Tillamook County

DEPARTMENT OF COMMUNITY DEVELOPMENT
BUILDING, PLANNING & ON-SITE SANITATION SECTIONS

1510 – B Third Street
Tillamook, Oregon 97141
www.tillamookcounty.gov
(503) 842-3408

Land of Cheese, Trees and Ocean Breeze

Floodway Development Permit #851-24-000580-PLNG:
MCREYNOLDS/SPATH

NOTICE TO MORTGAGEE, LIENHOLDER, VENDOR OR SELLER:
ORS 215 REQUIRES THAT IF YOU RECEIVE THIS NOTICE,
IT MUST BE PROMPTLY FORWARDED TO THE PURCHASER

NOTICE OF ADMINISTRATIVE REVIEW
Date of Notice: April 11, 2025

Notice is hereby given that the Tillamook County Department of Community Development is considering the following:

851-24-000580-PLNG: A review of a Floodway Development Permit for the placement of a proposed single-family dwelling near the Nestucca River. The subject property is accessed from Airport Way, a County local access road, and is designated as Tax Lot 6100, of Section 30BD of Township 4 South, Range 10 West of the Willamette Meridian, Tillamook County, Oregon. The property is located in the Pacific City/Woods Medium Density Residential (PCW-R2) Zone. The applicant is Ian Spath and the property owner is Pacific City Property Trust/Mali Ann McReynolds.

Written comments received by the Department of Community Development prior to 4:00p.m. on April 25, 2025, will be considered in rendering a decision. Comments should address the criteria upon which the Department must base its decision. A decision will be rendered no sooner than the next business day, April 28, 2025.

Notice of the application, a map of the subject area, and the applicable criteria are being mailed to all property owners within 250 feet of the exterior boundaries of the subject parcel for which an application has been made and other appropriate agencies at least 14 days prior to this Department rendering a decision on the request.

A copy of the application, along with a map of the request area and the applicable criteria for review are available for inspection on the Tillamook County Department of Community Development website: https://www.tillamookcounty.gov/commdev/landuseapps and is also available for inspection at the Department of Community Development office located at 1510-B Third Street, Tillamook, Oregon 97141.

If you have any questions about this application, please call the Department of Community Development at 503-842-3408 Ext. 3315 or lynn.tone@tillamookcounty.gov.

Sincerely,

Melissa Jenck, CFM, Senior Planner

Sarah Absher, CFM, Director
Enc. Applicable Ordinance Criteria, Maps

REVIEW CRITERIA

ARTICLE III – ZONE REGULATIONS

TCLUO SECTION 3.510: FLOOD HAZARD OVERLAY ZONE

(1) The fill is not within a Coastal High Hazard Area.

(2) Fill placed within the Regulatory Floodway shall not result in any increase in flood levels during the occurrence of the base flood discharge.

(3) The fill is necessary for an approved use on the property.

(4) The fill is the minimum amount necessary to achieve the approved use.

(5) No feasible alternative upland locations exist on the property.

(6) The fill does not impede or alter drainage or the flow of floodwaters.

(7) If the proposal is for a new critical facility, no feasible alternative site is available.

(8) For creation of new, and modification of, Flood Refuge Platforms, the following apply, in addition to (14)(a)(1-4) and (b)(1-5):

i. The fill is not within a floodway, wetland, riparian area or other sensitive area regulated by the Tillamook County Land Use Ordinance.

ii. The property is actively used for livestock and/or farm purposes,

iii. Maximum platform size = 10 sq ft of platform surface per acre of pasture in use, or 30 sq ft per animal, with a 10-ft wide buffer around the outside of the platform,

iv. Platform surface shall be at least 1 ft above base flood elevation,

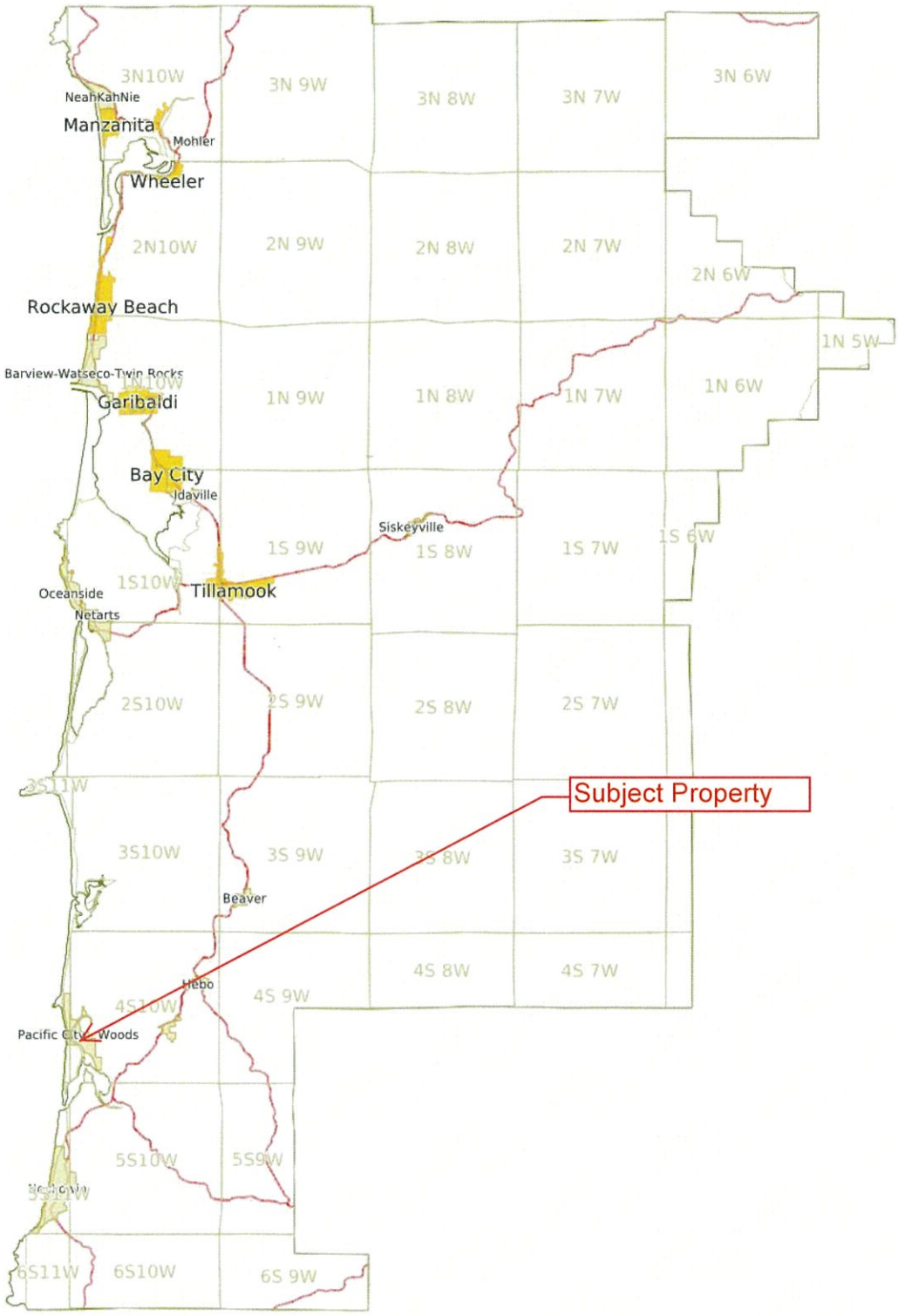
v. Slope of fill shall be no steeper than 1.5 horizontal to 1 vertical,

vi. Slope shall be constructed and/or fenced in a manner so as to prevent and avoid erosion.

Conditions of approval may require that if the fill is found to not meet criterion (5), the fill shall be removed or, where reasonable and practical, appropriate mitigation measures shall be required of the property owner. Such measures shall be verified by a certified engineer or hydrologist that the mitigation measures will not result in a net rise in floodwaters and be in coordination with applicable state, federal and local agencies, including the Oregon Department of Fish and Wildlife.

EXHIBIT A

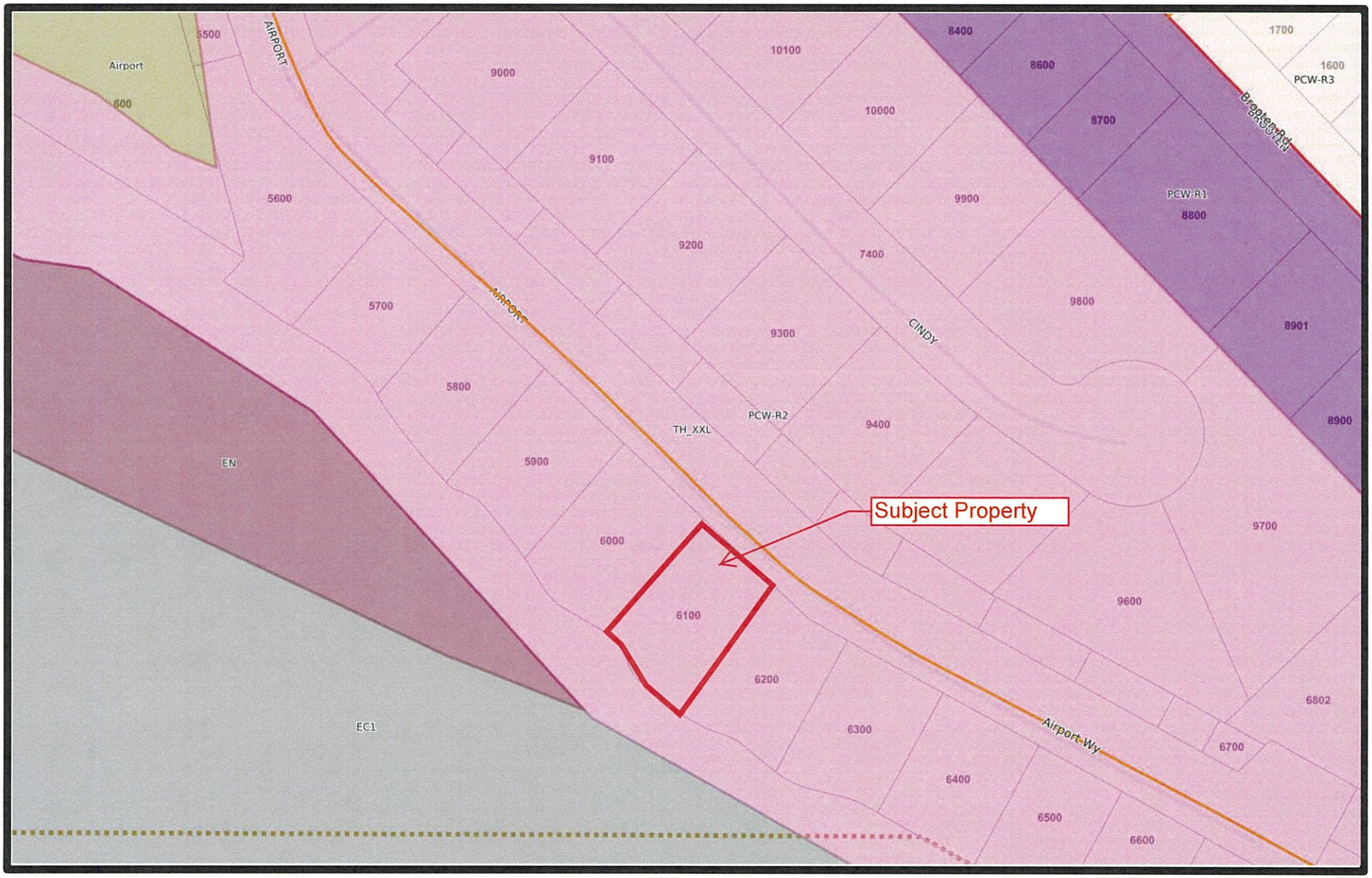
Vicinity Map



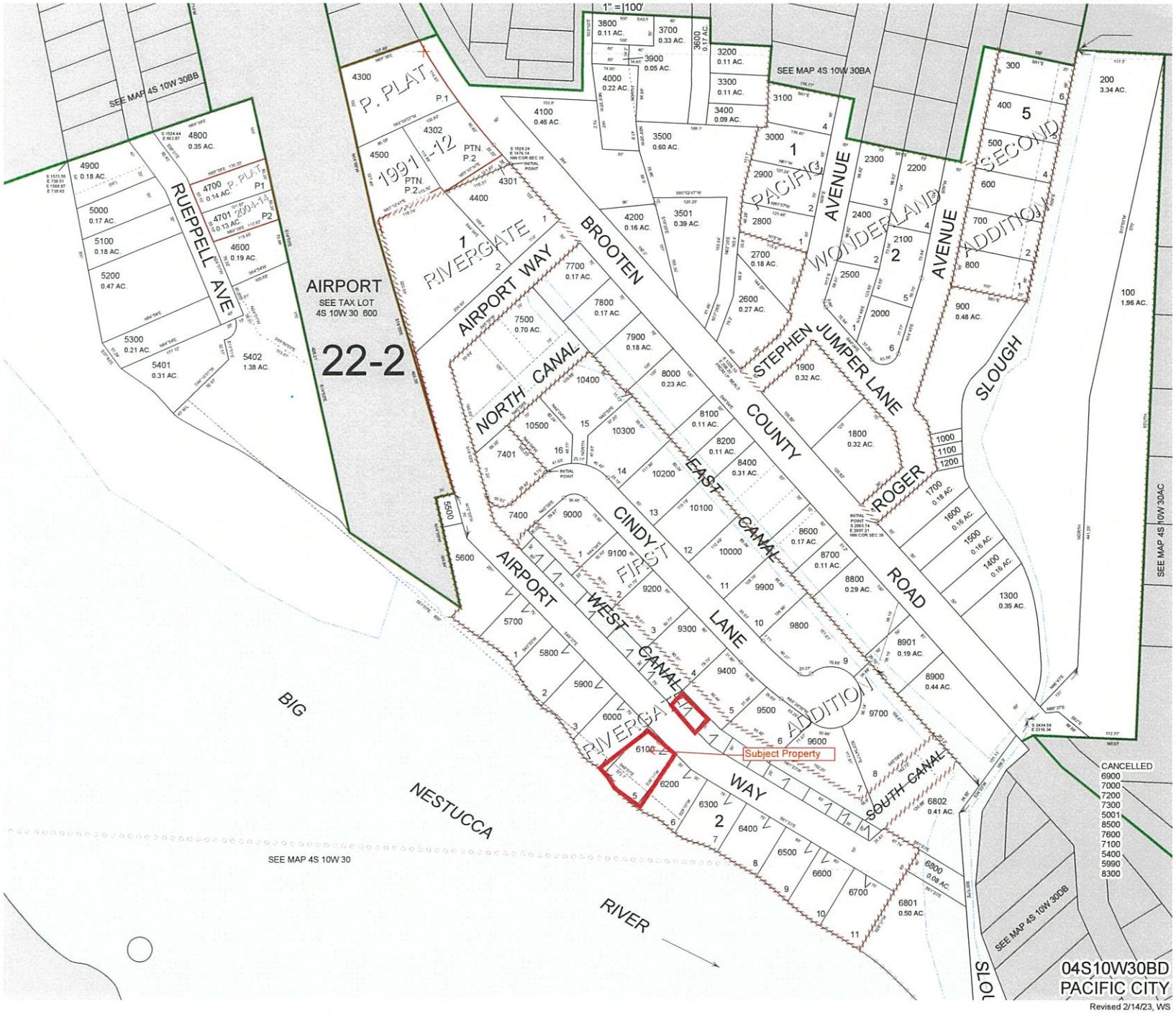
Generated with the GeoMOOSE Printing Utilities

Zoning Map

MOOSEMAPPING



Generated with the GeoMOOSE Printing Utilities


THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSE ONLY
0 50 100 150 200 Feet
1" = 100'
S.E.1/4 N.W.1/4 SEC.30 T.4S. R.10W. W.M.
TILLAMOOK COUNTY
04S10W30BD
PACIFIC CITY
SEE MAP 4S 10W 30BB
SEE MAP 4S 10W 30BA
SEE MAP 4S 10W 30AC
SEE MAP 4S 10W 30DB
SEE MAP 4S 10W 30
AIRPORT
SEE TAX LOT
4S 10W 30 600
22-2
P. PLAT
1991-12
PTN. P.2
P. PLAT 2004-14
RUEPPELL AVE
AIRPORT WAY
RIVERGATE
BROOTEN
NORTH CANAL
EAST CANAL
WEST CANAL
SOUTH CANAL
CINDY ST
AIRPORT LANE
RIVERGATE WAY
COUNTY ROAD
STEPHEN JUMPER LANE
ROGER
PACIFIC AVENUE
WONDERLAND AVENUE
SECOND ADDITION
SLOUGH
BIG NESTUCCA RIVER
Subject Property
CANCELLED
6900
7000
7200
7300
5001
8500
7600
7100
5400
5990
8300
Revised 2/14/23, WS

Tillamook County
2024 Real Property Assessment Report
Account 240821

Map	4S1030BD06100	**Tax Status**	Assessable
Code - Tax ID	2202 - 240821	**Account Status**	Active
		Subtype	NORMAL
Legal Descr	RIVERGATE Block - 2 Lot - 5		
Mailing	MCREYNOLDS, MALI ANN TRUSTEE PO BOX 305 PACIFIC CITY OR 97135	**Deed Reference #**	2023-2339
		Sales Date/Price	05-26-2023 / $0
		Appraiser	BRITTANY MCINTYRE

Property Class	100	**MA**	**SA**	**NH**
RMV Class	100	09	WF	903

Site	Situs Address	City
1	35700 AIRPORT WAY	COUNTY

Value Summary

Code Area		RMV	MAV	AV		RMV Exception	CPR %
2202	Land	198,480			Land	0	
	Impr	0			Impr	0	
Code Area Total		198,480	92,140	92,140		0	
Grand Total		198,480	92,140	92,140		0	

Land Breakdown

Code Area	ID #	RFPD	Ex	Plan Zone	Value Source	Trend %	Size	Land Class	Trended RMV
2202	1	☑		PCW-R2	Market	117	0.21 AC		168,480
					OSD - AVERAGE	100			30,000
					Code Area Total		0.21 AC		198,480

Improvement Breakdown

Code Area	ID #	Year Built	Stat Class	Description	Trend %	Total Sqft	Ex%	MS Acct	Trended RMV

Exemptions / Special Assessments / Notations

Notations

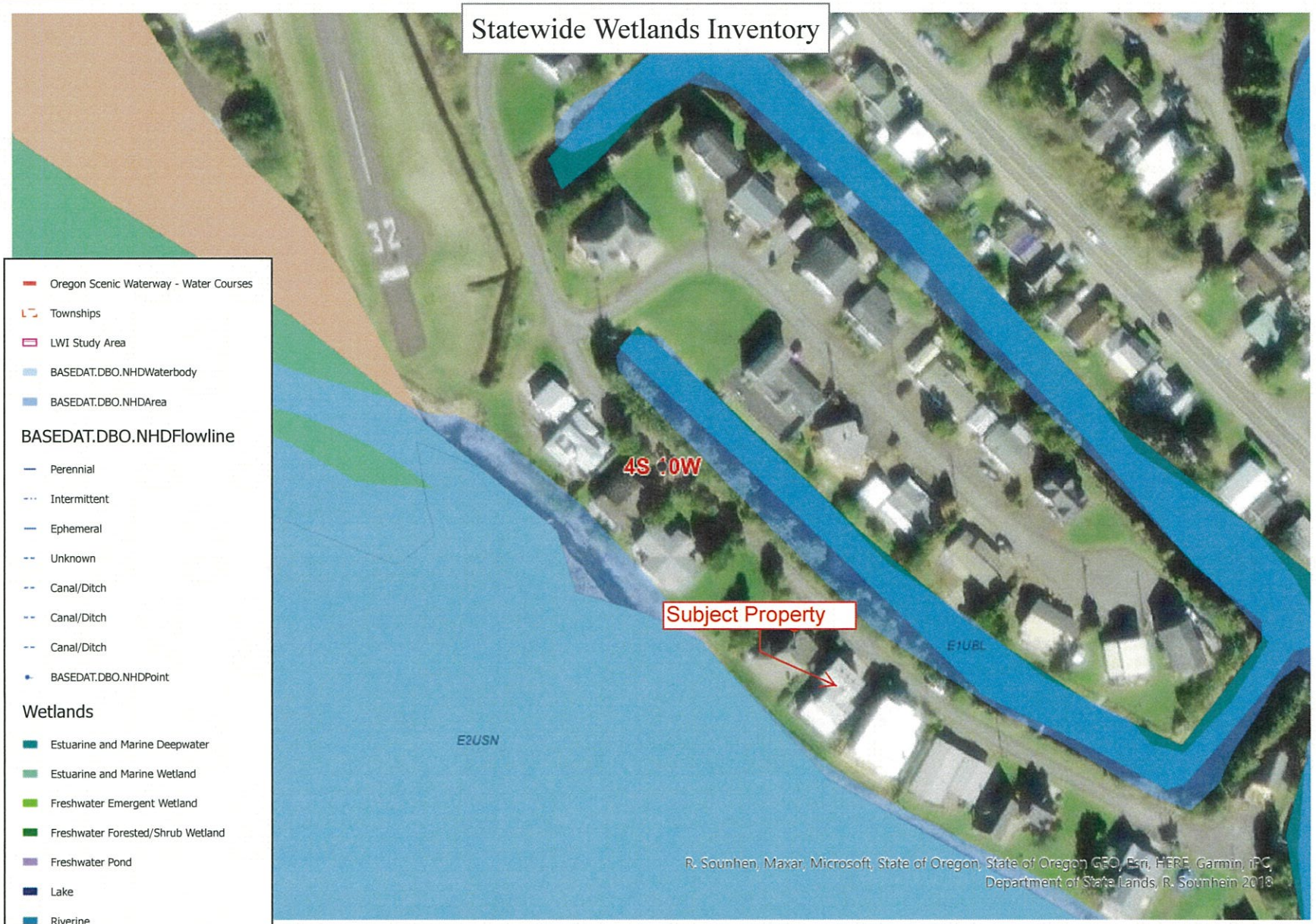
- DESTROYED OR DAMAGED PROPERTY, JULY 1 ASMT DATE 308.146(6) ADDED 2024
- ACT OF GOD RMV & MAV ADJUSTED 308.146 ADDED 2024
- ACT OF GOD PRORATED 308.425 ADDED 2023

Comments 10/19/06 input inventory. gb 12/6/06 Added acreage. dv 01/29/14 Reappraised land; tabled values. RBB 7/8/24 July 1 Reassessment; Residence completely destroyed in fire in June. RMV and MAV adjusted. Taxes were prorated for the 2023-24 tax year. LM

Hazard Map

Printed on 2 / 26 / 2025

Statewide Wetlands Inventory



- Oregon Scenic Waterway - Water Courses
- Townships
- LWI Study Area
- BASEDAT.DBO.NHDWaterbody
- BASEDAT.DBO.NHDArea

BASEDAT.DBO.NHDFlowline

- Perennial
- Intermittent
- Ephemeral
- Unknown
- Canal/Ditch
- Canal/Ditch
- Canal/Ditch
- BASEDAT.DBO.NHDPoint

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine
- SWI Agate-Winlo Soils
- SWI Predominantly Hydric Soil Map Units

https://www.oregon.gov/dsl/WW/Pages/SWI.aspx

1:2,257

0 0.01 0.03 0.05 0.08 0.1 mi

The Statewide Wetlands Inventory (SWI) represents the best data available at the time this map was published and is updated as new data becomes available. In all cases, actual field conditions determine the presence, absence and boundaries of wetlands and waters (such as creeks and ponds). An onsite investigation by a wetland professional can verify actual field conditions.

N

Date: 2/26/2025

State of Oregon
Department of State Lands
775 Summer Street, NE, Ste 100
Salem, OR. 97301-1279

National Flood Hazard Layer FIRMette

FEMA

123°57'53"W 45°11'58"N

0 250 500 1,000 1,500 2,000 Feet 1:6,000

123°57'15"W 45°11'32"N

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- SPECIAL FLOOD HAZARD AREAS
  - Without Base Flood Elevation (BFE) *Zone A, V, A99*
  - With BFE or Depth *Zone AE, AO, AH, VE, AR*
  - Regulatory Floodway
- OTHER AREAS OF FLOOD HAZARD
  - 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
  - Future Conditions 1% Annual Chance Flood Hazard *Zone X*
  - Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
  - Area with Flood Risk due to Levee *Zone D*
- OTHER AREAS
  - NO SCREEN Area of Minimal Flood Hazard *Zone X*
  - Effective LOMRs
  - Area of Undetermined Flood Hazard *Zone*
- GENERAL STRUCTURES
  - Channel, Culvert, or Storm Sewer
  - Levee, Dike, or Floodwall
- OTHER FEATURES
  - 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
  - Coastal Transect
  - Base Flood Elevation Line (BFE)
  - Limit of Study
  - Jurisdiction Boundary
  - Coastal Transect Baseline
  - Profile Baseline
  - Hydrographic Feature
- MAP PANELS
  - Digital Data Available
  - No Digital Data Available
  - Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represe an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/26/2025 at 7:41 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

EXHIBIT B

Tillamook County Department of Community Development
1510-B Third Street. Tillamook, OR 97141 | Tel: 503-842-3408 Fax: 503-842-1819
www.co.tillamook.or.us

PLANNING APPLICATION

OFFICE USE ONLY
Date Stamp
RECEIVED
NOV 18 2024
BY: Counter Appt - SK

☐Approved ☐Denied
Received by: SS
Receipt #: 140460 & 140462
Fees: 1680.00
Permit No:
851-24-000580-PLNG

Applicant ☐ *(Check Box if Same as Property Owner)*
Name: Ian Smith Phone: 503-965-7009
Address: 34635 Hill St
City: Pacific City State: OR Zip: 97135
Email: Ian@pacificcityhomes.com

Property Owner
Name: Mali McReynolds Phone:
Address: 35700 Airport Way
City: Pacific City State: OR Zip: 97135
Email:

Request: New Home / Barn Replacement

Type II	Type III	Type IV
☐ Farm/Forest Review	☐ Detailed Hazard Report	☐ Ordinance Amendment
☐ Conditional Use Review	☐ Conditional Use (As deemed by Director)	☐ Large-Scale Zoning Map Amendment
☐ Variance	☐ Ordinance Amendment	☐ Plan and/or Code Text Amendment
☐ Exception to Resource or Riparian Setback	☐ Map Amendment	
☐ Nonconforming Review (Major or Minor)	☐ Goal Exception	
☑ Development Permit Review for Estuary Development Floodway	☐ Nonconforming Review (As deemed by Director)	
☐ Non-farm dwelling in Farm Zone	☐ Variance (As deemed by Director)	
☐ Foredune Grading Permit Review		
☐ Neskowin Coastal Hazards Area		

Location:
Site Address: 35700 Airport Way 97135
Map Number:
Township Range Section Tax Lot(s)

Clerk's Instrument #: _____

Authorization

This permit application does not assure permit approval. The applicant and/or property owner shall be responsible for obtaining any other necessary federal, state, and local permits. The applicant verifies that the information submitted is complete, accurate, and consistent with other information submitted with this application.

X Mali McReynolds 11/7/24
Property Owner Signature (Required) Date

Applicant Signature 11/18/24
Date

Form Instructions

U.S. DEPARTMENT OF HOMELAND SECURITY
Federal Emergency Management Agency
National Flood Insurance Program

OMB Control No. 1660-0008
Expiration Date: 06/30/2026

ELEVATION CERTIFICATE

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION PAGES 1-11

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

SECTION A – PROPERTY INFORMATION

FOR INSURANCE COMPANY USE

Policy Number:

Company NAIC Number:

A1. Building Owner's Name: McREYNOLDS, MALI

A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: 35700 AIRPORT WAY

City: PACIFIC CITY State: OR ZIP Code: 97135

A3. Property Description (e.g., Lot and Block Numbers or Legal Description) and/or Tax Parcel Number: BLOCK 2, LOT 5, RIVERGATE ~ 4S-10-30-BD, TAX LOT 6100, TILLAMOOK COUNTY, OREGON

A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.): RESIDENTIAL

A5. Latitude/Longitude: Lat. 45.19556 Long. 123.95917 Horiz. Datum: ☐ NAD 1927 ☒ NAD 1983 ☐ WGS 84

A6. Attach at least two and when possible four clear color photographs (one for each side) of the building (see Form pages 7 and 8).

A7. Building Diagram Number: 7

A8. For a building with a crawlspace or enclosure(s):

a) Square footage of crawlspace or enclosure(s): 1604 sq. ft.

b) Is there at least one permanent flood opening on two different sides of each enclosed area? ☒ Yes ☐ No ☐ N/A

c) Enter number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade:
Non-engineered flood openings: N/A Engineered flood openings: 10

d) Total net open area of non-engineered flood openings in A8.c: N/A sq. in.

e) Total rated area of engineered flood openings in A8.c (attach documentation – see Instructions): 2000 sq. ft.

f) Sum of A8.d and A8.e rated area (if applicable – see Instructions): 2000 sq. ft.

A9. For a building with an attached garage:

a) Square footage of attached garage: N/A sq. ft.

b) Is there at least one permanent flood opening on two different sides of the attached garage? ☐ Yes ☐ No ☒ N/A

c) Enter number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade:
Non-engineered flood openings: N/A Engineered flood openings: N/A

d) Total net open area of non-engineered flood openings in A9.c: N/A sq. in.

e) Total rated area of engineered flood openings in A9.c (attach documentation – see Instructions): N/A sq. ft.

f) Sum of A9.d and A9.e rated area (if applicable – see Instructions): N/A sq. ft.

SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1.a. NFIP Community Name: TILLAMOOK COUNTY B1.b. NFIP Community Identification Number: 410196

B2. County Name: TILLAMOOK B3. State: OR B4. Map/Panel No.: 41057C0855 B5. Suffix: F

B6. FIRM Index Date: 09/28/2018 B7. FIRM Panel Effective/Revised Date: 09/28/2018

B8. Flood Zone(s): AE B9. Base Flood Elevation(s) (BFE) (Zone AO, use Base Flood Depth): 16.1

B10. Indicate the source of the BFE data or Base Flood Depth entered in Item B9:
☒ FIS ☐ FIRM ☐ Community Determined ☐ Other:

B11. Indicate elevation datum used for BFE in Item B9: ☐ NGVD 1929 ☒ NAVD 1988 ☐ Other/Source:

B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? ☐ Yes ☒ No
Designation Date: ☐ CBRS ☐ OPA

B13. Is the building located seaward of the Limit of Moderate Wave Action (LiMWA)? ☐ Yes ☒ No

Form Instructions

ELEVATION CERTIFICATE

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION PAGES 1-11

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: 35700 AIRPORT WAY

City: PACIFIC CITY State: OR ZIP Code: 97135

FOR INSURANCE COMPANY USE

Policy Number:

Company NAIC Number:

SECTION C – BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on: [X] Construction Drawings* [ ] Building Under Construction* [ ] Finished Construction
*A new Elevation Certificate will be required when construction of the building is complete.

C2. Elevations – Zones A1–A30, AE, AH, AO, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO, A99. Complete Items C2.a–h below according to the Building Diagram specified in Item A7. In Puerto Rico only, enter meters.
Benchmark Utilized: TILL.CO.SURVEY PC #4 Vertical Datum: NAVD 1988

Indicate elevation datum used for the elevations in items a) through h) below.
[ ] NGVD 1929 [X] NAVD 1988 [ ] Other:

Datum used for building elevations must be the same as that used for the BFE. Conversion factor used? [ ] Yes [X] No
If Yes, describe the source of the conversion factor in the Section D Comments area.

		Check the measurement used:
a) Top of bottom floor (including basement, crawlspace, or enclosure floor):	14.3	[X] feet [ ] meters
b) Top of the next higher floor (see Instructions):	23.81	[X] feet [ ] meters
c) Bottom of the lowest horizontal structural member (see Instructions):	N/A	[ ] feet [ ] meters
d) Attached garage (top of slab):	N/A	[ ] feet [ ] meters
e) Lowest elevation of Machinery and Equipment (M&E) servicing the building (describe type of M&E and location in Section D Comments area):	19.1	[X] feet [ ] meters
f) Lowest Adjacent Grade (LAG) next to building: [X] Natural [ ] Finished	13.7	[X] feet [ ] meters
g) Highest Adjacent Grade (HAG) next to building: [X] Natural [ ] Finished	14.3	[X] feet [ ] meters
h) Finished LAG at lowest elevation of attached deck or stairs, including structural support:	14.3	[X] feet [ ] meters

SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by state law to certify elevation information. *I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.*

Were latitude and longitude in Section A provided by a licensed land surveyor? [X] Yes [ ] No

[X] Check here if attachments and describe in the Comments area.

Certifier's Name: DOUGLAS H. KELLOW License Number: OR PLS 2027

Title: PROFESSIONAL LAND SURVEYOR

Company Name: KELLOW LAND SURVEYING

Address: P.O. BOX 335

City: PACIFIC CITY State: OR ZIP Code: 97135

Telephone: 503-801-3537 Ext.: Email: dkellow@aol.com

Signature: Douglas H Kellow Date: 12/22/2024

REGISTERED PROFESSIONAL LAND SURVEYOR
Douglas H Kellow
OREGON
February 3, 1983
DOUGLAS H. KELLOW
2027
Renewal: 06/30/25

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

Comments (including source of conversion factor in C2; type of equipment and location per C2.e; and description of any attachments):
A8e.) THE FLOOD VENTS ARE ENGINEERED "SMARTVENTS" CAPABLE OF HANDLING 200 SQUARE FEET OF FLOOR SPACE PER EACH VENT. 10X200=2000 SQ FT OR SQ IN-See Attached ICC-ES REPORT FOR "SMARTVENTS".
C2e.) ALL PROPOSED MACHINERY & EQUIPMENT SERVICING THE PROPOSED STRUCTURE WILL BE PLACED ABOVE 19.1 MSL NAVD 1988 ELEVATION TO COMPLY WITH THE "3.0 FEET ABOVE BASE FLOOD ELEVATION" REQUIREMENT.

ICC EVALUATION SERVICE

Most Widely Accepted and Trusted

ICC-ES Evaluation Report

ICC-ES | (800) 423-6587 | (562) 699-0543 | www.icc-es.org

ESR-2074

Reissued 02/2023
Revised 06/2024
This report is subject to renewal 02/2025.

DIVISION: 08 00 00—OPENINGS

SECTION: 08 95 43—VENTS/FOUNDATION FLOOD VENTS

REPORT HOLDER:

SMART VENT PRODUCTS, INC.

EVALUATION SUBJECT:

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-514 FLOOD VENT SEALING KIT #1540-526

ICC ES | ICC ES PMG | ICC ES LISTED

"2014 Recipient of Prestigious Western States Seismic Policy Council (WSSPC) Award in Excellence"

A Subsidiary of ICC INTERNATIONAL CODE COUNCIL®

ICC EVALUATION SERVICE®

www.icc-es.org | (800) 423-6587 | (562) 699-0543 *A Subsidiary of the International Code Council®*

ICC-ES Evaluation Report

ESR-2074

Reissued February 2023

Revised June 2024

This report is subject to renewal February 2025.

DIVISION: 08 00 00—OPENINGS
Section: 08 95 43—Vents/Foundation Flood Vents

REPORT HOLDER:

SMART VENT PRODUCTS, INC.

EVALUATION SUBJECT:

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS:
MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-514
FLOOD VENT SEALING KIT #1540-526

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2024, 2021, 2018, 2015, 2012, 2009 and 2006 *International Building Code®* (IBC)
- 2024, 2021, 2018, 2015, 2012, 2009 and 2006 *International Residential Code®* (IRC)
- 2024, 2021 and 2018 *International Energy Conservation Code®* (IECC)
- 2013 *Abu Dhabi International Building Code* (ADIBC)†

†The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

Properties evaluated:

- Physical operation
- Water flow

2.0 USES

The Smart Vent® units are engineered mechanically operated flood vents (FVs) employed to equalize hydrostatic pressure on walls of enclosures subject to rising or falling flood waters. Certain models also allow natural ventilation.

3.0 DESCRIPTION

3.1 General:

When subjected to rising water, the Smart Vent® FVs internal floats are activated, then pivot open to allow flow in either direction to equalize water level and hydrostatic pressure from one side of the foundation to the other. The FV pivoting door is normally held in the closed position by a buoyant release device. When subjected to rising water, the buoyant release device causes the unit to unlatch, allowing the door to rotate out of the way and allow flow. The water level stabilizes, equalizing the lateral forces. Each unit is fabricated from stainless steel. Smart Vent® Automatic Foundation Flood Vents are available in various models and sizes as described in Table 1. The SmartVENT® Stacking Model #1540-511 and FloodVENT® Stacking Model #1540-521 units each contain two vertically arranged openings per unit.

3.2 Engineered Opening:

The FVs comply with the design principle noted in Section 2.7.2.2 and Section 2.7.3 of ASCE/SEI 24-14 [Section 2.6.2.2 of ASCE/SEI 24-05 (2012, 2009, 2006 IBC and IRC)] for a maximum rate of rise and fall of 5.0 feet per hour (0.423 mm/s). In order to comply with the engineered opening requirement of ASCE/SEI 24, Smart Vent FVs must be installed in accordance with Section 4.0.

3.3 Ventilation:

The SmartVENT® Model #1540-510 and SmartVENT® Overhead Door Model #1540-514 both have screen covers with $^1/_4$-inch-by-$^1/_4$-inch (6.35 by 6.35 mm) openings, yielding 51 square inches (32 903 mm^2) of net free area to supply natural ventilation. The SmartVENT® Stacking Model #1540-511 consists of two Model #1540-510 units in one assembly, and provides 102 square inches (65 806 mm^2) of net free area to supply natural ventilation. Other FVs described in this report do not offer natural ventilation.

3.4 Flood Vent Sealing Kit:

The Flood Vent Sealing Kit Model #1540-526 is used with SmartVENT® Model #1540-520. It is a Homasote 440 Sound Barrier® (ESR-1374) insert with 21 – 2-inch-by-2-inch (51 mm x 51 mm) squares cut in it. See Figure 4.

4.0 DESIGN AND INSTALLATION

4.1 SmartVENT® and FloodVENT®:

SmartVENT® and FloodVENT® are designed to be installed into walls or overhead doors of existing or new construction from the exterior side. Installation of the vents must be in accordance with the manufacturer's instructions, the applicable code and this report. Installation clips allow mounting in masonry and concrete walls of any thickness. In order to comply with the engineered opening design principle noted in Section 2.7.2.2 and 2.7.3 of ASCE/SEI 24-14 [Section 2.6.2.2 of ASCE/SEI 24-05 (2012, 2009, 2006 IBC and IRC)], the Smart Vent® FVs must be installed as follows:

- With a minimum of two openings on different sides of each enclosed area.
- With a minimum of one FV for every 200 square feet (18.6 m^2) of enclosed area, except that the SmartVENT® Stacking Model #1540-511 and FloodVENT® Stacking Model #1540-521 must be installed with a minimum of one FV for every 400 square feet (37.2 m^2) of enclosed area.
- Below the base flood elevation.
- With the bottom of the FV located a maximum of 12 inches (305.4 mm) above the higher of the final grade or floor and finished exterior grade immediately under each opening.

4.2 Flood Vent Sealing Kit

The Flood Vent Sealing Kit Model 1540-526 is used in conjunction with FloodVENT® Model #1540-520. When installed and tested in accordance with ASTM E283, the FV and Flood Vent Sealing Kit assembly have an air leakage rate of less than 0.2 cubic feet per minute per lineal foot (18.56 l/min per lineal meter) at a pressure differential of 1 pound per square foot (50 Pa) based on 12.58 lineal feet (3.8 lineal meters) contained by the Flood Vent Sealing Kit.

5.0 CONDITIONS OF USE

The Smart Vent® FVs described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 The Smart Vent® FVs must be installed in accordance with this report, the applicable code and the manufacturer's installation instructions. In the event of a conflict, the instructions in this report govern.

5.2 The Smart Vent® FVs must not be used in the place of "breakaway walls" in coastal high hazard areas, but are permitted for use in conjunction with breakaway walls in other areas.

6.0 EVIDENCE SUBMITTED

6.1 Data in accordance with the ICC-ES Acceptance Criteria for Mechanically Operated Flood Vents (AC364), dated August 2015 (editorially revised February 2024).

