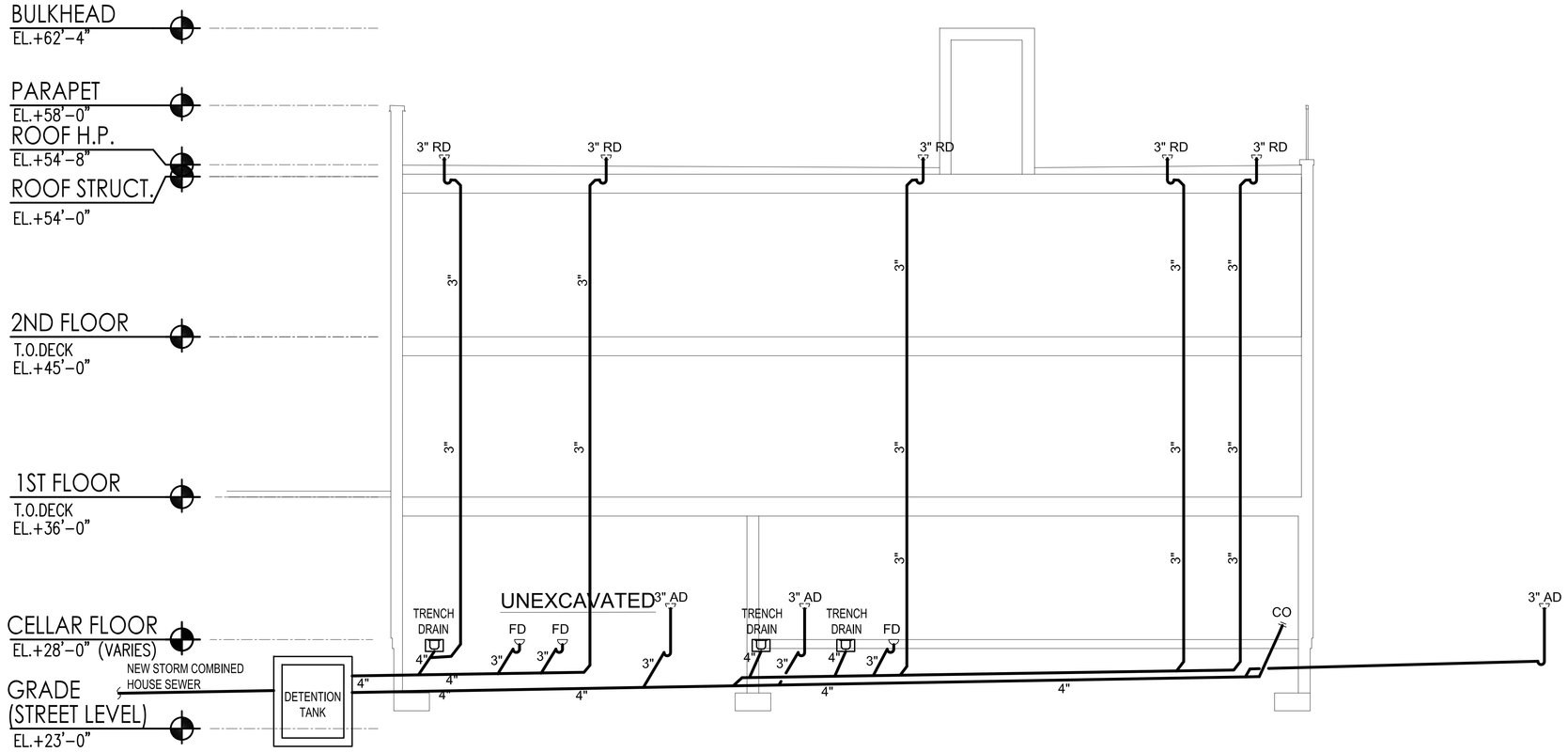
REGISTERED ARCHITECT ANTHONY YEUNG 019937 STATE OF NEW YORK

DATE: 09/16/20
PROJECT #: 2020-01
DRAWN BY: EH
CHECK BY: AY
DWG No.
P - 104.00
SHEET 03 of 05



GAS RISER DIAGRAM

SCALE: N.T.S.



STORM WATER RISER DIAGRAM

SCALE: N.T.S.

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cel. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

CONSULTANTS

REMARKS

REVISIONS

NO	DATE	ISSUE/REVISION

PROJECT

NEW 2-FRAMILY RESIDENTIAL BUILDING

243 MADISON STREET
MAMARONECK, NY 10543

DRAWING TITLE

GAS RISER DIAGRAM
STORM WATER RISER DIAGRAM

B-SCAN JOB STICKER

SEAL & SIGNATURE

REGISTERED ARCHITECT ANTHONY YANNI 019377 STATE OF NEW YORK

DATE: 09/16/20
PROJECT #: 2020-01
DRAWN BY: EH
CHECK BY: AY

DWG No.
P - 105.00

SHEET 05 of 05

NOTES

Electric Service And Power Distribution System

A. The Building Is Provided With New Incoming Service From Con Edison At 120/208V, 3 Phase, 4 Wire.
B. New Main Distribution Panel Serves Normal. Emergency Lighting Panel Servers all Emergency Lights.

Electrical Notes:

1. These Electrical Drawings Are Diagrammatic And Show General Layout Of Electrical Equipment And Conduit Runs. The Contractor Shall Make Detailed Large Scale Drawings Of The Electrical Conduit And Equipment And Coordinate Carefully With Other Trades. Additional Offsets And Transitions Shall Be Provided As Required To Install The Ductwork. All Dimensions Shown On These Drawings Are For The Convenience Of The Contractor And Shall Be Verified And Coordinated In The Field Before Duct And Equipment Installation. Advise The General Contractor As To The Exact Size And Location Of Any Opening In The Structure. Failure To Coordinate Work With Other Trades Shall Not Be Justification For Additional Compensation.
2. The Construction, Installation And Supporting Of All Conduit, Lighting, And Electrical Equipment Shall Be In Accordance With The Construction Standards And Requirements Of The New York State Building And Electrical Codes.
3. "As–Built Drawings, At The Completion Of The Entire Job, And Before Final Payment, Furnish To The Engineer/Owner, One (1) Set Of Sepia Mylars, Showing All Work Under This Contract As Actually Installed, Whether Shown On The Original Plans, Or Not, And Noting The Exact Location Of All Controls And Specialties. Submit One (1) Set Of Black And White Prints For Approval, Prior To Furnishing Final Record Sepia Mylars.
4. Secure All Supports To Building Structure As Noted In The Specifications. Support Horizontal Runs Of Metallic Conduits, Not More Than 10 Feet Apart.
5. Support Panels, Junction And Pull Boxes Independently To Building Structure With No Weight Bearing On Conduits.
6. Provide Separate Raceways For Conductors Of Normal And Emergency Circuits.
7. Connect Conduit To Motor Conduit Terminal Boxes With Sealtite Flexible Conduit: Minimum 18 Inches In Length And 50% Slack. Do Not Terminate In Or Fasten Raceways To Motor Foundation.
8. Leave Wire Sufficiently Long To Permit Making Final Connections. All Empty Conduits Shall Be Provided With #12 AWG Steel Drag Wires.
9. Junction And Pull Boxes: Generally, Do Not Locate Exposed In Finished Spaces. Where Necessary, Re–Route Conduits Or Make Other Arrangements For Concealment. Provide Pull Boxes As Necessary To Facilitate Pulling Of Wire And Coordinate Locations With Other Trades. Covers Of Junction And Pull Boxes Shall Be Accessible. For Empty Raceway Runs, Provide Pull Boxes Every 100 Feet.
10. All Outlet Boxes Receiving 1–1/4" Conduit Shall Be A Minimum Of 2–1/2" Deep.
11. Verify Locations Of Outlets And Switches In Finished Rooms With Architectural Drawings Of Interior Details And Finish. In Centering Outlets And Locating Boxes In Outlets, Allow For Overhead Pipes, Duct And Mechanical Equipment Variations In Fireproofing And Plastering, Window And Door Trim, Paneling, Hung Ceilings And The Like, And Correct Any Inaccuracy Resulting From Failure To Do So Without Expense To Owner.
12. Exact Location Of Lighting Fixtures Shall Be In Accordance With Architectural Reflected Ceiling Plan, Or As Directed By Architect.
13. The Electrical Contractor Shall Coordinate Ceiling Types With Ceiling Contractor Prior To Installation Of Lighting Fixtures, Speakers, Smoke And Heat Detectors, Exit Lights, Etc., And He Shall Also Coordinate Location Of Electrical Components In Relation To Diffusers And Sprinklers With Mechanical Contractors.
14. All Disconnect Switches And Circuit Breakers In Finished Public Areas Shall Be Recessed In Wall Or Mounted In Accessible Ceiling With The Approval Of The Architect And/Or Engineer.
15. Provide Sleeves In Floor Slab Or Fire Walls For All Conduits And Seal With U.L. Listed Fire Retardant Approved Compound After Installation Of Conduit.
16. All Receptacles Within 6 Ft. Of A Sink Shall Be GFI Protected.
17. Smoke Detector Wiring & Exterior Circuits Shall Be Hardwired/Concealed In Rigid Metal Conduits.

Lighting System And Lighting Control

1. Recessed, Pendant, Surface And Wall Mounted Lighting Fixtures Are Provided For Normal Power General Illumination.
2. Keep Indirect Fixtures As Long As Possible To Minimize The Number Of Joints. Refer To Plan For Lengths Of Indirect Fixtures.
3. All Fluorescent Fixtures Shall Be Equipped With Energy Saving Lamps And Electronic Ballasts, And Ballasts Shall Have A Total Harmonic Distortion Of Less Than 10%.
4. All Ballasts Based On Advance Ballast With Magnetek As An Approved Equal.
5. All Lamps Based On Osram/Sylvania Catalog Numbers, With Philips And General Electric As Approved Equals.
6. Emergency Fixtures Shall Be Wired To A Emergency Lighting Panel located Convenient to Authorized Persons. Only Authorized Persons Shall Have Control of Emergency Lighiting.
7. Emergency Lighting System Consists Of Egress Lighting Fixtures, And Exit Signs At Exits, Wired To Emergency Panels Are Provided.
8. All Finishes Must Be Approved By The Architect.
9. Provide All Necessary Mounting Hardware.
10. NO SUBSTITUTIONS SHALL BE PERMITTED.
11. All Light Fixtures To Be U.L. Approved.
12. All PL Lamps Shall Have Quad Pins Suitable For Dimmers.
13. Provide Emergency Battery Ballasts Integral To Lighting Fixtures As Indicated On Floor Plan.

TRANSIENT VOLTAGE SURGE SUPPRESSORS

Transient Voltage Surge Suppressors (TVSS) Schedule

Provide The Following TVSS Units In Locations Indicated And As Described Herein. Wiring Distance From Circuit Breaker To TVSS Unit Shall Be Kept To A Minimum And Shall Not Exceed 10' In Total Length. Contact Data Support Associates, 800–755–6492 For TVSS Equipment. Coordinate Application With Lightning Protection Contractor And Each Contractor Installing Cables Or Conductors Which Leave Or Enter The Site Or Buildings On The Site.

Type 1
Main Distribution Panel: Current Technology # SEL 250–120/208–3GY–L2. Unit Shall Include Integral Test Port, 10–Year Warranty, LED Indicators, Form C Contacts, Audible Counters. Unit Shall Be Fed From 3 Pole, Test Switch, Phase Indicator Lights, Low Battery Alarm And Dual Disturbance Alarm With 100 Amp Circuit Breaker In Switchboard And Be Fed Via 4 # 2 AWG Copper Conductors And A # 2 AWG Ground.

ELECTRICAL SYMBOL LIST

Identifier	Description
	Flexible Conduit Concealed Via Floors, Walls, Ceiling, Underground (2)
	Conduit Homerun To Panelboard
	Rigid Metal Conduit (Smoke Detector Wiring & Exterior Circuits)
	Conduit Turned Up
	Conduit Turned Down
	Duplex Receptacle, 15A, 120V – 18" AFF
	Simplex Receptacle, 20A, 120V – 18" AFF
GFI	Ground Fault Interrupting Receptacle, 15A, 120V
IG	Isolated Ground Receptacle, 15A, 120V – 18" AFF
	Duplex Receptacle Mounted High Or Above Counter, 15A, 120V – 42" AFF
	Junction Box
or	Panel Board – 72" To Top Of Enclosure (See Schedules For Mounting Type) (3)
	Main Distribution Panel (MDP)
	Electrical Meter
$3	AC General Use Snap Switch, 15A, 120–277 VAC – 42" AFF
$D	Dimmer Switch, 15A, 120–277 VAC – 42" AFF, 1500 Watts U.O.N.
$S	Closet Snap Switch – 42" AFF
$a	Light Switch ("a" Designates Lighting Fixtures Controlled) – 42" AFF
$3	Three–Way Switch, 15A, 120–277 VAC – 42" AFF
$4	Four–Way Switch, 15A, 120–277 VAC – 42" AFF
	Exit Light Fixture & Emergency Battery Light Fixture Combination, With (2) Heads
	Exit Sign With Direction Arrow & Emergency Battery Light Fixture Combination, With (2) Heads
30	Unfused Safety Switch (Amp. Rating)
WP 30/20	Fused Safety Switch (Switch Rating/Fuse Rating) WP: WATER PROOF
M	Combination Motor Starter And Disconnect Switch
E	Exhaust Fan (Kitchen/Bathroom), 80 CFM MIN.
FACP	Fire Alarm Control Panel
F	Fire Alarm Pull Station
F	Fire Alarm Combination Horn/Strobe
S/D	Smoke / CO Detector

