

Millcreek City Hall
1330 E Chambers Ave
Millcreek, Utah 84106
millcreekut.gov



Planning & Zoning
(801) 214-2700
planner@millcreekut.gov

LUHO-25-009

Land Use Hearing Staff Report

Meeting Date: 8/14/2025

Applicant: Joel Cosby

Re: Reconstruction of a Noncomplying Structure

Property Address: 4733 South Mile High Drive

Zone: R-1-10

Prepared By: Francis Xavier Lilly, AICP

REQUEST AND SYNOPSIS

The applicant is seeking approval to reconstruct a non-complying deck located in the front yard of a home at 4733 South Mile High Drive. This application is intended to resolve a code violation on the property, where a deck was reconstructed constructed without a permit. Millcreek issued a stop-work order on the property in January 2025. Staff worked with the applicant on a revised deck plan *does not increase the encroachment* of the deck into the north side yard setback, and pulls the deck in from the front property line.

The property is located within Millcreek's R-1-10 Zone which requires a 30-foot front yard setback and a 10-foot side yard setback as measured from property line to structure. (MKZ 18.36.040) Before the unpermitted work took place, the deck not meet these setback requirements as it sits 15 feet 2 inches from the front property line and is 9 feet 1 inch from the side property line.

The replacement deck is proposed to be smaller than the previous deck, but it will still require an approval of the Land Use Hearing Officer, because it will still encroach into required setbacks. The replacement deck will maintain the same side yard encroachment (9 feet 1 inch at the corner of the house). The front yard encroachment will be significantly reduced: The front of the deck will also be brought closer to the home by 8 feet with a new front yard setback of 23 feet, brining it closer to the required 30-foot front yard setback.

The Land Use Hearing Officer may allow for a noncomplying structure to be reconstructed pursuant to Millcreek's Nonconformities Code ([MKZ 18.60.050](#)).

18.60.050 Noncomplying Structures

Expansion and Enlargement. A noncomplying structure may be expanded or enlarged upon a permit

authorized by the land use hearing officer, provided that the land use hearing officer shall find the following:

1. The addition, enlargement, **or reconstruction** of the structure at a new location complies with the standards and regulations of the current zone and the applicable requirements of this title.
2. The addition to, enlargement of, moving of, or reconstruction of the structure at a new location of the lot is compatible with existing development within a reasonable distance in terms of height, mass, applicable building envelope requirements, and lot or parcel coverage; and
3. The addition to, enlargement of, moving of, or reconstruction of the structure at a new location of the lot will not be detrimental to the health, safety and general welfare of persons residing within a reasonable distance of the subject property.
4. The cumulative expansion since the structure became nonconforming does not exceed 50% of the structure's height, footprint, lot or parcel coverage, and/or area when it became nonconforming.

FINDINGS, CONCLUSIONS, & RECOMMENDATION

Findings:

1. Non-conforming structures may be expanded according to the terms set forth in the land use ordinance. [MKZ 18.60.050](#).
2. The property is currently located within the R-1-10 Zone.
3. Millcreek obtained record of a building permit issued by Salt Lake County on July 15, 2008, for a deck addition on the property. That permit is attached to this report.
In 2010, the front yard set back in an R-1-10 Zone was 30 feet. Staff believes that a permit on this property may have been issued in error, because the deck did not comply with front or side setbacks at the time the permit was approved. However, the land use approval was clearly indicated on the permit, and the site plan did not include any redlines, corrections, or setback information.
4. The footprint of the proposed deck will be reduced, to provide a 10 foot deck off the front of the house. The resulting setback encroachment will be seven feet, substantially less than the existing deck. A further reduction would be warranted if the hearing officer is to find that the reconstruction complies with the standards and regulations of the current zone.
5. Because the proposed deck is smaller in terms of area and encroachment into the front yard, staff would not object to a finding that the reconstruction of the deck at a new location of the lot will not be detrimental to the health, safety and general welfare of persons residing within a reasonable distance of the subject property, provided the new deck complies with the setbacks and materials as represented in the applicant's letter of intent and site plan, which are attached to this report.
6. This proposal does not result in a cumulative expansion of the noncomplying structure. In fact, the extent of noncompliance will be reduced if this permit is approved.

