GENERAL NOTES

1) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF THE WORK OF ALL SUBCONTRACTORS AS REQUIRED TO COMPLETE THE WORK, AND SHALL VERIFY THAT ALL WORK IS DONE TO THE HIGHEST DEGREE OF CRAFTSMANSHIP BY JOURNEYMEN OF THE RESPECTIVE TRADES.
2) THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, AND SHALL WORK TO CRITICAL ALIGNMENTS AS INDICATED ON THE DRAWINGS, AND SHALL NOT SCALE THE DRAWINGS FOR MEASUREMENTS.
3) IF ANY DISCREPANCIES IN DIMENSIONS OR CONDITIONS ARE FOUND, THE CONTRACTOR SHALL CONTACT THE ARCHITECT FOR CLARIFICATION PRIOR TO PROCEEDING WITH THAT PORTION OF THE WORK.
4) THE CONTRACTOR SHALL MAINTAIN THE SITE CLEAN AND FREE OF DEBRIS. THE CONTRACTOR SHALL MAINTAIN THE SITE AND JOB CONDITIONS IN SUCH A MANNER AS TO PROTECT FROM INJURY ALL PERSONS AND PROPERTY.
5) PROVIDE FOR THE DEMOLITION OF ALL EXISTING ITEMS WHICH WILL INTERFERE WITH THE WORK. PROVIDE MECHANICAL, ELECTRICAL AND PLUMBING DEMOLITION AS MAY BE REQUIRED.
6) PROVIDE BRACING AND SHORING AS REQUIRED TO PROTECT EXISTING CONSTRUCTION TO REMAIN FROM DAMAGE, AS WELL AS TO PROTECT PERSONS AND PROPERTY. VERIFY ALL BEARING CONDITIONS PRIOR TO BEGINNING DEMOLITION.

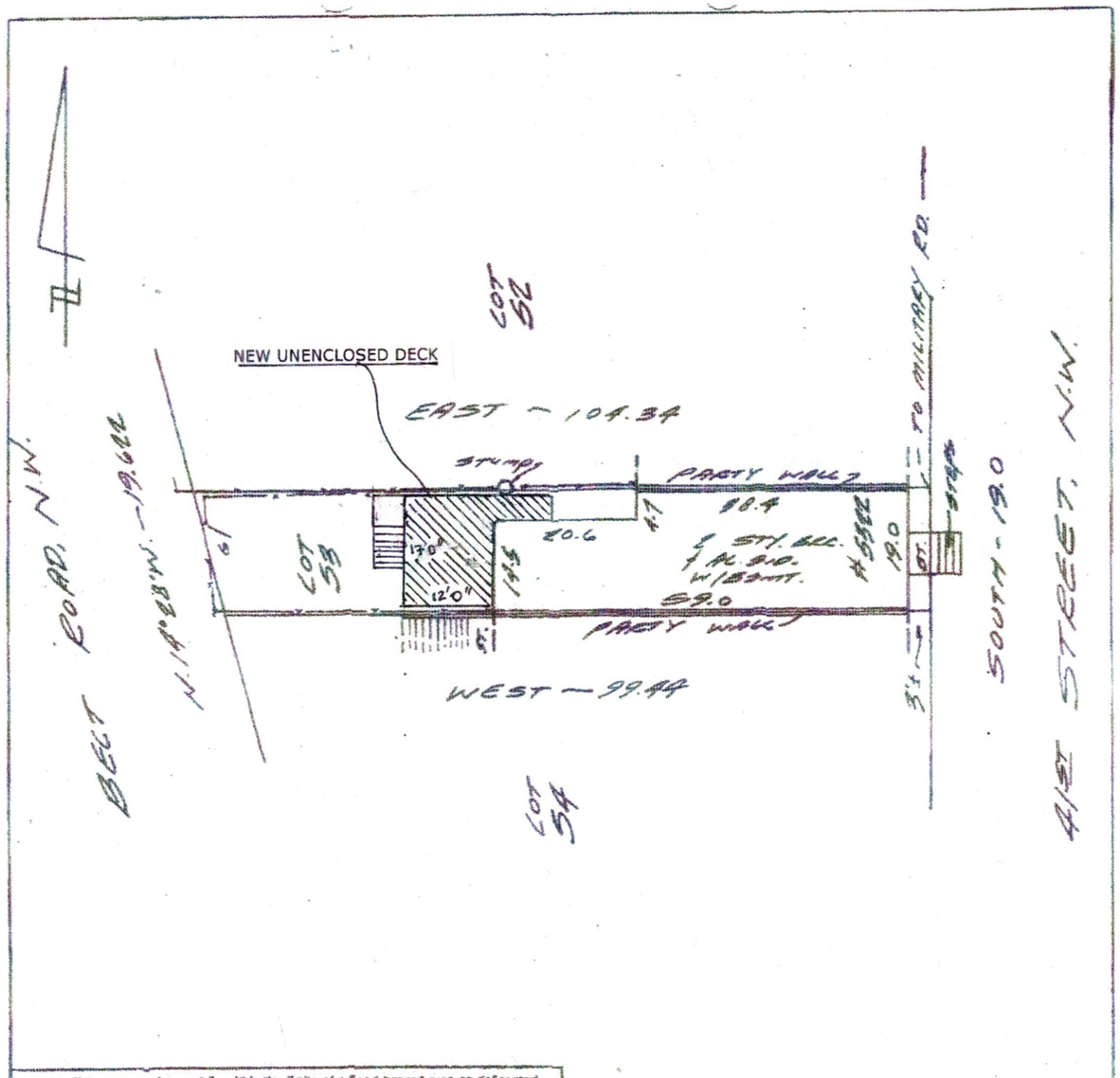
CODE SUMMARY

GENERAL
ALL WORK SHALL BE DONE IN STRICT COMPLIANCE WITH THE DISTRICT OF COLUMBIA BUILDING CODE, INCLUDING THE 2015 EDITION OF THE IRC AND THE 2017 DC CONSTRUCTION CODE AS WELL AS ANY AND ALL OTHER APPLICABLE CODES AND ALL OTHER APPLICABLE LOCAL, STATE AND NATIONAL CODES, STANDARDS AND ORDINANCES

SCOPE OF WORK

BUILD A NEW 12' 0" X 17' 0" UNENCLOSED, PTL DECK

INDEX OF DRAWINGS



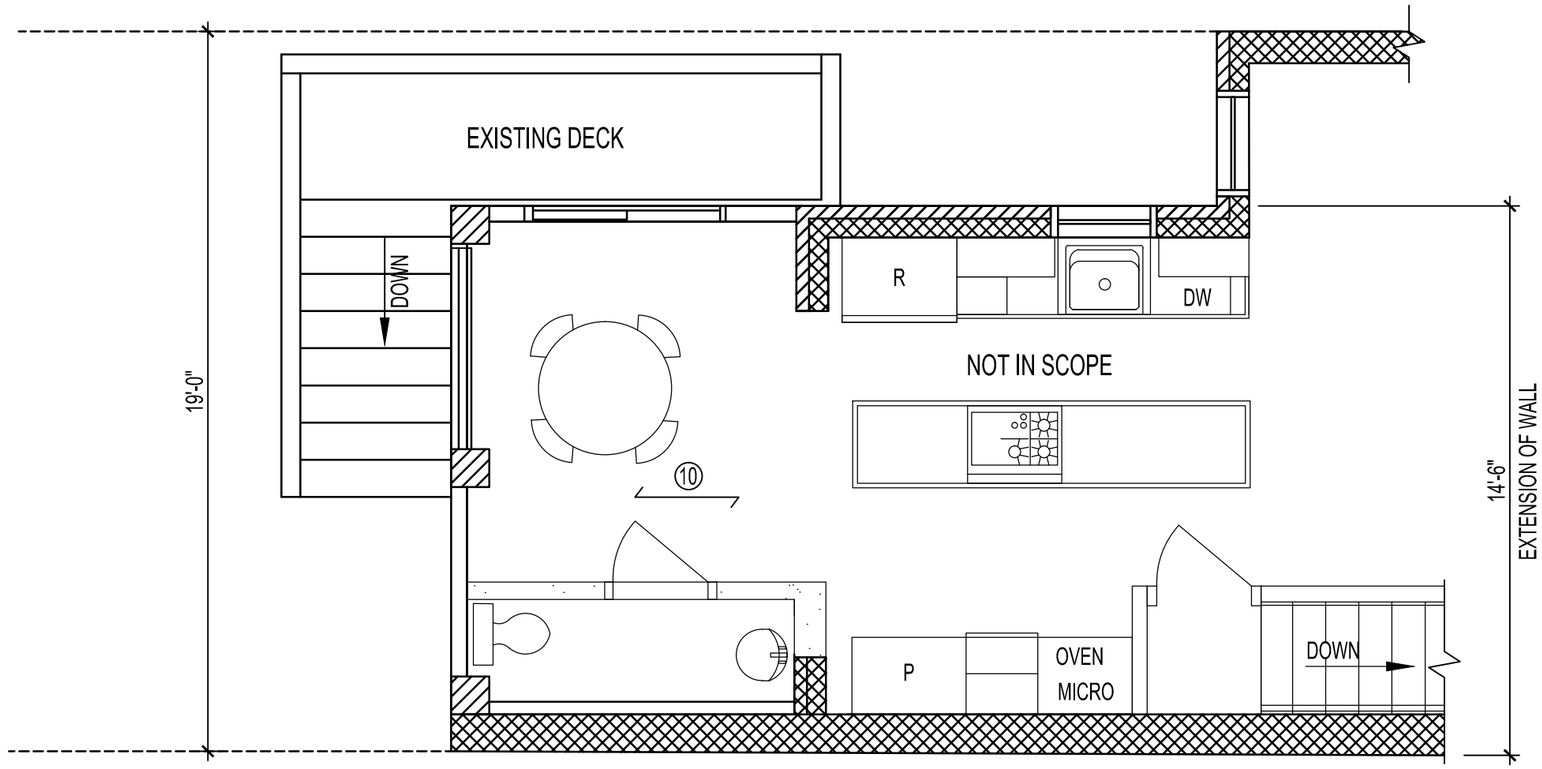
CHESAPEAK KITCHEN DESIGN
8001 WISCONSIN AVE. #102
BETHESDA MD 20814

COVER SHEET AND SITE PLAN

QUINN RESIDENCE
5322 41st N.W.
WASHINGTON, D.C. 20015

1-9-2023
DATE: 12-20-2022
PERMIT SET

COVER SHEET AND SITE PLAN
A001



EXISTING PLAN

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

CHESAPEAKE KITCHEN DESIGN
8001 WISCONSIN AVE. #102
BETHESDA MD 20814

EXISTING PLAN

QUINN RESIDENCE
5322 41st N.W.
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1-9-2023
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PERMIT SET

EXISTING PLAN

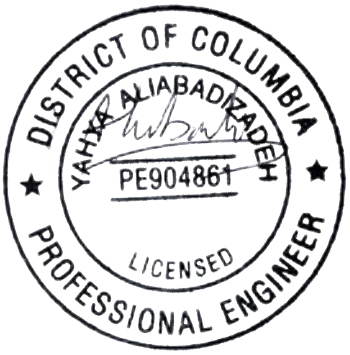
A002

A & A Structures LLC
22 Holly Leaf Ct.
Bethesda MD 20817
Tel : 240-678-5399
Email : yahya@aastructures.com

Project Title: Quinn's Residence
Engineer: Yahya Aliabadi PhD PE
Project ID:
Project Descr: New deck in the back of an existing building

Building Code Information

Governing Code : IBC 2018, ASCE 7-16, CBC 2019, AISC 360-16, NDS 2018, ACI 318-14, TMS
City Jurisdiction :
Contact Name :
Alternate Contact :
Building Official :
Address : , ,
Phone : Fax : eMail :
Notes :



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Project Descr: New deck in the back of an existing building

