NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 7 615 Erie Boulevard West, Syracuse, NY 13204-2400 P: (315) 426-7519, (315) 426-7551 | F: (315) 426-2653 www.dec.ny.gov

May 7, 2019

Kelly Sweet Harbor View Square, LLC c/o Housing Visions 1201 East Fayette Street, Suite 26 Syracuse, NY 13210

> Re: Harbor View Square, Site ID No. C738040 City of Oswego, Oswego County Sub-slab Depressurization Systems

Dear Ms. Sweet:

The New York State Department of Environmental Conservation (Department) and the New York State Department of Health have reviewed the revised Sub-slab Depressurization System Work Plan (work plan) for the Harbor View Square site, which was prepared by Synapse Risk Management, LLC and Jeffrey R. Holt, P.E. on behalf of Harbor View Square, LLC (Volunteer). The work plan was dated January 2019, but was revised and re-submitted on April 9, 2019. The work plan included the following drawings:

Building 1: E-106; P-100; P-106; Building 2: E-101; P-101; P-501; Buildings 3 & 4: E-101; P-101; P-501; and Figure 2 – Radon System Partial Plan and Details.

With the following modification, the work plan is hereby approved.

• The fans for the sub-slab depressurization systems will be located outside the buildings.

The Volunteer committed to this modification via an email dated May 6, 2019. This letter and the Volunteer's May 6, 2019 email must be attached to the front of all copies of the work plan. If you have any questions, please do not hesitate to contact me at 315-426-7411 or joshua.cook@dec.ny.gov.

Sincerely,

Joshua P. Cook, P.E. Professional Engineer 1



Department of Environmental Conservation Harbor View Square May 7, 2019 Page 2 of 2

> ec: Harry Warner (NYSDEC) Joshua Cook (NYSDEC) Maureen Schuck (NYSDOH) Richard Jones (NYSDOH) Kelly Sweet (Harbor View Square, LLC) Roger Creighton (Synapse) Jeffrey Holt Matt Hoskins (D&B) Mira Mejibovsky (Passero) Jon Fitzsimmons (Spoleta)



VAPOR INTRUSION INVESTIGATION AND ACTIVE SSDS DESIGN WORKPLAN

HARBOR VIEW SQUARE SYRACUSE, NEW YORK

Prepared for:

Housing Visions Consultants, Inc 1201 East Fayette Street Syracuse, New York 13210

Prepared by:

Synapse Risk Management 360 Erie Boulevard East Syracuse, NY 13202 (315) 475-3700

And

Holt Consulting

January 2019

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ENGINEERING CERTIFICATION

I, Jeffrey R. Holt, P.E., certify that I am currently a NYS registered professional engineer as defined in 6 NYCRR Part 375 and that this Vapor Intrusion Investigation & Active SSDS Design Workplan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigations and Remediation (DER-10).

HOLT CONSULTING

JEFFREY R. HOLT, P.E.



1.0 INTRODUCTION

This Vapor Intrusion Investigation and Active SSDS Design Workplan has been prepared on behalf of Housing Visions Consultants, Inc (Housing Visions) by Synapse Risk Management, LLC and Holt Consulting (Synapse) to evaluate the potential for soil vapor intrusion into buildings that are part of the Harbor View Square redevelopment project located in Oswego, New York (the Property).

Synapse developed this Workplan on behalf of Harbor View Square (Site), Site ID C738040, under the Brownfield Cleanup Program (BCP). The remedy for the Site was selected by a Record of Decision (ROD), which was issued in November 2013 under the Environmental Restoration Program (ERP), Site ID E738040, Operable Unit 01.

For all Site buildings which will be occupied by people, engineering controls will be placed beneath the concrete that will include vapor barriers and sub-slab depressurization systems (SSDS). All proposed buildings have been designed with active SSDS in accordance United States Environmental Protection Agency (USEPA) Techniques of Controlling Radon in New Residential Construction (March 1994). Details regarding the SSDS construction, commissioning, operation, maintenance and monitoring are discussed in further detail in forthcoming section of this Workplan. The cover systems will be required to be maintained to satisfy the requirements of the ROD.

The structure of this Workplan is consistent with requirements set forth in the New York State Department of Health (NYSDOH) Final, *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, October 2006 (supplemented May 2017).

1.1 Objective

The overall objective of this Workplan is to evaluate the potential for soil vapor intrusion from subsurface soil or groundwater into the indoor air of buildings at Site and to design active SSDS's for the Site buildings and confirm certain performance criterial (i.e. sub-slab vacuum, fan flow and SSDS monitoring failsafe's).

