

PERMIT NUMBER: B

21001723  
21001544

DATE ACCEPTED:



# RESIDENTIAL BUILDING PERMIT APPLICATION

HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES, AND PERMITS

3430 COURT HOUSE DRIVE, ELLICOTT CITY, MD 21043 - PHONE: (410) 313-2455 OPTION #4

www.howardcountymd.gov

## BUILDING SITE ADDRESS REQUIRED

Street Address: 12401 Benson Branch Rd		Unit:
City: Ellicott City	State: MD	Zip Code: 21042
Subdivision/Village/Complex Name:		SDP/WP/BA #:
Lot:	Tax Map:	Parcel:
Grading Permit #:		

## DESCRIPTION OF WORK REQUIRED

Existing Use: SFD	Proposed Use: SFD	Estimated Cost: \$ 50,000.
Trade Work to Be Completed (Separate Permits Required): <input type="checkbox"/> Mechanical (HVAC) <input type="checkbox"/> Electrical <input type="checkbox"/> Plumbing <input type="checkbox"/> None		
To add a patio to existing home, build deck off of attached garage and wild out deck pavilion next to pool. Deck 15x2 - 18x24. 5x20 deck + 10x100k permit		

## PROPERTY OWNER INFORMATION REQUIRED

Owner(s) Name(s) (As it appears on tax records): Chad Nelson		Primary Residence: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Owner's Street Address: 12401 Benson Branch Rd.		
City: Ellicott City	State: MD	Zip Code: 21042
Phone: 410 419 1882	Email:	

## APPLICANT NAME REQUIRED - INDIVIDUAL WHO SIGNS THIS APPLICATION

Business Name: Cumberland Dev Custom Homes		Contact Name: Curtis Cumberland
Street Address: 4132 Salem Bottom Rd.		
City: Westminster	State: MD	Zip Code: 21157
Phone: 301 252 1122	Email: Cumberlanddevcustomhomes@gmail.com	

## CONTRACTOR INFORMATION REQUIRED

Business Name: Cumberland Dev Custom Homes		License #: 7714, MHIC 134655
Licensee's Name:		
Street Address:		
City:	State:	Zip Code:
Phone:	Email:	

## ARCHITECT/ENGINEER INFORMATION INDIVIDUAL WHO SIGNED PLANS, IF APPLICABLE

Business Name: Cortworks		Name: Bill Ellis
Street Address: 332 West Pacific St.		
City: Frederick	State: MD	Zip Code:
Phone: 301 695 7121	Email:	

## BUILDING CHARACTERISTICS REQUIRED

Primary Structure: <input type="checkbox"/> SF Dwelling <input type="checkbox"/> SF Townhouse <input type="checkbox"/> SF Duplex <input type="checkbox"/> Mobile Home <input type="checkbox"/> Multi-Family Dwelling (MF*)	Condo: <input type="checkbox"/> Yes <input type="checkbox"/> No
Utilities: <input checked="" type="checkbox"/> Electric <input type="checkbox"/> Gas	Water Supply: <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private (Well)
Sewage Disposal: <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private (Septic)	
Heating System: <input type="checkbox"/> Electric <input type="checkbox"/> Natural Gas <input type="checkbox"/> Propane <input type="checkbox"/> Other:	Roadside Tree Project: <input type="checkbox"/> No <input type="checkbox"/> Yes: #
Sprinkler System: <input type="checkbox"/> NFPA 13 <input type="checkbox"/> NFPA 13R <input type="checkbox"/> NFPA 13D <input type="checkbox"/> None	Fire Alarm System: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Voice Evac

## ADDITIONAL RESIDENTIAL INFORMATION (PLEASE SELECT/COMPLETE ALL THAT APPLY)

Model Name & Options:				
# of Bedrooms (SF):	# of efficiency units (MF*):	# of 1 BR (MF*):	# of 2 BR (MF*):	# of 3 BR (MF*):
# Rooms:	# Full Baths:	# Half Baths:	# Fireplaces:	
Garage/Carport Info: <input type="checkbox"/> Attached Garage <input type="checkbox"/> Detached Garage <input type="checkbox"/> Integral Garage <input type="checkbox"/> Carport <input type="checkbox"/> None				
Basement/Foundation Info: <input type="checkbox"/> Slab on Grade <input type="checkbox"/> Post & Pier <input type="checkbox"/> Unfinished Basement <input type="checkbox"/> Finished Basement: <input type="checkbox"/> Full or <input type="checkbox"/> Partial				
1st Fl Width:	1st Fl Depth:	2nd Fl Width:	2nd Fl Depth:	Bsmt Width:
Bsmt Depth:		Energy Method: <input type="checkbox"/> Prescriptive <input type="checkbox"/> Performance <input type="checkbox"/> UA Alternative <input type="checkbox"/> ERI		
Gross Area: sq ft		Occupiable Area: sq ft		

## AGREEMENT/ DISCALIMER REQUIRED

THE UNDERSIGNED HEREBY CERTIFIES AND AGREES AS FOLLOWS: (1) THAT HE/SHE IS AUTHORIZED TO MAKE THIS APPLICATION; (2) THAT THE INFORMATION IS CORRECT; (3) THAT HE/SHE WILL COMPLY WITH ALL REGULATIONS OF HOWARD COUNTY WHICH ARE APPLICABLE THERETO; (4) THAT HE/SHE WILL PERFORM NO WORK ON THE ABOVE REFERENCED PROPERTY NOT SPECIFICALLY DESCRIBED IN THIS APPLICATION; (5) THAT HE/SHE GRANTS COUNTY OFFICIALS THE RIGHT TO ENTER ONTO THIS PROPERTY FOR THE PURPOSE OF INSPECTING THE WORK PERMITTED AND POSTING NOTICES.