Project Information

Project Title : Quinn's Residence
Description : New deck in the back of an existing building

I.D. :
Address : 5322 41st St NW, Washington, DC 20015

Project Leader : Yahya Aliabadi PhD PE
Phone : 240-678-5399 Fax : eMail : yahya@aastructures.com

Project Notes

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ASCE 7-16 Snow Loads

File: Calculation.ec6

DESCRIPTION: Snow Load

Flat Roof Snow Loads

Description : **per ASCE 7-16, Chapter 7**

Ground Snow Load, per Fig 7.2-1	30.00 psf	Roof Slope, Sec .7.3.4	10.00
Terrain Category	B (see ASCE 7-16 Section 26.7)	Roof Configuration	Monoslope
Exposure of Roof	Fully Exposed		
Ce : Exposure Factor, Table 7.3-1	0.90		
Ct : Thermal Factor	1.2 : Unheated and open air structures	pm, Minimum required	**20.00** psf
Risk Category, per Table 1.5-1	II	pf, Calculated Snow Load per Equation 7-1	**22.68** psf
Importance Factor, Is, Table 1.5-2	1.00	pf, Design Snow Load Max(pm min, pf calc)	**22.68** psf

Snow Drifts on Lower Roofs

Description : Drift **per ASCE 7-16, Chapter 7**

Balanced Snow Load	18.00 psf	hd : leeward	0.14 ft
Ground Snow Load	30.00 psf	hd : windward	0.10 ft
lu - upper	2.00 ft	hd : Max	0.10 ft
lu-lower	0.00 ft	hd : Design	0.10 ft
Height of Roof Step	15.00 ft	pd : Max Drift Only	1.85 psf
Snow Density	17.90 pcf	pd + Balanced	16.15 psf
hb : Balanced	1.01 ft	W : Drift Width	0.41 ft
hc : Step Height - hb	13.99 ft		
hc / hb	13.92	Total Snow Load @ End of Drift	18.00 psf
Importance Factor	1.00		

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Wood Beam

File: Calculation.ec6

DESCRIPTION: Middle beam of the deck

CODE REFERENCES

Calculations per NDS 2018, IBC 2018, CBC 2019, ASCE 7-16
Load Combination Set : IBC 2018

Material Properties

Analysis Method : Allowable Stress Design
Load Combination : IBC 2018

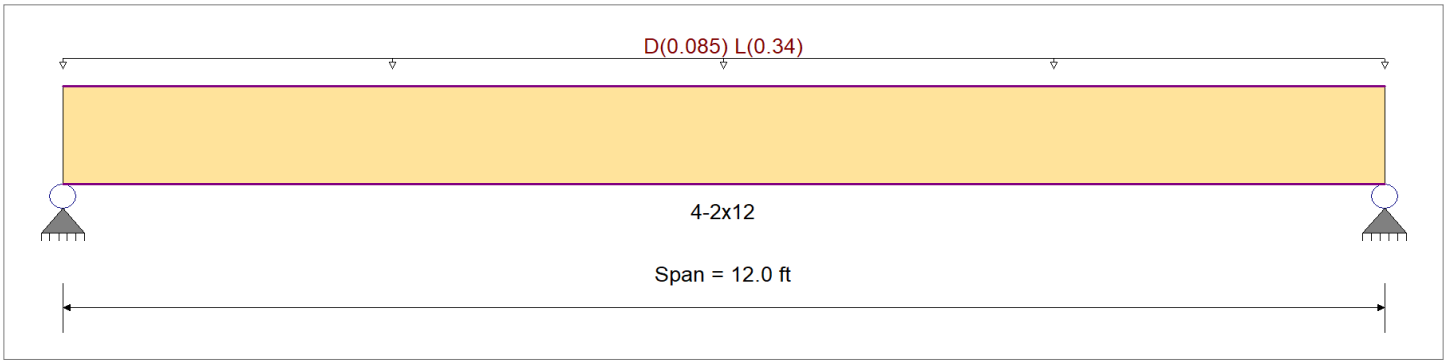
Wood Species : Mixed Southern Pine
Wood Grade : No.2: 2"-4" Thick: 12" Wide

Beam Bracing : Beam is Fully Braced against lateral-torsional buckling

Fb +	750 psi
Fb -	750 psi
Fc - Prll	1250 psi
Fc - Perp	565 psi
Fv	175 psi
Ft	450 psi

E : Modulus of Elasticity

Ebend- xx	1400 ksi
Eminbend - xx	510 ksi
Density	31.84 pcf



Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Uniform Load : D = 0.010, L = 0.040 ksf, Tributary Width = 8.50 ft

DESIGN SUMMARY

Design OK

Maximum Bending Stress Ratio	=	0.967 : 1	Maximum Shear Stress Ratio	=	0.274 : 1
Section used for this span		4-2x12	Section used for this span		4-2x12
	=	725.33 psi		=	47.98 psi
	=	750.00 psi		=	175.00 psi
Load Combination		+D+L	Load Combination		+D+L
Location of maximum on span	=	6.000 ft	Location of maximum on span	=	0.000 ft
Span # where maximum occurs	=	Span # 1	Span # where maximum occurs	=	Span # 1

Maximum Deflection

Max Downward Transient Deflection	0.160 in	Ratio =	899 >=360
Max Upward Transient Deflection	0.000 in	Ratio =	0 <360
Max Downward Total Deflection	0.200 in	Ratio =	719 >=180
Max Upward Total Deflection	0.000 in	Ratio =	0 <180

Maximum Forces & Stresses for Load Combinations

Load Combination / Segment Length	Span #	Max Stress Ratios M	Max Stress Ratios V	C_d	$C_{F/V}$	C_i	C_r	C_m	C_t	C_L	Moment Values M	Moment Values fb	Moment Values F'b	Shear Values V	Shear Values fv	Shear Values F'v
D Only													0.00	0.00	0.00	0.00
Length = 12.0 ft	1	0.215	0.061	0.90	1.000	1.00	1.00	1.00	1.00	1.00	1.53	145.07	675.00	0.43	9.60	157.50
+D+L					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
Length = 12.0 ft	1	0.967	0.274	1.00	1.000	1.00	1.00	1.00	1.00	1.00	7.65	725.33	750.00	2.16	47.98	175.00
+D+0.750L					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
Length = 12.0 ft	1	0.619	0.175	1.25	1.000	1.00	1.00	1.00	1.00	1.00	6.12	580.27	937.50	1.73	38.38	218.75
+0.60D					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
Length = 12.0 ft	1	0.073	0.021	1.60	1.000	1.00	1.00	1.00	1.00	1.00	0.92	87.04	1200.00	0.26	5.76	280.00

Overall Maximum Deflections

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
+D+L	1	0.2001	6.044		0.0000	0.000

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Project Title: Quinn's Residence
Engineer: Yahya Aliabadi PhD PE
Project ID:
Project Descr: New deck in the back of an existing building

Wood Beam

DESCRIPTION: Middle beam of the deck

Vertical Reactions

Support notation : Far left is #1 Values in KIPS

Load Combination	Support 1	Support 2
Overall MAXimum	2.550	2.550
Overall MINimum	2.040	2.040
D Only	0.510	0.510
+D+L	2.550	2.550
+D+0.750L	2.040	2.040
+0.60D	0.306	0.306
L Only	2.040	2.040

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Wood Beam

File: Calculation.ec6

DESCRIPTION: Beam parallel to facade

CODE REFERENCES

Calculations per NDS 2018, IBC 2018, CBC 2019, ASCE 7-16
Load Combination Set : IBC 2018

Material Properties

Analysis Method : Allowable Stress Design
Load Combination : IBC 2018

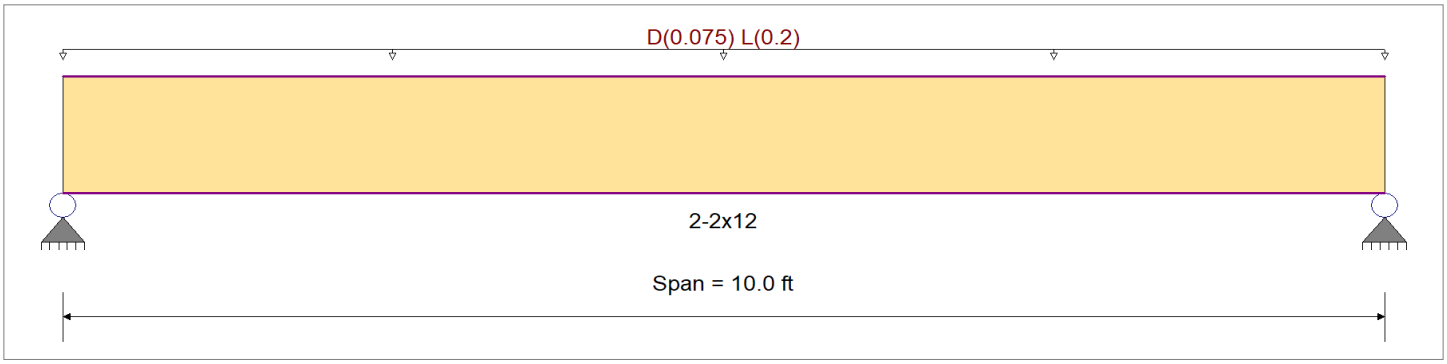
Wood Species : Mixed Southern Pine
Wood Grade : No.2: 2"-4" Thick: 12" Wide

Beam Bracing : Beam is Fully Braced against lateral-torsional buckling

Fb +	750 psi
Fb -	750 psi
Fc - Prll	1250 psi
Fc - Perp	565 psi
Fv	175 psi
Ft	450 psi

E : Modulus of Elasticity

Ebend- xx	1400 ksi
Eminbend - xx	510 ksi
Density	31.84 pcf



Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Uniform Load : D = 0.0150, L = 0.040 ksf, Tributary Width = 5.0 ft

DESIGN SUMMARY

Design OK

Maximum Bending Stress Ratio	=	0.869 : 1	Maximum Shear Stress Ratio	=	0.285 : 1
Section used for this span		2-2x12	Section used for this span		2-2x12
	=	651.85 psi		=	49.96 psi
	=	750.00 psi		=	175.00 psi
Load Combination		+D+L	Load Combination		+D+L
Location of maximum on span	=	5.000 ft	Location of maximum on span	=	0.000 ft
Span # where maximum occurs	=	Span # 1	Span # where maximum occurs	=	Span # 1

Maximum Deflection

Max Downward Transient Deflection	0.091 in	Ratio =	1321 >=360
Max Upward Transient Deflection	0.000 in	Ratio =	0 <360
Max Downward Total Deflection	0.125 in	Ratio =	960 >=180
Max Upward Total Deflection	0.000 in	Ratio =	0 <180

Maximum Forces & Stresses for Load Combinations

Load Combination / Segment Length	Span #	Max Stress Ratios M	Max Stress Ratios V	C_d	$C_{F/V}$	C_i	C_r	C_m	C_t	C_L	Moment Values M	Moment Values fb	Moment Values F'b	Shear Values V	Shear Values fv	Shear Values F'v
D Only													0.00	0.00	0.00	0.00
Length = 10.0 ft	1	0.263	0.087	0.90	1.000	1.00	1.00	1.00	1.00	1.00	0.94	177.78	675.00	0.31	13.63	157.50
+D+L					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
Length = 10.0 ft	1	0.869	0.285	1.00	1.000	1.00	1.00	1.00	1.00	1.00	3.44	651.85	750.00	1.12	49.96	175.00
+D+0.750L					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
Length = 10.0 ft	1	0.569	0.187	1.25	1.000	1.00	1.00	1.00	1.00	1.00	2.81	533.33	937.50	0.92	40.88	218.75
+0.60D					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
Length = 10.0 ft	1	0.089	0.029	1.60	1.000	1.00	1.00	1.00	1.00	1.00	0.56	106.67	1200.00	0.18	8.18	280.00