Conclusions:

1. The rest of the scope of work for the deck will comply with other standards, notably the side yard setback, and is both compatible and in harmony with the intent of the established requirements as set forth by Millcreek Code. In order to make a finding that the reconstruction of the deck complies with code, the deck will have to be further reduced in size to achieve a minimum 30 foot front yard setback.
2. The relocation will not be detrimental to the health, safety and general welfare of persons residing within a reasonable distance of the subject property, nor does it impose any unreasonable burden

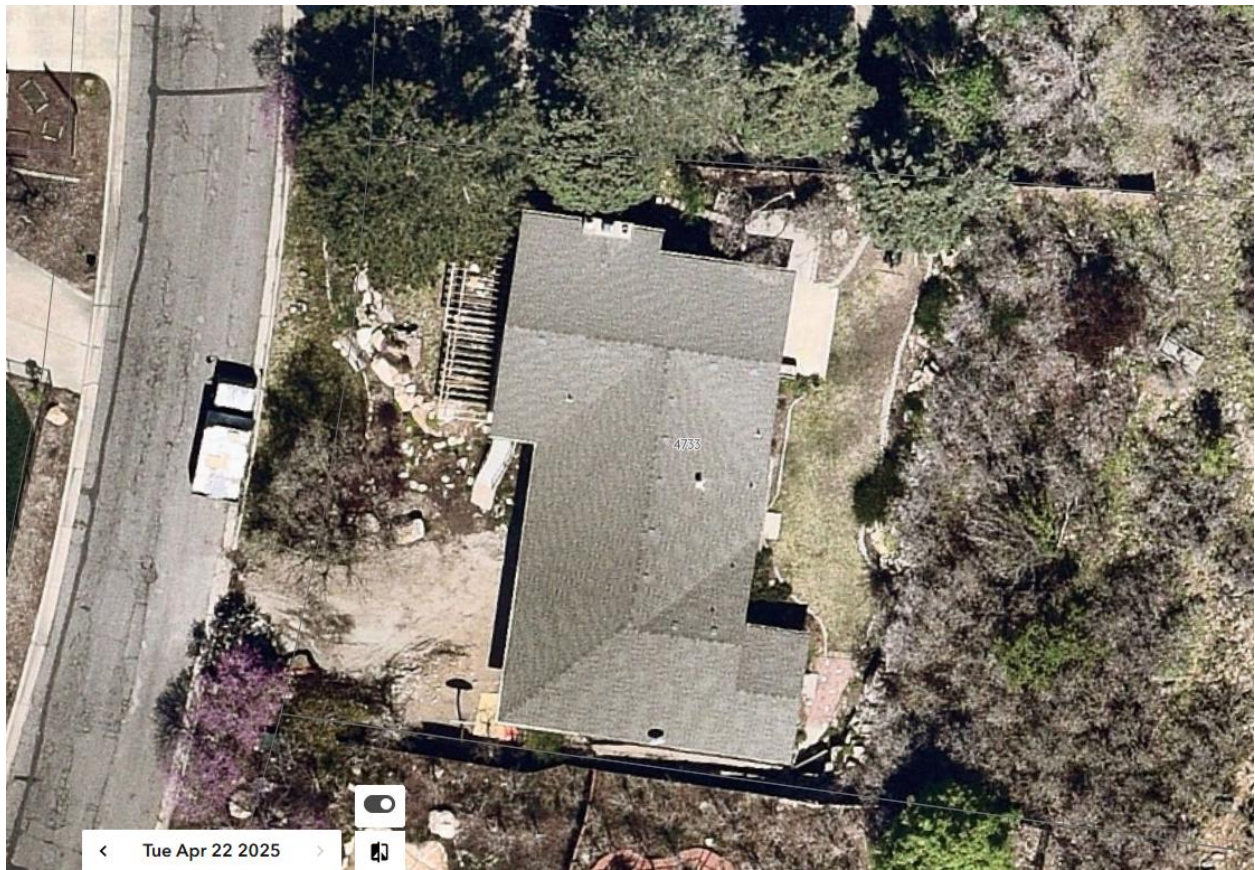
upon the lands located in the vicinity of the nonconforming use or structure and otherwise meets the criteria set forth by Millcreek Code [MKZ 18.60.050](#).

3. A replacement deck was constructed without a building permit, and a stop-work order was issued on the property. An approval of a permit to relocate a noncomplying structure will help resolve an ongoing code compliance case. If the Land Use Hearing Officer is inclined to issue a permit, staff recommends that the Land Use Hearing Officer require a timely removal of the illegally constructed deck and that the building permit be amended to include the attached site plan, revised if necessary to meet the required setbacks.