*Curtis Cumberland* \_\_\_\_\_ DATE SIGNED: 4/22/21

APPLICANT'S ORIGINAL SIGNATURE

## FOR OFFICE USE ONLY

CHECKS PAYABLE TO: DIRECTOR OF FINANCE OF HOWARD COUNTY

AGENCIES REQUIRED/APPROVALS:

<input type="checkbox"/> PR	<input type="checkbox"/> DPZ	<input type="checkbox"/> DED	<input checked="" type="checkbox"/> Health <i>RAC</i>	<input type="checkbox"/> SHA	<input type="checkbox"/> CID
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SUBMITTAL FEES: PAYMENT: ACCEPTED BY:



**BUILDING CODES:**

- A. ALL CONSTRUCTION SHALL CONFORM WITH THE 2018 INTERNATIONAL RESIDENTIAL CODE (IRC).
- B. ALL CONSTRUCTION SHALL CONFORM WITH ALL APPLICABLE LOCAL CODES/AMENDMENTS.

**DESIGN CRITERIA:** (PER SECTION R301 OF IRC 2018)

- A. THE DESIGN DEAD LOADS FOR ALL FRAMING IS BASED ON THE CONSTRUCTION MATERIALS SHOWN ON THE DRAWINGS AND INDICATED IN THE GENERAL NOTES.
- B. THE MINIMUM DESIGN UNIFORMLY DISTRIBUTED LIVE LOADS FOR ALL NEW FRAMING SHALL BE AS FOLLOWS:
  - FLOOR LOAD (U.O.N.) LL=40 PSF / DL=10 PSF
  - SLEEPING RMS. / ATTIC WITH FIXED STAIR LL=30 PSF / DL=10 PSF
  - GARAGE FLOOR LL=50 PSF / 2000# POINT MIN. 40 PSF
  - ROOF LIVE LOAD LL=20 PSF (LIMITED STORAGE)
  - ATTIC AND TRUSS BOTTOM CHORD LL=10 PSF (NO STORAGE)
- C. ROOF SNOW LOAD DESIGN CRITERIA:
  - GROUND SNOW LOAD (Pg)= 25 PSF
- D. WIND LOAD DESIGN CRITERIA:
  - BASIC WIND SPEED= 115 MPH
  - TOPOGRAPHIC EFFECTS= NO
- E. EARTHQUAKE LOAD DESIGN CRITERIA:
  - SEISMIC DESIGN CATEGORY= A
- F. SUBJECT TO DAMAGE FROM:
  - WEATHERING SEVERE
  - FROST LINE DEPTH 30"
  - TERMITE MOD-HEAVY
- G. TEMPERATURE AND FLOODING:
  - WINTER DESIGN TEMPERATURE 13° F
  - ICE BARRIER UNDERLAYMENT REQUIRED YES
  - FLOOD HAZARDS SEE FLOOD MAPS
  - AIR FREEZING INDEX 500
  - MEAN ANNUAL TEMPERATURE 55° F
  - RADON PROTECTION REQUIRED YES
- H. THE STABILITY OF THE STRUCTURE IS DEPENDENT UPON THE DIAPHRAGM ACTION OF THE FLOORS AND ROOF. THE CONTRACTOR IS RESPONSIBLE FOR THE METHOD OF CONSTRUCTION AND SHALL PROVIDE ALL TEMPORARY BRACING AND SHORING REQUIRED TO MAINTAIN THE STABILITY OF THE STRUCTURE AND TO SUPPORT CONSTRUCTION LOADS DURING CONSTRUCTION, INCLUDING SOILS ON WALLS FROM BACK FILLING PRIOR TO PLACING SLABS ON GRADE. DESIGN OF ALL BRACING IS THE CONTRACTOR'S RESPONSIBILITY.

**SPREAD FOOTING FOUNDATIONS:**

- A. THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 30" BELOW FINISH GRADE FOR FROST PROTECTION.
- B. ALL FOOTINGS HAVE BEEN DESIGNED FOR AN ASSUMED NET ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF.
- C. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ALL FOUNDATION AND SOIL CONDITIONS WHICH DIFFER FROM THOSE ANTICIPATED OR INDICATED IN THE CONTRACT DOCUMENTS.

**CONCRETE SLAB-ON-GRADE:**

- A. ALL SLABS ON GRADE, UNLESS OTHERWISE NOTED, SHALL CONSIST OF A 4 INCH THICK CONCRETE SLAB REINFORCED WITH ONE LAYER OF 6"x6"-MI-4XMI-4 WELDED WIRE FABRIC AND PLACED OVER A 6 MIL POLYETHYLENE VAPOR RETARDER AND 4 INCHES OF COMPACTED GRANULAR BASE. ALL EDGES OF VAPOR RETARDER SHALL BE LAPPED A MINIMUM OF 6 INCHES AND TAPED. MAXIMUM AGGREGATE SIZE OF GRANULAR BASE SHALL BE 1/2 INCH.
- B. FILL DEPTHS UNDER SLAB SHALL NOT EXCEED 24 INCHES FOR CLEAN SAND OR GRAVEL AND 8 INCHES FOR COMPACTED SOIL. SLABS ON GREATER FILL SHALL BE ENGINEER SUPPORTED SLABS. COORDINATE WITH ENGINEER WHERE REQUIRED.
- C. PLACE CONCRETE PER ACI 302. CONTRACTOR SHALL READ, UNDERSTAND & FOLLOW GUIDELINES SET FORTH FOR PREPARING SUBGRADE, PLACING, CONSOLIDATING, FINISHING AND CURING CONCRETE SLABS.