6.2 Test report on air infiltration in accordance with ASTM E283.

7.0 IDENTIFICATION

7.1 The ICC-ES mark of conformity, electronic labeling, or the evaluation report number (ICC-ES ESR-2074) along with the name, registered trademark, or registered logo of the report holder must be included in the product label.

7.2 The Smart VENT® models and the Flood Vent Sealing Kit described in this report must be identified by a label bearing the manufacturer's name (Smartvent Products, Inc.), the model number, and the evaluation report number (ESR-2074).

7.3 The report holder's contact information is the following:

SMART VENT PRODUCTS, INC.
19 MANTUA ROAD
MOUNT ROYAL, NEW JERSEY 08061
(877) 441-8368
www.smartvent.com
info@smartvent.com

TABLE 1—MODEL SIZES

MODEL NAME	MODEL NUMBER	MODEL SIZE (in.)	COVERAGE[1] (ft^2)
FloodVENT®	1540-520	15 3/4" X 7 3/4"	200
SmartVENT®	1540-510	15 3/4" X 7 3/4"	200
FloodVENT® Overhead Door	1540-524	15 3/4" X 7 3/4"	200
SmartVENT® Overhead Door	1540-514	15 3/4" X 7 3/4"	200
Wood Wall FloodVENT®	1540-570	14" X 8 3/4"	200
Wood Wall FloodVENT® Overhead Door	1540-574	14" X 8 3/4"	200
SmartVENT® Stacker	1540-511	16" X 16"	400
FloodVent® Stacker	1540-521	16" X 16"	400

For **SI:** 1 inch = 25.4 mm; 1 square foot = m^2

[1]The coverage area in square feet for each model is equivalent to the performance of the same number of square inches of non-engineered openings.

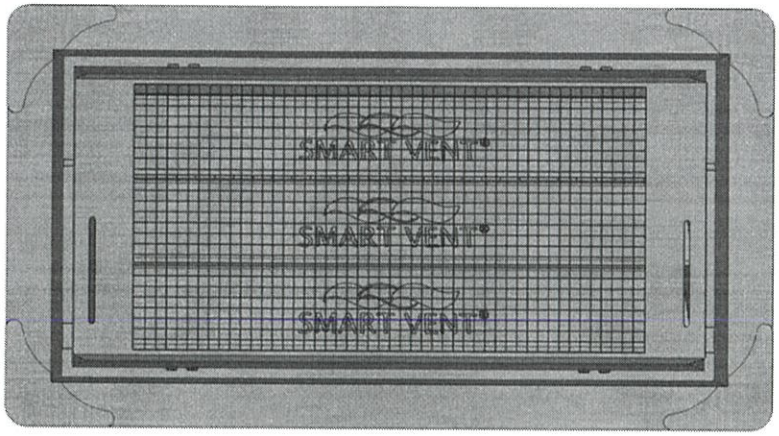


FIGURE 1—SMART VENT: MODEL 1540-510

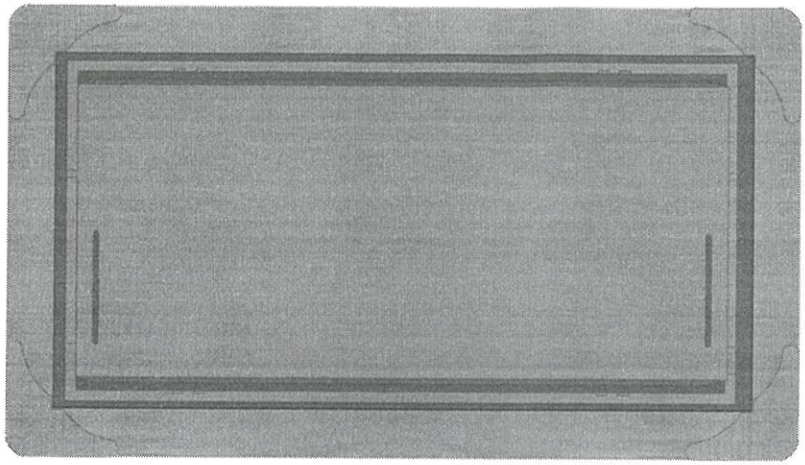


FIGURE 2—SMART VENT MODEL 1540-520

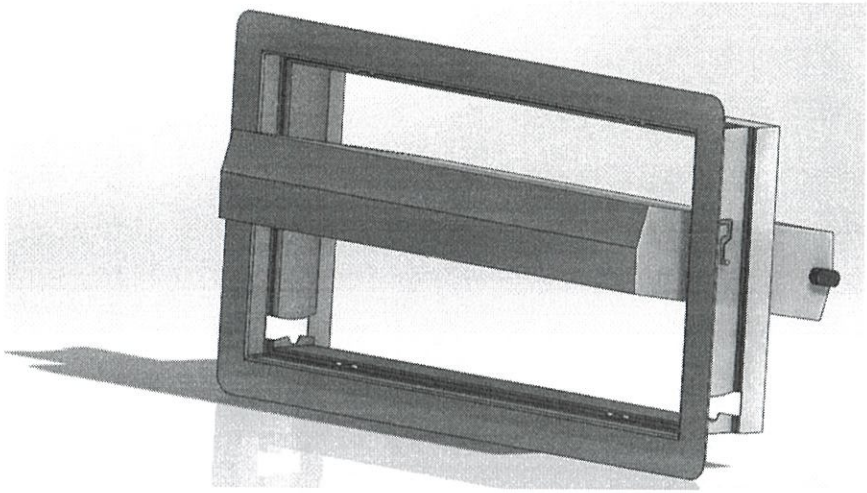


FIGURE 3—SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN

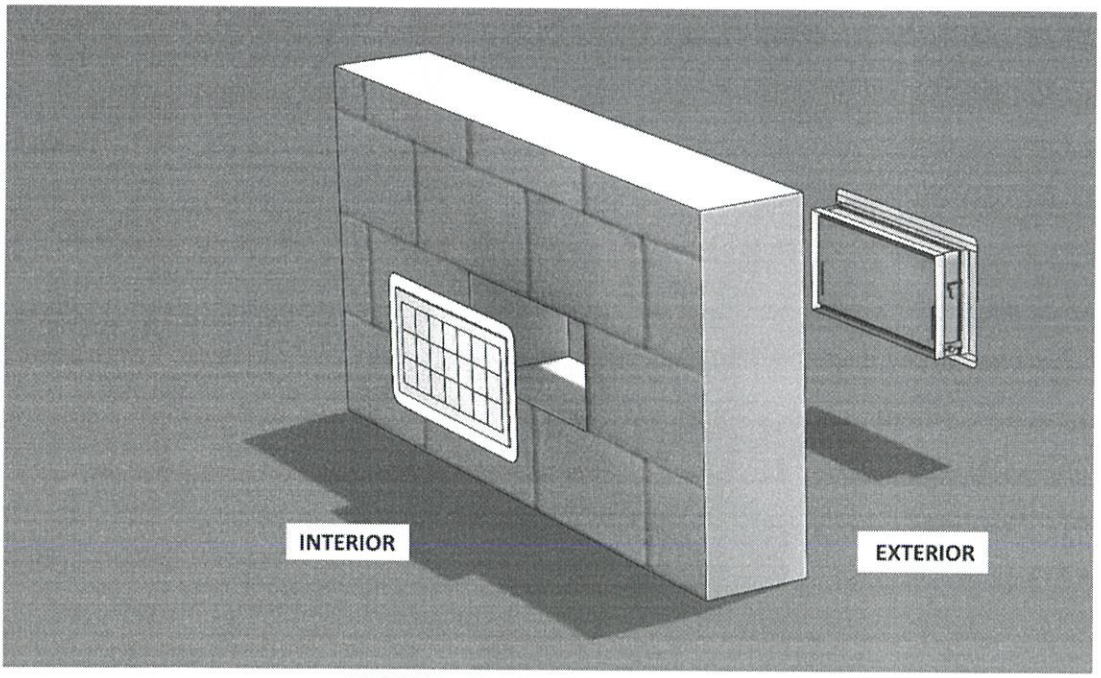


FIGURE 4—FLOOD VENT SEALING KIT

DIVISION: 08 00 00—OPENINGS
Section: 08 95 43—Vents/Foundation Flood Vents

REPORT HOLDER:

SMART VENT PRODUCTS, INC.

EVALUATION SUBJECT:

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-514
FLOOD VENT SEALING KIT #1540-526

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Smart Vent® Automatic Foundation Flood Vents, described in ICC-ES evaluation report ESR-2074, have also been evaluated for compliance with codes noted below.

Applicable code editions:

- 2022 *California Building Code* (CBC)

For evaluation of applicable chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) AKA: California Department of Health Care Access and Information (HCAI) and the Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

- 2022 *California Residential Code* (CRC)

2.0 CONCLUSIONS

2.1 CBC:

The Smart Vent® Automatic Foundation Flood Vents, described in Sections 2.0 through 7.0 of the evaluation report ESR-2074, comply with CBC Chapter 12, provided the design and installation are in accordance with the 2021 *International Building Code®* (IBC) provisions noted in the evaluation report and the additional requirements of CBC Chapters 12 and 16 , as applicable.

2.1.1 OSHPD:

The applicable OSHPD Sections and Chapters of the CBC are beyond the scope of this supplement.

2.1.2 DSA:

The applicable DSA Sections and Chapters of the CBC are beyond the scope of this supplement.

2.2 CRC:

The Smart Vent® Automatic Foundation Flood Vents, described in Sections 2.0 through 7.0 of the evaluation report ESR-2074, comply with the CRC, provided the design and installation are in accordance with the 2021 *International Residential Code®* (IRC) provisions noted in the evaluation report.

This supplement expires concurrently with the evaluation report, reissued February 2023 and revised June 2024.

DIVISION: 08 00 00—OPENINGS
Section: 08 95 43—Vents/Foundation Flood Vents

REPORT HOLDER:

SMART VENT PRODUCTS, INC.

EVALUATION SUBJECT:

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-514
FLOOD VENT SEALING KIT #1540-526

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Smart Vent® Automatic Foundation Flood Vents, described in ICC-ES evaluation report ESR-2074, have also been evaluated for compliance with the codes noted below.

Applicable code editions:

- 2023 *Florida Building Code—Building*
- 2023 *Florida Building Code—Residential*

2.0 CONCLUSIONS

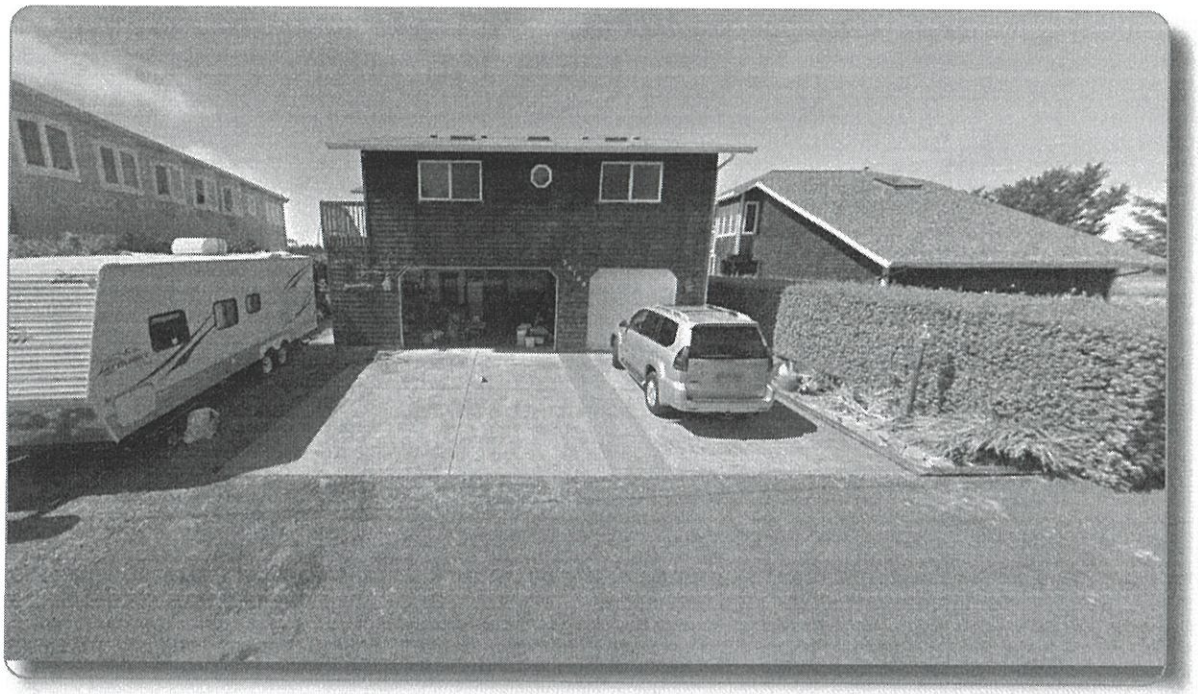
The Smart Vent® Automatic Foundation Flood Vents, described in Sections 2.0 through 7.0 of the evaluation report ESR-2074, comply with the *Florida Building Code—Building* and the *Florida Building Code—Residential*, provided the design requirements must be determined in accordance with the *Florida Building Code—Building* or the *Florida Building Code—Residential,* as applicable. The installation requirements noted in ICC-ES evaluation report ESR-2074 for 2021 *International Building Code®* meet the requirements of the *Florida Building Code—Building* or the *Florida Building Code—-Residential,* as applicable.

Use of the Smart Vent® Automatic Foundation Flood Vents has also been found to be in compliance with the High-Velocity Hurricane Zone provisions of the *Florida Building Code—Building* and the *Florida Building Code—Residential*.

For products falling under Florida Rule 61G20-3, verification that the report holder's quality assurance program is audited by a quality assurance entity approved by the Florida Building Commission for the type of inspections being conducted is the responsibility of an approved validation entity (or the code official when the report holder does not possess an approval by the Commission).

This supplement expires concurrently with the evaluation report, reissued February 2023 and revised June 2024.

35700 Airport Way
Hydraulic Analysis Report



prepared for

Ian Spath, Pacific City Homes

prepared by

Jake Hofeld, P.E.

REGISTERED PROFESSIONAL ENGINEER
77870PE
OREGON
JANUARY 3, 2011
JAKE DYLAN HOFELD

EXPIRES: 6/30/2025

Digitally signed by Jake Hofeld
Date: 2024.11.07 17:08:32 -08'00'

WATERWAYS CONSULTING, INC.

November 4, 2024

Contents

List of Figures

List of Attachments

INTRODUCTION

Waterways Consulting Inc. (Waterways) has been retained by Ian Spath from Pacific City Homes to evaluate the hydraulic effects on the Nestucca River during a 100-year base flood discharge from an existing residential structure to a proposed residential structure. The project is located on the east (left) bank floodplain of the Nestucca River at 35700 Airport Way in Pacific City, Or (**Figure 1**). The existing property currently does not contain any structures, as a previous residential building was destroyed in a fire. The proposed residential structure will replace the previous existing building and will include a 1575 square foot footprint house in approximately the same location within the property as the previous house. The new structure includes a covered entry on the street side of the house, and two covered overhanging balcony decks on the river side of the second story and the east side of the house. The entire property is located within the FEMA designated floodway, effective September 28, 2018 (**Figure 2**).

The following report has been prepared to support floodplain development permitting with Tillamook County for the proposed project and presents our hydraulic analysis of existing and proposed conditions for the 100-year flood event along the Nestucca River within the vicinity of the proposed residential structure . This report is based on the guidance outlined in Section 3.510(9)(a) of the Tillamook County Land Use Ordinance which requires, "...certification is provided by a professional registered civil engineer demonstrating through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that such encroachment shall not result in any increase in flood levels during the occurrence of the based flood discharge."

HYDRAULIC MODELING METHODOLOGY

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) has mapped Nestucca River at the project area as a Special Flood Hazard Area (SFHA) within the regulatory floodway Zone AE (**Figure 2**). Tillamook County provided Waterways with a hydraulic model of the Nestucca River covering the project area for a Letter of Map Revision (LOMR), effective September 24, 2015 (Case. Number 14-10-1727P). The LOMR and corresponding hydraulic model conducted in the United States Army Corps of Engineers (USACE) Hydraulic Engineering Center River Analysis Software (HEC-RAS) by West Consultants updated the previous modeling and FIRM Panels dated August 1, 1978. All elevations are referenced to a NAVD 88 vertical datum. This model was used as the basis for all hydraulic modeling.

Waterways updated the hydraulic analysis using HEC-RAS, version 6.4.1. A one-dimensional hydraulic model was completed to characterize the existing and proposed conditions at the project site during the 100-year recurrence interval peak flow at the Nestucca River. Five additional cross sections were added to the provided model in the vicinity of the project area (property). The two modeling scenarios include the Existing Conditions Model ("Ex. Cond." is the plan identifier in the model) and the Proposed Conditions Model ("Prop. Cond." is the plan identifier in the model). **Figure 5** shows the proposed project location, cross section locations used in the hydraulic analysis, and the effective FEMA floodplain and floodway boundaries (FEMA 2018).

Existing Conditions Model

Additional cross sections added to the LOMR model were sampled from a terrain surface derived from LiDAR data from the Department of Geology and Mineral Industries (DOGAMI) North Coast collected by Watershed Sciences Inc. in 2009. Bathymetry for the additional cross sections were interpolated from upstream and downstream cross sections of the LOMR model. The existing house was modeled as a blocked obstruction in the existing conditions model. **Figure 3** shows the property survey with both the existing and proposed house locations.

The downstream model boundary extends approximately 0.85 miles downstream of the project area and the upstream model boundary extends approximately 3.0 miles upstream of the project area (**Figure 5**). The bridge crossing geometry at Ferry Street and at Pacific Avenue upstream of the project area were included in the model from drawings provided by Oregon Department of Transportation (ODOT) and Tillamook County. Hydraulic roughness values for the additional cross sections were based on values published in the provided model. Hydraulic roughness values, known as Manning's Roughness, for the additional cross sections are outlined in **Table 1**.

Table 1. *Manning's Roughness for Different Land Use Types*

Land Use Type	Manning's 'n'
Channel	0.031
Open Pervious Areas (grassed)	0.04
Residential Area	0.08
Open Pervious Areas (trees)	0.10

Proposed Conditions Model

The proposed conditions model included the additional cross sections created in the existing conditions model. The existing condition terrain was updated with the proposed residential structure footprint provided by design drawings supplied by the client (**Figure 4**). The proposed residential structure was modeled as a blocked obstruction at cross sections located at the upstream and downstream sides of the proposed structure. The blocked obstruction is limited to the footprint of the structure at ground level. The posts associated with the second story overhanging decks are omitted from the model as these are considered negligible features in terms of ability to obstruct water during a flood event. The proposed conditions model did not update the existing topography of the site surrounding the proposed structure.

Boundary Conditions

The downstream boundary condition used in the two models was set to a known water surface elevation of 14.15 feet (NAVD 88) per the provided model. The downstream boundary condition is located downstream of FEMA Cross Section A near where Nestucca River meets the Nestucca Bay.

Peak Flow Hydrology

According to the FEMA FIS report and the provided model, the 100-year peak flow event for this portion of the Nestucca River is 49,700 cubic feet per second (cfs). Therefore, 49,700 cfs was assumed for the 100-year peak flow (i.e. base flood discharge) in all models.

RESULTS

Results of the hydraulic modeling are presented in **Attachment A**. These results show that the proposed structure will not result in a rise to the water surface elevations at any cross sections in the model. No change between the Existing Conditions Model and Proposed Conditions Model can likely be attributed to the relatively small change in building footprints as compared to a much larger, wider floodplain area.

CONCLUSIONS

The results of this hydraulic analysis indicate no rise in the 100-year water surface elevations for the Proposed Conditions Model when compared to the Existing Conditions Model. Based on this, the proposed project satisfies the requirement of Section 3.510(9)(a) of the Tillamook County Land Use Ordinance.

REFERENCES

Federal Emergency Management Agency. 2018. Flood Insurance Rate Maps (FIRMs) for Tillamook County (panel 0855), Oregon and Incorporated Areas. September 28, 2018.

Federal Emergency Management Agency. 2018. Flood Insurance Study (FIS) for Tillamook County, Oregon and Incorporated Areas. September 8, 2018.

U.S. Army Corps of Engineers. Hydrologic Engineering Center. Computer Program HEC-RAS Version 6.4.1 Davis, California. June 2023.

U.S. Army Corps of Engineers. Hydrologic Engineering Center. Hydraulic Reference Manual. Version 5.0 Davis, California. February 2016.

Watershed Sciences. LiDAR Remote Sensing Data Collection Oregon North Coast. Prepared for Department of Geology and Mineral Industries (DOGAMI). December 21, 2009.

West Consultants. Hydraulic Engineering Center River Analysis Software (HEC-RAS) Model of the Nestucca River. 2014.

Figures

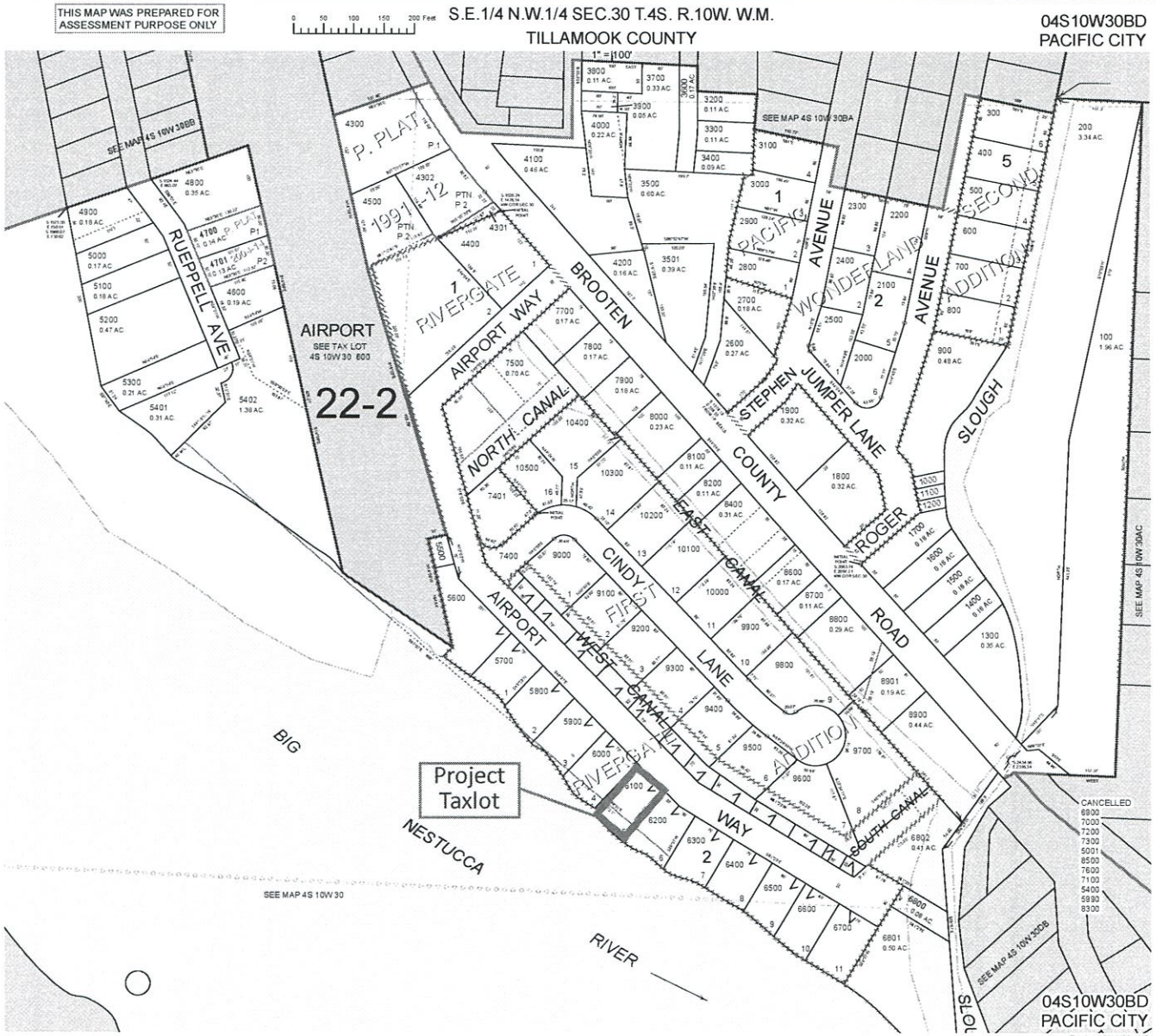


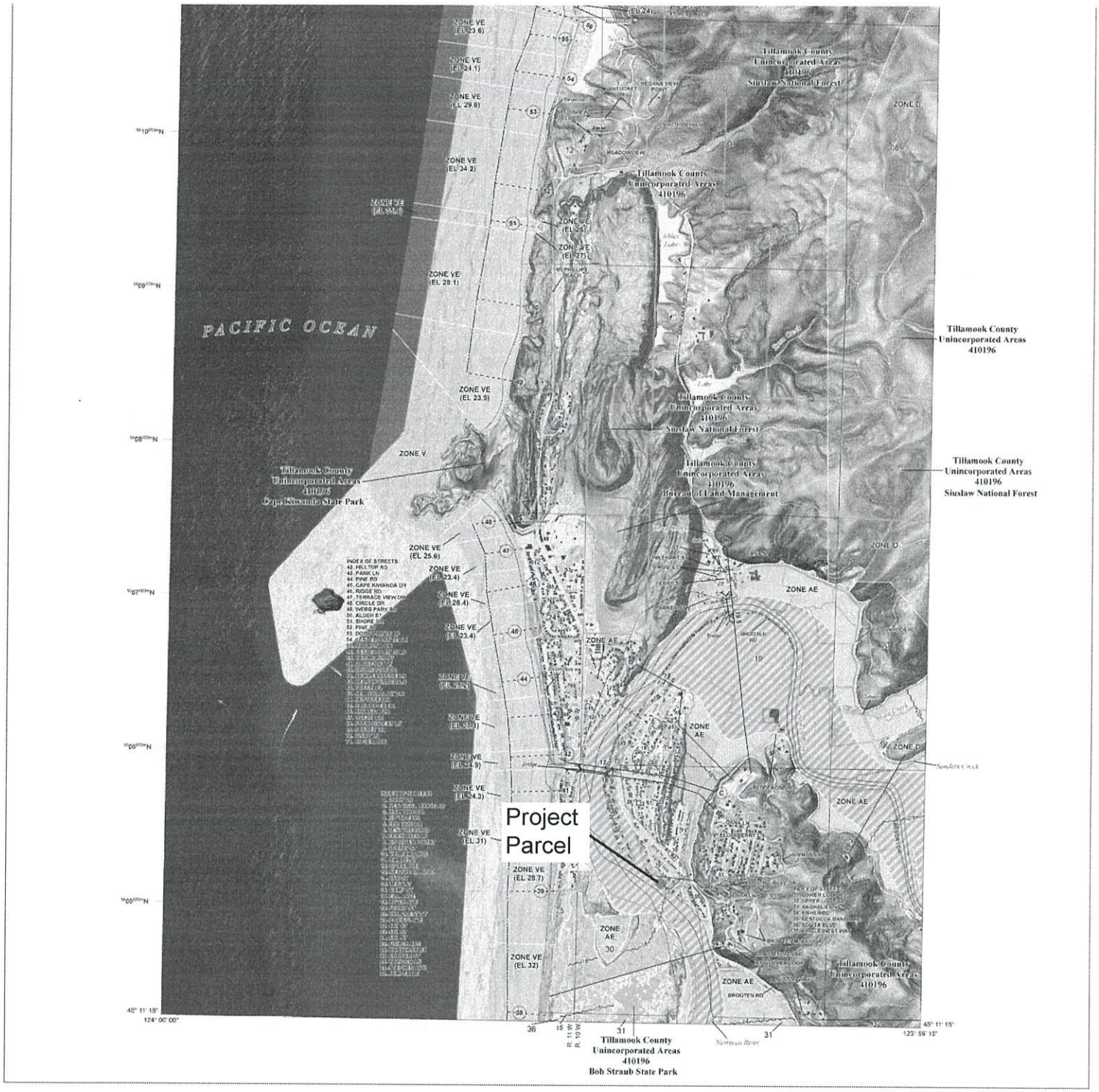
FIGURE 1

Tax Lot Location

(Map Sourced from Tillamook County Assessment and Taxation Website)

35700 Airport Way
Hydraulic Analysis Report

WATERWAYS CONSULTING, INC.
Santa Cruz, CA | waterways.com | Portland, OR



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT HTTP://MSC.FEMA.GOV

SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE) Zone A, V, A99 With BFE or Depth Zone AE, AO, AH, VE, AR
	Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
	Future Conditions 1% Annual Chance Flood Hazard Zone X
	Area with Reduced Flood Risk due to Levee See Notes. Zone X
	Area with Flood Risk due to Levee Zone D
OTHER AREAS	NO SCREEN Area of Minimal Flood Hazard Zone X
	Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES	Channel, Culvert, or Storm Sewer
	Levee, Dike, or Floodwall

NOTES TO USERS

For information and questions about this map, available products associated with this FIRM including historic versions of this FIRM, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange at 1-877-FEMA MAP (1-877-336-2627) or visit the FEMA Map Service Center website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Users may determine the current map date for each FIRM panel by visiting the FEMA Map Service Center website or by calling the FEMA Map Information eXchange.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study report for this jurisdiction.

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

The topographic base map for this FIRM revision is derived from aerial lidar surveys conducted between 2007 and 2011. Orthophotography acquired in 2009 was used where lidar coverage was unavailable for portions of Tillamook County.

SCALE

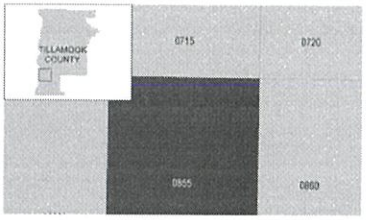
Map Projections:
Universal Transverse Mercator Zone 10N, North American Datum 1983
Western Hemisphere, Vertical Datum: NAVD 88

1 inch = 1,000 feet 1:12,000

0 1,000 2,000 4,000 Feet

0 255 510 1,020 Meters

PANEL LOCATOR



FEMA

National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

TILLAMOOK COUNTY, OREGON
And Incorporated Areas

PANEL 855 OF 1075

FEMA

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
TILLAMOOK COUNTY	410196	0855	F

FIGURE 2: FEMA Firm Panel

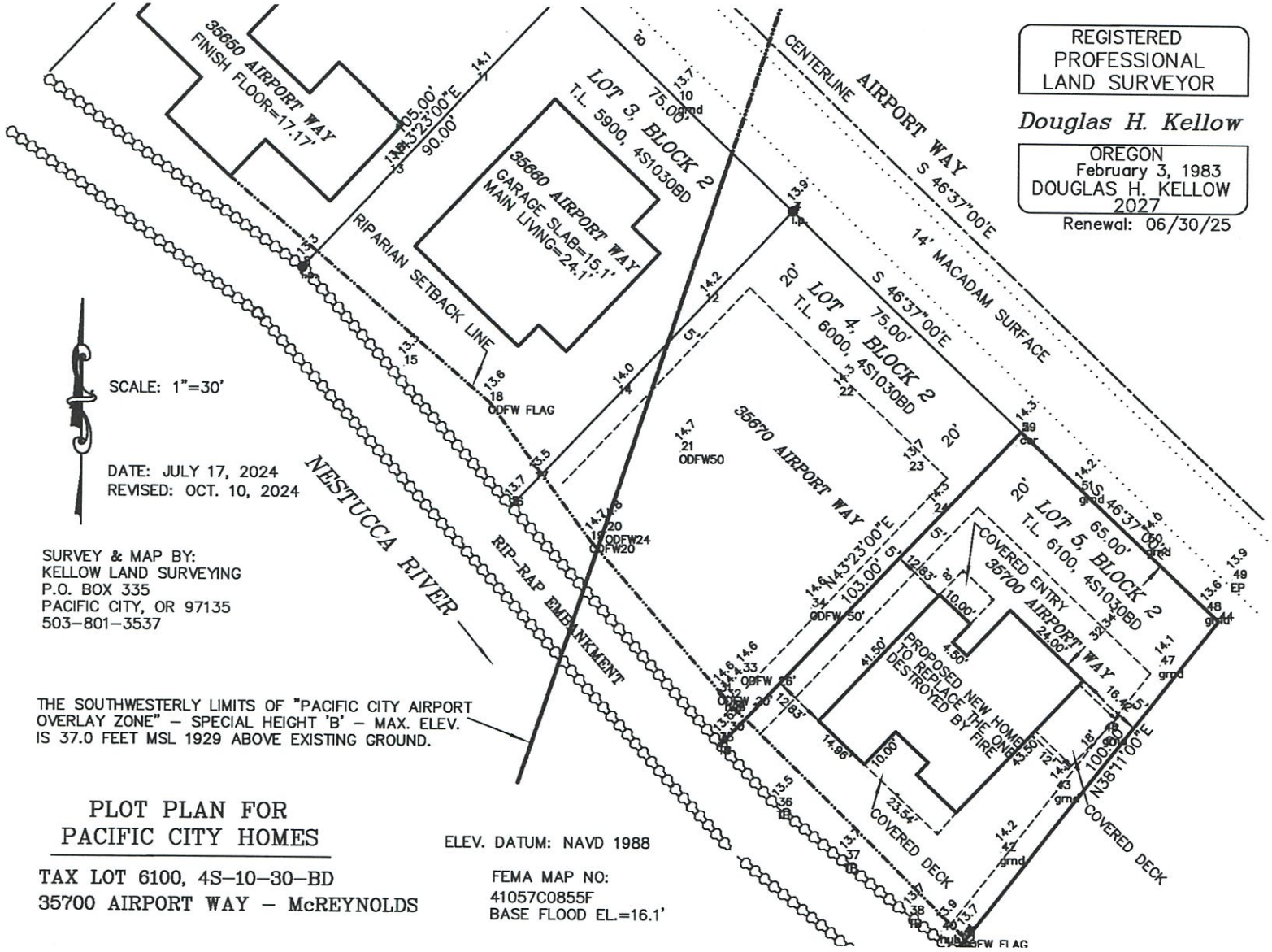


FIGURE
3

Property Survey and Site Plan

35700 Airport Way
Hydraulic Analysis Report

WATERWAYS CONSULTING, INC.
Santa Cruz, CA | watways.com | Portland, OR

FIGURE 4: Proposed Plans and Elevations

ATTENTION FRAMER! CRITICAL!
SEE "S" SHEETS FOR STRUCTURAL INFORMATION

GENERAL NOTES

1. INSULATION:

   WALLS: R-21
   ROOF: R-30C @ VAULTED CEILINGS ; R-49 @ FLAT CEILINGS
   UNDERFLOOR: R-38

2. VENTILATION:

A. ATTIC VENTILATION: R806
SHALL HAVE A MINIMUM NET FREE AREA OF 1/150 OF THE ATTIC AREA OR 1/300 NET AREA IF ONE-HALF THE AREA IS SOFFIT VENT AND ONE-HALF IS 3 FT. ABOVE PLATE LINE.
NOTE: WITH ENCLOSED RAFTER SPACES FLOW-THRU VENTING IS REQUIRED WITH 1" OF AIR SPACE BETWEEN INSULATION AND ROOF SHEATHING. ALSO 1" AIR SPACE @ SOFFIT VENTS ABOVE INSULATION

3. WINDOWS: R308 & R310
EGRESS WINDOWS IN SLEEPING AREA SHALL NOT BE MORE THAN 44" FROM FINISHED FLOOR TO SILL AND SHALL HAVE AN OPENING WITH MINIMUM DIMENSIONS 20" WIDE, 24" HIGH WITH A MINIMUM AREA OF 5.7 SQUARE FEET. ALL GLASS OVER 18" WIDE AND WITHIN 18" OF THE FLOOR SHALL COMPLY WITH IMPACT LOADS. SLIDING GLASS DOORS SHALL BE SAFETY GLAZED WITH LAMINATED OR TEMPERED GLASS.

INFILTRATION:

ALL FACTORY-BUILT WINDOWS AND DOORS SHALL COMPLY WITH THE FOLLOWING CRITERIA FOR MAXIMUM ALLOWABLE AIR INFILTRATION RATES:

WINDOWS:	U- 0.27
SKYLIGHTS:	U- 0.50
EXTERIOR DOORS:	U- 0.20
EXTERIOR DOORS WITH > 2.5 FT2 GLAZING:	U- 0.40

A MAXIMUM OF 28 SQUARE FEET OF EXTERIOR DOOR AREA PER DWELLING UNIT CAN HAVE A U-FACTOR OF 0.54 OR LESS.

THESE RATES MUST BE SUBSTANTIATED BY TESTING TO STANDARD ASTM E 283-73.

4. TUB / SHOWERS:
SHOWERS SHALL BE EITHER ONE-PIECE FIBERGLASS STALL UNITS OR CERAMIC TILE WALL TO 6FT. ABOVE FLOOR MINIMUM AND SHALL BE PROVIDED WITH A WATER RESISTANT BACKING. ALL SHOWER DOORS SHALL BE TEMPERED OR LAMINATED SAFETY GLASS OR SHATTER RESISTANT PLASTIC. ALL SHOWERS SHALL HAVE FLOW CONTROL DEVICES TO LIMIT TOTAL FLOW TO A MAXIMUM OF 3 G.P.M. PER SHOWER HEAD

5. WHEN GYPSUM WALL BOARD IS USED AS A BASE FOR TILE IN TUB AND SHOWER AND WATER CLOSET AREAS WATER-RESISTANT GYPSUM BACKBOARD COMPLYING WITH R702.4.2

6. R308.4.5 GLAZING AND WET SURFACES. GLAZING IN WALLS, ENCLOSURES OR FENCES CONTAINING OR FACING HOT TUBS, SPAS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, SHOWERS AND INDOOR OR OUTDOOR SWIMMING POOLS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES (1524 MM) MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION. THIS SHALL APPLY TO SINGLE GLAZING AND EACH PANE IN MULTIPLE GLAZING.
EXCEPTION: GLAZING THAT IS MORE THAN 60 INCHES (1524 MM), MEASURED HORIZONTALLY AND IN A STRAIGHT LINE, FROM THE WATER'S EDGE OF A BATHTUB, HOT TUB, SPA, WHIRLPOOL OR SWIMMING POOL OR FROM THE EDGE OF A SHOWER, SAUNA OR STEAM ROOM.

7. ALL EXIT DOORS WITH A NIGHT LATCH, DEAD BOLT OR SECURITY CHAIN SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR TOOL AND MOUNTED AT A HEIGHT NOT EXCEEDING 48" ABOVE THE FINISH FLOOR

8. A NON - REMOVABLE BACKFLOW PREVENTION DEVICE IS REQUIRED ON ALL EXTERIOR HOSE BIBBS. OPSC

9. A 36" MINIMUM LANDING IS REQUIRED AT ALL EXTERIOR DOORS. R311.3. THE LANDING SHALL NOT BE MORE THAN 8 1/4" BELOW THE TOP OF THE THRESHOLD.

10. ILLUMINATE BOTH INTERIOR AND EXTERIOR STAIRWAYS INCLUDING LANDINGS AND TREADS. R303.6 AND R303.7

11. PROVIDE STAIRWAYS PER R311.7 (APPLIES TO INTERIOR AND EXTERIOR STAIRS)
    A. 8" MAXIMUM RISE AND 9" MINIMUM RUN IS REQUIRED.
    B. A HANDRAIL IS REQUIRED AT EVERY STAIR OF 3 OR MORE RISERS. PROVIDE A 1.5" - 2 5/8" DIAMETER RAIL WITH 1.5" MIN. BETWEEN HANDRAIL AND WALL AND MOUNTED @ +30" - 38" ABOVE TREAD NOSING.
    C. HANDRAILS WHICH ALSO FUNCTION AS GUARDRAILS SHALL BE 34" - 38" ABOVE TREAD NOSING.

12. THE GRADE AROUND FOUNDATION WALLS SHALL FALL A MINIMUM OF 6" IN THE FIRST 10 FEET.

13. MIN. CLEARANCE OF SILL TO FINISHED GRADE: 6" R404.1.6

14. FOUNDATION BOLTS SHALL BE NOT LESS THAN 1/2" DIAMETER STEEL BOLTS EMBEDDED AT LEAST 7" INTO CONCRETE, SPACED 72" ON CENTER MAXIMUM, WITH AT LEAST TWO BOLTS PER PLATE OR SILL AND 1 BOLT WITHIN 12" OF ENDS AND CORNERS. R403.1.6 UNLESS NOTED OTHERWISE.