2.0 HEALTH AND SAFETY PROGRAM

A site-specific Health and Safety Plan (HASP) will be prepared under separate cover to address the field work set forth in this Vapor Intrusion Workplan. The HASP will be written in conformance with Occupational Safety and Health Administration (OSHA) and applicable USEPA regulations.

The objective of the HASP will be to provide a mechanism for establishing safe working conditions and procedures specific to the forgoing investigation. The safety organization, procedures, and protective equipment will be established based upon an analysis of potential physical, chemical, and biological hazards onsite. Specific hazard control methodologies will be identified to minimize the potential of accident or injury for all proposed activities.

3.0 SCOPE OF WORK

Overall Workplan objective is to evaluate soil vapor intrusion and to design active SSDS's in the Site buildings by implementing the following investigation activities:

- Evaluate potential for soil vapor intrusion from subsurface soil or groundwater into the indoor air of the Site buildings to include indoor air and sub-slab vapor sampling;
- Design an active SSDS in the Site buildings including sizing and connecting a Radon fan to the passive new construction Radon systems;
- Conduct diagnostic testing of the active SDSS's in the Site buildings to confirm vacuum levels below the sub-slab, fan flow rates, leak testing and testing for back-drafting of natural gas appliances.
- Prepare and submit a summary report to document the vapor intrusion investigation and the SSDS design activities, findings, conclusions and potential corrective actions, as required.

This Workplan has been prepared for use by Synapse personnel and approved sub-contractors, and details the procedures to be followed while performing the activities described within. A detailed description of the field activities to be performed at the Site and rationale are provided below. All sampling locations are subject to change based on field conditions.

3.1 Sub-Slab Vapor and Indoor Air Sampling

Sub-slab soil vapor and indoor air sampling will be conducted in order to document potential vapor intrusion pathways into the buildings that will be constructed as part of this redevelopment project. Given that the buildings will be constructed at different timeframes, the sampling will not occur concurrently with all of the Properties. All locations will be field verified and selected to be representative of conditions in and around slab penetrations (i.e., sumps or floor drains) and based on general NYSDEC and NYSDOH guidance.

Synapse proposes to install one sub-slab sampling points at select buildings, as follows:

 Install one sub-slab vapor sampling point in the basement of the building following the completion of construction and prior to occupancy.

Sub-Slab Sampling Point Installation

The temporary sub-slab sampling points will be installed by first drilling a 1-inch diameter hole through the concrete floor and into the sub-slab aggregate. The sub-slab sampling points will be constructed of 1/4 -inch diameter polyethylene tubing connected to a stainless steel vapor implant extending a minimum of 3-inches into the sub-slab aggregate. The hole and probe will be sealed at the surface with grout and allowed to cure for 4-hours prior to sample collection to prevent infiltration of indoor air into the sub-slab media.

Sub-Slab Sample Collection

Sub-slab vapor samples shall be collected as follows:

- Verify the integrity of the probe seal by using a tracer gas, such as helium or similar inert gas, as a quality control check. At a minimum at least 10% of the sample locations should be supported by tracer gas analysis.
- Prior to sampling, purge three volumes of air from the tubing and probe not exceeding 0.2 liters per minute (I/min).
- Connect a 2.7-liter certified as clean Summa® canister equipped with a flow regulator calibrated to collect sub-slab vapor sample over a 24-hour sampling interval; and
- Following the completion of sampling activities, vapor implants will be removed and the slab penetration will be sealed with non-VOC urethane or similar caulk.

Indoor Air Sampling

 One (1) indoor air sample will be collected concurrently with the sub-slab vapor sample utilizing 2.7-liter SUMA canister for analysis of volatile organic compounds (VOCs) by USEPA Method TO-15 (NYSDOH List). The SUMA canisters will be supplied under vacuum, and calibrated to draw a measured volume of air over a 24-hour period.

3.2 Analytical Methods

The vapor and indoor air samples will be collected over a 24-hour duration to be representative of potential typical occupant exposure. The vapor and indoor air samples will be submitted to Alpha Analytical of Westborough, Massachusetts a New York State certified Environmental Laboratory Approval Program (ELAP) laboratory. The vapor and indoor samples will be analyzed by United States Environmental Protection Agency (USEPA) Method TO-15 (NYSDOH Compound Lists). The minimum method reporting limits for comparison and evaluation purposes will be 0.25 micrograms per cubic meter (ug/m³) or less.