Symbol List Notes:

1. Symbol List Shown Is For General Reference Only. The Presence Of A Symbol Does Not Imply Its Use On This Project. Refer To Drawings For Specific Symbols Used.
2. See Sheet E–4 For Branch Circuit Designations
3. See Sheet E–4 For Panelboard Nameplate Requirements.
4. See Sheet E–3 For Smoke Detector Notes and Riser Diagram.

GENERAL SYMBOL LIST

Identifier	Description
1	Keynote Symbol
1	Keynote With Leader
	Connect To Existing

GEN.ABBREVIATIONS

Identifier	Description		
AFF	Above Finished Floor	HP	Horsepower
AFG	Above Finished Grade	MC	Mechanical Contractor
BFG	Below Finished Grade	MFR	Manufacturer
BLG	Building	MH	Mounting Height
CLG	Ceiling	MIN	Minimum
CO	Company	NYC	New York City
CONTR	Contractor	NTS	Not To Scale
DN	Down	WP	Weather Proof
DWG(S)	Drawing(s)	PC	Plumbing Contractor
EC	Electric Contractor	PSI	Pounds Per Square Inch
EM	Emergency	RT	Rain Tight
EQUIP	Equipment	RL	Equipment ToBe Relocated
FD	Fire Department	SDD	Duct Smoke Detector
HC	Hung Ceiling	SQ. FT.	Square Feet
		TYP	Typical

LIGHTING FIXTURE SCHEDULE

INTERIOR LIGHT SCHEDULE

- "A1" - CEILING SURFACE MOUNTED DECORATIVE LED (BEDROOMS) - 24" X 24" 45 WATT, 120V
- "A2" - CEILING SURFACE MOUNTED DECORATIVE LED (LIVING ROOMS) 33 WATT, 120V
- "B1" - CEILING SURFACE MOUNTED DOWNLIGHTS 16.5 WATT, 120V
- "C1" - LINEAL WALL SURFACE MOUNTED - DECORATIVE 40 WATT, 120V
- "C2" - LINEAL WALL SURFACE MOUNTED - UTILITY 24 WATT, 120V
- "C3" - LINEAL WALL SURFACE MOUNTED - CLOSETS 40 WATT, 120V
- "D1" - PENDANT - LIVING ROOM (SMALL) 12.5 WATT, 120V
- "D2" - PENDANT - UPPER LOBBY (LARGE) 12.5 WATT, 120V
- "E1" - UNDERCOUNTER LIGHTING - LED - KITCHEN 11.51 WATT, 120V
- "F1" - COVE - CONTINUOUS LED 11.51 WATT, 120V
- "G1" - MIRROR LIGHT BATHROOM - LED 120 WATT, 120V
- "G2" - BATH LIGHT - SURFACE MOUNTED WATERPROOF 22 WATT, 120V

EXTERIOR LIGHT SCHEDULE

- "X1" - SURFACE / WALL MOUNTED ON BUILDING 12.5 WATT, 120V
- "X2" - STEPS LIGHTS 12 WATT, 120V

NOTE

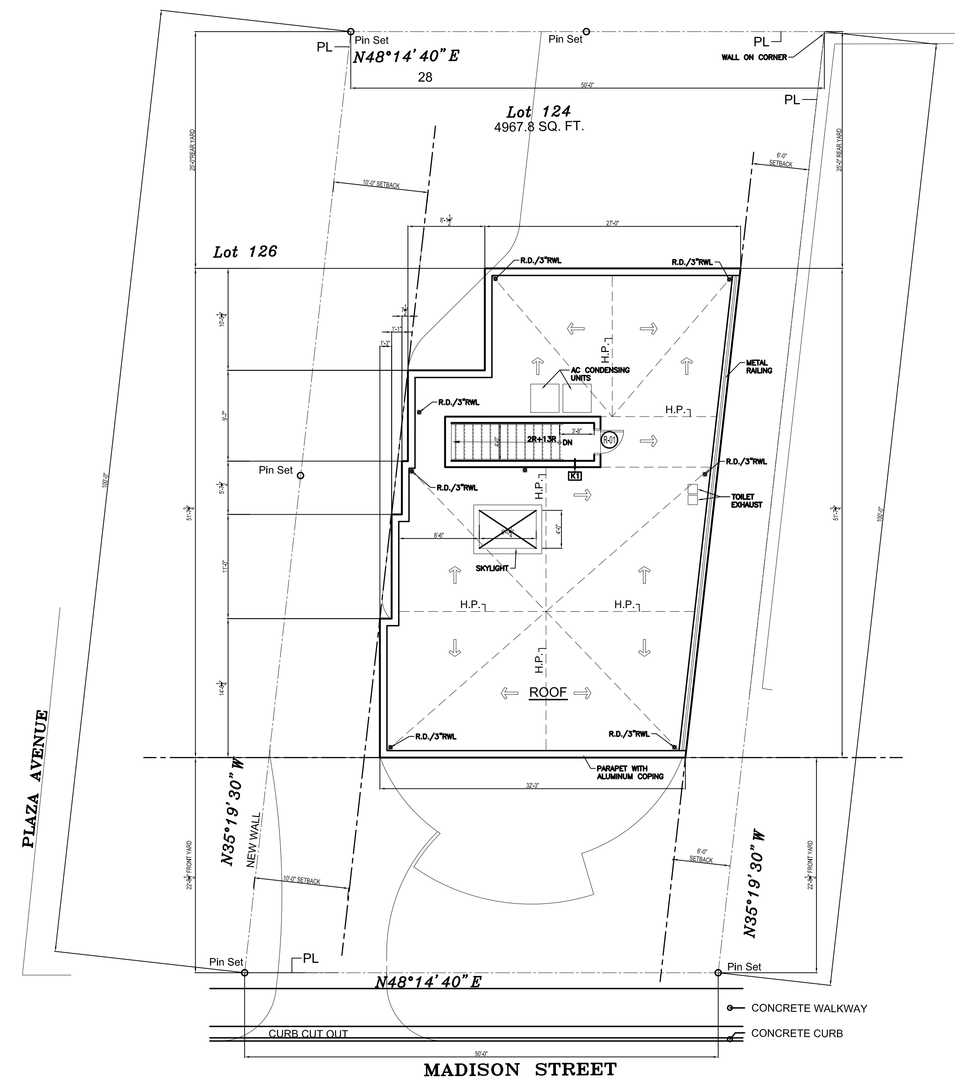
NOT LESS THAN 75% OF THE LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE HIGH EFFICACY LAMPS OR NOT LESS THAN 75% OF THE PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL CONTAIN ONLY HIGH EFFICACY LAMPS.