15. COLUMNS AND POSTS SHALL BE ADEQUATELY ANCHORED TO PREVENT LATERAL DISPLACEMNT. R407.3

16. ALL WOOD, INCLUDING POSTS, WITHIN 6" OF GROUND SHALL BE PRESSURE TREATED.

17. A WEATHER-RESISTANT RIGID BAFFLE, EXTENDING ABOVE THE INSULATION AT EAVE OR SOFFIT VENTS IS REQ.

FOUNDATION NOTES

1. FOOTINGS ARE TO BEAR ON UNDISTURBED SOIL DEVOID OF ANY ORGANIC MATERIAL AND STEPPED AS REQUIRED TO MAINTAIN THE REQ. DEPTH BELOW THE FINAL GRADE.

2. FOUNDATION:

   SEE PLAN DETAILS ON "S" SHEETS

3. SOIL BEARING PRESSURE ASSUMED TO BE 1500 PSF.

4. ANY FILL UNDER GRADE SUPPORTED SLABS: SAND

5. ALL WOOD IN CONTACT W/ CONC. TO BE PRESSURE TREATED OR PROTECTED WITH 55# ROLL ROOFING.

6. P.T. 2X6 SILL PLATES TYP.

7. FLOOR STRUCTURE: 3/4" T&G PLYWD DECKING GLUED & NAILED TO 2X F.J. @ 16" O.C. CROSSBRIDGING @ MIDSPANS, SOLID BLMNG @ BEARING. EXTRA JOIST UNDER PARALLEL WALLS.

8. PROVIDE R-38 UNDERFLOOR INSULATION USE SPRING WIRES TO HOLD INSULATION TIGHT TO UNDERSIDE OF FLOOR SHEATHING SPACE WIRES PER INSTALLERS SPECS.

9. SEE GENERAL NOTES

ELECTRICAL NOTES

1. A GROUNDING ELECTRODE AT ELECTRICAL SERVICE IS REQUIRED, CONSISTING OF (OR CONNECTED TO) A MINIMUM 20' LENGTH OF 1/2" DIAMETER STEEL REINFORCEMENT OF FOOTINGS. R403.1.8.
   ELECTRODE SHALL EXTEND 12" MINIMUM ABOVE THE PLATE LINE.

2. PROVIDE RECEPTICLES AS REQUIRED BY OESC OAR 918-305-0100
   A. OUTLETS ARE REQ. AT 12 FOOT O.C. MAX. SPACING.
   B. OUTLETS ARE REQUIRED AT ANY WALL SPACE 2 OR MORE FEET WIDE.
   C. OUTLETS ARE REQ. AT EACH COUNTER SPACE WIDER THAN 12", AT 4 FEET O.C.
   D. HALLS OF 10 FEET OR MORE SHALL INCLUDE AN OUTLET.
   E. PROVIDE AR LEAST ONE OUTLET IN THE GARAGE AND BASEMENT
   F. OUTLETS ARE REQ. AT 6 FOOT O.C. MAX. FROM ANY OPENING.

3. PROVIDE GFCI PROTECTION PER ELECTICAL CODE
   A. FOR OUTLETS IN BATHROOMS.
   B. AT NON - DEDICATED OUTLETS ABOVE COUNTER TOP WITHIN 6 FEET OF KITCHEN SINK.
   C. FOR ANY OUTLETS IN CRAWLSPACE OR UNFINISHED BASEMENT.
   D. FOR OUTDOOR OUTLETS. (SPECIFY WATERPROOF OUTLETS)
   E. FOR HYDROMASSAGE BATHTUBS AND THEIR ASSOCIATED ELECTRICAL COMPONENTS.

4. PROVIDE AT LEAST TWO SEPERATE 20 AMP CIRCUITS TO KITCHEN APPLIANCES, AND AT LEAST ONE SEPERATE 20 AMP CIRCUIT TO LAUNDRY APPLIANCES.

5. LIGHT FIXTURES IN TUB OR SHOWER ENCLOSURES SHALL BE LABLE " SUITABLE FOR DAMP LOCATIONS "

6. ALL SWITCHES, OUTLETS, AND ENVIROMENTAL CONTROLS SHALL BE MOUNTED NOT LESS THAN 15" NOR MORE THAN 48" ABOVE FINISHED FLOOR AND SHALL BE ALIGNED VERTICALLY.

   ALL EXHAUST DUCTS SHALL BE RIGID METAL, AND SHALL BE FITTED WITH A TIGHT FITTING BACKDRAFT DAMPER, CAPABLE OF CLOSING WHEN THE FAN IS NOT IN USE.

   DUCTS IN UNHEATED SPACES INCLUDING ATTICS SHALL BE INSULATED TO A MINIMUM OF R-4.

   (SD) = COMBO SMOKE DETECTOR / CO DETECTOR.
   ALL DETECTORS SHALL BE INTERCONNECTED SUCH THAT THE ACTUATION OF A SINGLE ALARM WILL ACTUATE ALL OF THE ALARMS IN THE HOUSE AND SHALL PROVIDE AN ALARM WHICH WILL BE AUDIBLE IN ALL THE SLEEPING AREAS. DETECTORS SHALL BE CONNECTED TO HOUSE POWER AND SHALL HAVE A BATTERY BACKUP. TYP.

   (F) = EXHAUST FAN.
   ALL EXHAUST DUCTS SHALL BE RIGID METAL AND SHALL BE FITTED WITH A TIGHT FITTING BACKDRAFT DAMPER, CAPABLE OF CLOSING WHEN THE FAN IS NOT IN USE.

INDEX OF DRAWINGS

GOVERNING CODE

2021 OREGON RESIDENTIAL SPECIALTY CODE

ENERGY CODE NOTES

ALL CONSTRUCTION SHALL CONFORM TO
2021 OREGON RESIDENTIAL ENERGY CODE PER TABLE N1101.1(1)

The Design Department, Inc.
Creating *Your* Perfect Space
1523 Boca Ratan Dr.
Lake Oswego, Oregon 97034
(503) 332 - 3796

NOTE:
Written dimensions on this drawing shall take precedence over scaled dimensions.
Contractor shall verify all dimensions, conditions, etc. pertaining to the work before proceeding.
The Designer must be notified of any variations from the dimensions and/or conditions shown on these drawings. Any such variation shall be resolved by the Owner prior to proceeding with the work or the Contractor shall accept full responsibility for cost to rectify same.

Custom Home Plan for:
Mali McReynolds
Pacific City, Oregon

Index of Drawings
General Notes

REVISIONS
09.01.24
09.16.24
09.26.24
10.08.24

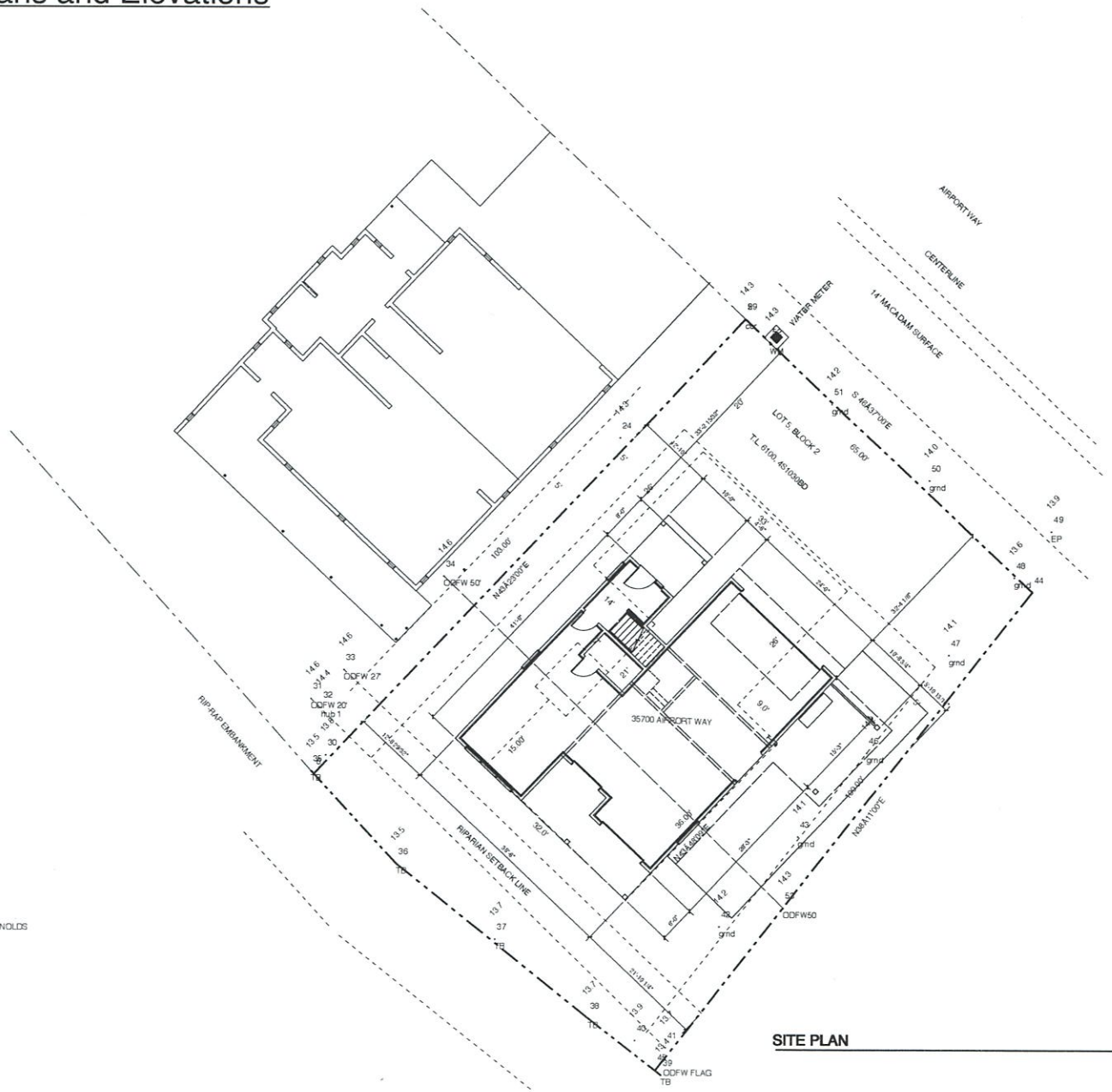
ORIGIN DATE: 08.20.24

PROJECT NO: 2524

SHEET 1

PROGRESS DRAWINGS NOT FOR CONSTRUCTION

FIGURE 4: Proposed Plans and Elevations



SITE PLAN

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

PROGRESS DRAWINGS NOT FOR CONSTRUCTION

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Custom Home Plan for:
Mali McReynolds
Pacific City, Oregon

Site Plan

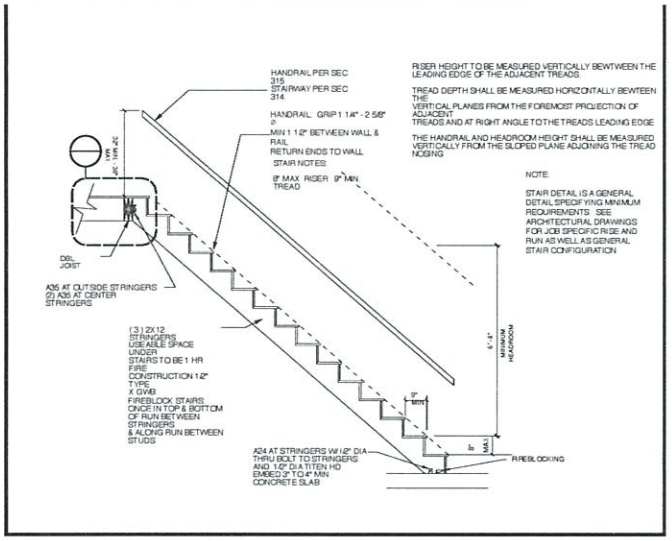
REVISIONS
09.01.24
09.16.24
09.26.24
10.03.24
10.06.24
10.08.24

ORIGIN DATE
08.20.24

PROJECT NO
2524

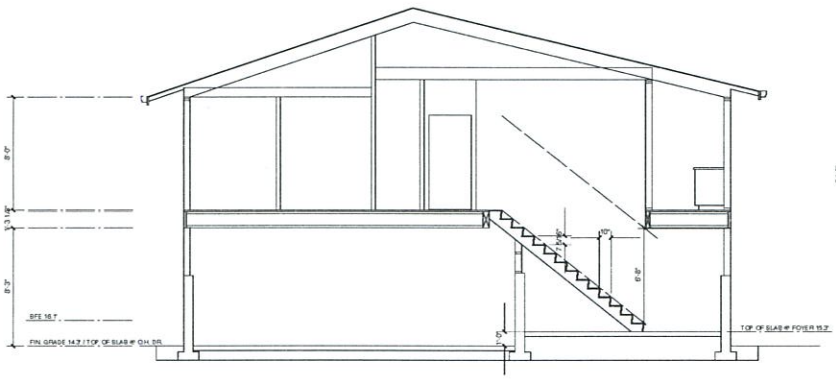
SHEET
2

FIGURE 4: Proposed Plans and Elevations



1 TYPICAL STAIR SECTION

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

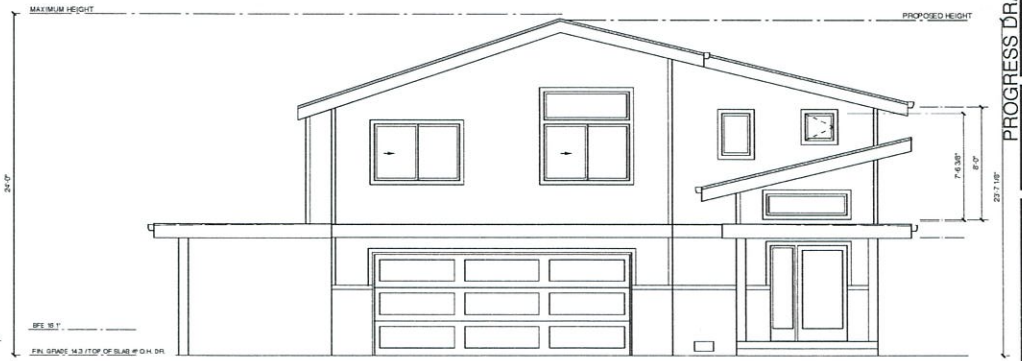


2 FRAMING SECTION @ STAIRWAY

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

WEST ELEVATION

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



EAST ELEVATION

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

ATTENTION FRAMER! CRITICAL!
SEE "S" SHEETS FOR STRUCTURAL INFORMATION

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PROGRESS DRAWINGS NOT FOR CONSTRUCTION

Custom Home Plan for:
Mali McReynolds
Pacific City, Oregon

Exterior Elevations

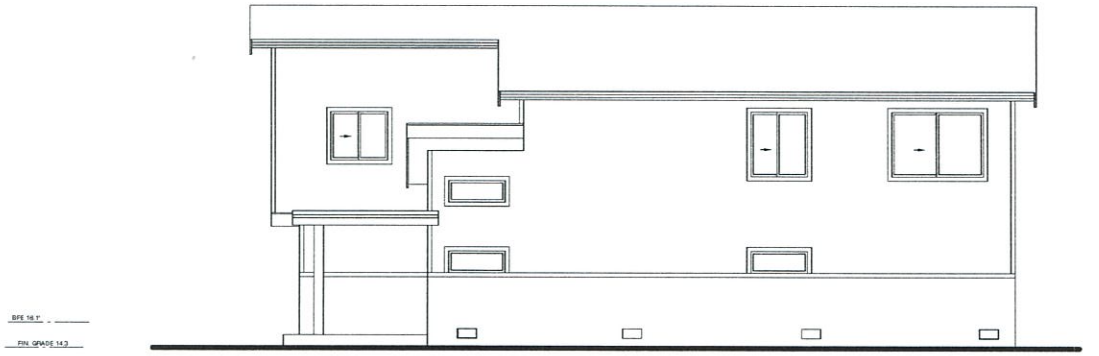
REVISIONS
09.02.24
09.16.24
09.26.24
09.27.24
10.04.24
10.06.24
10.07.24
10.08.24

ORIGIN DATE
08.20.24

PROJECT NO
2524

SHEET
3

FIGURE 4: Proposed Plans and Elevations



NORTH ELEVATION

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

SOUTH ELEVATION

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

ATTENTION FRAMER!
CRITICAL!
SEE "S" SHEETS FOR STRUCTURAL INFORMATION

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Custom Home Plan for:
Mali McReynolds
Pacific City, Oregon

Exterior Elevations

REVISIONS
09.02.24
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09.26.24
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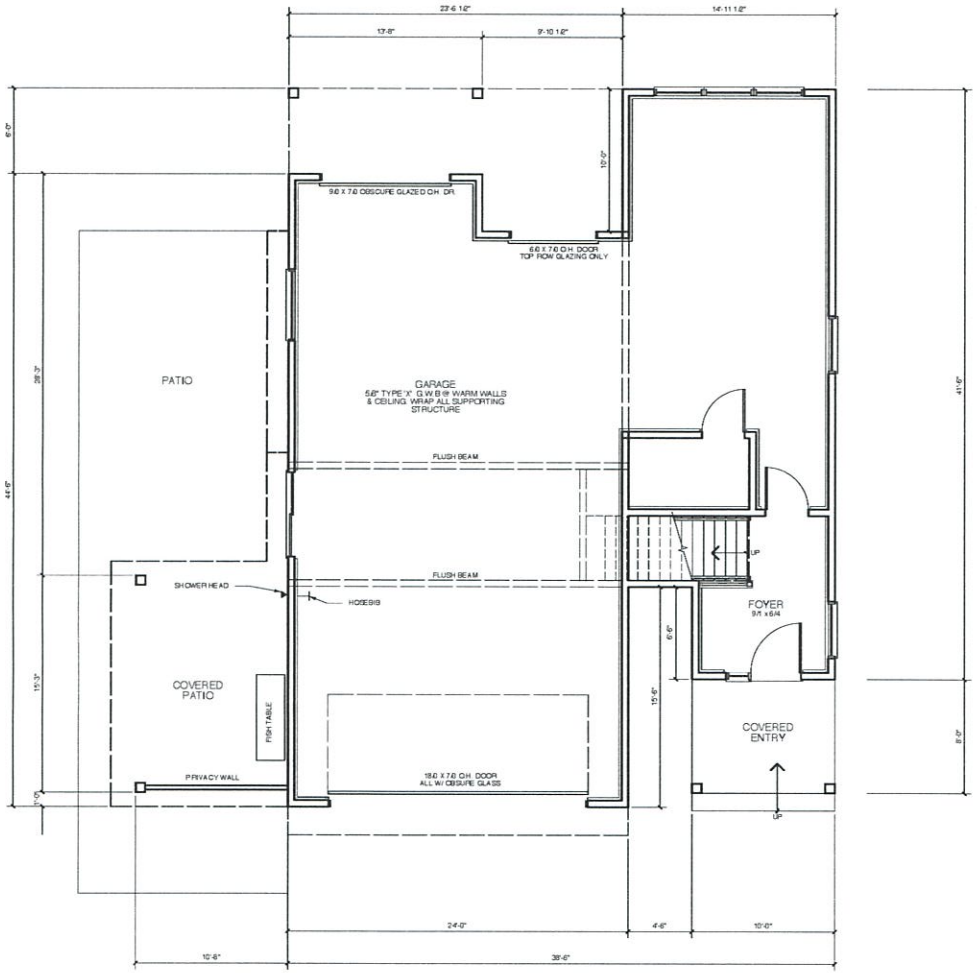
ORIGIN DATE
08.20.24

PROJECT NO.
2524

SHEET
4

PROGRESS DRAWINGS NOT FOR CONSTRUCTION

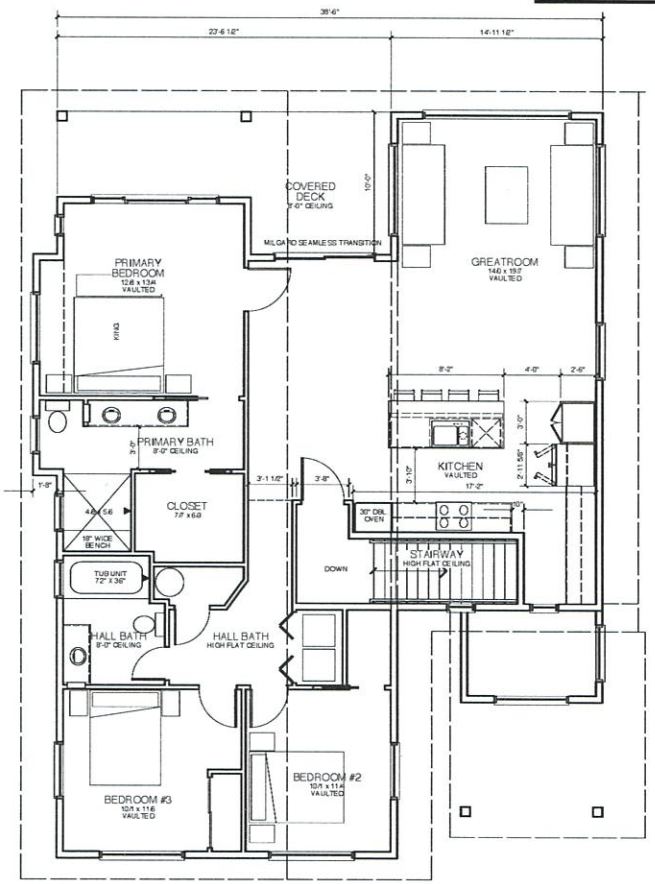
FIGURE 4: Proposed Plans and Elevations



GARAGE LEVEL FLOOR PLAN

90 SQ. FT. FOYER (INCLUDES EXTERIOR WALLS, EXCLUDES STAIRS)

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



MAIN FLOOR PLAN

1,609 SQ. FT. LIVING AREA INCLUDES EXTERIOR WALLS AND STAIRS

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

ATTENTION FRAMER! CRITICAL!
SEE "S" SHEETS FOR STRUCTURAL INFORMATION

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Custom Home Plan for:
Mall McReynolds
Pacific City, Oregon

Floor Plans

REVISIONS
09.01.24
09.16.24
09.26.24
09.27.24
10.04.24
10.06.24
10.07.24
10.08.24

ORIGIN DATE
08.20.24

PROJECT NO.
2524

SHEET

PROGRESS DRAWINGS NOT FOR CONSTRUCTION

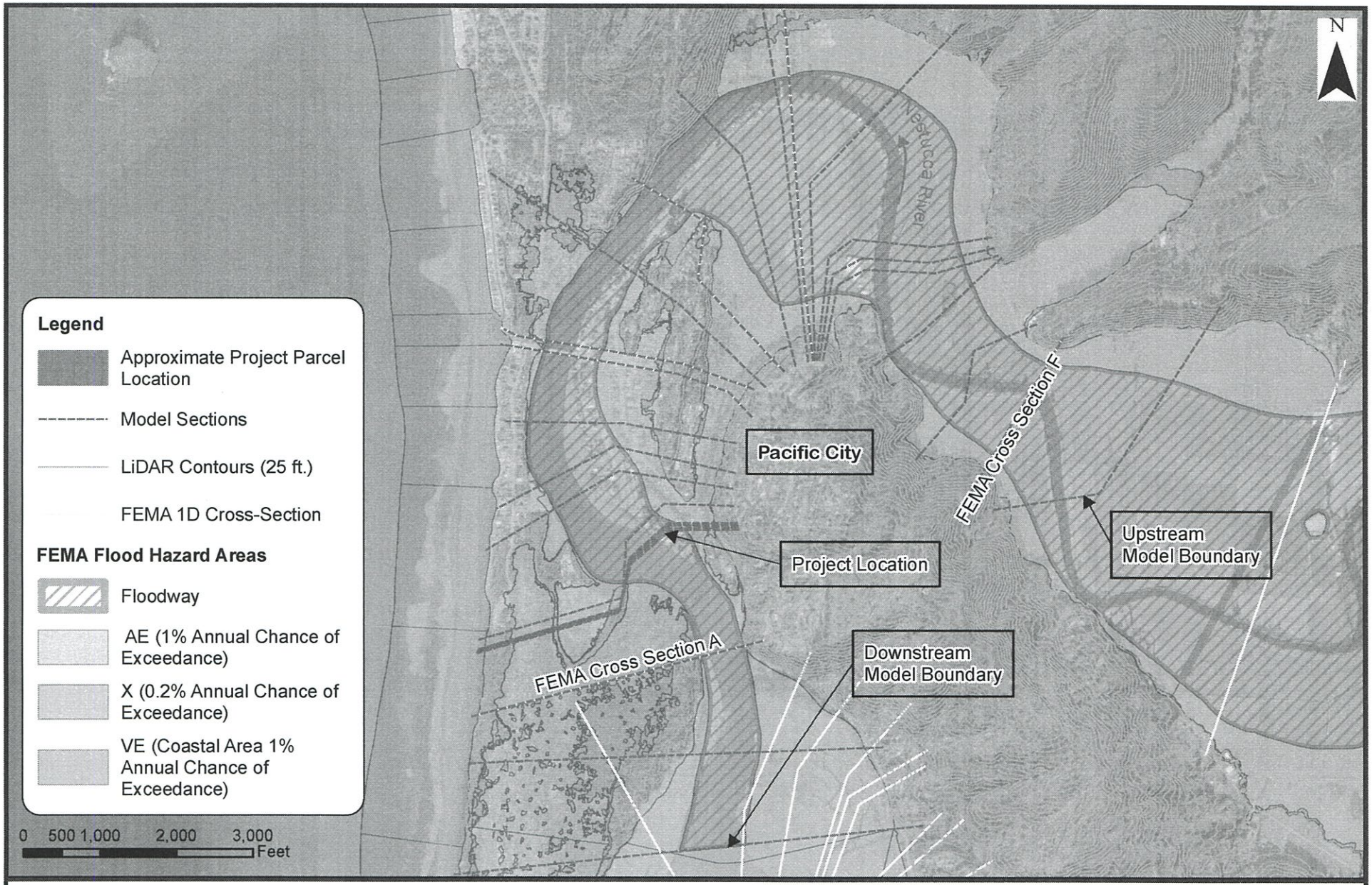


FIGURE 5

Hydraulic Analysis Overview Map of Proposed Project

35700 Airport Way
Hydraulic Analysis Report

WATERWAYS CONSULTING, INC.
Santa Cruz, CA | watways.com | Portland, OR

Attachment A

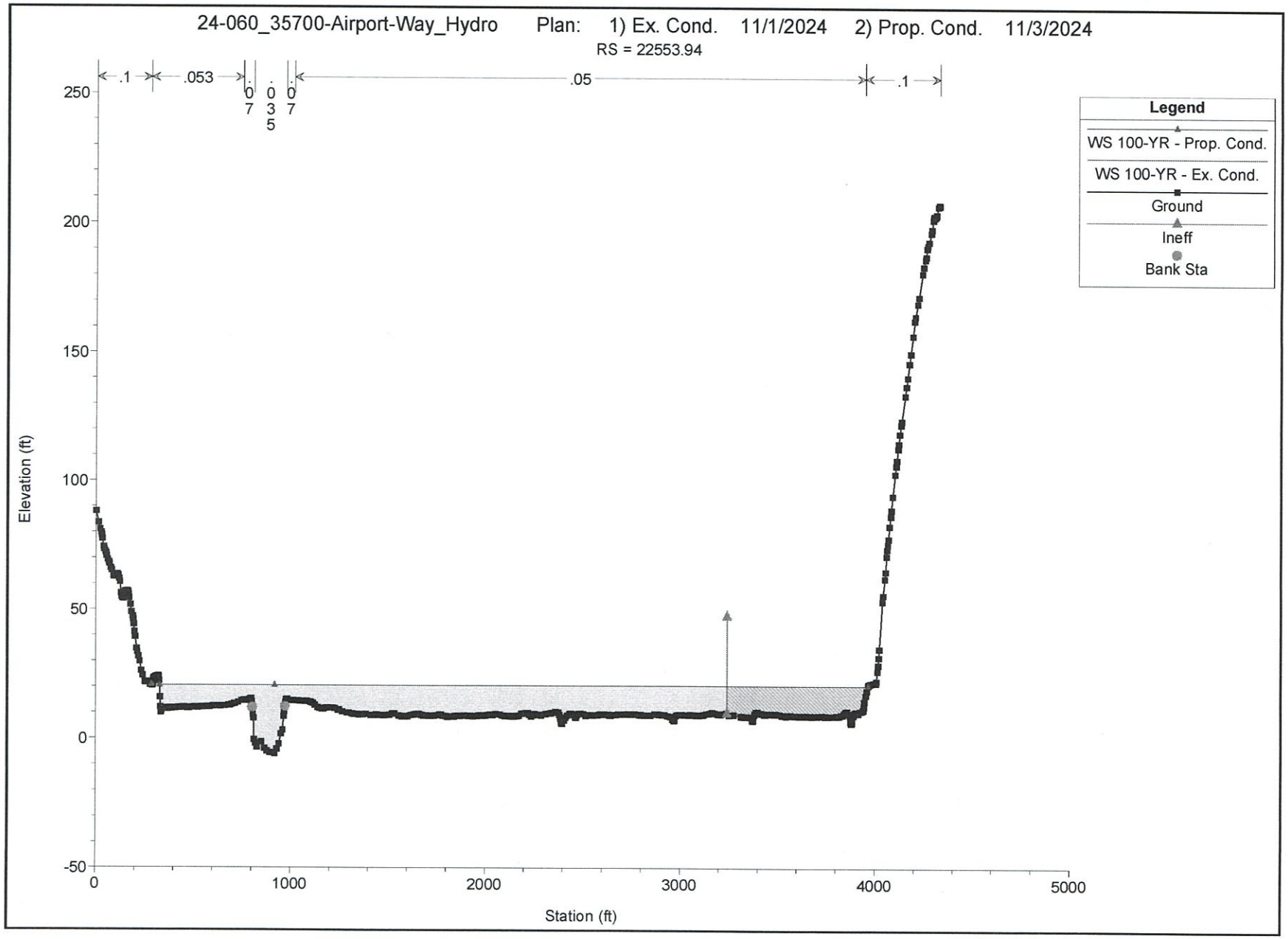
HEC-RAS Output Files

HEC-RAS River: Nestucca River Reach: Lower Profile: 100-YR

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Lower	22553.94	100-YR	Ex. Cond.	49700.00	-5.99	20.47	12.22	20.52	0.000091	3.07	32160.19	3643.05	0.11
Lower	22553.94	100-YR	Prop. Cond.	49700.00	-5.99	20.47	12.22	20.52	0.000091	3.07	32160.36	3643.06	0.11
Lower	21008.6	100-YR	Ex. Cond.	49700.00	-8.92	20.06		20.28	0.000261	5.20	17807.54	1743.58	0.20
Lower	21008.6	100-YR	Prop. Cond.	49700.00	-8.92	20.06		20.28	0.000261	5.20	17807.65	1743.58	0.20
Lower	20157.05	100-YR	Ex. Cond.	49700.00	-9.15	19.91	12.36	20.07	0.000214	4.44	19949.16	2301.84	0.17
Lower	20157.05	100-YR	Prop. Cond.	49700.00	-9.15	19.91	12.36	20.07	0.000214	4.44	19949.27	2301.85	0.17
Lower	19079.89	100-YR	Ex. Cond.	49700.00	-11.85	19.67		19.85	0.000231	5.04	20225.51	1888.65	0.18
Lower	19079.89	100-YR	Prop. Cond.	49700.00	-11.85	19.67		19.85	0.000231	5.04	20225.63	1888.66	0.18
Lower	18019.8	100-YR	Ex. Cond.	49700.00	-7.69	19.50	11.35	19.64	0.000188	4.33	22110.72	2667.83	0.16
Lower	18019.8	100-YR	Prop. Cond.	49700.00	-7.69	19.50	11.35	19.64	0.000188	4.33	22110.86	2667.83	0.16
Lower	17875.97	100-YR	Ex. Cond.	49700.00	-7.60	19.48	11.05	19.61	0.000170	4.14	22981.68	2676.65	0.16
Lower	17875.97	100-YR	Prop. Cond.	49700.00	-7.60	19.48	11.05	19.61	0.000170	4.14	22981.83	2676.65	0.16
Lower	17653.2	100-YR	Ex. Cond.	49700.00	-4.67	19.50	11.28	19.57	0.000096	3.23	29177.87	3181.44	0.12
Lower	17653.2	100-YR	Prop. Cond.	49700.00	-4.67	19.50	11.28	19.57	0.000096	3.23	29178.07	3181.44	0.12
Lower	15949.74	100-YR	Ex. Cond.	49700.00	-7.67	19.45	9.86	19.48	0.000032	1.91	46592.88	4377.52	0.07
Lower	15949.74	100-YR	Prop. Cond.	49700.00	-7.67	19.45	9.86	19.48	0.000032	1.91	46593.16	4377.52	0.07
Lower	14728.64	100-YR	Ex. Cond.	49700.00	-9.90	19.40	10.23	19.44	0.000044	2.47	37193.02	3855.12	0.09
Lower	14728.64	100-YR	Prop. Cond.	49700.00	-9.90	19.40	10.23	19.44	0.000044	2.47	37193.29	3855.12	0.09
Lower	14621.23			Bridge									
Lower	14544.91	100-YR	Ex. Cond.	49700.00	-8.62	19.38	10.32	19.42	0.000046	2.55	36776.38	3870.43	0.10
Lower	14544.91	100-YR	Prop. Cond.	49700.00	-8.62	19.38	10.32	19.42	0.000046	2.55	36776.66	3870.43	0.10
Lower	13541.26	100-YR	Ex. Cond.	49700.00	-7.81	19.33	10.21	19.38	0.000052	2.51	32684.44	3280.23	0.10
Lower	13541.26	100-YR	Prop. Cond.	49700.00	-7.81	19.33	10.21	19.38	0.000052	2.51	32684.66	3280.23	0.10
Lower	12396	100-YR	Ex. Cond.	49700.00	-3.59	18.46		19.18	0.000466	7.08	9064.17	2047.98	0.30
Lower	12396	100-YR	Prop. Cond.	49700.00	-3.59	18.46		19.18	0.000466	7.08	9064.25	2047.98	0.30
Lower	11367.2	100-YR	Ex. Cond.	49700.00	-3.05	17.68	9.51	18.61	0.000627	7.86	7498.27	2007.74	0.35
Lower	11367.2	100-YR	Prop. Cond.	49700.00	-3.05	17.68	9.51	18.61	0.000627	7.86	7498.36	2007.76	0.35
Lower	10048.77	100-YR	Ex. Cond.	49700.00	-3.49	16.91	9.18	17.76	0.000628	7.57	8607.56	2055.70	0.34
Lower	10048.77	100-YR	Prop. Cond.	49700.00	-3.49	16.91	9.18	17.76	0.000628	7.57	8607.73	2055.72	0.34
Lower	9942.323			Bridge									
Lower	9904.361	100-YR	Ex. Cond.	49700.00	-8.44	16.76	8.05	17.45	0.000550	6.97	9949.64	2093.46	0.31
Lower	9904.361	100-YR	Prop. Cond.	49700.00	-8.44	16.76	8.05	17.45	0.000550	6.97	9949.84	2093.46	0.31
Lower	8988.11	100-YR	Ex. Cond.	49700.00	-4.80	16.54	8.14	16.90	0.000336	5.39	12835.98	1977.94	0.24
Lower	8988.11	100-YR	Prop. Cond.	49700.00	-4.80	16.54	8.14	16.90	0.000336	5.39	12836.28	1977.97	0.24
Lower	8192.259	100-YR	Ex. Cond.	49700.00	-18.19	16.28	6.30	16.65	0.000314	5.51	12794.84	2036.13	0.24
Lower	8192.259	100-YR	Prop. Cond.	49700.00	-18.19	16.28	6.30	16.65	0.000314	5.51	12795.18	2036.14	0.24
Lower	7839.108	100-YR	Ex. Cond.	49700.00	-6.96	16.17	6.76	16.54	0.000316	5.20	12341.71	1874.39	0.24
Lower	7839.108	100-YR	Prop. Cond.	49700.00	-6.96	16.17	6.76	16.54	0.000316	5.20	12342.04	1874.41	0.24
Lower	6628.945	100-YR	Ex. Cond.	49700.00	-1.36	15.96	6.84	16.19	0.000213	3.94	14085.53	3167.65	0.19
Lower	6628.945	100-YR	Prop. Cond.	49700.00	-1.36	15.96	6.84	16.19	0.000213	3.94	14085.87	3167.67	0.19
Lower	6392.75	100-YR	Ex. Cond.	49700.00	-2.66	15.91	6.22	16.14	0.000198	3.95	14702.60	2923.31	0.18
Lower	6392.75	100-YR	Prop. Cond.	49700.00	-2.66	15.91	6.22	16.14	0.000198	3.95	14702.96	2923.32	0.18
Lower	6374.74	100-YR	Ex. Cond.	49700.00	-2.76	15.91	6.17	16.14	0.000199	3.96	14752.78	2944.51	0.19
Lower	6374.74	100-YR	Prop. Cond.	49700.00	-2.76	15.91	6.17	16.14	0.000199	3.97	14670.74	2903.94	0.19
Lower	6359.73	100-YR	Ex. Cond.	49700.00	-2.84	15.90	6.14	16.14	0.000198	3.96	14860.28	2887.36	0.18
Lower	6359.73	100-YR	Prop. Cond.	49700.00	-2.84	15.90	6.14	16.14	0.000198	3.96	14750.31	2835.25	0.18
Lower	6329.21	100-YR	Ex. Cond.	49700.00	-3.01	15.90	6.08	16.13	0.000195	3.94	15077.49	2820.66	0.18
Lower	6329.21	100-YR	Prop. Cond.	49700.00	-3.01	15.90	6.08	16.13	0.000195	3.95	14952.97	2767.12	0.18
Lower	6299.68	100-YR	Ex. Cond.	49700.00	-3.17	15.90	5.93	16.12	0.000188	3.89	15392.66	2675.12	0.18
Lower	6299.68	100-YR	Prop. Cond.	49700.00	-3.17	15.90	5.93	16.12	0.000188	3.89	15392.66	2675.12	0.18
Lower	4746.314	100-YR	Ex. Cond.	49700.00	-11.72	14.76	7.45	15.56	0.000672	7.30	7417.23	2442.34	0.34
Lower	4746.314	100-YR	Prop. Cond.	49700.00	-11.72	14.76	7.45	15.56	0.000672	7.30	7417.23	2442.34	0.34
Lower	3370.732	100-YR	Ex. Cond.	49700.00	-3.40	14.28	6.63	14.73	0.000430	5.53	9803.55	3594.57	0.27
Lower	3370.732	100-YR	Prop. Cond.	49700.00	-3.40	14.28	6.63	14.73	0.000430	5.53	9803.55	3594.57	0.27