**CAST IN PLACE CONCRETE:**

- A. ALL CONCRETE CONSTRUCTION SHALL CONFORM TO THE "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301)" AND TO THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318)".
- B. IN ADDITION TO THE ABOVE, ALL CONCRETE WORK SHALL CONFORM TO THE FOLLOWING:
  - 1. RECOMMENDED PRACTICE FOR HOT WEATHER CONCRETING (ACI 305).
  - 2. RECOMMENDED PRACTICE FOR COLD WEATHER CONCRETING (ACI 306).
  - 3. RECOMMENDED PRACTICE FOR CONCRETE FORM WORK (ACI 347).
- C. ALL CONCRETE, UNLESS OTHERWISE NOTED, SHALL BE STONE AGGREGATE CONCRETE HAVING A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI. ALL CONCRETE EXPOSED TO WEATHER SHALL HAVE AN AIR ENTRAINMENT OF 5%-7%. NO ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL BE PERMITTED. MAXIMUM AGGREGATE SIZE SHALL BE 1" AND MAXIMUM SLUMP SHALL BE 4" (3" FOR SLABS ON GRADE). ALL CONCRETE, EXCEPT FOOTINGS, SHALL CONTAIN A WATER REDUCING ADMIXTURE. PORTLAND CEMENT SHALL CONFORM TO ASTM C150 AND NORMAL WEIGHT AGGREGATES SHALL CONFORM TO ASTM C33.
- D. ALL REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A615 GRADE 60. ALL WELDED WIRE FABRIC (W.W.F.) SHALL CONFORM TO ASTM A105. LAP ALL REINFORCING BARS A MINIMUM OF 48xBAR DIA. (EX. - LAP 1/2" BAR 24") AND ALL W.W.F. A MINIMUM OF TWO FULL GRIDS, UNLESS OTHERWISE INDICATED.

**STRUCTURAL AND MISCELLANEOUS STEEL:**

- A. ALL STEEL CONSTRUCTION SHALL CONFORM TO THE THIRTEENTH EDITION OF THE AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS - ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN" AND THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".
- B. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A992 GRADE 50 OR ASTM A36 AT THE CONTRACTORS OPTION.
- C. ALL MISCELLANEOUS STEEL (ANGLES, PLATES, ETC.) SHALL CONFORM TO ASTM A36 HAVING A MINIMUM YIELD STRENGTH OF Fy=36,000 PSI.
- D. ALL STRUCTURAL STEEL PIPE SHALL CONFORM TO ASTM A501 HAVING A MINIMUM YIELD STRENGTH OF Fy=36,000 PSI OR TO ASTM A53, TYPE "E" OR "S" GRADE "B", HAVING A MINIMUM YIELD STRENGTH OF Fy=35,000 PSI.
- E. ALL STRUCTURAL STEEL TUBES SHALL CONFORM TO ASTM A500, GRADE "B", HAVING A MINIMUM YIELD STRENGTH OF Fy=46,000 PSI.
- F. ALL CONNECTIONS, UNLESS OTHERWISE NOTED, SHALL BE DOUBLE ANGLE OR SINGLE PLATE SHEAR CONNECTIONS DESIGNED AND DETAILED IN ACCORDANCE WITH THE AISC "STEEL CONSTRUCTION MANUAL" WITH A MINIMUM EDGE DISTANCE OF 1-1/2 INCHES AND BOLT SPACING OF 3 INCHES.
- G. THE CONTRACTOR SHALL NOT SPLICE OR CUT OPENINGS IN STEEL MEMBERS NOT SHOWN ON CONTRACT DRAWINGS WITHOUT THE PERMISSION OF THE STRUCTURAL ENGINEER.

**WOOD FRAMING:**

- A. ALL WOOD FRAMING SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" PUBLISHED BY THE NATIONAL FOREST PRODUCTS ASSOCIATION.
- B. ALL NEW LUMBER SHALL BE SPRUCE-PINE-FIR NO. 2 OR BETTER. ALL NEW PRESSURE TREATED LUMBER SHALL BE SOUTHERN PINE NO. 2 OR BETTER.
- C. NAILING OF ALL WOOD FRAMING SHALL MEET THE MINIMUM RECOMMENDED REQUIREMENTS PROVIDED IN THE NAILING SCHEDULE OF THE IRC BUILDING CODE.
- D. PROVIDE DOUBLE JOISTS OR HEADERS ALONG EACH SIDE OF FLOOR OR ROOF OPENINGS, UNDER THE CENTERLINE OF PARTITION WALLS PARALLEL TO JOIST SPANS, AND ABOVE ALL WALL OPENINGS UNLESS OTHERWISE INDICATED.
- E. THE CONTRACTOR SHALL CUT OR NOTCH THE WOOD FRAMING ONLY AS REQUIRED AND IN ACCORDANCE WITH THE IRC BUILDING CODE, THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION", OR AS SHOWN ON THE CONTRACT DRAWINGS.
- F. PROVIDE DOUBLE OR TRIPLE STUDS AT ALL CORNERS, SIDES OF OPENINGS, AND BENEATH ALL WOOD BEAMS AND LINTELS, UNLESS OTHERWISE INDICATED.
- G. WOOD TRUSSES SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE TRUSS INSTITUTE'S "NATIONAL DESIGN SPECIFICATION FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION" FOR THE DESIGN LOADS INDICATED ON THE CONTRACT DOCUMENTS.
- H. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS FOR ALL WOOD TRUSSES INCLUDING MEMBER LAYOUT, WOOD SPECIES AND GRADE, MEMBER SIZES, TRUSS BEARING CONNECTION DETAILS, CAPACITY OF CONNECTOR PLATES AND THE SIZE AND LOCATION OF ALL REQUIRED BRIDGING. THE CALCULATIONS AND SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE APPLICABLE STATE OR JURISDICTION REVIEWING THE PROJECT.
- I. THE CONTRACTOR SHALL PROVIDE TRUSS TIES EQUIVALENT TO OR BETTER THAN THE UPLIFT LOADS INDICATED ON THE TRUSS SHOP DRAWINGS.

**STAIRS, HANDRAILS and GUARDS:**

- A. STAIRS SHALL COMPLY WITH SECTION R311 OF THE IRC. STAIRWAYS SHALL NOT BE LESS THAN 36 INCHES IN CLEAR WIDTH AT ALL POINTS ABOVE THE PERMITTED HANDRAIL HEIGHT AND BELOW THE REQ'D HEADROOM HEIGHT; 31.5 INCHES WHERE A HANDRAIL IS INSTALLED ON ONE SIDE; 27 INCHES WHERE HANDRAILS ARE INSTALLED ON BOTH SIDES.
- B. MINIMUM HEADROOM IN ALL PARTS OF THE STAIRWAY SHALL NOT BE LESS THAN 6 FEET 8 INCHES.
- C. MAXIMUM STAIR RISER HEIGHT SHALL BE 7-3/4 INCHES AND MINIMUM TREAD DEPTH SHALL BE 10 INCHES. (UNLESS NOTED OTHERWISE IN CONTRACT DRAWINGS.)
- D. HANDRAILS SHALL BE PROVIDED ON AT LEAST ONE SIDE OF EACH STAIRWAY WITH FOUR OR MORE RISERS. HANDRAILS SHALL BE A MINIMUM OF 34 INCHES AND A MAXIMUM OF 38 INCHES ABOVE TREAD NOSING.
- E. PORCHES, BALCONIES, RAMPS OR RAISED FLOOR SURFACES LOCATED MORE THAN 30 INCHES ABOVE THE FLOOR OR GRADE BELOW SHALL HAVE GUARDS NOT LESS THAN 36 INCHES IN HEIGHT.
- F. REQUIRED GUARDS SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL CLOSURES WHICH DO NOT ALLOW PASSAGE OF A SPHERE 4 INCHES OR MORE IN DIAMETER.