ELECTRICAL ABBREVIATIONS

Identifier	Description	Identifier	Description
AIC	Interrupting Capacity	MDP	Main Distribution Panel
ATS	Automatic Transfer Switch	MDS	Main Distribution Switchboard
C	Conduit	MLO	Main Lugs Only
CB	Circuit Breaker	NC	Nurse Call System
C/T	Current Transformer	N	Neutral (Grounded Circuit Conductor)
EM	Emergency Lighting	NEC	National Electric Code
EMT	Electrical Metallic Tubing	NL	Night Light
EWC	Electric Water Cooler	PNL	Panel
FACP	Fire Alarm Control Panel	RECEPT	Receptacle
G, GND	Ground	RGS	Rigid Galvanized Steel
GFI	Ground Fault Circuit Interrupter	SW&FU	Disconnect Switch And Fuse
GE	Generator	STP	Shielded Twisted Pair
IG	Isolated Ground	SEB	Service End Box
IMC	Intermediate Metal Conduit	TEL	Telephone
JB	Junction Box	TBB	Telephone Backboard
KCMIL	Thousand Circular Mill (also KCM Or MCM)	TMCC	Temperature Motor Control Center
LRA	Locked Rotor Amps	UTP	Unshielded Twisted Pair
MCB	Main Circuit Breaker	XFMR	Transformer
MCC	Motor Control Center		

DRAWING LIST

E–101	NOTES, SYMBOLS, ABBREVIATIONS, LIGHTING FIXTURE SCHEDULE & DRAWING LIST
E–102	CELLAR AND FIRST FLOOR ELECTRIC PLANS
E–103	SECOND FLOOR AND ROOF ELECTRIC PLANS
E–104	ELECTRICAL LIGHTING FIXTURE SCHEDULE AND ELECTRICAL RISER DIAGRAM AND ELECTRICAL NOTES



1 E-101.00 SITE PLAN
SCALE: 1/8" = 1'-0"

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cel. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