Synapse will notify Alpha Analytical in advance of the requirement to provide Category B laboratory data deliverables. Additionally, a data usability summary report will be provided for NYSDEC and NYSDOH review and determination of completeness. The completed chain of custody and samples will be delivered to the laboratory and scheduled for standard turn-around.

Quality Assurance/Quality Control

During the implementation of the investigation extreme care and attention shall be employed to ensure high quality of data and minimize sampling error. Proper Quality Assurance/Quality Control (QA/QC) protocols must be followed for sample collection and laboratory analysis, such as certified clean sample canisters, meeting holding times and temperatures.

3.3 Active SSDS Design

The SSSD systems will be installed and activated as set forth in the Soil Remedial Action Workplan. The details for the SSDS layout and construction are detailed of following drawings from Passero and Synapse:

- E-101 Power and System Plan
- E-106 Roof Plan
- P-100 Foundation Plan
- P-101 Overall Floor Plan
- P-501 Details
- Figure 2 Radon System Partial Plan Details

The SSDS as designed consists of 3-inch or 4-inch diameter perforated piping installed within the washed gravel below the floor slabs. A 10 mil vapor barrier is installed over the graded gravel material and perforated piping. The below slab 3-inch or 4-inch diameter perforated piping will be manifolded to solid 3-inch or 4-inch poly vinyl chloride (PVC) piping that will connect to inline fans mounted in the un-conditioned attic space (town homes) and a roof mounted fan (mixed use building) (See Drawing P-100).

The SSDS controls will consist of 120 volt AC feed from building electrical panels to an attic or roof mounter service disconnect switch. The fans will be individually monitored in real time with u-tube monometers mounted to the solid PVC pipe. In the event that a fan loses power or vacuum an audible alarm will be initiated, that will alert Housing Visions maintenance personnel or tenants. A contact telephone number is affixed to the pipe just below the manometer, so that the alarm condition can be reported and corrected.

An SSDS OM&M Manual will be prepared following installation and testing in accordance with the New York State Health Department (NYSDOH) *Soil Vapor Intrusion Guidance Manual (Updated 2017).*

SSDS Evaluation

In order to evaluate and confirm sub-slab vacuum fields below the Site building slabs, sub-slab diagnostic measurement points will be installed through the building slab. The vacuum beneath the sub-slab will be recorded as Inches of Water Column (In. W.C.) and measured with a Fluke Model 922 digital monometer or similar. Determine the maximum radius of influence that achieves a minimum allowable depressurization value of between -0.002 and -0.004 inches of water column (in WC).

Vacuum Testing Methodology

Approximately 30 days after the start of the SSDS, up to four (4) pressure differential test points will installed in the building basement or lowest floor. The sub-slab diagnostic measurements readings will be recorded in In. W.C. at the test locations. In addition to the sub-slab diagnostic testing, total system air flow will be measured in cubic feet per minute (CFM).

Other Sub-slab Depressurization Observations

A smoke pen was utilized to check the perimeter of the slab for leaks, no leaks were observed along the perimeter of the foundation system or at any slab joints.

Back-drafting Considerations

To confirm that the active SSDS is not causing a back-drafting conditions to atmospherically vent appliance's the following testing will be conducted:

- The hot water tanks will be operated continually for five (5) minutes prior to starting the spillage testing.
- The furnaces' will be operated in the buildings during the time of the diagnostic testing process.
- A smoke pen will be utilized to identify whether spillage of flue gasses from hot water tanks or other gas fired appliances is occurring, to be conducted 5 minutes after appliance start-up

4.0 REPORT

The findings of vapor intrusion investigation and SSDS design activities will be incorporated into the Construction Completion Report that will be prepared following the completion work activities outlined in this Soil Remedial Action Workplan and in accordance with DER-10, section 1.5. The draft SSDS Operation and Maintenance Manual will be submitted 120 days prior to occupancy or as part of the Site Management Plan, whichever is sooner.

5.0 REFERENCES

- New York State Department of Health (October 2006, Supplemented May 2017). *Guidance for Evaluation Soil Vapor Intrusion in the State of New York.*
- United States Environmental Protection Agency. Radon Mitigation Standards (EPA 402-R-93-078, Revised April 1994)

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Passero Associates 242 West Main Street, Suite 100 Rochester, NY 14614 Principal-In-Charge Mark D, Passero, P.E.
Project Manager Mira Mejibovsky, AIA
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1 DROP 1-1/2" GAS TO HVAC UNIT (BY MECHANICAL CONTRACTOR). REFER TO GAS CONNECTION DETAIL ON DRAWING P-501.

2 2" GAS DOWN. 3 4" RADON PIPING DOWN.