HEC-RAS River: Nestucca River Reach: Lower Profile: 100-YR (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Lower	2099.855	100-YR	Ex. Cond.	49700.00	-3.90	14.15	5.85	14.31	0.000175	3.42	17693.71	5262.50	0.17
Lower	2099.855	100-YR	Prop. Cond.	49700.00	-3.90	14.15	5.85	14.31	0.000175	3.42	17693.71	5262.50	0.17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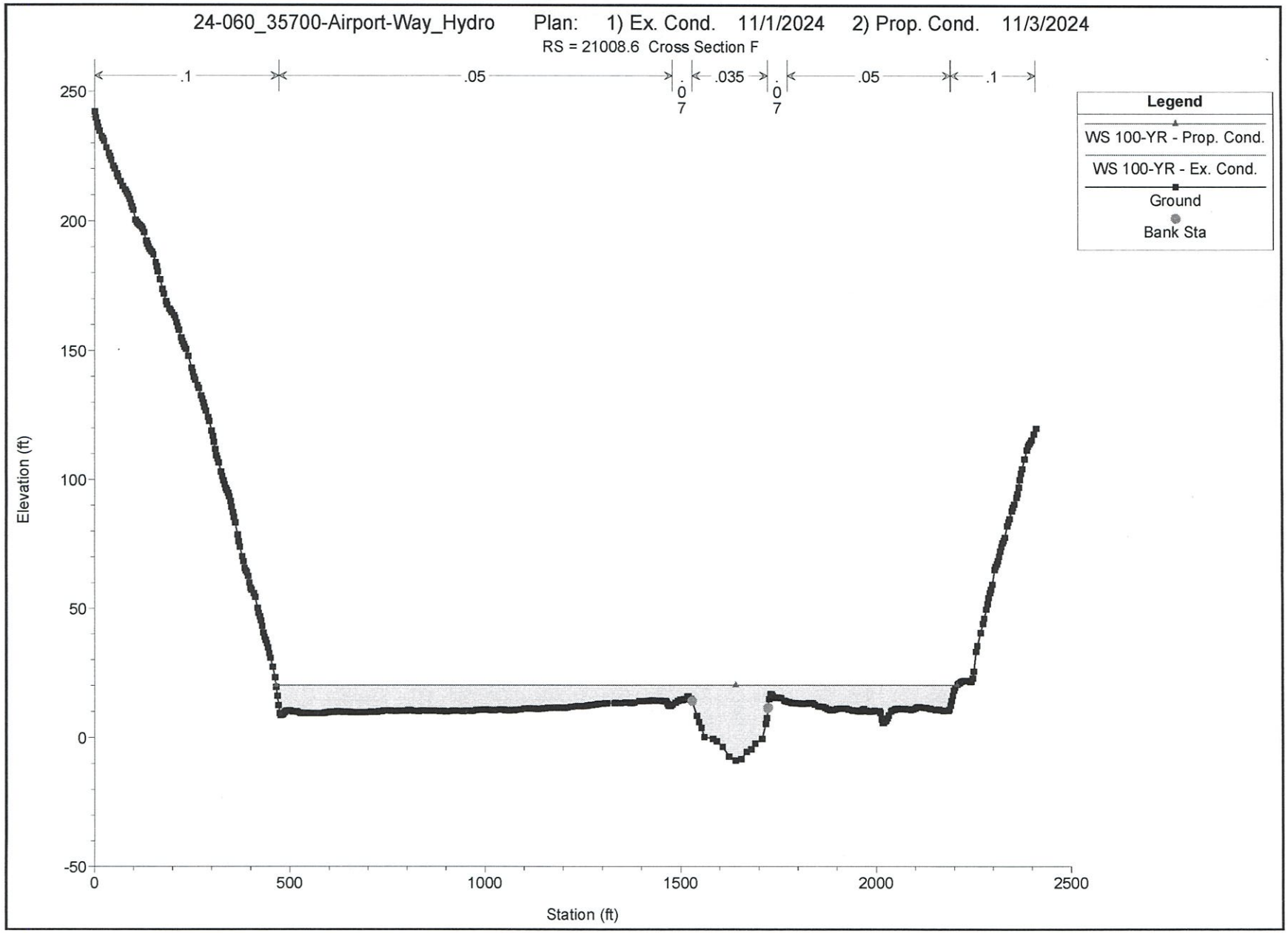
RS = 22553.94
.1
.053
.07
.035
.07
.05
.1
Legend
WS 100-YR - Prop. Cond.
WS 100-YR - Ex. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
250
200
150
100
50
0
-50
0
1000
2000
3000
4000
5000
Station (ft)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RS = 21008.6 Cross Section F
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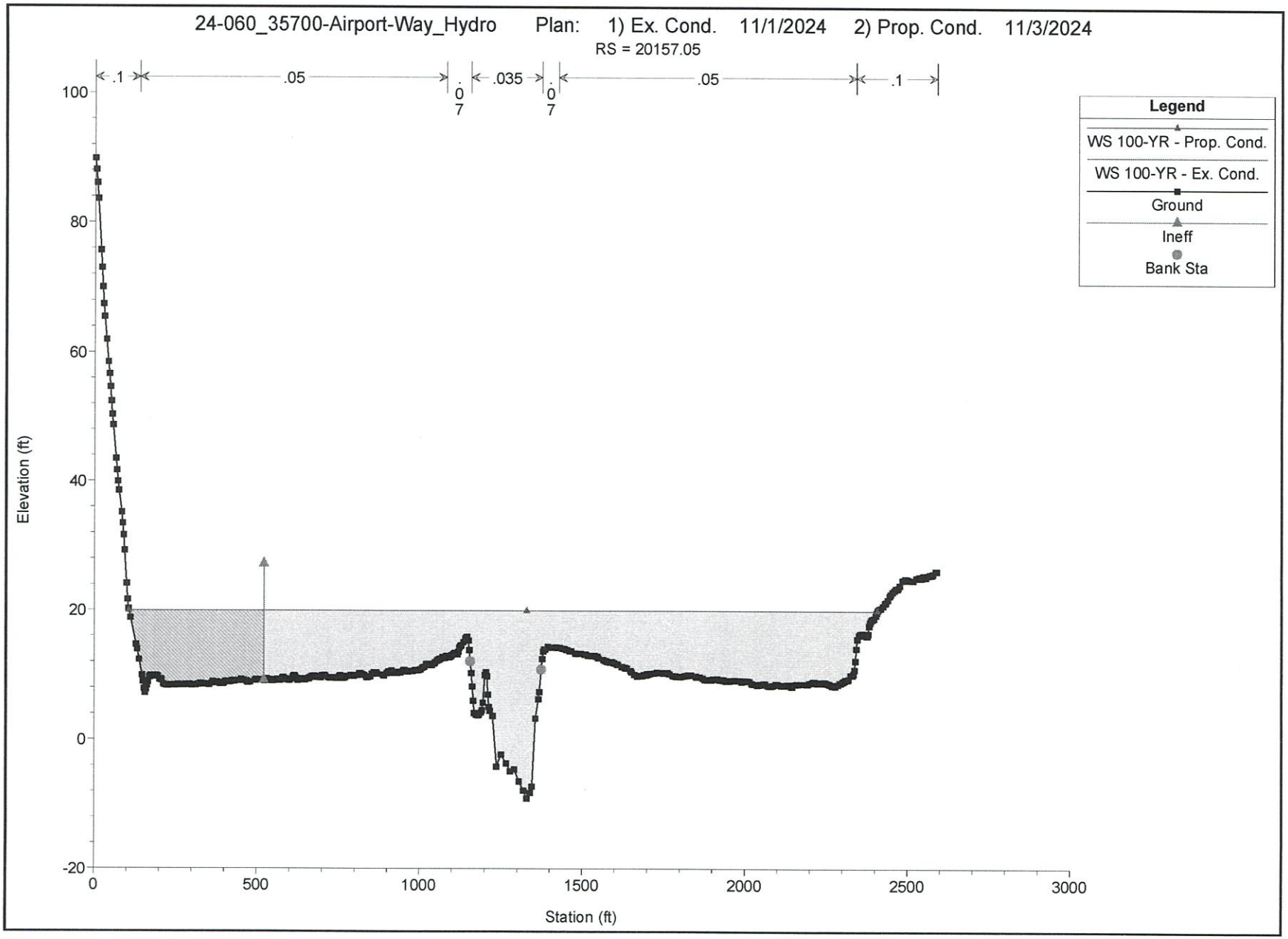
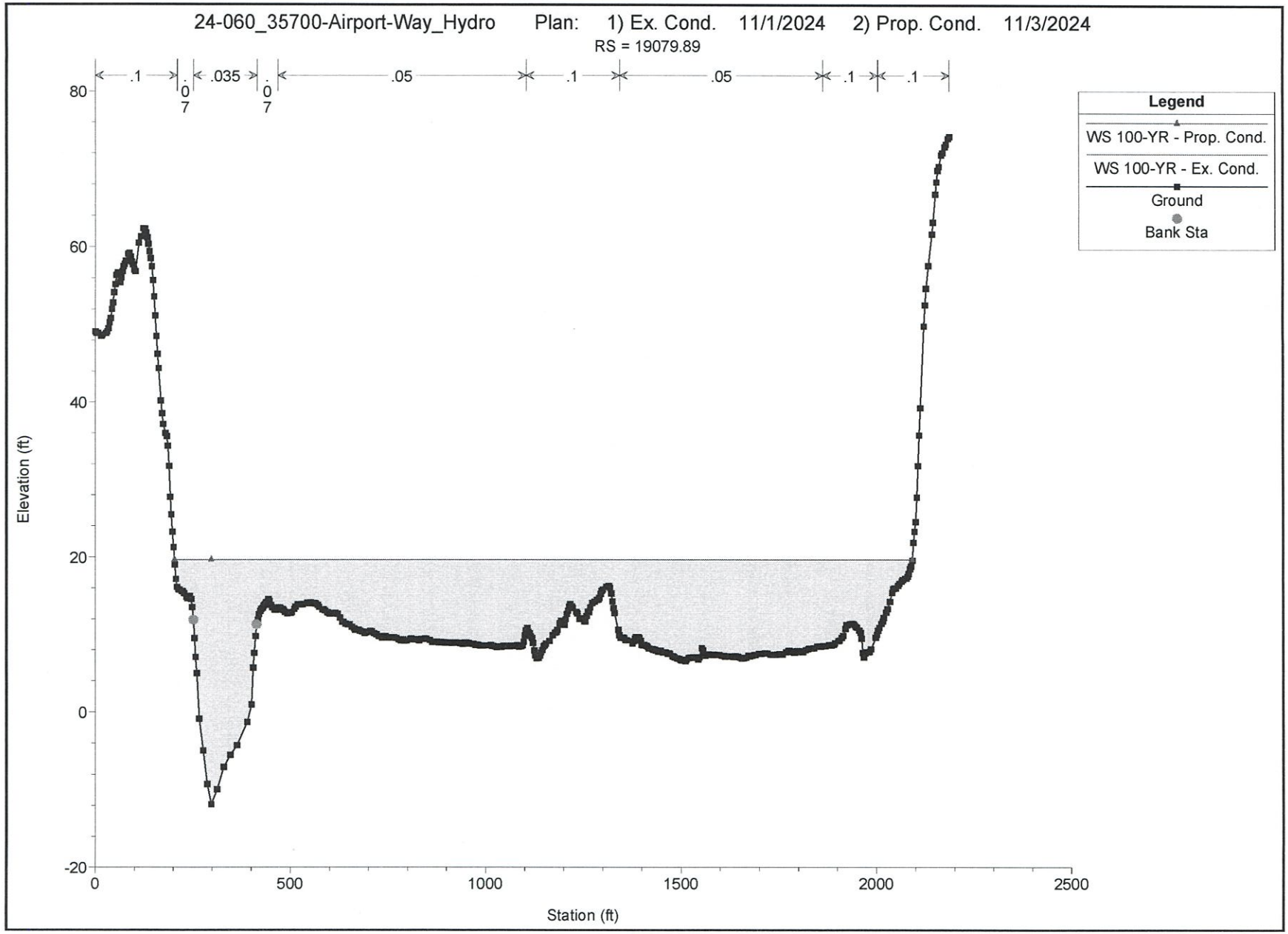
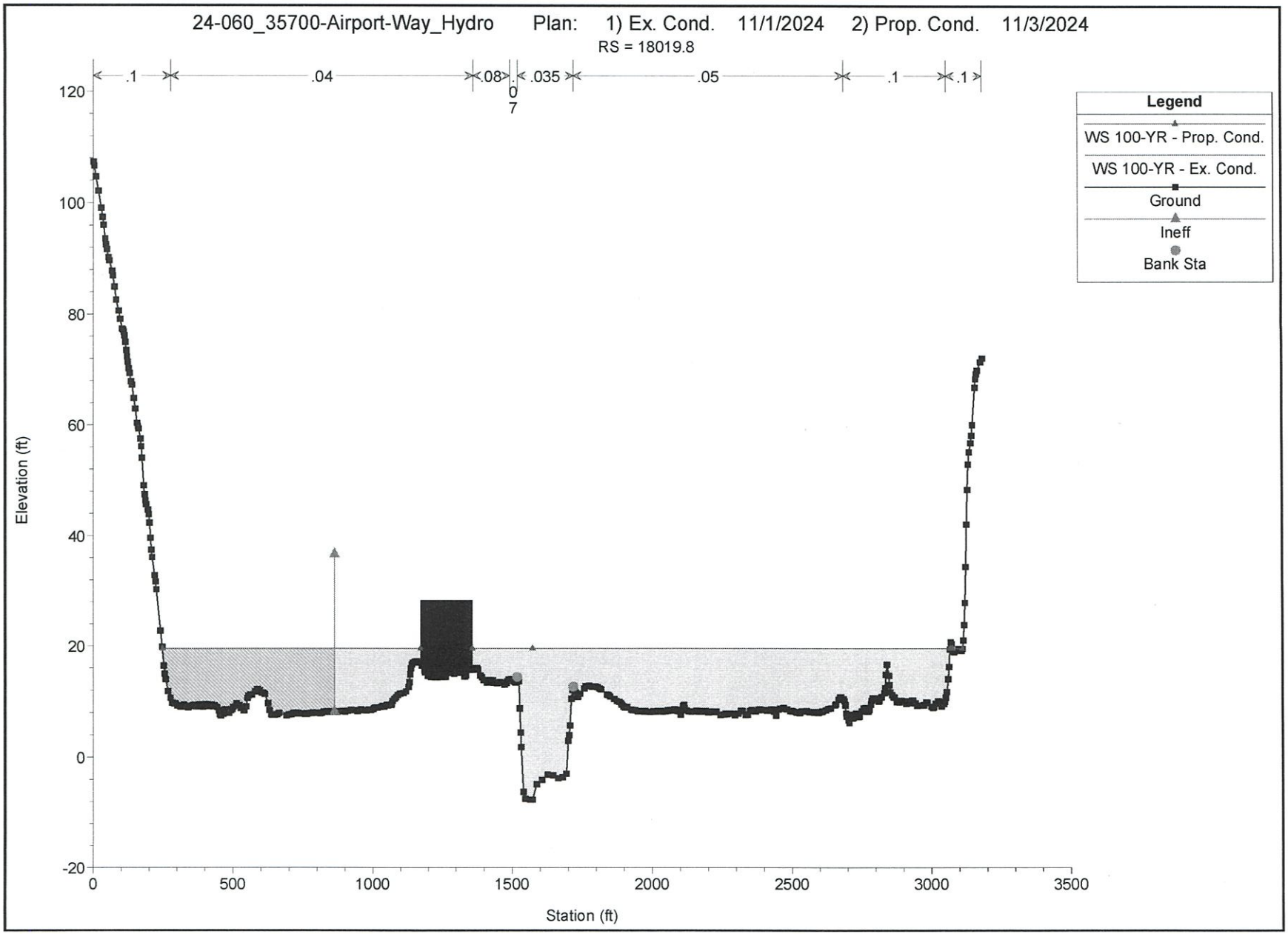
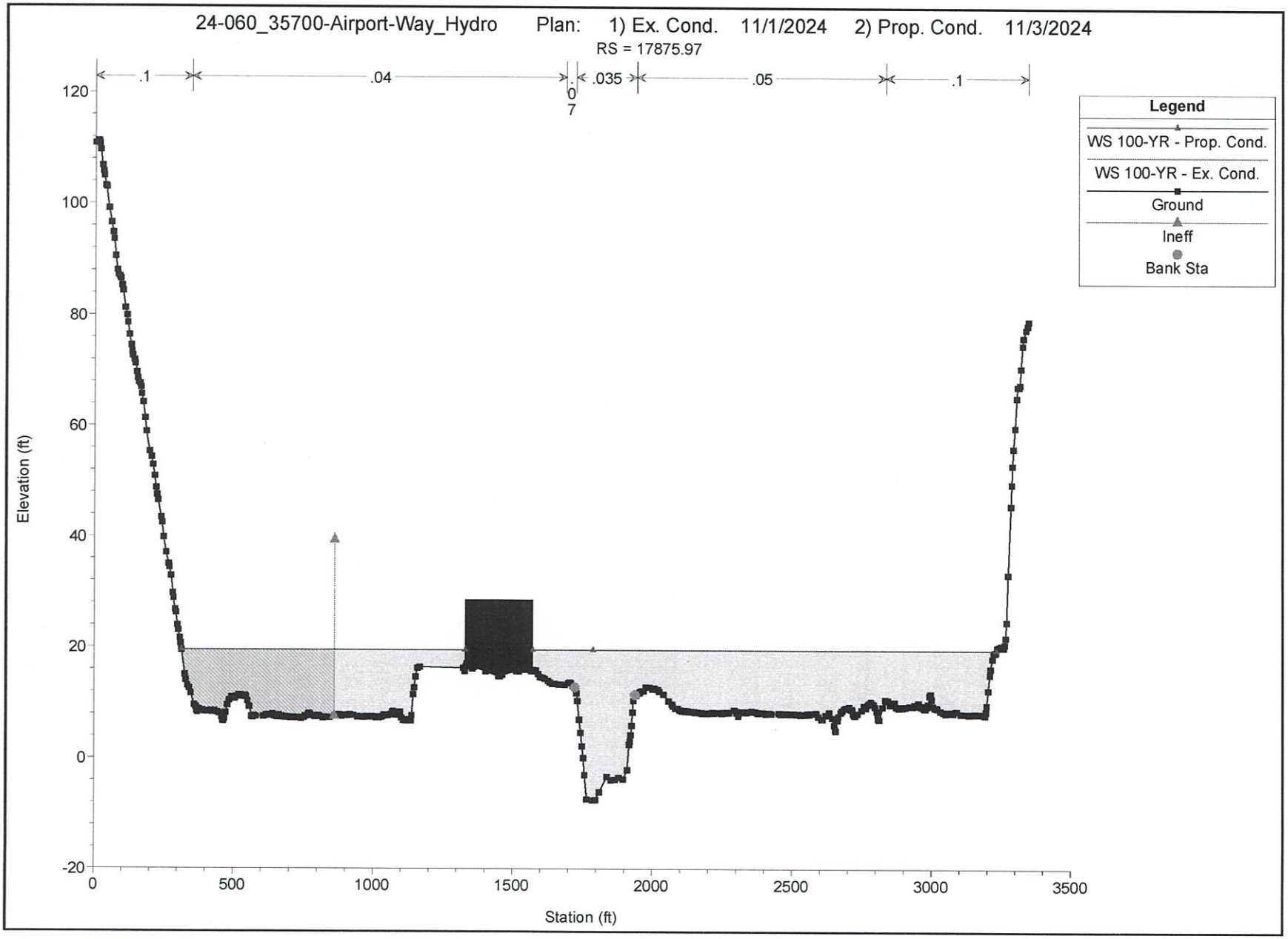
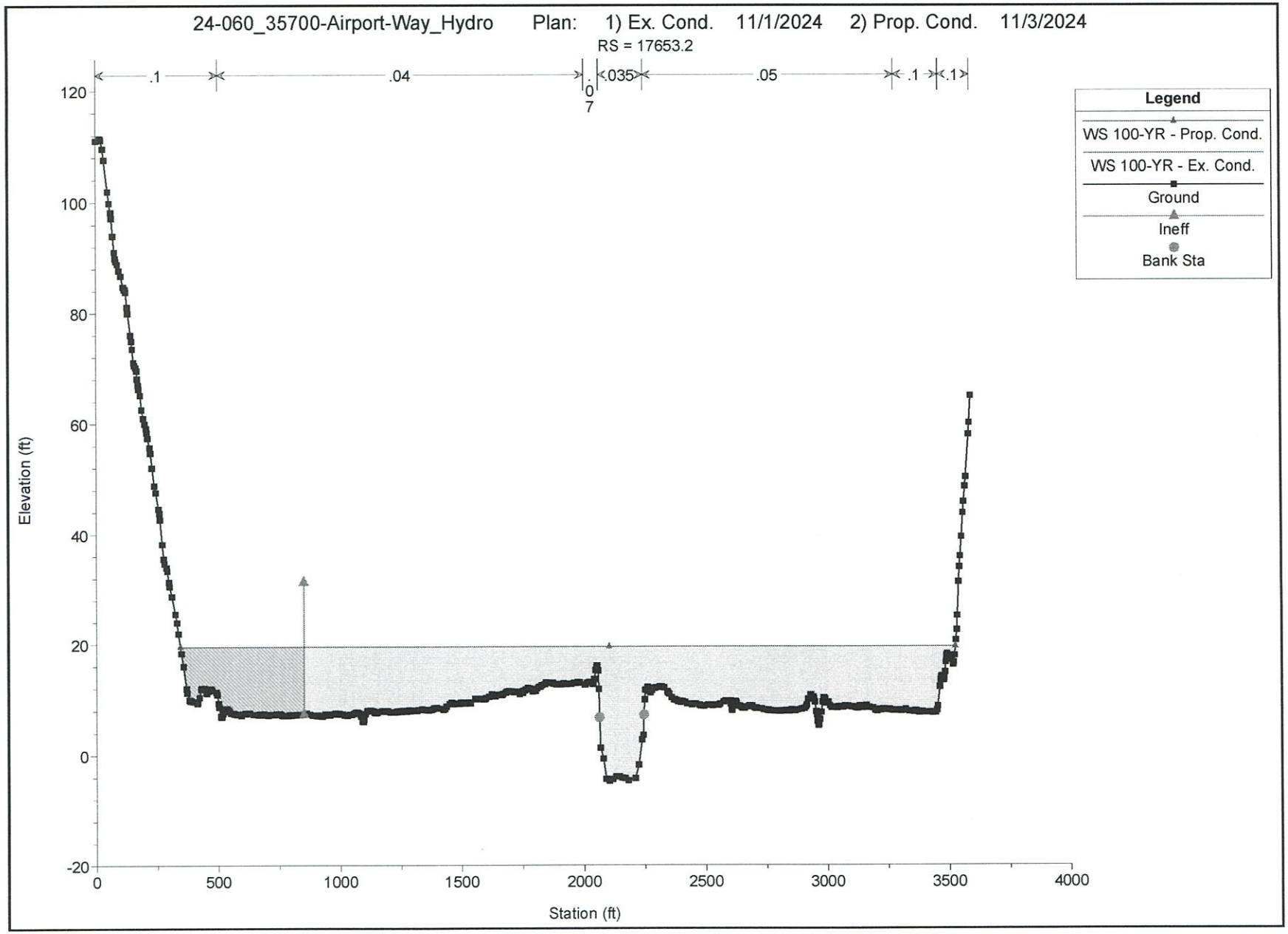
.05
.07
.035
.07
.05
.1
Legend
WS 100-YR - Prop. Cond.
WS 100-YR - Ex. Cond.
Ground
Bank Sta
Elevation (ft)
250
200
150
100
50
0
-50
0
500
1000
1500
2000
2500
Station (ft)

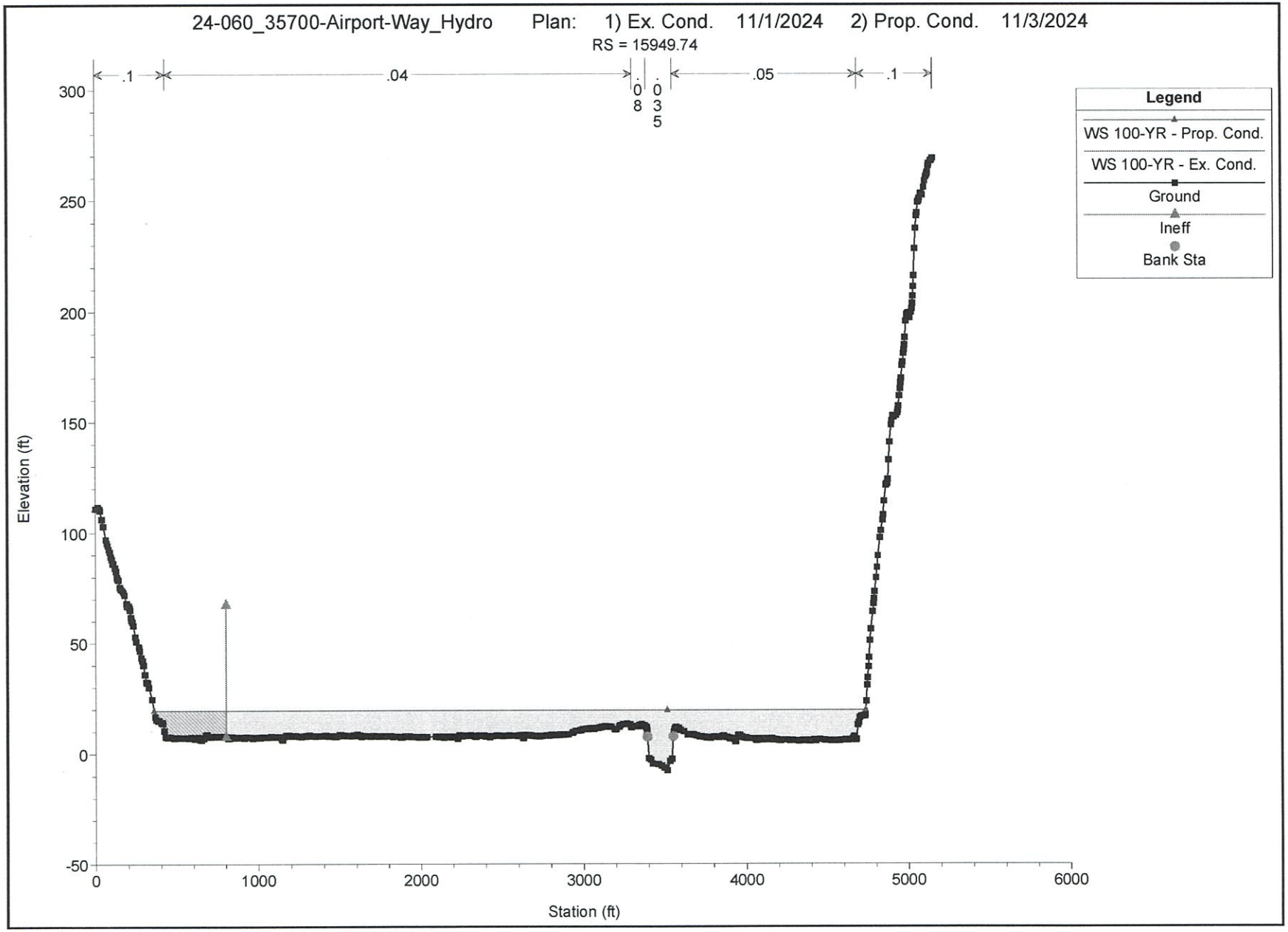

24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 20157.05
.1
.05
.07
.035
.07
.05
.1
Legend
WS 100-YR - Prop. Cond.
WS 100-YR - Ex. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
100
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
Station (ft)

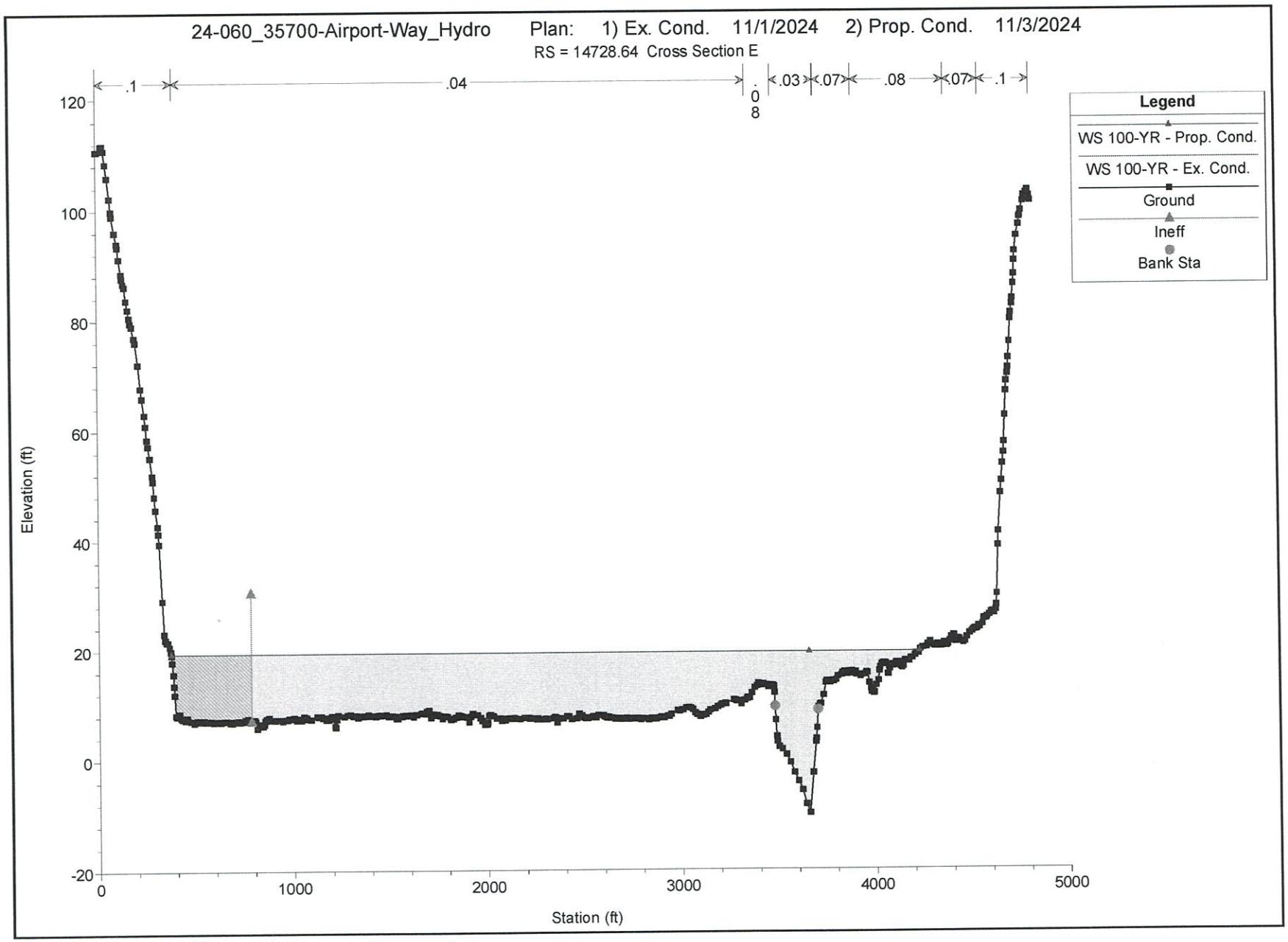

24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 19079.89
.1
.07
.035
.07
.05
.1
.05
.1
.1
Legend
WS 100-YR - Prop. Cond.
WS 100-YR - Ex. Cond.
Ground
Bank Sta
Elevation (ft)
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
Station (ft)

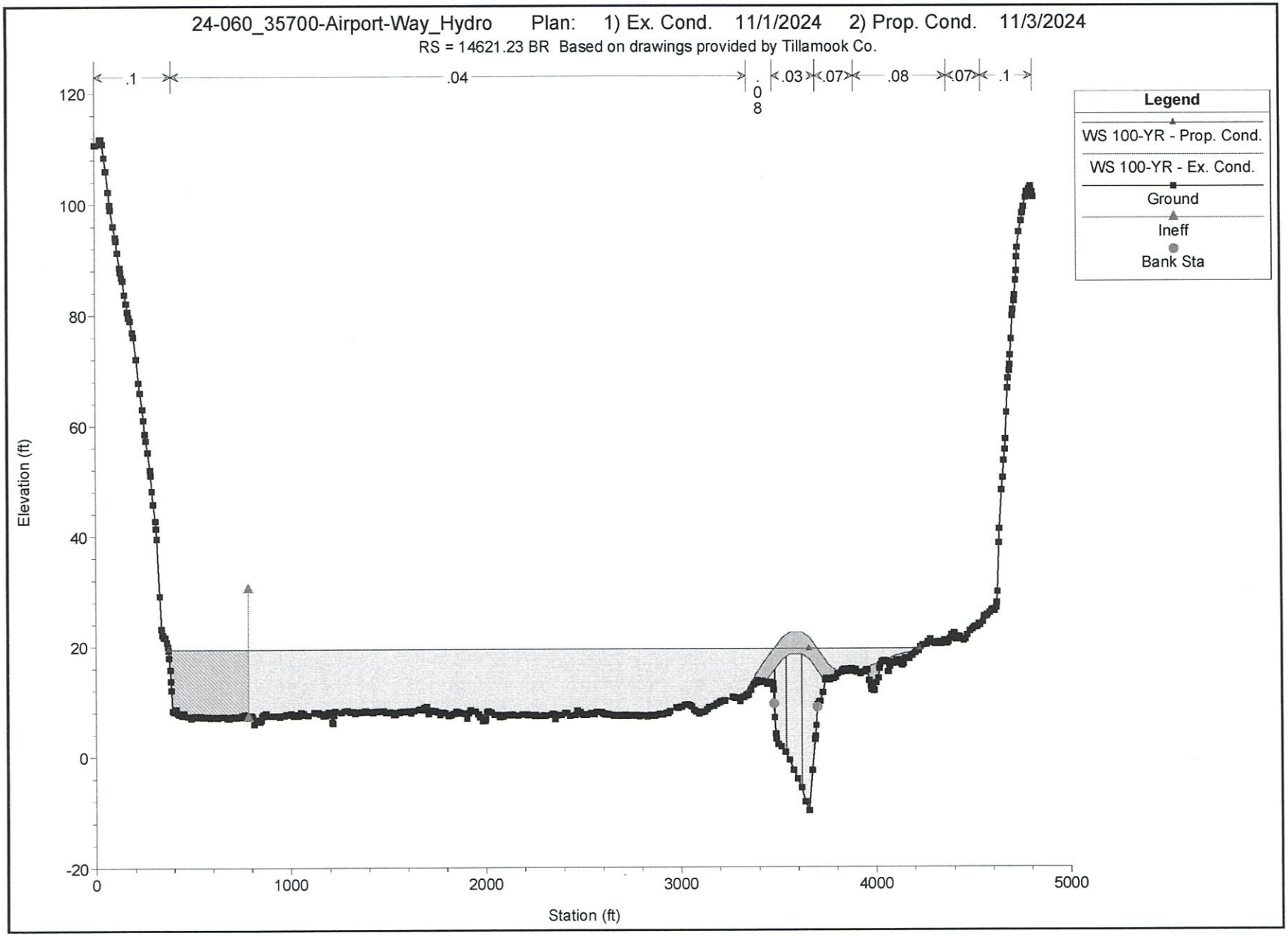

24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 18019.8
.1
.04
.08
.035
.05
.1
.1
0
7
Legend
WS 100-YR - Prop. Cond.
WS 100-YR - Ex. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
120
100
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
Station (ft)

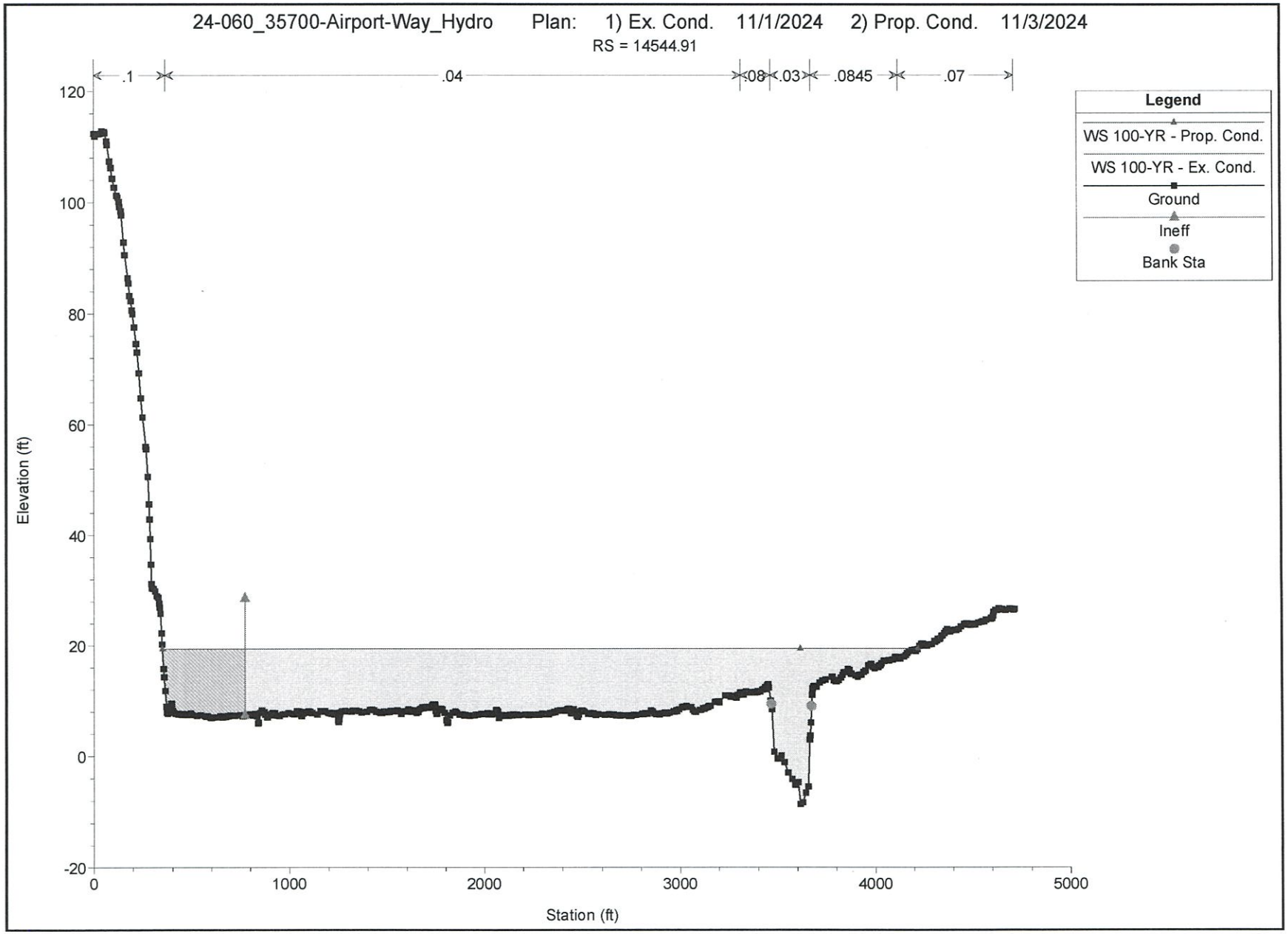

24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 17875.97
.1
.04
.035
.05
.1
Legend
WS 100-YR - Prop. Cond.
WS 100-YR - Ex. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
120
100
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
Station (ft)