**INSULATION & MOISTURE PROTECTION:**

- A. N/A
- B. PROVIDE MINIMUM ONE LAYER OF 15 lb. ROOFING FELT AT THE ROOF TO PROVIDE A WATER-RESISTANT BASE FOR FIBERGLASS COMPOSITION ROOF SHINGLES.
- C. AN ICE BARRIER, IF REQUIRED, THAT CONSISTS OF TWO LAYERS OF UNDERLAYMENT CEMENTED TOGETHER OR OF A SELF-ADHERING POLYMER MODIFIED BITUMEN SHEET, SHALL BE USED IN LIEU OF NORMAL UNDERLAYMENT AND EXTEND FROM THE LOWEST EDGES OF ALL ROOF SURFACES TO A POINT AT LEAST 24 INCHES INSIDE THE EXTERIOR WALL LINE OF THE BUILDING.
- D. PROVIDE INSULATION TO ACHIEVE MINIMUM R-VALUES AS FOLLOWS:
  - CEILING: R-49 (R-38 IF UNCOMPRESSED EXTENDS OVER WALL TOP PLATE)
  - EXTERIOR FRAME WALLS: R-20 (TOTAL WALL ASSEMBLY)
  - BASEMENT (CONCRETE) WALLS: R-10 CONTINUOUS
  - FLOORS OVER UNCONDITIONED SPACE: R-19
  - WINDOWS / GLASS DOORS: U-FACTOR ≤ 0.35
  - SKYLIGHTS: U-FACTOR ≤ 0.55
- E. THE CONTRACTOR SHALL PROVIDE CORROSION-RESISTANT METAL FLASHING ABOVE ALL WINDOW AND DOOR OPENINGS TO PREVENT MOISTURE PENETRATION. SIMILAR FLASHING SHALL BE PROVIDED AT ROOF VALLEYS AND ROOF OPENINGS, WOOD OR METAL COPINGS AND SILLS.
- F. THE CONTRACTOR SHALL PROVIDE PERFORATED SOFFITS AT THE ROOF EAVES AND A CONTINUOUS RIDGE VENT AT THE ROOF TO PROVIDE REQUIRED ATTIC VENTILATION.

**MECHANICAL, ELECTRICAL & PLUMBING:**

- A. N/A
- B. ELECTRICAL DESIGN AND INSTALLATION TO BE PERFORMED BY LICENSED ELECTRICAL CONTRACTOR IN COMPLIANCE WITH ALL APPLICABLE CODES.
- C. PLUMBING DESIGN AND INSTALLATION TO BE PERFORMED BY LICENSED PLUMBING CONTRACTOR IN COMPLIANCE WITH ALL APPLICABLE CODES.

**PROJECT GENERAL NOTES:**

- A. WALL DIMENSIONS ARE FROM OUTSIDE FACE OF FRAMING AND ARE AS FOLLOWS (U.O.N.):
  - INTERIOR PARTITIONS = 3-1/2" (2x4 WOOD STUDS @ 16" O.C.)
  - 5-1/2" (2x6 WOOD STUDS @ 16" O.C.)
  - EXTERIOR WALLS (INSULATED) = 6" (2x6 STUDS @ 16" O.C. PLUS 1/2" SHEATHING)
  - EXTERIOR WALLS (NON-INSULATED) = 4" (2x4 STUDS @ 16" O.C. PLUS 1/2" SHEATHING)
- B. THE CONTRACTOR AND HIS ASSOCIATED SUBCONTRACTORS ARE RESPONSIBLE TO THOROUGHLY REVIEW ALL DRAWINGS. ANY INCONSISTENCIES OR ERRORS ARE TO BE REPORTED TO THE DESIGNER FOR CLARIFICATION OR CORRECTION PRIOR TO THE START OF CONSTRUCTION OR MANUFACTURING OF PRE-FABRICATED COMPONENTS.
- C. IF THE CONTRACTOR MODIFIES OR DEVIATES FROM THESE PLANS FOR ANY REASON WITHOUT NOTIFYING CADDWORKS, INC., THE PLANS CODE COMPLIANCE BECOMES THE CONTRACTOR'S RESPONSIBILITY.
- D. SIZES/SPACING OF ALL PRE-ENGINEERED WOOD FRAMING PRODUCTS (MICROLAM, PARALLAM, & FLOOR/ROOF TRUSSES) TO BE ENGINEERED/VERIFIED BY MANUFACTURER.
- E. FLOOR FRAMING TO BE ACCOMPLISHED WITH PRE-ENGINEERED WOOD "I" JOISTS; MANUFACTURER'S AGENT TO DESIGN JOIST LAYOUT AND PROVIDE ENGINEERED SHOP DRAWINGS; FLOOR SYSTEM TO BE DESIGNED WITH 1/480 LIVE LOAD DEFLECTION MIN. (L/600 IN AREAS TO BE FINISHED WITH TILE).
- F. ROOF FRAMING TO BE ACCOMPLISHED WITH PRE-ENGINEERED WOOD TRUSSES; MANUFACTURER'S AGENT TO DESIGN TRUSS LAYOUT AND PROVIDE ENGINEERED SHOP DRAWINGS.
- G. THE STAIR MANUFACTURER SHALL VERIFY EXISTING FIELD CONDITIONS PRIOR TO FABRICATION OF STAIR; STAIR TO BE BUILT IN COMPLIANCE WITH ALL APPLICABLE CODES.
- H. THESE DOCUMENTS ARE NOT TO BE SCALED. DIMENSIONS SHALL GOVERN ON ALL DRAWINGS. ANY OMISSIONS OR AREAS OF DISCREPANCY SHALL BE REFERRED TO CADDWORKS, INC. PRIOR TO CONSTRUCTION.