CONNECT INLET AND OUTLET RADON PIPING TO FAN MOUNTED ON SHAFT WALL. RADONAWAY RP145 RADON FAN PROVIDED BY PLUMBING CONTRACTOR. TERMINATE OUTLET PIPING STRAIGHT UP TO ATMOSPHERE. hunnun

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	Stamp:	
	Client: HARBOR HARBOR ENTERP	R VIEW SQUARE, LLC R VIEW SQUARE RISES, LLC Fayette Street
	Syn accuse Passe 242 West Main Strr Rochester, NY 146 Principal-In-Charge Project Manager Designed By No. Date 1 1/21/19	et, Suite 100 14 Set, Suite 100 Set, Suite 100 Set, Suite 100 Set, Suite 100 Set, Set, Set, Set, Set, Set, Set, Set,
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	HAF	RBOR VIEW SQUARE BUILDING #1
	T County: Osw Project No.: 201	own/City: Oswego rego State: New York
	Drawing No.:	P-106
CONSTRUCTION SET	AUG	UST 1, 2018







GARAGE FLOOR PLAN

1





- LARGER.

- CENTER.

- BASE.

- (17)

GENERAL NOTES:

A. REFER TO ARCHITECTURAL PLANS FOR FINAL LOCATIONS OF LIGHTS, SWITCHES AND OUTLETS PRIOR TO ROUGH-INS, REFER TO ELEVATIONS AND REFLECTED CEILING PLANS.

B. FIRESTOP ALL PENETRATIONS THROUGH FIRE AND SMOKE WALLS.

C. ALL WIRING SHALL BE PLENUM RATED.

D. DO NOT INSTALL SWITCHES, RECEPTACLES, OR OTHER MISC. WALL BOXES IN THE SAME STUD CAVITY WITH SWITCHES, RECEPTACLES, OR OTHER MISC. WALL BOXES FOR AN ADJACENT RESIDENTIAL UNIT. BOXES SERVING DIFFERENT RESIDENTIAL SPACES SHALL BE SEPARATED BY AT LEAST 16" O.C. AND ONE WALL STUD.

E. PROVIDE TYPE WRITTEN PANELBOARD SCHEDULES FOR ALL PANELS.

F. ALL 120V, SINGLE PHASE, 15 AND 20 AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS OR DEVICES INSTALLED IN DWELLING UNITS SHALL BE ARC FAULT PROTECTED BY ANY OF THE MEANS DESCRIBED IN NEC 210.12 (A)(1) THROUGH (6).

G. ALL 120V, 15A AND 20A, RECEPTACLES LOCATED INSIDE A DWELLING UNIT SHALL BE TAMPER RESISTANT.

H. ALL KITCHEN RECEPTACLES SHALL BE GFI PROTECTED. COORDINATE WITH MILLWORK PRIOR TO ROUGH-IN.

I. ALL BRANCH CIRCUIT WIRING SHALL BE A MINIMUM OF #12AWG OR

J. MOUNT ALL UNIT LOAD CENTERS, IN DWELLING UNITS, SUCH THAT THE TOP MOST OPERABLE DEVICE IS LESS THAN 48".

K. WIRING AND ANY HOLES INTO ANY OUTLET BOXES ON DEMISING WALLS AND EXTERIOR WALLS SHALL BE SEALED WITH CAULK OR FOAM AND OUTLET BOX CAULKED TO DRYWALL.

DRAWING NOTES:

(1) PROVIDE (1) 120V POWER CONNECTION TO RANGE HOOD AND CIRCUIT TO LOAD CENTER UTILIZING 2-#12 & 1-#12E.G. VERIFY MOUNTING HEIGHT WITH MANUFACTURERS RECOMMENDATIONS.

(2) PROVIDE (1) 240V, 50A/2P POWER CONNECTION FOR ELECTRIC RANGE AND CIRCUIT TO LOAD CENTER UTILIZING 3-#6 & 1-#10E.G IN 3/4"C. VERIFY MOUNTING HEIGHT WITH MANUFACTURERS RECOMMENDATIONS.

(3) PROVIDE 120V CONVENTIONAL COMBINATION SMOKE/CO DETECTOR WITH AUDIBLE BASE. DETECTOR SHALL BE LISTED IN ACCORDANCE WITH UL2075 AND UL268.

(4) PROVIDE 2-#12 & 1-#12E.G. TO GARBAGE DISPOSAL BY P.C. PROVIDE SWITCH IN CABINET TO CONTROL DISPOSAL. CIRCUIT TO LOAD

(5) PROVIDE (1) 240V, 30A/2P POWER CONNECTION FOR ELECTRIC DRYER AND CIRCUIT TO LOAD CENTER UTILIZING 3-#10 & 1-#10E.G IN 1/2"C. VERIFY MOUNTING HEIGHT WITH MANUFACTURERS RECOMMENDATIONS.