SUPPORTING DOCUMENTS

- **Aerial Image - 2025**
- **Streetview Images – 2010 and 2007**
- **Building Permit 726116 from Salt Lake County**
- **Photos from Code Compliance Case**
- **Letter of Intent**
- **Site Plan**

Aerial Image – 2025

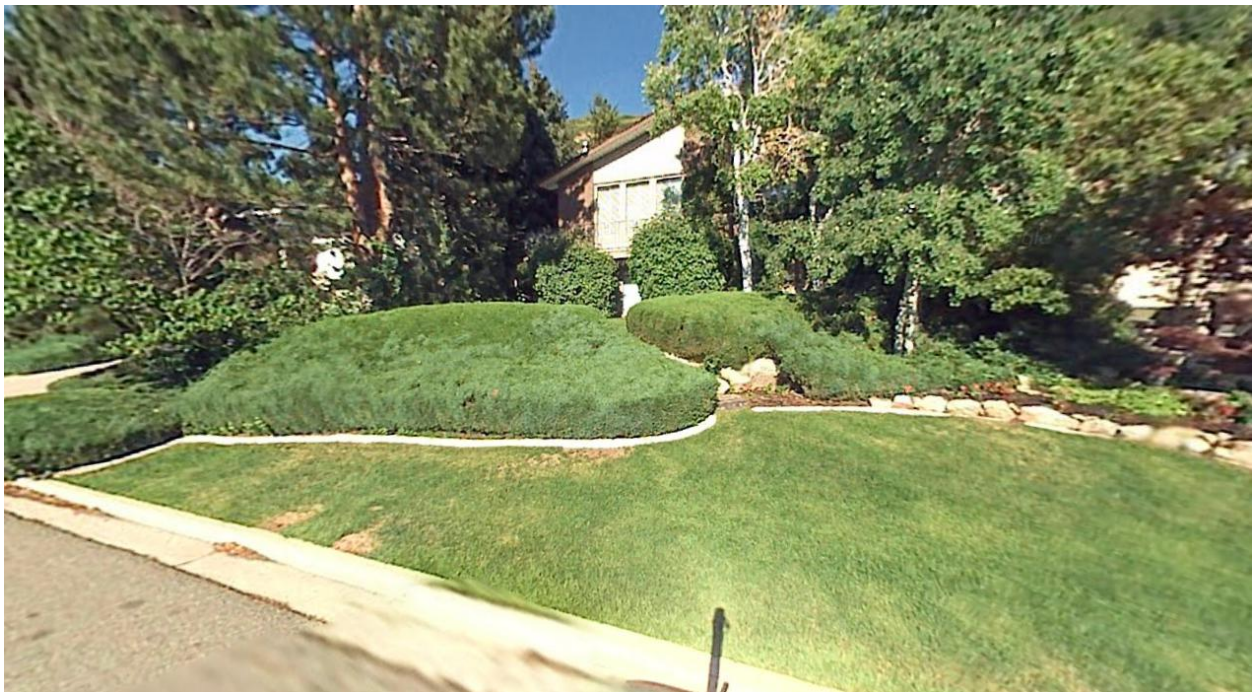


This aerial image shows the deck, partially under construction, as of April 22, 2025.

Streetview Images



Street view image showing former deck after it was permitted - 2010



Street view image showing the house before construction of the deck - 2007



SALT LAKE COUNTY
PLANNING & DEVELOPMENT SERVICES DIVISION
SINGLE FAMILY RESIDENTIAL PERMIT

DEPARTMENT OF PUBLIC WORKS
2001 SOUTH STATE STREET #N3600
SALT LAKE CITY, UT 84190-4050

INSPECTION REQUESTS: (801) 468-2163
CODE QUESTIONS: (801) 468-2000
FAX: (801) 468-2169
WEB ADDRESS FOR INSPECTION: www.pwpds.slco.org/inspect/web/

APPLICATION #

726116

Issue Date: 15-Jul-2008

Property Address: 4733 S MILEHIGH DR

Lot / Suite#:

Community Council: MT Olympus

Zone: R110

Land Use Authorized by: JLN Date: July 15, 2008

Plan Review by: JLN

PERMIT
DETAILS

PLANNING

BUILDING

Group/Division: R3

Fire Sprinkler: No

Construction Type: 5B *DECK 170

Card File:

Building Area: 170

Valuation: 2,720.00

Occupant Load:

THIS PERMIT IS FOR: SINGLE FAMILY RESIDENTIAL

Type of Work: Addition

Deck

Fee Type

Fee Amount

BUILDING PERMIT

93.00

LAND USE REVIEW

50.00

PLAN CHECK FOR FCOZ

100.00

STATE SURCHARGE

0.93

Transaction #: 180746/Received
by:CELLIS

243.93

OWNER BUILDER DECLARATION

I hereby claim exemption from the requirement for licensing under the Construction Trade Licensing Act (58-55, UCA) because work will be performed by the owner of the property for his/her private, noncommercial nonpublic use. Any work not performed by the owner will be performed by a contractor license under the Construction Trade Licensing Act, and the names and license number(s) of the contractors shall be provided to Salt Lake County and shall be entered on the permit before their work is begun.

This permit shall become null and void if work is not commenced within 180 days, or if work is suspended or abandoned for a period of 180 days or more at any time after the work has commenced.

Commencement or continuation of work shall be verified only by inspection reports from Salt Lake County inspectors. All required inspections shall be requested at least one working day before they are to be made. Inspections are required before any work is covered. Please call if you need further information about when an inspection is required.

I hereby certify that I have read and examined this permit and that the information provided by me is true and correct. All provision of Laws and ordinance governing this type of work will be complied with whether specified herein or not. The granting of a permit does not presume to give authority to violate or cancel the provision of any other state or local law regulating construction or the performance of construction.

Applicant: KAYE JOHNSON

Address: 4733 MILE HIGH

Daytime Phone: (801)278-9385 x

Print KAYE JOHNSON

Signature

Date

7/15/08

Zoning approved by

Date

Building approved by

Date

7/15/08

PAD FOOTING

20" x 20" x 10"
w/ (3) #4
EACH WAY

8x8 DF Column

2x8
Double
Joist

2x8 Deck Joists @ 16" oc.
SIMPSON
HANGER

DOUBLE JOIST

2x9" x 2x9" x 10"

PAD FOOTING w/

(4) #4 BARS EACH WAY

16" OC SPACING
FLOOR



2x10 Deck Joists @ 16" oc.
OR 2x8 Deck Joist @ 12" oc.

726116
SALT LAKE COUNTY
BUILDING INSPECTION

AUG 11 2008

APPROVED
BY mwt

DECK JOIST LAYOUT

JOHNSON, JONI KAYE	
SCALE: 3/4" = 1'-0"	APPROVED BY
DATE: 7-3-08	
DECK	

Project: JOHNSON - Location: 2-2x8 DECK JOISTS

Summary:

(2) 1.5 IN x 7.25 IN x 5.4 FT (2.7 + 2.7) / #2 - Douglas-Fir-South - Dry Use

Section Adequate By: 535.6% Controlling Factor: Section Modulus / Depth Required 2.88 IN

* Laminations are to be fully connected to provide uniform transfer of loads to all members

Left Cantilever Deflections:

Dead Load:	DLD-Left=	0.00	IN
Live Load:	LLD-Left=	-0.01	IN = 2L/6454
Total Load:	TLD-Left=	-0.01	IN = 2L/5320

Center Span Deflections:

Dead Load:	DLD-Center=	0.00	IN
Live Load:	LLD-Center=	0.00	IN = L/10327
Total Load:	TLD-Center=	0.00	IN = L/8070

Center Span Left End Reactions (Support A):

Live Load:	LL-Rxn-A=	405	LB
Dead Load:	DL-Rxn-A=	145	LB
Total Load:	TL-Rxn-A=	550	LB
Bearing Length Required (Beam only, support capacity not checked):	BL-A=	0.35	IN

Center Span Right End Reactions (Support B):

Live Load:	LL-Rxn-B=	405	LB
Dead Load:	DL-Rxn-B=	122	LB
Total Load:	TL-Rxn-B=	527	LB
Bearing Length Required (Beam only, support capacity not checked):	BL-B=	0.34	IN
Dead Load Uplift F.S.:	FS=	1.5	

Beam Data:

Left Cantilever Length:	L1=	2.7	FT
Left Cantilever Unbraced Length-Top of Beam:	Lu1-Top=	0.0	FT
Left Cantilever Unbraced Length-Bottom of Beam:	Lu1-Bottom=	2.7	FT
Center Span Length:	L2=	2.7	FT
Center Span Unbraced Length-Top of Beam:	Lu2-Top=	0.0	FT
Center Span Unbraced Length-Bottom of Beam:	Lu2-Bottom=	2.7	FT
Live Load Duration Factor:	Cd=	1.00	
Live Load Deflect. Criteria:	L/	360	
Total Load Deflect. Criteria:	L/	240	

Left Cantilever Loading:

Uniform Load:

Live Load:	wL-1=	0	PLF
Dead Load:	wD-1=	0	PLF
Beam Self Weight:	BSW=	4	PLF
Total Load:	wT-1=	4	PLF

Center Span Loading:

Uniform Load:

Live Load:	wL-2=	300	PLF
Dead Load:	wD-2=	90	PLF
Beam Self Weight:	BSW=	4	PLF
Total Load:	wT-2=	394	PLF

Properties For: #2- Douglas-Fir-South

Bending Stress:	Fb=	850	PSI
Shear Stress:	Fv=	180	PSI
Modulus of Elasticity:	E=	1200000	PSI
Adjusted Modulus of Elasticity:	E-Min=	440000	PSI
Stress Perpendicular to Grain:	Fc_perp=	520	PSI

Adjusted Properties

Fb' (Tension):	Fb'=	1020	PSI
Adjustment Factors: Cd=1.00 CF=1.20			
Fv':	Fv'=	180	PSI
Adjustment Factors: Cd=1.00			

Design Requirements:

Controlling Moment:

1.377 Ft from left support of span 2 (Center Span)	M=	351	FT-LB
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Critical moment created by combining all dead loads and live loads on span(s) 1, 2

Controlling Shear:

At a distance d from left support of span 2 (Center Span)	V=	304	LB
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Critical shear created by combining all dead loads and live loads on span(s) 1, 2

Comparisons With Required Sections:

Section Modulus (Moment):	Sreq=	4.13	IN3
	S=	26.28	IN3
Area (Shear):	Areq=	2.53	IN2
	A=	21.75	IN2
Moment of Inertia (Deflection):	Ireq=	5.31	IN4
	I=	26.28	IN4

Project: JOHNSON - Location: 2x8 deck joists @ 12" o.c.

Summary:

1.5 IN x 7.25 IN x 10.0 FT @ 12 O.C. / #2 - Douglas-Fir-South - Dry Use

Section Adequate By: 5.9% Controlling Factor: Moment of Inertia / Depth Required 7.11 In

Center Span Deflections:

Dead Load:	DLD-Center=	0.06	IN
Live Load:	LLD-Center=	0.24	IN = L/508
Total Load:	TLD-Center=	0.30	IN = L/407

Center Span Left End Reactions (Support A):

Live Load:	LL-Rxn-A=	300	LB
Dead Load:	DL-Rxn-A=	75	LB
Total Load:	TL-Rxn-A=	375	LB
Bearing Length Required (Beam only, support capacity not checked):	BL-A=	0.48	IN

Center Span Right End Reactions (Support B):

Live Load:	LL-Rxn-B=	300	LB
Dead Load:	DL-Rxn-B=	75	LB
Total Load:	TL-Rxn-B=	375	LB
Bearing Length Required (Beam only, support capacity not checked):	BL-B=	0.48	IN

Joist Data:

Center Span Length:	L2=	10.0	FT
Floor sheathing applied to top of joists-top of joists fully braced.			
Live Load Duration Factor:	Cd=	1.00	
Live Load Deflect. Criteria:	L/	480	
Total Load Deflect. Criteria:	L/	360	

Center Span Loading:

Uniform Floor Loading:

Live Load:	LL-2=	60.0	PSF
Dead Load:	DL-2=	15.0	PSF
Total Load:	TL-2=	75.0	PSF
Total Load Adjusted for Joist Spacing:	wT-2=	75	PLF

Properties For: #2- Douglas-Fir-South

Bending Stress:	Fb=	850	PSI
Shear Stress:	Fv=	180	PSI
Modulus of Elasticity:	E=	1200000	PSI
Adjusted Modulus of Elasticity:	E-Min=	440000	PSI
Stress Perpendicular to Grain:	Fc-perp=	520	PSI