# PROPOSED EXTERIOR POOL ACCESSORY STRUCTURES FOR: THE NELSON FAMILY

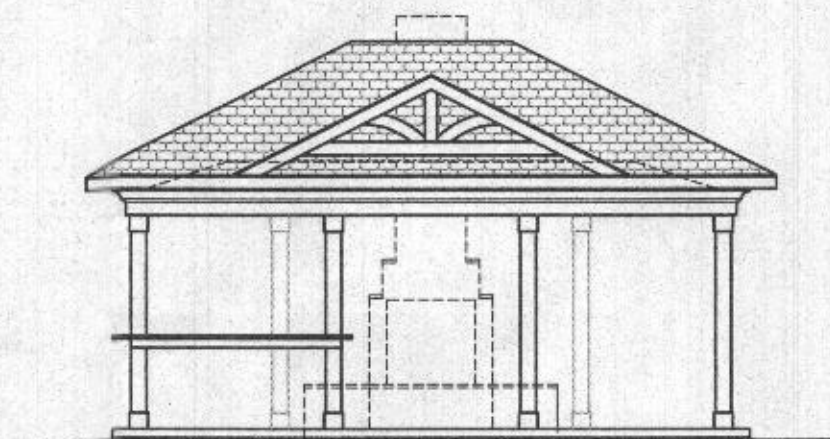
SCOPE OF WORK:  
NEW PATIO OFF MAIN HOUSE REAR PORCH.  
NEW COVERED PATIO OFF EXISTING GARAGE  
NEW POOL PAVILION



NEW REAR PATIO



NEW COVERED PATIO @ GARAGE



NEW PAVILION

*Approved B21001725  
RAC 6/10/2021*

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A-6	PAVILION PLAN & ELEVATIONS
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**CADDWORKS, INC.**  
RESIDENTIAL DESIGN  
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SUBMITTALS		REMARKS	
ISSUE DATE	DESCRIPTION	DATE	DESCRIPTION
4-18-2021	DNR		

GENERAL NOTES

PROPOSED ADDITIONS FOR:  
**THE NELSON FAMILY**

RECEIVED  
MAY 12 2021  
LICENSES & PERMITS DIVISION

**FOUNDATION CHART**

FOUNDATION WALL THICKNESS FOR THIS PROJECT IS BASED ON THE FOLLOWING CHART IT MAY BE MODIFIED IN THE FIELD AS REQUIRED BY GRADE CONDITIONS USING THE SAME GUIDELINES.

**MINIMUM VERTICAL REINFORCEMENT FOR 6-, 8-, 10-INCH & 12-INCH NOMINAL FLAT BASEMENT WALLS** <sup>b,c,d,e,f,h,i,k,n,o</sup>

MINIMUM VERTICAL REINFORCEMENT - BAR SIZE AND SPACING (INCHES)

SOIL CLASSES<sup>a</sup> AND DESIGN LATERAL SOIL (PSF PER FOOT OF DEPTH)

MAXIMUM WALL HEIGHT (feet)	MAXIMUM UNBALANCED BACKFILL HEIGHT <sup>g</sup> (feet)	SOIL CLASSES <sup>a</sup> AND DESIGN LATERAL SOIL (PSF PER FOOT OF DEPTH)											
		SM, GP, SM, SP <sup>50</sup>				SM, GC, SM, SM-SC and ML <sup>45</sup>				SC, ML-CL and Inorganic CL <sup>60</sup>			
		6	8	10	12	6	8	10	12	6	8	10	12
5	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
6	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
7	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
8	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
9	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
10	4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

**NOTES:**

- SOIL CLASSES ARE IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM. REFER TO TABLE R404.1 OF IRC 2015.
- TABLE VALUES ARE BASED ON REINFORCING BARS WITH A MINIMUM YIELD STRENGTH OF 60,000 PSI.
- VERTICAL REINFORCEMENT WITH A YIELD STRENGTH OF LESS THAN 60,000 PSI AND/OR BARS OF A DIFFERENT SIZE THAN SPECIFIED IN THE TABLE ARE PERMITTED IN ACCORDANCE WITH SECTION R404.1.3.1.6 AND TABLE R404.1.2(4) OF IRC 2015.
- NR - INDICATES NO VERTICAL WALL REINFORCEMENT IS REQUIRED, EXCEPT FOR 6-INCH NOMINAL WALLS FORMED WITH STAY-IN-PLACE FORMING SYSTEMS IN WHICH CASE VERTICAL REINFORCEMENT SHALL BE #4 @ 48" ON CENTER.
- ALLOWABLE DEFLECTION CRITERION IS L/240, WHERE L IS THE UNSUPPORTED HEIGHT OF THE BASEMENT WALL IN INCHES.
- INTERPOLATION IS NOT PERMITTED.
- WHERE WALLS WILL RETAIN 4 FEET OR MORE OF UNBALANCED BACKFILL, THEY SHALL BE LATERALLY SUPPORTED AT THE TOP AND BOTTOM BEFORE BACKFILLING.
- VERTICAL REINFORCEMENT SHALL BE LOCATED TO PROVIDE A COVER OF 1 1/4-INCHES MEASURED FROM THE INSIDE FACE OF THE WALL. THE CENTER OF THE STEEL SHALL NOT VARY FROM THE SPECIFIED LOCATION BY MORE THAN THE GREATER OF 10 PERCENT OF THE WALL THICKNESS OR 3/8-INCH.
- CONCRETE COVER FOR REINFORCEMENT MEASURED FROM THE INSIDE FACE OF THE WALL, SHALL NOT BE LESS THAN 3/4-INCH. CONCRETE COVER FOR REINFORCEMENT MEASURED FROM THE OUTSIDE FACE OF THE WALL SHALL NOT BE LESS THAN 1 1/2-INCHES FOR #5 BARS AND SMALLER, AND NOT LESS THAN 2 INCHES FOR LARGER BARS.
- DR - MEANS DESIGN IS REQUIRED IN ACCORDANCE WITH THE APPLICABLE BUILDING CODE, OR WHERE THERE IS NO CODE IN ACCORDANCE WITH ACI 318.
- CONCRETE SHALL HAVE A SPECIFIED COMPRESSIVE STRENGTH, f'<sub>c</sub>, OF NOT LESS THAN 3500 PSI AT 28 DAYS, UNLESS A HIGHER STRENGTH IS REQUIRED BY FOOTNOTE I OR M.
- THE MINIMUM THICKNESS IS PERMITTED TO BE REDUCED 2 INCHES, PROVIDED THE MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE, f'<sub>c</sub>, IS 4,000 PSI.
- A PLAIN CONCRETE WALL WITH A MINIMUM NOMINAL THICKNESS OF 12 INCHES IS PERMITTED, PROVIDED MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE, f'<sub>c</sub>, IS 3,500 PSI.
- SEE TABLE R404.2 OF IRC 2015 FOR TOLERANCE FROM NOMINAL THICKNESS PERMITTED FOR FLAT WALLS.
- THE USE OF THIS TABLE SHALL BE PROHIBITED FOR SOIL CLASSIFICATIONS NOT SHOWN.