6 PROVIDE (1) SWITCH TO CONTROL THE RANGE HOOD LIGHT AND (1) SWITCH TO CONTROL THE RANGE HOOD FAN MOUNT SWITCHES AT SWITCH TO CONTROL THE RANGE HOOD FAN.MOUNT SWITCHES AT 46" AFF TO TOP OF COVERPLATE.

7 PROVIDE 3-#12 & 1-#12E.G. TO BATHROOM EXHAUST BY M.C. PROVIDE (2) SWITCHES, (1) FOR FAN AND (1) FOR LIGHT. COORDINATE SWITCH LOCATION PRIOR TO ROUGH-IN. CIRCUIT TO LOAD CENTER.

(8) PROVIDE 120V CONVENTIONAL HEAT DETECTOR WITH AUDIBLE BASE. 9 PROVIDE 120V CONVENTIONAL SMOKE DETECTOR WITH AUDIBLE

(10) EXTEND NEAREST RECEPTACLE CIRCUIT AND MAKE CONNECTION TO A 16 VOLT UL LISTED TRANSFORMER INCLUDED WITH DOOR ENTRY CHIME KIT. COORDINATE CHIME LOCATION WITH ARCHITECT PRIOR TO INSTALLATION.

(11) PROVIDE 120V POWER CONNECTION TO FURNACE FROM APARTMENT LOAD CENTER. FEED UTILIZING 2-#12 & 1-#12E.G.. COORDINATE CONNECTION WITH MECHANICAL CONTRACTOR.

(12) PROVIDE 120V POWER CONNECTION TO HOT WATER HEATER FROM APARTMENT LOAD CENTER. FEED UTILIZING 2-#12 & 1-#12E.G. IN 1/2"C. COORDINATE CONNECTION WITH MECHANICAL CONTRACTOR.

(13) PROVIDE 120V CONVENTIONAL SMOKE OR HEAT DETECTOR(AS SHOWN) WITH AUDIBLE BASE AND VISUAL STROBE.

(14) PROVIDE 120V CONVENTIONAL COMBINATION SMOKE/CO DETECTOR WITH AUDIBLE BASE AND VISUAL STROBE. DETECTOR SHALL BE LISTED IN ACCORDANCE WITH UL2075 AND UL268.

(15) PROVIDE FOR REMOTE STROBE IN BATHROOMS OF H/V IMPARIED UNITS. DEVICES TO BE POWERED VIA DETECTION DEVICE.

(16) PROVIDE (1)120V RECEPTACLE FOR DISHWASHER FROM APARTMENT LOAD CENTER. FEED UTILIZING 2-#12 & 1-#12E.G.. VERIFY MOUNTING HEIGHT WITH MANUFACTURER'S RECOMMENDATIONS

PROVIDE POWER TO RADON FAN. PROVIDE 20A/1P CIRCUIT BREAKER IN HOUSE PANEL. PROVIDE MOTOR RATED SWITCH AT UNIT. FEED UTILIZING 2-#12 & 1-#12E.G. IN 1/2"C. COORDINATE FINAL VENT PIPE RISER LOCATIONS PRIOR TO ROUGH-IN. PROVIDE UTILITY LIGHT WITHIN 10' OF VENT RISER. PROVIDE PULL STRING IN CONDUITS. UTILITY LIGHT TO BE PORCELAIN SOCKET WITH SCREW-IN LED BULB. PROVIDE SWITCH FOR LIGHT.



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PASSERO ASSOCIATES engineering architecture

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POWER AND SYSTEMS PLAN

HARBOR VIEW SQUARE

BUILDING #2

Town/City: OSWEGO County: OSWEGO State:NEW YORK Project No.:

20160101.0001

E-101

AUGUST 1, 2018







2 FIRST FLOOR PLAN





 DRAWING NOTES: 4* COMBINED WATER SERVICE UP. SLEEVE AND SEAL. CONNECT 4* COMBINED WATER SERVICE TO 4* COLD BY SITE CONTRACT. CONNECT 2* COMBINED WATER SERVICE TO 4* COLD BY SITE CONTRACT. CONNECT 2* 1/2* GAS TO 2* 1/2* BY SITE CONTRACT AT INVERT * 3.00*. CONNECT 2* 1/2* GAS TO 2* 1/2* BY SITE CONTRACT. 4* RADON VENT STACK THROUGH ROOF. CONNECT 3/4* GAS TO HVAC UNIT (BY MECHANICAL CONTRACTOR). HOT WATER HEATER, REFER TO DETAIL ON DRAWING P-501. CONNECT 3/4* GAS TO HVAC UNIT (BY MECHANICAL CONTRACTOR). HOT WATER HEATER. RUN 3/4* HOT TO WATER DISTRIBUTION MANIFOLD. 2* 1/2* GAS UP. 4* COMBINED WATER SERVICE DOWN. CONNECT INLET AND OUTLET RADON PIPING TO FAN. RADONAWAY RP145 RADON FAN PROVIDED BY PLUMBING CONTRACTOR. TERMINATE OUTLET PIPING STRAIGHT UP TO ROOF BOOT AND OUT TO ATMOSPHERE. 	PA e	SSE engine Schoen Plate te 300 sford, NY 14	RO A eering	Associates architecture Bengineering, p.c. Phone: (585) 641-7121 Fax: (585) 362-4175 www.ec4b.com
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		HA	RBC SQL BUILE	DR VIEW JARE DING #2 y: OSWEGO
	Co Proje	201	wego 601	State: NEW YORK
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CONSTRUCTION SET	Date	AUC	GUST	Г 1, 2018









- LARGER.

DRAWING NOTES:

- CENTER.
- INSTALLATION.





A. REFER TO ARCHITECTURAL PLANS FOR FINAL LOCATIONS OF LIGHTS, SWITCHES AND OUTLETS PRIOR TO ROUGH-INS, REFER TO ELEVATIONS AND REFLECTED CEILING PLANS.

B. FIRESTOP ALL PENETRATIONS THROUGH FIRE AND SMOKE WALLS.

C. ALL WIRING SHALL BE PLENUM RATED.

D. DO NOT INSTALL SWITCHES, RECEPTACLES, OR OTHER MISC. WALL BOXES IN THE SAME STUD CAVITY WITH SWITCHES, RECEPTACLES, OR OTHER MISC. WALL BOXES FOR AN ADJACENT RESIDENTIAL UNIT. BOXES SERVING DIFFERENT RESIDENTIAL SPACES SHALL BE SEPARATED BY AT LEAST 16" O.C. AND ONE WALL STUD.

E. PROVIDE TYPE WRITTEN PANELBOARD SCHEDULES FOR ALL PANELS.

F. ALL 120V, SINGLE PHASE, 15 AND 20 AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS OR DEVICES INSTALLED IN DWELLING UNITS SHALL BE ARC FAULT PROTECTED BY ANY OF THE MEANS DESCRIBED IN NEC 210.12 (A)(1) THROUGH (6).

G. ALL 120V, 15A AND 20A, RECEPTACLES LOCATED INSIDE A DWELLING UNIT SHALL BE TAMPER RESISTANT.

H. ALL KITCHEN RECEPTACLES SHALL BE GFI PROTECTED. COORDINATE WITH MILLWORK PRIOR TO ROUGH-IN.

I. ALL BRANCH CIRCUIT WIRING SHALL BE A MINIMUM OF #12AWG OR

J. MOUNT ALL UNIT LOAD CENTERS, IN DWELLING UNITS, SUCH THAT THE TOP MOST OPERABLE DEVICE IS LESS THAN 48".

K. WIRING AND ANY HOLES INTO ANY OUTLET BOXES ON DEMISING WALLS AND EXTERIOR WALLS SHALL BE SEALED WITH CAULK OR FOAM AND OUTLET BOX CAULKED TO DRYWALL.

(1) PROVIDE (1) 120V POWER CONNECTION TO RANGE HOOD AND CIRCUIT TO LOAD CENTER UTILIZING 2-#12 & 1-#12E.G. VERIFY MOUNTING HEIGHT WITH MANUFACTURERS RECOMMENDATIONS.

(2) PROVIDE (1) 240V, 50A/2P POWER CONNECTION FOR ELECTRIC RANGE AND CIRCUIT TO LOAD CENTER UTILIZING 3-#6 & 1-#10E.G IN 3/4"C. VERIFY MOUNTING HEIGHT WITH MANUFACTURERS RECOMMENDATIONS.

(3) PROVIDE 120V CONVENTIONAL COMBINATION SMOKE/CO DETECTOR WITH AUDIBLE BASE. DETECTOR SHALL BE LISTED IN ACCORDANCE WITH UL2075 AND UL268.