Overall Maximum Deflections

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
+D+L	1	0.1249	5.036		0.0000	0.000

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Engineer: Yahya Aliabadi PhD PE
Project ID:
Project Descr: New deck in the back of an existing building

Wood Beam

DESCRIPTION: Beam parallel to facade

Vertical Reactions

Support notation : Far left is #1 Values in KIPS

Load Combination	Support 1	Support 2
Overall MAXimum	1.375	1.375
Overall MINimum	1.000	1.000
D Only	0.375	0.375
+D+L	1.375	1.375
+D+0.750L	1.125	1.125
+0.60D	0.225	0.225
L Only	1.000	1.000

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Project ID:
Project Descr: New deck in the back of an existing building

General Footing

File: Calculation.ec6

DESCRIPTION: Deck Footing

Code References

Calculations per ACI 318-14, IBC 2018, CBC 2019, ASCE 7-16
Load Combinations Used : IBC 2018

General Information

Material Properties

f'c : Concrete 28 day strength	=	3.0	ksi
fy : Rebar Yield	=	60.0	ksi
Ec : Concrete Elastic Modulus	=	3,122.0	ksi
Concrete Density	=	145.0	pcf
φ Values Flexure	=	0.90	
Shear	=	0.750	

Analysis Settings

Min Steel % Bending Reinf.	=	
Min Allow % Temp Reinf.	=	0.00180
Min. Overturning Safety Factor	=	1.0 : 1
Min. Sliding Safety Factor	=	1.0 : 1
Add Ftg Wt for Soil Pressure	:	Yes
Use ftg wt for stability, moments & shears	:	Yes
Add Pedestal Wt for Soil Pressure	:	No
Use Pedestal wt for stability, mom & shear	:	No

Soil Design Values

Allowable Soil Bearing	=	1.0	ksf
Increase Bearing By Footing Weight	=	No	
Soil Passive Resistance (for Sliding)	=	250.0	pcf
Soil/Concrete Friction Coeff.	=	0.30	

Increases based on footing Depth

Footing base depth below soil surface	=	ft
Allow press. increase per foot of depth	=	ksf
when footing base is below	=	ft

Increases based on footing plan dimension

Allowable pressure increase per foot of depth	=	ksf
when max. length or width is greater than	=	ft

Dimensions

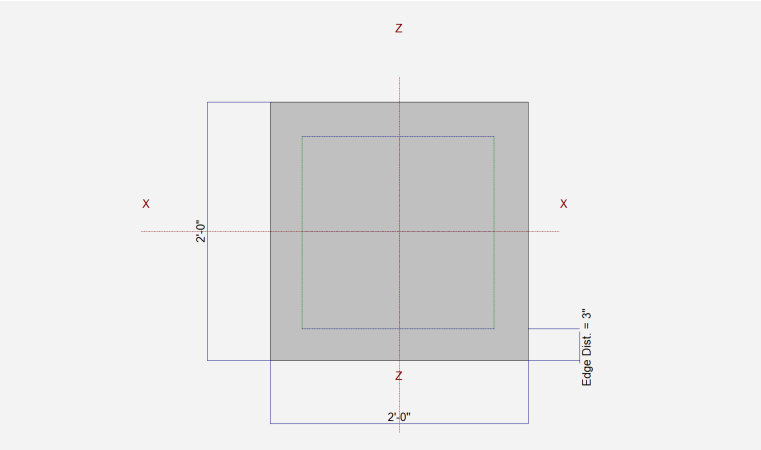
Width parallel to X-X Axis	=	2.0 ft
Length parallel to Z-Z Axis	=	2.0 ft
Footing Thickness	=	10.0 in

Pedestal dimensions...

px : parallel to X-X Axis	=	in
pz : parallel to Z-Z Axis	=	in
Height	=	in

Rebar Centerline to Edge of Concrete...

at Bottom of footing	=	3.0 in

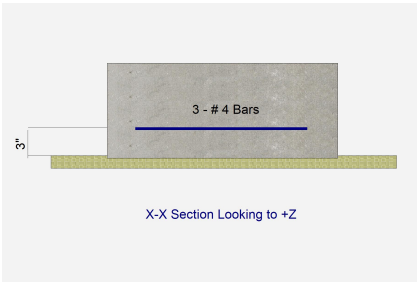


Reinforcing

Bars parallel to X-X Axis			
Number of Bars	=		3.0
Reinforcing Bar Size	=	#	4
Bars parallel to Z-Z Axis			
Number of Bars	=		3.0
Reinforcing Bar Size	=	#	4

Bandwidth Distribution Check (ACI 15.4.4.2)

Direction Requiring Closer Separation	
	n/a
# Bars required within zone	n/a
# Bars required on each side of zone	n/a



Applied Loads

		D	Lr	L	S	W	E	H	
P : Column Load	=	1.0		2.0					k
OB : Overburden	=								ksf
M-xx	=								k-ft
M-zz	=								k-ft
V-x	=								k
V-z	=								k

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General Footing

File: Calculation.ec6

DESCRIPTION: Deck Footing

DESIGN SUMMARY

Design OK

	Min. Ratio	Item	Applied	Capacity	Governing Load Combination
PASS	0.8708	Soil Bearing	0.8708 ksf	1.0 ksf	+D+L about Z-Z axis
PASS	n/a	Overturning - X-X	0.0 k-ft	0.0 k-ft	No Overturning
PASS	n/a	Overturning - Z-Z	0.0 k-ft	0.0 k-ft	No Overturning
PASS	n/a	Sliding - X-X	0.0 k	0.0 k	No Sliding
PASS	n/a	Sliding - Z-Z	0.0 k	0.0 k	No Sliding
PASS	n/a	Uplift	0.0 k	0.0 k	No Uplift
PASS	0.06075	Z Flexure (+X)	0.550 k-ft/ft	9.053 k-ft/ft	+1.20D+1.60L
PASS	0.06075	Z Flexure (-X)	0.550 k-ft/ft	9.053 k-ft/ft	+1.20D+1.60L
PASS	0.06075	X Flexure (+Z)	0.550 k-ft/ft	9.053 k-ft/ft	+1.20D+1.60L
PASS	0.06075	X Flexure (-Z)	0.550 k-ft/ft	9.053 k-ft/ft	+1.20D+1.60L
PASS	0.06694	1-way Shear (+X)	5.50 psi	82.158 psi	+1.20D+1.60L
PASS	0.06694	1-way Shear (-X)	5.50 psi	82.158 psi	+1.20D+1.60L
PASS	0.06694	1-way Shear (+Z)	5.50 psi	82.158 psi	+1.20D+1.60L
PASS	0.06694	1-way Shear (-Z)	5.50 psi	82.158 psi	+1.20D+1.60L
PASS	0.1243	2-way Punching	20.429 psi	164.317 psi	+1.20D+1.60L

Detailed Results

Soil Bearing

Rotation Axis & Load Combination...	Gross Allowable	Xecc (in)	Zecc (in)	Actual Soil Bearing Stress @ Location Bottom, -Z	Top, +Z	Left, -X	Right, +X	Actual / Allow Ratio
X-X, D Only	1.0	n/a	0.0	0.3708	0.3708	n/a	n/a	0.371
X-X, +D+L	1.0	n/a	0.0	0.8708	0.8708	n/a	n/a	0.871
X-X, +D+0.750L	1.0	n/a	0.0	0.7458	0.7458	n/a	n/a	0.746
X-X, +0.60D	1.0	n/a	0.0	0.2225	0.2225	n/a	n/a	0.223
Z-Z, D Only	1.0	0.0	n/a	n/a	n/a	0.3708	0.3708	0.371
Z-Z, +D+L	1.0	0.0	n/a	n/a	n/a	0.8708	0.8708	0.871
Z-Z, +D+0.750L	1.0	0.0	n/a	n/a	n/a	0.7458	0.7458	0.746
Z-Z, +0.60D	1.0	0.0	n/a	n/a	n/a	0.2225	0.2225	0.223

Overturning Stability

Rotation Axis & Load Combination...	Overturning Moment	Resisting Moment	Stability Ratio	Status
Footing Has NO Overturning				

All units k

Sliding Stability

Force Application Axis Load Combination...	Sliding Force	Resisting Force	Stability Ratio	Status
Footing Has NO Sliding				

Footing Flexure

Flexure Axis & Load Combination	Mu k-ft	Side	Tension Surface	As Req'd in^2	Gvrn. As in^2	Actual As in^2	Phi*Mn k-ft	Status
X-X, +1.40D	0.1750	+Z	Bottom	0.2160	Min Temp %	0.30	9.053	OK
X-X, +1.40D	0.1750	-Z	Bottom	0.2160	Min Temp %	0.30	9.053	OK
X-X, +1.20D+1.60L	0.550	+Z	Bottom	0.2160	Min Temp %	0.30	9.053	OK
X-X, +1.20D+1.60L	0.550	-Z	Bottom	0.2160	Min Temp %	0.30	9.053	OK
X-X, +1.20D+0.50L	0.2750	+Z	Bottom	0.2160	Min Temp %	0.30	9.053	OK
X-X, +1.20D+0.50L	0.2750	-Z	Bottom	0.2160	Min Temp %	0.30	9.053	OK
X-X, +1.20D	0.150	+Z	Bottom	0.2160	Min Temp %	0.30	9.053	OK
X-X, +1.20D	0.150	-Z	Bottom	0.2160	Min Temp %	0.30	9.053	OK
X-X, +0.90D	0.1125	+Z	Bottom	0.2160	Min Temp %	0.30	9.053	OK
X-X, +0.90D	0.1125	-Z	Bottom	0.2160	Min Temp %	0.30	9.053	OK
Z-Z, +1.40D	0.1750	-X	Bottom	0.2160	Min Temp %	0.30	9.053	OK
Z-Z, +1.40D	0.1750	+X	Bottom	0.2160	Min Temp %	0.30	9.053	OK
Z-Z, +1.20D+1.60L	0.550	-X	Bottom	0.2160	Min Temp %	0.30	9.053	OK
Z-Z, +1.20D+1.60L	0.550	+X	Bottom	0.2160	Min Temp %	0.30	9.053	OK
Z-Z, +1.20D+0.50L	0.2750	-X	Bottom	0.2160	Min Temp %	0.30	9.053	OK
Z-Z, +1.20D+0.50L	0.2750	+X	Bottom	0.2160	Min Temp %	0.30	9.053	OK

A & A Structures LLC
22 Holly Leaf Ct.
Bethesda MD 20817
Tel : 240-678-5399
Email : yahya@aastructures.com

Project Title: Quinn's Residence
Engineer: Yahya Aliabadi PhD PE
Project ID:
Project Descr: New deck in the back of an existing building

General Footing

DESCRIPTION: Deck Footing

Footing Flexure

Flexure Axis & Load Combination	Mu k-ft	Side	Tension Surface	As Req'd in^2	Gvrn. As in^2	Actual As in^2	Phi*Mn k-ft	Status
Z-Z, +1.20D	0.150	-X	Bottom	0.2160	Min Temp %	0.30	9.053	OK
Z-Z, +1.20D	0.150	+X	Bottom	0.2160	Min Temp %	0.30	9.053	OK
Z-Z, +0.90D	0.1125	-X	Bottom	0.2160	Min Temp %	0.30	9.053	OK
Z-Z, +0.90D	0.1125	+X	Bottom	0.2160	Min Temp %	0.30	9.053	OK

One Way Shear

Load Combination...	Vu @ -X	Vu @ +X	Vu @ -Z	Vu @ +Z	Vu:Max	Phi Vn	Vu / Phi*Vn	Status
+1.40D	1.75 psi	1.75 psi	1.75 psi	1.75 psi	1.75 psi	82.16 psi	0.02	OK
+1.20D+1.60L	5.50 psi	5.50 psi	5.50 psi	5.50 psi	5.50 psi	82.16 psi	0.07	OK
+1.20D+0.50L	2.75 psi	2.75 psi	2.75 psi	2.75 psi	2.75 psi	82.16 psi	0.03	OK
+1.20D	1.50 psi	1.50 psi	1.50 psi	1.50 psi	1.50 psi	82.16 psi	0.02	OK
+0.90D	1.13 psi	1.13 psi	1.13 psi	1.13 psi	1.13 psi	82.16 psi	0.01	OK