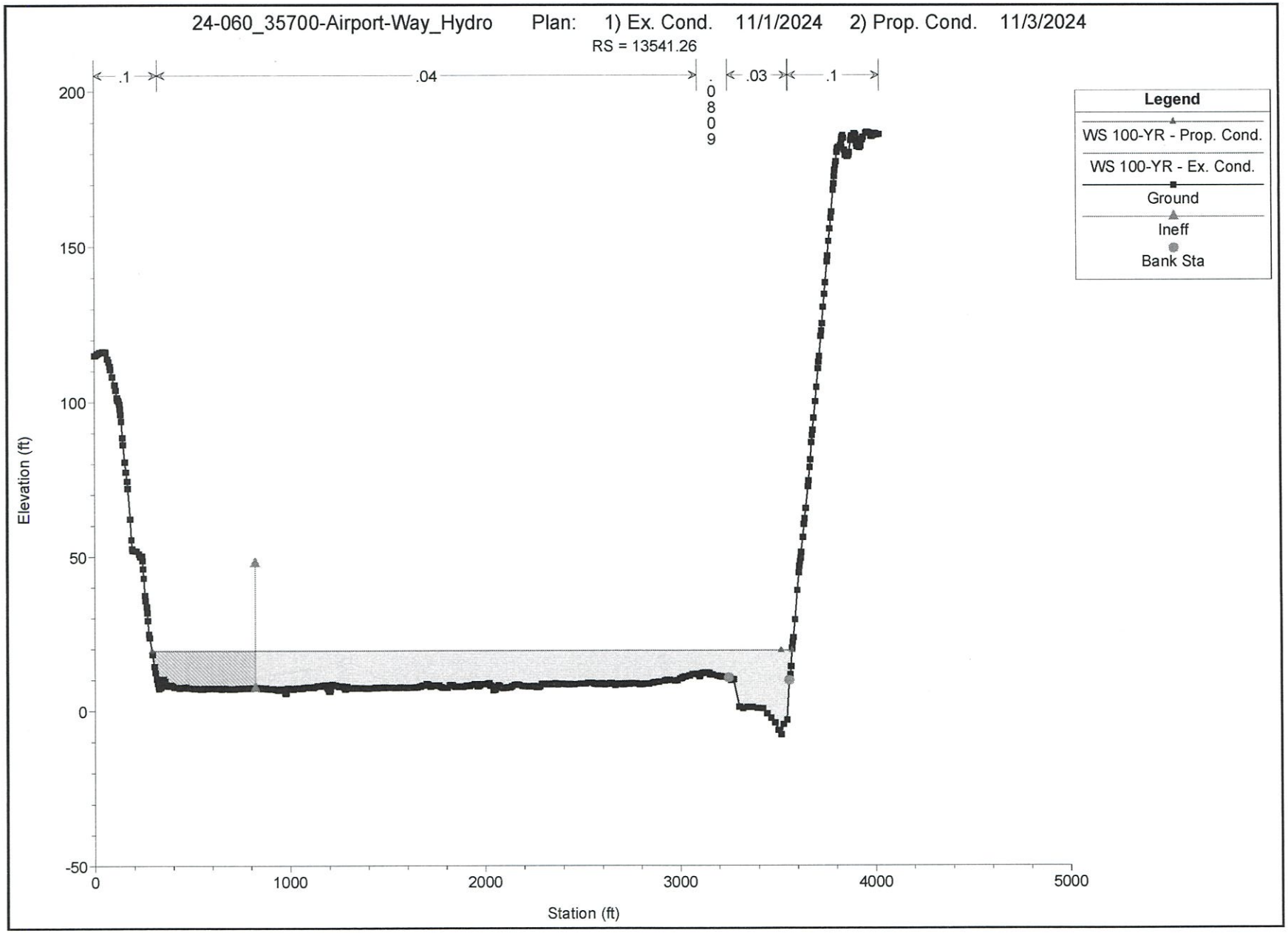

24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 17653.2
.1
.04
.07
.035
.05
.1
.1
Legend
WS 100-YR - Prop. Cond.
WS 100-YR - Ex. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
120
100
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
4000
Station (ft)

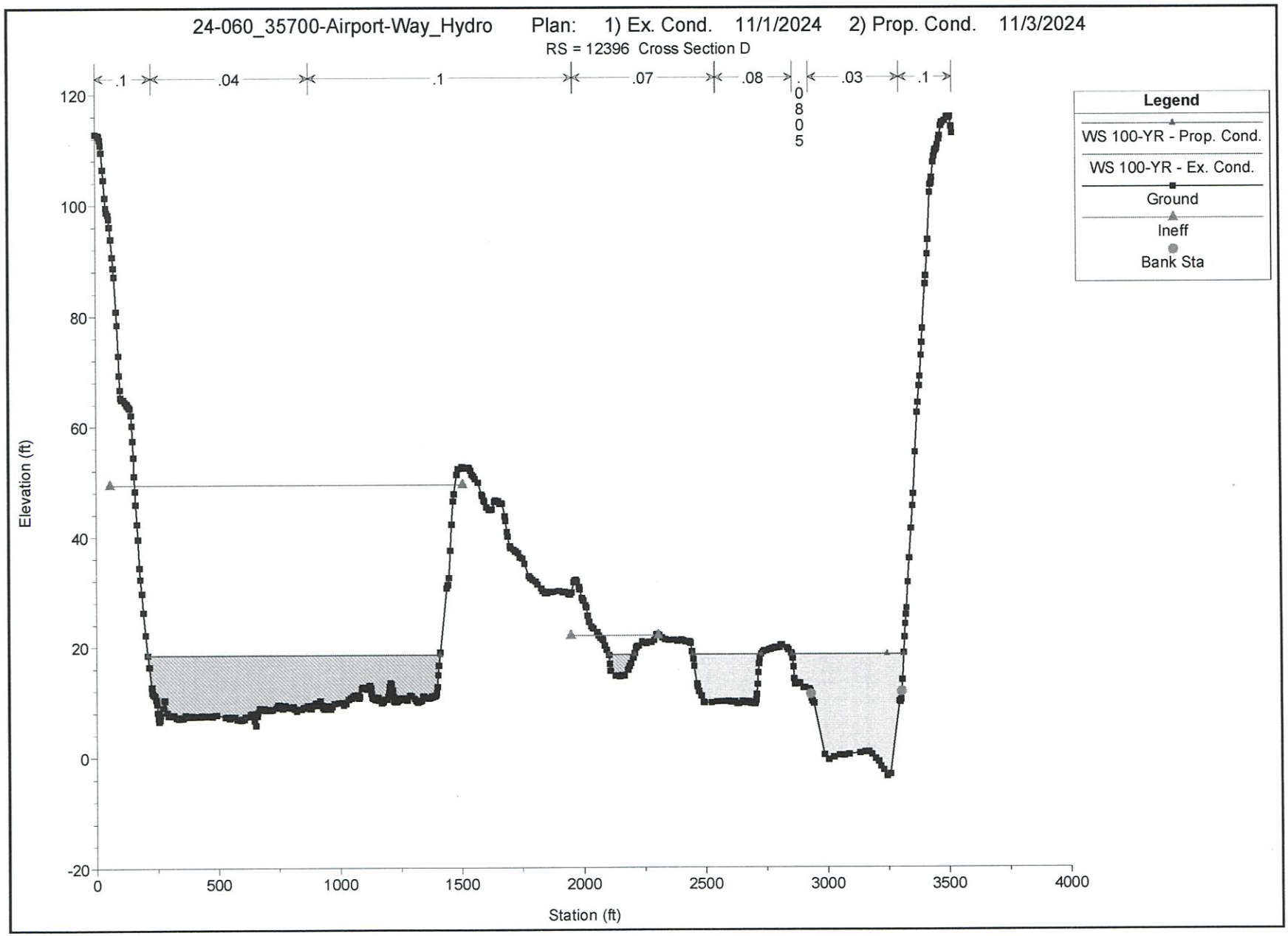

24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 15949.74
.1
.04
.08
.035
.05
.1
Legend
WS 100-YR - Prop. Cond.
WS 100-YR - Ex. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
300
250
200
150
100
50
0
-50
0
1000
2000
3000
4000
5000
6000
Station (ft)

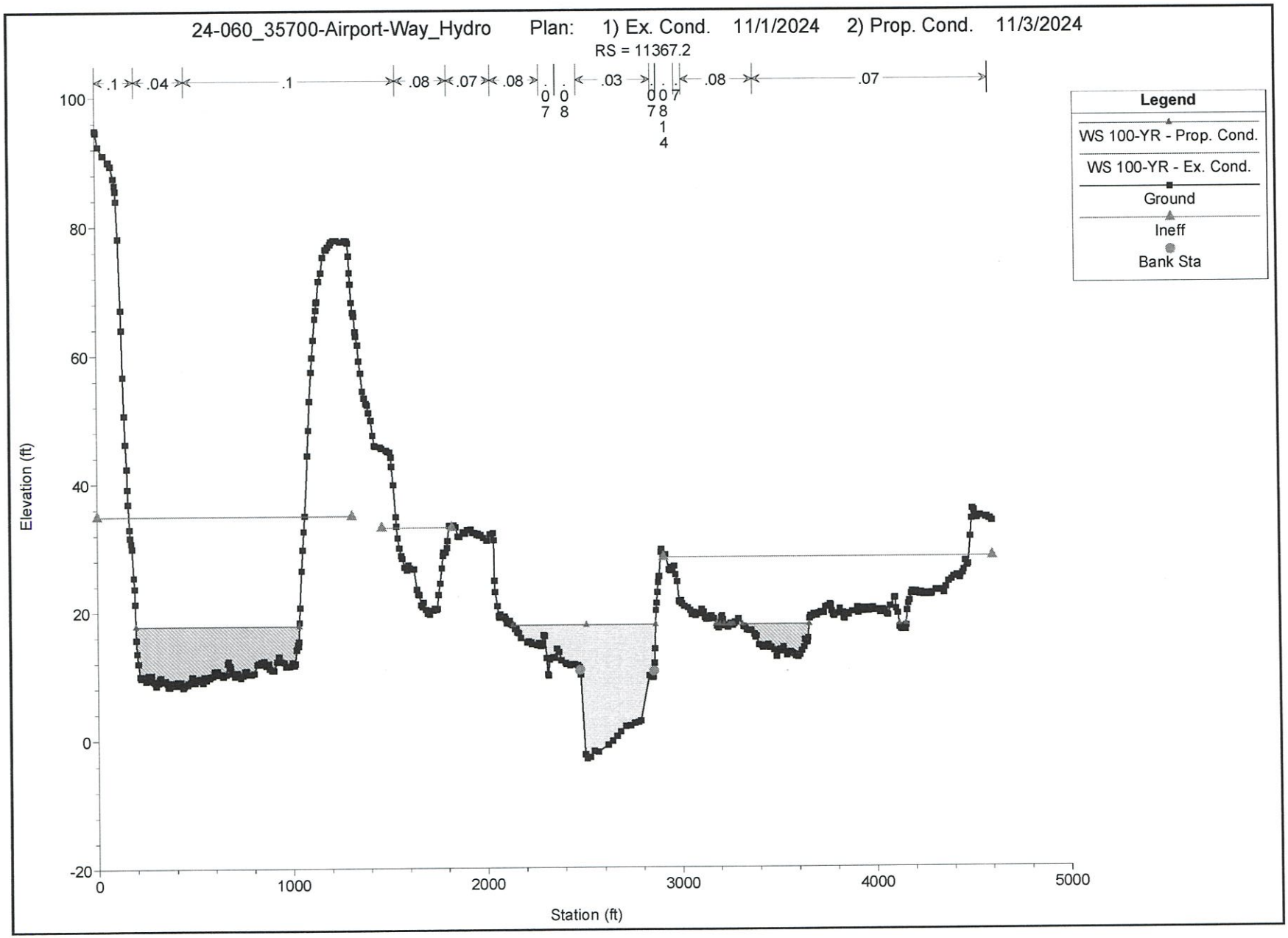

24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 14728.64 Cross Section E
.1
.04
.08
.03
.07
.08
.07
.1
Legend
WS 100-YR - Prop. Cond.
WS 100-YR - Ex. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
120
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
Station (ft)

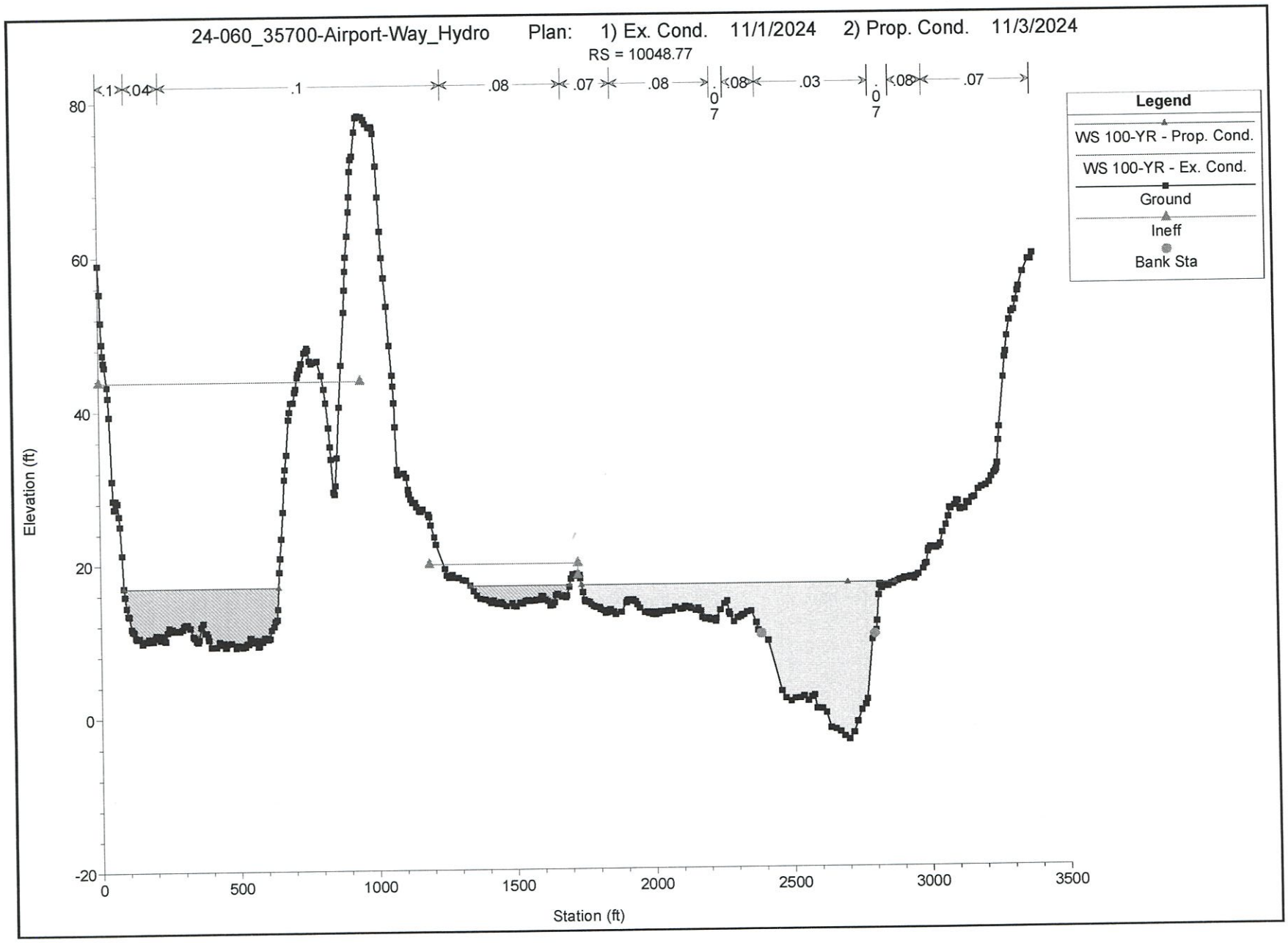

24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 14621.23 BR Based on drawings provided by Tillamook Co.
.1
.04
.08
.03
.07
.08
.07
.1
Legend
WS 100-YR - Prop. Cond.
WS 100-YR - Ex. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
120
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
Station (ft)

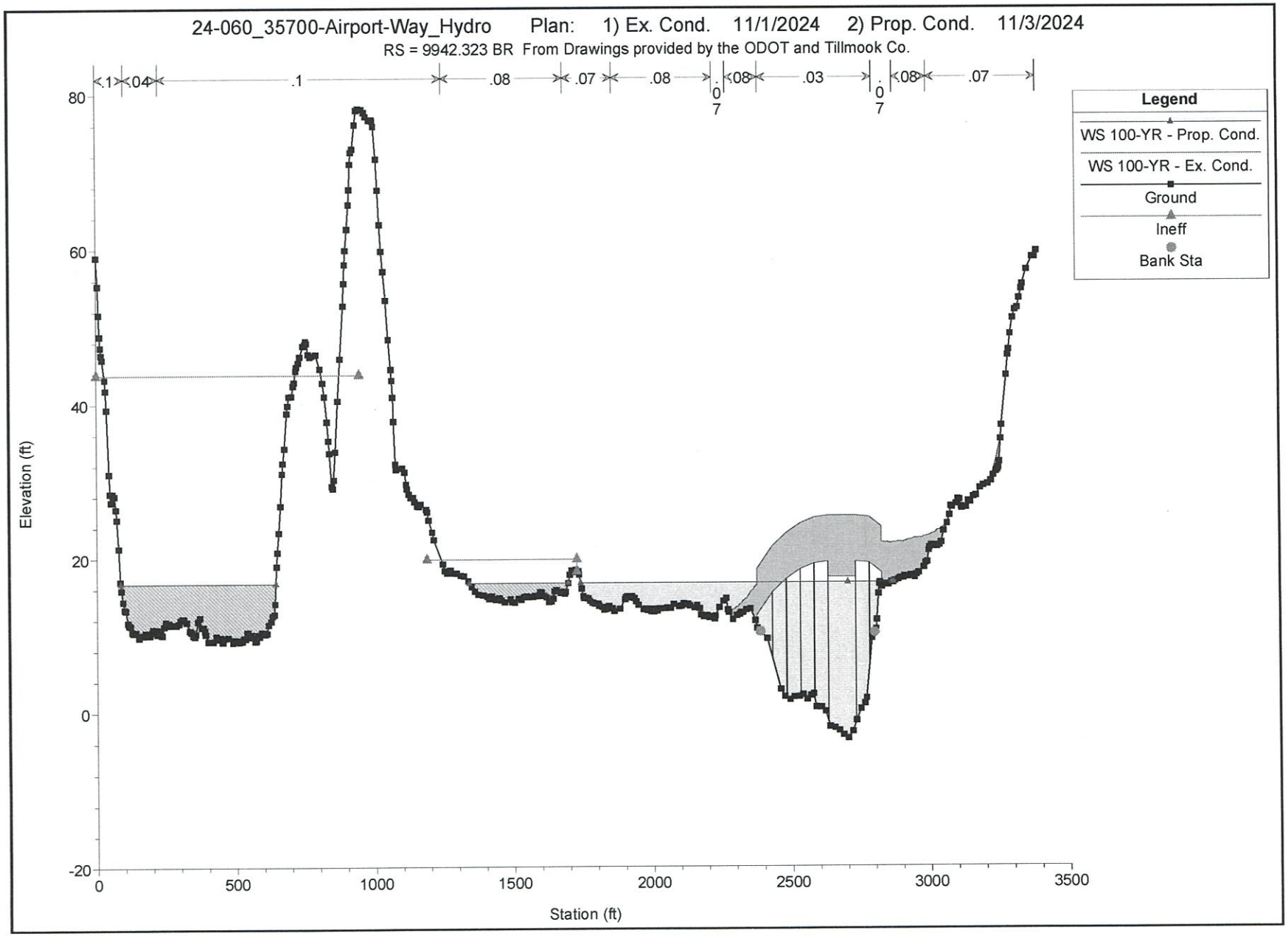

24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 14544.91
.1
.04
.08
.03
.0845
.07
Legend
WS 100-YR - Prop. Cond.
WS 100-YR - Ex. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
120
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
Station (ft)

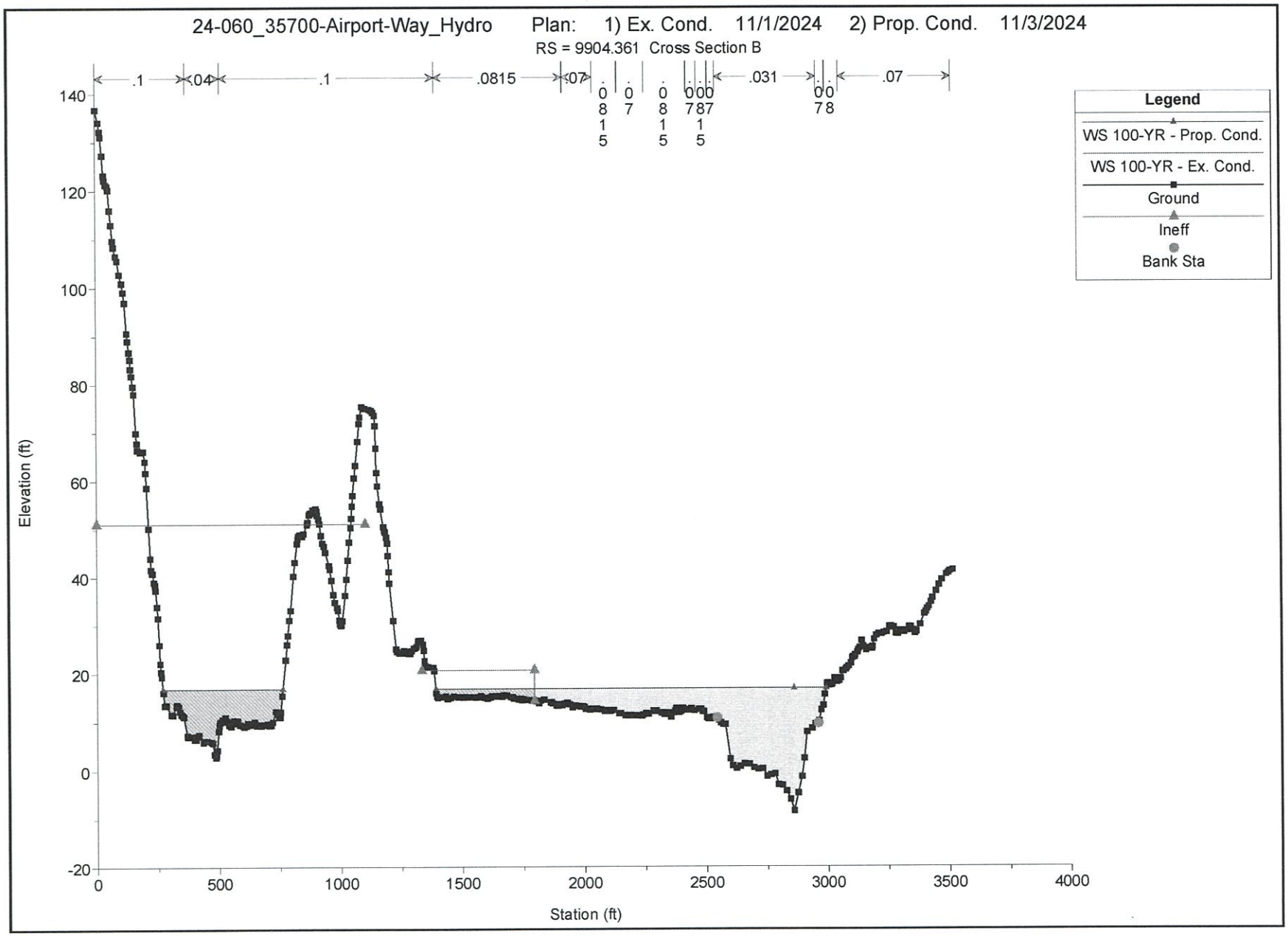

24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 13541.26
.1
.04
.08099
.03
.1
Legend
WS 100-YR - Prop. Cond.
WS 100-YR - Ex. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
200
150
100
50
0
-50
0
1000
2000
3000
4000
5000
Station (ft)

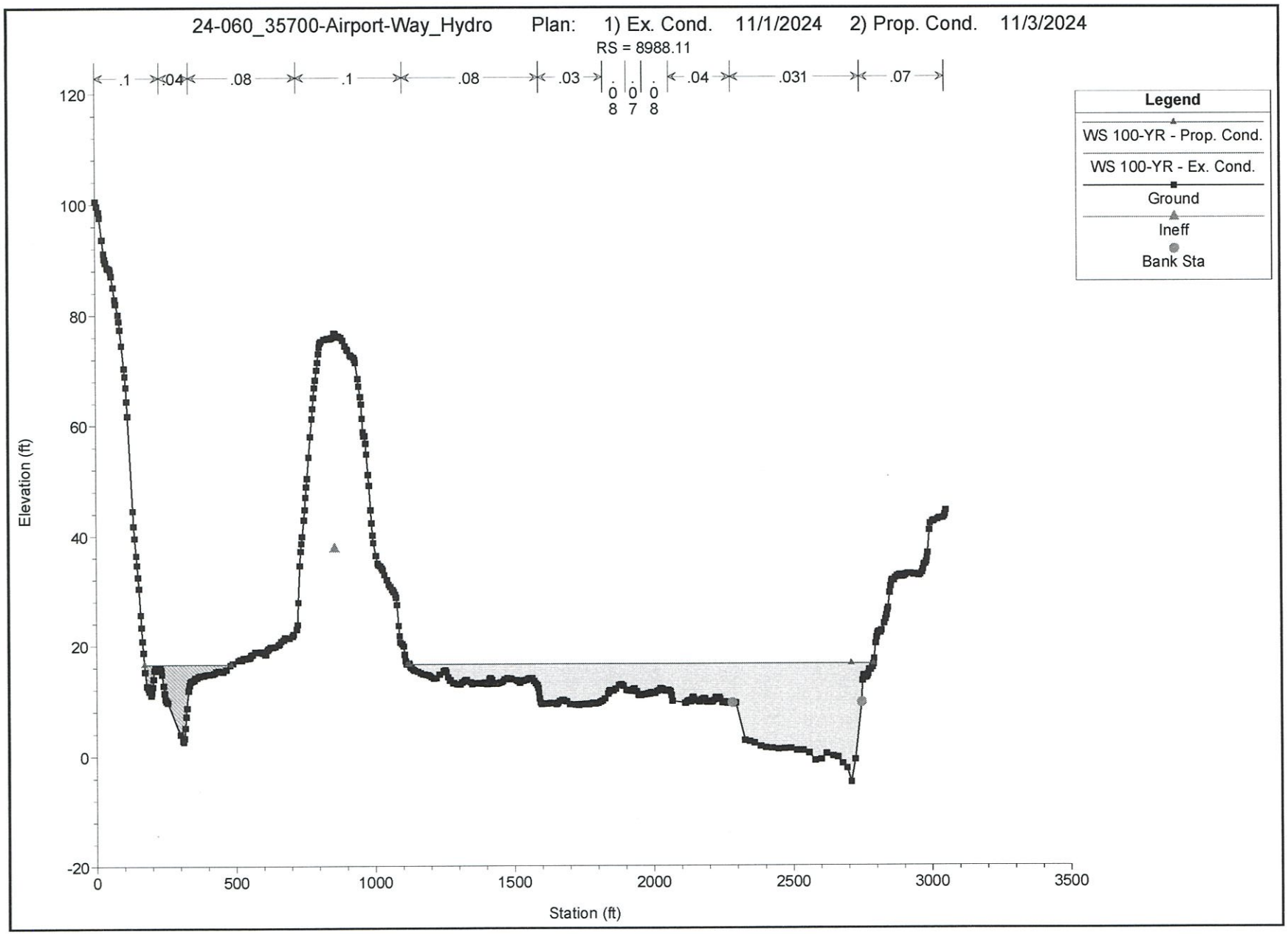

24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 12396 Cross Section D
.1
.04
.1
.07
.08
.0805
.03
.1
Legend
WS 100-YR - Prop. Cond.
WS 100-YR - Ex. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
120
100
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
4000
Station (ft)

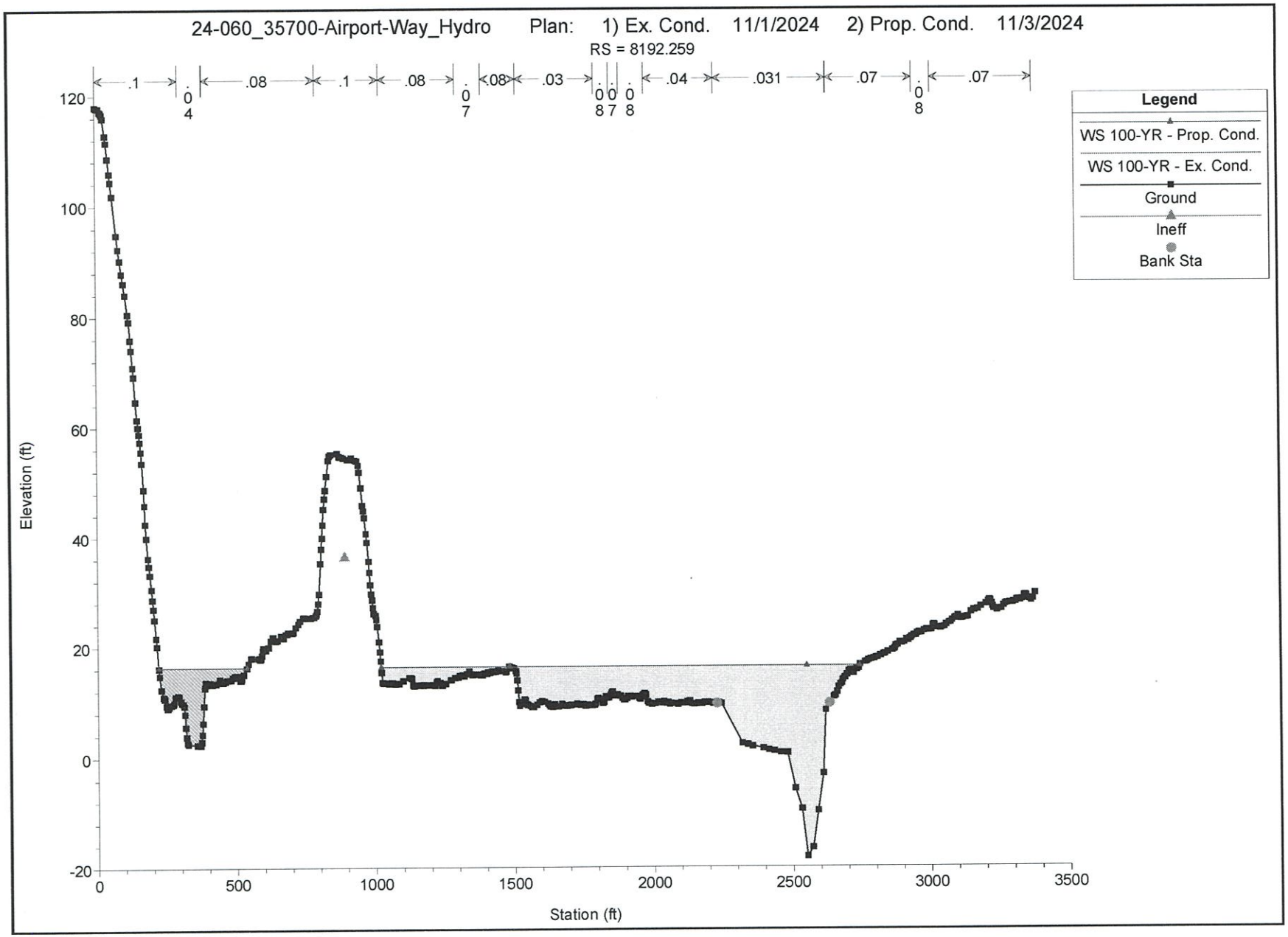

24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 11367.2
.1
.04
.1
.08
.07
.08
.03
.08
.07
Legend
WS 100-YR - Prop. Cond.
WS 100-YR - Ex. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000

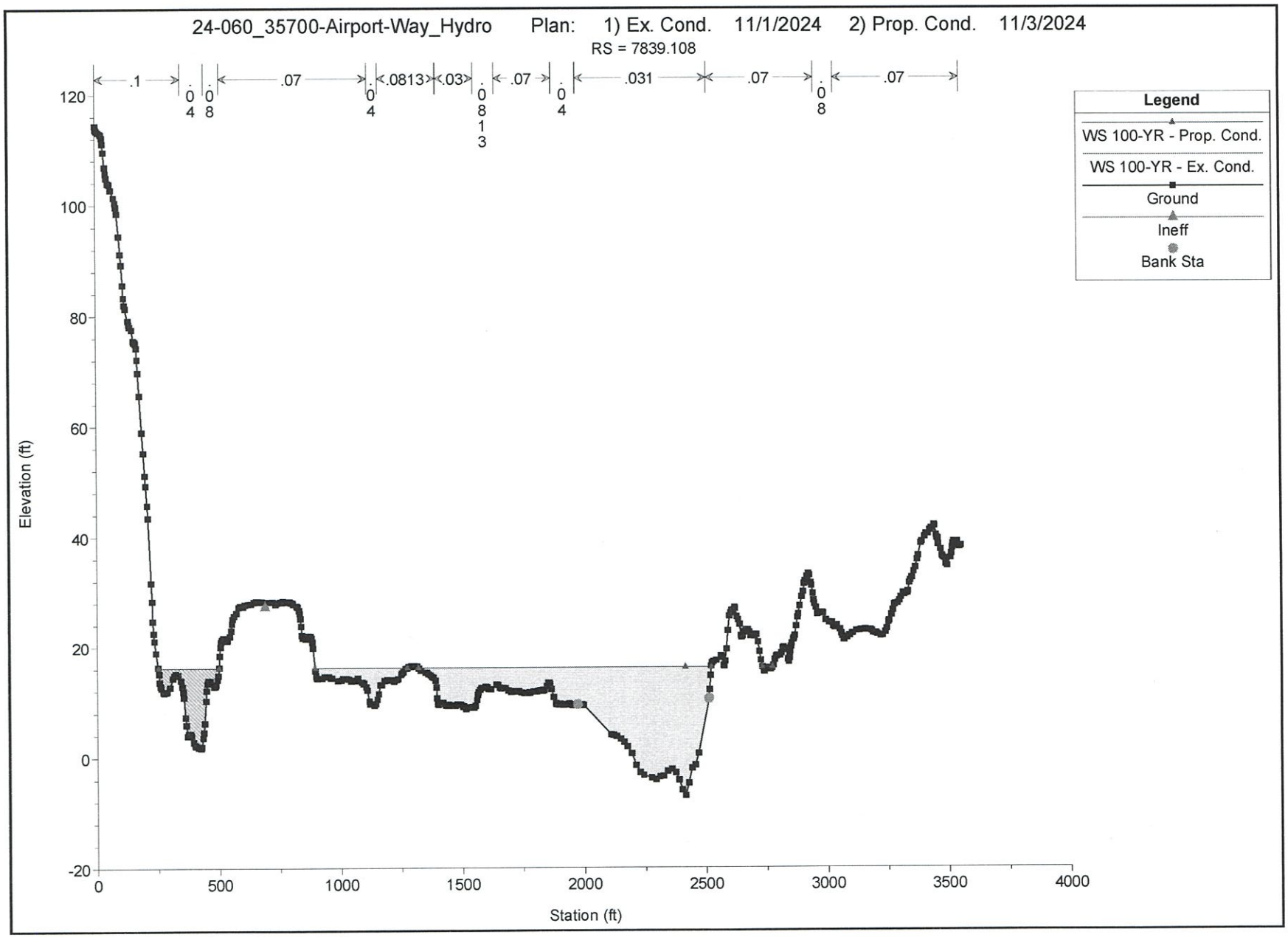

24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 10048.77
.1
.04
.1
.08
.07
.08
.08
.03
.07
.08
.07
Legend
WS 100-YR - Prop. Cond.
WS 100-YR - Ex. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
Station (ft)

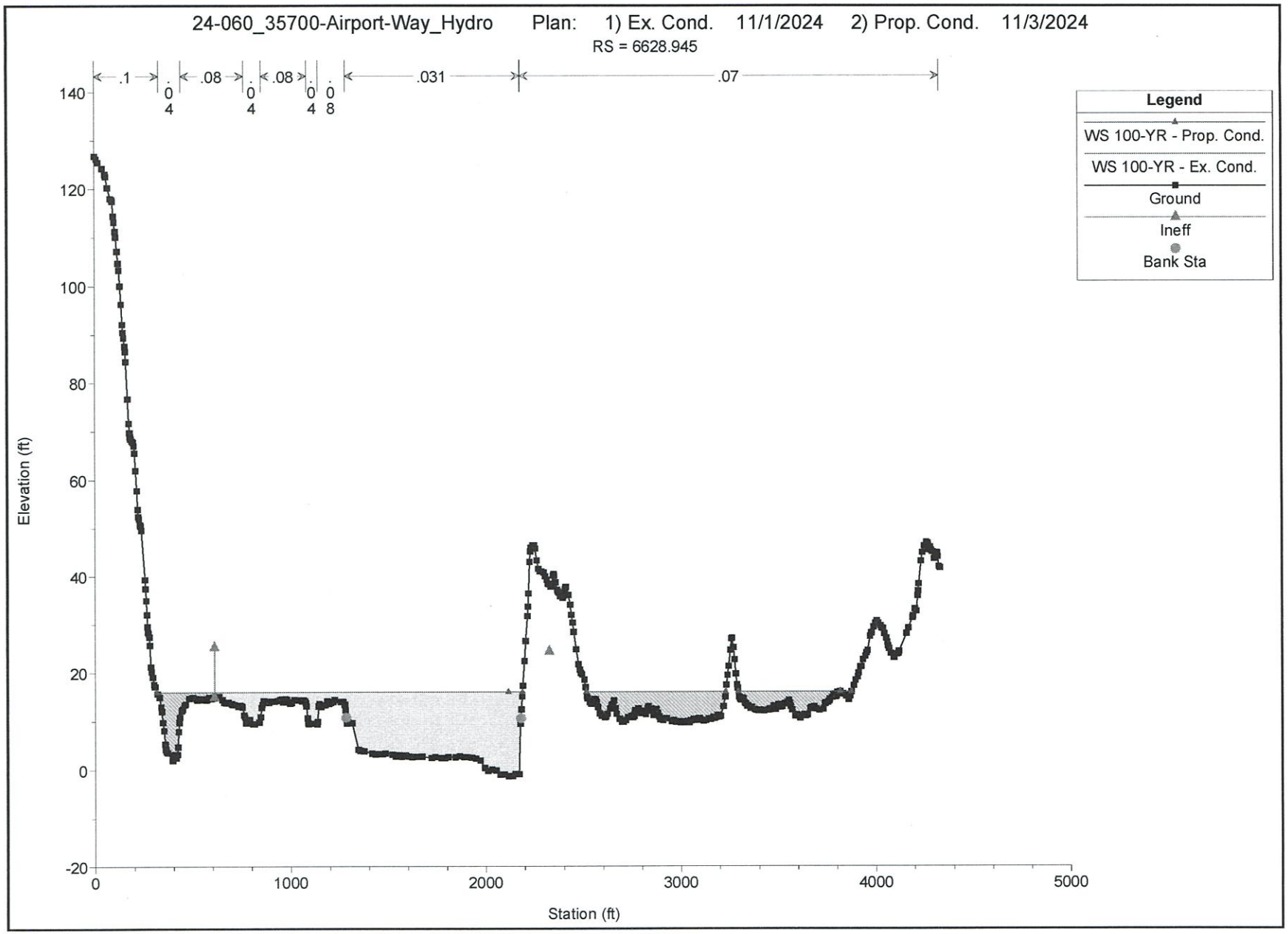

24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 9942.323 BR From Drawings provided by the ODOT and Tillmook Co.
.1
.04
.1
.08
.07
.08
.07
.08
.03
.07
.08
.07
Legend
WS 100-YR - Prop. Cond.
WS 100-YR - Ex. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
Station (ft)

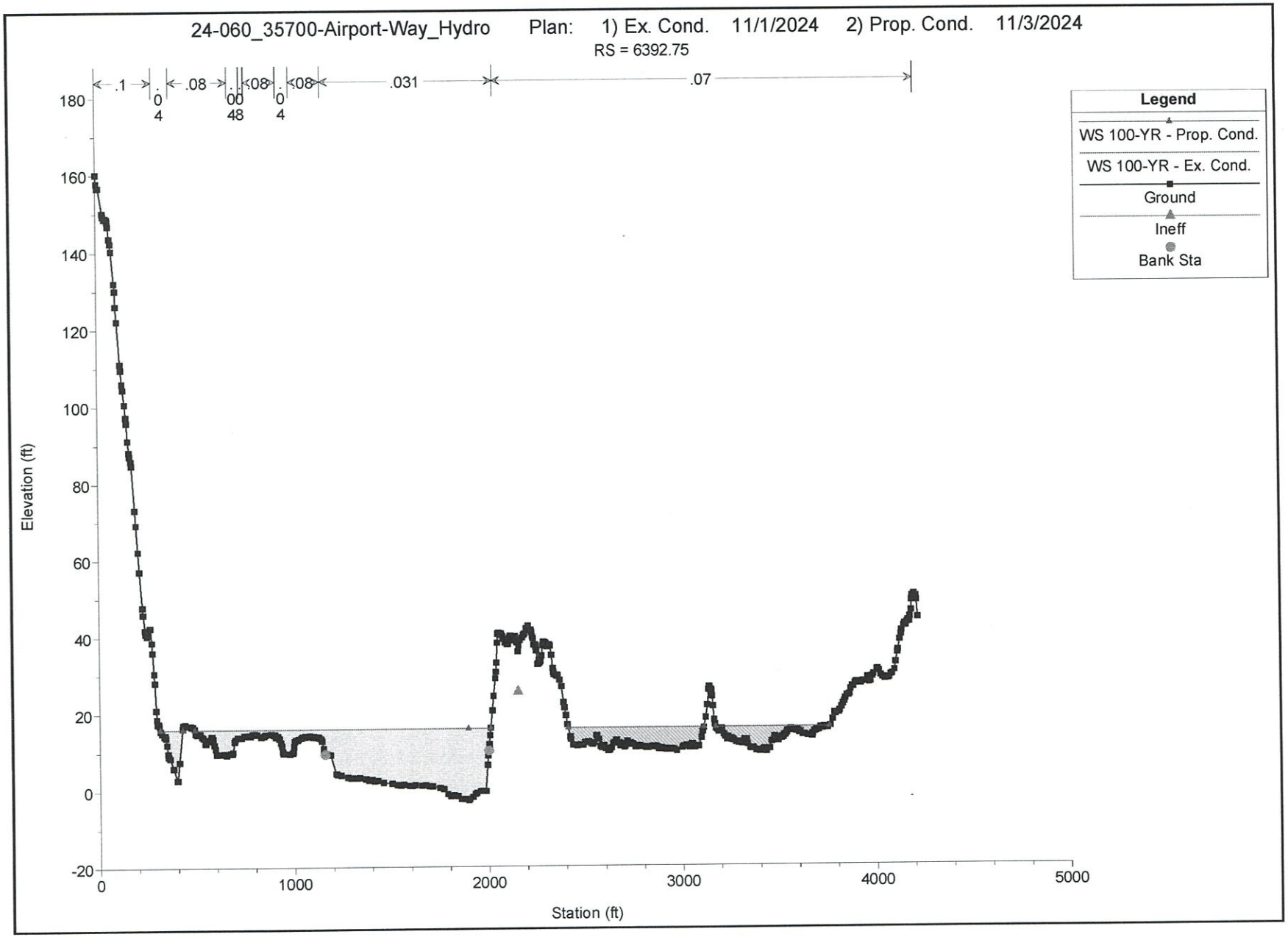

24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 9904.361 Cross Section B
.1
.04
.1
.0815
.07
.031
.07
Legend
WS 100-YR - Prop. Cond.
WS 100-YR - Ex. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
140
120
100
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
4000