CONSULTANTS

REMARKS

REVISIONS

NO	DATE	ISSUE/REVISION

PROJECT

NEW 2-FRAMILY RESIDENTIAL BUILDING

243 MADISON STREET
MAMARONECK, NY 10543

DRAWING TITLE

NOTES, SYMBOLS, ABBREVIATIONS LIGHTING FIXTURE SCHEDULE & DRAWING LIST

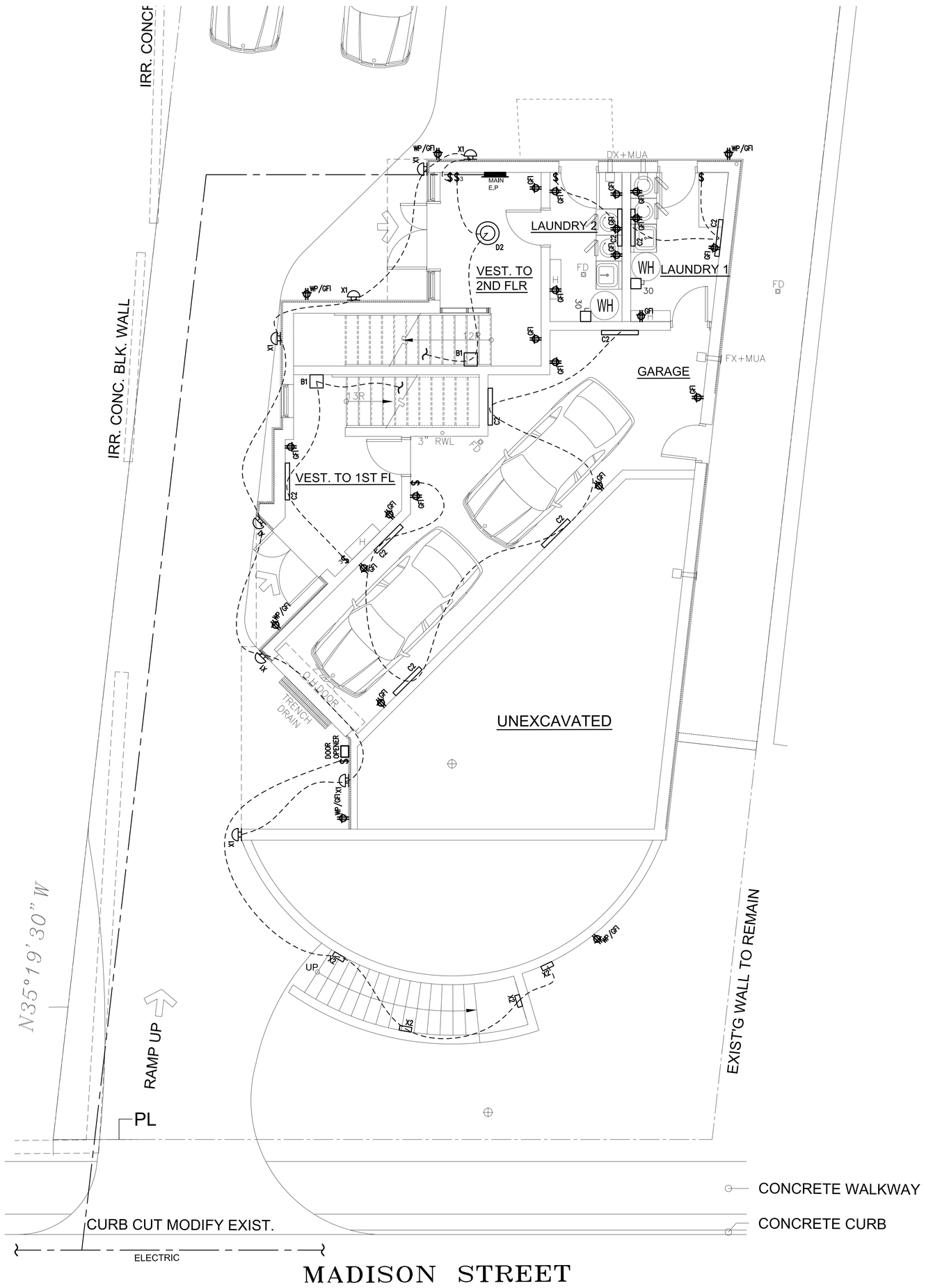
B–SCAN JOB STICKER

SEAL & SIGNATURE

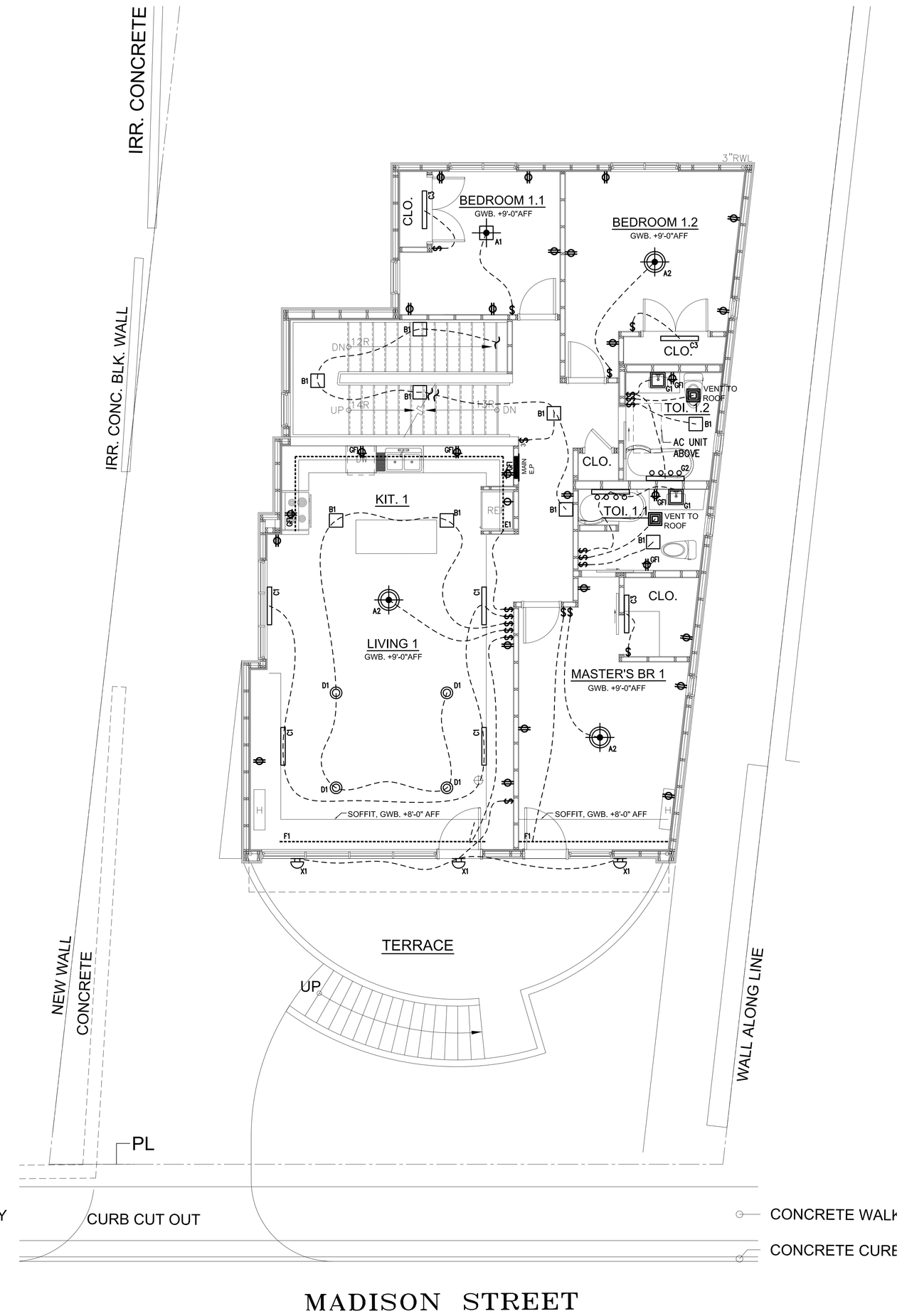
DATE: 09/15/20
PROJECT #: 2020-01
DRAWN BY: EH
CHECK BY: AY

DWG No. E - 101.00

SHEET 01 of 04



1 E-102 CELLAR PLAN (ELEC. PROPOSED)
SCALE: 1/4" = 1'-0"



2 E-102 1st FL PLAN (ELEC. PROPOSED)
SCALE: 1/4" = 1'-0"

NOTES:

1. EACH OF THE 2 DWELLING UNITS ARE SEPARATELY METERED.
2. AC SYSTEM TO BE WIRED ACCORDING TO WIRING DIAGRAM OBTAINED FROM HVAC VENDOR.

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cel. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