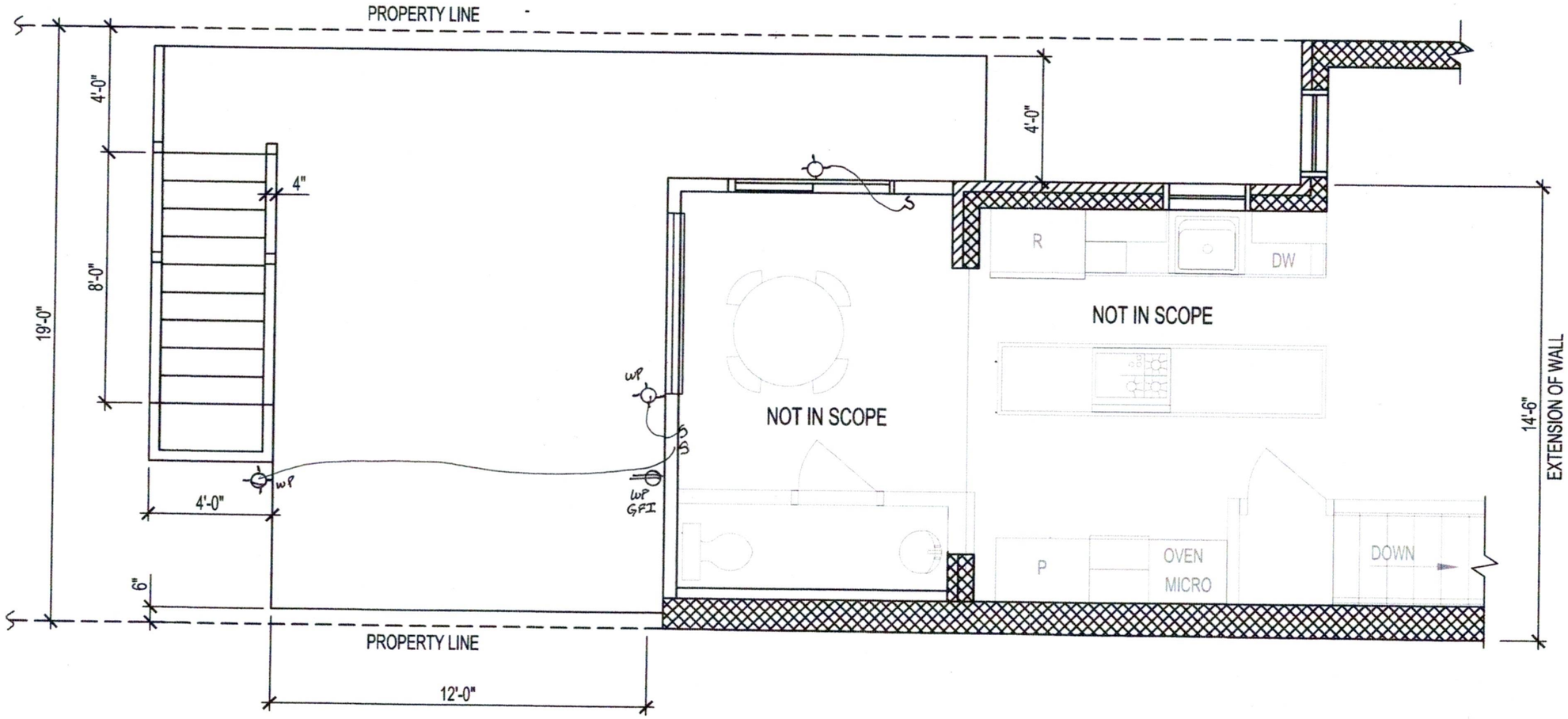
Two-Way "Punching" Shear

All units k

Load Combination...	Vu	Phi*Vn	Vu / Phi*Vn	Status
+1.40D	6.50 psi	164.32 psi	0.03956	OK
+1.20D+1.60L	20.43 psi	164.32 psi	0.1243	OK
+1.20D+0.50L	10.21 psi	164.32 psi	0.06216	OK
+1.20D	5.57 psi	164.32 psi	0.03391	OK
+0.90D	4.18 psi	164.32 psi	0.02543	OK

LEGEND:

- ~ SWITCH
- ~ WP DUPLEX RECEPTACLE
- ~ WP SURFACE LIGHT



ELECTRIC PLAN
SCALE: 1/4"=1'

CHESAPEAK KITCHEN DESIGN
8001 WISCONSIN AVE. #102
BETHESDA MD 20814

ELECTRIC PLAN

QUINN RESIDENCE
5322 41st N.W.
WASHINGTON, D.C. 20015

1-9-2023
DATE: 12-20-2022
PERMIT SET

ELECTRIC PLAN
E001

GENERAL NOTES:

PROJECT NAME: QUINN RESIDENCE

ADDRESS: 5322 41ST ST NW WASHINGTON, DC 20015

DESCRIPTION: RESIDENTIAL DECK BEHIND EXISTING BUILDING

CODES AND STANDARDS

1. ALL DESIGN AND CONSTRUCTION IS BASED ON AND SHALL BE IN ACCORDANCE WITH THE FOLLOWING CODES.

2015 IRC - 2015 INTERNATIONAL RESIDENTIAL CODE W/ AMENDMENTS
ACI - AMERICAN CONCRETE INSTITUTE
ACI 318-14 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
ACI 530-13 BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES
AF&PA - AMERICAN FOREST & PAPER ASSOCIATION
AF&PA-2012
SDPWS-2008
AISC - AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AISC 341-10 SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS
AISC 360-10 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS
APA - APA - ENGINEERED WOOD ASSOCIATION
ASCE - AMERICAN SOCIETY OF CIVIL ENGINEERS
ASCE/SEI 7-16 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
AWPA - AMERICAN WOOD PROTECTION ASSOCIATION
AWS - AMERICAN WELDING SOCIETY
TMS - THE MASONRY SOCIETY
TMS 402/602 - SPECIFICATION FOR MASONRY STRUCTURES
TPI - TRUSS PLATE INSTITUTE
TPI 1-2014
WRI - WIRE REINFORCEMENT INSTITUTE, INC.

2. ALL REFERENCED STANDARDS SHALL BE OF THE EFFECTIVE DATE NOTED IN THE CONTROLLING BUILDING CODE.
3. NO PROVISION OF ANY REFERENCED STANDARD SPECIFICATION, MANUAL, OR CODE (WHETHER OR NOT SPECIFICALLY INCORPORATED BY REFERENCE IN THE CONSTRUCTION DOCUMENTS) SHALL BE EFFECTIVE TO CHANGE THE DUTIES AND RESPONSIBILITIES OF THE OWNER, CONTRACTOR, ENGINEER, SUPPLIER, OR ANY OF THEIR CONSULTANTS, AGENTS, OR EMPLOYEES FROM THOSE OUTLINED IN THE CONSTRUCTION DOCUMENTS NOR SHALL IT BE EFFECTIVE TO ASSIGN TO THE STRUCTURAL ENGINEER OF RECORD OR ANY OF THE STRUCTURAL ENGINEER OF RECORD'S CONSULTANTS, AGENTS, OR EMPLOYEES ANY DUTY OR AUTHORITY TO SUPERVISE OR DIRECT THE FURNISHING OR PERFORMANCE OF THE WORK OR ANY DUTY OR AUTHORITY TO UNDERTAKE RESPONSIBILITIES CONTRARY TO THE PROVISIONS OF THE CONSTRUCTION DOCUMENTS.

LOADS

DESIGN LOADS (ALL LOADS ARE SERVICE LOADS UNLESS NOTED):

1. DEAD LOADS

FLOOR LOAD	13 PSF
JOISTS UNIFORM LOAD	17 PLF

2. LIVE LOADS

FLOORS	40 PSF
STAIRS	100 PSF

3. SNOW LOADS

GROUND SNOW LOAD (PG)	30 PSF
EXPOSURE CATEGORY	C
SNOW EXPOSURE FACTOR (CE)	1.0
ROOF THERMAL FACTOR (CT)	1.1
RISK CATEGORY	II
SNOW LOAD IMPORTANCE FACTOR (IS)	1.0
FLAT ROOF SNOW LOAD (PF)	23 PSF
ROOF SLOPE FACTOR(CS)	1.0
SNOWDRIFT	30 PSF
MAX DRIFT LENGTH (W)	6.5 FT
HEIGHT OF SNOWDRIFT (HD)	1.7 FT
EQUIVALENT SNOW DRIFT LOAD	97.3 PLF
DISTANCE OF EQUIVALENT DRIFT TO PARAPET	2.2 FT

4. WIND DESIGN CRITERIA

ULTIMATE WIND SPEED (3-SECOND GUST)	115 MPH
WIND DIRECTIONAL FACTOR (KD)	0.85
EXPOSURE CATEGORY	C
TOPOGRAPHIC FACTOR (KZT)	1.16
GUST EFFECT FACTOR (G)	0.85
MIN WIND LOAD ON THE ROOF	-5.6 PSF
MAX WIND LOAD ON ROOF	-28 PSF
INTERNAL PRESSURE	+/- 6.63 PSF
MAX WIND WARD PRESSURE	25.7 PSF
MAX LEE WARD PRESSURE	-9.4 PSF
MAX SIDE WAY PRESSURE	-22.5 PSF

5. DESIGN SEISMIC INFORMATION:

RISK CATEGORY	II
MAPPED SPECTRAL RESPONSE COEFFICIENT	SS = 0.177
MAPPED SPECTRAL RESPONSE COEFFICIENT	S1 = 0.063
SPECTRAL RESPONSE COEFFICIENT	SDs = 0.189
SPECTRAL RESPONSE COEFFICIENT	SD1 = 0.101
SITE CLASS	D
BASIC SEISMIC-FORCE RESISTING SYSTEM	SHEAR WALL
RESPONSE MODIFICATION FACTOR, R	N/A
DESIGN BASE SHEAR	N/A
ANALYSIS PROCEDURE EQUIVALENT LATERAL FORCE (ASCE 7, SECTION 12.8)	
SEISMIC DESIGN CATEGORY	B