**HEADER SPAN CHART** <sup>a,b</sup>

(PER SECTION R602 OF IRC 2015)

**GIRDER SPANS<sup>a</sup> AND HEADER SPANS<sup>d</sup> FOR EXTERIOR BEARING WALLS**

GROUND SNOW LOAD (PSF)<sup>e</sup>

GIRDERS & HEADERS SUPPORTING	SIZE	BUILDING WIDTH <sup>c</sup> (feet)																	
		30				50				70									
		20		28		36		20		28		36							
ROOF AND CEILING	(2) 2x6	6-10	1	5-11	2	5-4	2	5-11	2	5-2	2	4-1	2	5-4	2	4-1	2	4-1	2
	(2) 2x8	8-5	2	7-3	2	6-6	2	6-6	2	6-3	2	5-1	2	6-6	2	5-1	2	5-0	2
	(2) 2x10	10-8	2	8-5	2	7-6	2	8-5	2	7-3	2	6-6	2	7-6	2	6-6	2	5-0	2
	(3) 2x6	6-4	1	7-5	1	6-8	1	7-5	1	6-5	2	5-1	2	6-6	1	5-1	2	5-2	2
	(3) 2x8	8-6	1	7-1	2	6-2	2	7-1	2	6-2	2	5-0	2	6-2	2	7-0	2	6-4	2
	(3) 2x10	10-8	1	9-1	2	8-2	2	9-1	2	7-0	2	6-2	2	8-2	2	7-0	2	7-4	2
ROOF, CEILING AND ONE CENTER-BEARING FLOOR	(2) 2x6	5-4	2	5-0	2	4-6	2	5-2	2	4-6	2	4-1	2	4-4	2	4-2	2	3-4	2
	(2) 2x8	7-0	2	6-2	2	5-6	2	6-4	2	5-6	2	5-0	2	5-4	2	5-1	2	4-1	2
	(2) 2x10	8-1	2	7-1	2	6-5	2	7-4	2	6-5	2	5-4	2	6-8	2	5-0	2	5-3	2
	(3) 2x6	7-3	1	6-3	2	5-8	2	6-5	2	5-8	2	5-1	2	5-1	2	5-2	2	4-8	2
	(3) 2x8	8-4	2	7-8	2	6-11	2	7-1	2	6-1	2	6-3	2	7-3	2	6-4	2	5-8	2
	(3) 2x10	10-7	2	8-11	2	6-0	2	7-2	2	6-0	2	7-3	2	6-5	2	7-4	2	6-1	2
ROOF, CEILING AND TWO CLEAR SPAN FLOOR	(2) 2x6	5-0	2	4-4	2	3-10	2	4-10	2	4-2	2	3-4	2	4-6	2	3-11	2	3-6	2
	(2) 2x8	6-1	2	5-9	2	4-6	2	5-1	2	5-1	2	4-1	2	5-6	2	4-4	2	4-3	2
	(2) 2x10	7-1	2	6-1	2	5-5	2	6-10	2	5-1	2	5-4	2	6-4	2	5-6	2	5-0	2
	(3) 2x6	6-8	2	5-5	2	4-10	2	5-1	2	5-3	2	4-8	2	5-7	2	4-11	2	4-5	2
	(3) 2x8	7-1	2	6-1	2	5-11	2	6-5	2	6-5	2	5-4	2	6-10	2	5-0	2	5-4	2
	(3) 2x10	8-0	2	7-8	2	6-10	2	6-7	2	7-5	2	6-8	2	7-11	2	6-11	2	6-9	2
ROOF, CEILING AND TWO CENTER-BEARING FLOORS	(2) 2x6	4-9	2	4-2	2	3-9	2	4-7	2	4-0	2	3-8	2	4-4	2	3-8	2	3-9	2
	(2) 2x8	5-1	2	5-1	2	4-7	2	5-8	2	4-11	2	4-5	2	5-3	2	4-1	2	4-2	2
	(2) 2x10	6-6	2	5-10	2	5-3	2	6-6	2	5-6	2	5-2	2	6-1	2	5-4	2	4-10	2
	(3) 2x6	5-11	2	5-2	2	4-6	2	5-4	2	5-1	2	4-1	2	5-5	2	4-8	2	4-9	2
	(3) 2x8	6-1	2	5-4	2	4-8	2	5-9	2	5-1	2	4-1	2	5-5	2	4-8	2	4-9	2
	(3) 2x10	7-3	2	6-4	2	5-8	2	7-1	2	6-2	2	5-7	2	6-7	2	5-4	2	5-3	2
ROOF, CEILING AND TWO CLEAR SPAN FLOORS	(3) 2x10	8-5	2	7-4	2	6-7	2	8-2	2	7-2	2	6-8	2	7-9	2	6-8	2	6-1	2
	(2) 2x6	3-0	2	3-4	2	3-0	2	3-10	2	3-4	2	2-11	2	3-4	2	3-8	2	2-11	2
	(2) 2x8	4-1	2	4-1	2	3-8	2	4-8	2	4-0	2	3-7	2	4-7	2	4-0	2	3-6	2
	(2) 2x10	5-6	2	4-4	2	4-3	2	5-5	2	4-8	2	3-4	2	5-4	2	4-7	2	4-1	2
	(3) 2x6	4-9	2	4-2	2	3-9	2	4-4	2	4-1	2	3-8	2	4-8	2	4-1	2	3-8	2
	(3) 2x10	5-1	2	5-1	2	4-7	2	5-10	2	5-0	2	4-6	2	5-9	2	4-11	2	4-5	2