CONSULTANTS

REMARKS

REVISIONS

NO	DATE	ISSUE/REVISION

PROJECT

NEW 2-FRAMILY RESIDENTIAL BUILDING

243 MADISON STREET
MAMARONECK, NY 10543

DRAWING TITLE

CELLAR, 1ST FL. & 2ND FL.
ELECTRIC PLANS

B-SCAN JOB STICKER

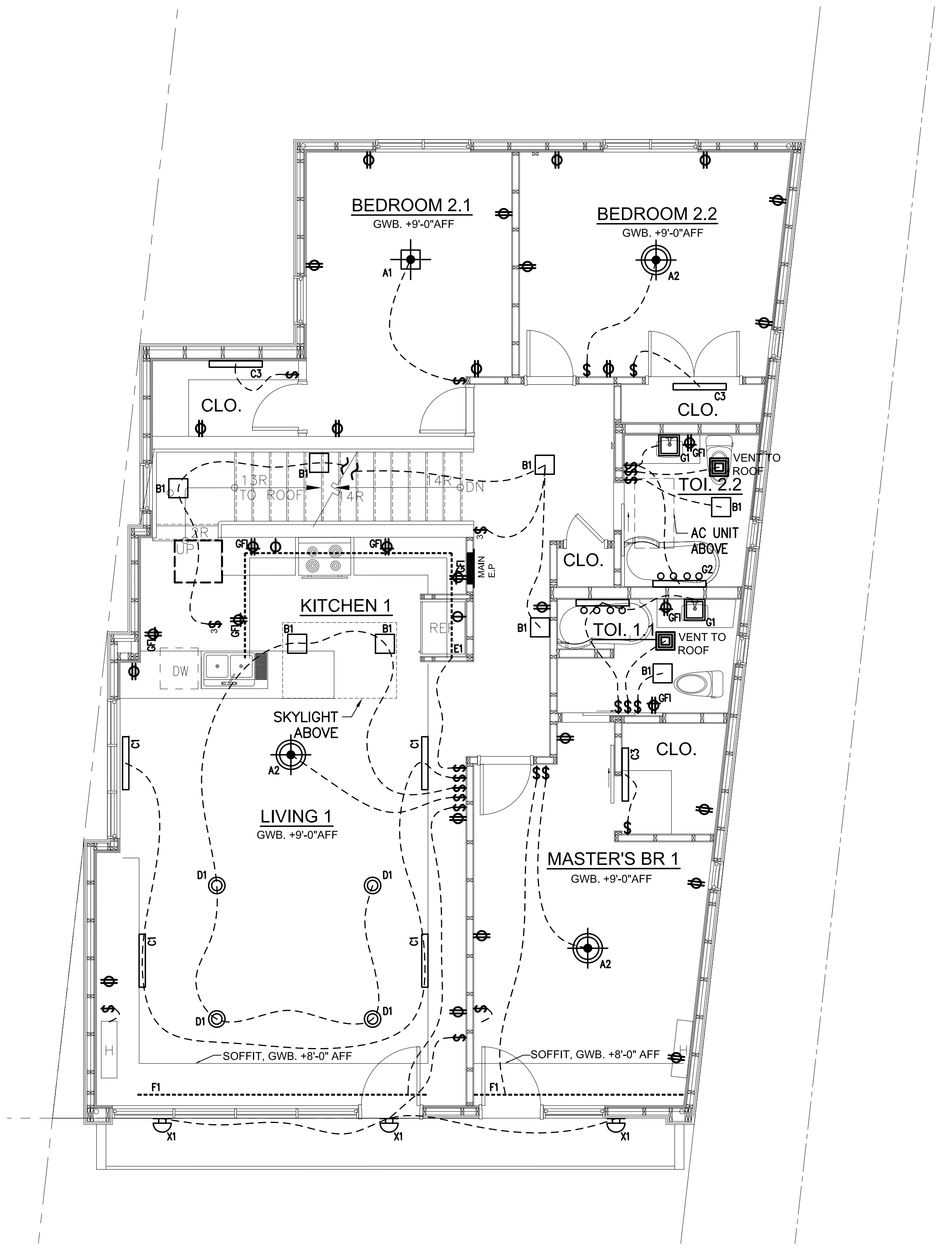
SEAL & SIGNATURE

REGISTERED ARCHITECT ANTHONY YEUNG STATE OF NEW YORK

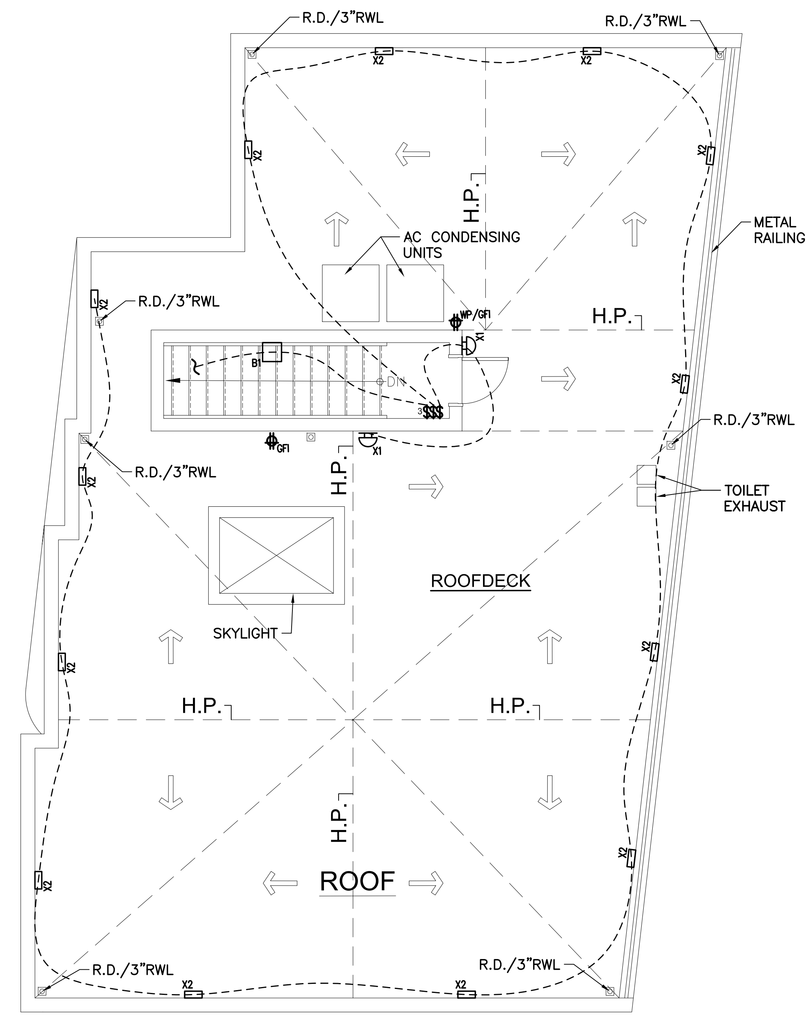
DATE: 09/15/20
PROJECT #: 2020-01
DRAWN BY: EH
CHECK BY: AY

DWG No. E - 102.00

SHEET 02 of 04



3 E-102 2nd FL PLAN (ELEC. PROPOSED)
SCALE: 1/4" = 1'-0"



4 E-102 ROOF PLAN (ELEC. PROPOSED)
SCALE: 1/4" = 1'-0"

NOTES:

1. EACH OF THE 2 DWELLING UNITS ARE SEPARATELY METERED.
2. AC SYSTEM TO BE WIRED ACCORDING TO WIRING DIAGRAM OBTAINED FROM HVAC VENDOR.