GENERAL CONDITIONS

1. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE GOVERNING MUNICIPAL CODES & SPECIFICATIONS FOR THIS PROJECT.
2. IF MATERIALS, QUANTITIES, STRENGTHS, OR SIZES INDICATED BY THE DRAWINGS OR SPECIFICATIONS ARE NOT IN AGREEMENT WITH THESE NOTES, THE BETTER QUALITY AND/OR GREATER QUANTITY, STRENGTH, OR SIZE INDICATED, SPECIFIED, OR NOTED SHALL BE PROVIDED.
3. THE CONTRACTOR SHALL MAKE NO DEVIATION FROM THE DESIGN DRAWINGS WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT.
4. WORK NOT INDICATED ON A PART OF THE DRAWINGS BUT REASONABLY IMPLIED TO BE SIMILAR TO THAT SHOWN AT CORRESPONDING PLACES, SHALL BE REPEATED.
5. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURE AND SEQUENCE TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING, GUYS, OR TIE-DOWNS MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
6. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS AND ELEVATIONS.
7. CONTRACTOR TO SUPPORT, BRACE AND SECURE ALL STRUCTURES AS REQUIRED DURING ERECTION/CONSTRUCTION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE SAFETY OF THE BUILDING DURING CONSTRUCTION. THE BUILDING IS NOT FULLY BRACED UNTIL ALL SHEAR WALLS, SHEATHING, FASTENERS, AND OTHER LATERAL BRACING COMPONENTS HAVE BEEN COMPLETELY INSTALLED.
8. THESE NOTES APPLY TO ALL STRUCTURAL DRAWINGS. NOTES SHALL APPLY UNLESS OTHERWISE INDICATED BY STRUCTURAL DRAWINGS OR SPECIFICATIONS.
9. WHERE A DETAIL, TYPICAL DETAIL, SECTION, TYPICAL SECTION, OR PLAN NOTE IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL SIMILAR OR LIKE CONDITIONS UNLESS NOTED OTHERWISE.
10. CONSTRUCTION DOCUMENTS INCLUDE, BUT ARE NOT LIMITED TO, THE STRUCTURAL DOCUMENTS (DRAWINGS AND CALCULATIONS), BUT DO NOT INCLUDE SHOP DRAWINGS, VENDOR DRAWINGS, OR MATERIAL PREPARED AND SUBMITTED BY THE GENERAL CONTRACTOR.
11. CONSTRUCTION DOCUMENTS SHALL GOVERN IN THE EVENT OF A CONFLICT WITH THE CODE OF PRACTICE OR SPECIFICATIONS OF ACI, PCI, AISC, SJI, OR OTHER STANDARDS. WHERE A CONFLICT OCCURS WITHIN THE CONSTRUCTION DOCUMENTS, THE STRICTEST REQUIREMENT SHALL GOVERN.
12. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS AND NOTIFY THE ARCHITECT/STRUCTURAL ENGINEER OF RECORD OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK. FOR DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS, SEE ARCHITECTURAL DRAWINGS.
13. DO NOT SCALE FOR DIMENSIONS NOT SHOWN ON DRAWINGS. SEND WRITTEN RFI (REQUEST FOR INFORMATION) TO THE ARCHITECT/ENGINEER FOR DIMENSIONS NOT PROVIDED.
14. NO PROVISIONS HAVE BEEN MADE IN THE DESIGN FOR THE SUPPORT OF A CONCENTRATED LOAD FROM PLUMBING, MECHANICAL OR HVAC EXCEPT AS SHOWN ON THE DRAWINGS.
15. THE GENERAL CONTRACTOR SHALL COORDINATE ALL SIZES AND LOCATIONS OF FLOOR, ROOF, AND WALL PENETRATIONS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS. ALL PENETRATIONS NOT SHOWN ON STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER OF RECORD UNLESS NOTED OTHERWISE.
16. THE GENERAL CONTRACTOR SHALL VERIFY THAT MISCELLANEOUS FRAMING SHOWN ON THE STRUCTURAL DRAWINGS FOR MECHANICAL EQUIPMENT, OWNER-FURNISHED ITEMS, PARTITIONS, ETC. IS CONSISTENT WITH THE REQUIREMENTS OF SUCH ITEMS.
17. ELEVATIONS SHOWN ARE TO THE TOP OF FOUNDATIONS, SLABS, OR STEEL BEAMS UNLESS NOTED OTHERWISE.
18. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES TO COMPLY WITH THE CONSTRUCTION DOCUMENTS.
19. THE GENERAL CONTRACTOR HAS SOLE RESPONSIBILITY TO COMPLY WITH ALL APPLICABLE OSHA REGULATIONS.
20. THE STRUCTURAL ENGINEER OF RECORD HAS DELEGATED THE DESIGN OF GLAZING SYSTEMS, COLD-FORMED METAL FRAMING, RAILING, SKYLIGHTS, STAIRS, OR OTHER SYSTEMS NOT SHOWN IN THE STRUCTURAL DRAWINGS. SUCH SYSTEMS SHALL BE DESIGNED, FURNISHED, AND INSTALLED AS REQUIRED BY OTHER PORTIONS OF THE CONTRACT DOCUMENTS.
21. ALL TESTING SHALL BE PAID FOR BY THE OWNER (CONTRACTOR SHALL COORDINATE WITH OWNER TO ENSURE THAT COST OF TESTING IS ACCURATE AND PRESENTED TO OWNER WITH CONSTRUCTION COSTS).

FOUNDATIONS

1. RESIDENTIAL BUILDING FOUNDATION DESIGNS ARE BASED ON AN ALLOWABLE BEARING PRESSURE OF 1,500 PSF.
2. BOTTOM OF SPREAD FOOTINGS SHALL BEAR ON FIRM NATURAL SOILS, NEW CONTROLLED COMPACTED ENGINEERED FILL PLACED OVER NATURAL SOILS AND/OR A COMBINATIONS THEREOF.
3. ENGINEERED FILL SHALL BE COMPRISED OF MATERIALS SPECIFIED IN THE GEOTECHNICAL REPORT AND/OR IN THE ABSENCE OF THE GEOTECHNICAL REPORT TO BE APPROVED BY A GEOTECHNICAL ENGINEER.
4. EXCAVATIONS AND PREPARATIONS OF FOUNDATIONS SHALL STRICTLY FOLLOW THE FOUNDATION AND UNDERPINNING DRAWINGS.
5. IF A GEOTECHNICAL REPORT IS PROVIDED, ALL REQUIREMENTS FOR SITE PREPARATION AND EXCAVATION SHALL BE STRICTLY FOLLOWED. EXCAVATE THE BUILDING SITE TO THE DEPTH AND EXTENT INDICATED IN THE SOILS REPORT. ALL SUBGRADES SHALL BE APPROVED IN WRITING BY THE SOILS ENGINEER BEFORE BACKFILLING. PROVIDE FILL MATERIAL AND/OR SOIL COMPACTION AS SPECIFIED IN THE GEOTECHNICAL REPORT.
6. NOTIFY ARCHITECT AND ENGINEER IF SOIL AND/OR FOUNDATION CONDITIONS ENCOUNTERED DIFFER FROM SOILS EXPLORATION INFORMATION MADE AVAILABLE TO THE CONTRACTOR.
7. EARTHWORK SHALL BE PERFORMED UNDER THE SUPERVISION OF A LICENSED SOIL TESTING COMPANY TO ASSURE COMPLIANCE WITH THE REQUIREMENTS OF THE SOILS REPORT AND SPECIFICATIONS.
8. BOTTOM OF ALL FOOTINGS MUST BE INSPECTED AND APPROVED BY A REGISTERED SOILS ENGINEER BEFORE PLACING ANY CONCRETE. APPROVAL IN WRITING MUST INDICATE THE SOIL IS ADEQUATE TO SAFELY SUSTAIN THE SPECIFIED BEARING PRESSURE.
9. ALL FOOTINGS SHALL BE CENTERED UNDER THE COLUMN OR WALLS ABOVE UNLESS NOTED OTHERWISE.
10. FOOTING ELEVATIONS SHOWN ON DRAWINGS REFER TO THE TOP OF FOOTING AND ARE APPROXIMATE. THEY MAY BE REQUIRED TO BE ADJUSTED PER ACTUAL FIELD CONDITIONS, (i.e. EXCAVATE DEEPER TO REACH REQUIRED BEARING CAPACITY.)
11. FOOTINGS CAN BE POURED THICKER IF NECESSARY, TO MAINTAIN TOP OF FOOTING ELEVATIONS AND/OR BLOCK COURSING.
12. BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 2'-6 BELOW THE ADJACENT EXTERIOR FINISH GRADE.
13. STRUCTURAL ENGINEERED FILL UNDER SLAB ON GRADE SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM MODIFIED DENSITY BY A.S.T.M. D-1557-72 AND OTHER RELATED A.S.T.M. SECTIONS.
14. DO NOT BACKFILL UNTIL WALLS HAVE BEEN CURED. BACKFILL AGAINST A WALL SHALL BE PLACED EVENLY ON BOTH SIDES OF THE WALL UNLESS THE WALL IS FULLY BRACED BY THE CONTRACTOR FOR LATERAL PRESSURE. SUCH BRACING INCLUDING ITS DESIGN IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL REMAIN IN PLACE UNTIL AFTER THE FLOOR SLAB OR OTHER STRUCTURAL ELEMENT BRACING THE WALL HAS BEEN CONSTRUCTED TO THE SATISFACTION OF THE ARCHITECT.