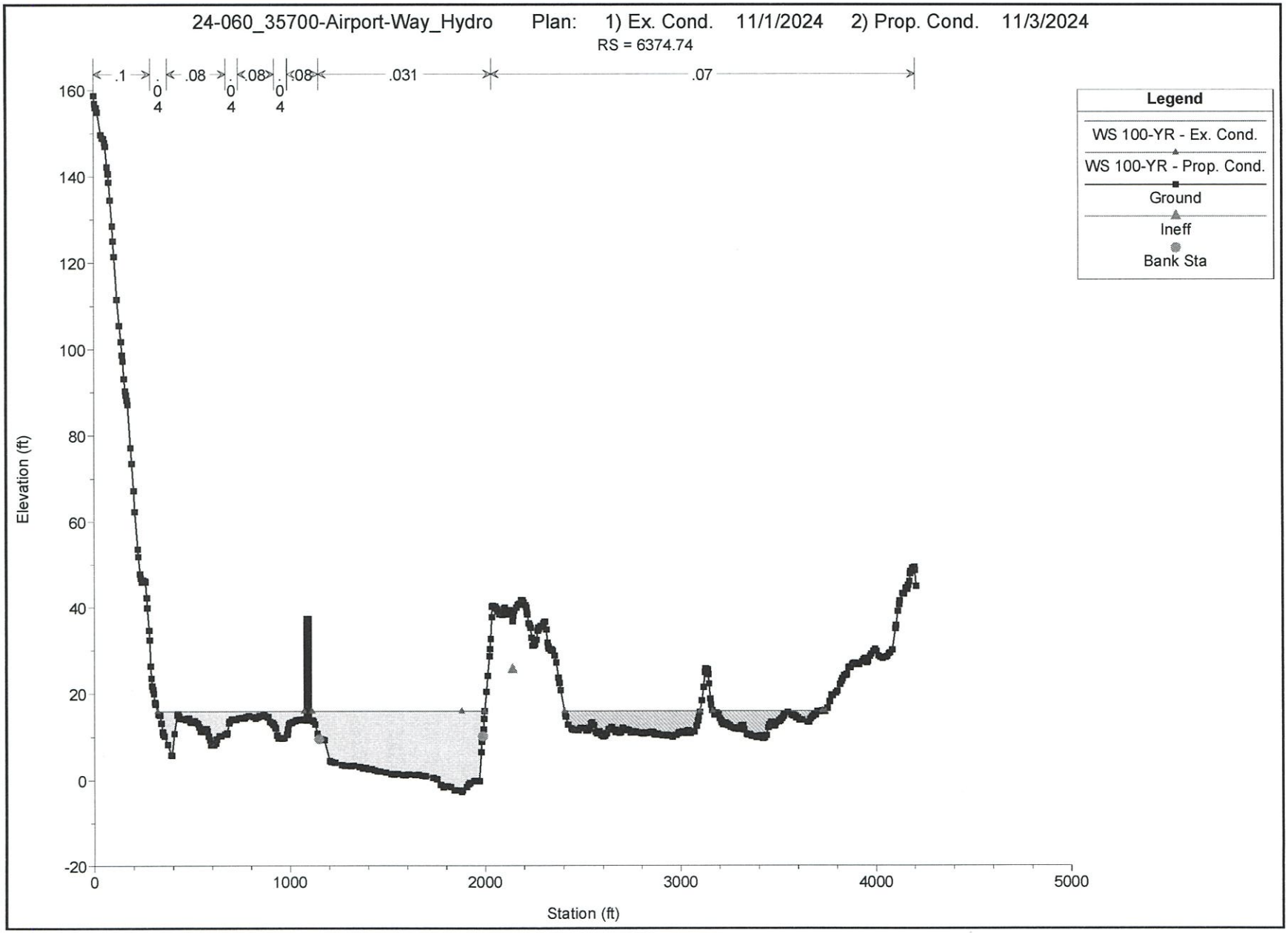

24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 8988.11
.1
.04
.08
.1
.08
.03
.08
.07
.04
.031
.07
.08
Legend
WS 100-YR - Prop. Cond.
WS 100-YR - Ex. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
120
100
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
Station (ft)

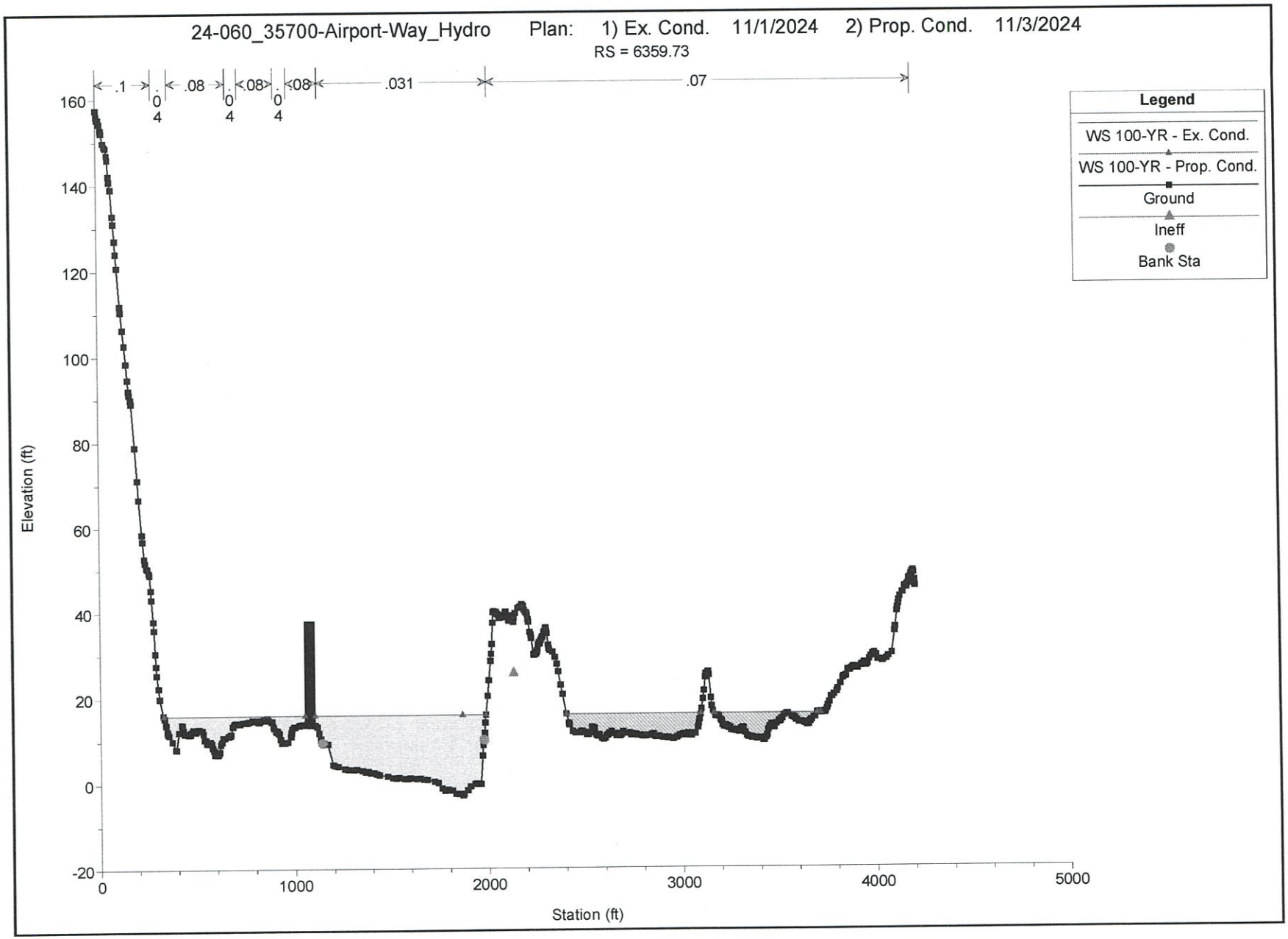

24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 8192.259
.1
.04
.08
.1
.08
.07
.08
.03
.08
.07
.08
.04
.031
.07
.08
.07
Legend
WS 100-YR - Prop. Cond.
WS 100-YR - Ex. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
120
100
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
Station (ft)

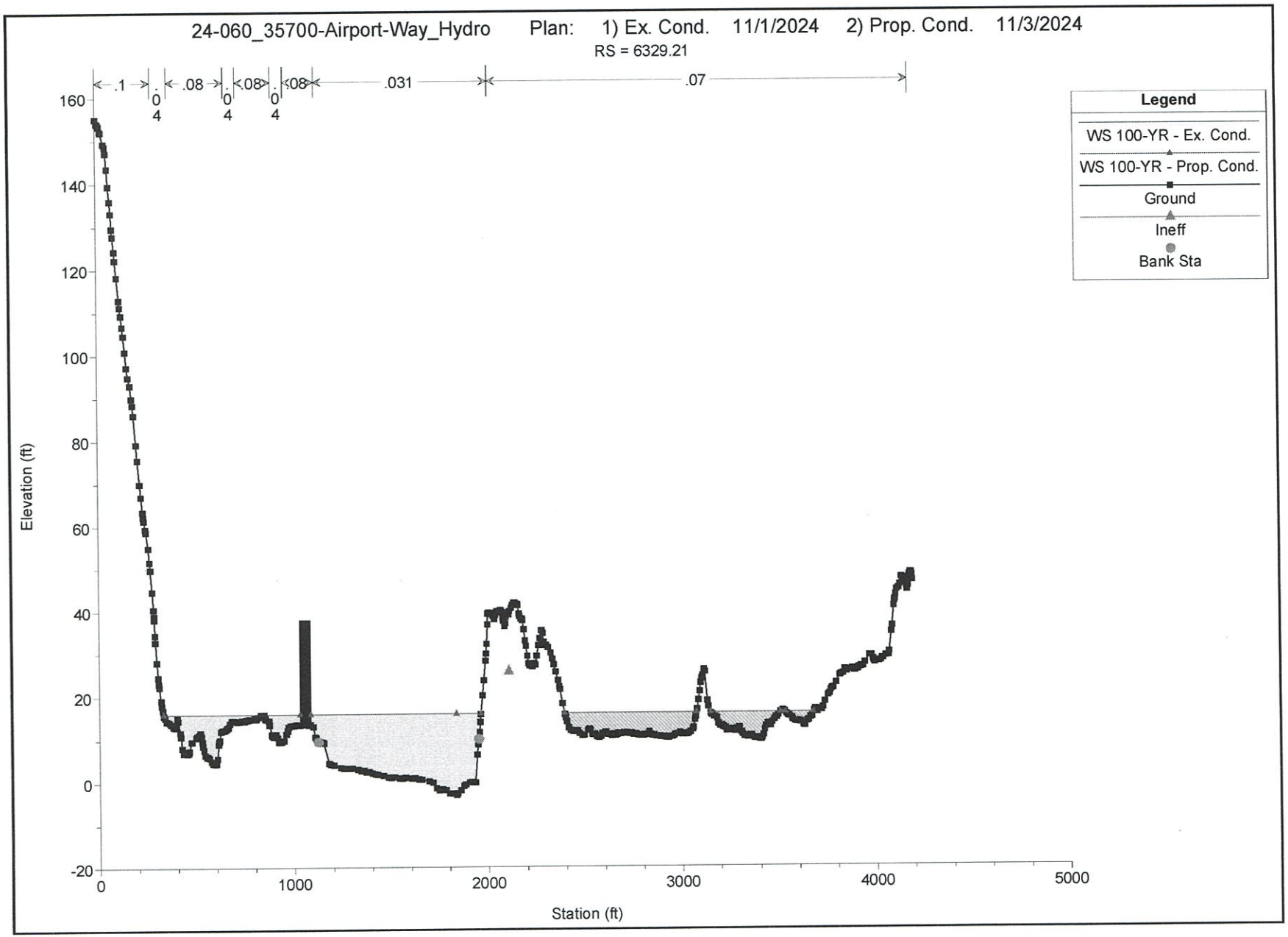

24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 7839.108
.1
.04
.08
.07
.04
.0813
.03
.0813
.07
.04
.031
.07
.08
.07
Legend
WS 100-YR - Prop. Cond.
WS 100-YR - Ex. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
120
100
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
4000
Station (ft)

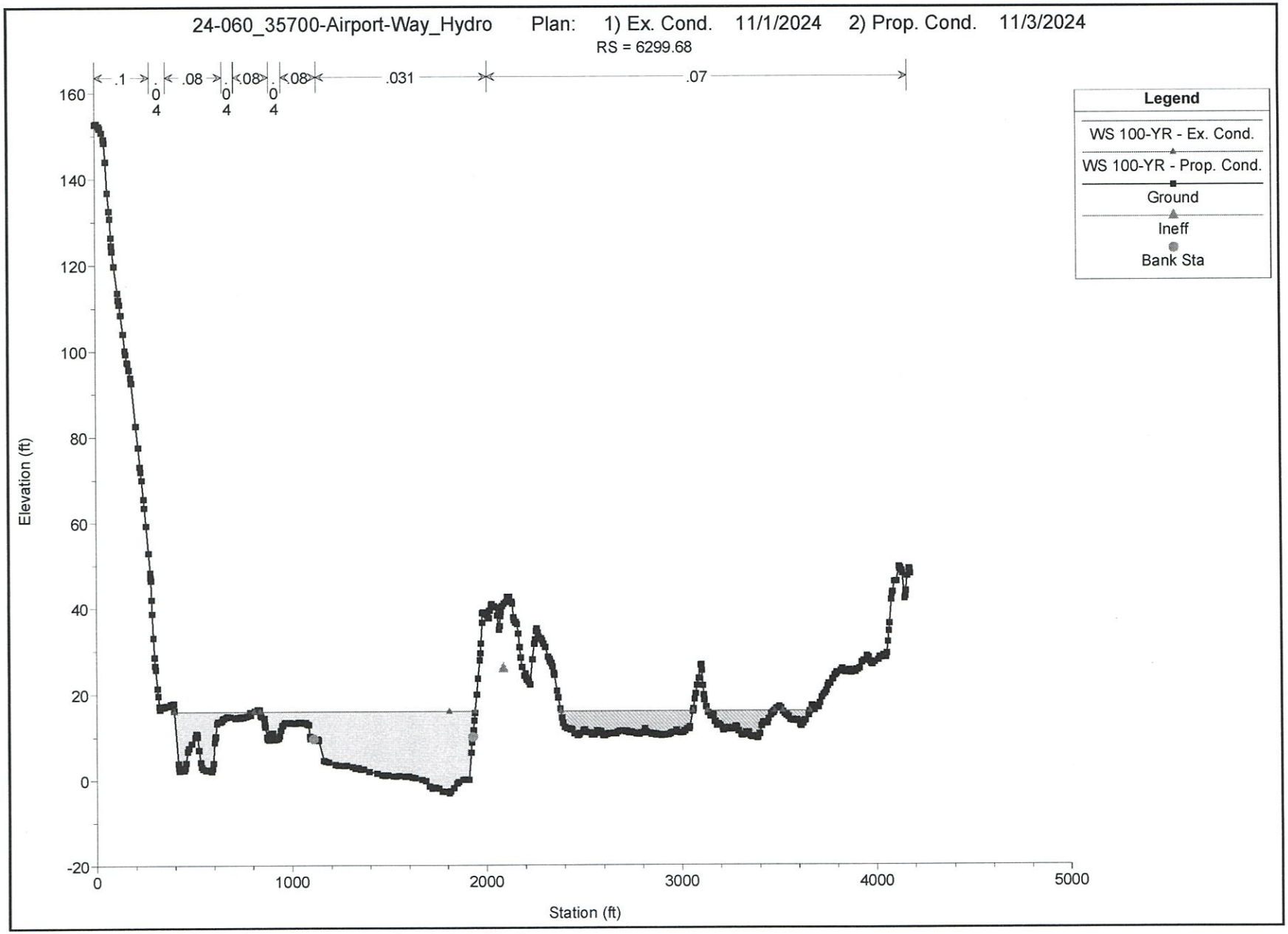

24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 6628.945
.1
.04
.08
.04
.08
.04
.08
.031
.07
Legend
WS 100-YR - Prop. Cond.
WS 100-YR - Ex. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
140
120
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
Station (ft)

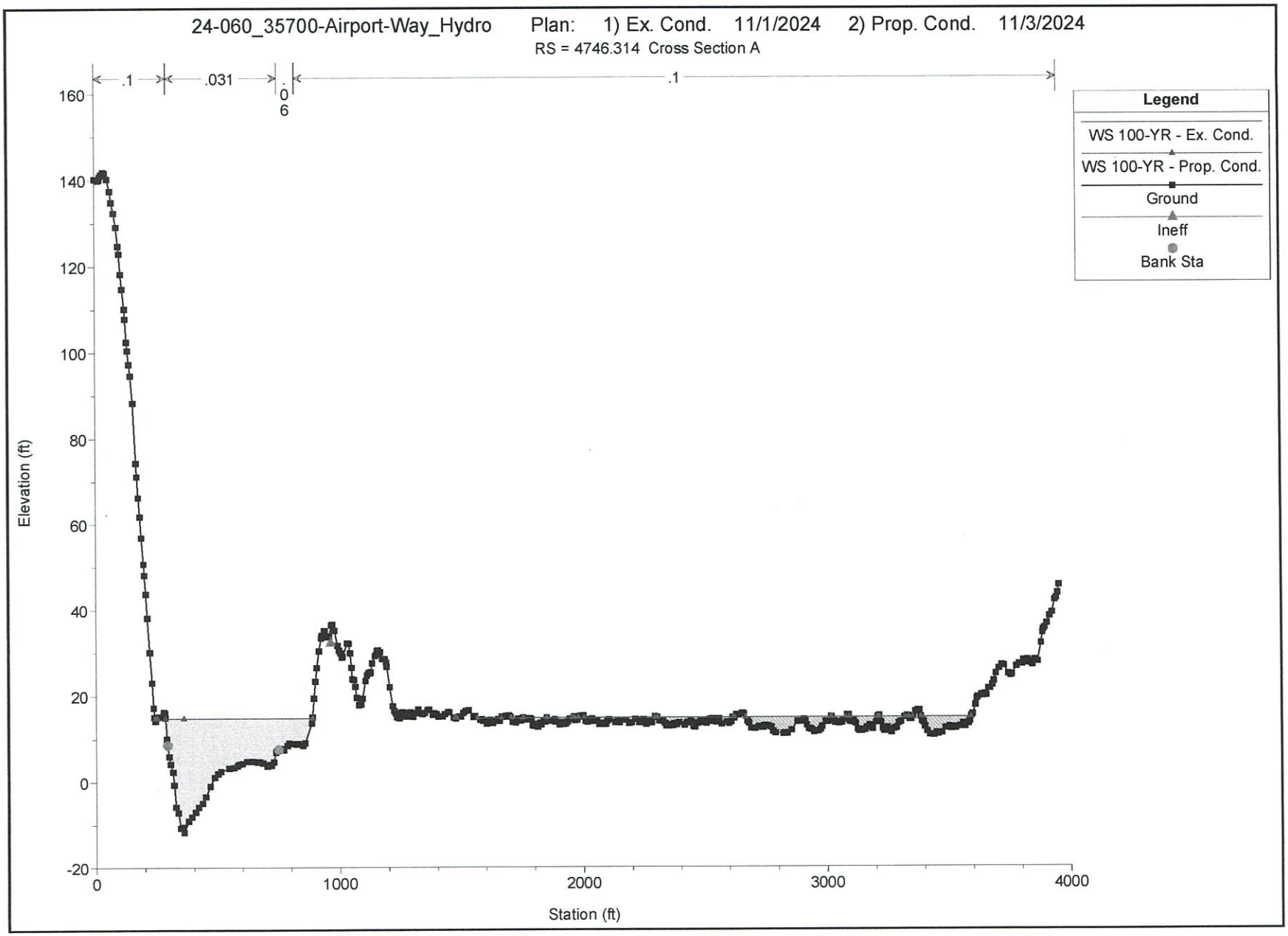

24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 6392.75
.1
.04
.08
.0048
.08
.04
.08
.031
.07
Legend
WS 100-YR - Prop. Cond.
WS 100-YR - Ex. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
180
160
140
120
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
Station (ft)

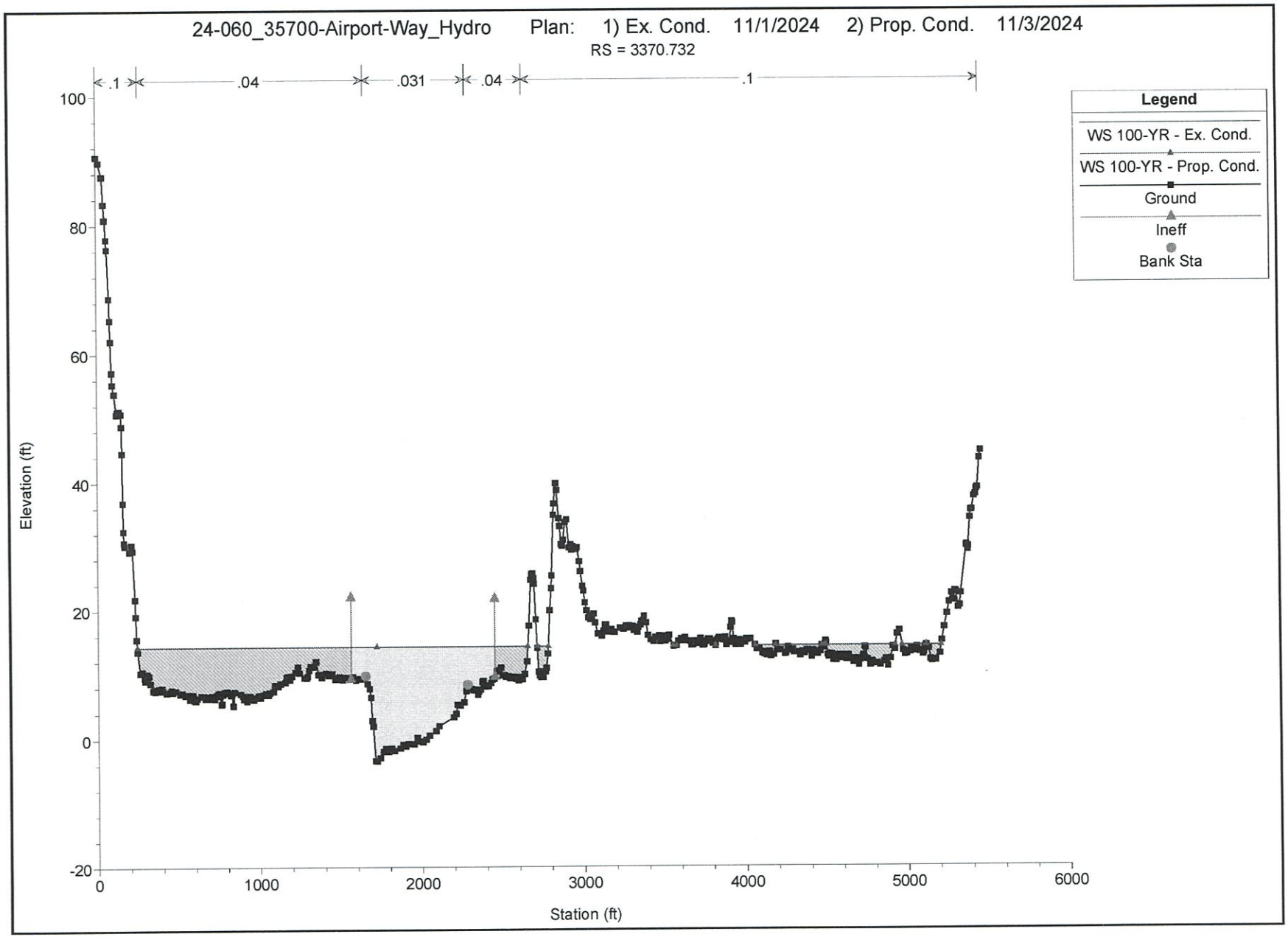

24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 6374.74
.1
.04
.08
.04
.08
.04
.08
.031
.07
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
160
140
120
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
Station (ft)

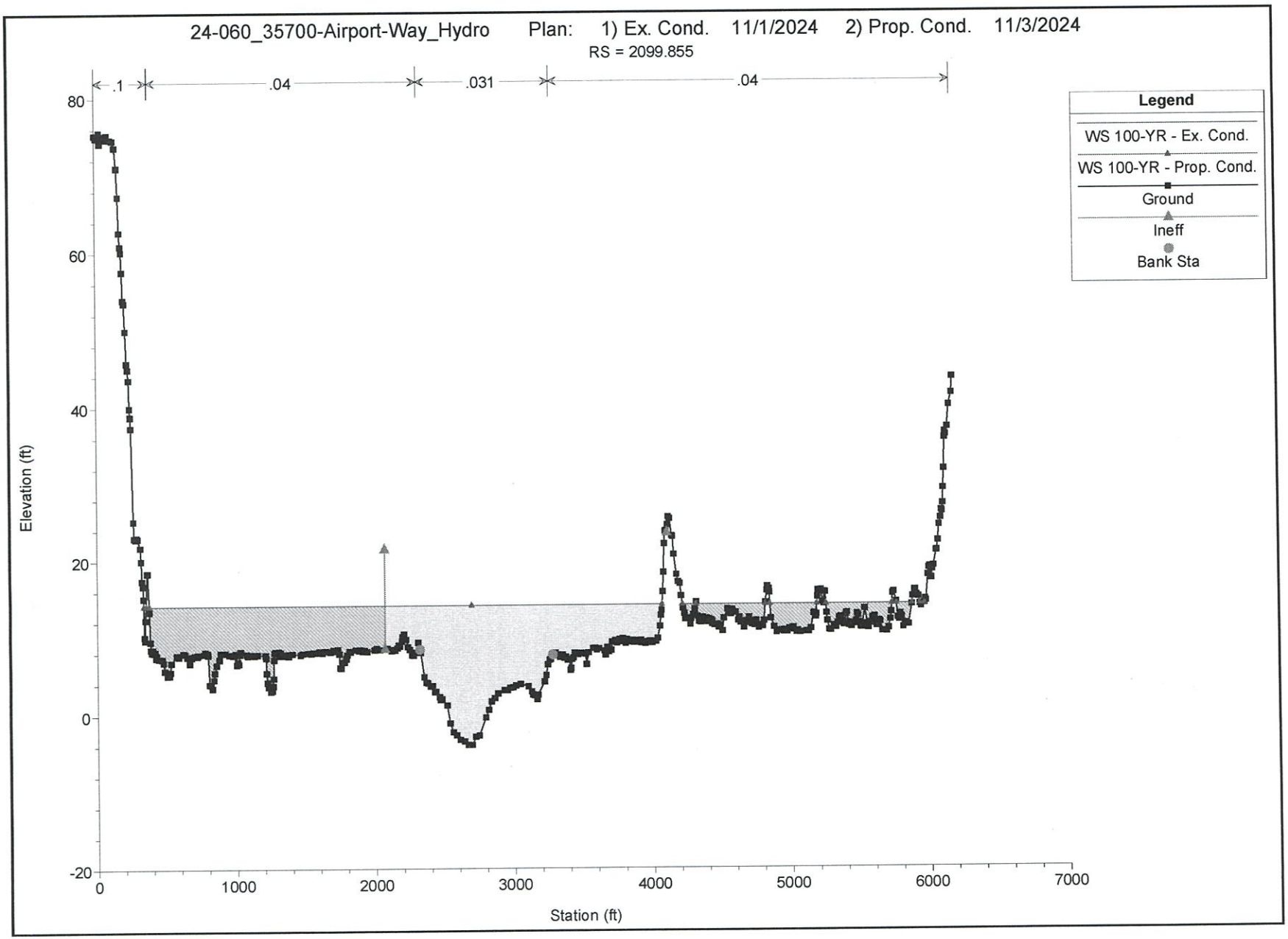

24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 6359.73
.1
.04
.08
.04
.08
.04
.08
.031
.07
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
160
140
120
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
Station (ft)


24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 6329.21
.1
.04
.08
.04
.08
.04
.08
.031
.07
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
160
140
120
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
Station (ft)


24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 6299.68
.1
.04
.08
.04
.08
.04
.08
.031
.07
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
160
140
120
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
Station (ft)


24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 4746.314 Cross Section A
.1
.031
.06
.1
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
160
140
120
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
Station (ft)


24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 3370.732
.1
.04
.031
.04
.1
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
6000
Station (ft)


24-060_35700-Airport-Way_Hydro Plan: 1) Ex. Cond. 11/1/2024 2) Prop. Cond. 11/3/2024
RS = 2099.855
.1
.04
.031
.04
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop. Cond.
Ground
Ineff
Bank Sta
Elevation (ft)
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
6000
7000
Station (ft)

Nava Contracting & Engineering, Inc.
4106 S.E. Oak St,.
Portland, Oregon 97214
Ph: (503) 238-0633 ; Email: navaengr4@gmail.com

Client: Mali McReynolds | By: Matthew V. Nava P.E. | Page:
Project: Lot 5 Block 2, Rivergate Subdivision | Date: 11/05/2024

COVER SHEET

Description: Structural Analysis and Design

Location: Lot 5 Block 2
Rivergate Subdivision
Pacific City, Oregon

Design Basis:
Code: Oregon Structural Specialty Code 2022
Wind: 135 mph 3sec gust, Category II , Exposure D per ASCE 7 - 16
Seismic Zone: D2
Floor Live Load: 40 psf
Attic Live Load: 20 psf for Ht > 42", 10 psf for Ht < 42"
Deck Live Load": 60 psf
Snow: 25 psf
Roof Dead Load: 15 psf

Notes:

1. Timber connection hardware as indicated shall be from Simpson Strong Tie. Install hardware in accordance with Simpson installation requirements as provided in the most current manufacturers catalogs.
2. All Architectural considerations, including stairs and hand railings and their connections, interior and exterior finishes, fire ratings, egress requirements, flashing, insulation, setbacks, ventilation, height restrictions, etc are by others.
3. It is the owners and/or owners representative responsibility to coordinate with local building jurisdictions to determine if a Geological/Geotechnical investigation and/or report is required for the specific building location. The design as provided by myself is based on standard typical soil conditions and does not include any additional design requirements for special and/or unusual geological/Geotechnical considerations unless specifically noted.
4. All excavation, fill, compaction, and drainage by others.
5. Means and methods of construction including temporary shoring by others
6. Structural calculations herein are for analysis purposes only. DO NOT USE THE FLOOR PLANS, ELEVATIONS OR DIMENSIONS SHOWN HERE-IN FOR CONSTRUCTION. REFER TO DESIGN STRUCTURAL DRAWINGS FOR ALL CONSTRUCTION REQUIREMENTS.

Following Calculations and Design have been prepared by the undersigned:
Matthew V. Nava, P.E.
Registration No. 13703
State: Oregon
Expiration Date: 12/31/2024

NAVA CONTRACTING & ENGINEERING, INC.
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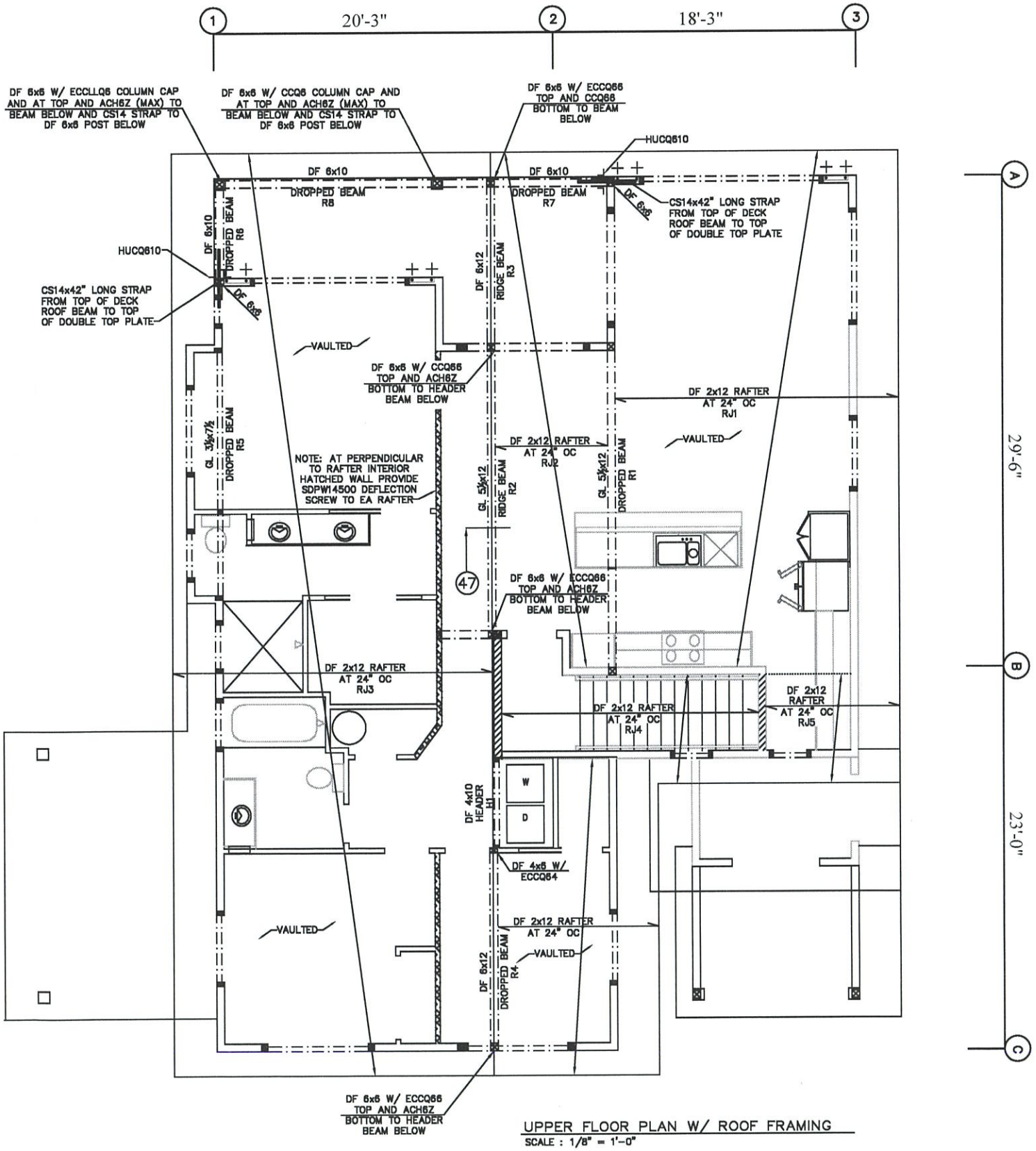

UPPER FLOOR PLAN W/ ROOF FRAMING
SCALE : 1/8" = 1'-0"

NAVA CONTRACTING & ENGINEERING, INC.
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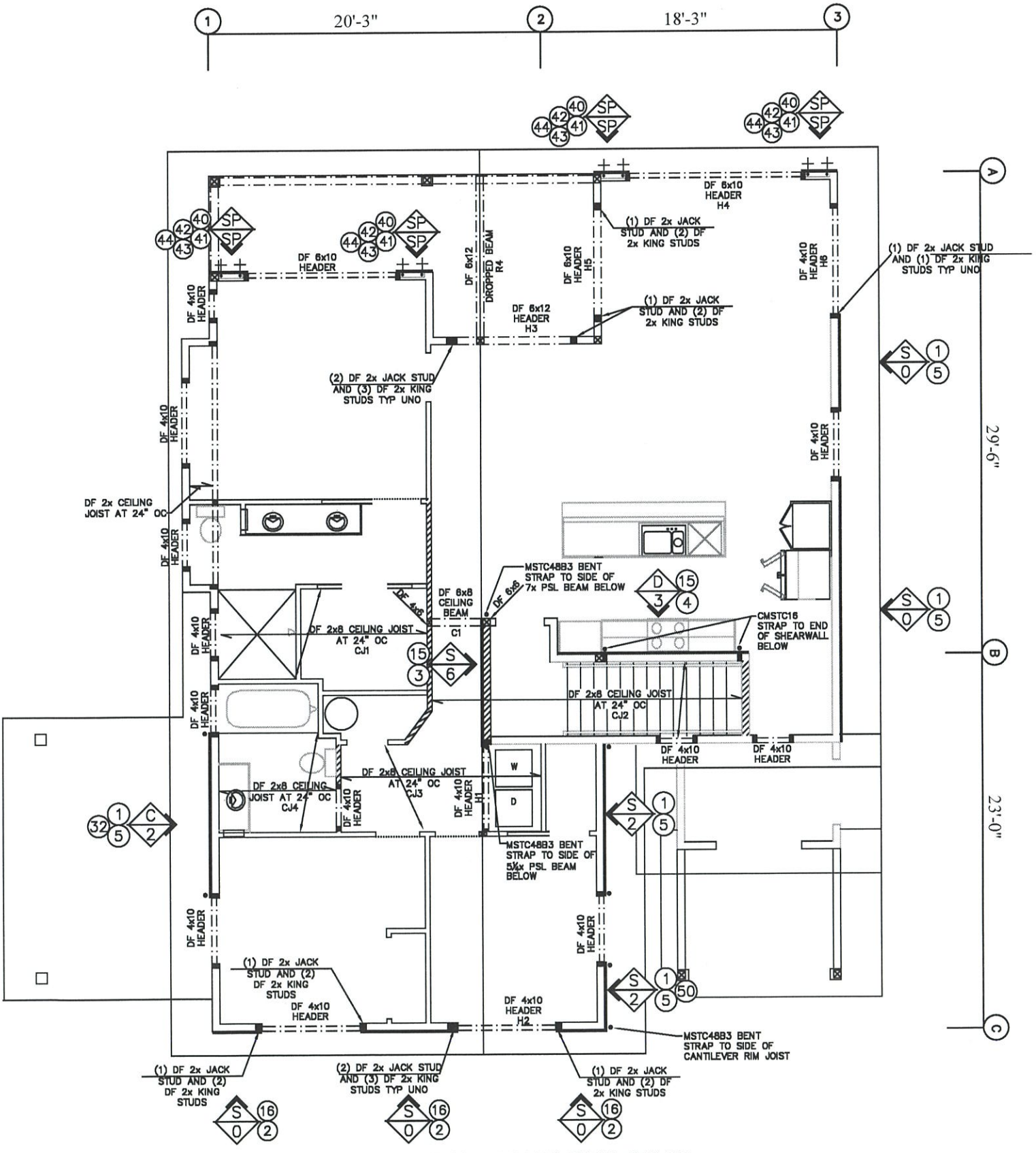
Ph: (503) 238-0633 *navaengr4@gmail.com*

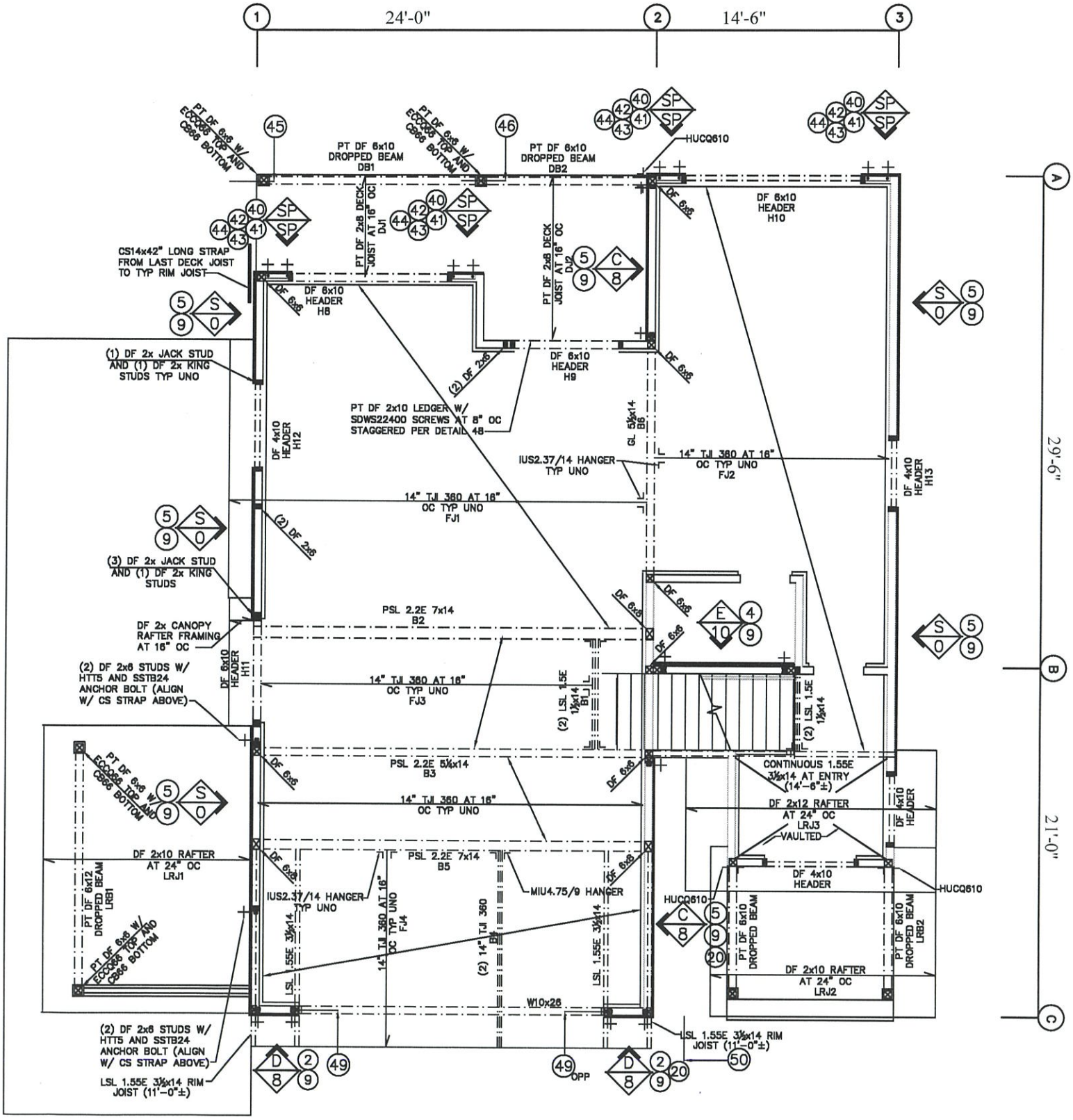
Client: Mali McReynolds By: Matthew V. Nava, P.E. Page: .
Project: Lot 5 Block 2, Rivergate Subdivision Date: 11/05/2024 .