MECHANICAL SCHEDULE

ROOF

UNIT	LOCATION	VOLTS / HZ / PHASE	COOLING / HEATING BTU	COOLING	HEATING	MANUFACTURER	MODEL	SOUND PRESSURE	WEIGHT / DIMENSIONS
HP-2	ROOF	208-230/60/1PH	36,000 / 40,000	3.0 KW	2.41 KW	MITSUBISHI	PUZ-A36NKA7(-BS)	dBA 52 / 53	214 LBS / 41-5/16" X 14-33/16" X 52-11/16"
HP-1	ROOF	208-230/60/1PH	36,000 / 40,000	3.0 KW	2.41 KW	MITSUBISHI	PUZ-A36NKA7(-BS)	dBA 52 / 53	214 LBS / 41-5/16" X 14-33/16" X 52-11/16"

2ND FLOOR

UNIT	LOCATION	VOLTS / HZ / PHASE	COOLING / HEATING BTU	COOLING	HEATING	MANUFACTURER	MODEL	SOUND PRESSURE	WEIGHT / DIMENSIONS
AH-2	CLG MOUNTED	208-230/60/1PH	36,000 / 40,000	3.0 KW	2.41 KW	MITSUBISHI	PEAD-A36AA7	dBA 42 / 40 / 37	86 LBS / 55-1/8" X 28-7/8" X 9-7/8"

1ST FLOOR

UNIT	LOCATION	VOLTS / HZ / PHASE	COOLING / HEATING BTU	COOLING	HEATING	MANUFACTURER	MODEL	SOUND PRESSURE	WEIGHT / DIMENSIONS
AH-1	CLG MOUNTED	208-230/60/1PH	36,000 / 40,000	3.0 KW	2.41 KW	MITSUBISHI	PEAD-A36AA7	dBA 42 / 40 / 37	86 LBS / 55-1/8" X 28-7/8" X 9-7/8"

INDOOR EXHAUST FANS FOR KITCHENS, BATHROOMS AND DRYERS

UNIT	LOCATION	VOLTS/PHASE	DAMPER	VIBRATION ISOLATORS	FAN SIZE	MANUFACTURER	MODEL	REMARKS
TX	CEILING	120/1 PHASE	100 SERIES	RC-75	144, 50 CFM @ 0.25" SP	COOK GEMINI	100 SERIES , GC	
DX	CEILING	120/1 PHASE	100 SERIES	RC-75	144, 50 CFM @ 0.25" SP	COOK GEMINI	100 SERIES , GC	
KX	CEILING	120/1 PHASE	100 SERIES	RC-75	164, 100 CFM @ 0.25" SP	COOK GEMINI	100 SERIES , GC	

ROOF EXHAUST FANS FOR KITCHENS, BATHROOMS AND DRYERS

UNIT	LOCATION	VOLTS/PHASE	DAMPER	FAN SIZE	MANUFACTURER	MODEL	REMARKS
TX	ROOF	120/1 PHASE	BACKDRAFT	90C17DEC, 200 CFM @ 0.5" SP, 1/4 HP	COOK GEMINI	ACED -EC	
DX	ROOF	120/1 PHASE	BACKDRAFT	500 CFM @ 0.375" SP, 1/6 HP	COOK GEMINI	ACEB80C2B	
KX	ROOF	120/1 PHASE	BACKDRAFT	100C17DEC, 400 CFM @ 0.5" SP, 1/4 HP	COOK GEMINI		

O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cel. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

CONSULTANTS

REMARKS

REVISIONS

NO	DATE	ISSUE/REVISION

PROJECT

NEW 2-FRAMILY RESIDENTIAL BUILDING

243 MADISON STREET
MAMARONECK, NY 10543

DRAWING TITLE

SCOND FLOOR & ROOF ELECTRIC PLANS

B-SCAN JOB STICKER

SEAL & SIGNATURE

REGISTERED ARCHITECT ANTHONY YEUNG 012937 STATE OF NEW YORK

DATE: 09/15/20
PROJECT #: 2020-01
DRAWN BY: EH
CHECK BY: AY

DWG No. E - 103.00

SHEET 03 of 04

LIGHTING SCHEDULE

LABEL	DESCRIPTION	LOCATION	BALLAST/TYPE	BULBS/FIXTURE	WATTS/BULB	BULB WATTS TOTAL	FIXTURE QUANTITY	TOTAL WATTS	MANUFACTURER
A1	CEILING, CFL 3506Lmn 120V INTEGRATED LED WHITE ACRYLIC 24"X24"	BEDROOM	LED BUILT-IN	1	45	45	2	90	YLIGHTING
A2	CEILING, CFL 1692Lmn 120V INTEGRATED LED WHITE ACRYLIC 18"Ø	BEDROOM/LIVING ROOMS	LED BUILT-IN	1	33	33	6	198	YLIGHTING
B1	CEILING, CFL 965Lmn 120V INTEGRATED LED WHITE ACRYLIC 8"X8"	HALLWAY/BATHROOM/ATTIC	LED BUILT-IN	1	16.5	16.5	21	346.5	MODERN FORMS
C1	WALL , FLOUR CFL 3472Lmn 120V WHITE ACRYLIC 35-3/8" LONG	LIVING ROOM	INTEGRATED LED	1	40	40	8	320	CRAFTMADE
C2	WALL , FLOUR CFL 3120Lmn 120V BRONZE ACRYLIC 3-5/8"W 5-1/2"H 8-3/4"D	CELLAR	C-LITE LED	1	24	24	18	432	E-CONOLIGHT
C3	WALL , FLOUR CFL 3472Lmn 120V WHITE ACRYLIC 35-3/8" LONG	CLOSET	INTEGRATED LED	1	40	40	6	240	CRAFTMADE
D1	CEILING PENDANT, CFL 375Lmn 120V GLASS SHADE 16-1/8"Ø	LIVING ROOM	INTEGRATED LED	1	12.5	12.5	8	100	MODERN FORMS
D2	CEILING PENDANT, CFL 375Lmn 120V GLASS SHADE 16-1/8"Ø	STAIR / VESTIBULE	INTEGRATED LED	1	12.5	12.5	8	100	MODERN FORMS
E1	UNDERCOUNTER, CFL 86.1Lmn 120V WHITE ACRYLIC 24"	KITCHEN	LED LIGHT BAR	1	11.51	11.51	24	276.24	GE
F1	LED STRIP, CFL 442Lmn 120V PER FOOT	CEILING	LED STRIP	1	4.4	4.4	52	228.8	ASPECT LED
G1	LIGHTED MIRROR, FLOUR CFL 10800Lmn 120V 36"X36"	BATHROOM	SILHOUETTE LED	1	120	120	4	480	YLIGHTING
G2	WALL LIGHT, FLOUR CFL 1600Lmn 120V GLASS SHADE 24"	BATHROOM	LED BUILT-IN	1	22	22	4	88	POSSINI EURO EXETER
X1	WALL , FLUOR CFL 1500Lmn 120V OUTDOOR WALL LIGHT14-1/4"X5"X6-1/2"	EXTERIOR WALL / ROOF	LED BULB, A19	1	12.5	12.5	17	212.5	LAMPS PLUS
X2	WALL , FLUOR CFL 270Lmn 120V BLACK ALUMINUM 7"X7"	EXTERIOR WALL / ROOF	INTEGRATED LED	1	12	12	17	204	MODERN FORMS