WOOD CONSTRUCTION

1. WOOD CONSTRUCTION SHALL CONFORM TO THE AFPA "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION", REFERRED EDITION., NATIONAL FOREST PRODUCTS ASSOCIATION “NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION”, AMERICAN PLYWOOD ASSOCIATION “PLYWOOD DESIGN SPECIFICATION”, NATIONAL LUMBER MANUFACTURERS ASSOCIATION “NATIONAL DESIGN SPECIFICATION FOR STRESS-GRADE LUMBER AND IT'S FASTENINGS” AND AMERICAN WOOD-PRESERVERS ASSOCIATION STANDARDS.
2. ALL STRUCTURAL FRAMING MEMBERS SHALL BE HEM-FIR, GRADE 2, STRESS GRADE LUMBER, OR APPROVED EQUAL UNLESS NOTED OTHERWISE. THE MINIMUM ALLOWABLE PROPERTIES ARE AS FOLLOWS:
   a. Fb = 850 PSI
   b. Fv = 150 PSI
   c. E = 1,300,000 PSI ALL
3. STRUCTURAL TIMBER TO BE STAMPED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION'S “CONSTRUCTION MANUAL”.
4. ALL STUDS SHALL BE S-P-F, STUD GRADE UNLESS NOTED OTHERWISE. ALL STUDS OVER 10'-0" LONG SHALL BE S-P-F, GRADE 2.
5. PROVIDE SOLID BLOCKING UNDER ALL POINT LOADS, POSTS, AND/OR COLUMNS. CARRY ALL POSTS AND COLUMNS DOWN TO THE FOUNDATION OR BEAM. BLOCKING SHALL BE THE SAME SIZE AS THE POST ABOVE.
6. ALL NAILS SHALL BE COMMON NAILS UNLESS NOTED OTHERWISE. THE FOLLOWING SIZE NAILS MUST BE USED, WHEN SPECIFIED:
   a. 16d COMMON NAILS = 0.162 DIA. x 3 1/2" LONG
   b. 16d SINKER NAILS = 0.148 DIA. x 3 1/4" LONG
   c. 10d COMMON NAILS = 0.148 DIA. x 3" LONG
   d. 8d COMMON NAILS = 0.131 DIA. x 2 1/2" LONG
7. WOOD HEADERS OVER OPENINGS IN NON-BEARING WALLS SHALL BE:
   a. DOUBLE 2x4 HEADERS FOR UP TO 4'-0"
   b. DOUBLE 2x6 HEADERS FROM OVER 4'-0" UP TO 6'-0"
   c. DOUBLE 2x8 HEADERS FROM OVER 6'-0" UP TO 10'-0"
   d. NOT LESS THAN DOUBLE 2x10 HEADERS FROM OVER 10'-0" UP TO 12'-0", UNLESS NOTED OTHERWISE.
8. CONTRACTOR HAS THE OPTION TO SUBMIT TRUSSED HEADERS.
9. UNLESS OTHERWISE DETAILED FLOOR OR ROOF TRUSS CONNECTIONS TO SUPPORTING BEAMS (FLUSH CONNECTIONS) SHALL BE FACE MOUNT HANGERS AS MANUFACTURED BY THE SIMPSON STRONG-TIE COMPANY OR APPROVED EQUAL. THE TYPE HANGER USED SHALL BE AS RECOMMENDED BY THE MANUFACTURER OF THE MEMBER-SUPPORTED, UNLESS OTHERWISE NOTED.
10. LVL MEMBERS SHALL BE MANUFACTURED BY LOUISIANA-PACIFIC CORP. OR TRUS JOIST (LVL - LAMINATED VENEER LUMBER, LP SOLIDSTART OR MICROLLAM). BEAM MEMBERS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:
    a. Fb = 2,600 PSI
    b. Fv = 285 PSI
    c. E = 1,900,000 PSI (1.9E).
11. PSL MEMBERS SHALL BE MANUFACTURED BY TRUSS JOIST (PSL - PARALLEL STRAND LUMBER OR PARALLAM) AND SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:
    a. Fb = 2,900 PSI
    b. Fv = 290 PSI
    c. E 2,000,000 PSI (2.0E)
12. PSL COLUMN/POST MEMBERS SHALL BE MANUFACTURED BY TRUS JOIST (PSL - PARALLEL STRAND LUMBER OR PARALLAM) AND SHALL HAVE THE FOLLOWING PROPERTIES:
    a. Fb = 2,400 PSI
    b. Fc para = 2,500 PSI
    c. E = 1,800,000 PSI (1.8E)
13. LSL MEMBERS SHALL BE MANUFACTURED BY LOUISIANA-PACIFIC CORP. OR TRUS JOIST (LSL - LAMINATED STRAND LUMBER, LP SOLIDSTART, OR TIMBERSTRAND).
14. BEAM MEMBERS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:
    a. Fb = 2,325 PSI
    b. Fv = 310 PSI
    c. Fc perp = 800 PSI
    d. E = 1,550,000 PSI (1.55E)
15. COLUMN MEMBERS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:
    a. Fb = 1,700 PSI
    b. Fc para = 1,400 PSI
    c. E = 1,300,000 PSI (1.3E)
16. ALL TIMBER CONNECTIONS SHALL BE MADE USING PREFABRICATED CONNECTORS. TOE-NAILING IS NOT PERMITTED UNLESS SHOWN ON THE DRAWINGS. SUBMIT MANUFACTURER'S DATA FOR REVIEW. FASTENERS SHALL BE AS MANUFACTURED BY SIMPSON OR APPROVED EQUAL. ALL FASTENERS THAT ARE EXPOSED TO THE WEATHER AND/OR ARE IN CONTACT WITH ANY PRESSURE-TREATED LUMBER SHALL BE ZMAX (G185) GALVANIZED MINIMUM.
17. ALL CONNECTIONS TO PRESERVATIVE-TREATED WOOD, MUST BE MADE USING ONLY GALVANIZED CONNECTORS AND FASTENERS. GALVANIZED CONNECTORS MUST BE A MINIMUM OF (CLASS G-185) 1.85 oz. OF ZINC PER SQUARE FOOT OF SURFACE AREA (HOT-DIP GALVANIZED PER ASTM A653, ALL SURFACES/SIDES) AND HAVE A BARRIER MEMBRANE BETWEEN THE TREATED WOOD AND CONNECTOR. GALVANIZED FASTENERS MUST BE HOT-DIP GALVANIZED PER ASTM A153. ANY HEAVYDUTY CONNECTORS THAT ARE 14 GAUGE OR THICKER REQUIRES A MINIMUM ZINC COATING WEIGHT OF 2.0 oz. PER SQUARE FOOT (PER ASTM 123, ALL SURFACES/SIDES). WHERE BARRIERS ARE REQUIRED, PROVIDE GRACE VYCOR DECK PROTECTOR OR EQUAL. BARRIERS ARE TYPICALLY REQUIRED AT EXTERIOR (OUTDOOR) CONDITIONS (i.e. DECKS, ETC.) AND/OR WHERE GALVANIZED CONNECTORS ARE ATTACHED TO ANY TREATED LUMBER INDOORS, OTHER THAN SBX/DOT OR ZINC BORATE TREATED LUMBER.
18. SHEATHING FOR ROOFS SHALL BE 5/8" THICK 24/16 SPAN RATING, APA PLYWOOD OR O.S.B. SHEATHING, EXTERIOR GRADE EXPOSURE 1, AND F.R.T. WHERE NOTED ON ARCHITECTURAL DRAWINGS. SHEATHING FOR WALLS SHALL BE MIN. 7/16" THICK 24/16 SPAN RATING, APA O.S.B. SHEATHING, EXTERIOR GRADE EXPOSURE 1 AND WHERE NOTED ON ARCH. DWGS. SHEATHING FOR FLOORS SHALL BE 3/4" THICK, 24" SPAN RATING, APA STURD-I-FLOOR, EXPOSURE 1.
19. ALL JOINTS IN SHEATHING SHALL BE STAGGERED. ALL EDGES IN FLOOR AND ROOF SHEATHING SHALL BE TONGUE & FLOOR AND ROOF SHEATHING SHALL BE GLUED AND ADHESIVE CONFORMING TO APA SPECIFICATION AFG-01 OR ASTM D3498 SHALL BE USED. FOR THE 2ND & 3RD FLOORS IN THE AMENITY AREA, SHEET EDGES IN THE FLOOR SHEATHING SHALL HAVE LUMBER BLOCKING AS RECOMMENDED BY APA TO PROVIDE A RIGID FLOOR DIAPHRAGM FOR TRANSFERRING LATERAL LOADS. NAILING SHALL COMPLY WITH APA REQUIREMENTS FOR PLYWOOD FLOOR/ROOF DIAPHRAGMS.
20. PROVIDE PRESSURE-TREATED LUMBER WHERE LUMBER IS IN CONTACT WITH CONCRETE OR OUTSIDE OF THE BUILDING.

CHESAPEAKE KITCHEN DESIGN
8001 WISCONSIN AVE. #102
BETHESDA MD 20814

DISTRICT OF COLUMBIA
YAHYA ALIABADRADEH
PE904861
LICENSED
PROFESSIONAL ENGINEER

GENERAL STRUCTURAL NOTES

QUINN RESIDENCE
5322 41st N.W.
WASHINGTON, D.C. 20015

1-9-2023

DATE: 12-20-2022

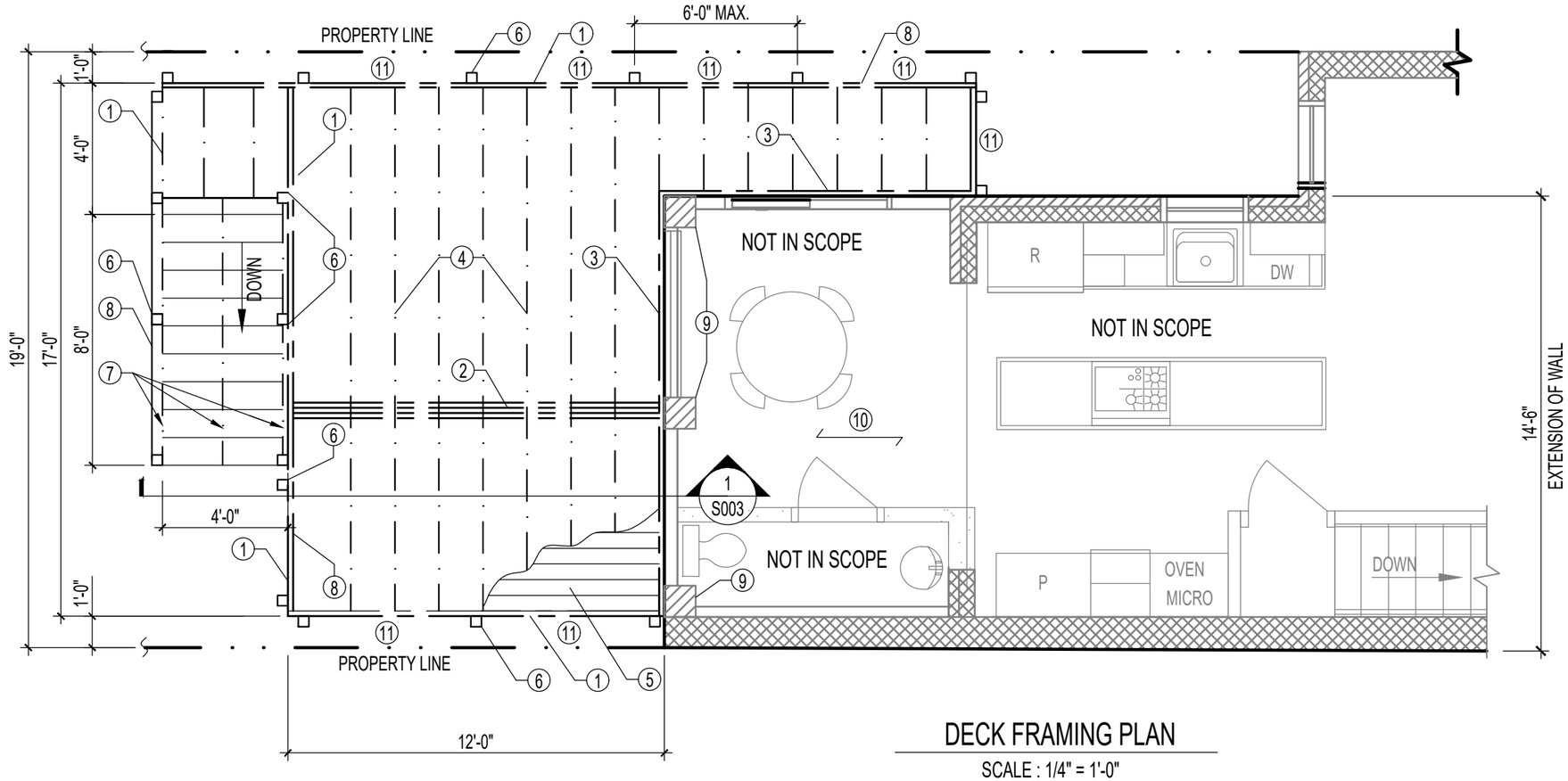
PERMIT SET

GENERAL STRUCTURAL NOTES

S000

NOTES:

1. (2) 2 x 12 PT
2. (4) 2 x 12 PT MIDDLE BEAM
3. 2 x 10 PT LEDGER BOARD
4. 2 x 10 PT @ 16" O.C. FRAMING
5. 5/4 DECKING PT
6. GUARD POST 4 x 4 PT
7. STRINGERS - SOLID 2 x 12 PT
8. HANDRAIL PT OR PVC
9. EXISTING 12" x 12" BRICK PIER V.I.F.
10. EXISTING FLOOR W/ 2 x 8 @ 16" O.C.
11. FENCE PANELS



DECK FRAMING PLAN

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

CHESAPEAKE KITCHEN DESIGN
8001 WISCONSIN AVE. #102
BETHESDA MD 20814

DISTRICT OF COLUMBIA
YAHYA ALIABADRADEH
PE904861
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PROFESSIONAL ENGINEER

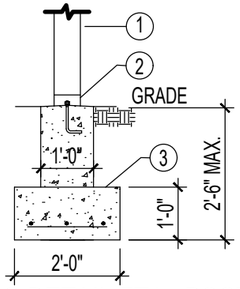
DECK FRAMING PLAN

QUINN RESIDENCE
5322 41st N.W.
WASHINGTON, D.C. 20015

1-9-2023
DATE: 12-20-2022
PERMIT SET

DECK FRAMING PLAN

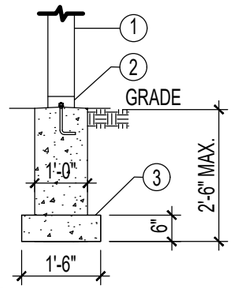
S001



1 FOOTING DETAIL FT1 - POST FOOTING

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

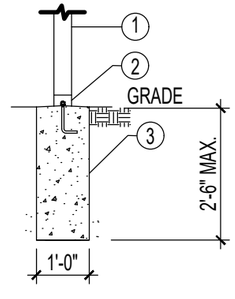
1. 6x6 PTL POST
2. SIMPSON ABU8Z GALVANIZED ADJUSTABLE STANDOFF POST BASE
3. CONCRETE FOOTING 2'-0" x 2'-0" x 12" WITH 3#4 x 1'-6" LONG REBAR EACH WAY