**NOTES:**

- SPANS ARE GIVEN IN FEET AND INCHES.
- TABULATED VALUES ASSUME #2 GRADE LUMBER.
- BUILDING WIDTH IS MEASURED PERPENDICULAR TO THE RIDGE. FOR WIDTHS BETWEEN THOSE SHOWN SPANS ARE PERMITTED TO BE INTERPOLATED.
- N<sub>J</sub> - NUMBER OF JACK STUDS REQUIRED TO SUPPORT EACH END, WHERE THE NUMBER OF REQUIRED JACK STUDS EQUALS ONE, THE HEADER IS PERMITTED TO BE SUPPORTED BY AN APPROVED FRAMING ANCHOR ATTACHED TO THE FULL-HEIGHT WALL STUD AND TO THE HEADER.
- USE 30 PSF GROUND SNOW LOAD FOR CASES IN WHICH GROUND SNOW LOAD IS LESS THAN 30 PSF AND THE ROOF LIVE LOAD IS EQUAL TO OR LESS THAN 20 PSF.

**HEADER SPAN CHART** <sup>a,b</sup>

(PER SECTION R602 OF IRC 2015)

**GIRDER SPANS<sup>a</sup> AND HEADER SPANS<sup>d</sup> FOR INTERIOR BEARING WALLS**

HEADERS & GIRDERS SUPPORTING	SIZE	BUILDING WIDTH <sup>c</sup> (feet)					
		20		28		36	
		SPAN	N <sub>J</sub> <sup>d</sup>	SPAN	N <sub>J</sub> <sup>d</sup>	SPAN	N <sub>J</sub> <sup>d</sup>
ONE FLOOR ONLY	(2) 2x6	4-6	1	3-11	1	3-6	1
	(2) 2x8	5-9	1	5-0	2	4-5	2
	(2) 2x10	7-0	2	6-1	2	5-5	2
	(2) 2x12	8-1	2	7-0	2	6-3	2
	(3) 2x6	7-2	1	6-3	1	5-7	2
	(3) 2x10	8-9	1	7-7	2	6-9	2
TWO FLOORS	(3) 2x12	10-2	2	8-10	2	7-10	2
	(2) 2x6	3-2	2	2-4	2	2-5	2
	(2) 2x8	4-1	2	3-6	2	3-2	2
	(2) 2x10	4-11	2	4-3	2	3-10	2
	(2) 2x12	5-9	2	5-0	2	4-5	2
	(3) 2x8	5-1	2	4-5	2	3-11	2
(3) 2x10	6-2	2	5-4	2	4-0	2	
(3) 2x12	7-2	2	6-3	2	5-1	2	

**NOTES:**

- SPANS ARE GIVEN IN FEET AND INCHES.
- TABULATED VALUES ASSUME #2 GRADE LUMBER.
- BUILDING WIDTH IS MEASURED PERPENDICULAR TO THE RIDGE. FOR WIDTHS BETWEEN THOSE SHOWN SPANS ARE PERMITTED TO BE INTERPOLATED.
- N<sub>J</sub> - NUMBER OF JACK STUDS REQUIRED TO SUPPORT EACH END, WHERE THE NUMBER OF REQUIRED JACK STUDS EQUALS ONE, THE HEADER IS PERMITTED TO BE SUPPORTED BY AN APPROVED FRAMING ANCHOR ATTACHED TO THE FULL-HEIGHT WALL STUD AND TO THE HEADER.