UPPER FLOOR PLAN W/ CEILING FRAMING

NAVA CONTRACTING & ENGINEERING, INC.
4106 SE Oak St, Portland, OR 97214
Ph: (503) 238-0633 *navaengr4@gmail.com*

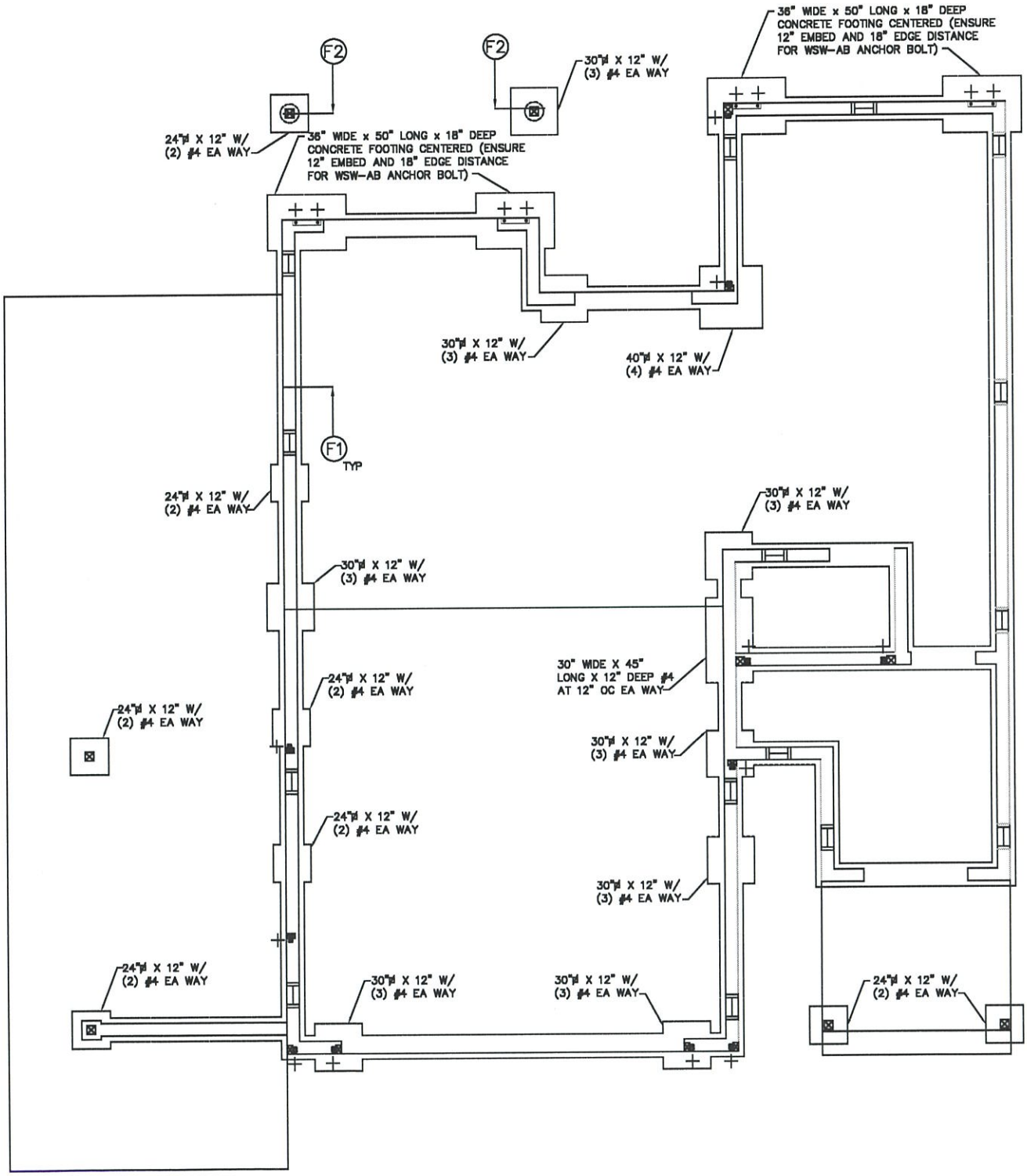
Client: Mali McReynolds By: Matthew V. Nava, P.E. Page: .
Project: Lot 5 Block 2, Rivergate Subdivision Date: 11/05/2024 .



GARAGE PLAN UPPER FLOOR FRAMING

NAVA CONTRACTING & ENGINEERING, INC.
4106 SE Oak St, Portland, OR 97214
Ph: (503) 238-0633 *navaengr4@gmail.com*

Client: Mali McReynolds By: Matthew V. Nava, P.E. Page: .
Project: Lot 5 Block 2, Rivergate Subdivision Date: 11/05/2024 .



FOUNDATION PLAN
SCALE : 1/8" = 1'-0"

NAVA CONTRACTING & ENGINEERING, INC.
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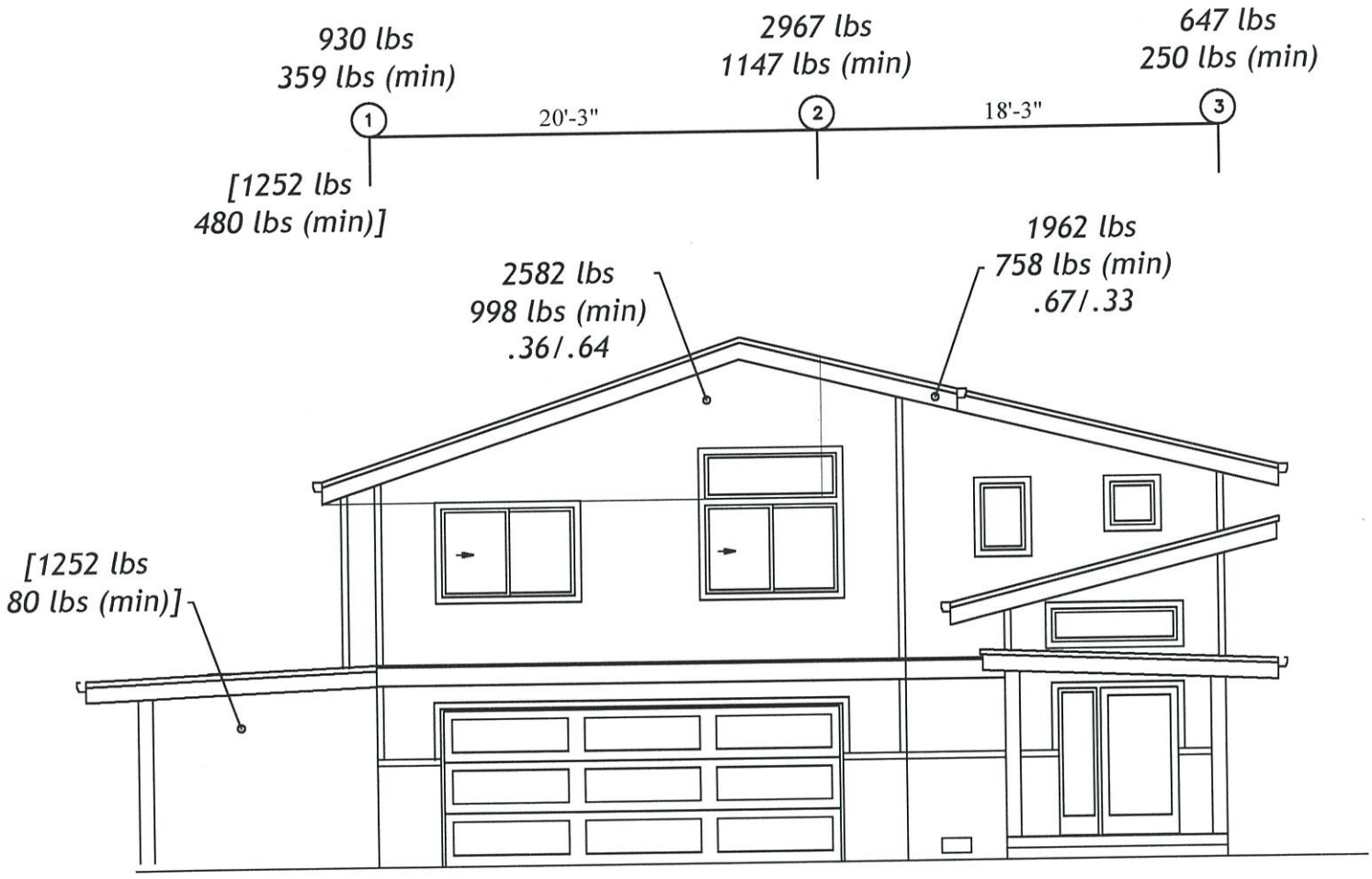
Client: Mali McReynolds | By: Matthew V. Nava, P.E. | Page: .
Project: Lot 5 Block 2, Rivergate Subdivision | Date: 11/05/2024 .



Wind Speed 135 mph (3 sec gust)
Exposure D

ω (wall) = 24.83 psf
ω (eave) = -5.44 psf
use ω (wall) = 9.6 psf (min)
use ω (eave) = 4.8 psf (min)

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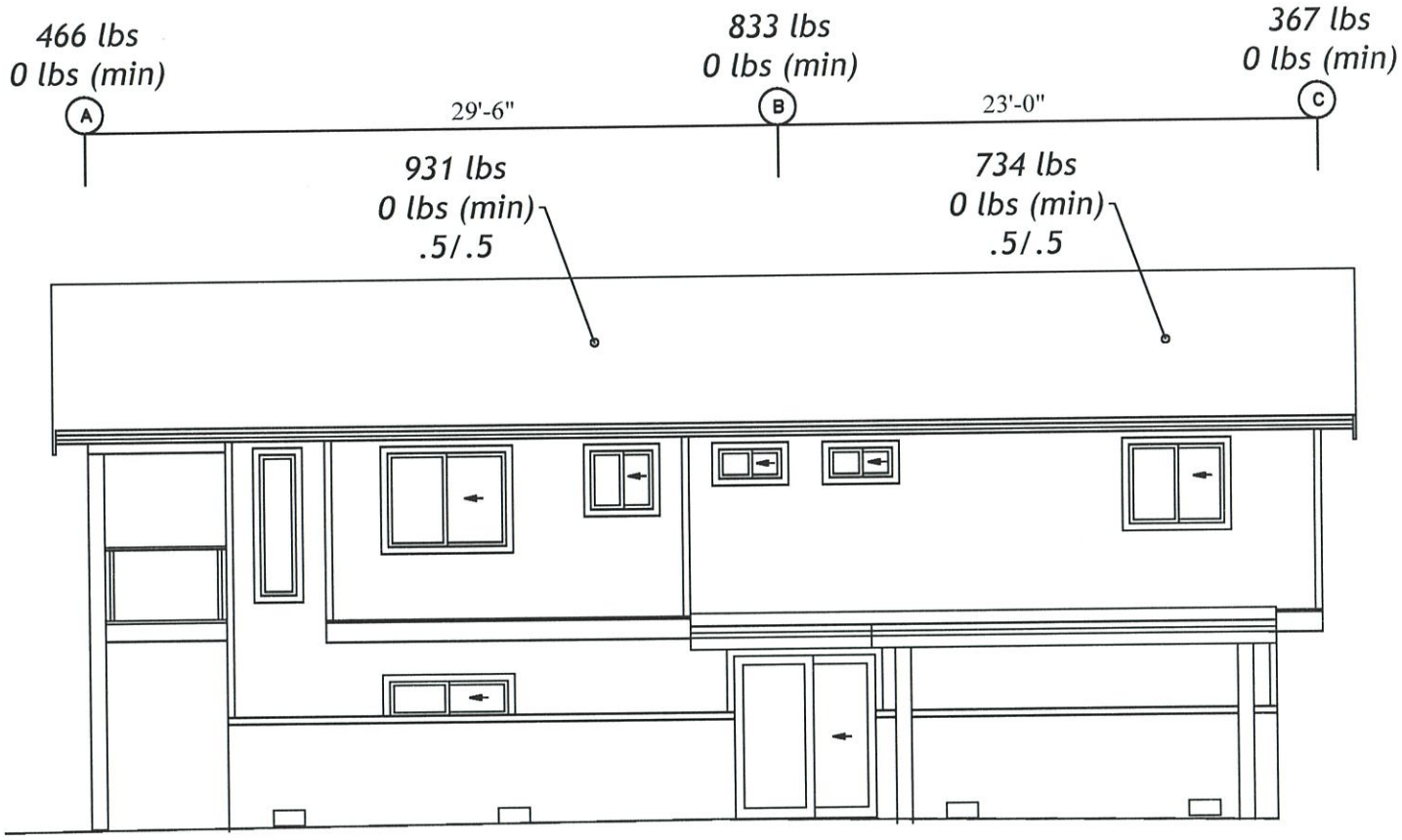

Wind Speed 135 mph (3 sec gust)
Exposure D

ω (wall) = 24.83 psf
ω (eave) = -5.44 psf
use ω (wall) = 9.6 psf (min)
use ω (eave) = 4.8 psf (min)

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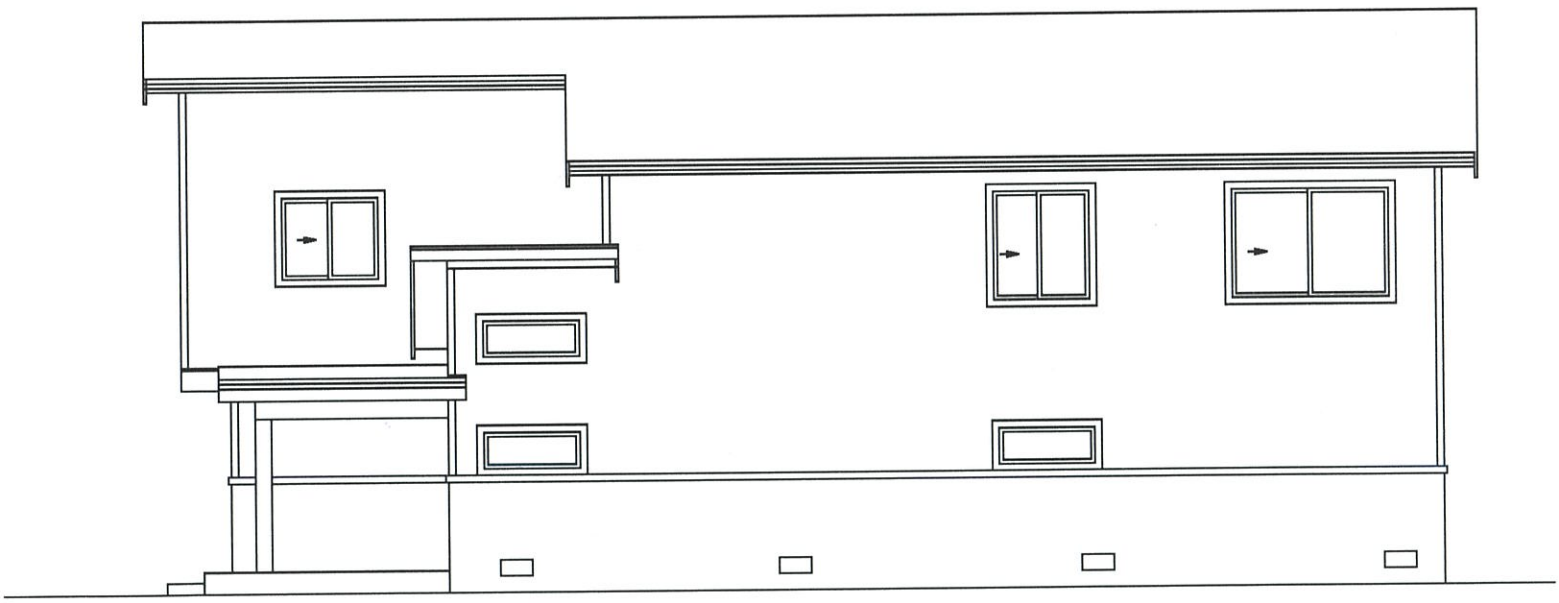
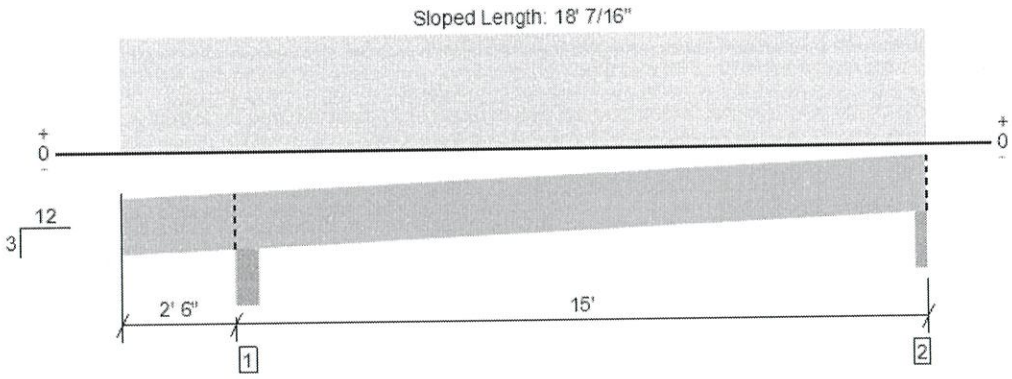


ROOF, RJ1

1 piece(s) 2 x 12 DF No.2 @ 19.2" OC



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	471 @ 17' 4 1/4"	2578 (2.75")	Passed (18%)	--	1.0 D + 1.0 S (Alt Spans)
Shear (lbs)	416 @ 3' 10 7/16"	2329	Passed (18%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	1649 @ 10' 2 5/8"	3138	Passed (53%)	1.15	1.0 D + 1.0 S (Alt Spans)
Live Load Defl. (in)	0.147 @ 10' 1"	0.754	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.234 @ 10' 1 3/16"	1.005	Passed (L/772)	--	1.0 D + 1.0 S (Alt Spans)

Member Length : 18' 3 1/4"
System : Roof
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 3/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Beveled Plate - DF	5.50"	5.50"	1.50"	255	412	667	Blocking
2 - Beveled Plate - DF	2.75"	2.75"	1.50"	178	293	471	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	9' 1" o/c	
Bottom Edge (Lu)	18' o/c	

- Maximum allowable bracing intervals based on applied load.
- Dimensions for lateral bracing intervals are measured along the length of the member for sloped conditions.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 17' 6"	19.2"	15.0	25.0	Default Load

Weyerhaeuser Notes

Weyerhaeuser warrants that the sizing of its products will be in accordance with Weyerhaeuser product design criteria and published design values. Weyerhaeuser expressly disclaims any other warranties related to the software. Use of this software is not intended to circumvent the need for a design professional as determined by the authority having jurisdiction. The designer of record, builder or framer is responsible to assure that this calculation is compatible with the overall project. Accessories (Rim Board, Blocking Panels and Squash Blocks) are not designed by this software. Products manufactured at Weyerhaeuser facilities are third-party certified to sustainable forestry standards. Weyerhaeuser Engineered Lumber Products have been evaluated by ICC-ES under evaluation reports ESR-1153 and ESR-1387 and/or tested in accordance with applicable ASTM standards. For current code evaluation reports, Weyerhaeuser product literature and installation details refer to www.weyerhaeuser.com/woodproducts/document-library.

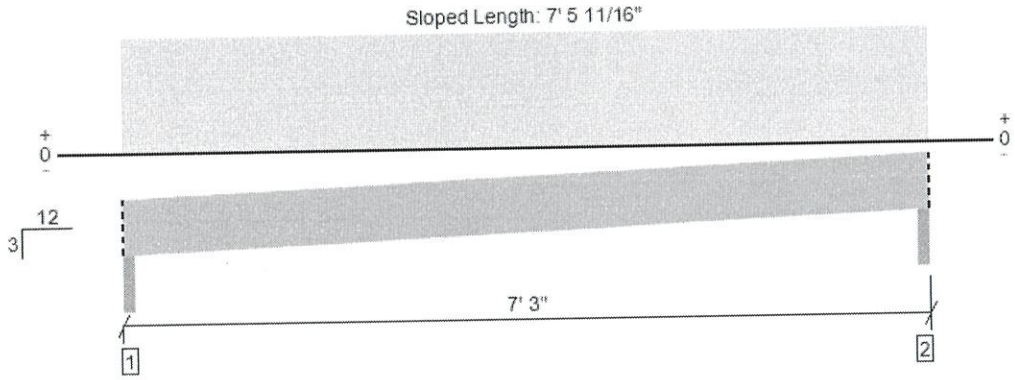
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

ROOF, RJ2

1 piece(s) 2 x 12 DF No.2 @ 19.2" OC



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	235 @ 1 3/4"	2578 (2.75")	Passed (9%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	161 @ 1' 1 11/16"	2329	Passed (7%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	392 @ 3' 7 1/2"	3138	Passed (12%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.008 @ 3' 7 1/2"	0.359	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.013 @ 3' 7 1/2"	0.478	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)

Member Length : 7' 8 1/2"
System : Roof
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 3/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Beveled Plate - DF	2.75"	2.75"	1.50"	90	145	235	Blocking
2 - Beveled Plate - DF	2.75"	2.75"	1.50"	90	145	235	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	7' 6" o/c	
Bottom Edge (Lu)	7' 6" o/c	

- Maximum allowable bracing intervals based on applied load.
- Dimensions for lateral bracing intervals are measured along the length of the member for sloped conditions.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 7' 3"	19.2"	15.0	25.0	Default Load

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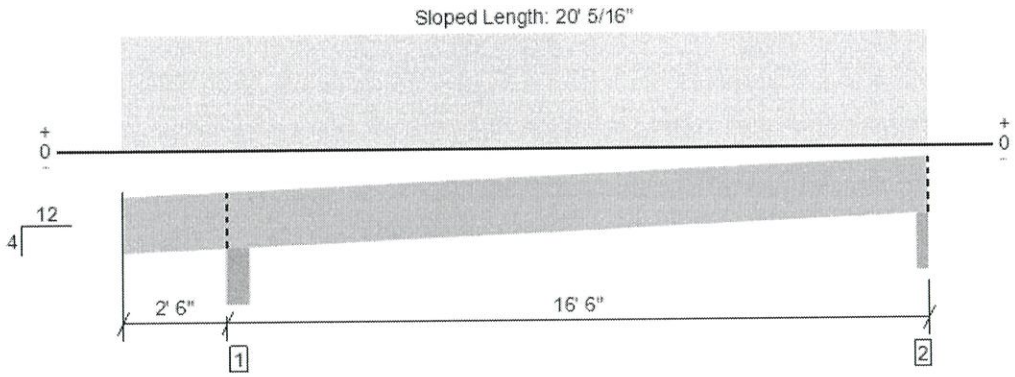
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ROOF, RJ3

1 piece(s) 2 x 12 DF No.2 @ 24" OC



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	657 @ 18' 10 1/4"	2578 (2.75")	Passed (25%)	--	1.0 D + 1.0 S (Alt Spans)
Shear (lbs)	586 @ 3' 10 3/16"	2329	Passed (25%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	2549 @ 10' 11 7/16"	3138	Passed (81%)	1.15	1.0 D + 1.0 S (Alt Spans)
Live Load Defl. (in)	0.287 @ 10' 9 15/16"	0.850	Passed (L/712)	--	1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.461 @ 10' 10 1/8"	1.133	Passed (L/442)	--	1.0 D + 1.0 S (Alt Spans)

Member Length : 20' 4 1/16"
System : Roof
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 4/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Beveled Plate - DF	5.50"	5.50"	1.50"	349	551	900	Blocking
2 - Beveled Plate - DF	2.75"	2.75"	1.50"	252	405	657	Blocking

• Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	4' 9" o/c	
Bottom Edge (Lu)	20' o/c	

•Maximum allowable bracing intervals based on applied load.

•Dimensions for lateral bracing intervals are measured along the length of the member for sloped conditions.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 19'	24"	15.0	25.0	Default Load

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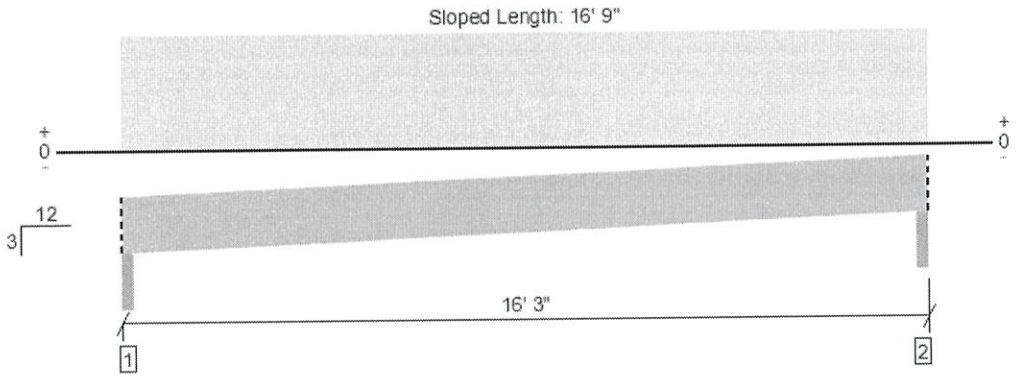
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

ROOF, RJ4

1 piece(s) 2 x 12 DF No.2 @ 19.2" OC



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	526 @ 1 3/4"	2578 (2.75")	Passed (20%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	452 @ 1' 1 11/16"	2329	Passed (19%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	2061 @ 8' 1 1/2"	3138	Passed (66%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.218 @ 8' 1 1/2"	0.822	Passed (L/906)	--	1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.352 @ 8' 1 1/2"	1.097	Passed (L/560)	--	1.0 D + 1.0 S (All Spans)

Member Length : 16' 11 13/16"
System : Roof
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 3/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Beveled Plate - DF	2.75"	2.75"	1.50"	201	325	526	Blocking
2 - Beveled Plate - DF	2.75"	2.75"	1.50"	201	325	526	Blocking

• Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	6' 7" o/c	
Bottom Edge (Lu)	16' 9" o/c	

•Maximum allowable bracing intervals based on applied load.
•Dimensions for lateral bracing intervals are measured along the length of the member for sloped conditions.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 16' 3"	19.2"	15.0	25.0	Default Load

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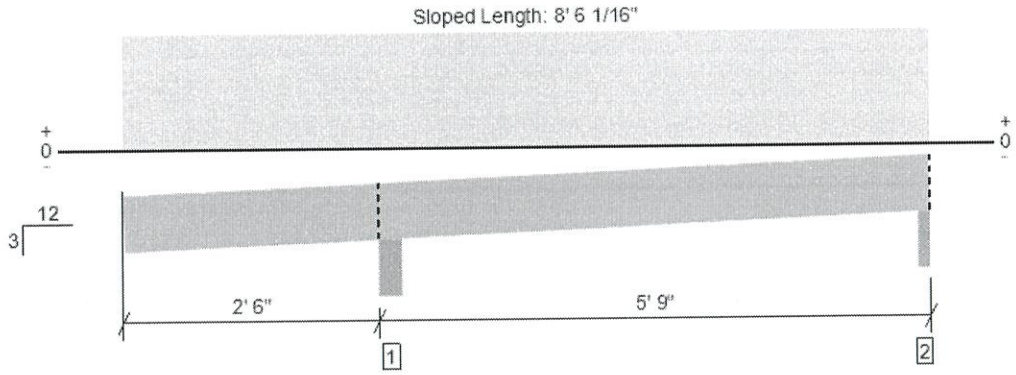
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

ROOF, RJ5

1 piece(s) 2 x 12 DF No.2 @ 19.2" OC



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Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	396 @ 2' 8 3/4"	5315 (5.50")	Passed (7%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	145 @ 3' 10 7/16"	2329	Passed (6%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	-241 @ 2' 8 3/4"	3138	Passed (8%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.004 @ 0	0.281	Passed (2L/999+)	--	1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.005 @ 0	0.375	Passed (2L/999+)	--	1.0 D + 1.0 S (Alt Spans)

Member Length : 8' 8 7/8"
System : Roof
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 3/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Beveled Plate - DF	5.50"	5.50"	1.50"	151	244	396	Blocking
2 - Beveled Plate - DF	2.75"	2.75"	1.50"	53	99	152	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	8' 6" o/c	
Bottom Edge (Lu)	8' 6" o/c	

- Maximum allowable bracing intervals based on applied load.
- Dimensions for lateral bracing intervals are measured along the length of the member for sloped conditions.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 8' 3"	19.2"	15.0	25.0	Default Load

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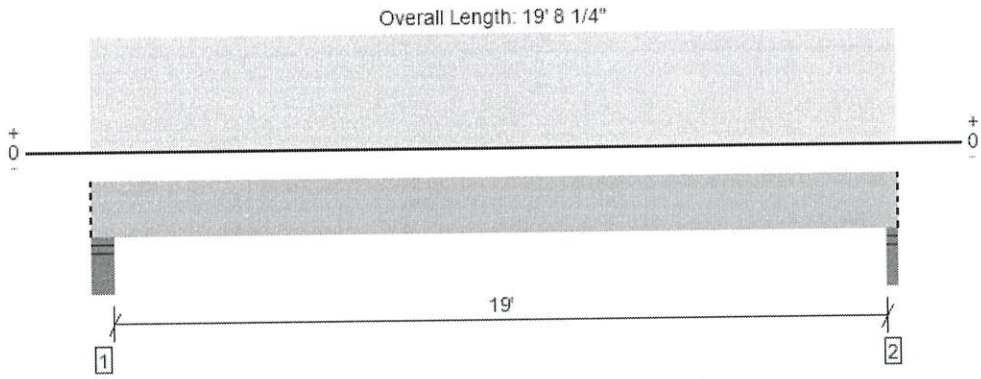
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

ROOF, R1

1 piece(s) 5 1/2" x 13 1/2" 24F-V4 DF Glulam



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	5649 @ 19' 7"	9453 (2.75")	Passed (60%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	4873 @ 1' 7"	15085	Passed (32%)	1.15	1.0 D + 1.0 S (All Spans)
Pos Moment (Ft-lbs)	26949 @ 9' 11 1/2"	38037	Passed (71%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.530 @ 9' 11 1/2"	0.962	Passed (L/436)	--	1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.886 @ 9' 11 1/2"	1.283	Passed (L/261)	--	1.0 D + 1.0 S (All Spans)

Member Length : 19' 8 1/4"
System : Roof
Member Type : Drop Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Critical positive moment adjusted by a volume/size factor of 0.99 that was calculated using length L = 19' 3".
- The effects of positive or negative camber have not been accounted for when calculating deflection.
- The specified glulam is assumed to have its strong laminations at the bottom of the beam. Install with proper side up as indicated by the manufacturer.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Stud wall - DF	5.50"	5.50"	1.69"	2327	3467	5794	Blocking
2 - Stud wall - DF	2.75"	2.75"	1.64"	2269	3380	5649	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	19' 8" o/c	
Bottom Edge (Lu)	19' 8" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 19' 8 1/4"	N/A	18.0	--	
1 - Uniform (PLF)	0 to 19' 8" (Front)	N/A	159.4	257.5	Linked from: RJ1, Support 1
2 - Uniform (PLF)	0 to 19' 8" (Front)	N/A	56.3	90.6	Linked from: RJ2, Support 2

- Side loads are assumed to not induce cross-grain tension.

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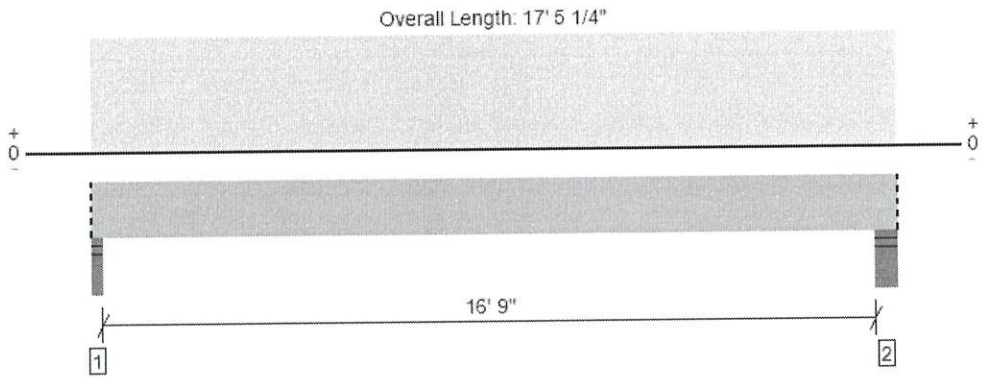
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

ROOF, R2

1 piece(s) 5 1/2" x 10 1/2" 24F-V4 DF Glulam



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	4211 @ 1 1/4"	9453 (2.75")	Passed (45%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	3671 @ 1' 1 1/4"	11733	Passed (31%)	1.15	1.0 D + 1.0 S (All Spans)
Pos Moment (Ft-lbs)	17680 @ 8' 7 1/4"	23244	Passed (76%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.577 @ 8' 7 1/4"	0.850	Passed (L/354)	--	1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.963 @ 8' 7 1/4"	1.133	Passed (L/212)	--	1.0 D + 1.0 S (All Spans)

Member Length : 17' 5 1/4"
System : Roof
Member Type : Drop Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Critical positive moment adjusted by a volume/size factor of 1.00 that was calculated using length L = 17'.
- The effects of positive or negative camber have not been accounted for when calculating deflection.
- The specified glulam is assumed to have its strong laminations at the bottom of the beam. Install with proper side up as indicated by the manufacturer.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Stud wall - DF	2.75"	2.75"	1.50"	1689	2522	4211	Blocking
2 - Stud wall - DF	5.50"	5.50"	1.50"	1730	2583	4313	Blocking

• Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	17' 5" o/c	
Bottom Edge (Lu)	17' 5" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 17' 5 1/4"	N/A	14.0	--	
1 - Uniform (PLF)	0 to 17' 5" (Front)	N/A	56.3	90.6	Linked from: RJ2, Support 2
2 - Uniform (PLF)	0 to 17' 5" (Front)	N/A	126.0	202.5	Linked from: RJ3, Support 2

• Side loads are assumed to not induce cross-grain tension.

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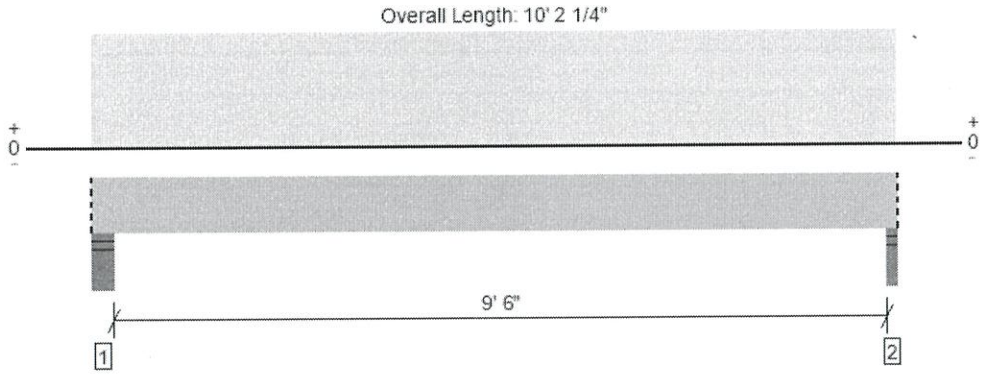
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

ROOF, R3

1 piece(s) 6 x 12 DF No.2



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	2437 @ 10' 1"	9453 (2.75")	Passed (26%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	1863 @ 1' 5"	8244	Passed (23%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	5839 @ 5' 2 1/2"	10166	Passed (57%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.066 @ 5' 2 1/2"	0.488	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.110 @ 5' 2 1/2"	0.650	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)

Member Length : 10' 2 1/4"
System : Roof
Member Type : Drop Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Lumber grading provisions must be extended over the length of the member per NDS 4.2.5.5.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Stud wall - DF	5.50"	5.50"	1.50"	1033	1527	2559	Blocking
2 - Stud wall - DF	2.75"	2.75"	1.50"	983	1453	2437	Blocking

• Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	10' 2" o/c	
Bottom Edge (Lu)	10' 2" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 10' 2 1/4"	N/A	16.0	--	
1 - Uniform (PLF)	0 to 10' 2" (Front)	N/A	56.3	90.6	Linked from: RJ2, Support 2
2 - Uniform (PLF)	0 to 10' 2" (Front)	N/A	126.0	202.5	Linked from: RJ3, Support 2

• Side loads are assumed to not induce cross-grain tension.