Adjusted Properties

Fb' (Tension):	Fb'=	1173	PSI
Adjustment Factors: Cd=1.00 CF=1.20 Cr=1.15			
Fv':	Fv'=	180	PSI
Adjustment Factors: Cd=1.00			

Design Requirements:

Controlling Moment:	M=	938	FT-LB
5.0 Ft from left support of span 2 (Center Span)			
Critical moment created by combining all dead loads and live loads on span(s) 2			
Controlling Shear:	V=	330	LB
At a distance d from left support of span 2 (Center Span)			
Critical shear created by combining all dead loads and live loads on span(s) 2			

Comparisons With Required Sections:

Section Modulus (Moment):	Sreq=	9.59	IN3
	S=	13.14	IN3
Area (Shear):	Areq=	2.75	IN2
	A=	10.88	IN2
Moment of Inertia (Deflection):	Ireq=	44.99	IN4
	I=	47.63	IN4

Bending Stress:	Fb'	1173	PSI
Adjusted Modulus of Elasticity:	E-Min	440000	PSI

Photos from Code Compliance Case



This image shows the replacement deck under construction, without a permit. A stop-work order was issued in January 2025, pending planning approval (and a Land Use Hearing Officer permit). The old deck, since demolished, extended to the top edge of the rockery wall depicted in the photo.



As part of the review of the unpermitted replacement deck, staff is requiring the applicant to avoid encroaching into the side yard setback on the north side of the house. This will require modification of the structure as it was partially built in January.

The revised deck site plan shows that the replacement deck will have a compliant side yard setback.

Floor Joist[2006 International Building Code (05 NDS)] Ver: 7.01.12

By: Michael Sotuyo , Michael Sotuyo on: 08-07-2008 : 2:13:21 PM

Project: JOHNSON - Location: 2x10 deck joists @ 16" o.c.

Summary:

1.5 IN x 9.25 IN x 10.0 FT @ 16 O.C. / #2 - Douglas-Fir-South - Dry Use

Section Adequate By: 53.3% Controlling Factor: Section Modulus / Depth Required 7.83 In

Center Span Deflections:

Dead Load:

Live Load:

Total Load:

DLD-Center=	0.04	IN
LLD-Center=	0.15	IN = L/792
TLD-Center=	0.19	IN = L/633

Center Span Left End Reactions (Support A):

Live Load:

Dead Load:

Total Load:

LL-Rxn-A=	400	LB
DL-Rxn-A=	100	LB
TL-Rxn-A=	500	LB
BL-A=	0.64	IN

Bearing Length Required (Beam only, support capacity not checked):

Center Span Right End Reactions (Support B):

Live Load:

Dead Load:

Total Load:

LL-Rxn-B=	400	LB
DL-Rxn-B=	100	LB
TL-Rxn-B=	500	LB
BL-B=	0.64	IN

Bearing Length Required (Beam only, support capacity not checked):

Joist Data:

Center Span Length:

Floor sheathing applied to top of joists-top of joists fully braced.

L2=	10.0	FT
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Live Load Duration Factor:

Cd=	1.00
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Live Load Deflect. Criteria:

L/	480
----	-----

Total Load Deflect. Criteria:

L/	360
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Center Span Loading:

Uniform Floor Loading:

Live Load:

Dead Load:

Total Load:

LL-2=	60.0	PSF
DL-2=	15.0	PSF
TL-2=	75.0	PSF
WT-2=	100	PLF

Total Load Adjusted for Joist Spacing:

Properties For: #2- Douglas-Fir-South

Bending Stress:

Shear Stress:

Modulus of Elasticity:

Adjusted Modulus of Elasticity:

Stress Perpendicular to Grain:

Fb=	850	PSI
Fv=	180	PSI
E=	1200000	PSI
E-Min=	440000	PSI
Fc-perp=	520	PSI

Adjusted Properties

Fb' (Tension):

Adjustment Factors: Cd=1.00 CF=1.10 Cr=1.15

Fb'=	1075	PSI
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Fv':

Adjustment Factors: Cd=1.00

Fv'=	180	PSI
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Design Requirements:

Controlling Moment:

5.0 Ft from left support of span 2 (Center Span)

Critical moment created by combining all dead loads and live loads on span(s) 2

M=	1250	FT-LB
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Controlling Shear:

At a distance d from right support of span 2 (Center Span)