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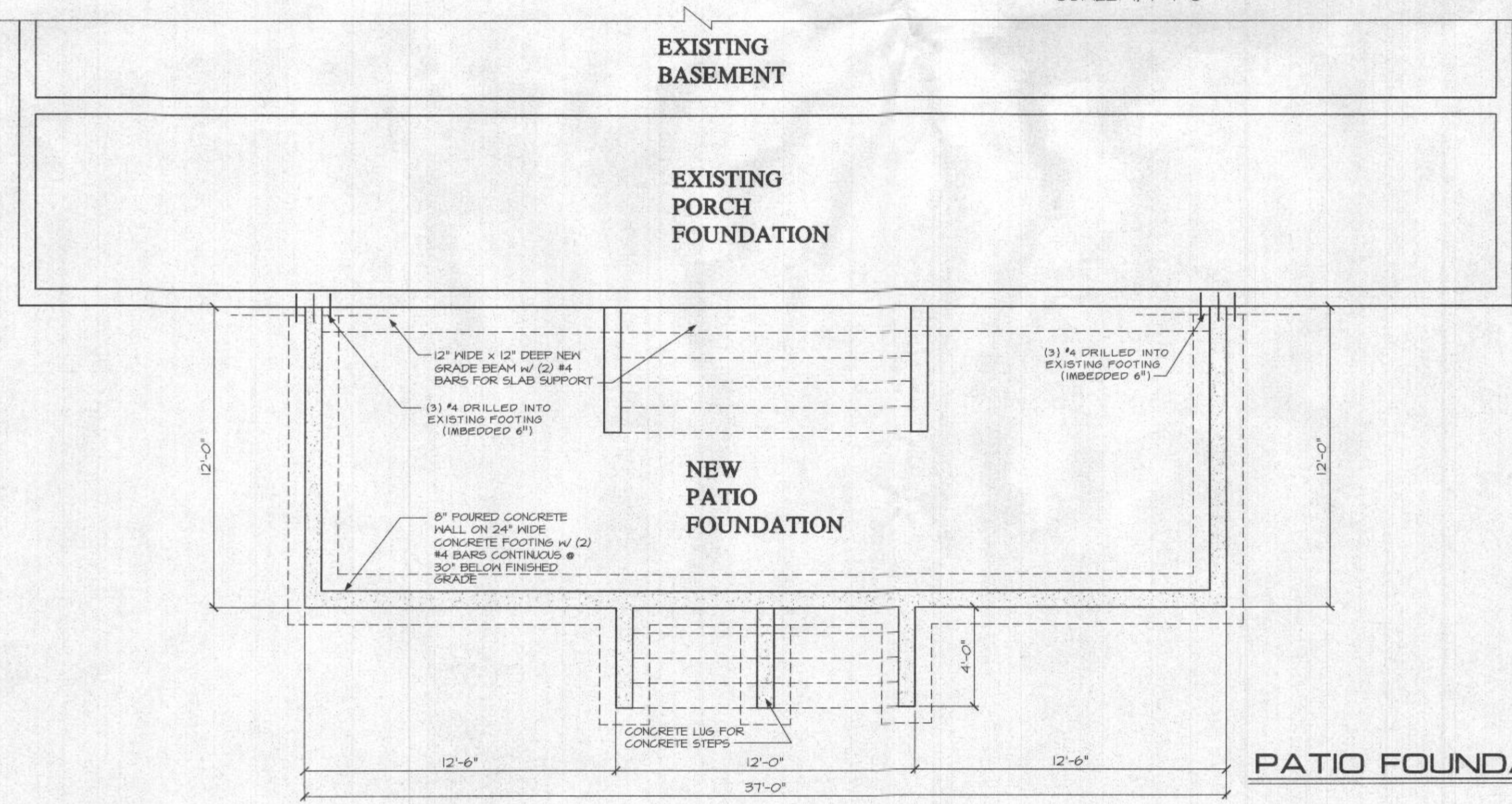
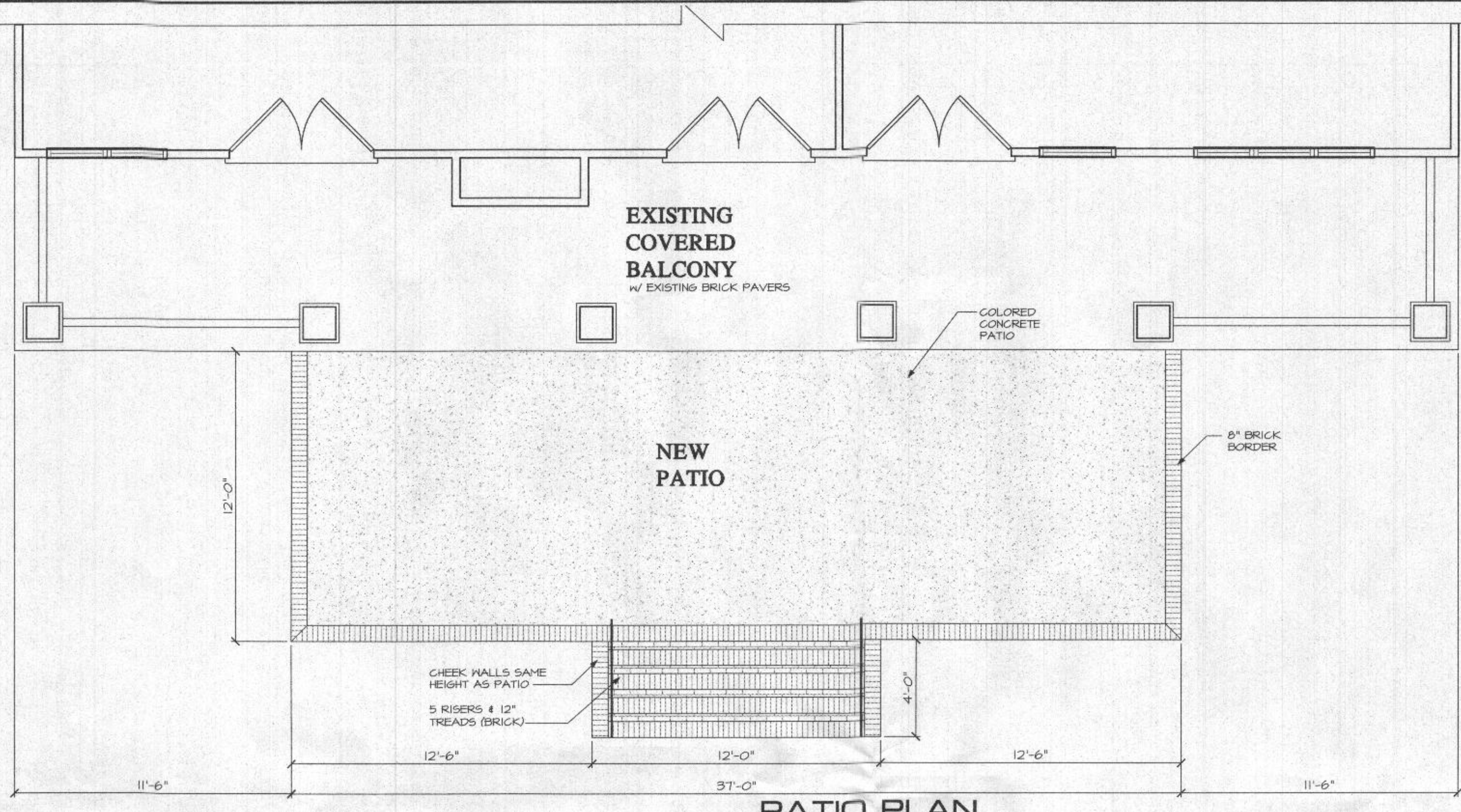
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**PATIO ELEVATION**

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



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**NEW PATIO  
 ELEVATION  
 PLAN**

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