2 FOOTING DETAIL FT2 - LANDING FOOTING

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

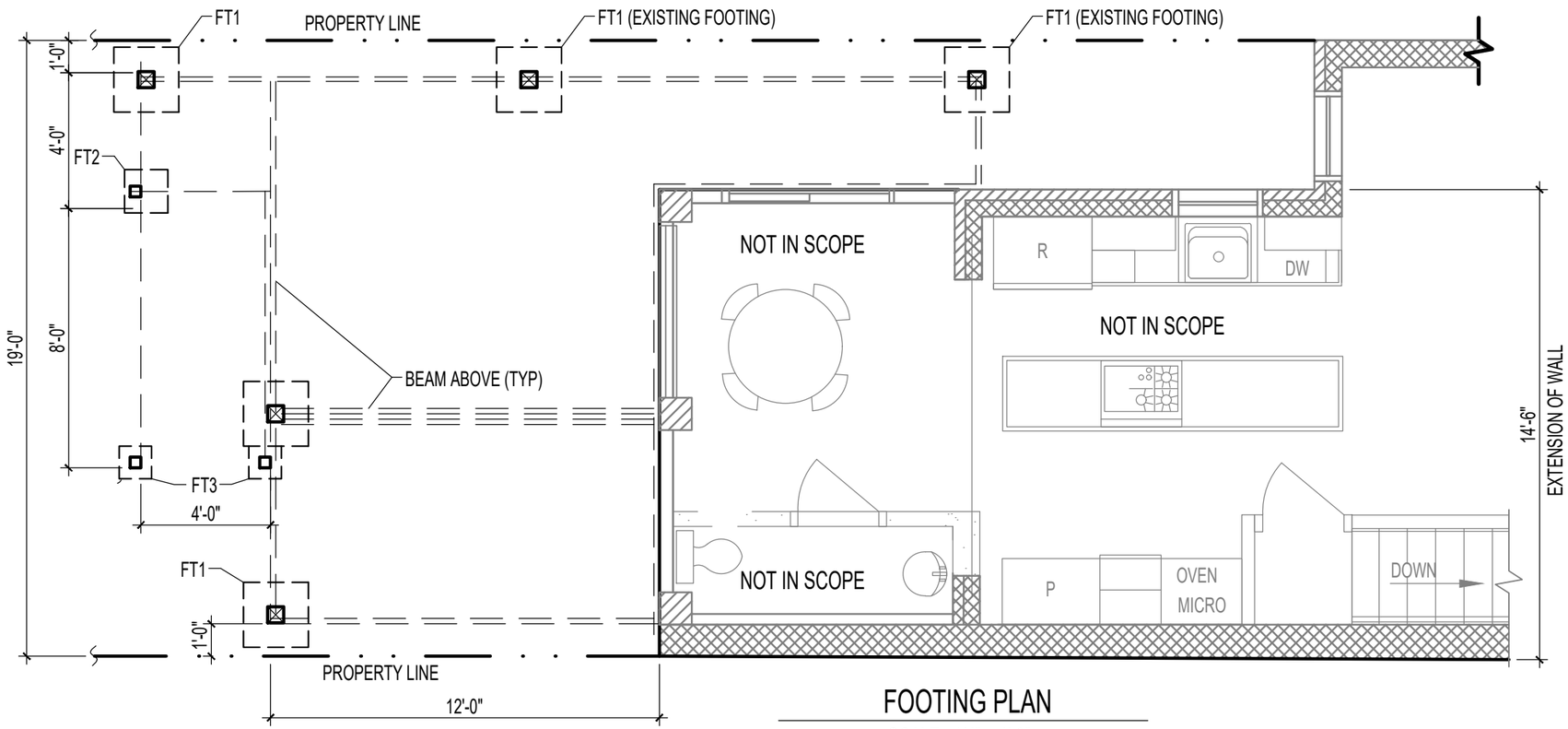
1. 6x6 PTL POST
2. SIMPSON ABW66Z GALVANIZED ADJUSTABLE STANDOFF POST BASE
3. CONCRETE FOOTING 1'-6" x 1'-6" x 6"



3 FOOTING DETAIL FT3 - STAIRWAY POST FOOTING

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

1. 4x4 PTL POST
2. SIMPSON ABW44Z GALVANIZED ADJUSTABLE STANDOFF POST BASE
3. CONCRETE FOOTING 1-0" x 1'-0" x 30"



FOOTING PLAN

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

CHESAPEAKE KITCHEN DESIGN
8001 WISCONSIN AVE. #102
BETHESDA MD 20814

DISTRICT OF COLUMBIA
YAHYA ALIABADRADEH
PE904861
LICENSED
PROFESSIONAL ENGINEER

FOOTING PLAN

QUINN RESIDENCE
5322 41st N.W.
WASHINGTON, D.C. 20015

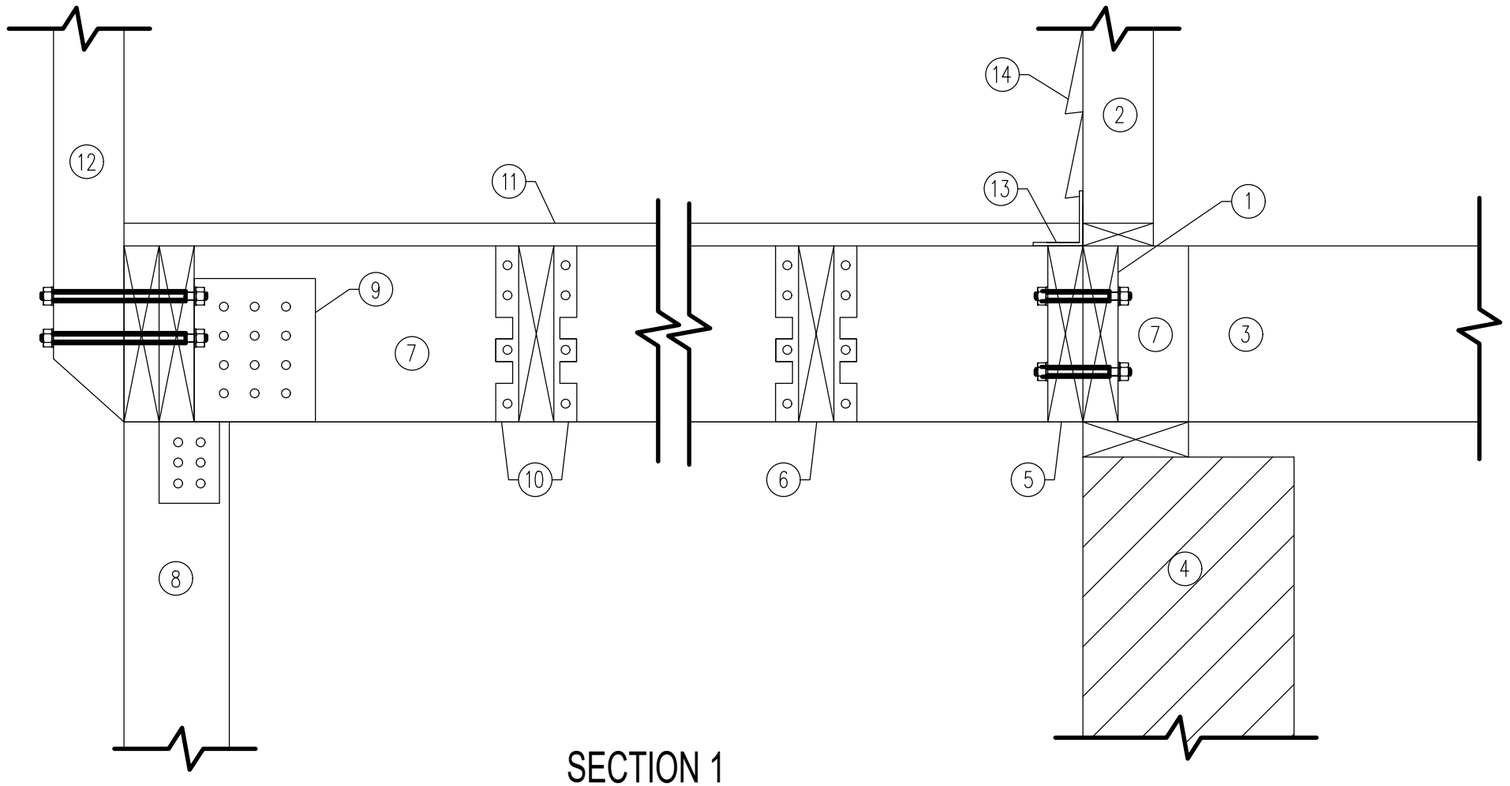
1-9-2023
DATE: 12-20-2022
PERMIT SET

FOOTING PLAN

S002

BRACING NOTES

1. EXISTING 2.5" x 10" BAND BOARD.
2. EXISTING 2x4 WALL.
3. EXISTING 2x10 FLOOR JOIST.
4. EXISTING 12x12 BRICK PIER.
5. NEW 2x10 LEDGER BOARD ATTACH WITH ½" DIAMETER BOLTS – 18" O.C. STAGGERED.
6. 2x10 DECK JOIST.
7. 2 – 2x12 BEAM.
8. 6x6 POST.
9. SIMPSON STRONG BEAM COLUMN CAP CCTQ3–6SDS.
10. 2x10 JOIST HANGER–SIMPSON STRONG G90.
11. 1.25" x 6" DECKING.
12. GUARD POST – ATTACH WITH 2 –1/2" DIAMETER BOLTS AND NUT AND WASHERS.
13. CONTINUOUS FLASHING.
14. EXISTING SIDING.



SECTION 1

SCALE : 1 1/2" = 1'-0"

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SECTION 1

QUINN RESIDENCE
5322 41st N.W.
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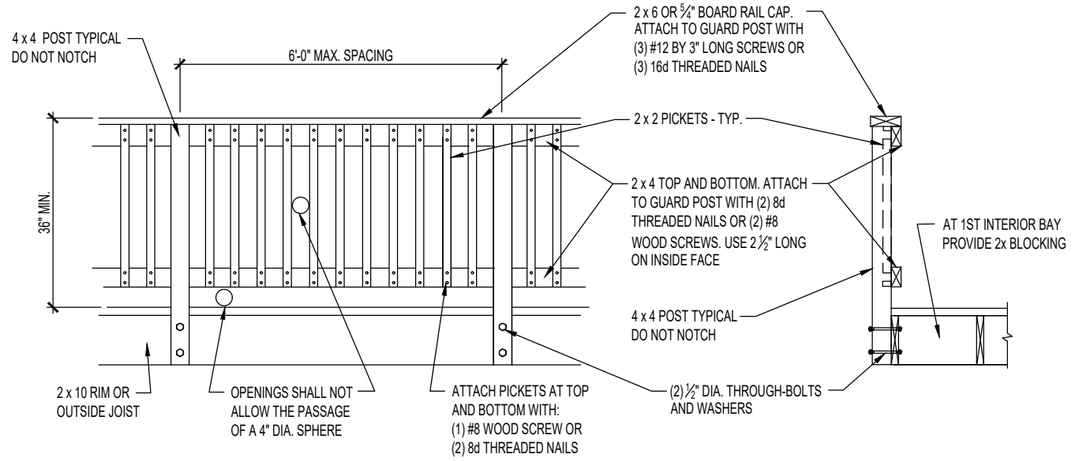
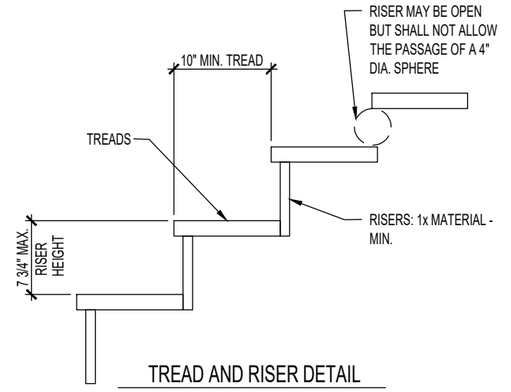
SECTION 1

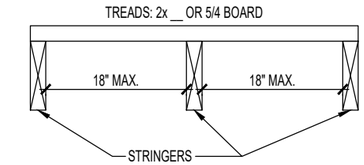
S003



DECK GUARD DETAIL

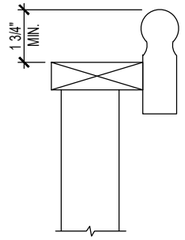


TREAD AND RISER DETAIL

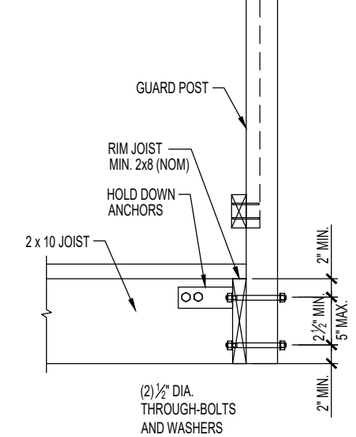


ATTACHMENT PER TREAD AT EACH STRINGER OR LEDGER
5/4" TREADS - (2) 8d THREADED NAILS OR (2) #8 SCREWS 2 1/2" LONG MIN.