Critical shear created by combining all dead loads and live loads on span(s) 2

V=	430	LB
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Comparisons With Required Sections:

Section Modulus (Moment):

Sreq=	13.95	IN3
-------	-------	-----

Area (Shear):

S=	21.39	IN3
----	-------	-----

Areq=	3.58	IN2
-------	------	-----

Moment of Inertia (Deflection):

A=	13.88	IN2
----	-------	-----

Ireq=	59.99	IN4
-------	-------	-----

I=	98.93	IN4
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Project: JOHNSON - Location: 2'-9"x2'-9"x10" PAD FOOTING

Summary:

Footing Size: 2.75 FT x 2.75 FT x 10.00 IN

Reinforcement: #4 Bars @ 8.00 IN. O.C. E/W / (4) min.

Footing Loads:

Live Load:

PL= 7200 LB

Dead Load:

PD= 1800 LB

Total Load:

PT= 9000 LB

Ultimate Factored Load:

Pu= 13680 LB

Footing Properties:

Allowable Soil Bearing Pressure:

Qs= 1500 PSF

Concrete Compressive Strength:

F'c= 3000 PSI

Reinforcing Steel Yield Strength:

Fy= 60000 PSI

Concrete Reinforcement Cover:

c= 3.00 IN

Footing Size:

Width:

W= 2.75 FT

Length:

L= 2.75 FT

Depth:

Depth= 10.00 IN

Effective Depth to Top Layer of Steel:

d= 6.25 IN

Column and Baseplate Size:

Column Type:

(Steel)

Column Width:

m= 4.00 IN

Column Depth:

n= 4.00 IN

Baseplate Width:

bsw= 4.00 IN

Baseplate Length:

bsl= 4.00 IN

Bearing Calculations:

Ultimate Bearing Pressure:

Qu= 1190 PSF

Effective Allowable Soil Bearing Pressure:

Qe= 1375 PSF

Required Footing Area:

Areq= 6.55 SF

Area Provided:

A= 7.56 SF

Baseplate Bearing:

Bearing Required:

Bearing= 13680 LB

Allowable Bearing:

Bearing-Allow= 57120 LB

Beam Shear Calculations (One Way Shear):

Beam Shear:

Vu1= 3420 LB

Allowable Beam Shear:

vc1= 19205 LB

Punching Shear Calculations (Two way shear):

Critical Perimeter:

Bo= 41.00 IN

Punching Shear:

Vu2= 12360 LB

Allowable Punching Shear (ACI 11-35):

vc2-a= 71580 LB

Allowable Punching Shear (ACI 11-36):

vc2-b= 96605 LB

Allowable Punching Shear (ACI 11-37):

vc2-c= 47720 LB

Controlling Allowable Punching Shear:

vc2= 47720 LB

Bending Calculations:

Factored Moment:

Mu= 43579 IN-LB

Nominal Moment Strength:

Mn= 253074 IN-LB

Reinforcement Calculations:

Concrete Compressive Block Depth:

a= 0.56 IN

Steel Required Based on Moment:

As(1)= 0.13 IN2

Minimum Code Required Reinforcement (Shrinkage/Temperature ACI-10.5.4):

As(2)= 0.59 IN2

Controlling Reinforcing Steel:

As-reqd= 0.59 IN2

Selected Reinforcement:

#4 Bars @ 8.00 IN. O.C. E/W / (4) Min.

Reinforcement Area Provided:

As= 0.79 IN2

Development Length Calculations:

Development Length Required:

Ld= 15.00 IN

Development Length Supplied:

Ld-sup= 11.50 IN

Note: Plain concrete adequate for bending, therefore adequate development length not required.

Letter of Intent for Millcreek City

Project Info: 4733 South Mile High / 300 Square Foot Deck Removal & Replacement

To Whom It May Concern:

This letter is to provide details of our intent for the deck at the above property. The deck has been analyzed for removal and replacement due to significant structural and material failure. The existing deck has deteriorated over time, with noticeable issues including rotted wood, unstable and wobbly stairs, and overall structural weakness—posing a clear safety hazard to occupants and visitors. To ensure a safe and long-lasting solution, the new deck will be constructed using Trex composite decking material. Trex is a high-quality, low-maintenance alternative to wood that resists rot, warping, and insect damage, making it ideal for long-term outdoor use.

Thank you,
Joel Cosby