(4) PROVIDE 2-#12 & 1-#12E.G. TO GARBAGE DISPOSAL BY P.C. PROVIDE SWITCH IN CABINET TO CONTROL DISPOSAL. CIRCUIT TO LOAD

5 PROVIDE (1) 240V, 30A/2P POWER CONNECTION FOR ELECTRIC DRYER AND CIRCUIT TO LOAD CENTER UTILIZING 3-#10 & 1-#10E.G IN 1/2"C. VERIFY MOUNTING HEIGHT WITH MANUFACTURERS RECOMMENDATIONS.

6 PROVIDE (1) SWITCH TO CONTROL THE RANGE HOOD LIGHT AND (1) SWITCH TO CONTROL THE RANGE HOOD FAN. MOUNT SWITCHES AT 46" AFF TO TOP OF COVERPLATE.

PROVIDE 3-#12 & 1-#12E.G. TO BATHROOM EXHAUST BY M.C. PROVIDE
 (2) SWITCHES, (1) FOR FAN AND (1) FOR LIGHT. COORDINATE SWITCH
 LOCATION PRIOR TO ROUGH-IN. CIRCUIT TO LOAD CENTER.

(8) PROVIDE 120V CONVENTIONAL HEAT DETECTOR WITH AUDIBLE BASE.

(9) PROVIDE 120V CONVENTIONAL SMOKE DETECTOR WITH AUDIBLE BASE.

10 EXTEND NEAREST RECEPTACLE CIRCUIT AND MAKE CONNECTION TO A 16 VOLT UL LISTED TRANSFORMER INCLUDED WITH DOOR ENTRY CHIME KIT. COORDINATE CHIME LOCATION WITH ARCHITECT PRIOR TO

(11) PROVIDE 120V POWER CONNECTION TO FURNACE FROM APARTMENT LOAD CENTER. FEED UTILIZING 2-#12 & 1-#12E.G. IN 1/2"C. COORDINATE CONNECTION WITH MECHANICAL CONTRACTOR.

(12) PROVIDE 120V POWER CONNECTION TO HOT WATER HEATER FROM APARTMENT LOAD CENTER. FEED UTILIZING 2-#12 & 1-#12E.G. IN 1/2"C. COORDINATE CONNECTION WITH MECHANICAL CONTRACTOR.

(13) PROVIDE 120V CONVENTIONAL SMOKE OR HEAT DETECTOR(AS SHOWN) WITH AUDIBLE BASE AND VISUAL STROBE.

(14) PROVIDE 120V CONVENTIONAL COMBINATION SMOKE/CO DETECTOR WITH AUDIBLE BASE AND VISUAL STROBE. DETECTOR SHALL BE LISTED IN ACCORDANCE WITH UL2075 AND UL268.

(15) PROVIDE REMOTE STROBE IN BATHROOMS OF H/V IMPARIED UNITS. DEVICES TO BE POWERED VIA DETECTION DEVICE.

(16) PROVIDE (1)120V RECEPTACLE FOR DISHWASHER FROM APARTMENT LOAD CENTER. FEED UTILIZING 2-#12 & 1-#12E.G.. VERIFY MOUNTING

2 17 PROVIDE POWER TO RADON FAN. PROVIDE 20A/1P CIRCUIT BREAKER IN HOUSE PANEL. PROVIDE MOTOR RATED SWITCH AT UNIT. FEED UTILIZING 2-#12 & 1-#12E.G. IN 1/2"C. COORDINATE FINAL VENT PIPE RISER LOCATIONS PRIOR TO ROUGH-IN. PROVIDE UTILITY LIGHT WITHIN 10' OF VENT RISER. PROVIDE PULL STRING IN CONDUITS. UTILITY LIGHT TO BE PORCELAIN SOCKET WITH SCREW-IN LED BULB. PROVIDE SWITCH FOR LIGHT.

CONSTRUCTION SET

PASSERO ASSOCIATE engineering architecture	S
IS Schoen Place Suite 300 Pittsford, NY 14534 Phone: (585) 641-712 Fax: (585) 362-4174 www.ec4b.com	2. 11 5 n
Stamp:	
Client: HARBOR VIEW SQUARE, LL HARBOR VIEW SQUARE ENTERPRISES, LLC	.C
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AUGUST 1, 2018