TREAD CONNECTION



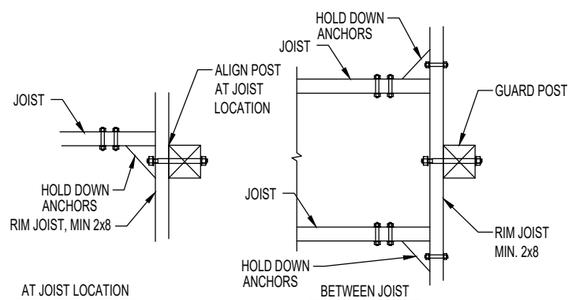
HANDRAIL



SECTION

GUARDPOST SPACING IS LIMITED TO 5 FT. WHEN HOLD-DOWN ANCHORS ARE NOT INSTALLED

ATTACHMENT OF HOLD-DOWN ANCHORS PER MFGR SPECIFICATION



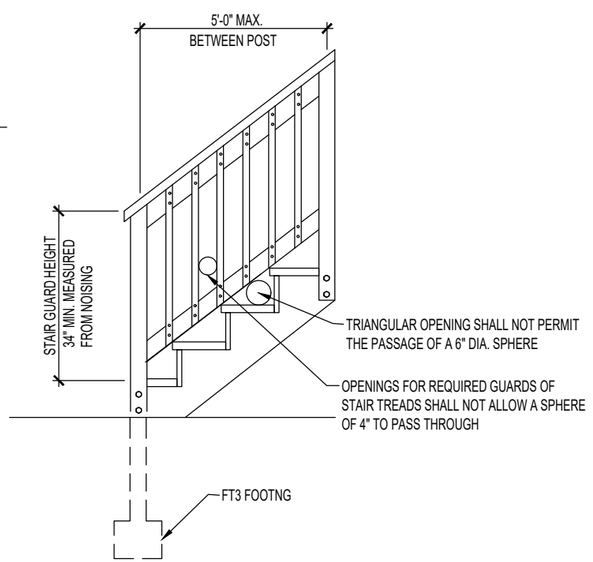
AT JOIST LOCATION

BETWEEN JOIST

PLAN VIEWS

GUARD POST TO RIM JOIST

NOT TO SCALE



STAIR AND GUARDRAIL

CHESAPEAKE KITCHEN DESIGN
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DECK DETAILS 1

QUINN RESIDENCE
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1-9-2023
DATE: 12-20-2022
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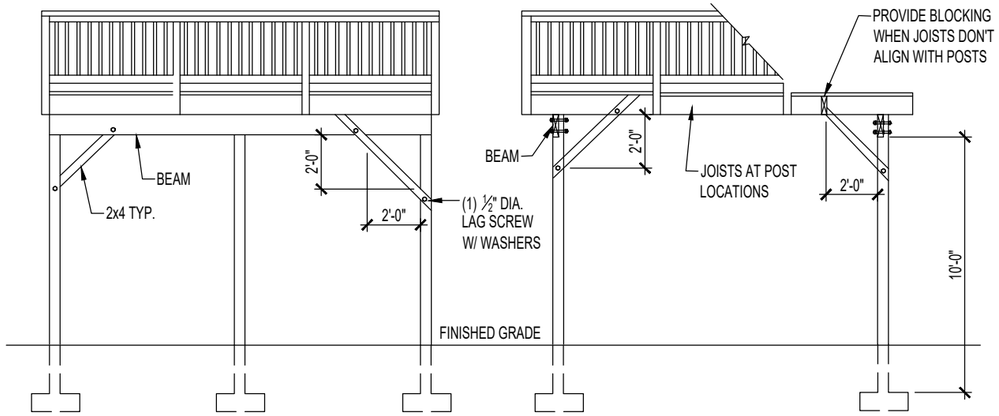
DECK DETAILS 1

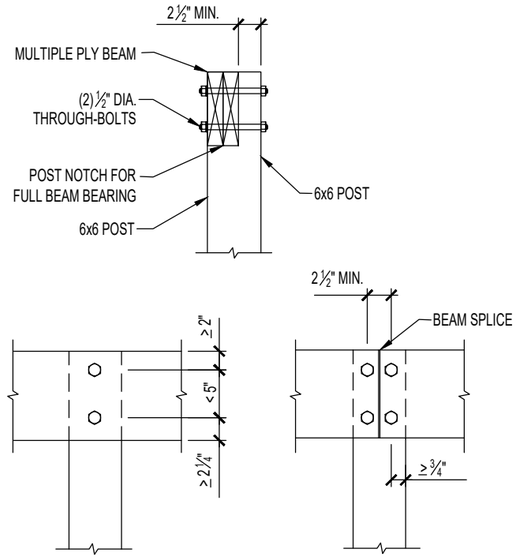
S004



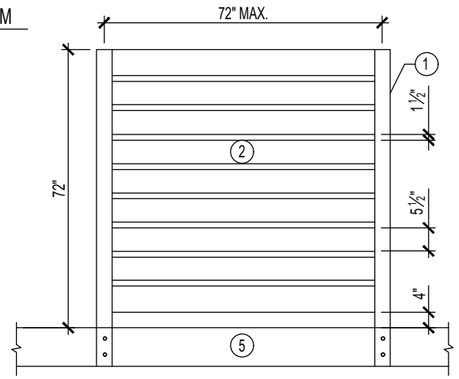
PARALLEL TO BEAM

PERPENDICULAR TO BEAM

2x KNEE BRACING



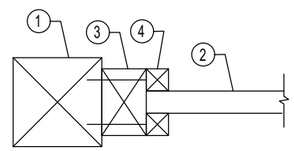
NOTCHED POST TO BEAM CONNECTION



FRONT VIEW

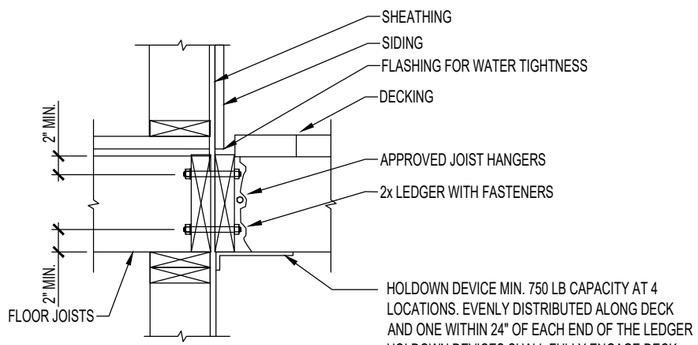
1. 4 x 4 POST
2. 1 x 6
3. 2 x 3
4. 1 x 1
5. 2 x 10

ALL WOOD P.T.L.



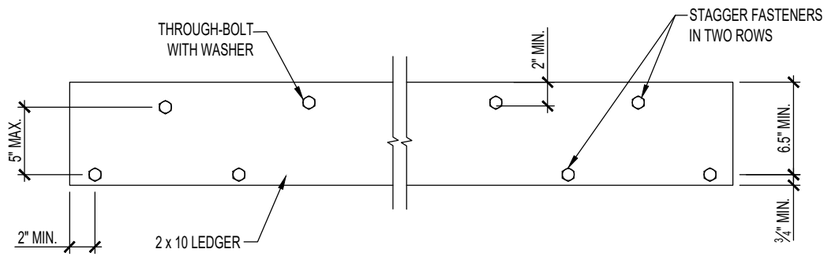
TOP VIEW

HORIZONTAL FENCE PANEL



LATERAL LOAD CONNECTION

NOT TO SCALE



LEDGER FASTENER SPACING AND CLEARANCES

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DISTRICT OF COLUMBIA
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DECK DETAILS 2

QUINN RESIDENCE
5322 41st N.W.
WASHINGTON, D.C. 20015

1-9-2023
DATE: 12-20-2022
PERMIT SET

DECK DETAILS 2

S005

DISTRICT OF COLUMBIA GOVERNMENT
OFFICE OF THE SURVEYOR

Washington, D.C., November 28, 2023

Plat for Building Permit of :

SQUARE 1742 LOT 53

Scale: 1 inch = 20 feet

Recorded in Book 57 Page 44

Receipt No. 24-00908

Drawn by: M.G.

Furnished to: FERNANDO ALBAN

"I hereby certify that the dimensions and configuration of the lot(s) hereon depicted are consistent with the records of the Office of the Surveyor unless otherwise noted, but may not reflect actual field measurements. The dimensions and configuration of A&T lots are provided by the Office of Tax and Revenue and may not necessarily agree with the deed description(s)."

Surveyor, D.C.

I hereby certify that on this plat on which the Office of the Surveyor has drawn the dimensions of this lot, I have accurately and completely depicted and labeled the following:
1) all existing buildings and improvements - including parking spaces, covered porches, decks and retaining walls over four feet above grade, and any existing face-on-line or party wall labeled as such, well as projections and improvements in public space - with complete and accurate dimensions;
2) all proposed demolition or raze of existing buildings duly labeled as such; all proposed buildings and improvements - including parking spaces, covered porches, decks and retaining walls over four feet above grade, any existing face-on-line or party wall labeled as such, as well as projections and improvements in public space and the improvements used to satisfy pervious surface or green area ratio requirements - with complete and accurate dimensions, in conformity with the plans submitted with building permit application DK24000045; and
3) any existing chimney or vent on an adjacent property that is located within 10 feet of this lot.
I also hereby certify that:
1) my depiction on this plat, as detailed above, is accurate and complete as of the date of my signature hereon;
2) there is no elevation change exceeding ten feet measured between lot lines; or if so, this elevation change is depicted on a site plan submitted with the plans for this permit application;
3) I have/have not (*circle one*) filed a subdivision application with the Office of the Surveyor;
4) I have/have not (*circle one*) filed a subdivision application with the Office of Tax & Revenue; and
5) if there are changes to the lot and its boundaries as shown on this plat, or to the proposed construction and plans as shown on this plat, that I shall obtain an updated plat from the Office of the Surveyor on which I will depict all existing and proposed construction and which I will then submit to the Office of the Zoning Administrator for review and approval prior to permit issuance.
The Office of the Zoning Administrator will only accept a Building Plat issued by the Office of the Surveyor within the two years prior to the date DCRA accepts a Building Permit Application as complete.
I acknowledge that any inaccuracy or errors in my depiction on this plat will subject any permit or certificate of occupancy issued in reliance on this plat to enforcement, including revocation under Sections 105.6(1) and 110.5.2 of the Building Code (Title 12A of the DCMR) as well as prosecution and penalties under Section 404 of D.C. Law 4-164 (D.C. Official Code §22-2405).

Signature: Fernando Alban
Date: 3-8-2024

Printed Name: FERNANDO ALBAN Relationship to Lot Owner: CONTRACTOR

If a registered design professional, provide license number _____ and include stamp below.

0 10 30 60 100

SCALE: 1:20

SQUARE 1742