GENERAL NOTES

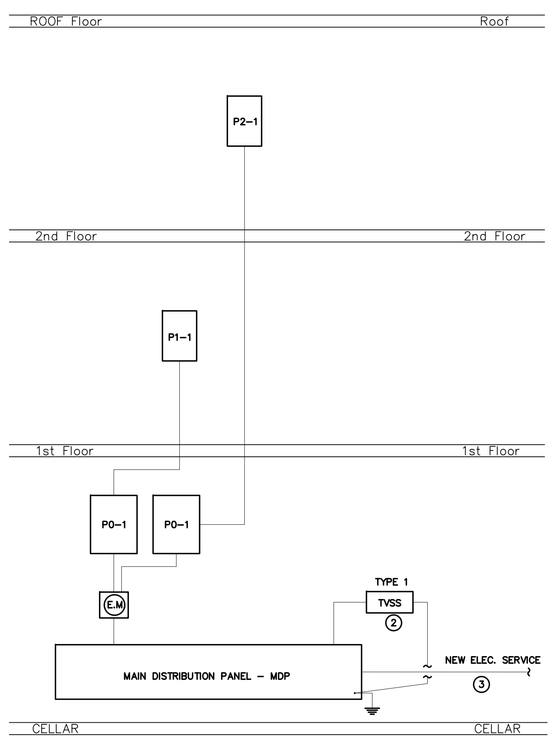
1. Provide Additional Gutter Space For Tapping The Panels To The Riser.
2. Refer To Panel Schedules For Feeder Sizes.
3. All Equipment Short Circuit Rating Shall Be Fully Rated.
4. All Equipment Shall Have Copper Bus Bars. No Aluminum.

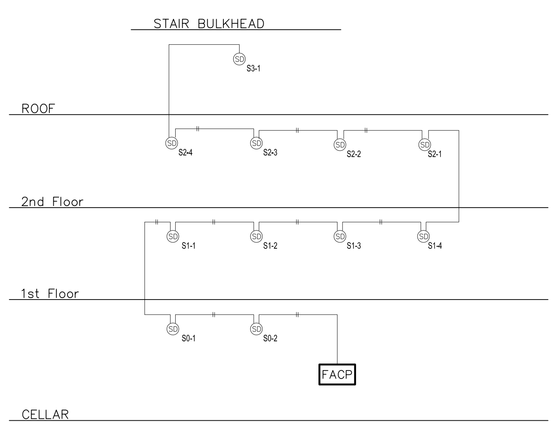
KEY NOTES (Symbols ①, ②, Etc.)

1. Provide Dedicated Telephone Line For Con Edison (Time Or Day Account). Install Near Metering At Electrical Room As Required By Con Edison.
2. See TVSS Notes on Sheet E-1.
3. 12#500 MCM, 3#3/0, 3 G-4" Conduits.

GENERAL NOTES FOR INSTALLATION FO SMOKE DETECTORS

1. EACH DWELLING UNIT SHALL BE EQUIPPED WITH AN APPROVED TYPE SMOKE DETECTOR DEVISE RECEIVING PRIMARY POWER FROM THE BUILDING WIRING WITH NO SWITCHES IN THE CIRCUIT OTHER CURRENT DEVISE PROTECTING THE BRANCH CIRCUIT.
2. SMOKE DETECTORS MUST BE EITHER THE IONIZATION CHAMBER TYPE OR THE PHOTO-ELECTRIC DETECTORS TYPE.
3. ALL SMOKE DETECTORS MUST BE INSTALLED WITHIN 15'-0" OF THE ENTRANCE OF ANY SLEEPING ROOM, WALL OR CEILING MOUNTED AS INDICATED ON PLAN, AS PER N.F.P.A. #74/1980.
4. A CERTIFICATE OF SATISFACTORY INSTALLATION FOR SMOKE DETECTORS MUST BE FILED WITH THE DOB.
5. ADA APPROVED-AUDIO & VISUAL UNIT - "BRK ELECT." MODEL 100S (REQUIRED IN ALL MULTIPLE FAMILY DWELLINGS).
6. IN ALL OCCUPANCY GROUPS-APPROVED AND OPERATIONAL DEVICES REQUIRED IN MECHANICAL ROOMS, ELECTRICAL SWITCH GEAR ROOMS, ELECTRIC AND TELEPHONE CLOSETS OVER 75 SQUARE FEET.
7. ALL DEVICES SHALL BE ACCEPTED BY NATIONALLY ACCEPTED INDEPENDENT LABORATORY AS MEETING NATIONALLY RECOGNIZED STANDARDS AND AS MAINTAINED BY PERIODIC FOLLOW UP SERVICE TO ENSURE CONTINUED COMPLIANCE.





O.A.P.D.
OFFICE for ARCHITECTURE, PLANNING, DESIGN, P.C.
4 Governors Court, Great Neck, N.Y. 11023
1334 East Gun Hill Road, Bronx, N.Y. 10469
Off. (516) 773-3862 Off. (718) 798-9547
Fax (516) 773-3879 Cel. (516) 967-3862
WWW.OAPDARCHITECTURE.COM

CONSULTANTS

REMARKS

REVISIONS

NO	DATE	ISSUE/REVISION

PROJECT

NEW 2-FRAMILY RESIDENTIAL BUILDING

243 MADISON STREET
MAMARONECK, NY 10543

DRAWING TITLE

ELECTRICAL RISER DIAGRAM
SMOKE DETECTOR RISER
DIAGRAM AND NOTES

B-SCAN JOB STICKER

SEAL & SIGNATURE

REGISTERED ARCHITECT ANTHONY YU 012937 STATE OF NEW YORK

DATE: 09/15/20
PROJECT #: 2020-01
DRAWN BY: EH
CHECK BY: AY

DWG No.
E - 104.00

SHEET 04 of 04