	PASSERO ASSOCIATES engineering architecture
DRAWING NOTES:	ECHB engineering, p.c.
 2" DOMESTIC WATER SERVICE UP. SLEEVE AND SEAL. CONNECT 4" COMBINED WATER SERVICE TO 4" COLD BY SITE 	15 Schoen Place Phone: (585) 641-7121 Suite 300 Fax: (585) 362-4175 Pittsford, NY 14534 www.ec4b.com
 CONTRACT. CONNECT 4" SANITARY TO 4" BY SITE CONTRACT AT INVERT -3.00'. 	
5 4" RADON VENT PIPING THROUGH ROOF.	
6 CONNECT 2-1/2" GAS TO 2-1/2" BY SITE CONTRACT.	
 (7) CONNECT 3/4" GAS TO HVAC UNIT (BY MECHANICAL CONTRACTOR). (8) HOT WATER HEATER, REFER TO DETAIL ON DRAWING P-501. 	
 CONNECT 3/4" GAS TO WATER HEATER. RUN 3/4" COLD (BUILDING MAIN) TO WATER HEATER, RUN 3/4" HOT FROM WATER HEATER TO WATER DISTRIBUTION MANIFOLD. 4" SANITARY/WASTE UP. 	
10 UP TO EXTERIOR WALL PLATE CLEANOUT.	
(1) WATER DISTRIBUTION MANIFOLD	
(13) CONNECT INLET AND OUTLET RADON PIPING TO FAN. RADONAWAY RP145 RADON FAN PROVIDED BY PLUMBING CONTRACTOR. TERMINATE OUTLET PIPING STRAIGHT UP TO ROOF BOOT AND OUT TO ATMOSPHERE.	
	Stamp:
	Client: HARBOR VIEW SQUARE, LLC HARBOR VIEW SQUARE ENTERPRISES, LLC
	1201 E. FAYETTE ST. SYRACUSE, NY 13210
	Passero Associates
	242 West Main Street, Suite 100 (585) 325-1000 Rochester, NY 14614 Fax: (585) 325-1691 Principal-In-Charge Peter Wehner, AIA Project Manager Mira Meilboysky, AIA
	Designed By Timothy D. Geier, AIA No. Date By Description
	1 10/25/18 REVISED PER HCR COMMENTS 2 1/21/19 Radon Changes
	UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS IN VIOLATION OF STATE EDUCATION LAW ARTICLE 145 SECTION 7209 AND ARTICLE 147 SECTION 7307, THESE PLANS ARE COPYRIGHT PROTECTED. ©
	OVERALL PLANS
	BUILDING #3 & #4
	Town/City: OSWEGO County: OSWEGO State: NEW YORK
	20160101.0001
	Drawing No.: P-101
CONSTRUCTION SET	AUGUST 1, 2018



PROVIDE STENCILS @ ALL FLOOR LEVEL PENETRATIONS 3" OR 4" VERTICAL NON- PERFORATED PVC RADON PIPE CONCRETE SLAB ON GRADE - REFER TO STRUCT. DRWG'S. FOR ADDITIONAL DESIGN INFO. INSECT/RODENT SCREEN AT ENDS	Passerse constructionAsserse constru
TERMINATE 12" ABOVE ROOF PLANE OUTLET	Stamp: Stamp: Client: HARBOR VIEW SQUARE, LLC HARBOR VIEW SQUARE
ANN PIPE INSIDE THE INTERIOR NS ACROSS THE MIDDLE AS ENT SQUARE FOOTAGE IS RE FEET. 3" OR 4" PVC) IN LOCATION E TO RUN THROUGH AN DOF. THE EFFICIENCY OF THE HE PIPE CAN BE RUN STRAIGHT RIZONTAL RUNS.	ENTERPRISES, LLC 1201 E. FAYETTE ST. SYRACUSE, NY 13210 Passero Associates Accuse, NY 14614 Principal-In-Charge Project Manager Designed By Project Manager Designed By Project Manager Description 1 10/25/18 REVISED PER HCR COMMENTS 2 1/21/19 Radon Changes 2 1/21/19 Ra
THANE CAULK ALL CRACKS, RACKS DUE TO SETTLEMENT.	
THE ROOF MUST BE AT LEAST ERABLE WINDOW. PIPE LEAST 1'-0" ABOVE THE PLANE	DETAILS
ATTIC LESS THAN 6'-0" FROM ATION OF A FAN IS NOT I TEST RESULTS INDICATED HIS WILL INSURE NECESSARY D A SYSTEM BE REQUIRED AND TS WITH A POST CONTRUCTION UFACTURER'S INSTALLATION MMENDATIONS. REFERENCE DDITIONAL GUIDANCE. SEE ESIGN.	BUILDING #3 & #4 Town/City: OSWEGO County: OSWEGO State: NEW YORK Project No.: 20160101.00001
	Drawing No.: P-501
CONSTRUCTION SET	AUGUST 1, 2018