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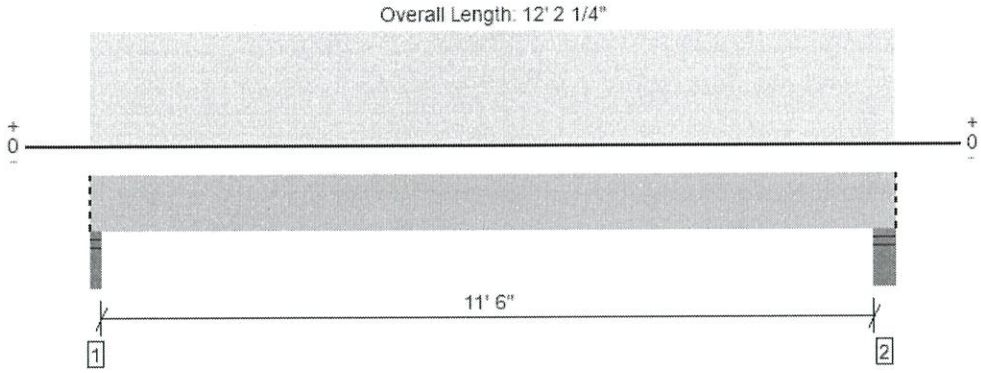
ROOF, R4

1 piece(s) 6 x 12 DF No.2



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	2938 @ 1 1/4"	9453 (2.75")	Passed (31%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	2355 @ 1' 2 1/4"	8244	Passed (29%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	8480 @ 5' 11 3/4"	10166	Passed (83%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.139 @ 5' 11 3/4"	0.587	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.233 @ 5' 11 3/4"	0.783	Passed (L/606)	--	1.0 D + 1.0 S (All Spans)

Member Length : 12' 2 1/4"
System : Roof
Member Type : Drop Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Lumber grading provisions must be extended over the length of the member per NDS 4.2.5.5.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Stud wall - DF	2.75"	2.75"	1.50"	1186	1753	2938	Blocking
2 - Stud wall - DF	5.50"	5.50"	1.50"	1227	1814	3041	Blocking

• Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	12' 2" o/c	
Bottom Edge (Lu)	12' 2" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 12' 2 1/4"	N/A	16.0	--	
1 - Uniform (PLF)	0 to 12' 2" (Front)	N/A	56.3	90.6	Linked from: RJ2, Support 2
2 - Uniform (PLF)	0 to 12' 2" (Front)	N/A	126.0	202.5	Linked from: RJ3, Support 2

• Side loads are assumed to not induce cross-grain tension.

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The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
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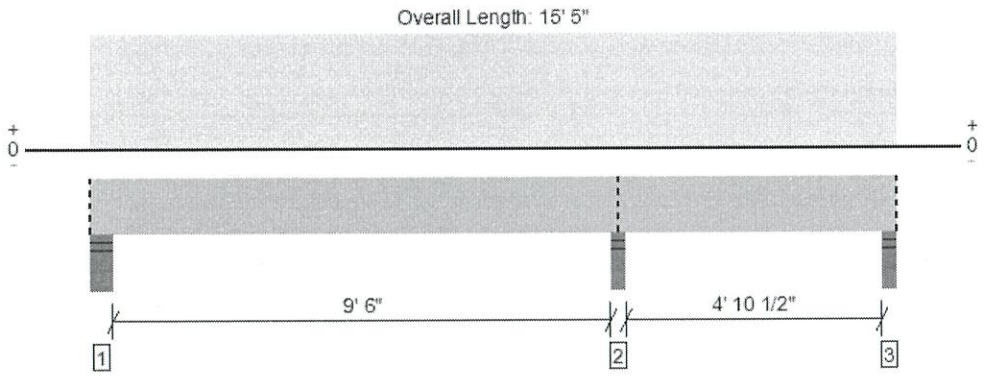
Weyerhaeuser

ROOF, R5

1 piece(s) 3 1/2" x 7 1/2" 24F-V4 DF Glulam



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	4617 @ 10' 1 1/4"	5206 (3.50")	Passed (89%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	2296 @ 9' 4"	5333	Passed (43%)	1.15	1.0 D + 1.0 S (All Spans)
Pos Moment (Ft-lbs)	3658 @ 4' 4 1/16"	7547	Passed (48%)	1.15	1.0 D + 1.0 S (Alt Spans)
Neg Moment (Ft-lbs)	-4089 @ 10' 1 1/4"	5817	Passed (70%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.149 @ 4' 9 1/2"	0.489	Passed (L/786)	--	1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.242 @ 4' 9 5/16"	0.651	Passed (L/484)	--	1.0 D + 1.0 S (Alt Spans)

Member Length : 15' 5"
System : Roof
Member Type : Drop Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Critical positive moment adjusted by a volume/size factor of 1.00 that was calculated using length L = 8' 1/16".
- Critical negative moment adjusted by a volume/size factor of 1.00 that was calculated using length L = 5' 3 13/16".
- The effects of positive or negative camber have not been accounted for when calculating deflection.
- The specified glulam is assumed to have its strong laminations at the bottom of the beam. Install with proper side up as indicated by the manufacturer.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Stud wall - DF	5.50"	5.50"	1.50"	778	1201	1979	Blocking
2 - Stud wall - SPF	3.50"	3.50"	3.10"	1830	2787	4617	Blocking
3 - Stud wall - DF	3.50"	3.50"	1.50"	181	484/-72	665	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	15' 5" o/c	
Bottom Edge (Lu)	15' 5" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 15' 5"	N/A	6.4	--	
1 - Uniform (PLF)	0 to 15' 5" (Front)	N/A	174.5	275.5	Linked from: RJ3, Support 1

- Side loads are assumed to not induce cross-grain tension.

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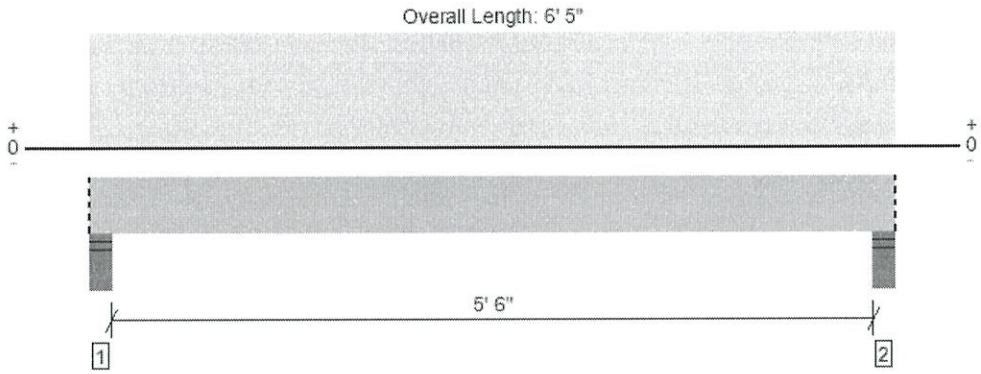
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

ROOF, R6

1 piece(s) 6 x 10 DF No.2



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	1486 @ 4"	18906 (5.50")	Passed (8%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	907 @ 1' 3"	6810	Passed (13%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	1914 @ 3' 2 1/2"	6937	Passed (28%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.013 @ 3' 2 1/2"	0.287	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.022 @ 3' 2 1/2"	0.383	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)

Member Length : 6' 5"
System : Roof
Member Type : Drop Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Lumber grading provisions must be extended over the length of the member per NDS 4.2.5.5.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Stud wall - DF	5.50"	5.50"	1.50"	602	884	1486	Blocking
2 - Stud wall - DF	5.50"	5.50"	1.50"	602	884	1486	Blocking

• Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	6' 5" o/c	
Bottom Edge (Lu)	6' 5" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 6' 5"	N/A	13.2	--	
1 - Uniform (PLF)	0 to 6' 5" (Front)	N/A	174.5	275.5	Linked from: RJ3, Support 1

• Side loads are assumed to not induce cross-grain tension.

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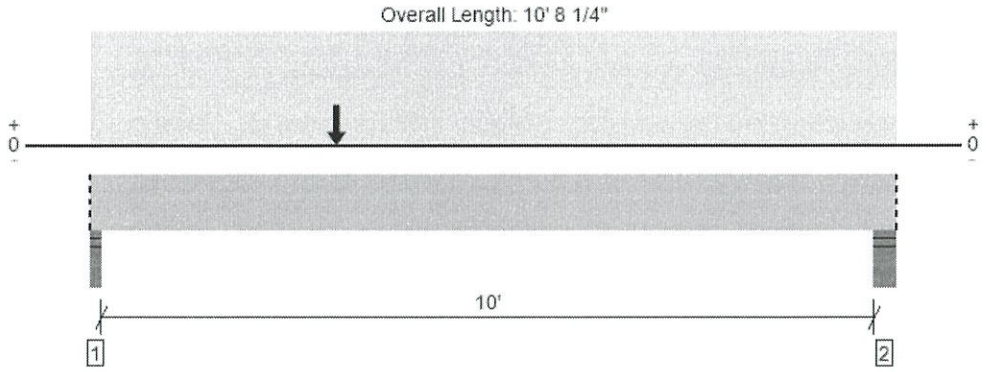
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ROOF, R7

1 piece(s) 6 x 10 DF No.2



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	2262 @ 1 1/4"	9453 (2.75")	Passed (24%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	2167 @ 1' 1/4"	6810	Passed (32%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	6624 @ 3' 3"	6937	Passed (95%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.118 @ 4' 10 1/16"	0.512	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.203 @ 4' 10 3/16"	0.683	Passed (L/605)	--	1.0 D + 1.0 S (All Spans)

Member Length : 10' 8 1/4"
System : Roof
Member Type : Drop Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Lumber grading provisions must be extended over the length of the member per NDS 4.2.5.5.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Stud wall - DF	2.75"	2.75"	1.50"	942	1320	2262	Blocking
2 - Stud wall - DF	5.50"	5.50"	1.50"	553	742	1295	Blocking

• Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	10' 8" o/c	
Bottom Edge (Lu)	10' 8" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 10' 8 1/4"	N/A	13.2	--	
1 - Uniform (PSF)	0 to 10' 8 1/4" (Front)	2'	15.0	25.0	Default Load
2 - Point (lb)	3' 3" (Front)	N/A	1033	1527	Linked from: R4, Support 1

• Side loads are assumed to not induce cross-grain tension.

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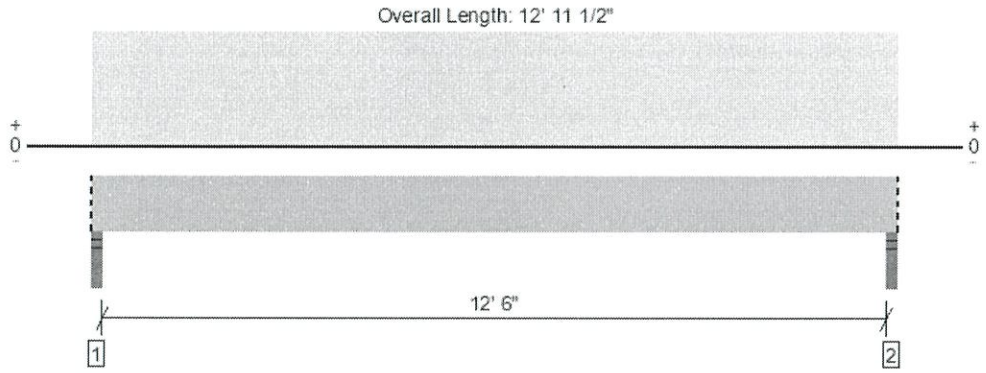
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

ROOF, R8

1 piece(s) 6 x 10 DF No.2



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	604 @ 1 1/4"	9453 (2.75")	Passed (6%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	509 @ 1' 1/4"	6810	Passed (7%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	1895 @ 6' 5 3/4"	6937	Passed (27%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.058 @ 6' 5 3/4"	0.637	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.109 @ 6' 5 3/4"	0.850	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)

Member Length : 12' 11 1/2"
System : Roof
Member Type : Drop Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Lumber grading provisions must be extended over the length of the member per NDS 4.2.5.5.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Stud wall - DF	2.75"	2.75"	1.50"	280	324	604	Blocking
2 - Stud wall - DF	2.75"	2.75"	1.50"	280	324	604	Blocking

• Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	13' o/c	
Bottom Edge (Lu)	13' o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 12' 11 1/2"	N/A	13.2	--	
1 - Uniform (PSF)	0 to 12' 11 1/2" (Front)	2'	15.0	25.0	Default Load

• Side loads are assumed to not induce cross-grain tension.

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The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

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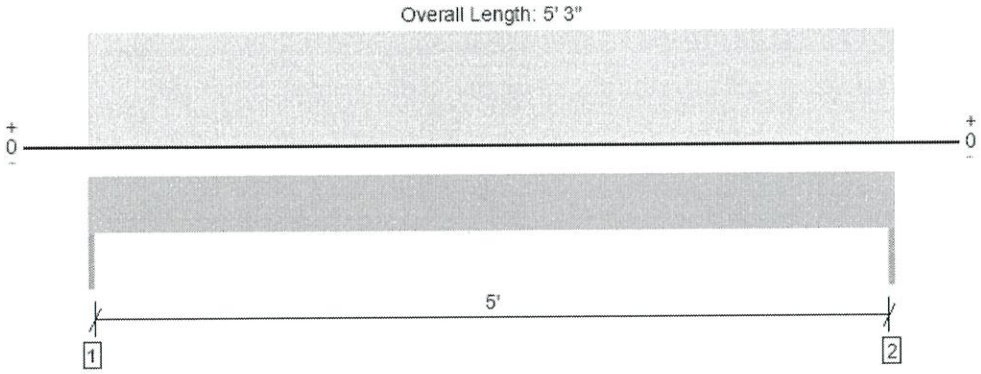
Weyerhaeuser

ROOF, H1

1 piece(s) 4 x 10 DF No.2



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	1832 @ 0	3281 (1.50")	Passed (56%)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Shear (lbs)	1207 @ 10 3/4"	4468	Passed (27%)	1.15	1.0 D + 0.75 L + 0.75 S (All Spans)
Moment (Ft-lbs)	2404 @ 2' 7 1/2"	5166	Passed (47%)	1.15	1.0 D + 0.75 L + 0.75 S (All Spans)
Live Load Defl. (in)	0.018 @ 2' 7 1/2"	0.175	Passed (L/999+)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Total Load Defl. (in)	0.032 @ 2' 7 1/2"	0.262	Passed (L/999+)	--	1.0 D + 0.75 L + 0.75 S (All Spans)

Member Length : 5' 3"
System : Wall
Member Type : Header
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Factored	
1 - Trimmer - DF	1.50"	1.50"	1.50"	802	604	769	1832	None
2 - Trimmer - DF	1.50"	1.50"	1.50"	802	604	769	1832	None

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	5' 3" o/c	
Bottom Edge (Lu)	5' 3" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location	Tributary Width	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 5' 3"	N/A	8.2	--	--	
1 - Uniform (PSF)	0 to 5' 3"	11' 6"	10.0	20.0	-	CEILING
2 - Uniform (PLF)	0 to 5' 3"	N/A	56.3	-	90.6	Linked from: RJ2, Support 2
3 - Uniform (PLF)	0 to 5' 3"	N/A	126.0	-	202.5	Linked from: RJ3, Support 2

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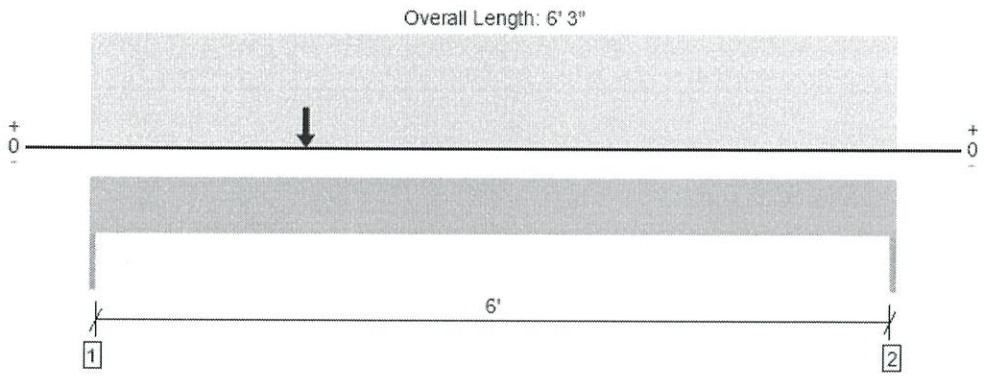
ROOF, H2

1 piece(s) 4 x 10 DF No.2



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	2506 @ 0	3281 (1.50")	Passed (76%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	2427 @ 10 3/4"	4468	Passed (54%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	4054 @ 1' 8"	5166	Passed (78%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.036 @ 2' 10 3/8"	0.208	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.061 @ 2' 10 3/8"	0.313	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)

Member Length : 6' 3"
System : Wall
Member Type : Header
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Trimmer - DF	1.50"	1.50"	1.50"	1019	1487	2506	None
2 - Trimmer - DF	1.50"	1.50"	1.50"	447	640	1087	None

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	6' 3" o/c	
Bottom Edge (Lu)	6' 3" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 6' 3"	N/A	8.2	--	
1 - Uniform (PSF)	0 to 6' 3"	2'	15.0	25.0	Default Load
2 - Point (lb)	1' 8"	N/A	1227	1814	Linked from: R5, Support 2

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The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

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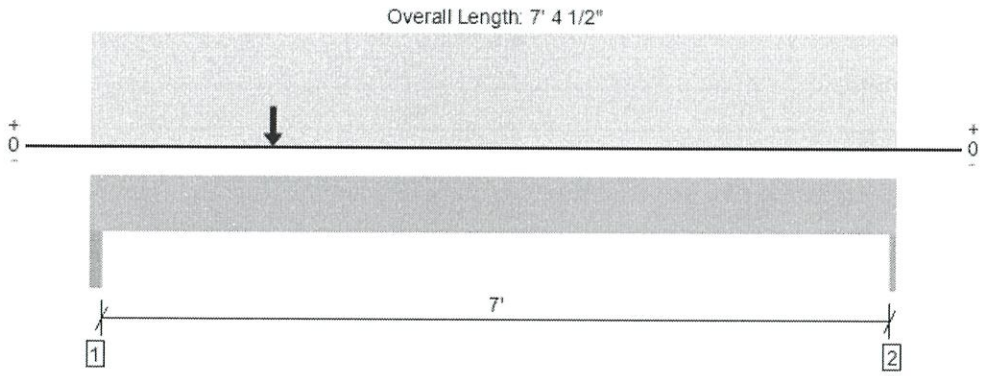
Weyerhaeuser

ROOF, H3

1 piece(s) 6 x 12 DF No.2



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	5593 @ 1 1/2"	10313 (3.00")	Passed (54%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	5477 @ 1' 2 1/2"	8244	Passed (66%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	8492 @ 1' 8"	10166	Passed (84%)	1.15	1.0 D + 1.0 S (All Spans)
Vert Live Load Defl. (in)	0.040 @ 3' 4 5/16"	0.242	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)
Vert Total Load Defl. (in)	0.068 @ 3' 4 3/8"	0.363	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)
Lat Member Reaction (lbs)	718 @ 7' 4 1/2"	N/A	Passed (N/A)	1.60	1.0 D + 0.6 W
Lat Shear (lbs)	602 @ 8 1/2"	11469	Passed (5%)	1.60	1.0 D + 0.6 W
Lat Moment (Ft-lbs)	1301 @ mid-span	6764	Passed (19%)	1.60	1.0 D + 0.6 W
Lat Deflection (in)	0.042 @ mid-span	0.363	Passed (L/999+)	--	1.0 D + 0.6 W
Bi-Axial Bending	0.66	1.00	Passed (66%)	1.60	1.0 D + 0.45 W + 0.75 L + 0.75 S

Member Length : 7' 4 1/2"
System : Wall
Member Type : Header
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Lateral deflection criteria: Wind (L/240)
- Lumber grading provisions must be extended over the length of the member per NDS 4.2.5.5.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Trimmer - DF	3.00"	3.00"	1.63"	2276	3317	5593	None
2 - Trimmer - DF	1.50"	1.50"	1.50"	735	1027	1762	None

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	7' 5" o/c	
Bottom Edge (Lu)	7' 5" o/c	

•Maximum allowable bracing intervals based on applied load.

Lateral Connections						
Supports	Stud Size	Stud Material	Connector	Type/Model	Quantity	Nailing
Left	2X	Douglas Fir-Larch	Nails	10d (0.128" x 3") (End)	8	
Right	2X	Douglas Fir-Larch	Nails	10d (0.128" x 3") (End)	8	

Vertical Loads	Location	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 7' 4 1/2"	N/A	16.0	--	
1 - Uniform (PSF)	0 to 7' 4 1/2"	2'	15.0	25.0	Default Load
2 - Point (lb)	1' 8"	N/A	1689	2522	Linked from: R3, Support 1
3 - Point (lb)	1' 8"	N/A	983	1453	Linked from: R4, Support 2

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Lateral Load	Location	Tributary Width	Wind (1.60)	Comments
1 - Uniform (PSF)	Full Length	5' 6"	60.0	

• IBC Table 1604.3, footnote f: Deflection checks are performed using 42% of this lateral wind load.

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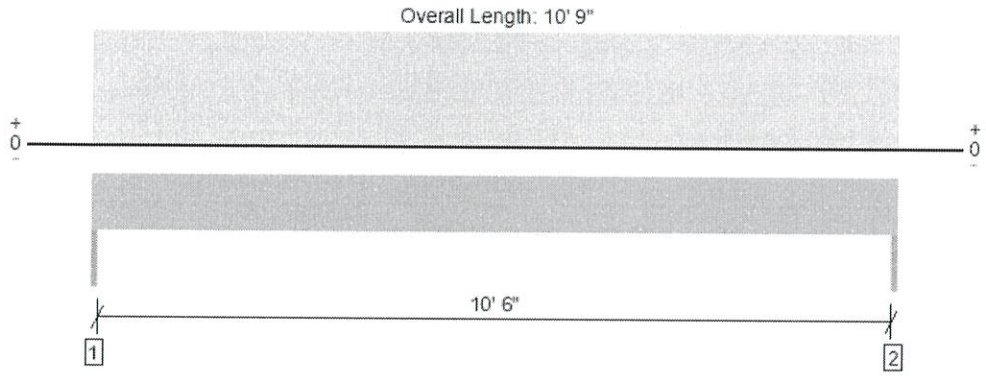
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ROOF, H4

1 piece(s) 6 x 10 DF No.2



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	501 @ 0	5156 (1.50")	Passed (10%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	416 @ 11"	6810	Passed (6%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	1347 @ 5' 4 1/2"	6937	Passed (19%)	1.15	1.0 D + 1.0 S (All Spans)
Vert Live Load Defl. (in)	0.029 @ 5' 4 1/2"	0.358	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)
Vert Total Load Defl. (in)	0.055 @ 5' 4 1/2"	0.538	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)
Lat Member Reaction (lbs)	871 @ 10' 9"	N/A	Passed (N/A)	1.60	1.0 D + 0.6 W
Lat Shear (lbs)	776 @ 7"	9475	Passed (8%)	1.60	1.0 D + 0.6 W
Lat Moment (Ft-lbs)	2340 @ mid-span	5588	Passed (42%)	1.60	1.0 D + 0.6 W
Lat Deflection (in)	0.199 @ mid-span	0.538	Passed (L/648)	--	1.0 D + 0.6 W
Bi-Axial Bending	0.48	1.00	Passed (48%)	1.60	1.0 D + 0.6 W

Member Length : 10' 9"
System : Wall
Member Type : Header
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Lateral deflection criteria: Wind (L/240)
- Lumber grading provisions must be extended over the length of the member per NDS 4.2.5.5.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Trimmer - DF	1.50"	1.50"	1.50"	232	269	501	None
2 - Trimmer - DF	1.50"	1.50"	1.50"	232	269	501	None

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	10' 9" o/c	
Bottom Edge (Lu)	10' 9" o/c	

•Maximum allowable bracing intervals based on applied load.

Lateral Connections						
Supports	Stud Size	Stud Material	Connector	Type/Model	Quantity	Nailing
Left	2X	Douglas Fir-Larch	Nails	16d (0.135" x 3 1/2") (End)	8	
Right	2X	Douglas Fir-Larch	Nails	16d (0.135" x 3 1/2") (End)	8	

Vertical Loads	Location	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 10' 9"	N/A	13.2	--	
1 - Uniform (PSF)	0 to 10' 9"	2'	15.0	25.0	Default Load

Lateral Load	Location	Tributary Width	Wind (1.60)	Comments
1 - Uniform (PSF)	Full Length	4' 6"	60.0	

• IBC Table 1604.3, footnote f: Deflection checks are performed using 42% of this lateral wind load.

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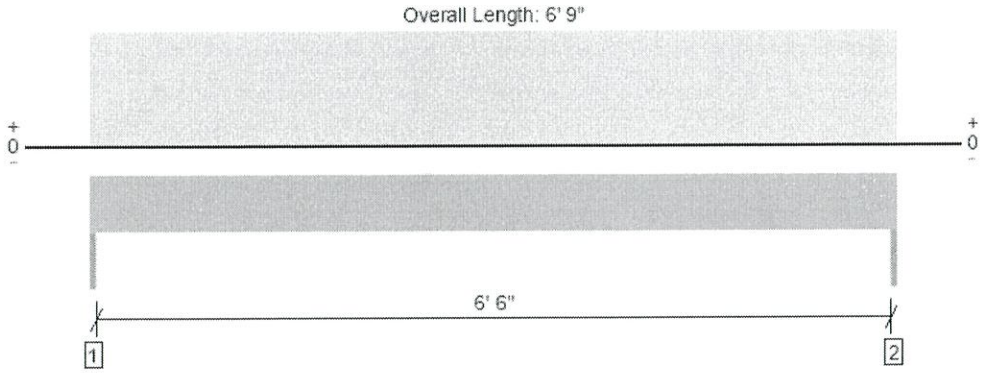
ROOF, H5

1 piece(s) 6 x 10 DF No.2



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	1534 @ 0	5156 (1.50")	Passed (30%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	1117 @ 11"	6810	Passed (16%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	2588 @ 3' 4 1/2"	6937	Passed (37%)	1.15	1.0 D + 1.0 S (All Spans)
Vert Live Load Defl. (in)	0.025 @ 3' 4 1/2"	0.225	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)
Vert Total Load Defl. (in)	0.042 @ 3' 4 1/2"	0.338	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)
Lat Member Reaction (lbs)	547 @ 6' 9"	N/A	Passed (N/A)	1.60	1.0 D + 0.6 W
Lat Shear (lbs)	452 @ 7"	9475	Passed (5%)	1.60	1.0 D + 0.6 W
Lat Moment (Ft-lbs)	923 @ mid-span	5588	Passed (17%)	1.60	1.0 D + 0.6 W
Lat Deflection (in)	0.031 @ mid-span	0.338	Passed (L/999+)	--	1.0 D + 0.6 W
Bi-Axial Bending	0.35	1.00	Passed (35%)	1.60	1.0 D + 0.45 W + 0.75 L + 0.75 S

Member Length : 6' 9"
System : Wall
Member Type : Header
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Lateral deflection criteria: Wind (L/240)
- Lumber grading provisions must be extended over the length of the member per NDS 4.2.5.5.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Trimmer - DF	1.50"	1.50"	1.50"	610	924	1534	None
2 - Trimmer - DF	1.50"	1.50"	1.50"	610	924	1534	None

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	6' 9" o/c	
Bottom Edge (Lu)	6' 9" o/c	

•Maximum allowable bracing intervals based on applied load.

Lateral Connections						
Supports	Stud Size	Stud Material	Connector	Type/Model	Quantity	Nailing
Left	2X	Douglas Fir-Larch	Nails	10d (0.128" x 3") (End)	6	
Right	2X	Douglas Fir-Larch	Nails	10d (0.128" x 3") (End)	6	

Vertical Loads	Location	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 6' 9"	N/A	13.2	--	
1 - Uniform (PLF)	0 to 6' 9"	N/A	56.3	90.6	Linked from: RJ2, Support 2
2 - Uniform (PLF)	0 to 6' 9"	N/A	111.2	183.1	Linked from: RJ1, Support 2

Lateral Load	Location	Tributary Width	Wind (1.60)	Comments
1 - Uniform (PSF)	Full Length	4' 6"	60.0	

ForteWEB Software Operator	Job Notes
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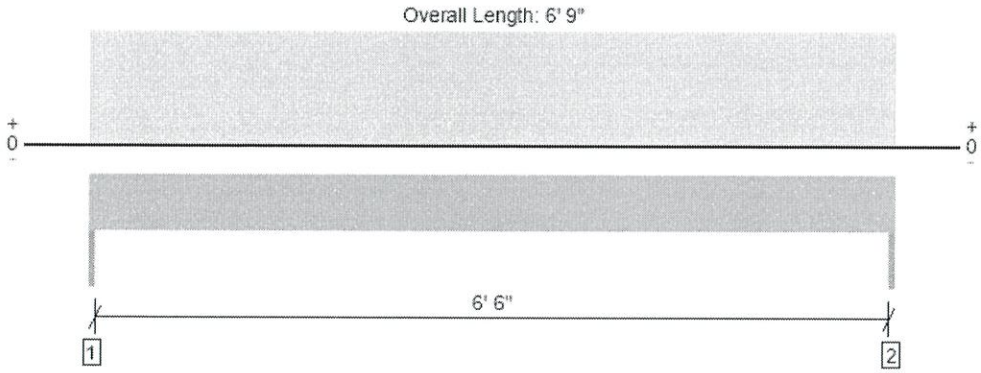
Weyerhaeuser

11/5/2024 9:39:46 PM UTC
ForteWEB v3.8, Engine: V8.4.1.24, Data: V8.1.6.3
File Name: McReynolds PC

ROOF, H6

1 piece(s) 4 x 10 DF No.2



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	1435 @ 0	3281 (1.50")	Passed (44%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	1054 @ 10 3/4"	4468	Passed (24%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	2421 @ 3' 4 1/2"	5166	Passed (47%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.033 @ 3' 4 1/2"	0.225	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.054 @ 3' 4 1/2"	0.338	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)

Member Length : 6' 9"
System : Wall
Member Type : Header
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Trimmer - DF	1.50"	1.50"	1.50"	566	869	1435	None
2 - Trimmer - DF	1.50"	1.50"	1.50"	566	869	1435	None

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	6' 9" o/c	
Bottom Edge (Lu)	6' 9" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 6' 9"	N/A	8.2	--	
1 - Uniform (PLF)	0 to 6' 9"	N/A	159.4	257.5	Linked from: RJ1, Support 1

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The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
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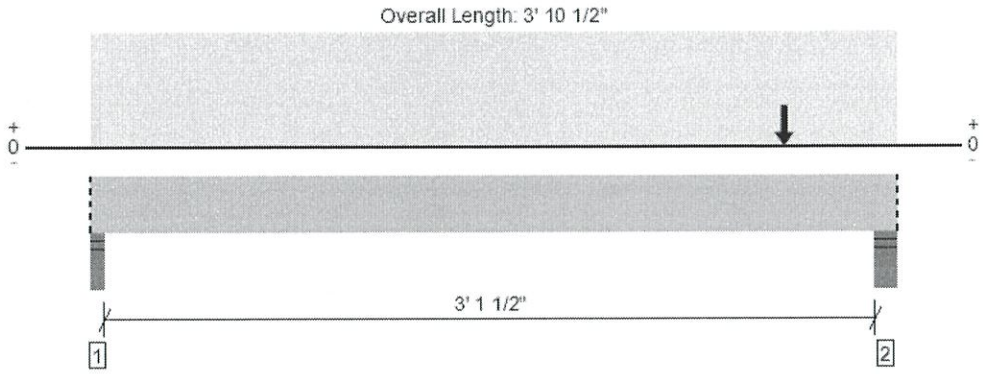
Weyerhaeuser

ROOF, C1

1 piece(s) 6 x 8 DF No.2



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	4108 @ 3' 6 1/2"	18906 (5.50")	Passed (22%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	568 @ 2' 9 1/2"	5376	Passed (11%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	853 @ 3' 4"	3706	Passed (23%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.003 @ 2' 3/4"	0.169	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.005 @ 2' 9/16"	0.225	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)

Member Length : 3' 10 1/2"
System : Roof
Member Type : Drop Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Factored	
1 - Stud wall - DF	3.50"	3.50"	1.50"	163	74	159	338	Blocking
2 - Stud wall - DF	5.50"	5.50"	1.50"	1685	81	2424	4108	Blocking

• Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	3' 11" o/c	
Bottom Edge (Lu)	3' 11" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 3' 10 1/2"	N/A	10.4	--	--	
1 - Uniform (PSF)	0 to 3' 10 1/2" (Front)	2'	10.0	20.0	-	ATTIC
2 - Point (lb)	3' 4" (Front)	N/A	1730	-	2583	Linked from: R3, Support 2

• Side loads are assumed to not induce cross-grain tension.

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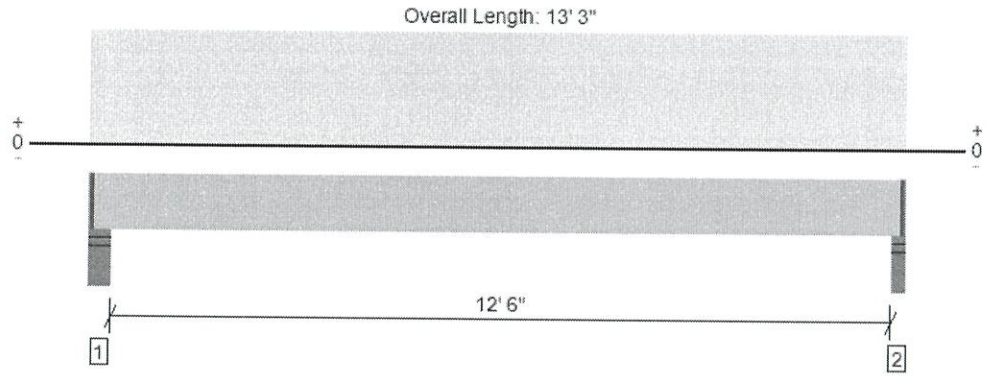
Weyerhaeuser

ROOF, CJ1

1 piece(s) 2 x 8 DF No.2 @ 24" OC



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Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	258 @ 13' 1/2"	2109 (2.25")	Passed (12%)	--	1.0 D + 1.0 L (All Spans)
Shear (lbs)	226 @ 1' 3/4"	1305	Passed (17%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	802 @ 6' 8 1/2"	1360	Passed (59%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.152 @ 6' 8 1/2"	0.317	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.304 @ 6' 8 1/2"	0.633	Passed (L/500)	--	1.0 D + 1.0 L (All Spans)
TJ-Pro™ Rating	N/A	N/A	N/A	--	N/A

Member Length : 13' 1/2"
System : Floor
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.
- No composite action between deck and joist was considered in analysis.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Factored	
1 - Stud wall - DF	5.50"	4.25"	1.50"	134	134	268	1 1/4" Rim Board
2 - Stud wall - DF	3.50"	2.25"	1.50"	131	131	262	1 1/4" Rim Board

• Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	12' 5" o/c	
Bottom Edge (Lu)	13' 1" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Floor Live (1.00)	Comments
1 - Uniform (PSF)	0 to 13' 3"	24"	10.0	10.0	Default Load

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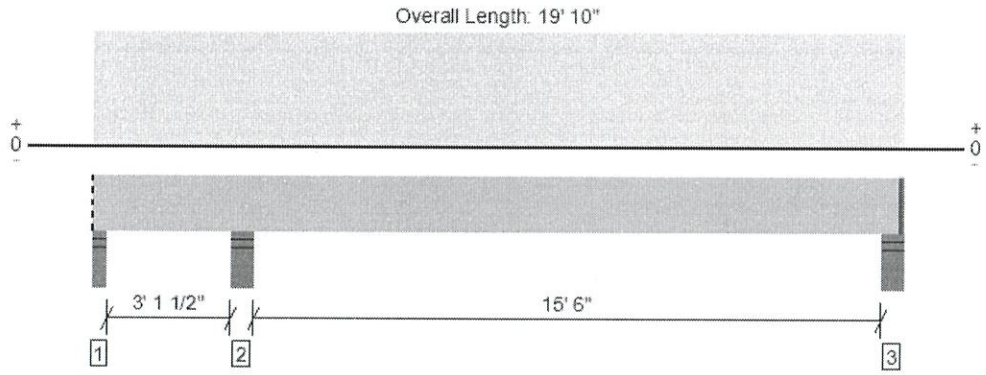
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ROOF, CJ2

1 piece(s) 2 x 8 DF No.2 @ 24" OC



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	752 @ 3' 7 3/4"	3506 (5.50")	Passed (21%)	--	1.0 D + 1.0 L (All Spans)
Shear (lbs)	349 @ 4' 5 3/4"	1305	Passed (27%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	-1037 @ 3' 7 3/4"	1360	Passed (76%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.191 @ 12' 5 5/16"	0.395	Passed (L/995)	--	1.0 D + 1.0 L (Alt Spans)
Total Load Defl. (in)	0.380 @ 12' 5 3/8"	0.791	Passed (L/500)	--	1.0 D + 1.0 L (Alt Spans)
TJ-Pro™ Rating	N/A	N/A	N/A	--	N/A

Member Length : 19' 8 3/4"
System : Floor
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- -262 lbs uplift at support located at 2 1/2". Strapping or other restraint may be required.
- Applicable calculations are based on NDS.
- No composite action between deck and joist was considered in analysis.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Factored	
1 - Stud wall - DF	3.50"	3.50"	1.50"	-112	37/-149	-262	Blocking
2 - Stud wall - SPF	5.50"	5.50"	1.50"	376	376	752	None
3 - Stud wall - DF	5.50"	4.25"	1.50"	133	133	266	1 1/4" Rim Board

- Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.
- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	12' 9" o/c	
Bottom Edge (Lu)	8' 11" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Floor Live (1.00)	Comments
1 - Uniform (PSF)	0 to 19' 10"	24"	10.0	10.0	Default Load

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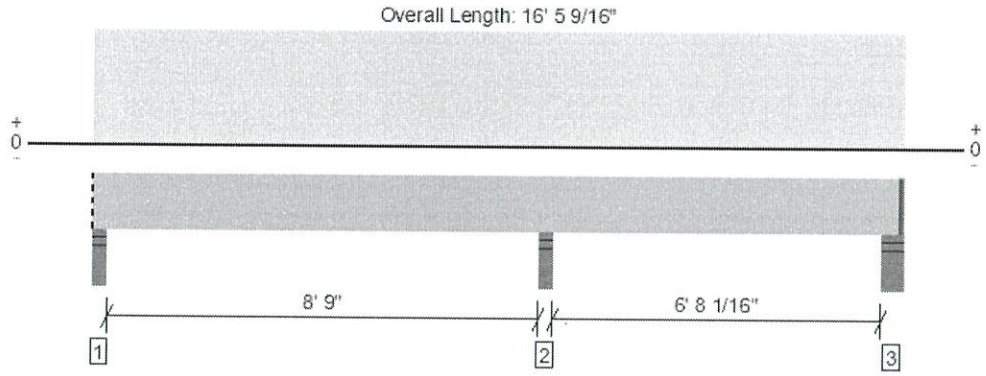
Weyerhaeuser

ROOF, CJ3

1 piece(s) 2 x 8 DF No.2 @ 24" OC



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	403 @ 9' 2 1/4"	2231 (3.50")	Passed (18%)	--	1.0 D + 1.0 L (All Spans)
Shear (lbs)	186 @ 8' 5 1/4"	1305	Passed (14%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	-331 @ 9' 2 1/4"	1360	Passed (24%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.025 @ 4' 5 3/16"	0.224	Passed (L/999+)	--	1.0 D + 1.0 L (Alt Spans)
Total Load Defl. (in)	0.045 @ 4' 4 1/16"	0.449	Passed (L/999+)	--	1.0 D + 1.0 L (Alt Spans)
TJ-Pro™ Rating	N/A	N/A	N/A	--	N/A

Member Length : 16' 4 5/16"
System : Floor
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.
- No composite action between deck and joist was considered in analysis.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Factored	
1 - Stud wall - DF	3.50"	3.50"	1.50"	76	81/-6	157	Blocking
2 - Stud wall - SPF	3.50"	3.50"	1.50"	201	201	403	None
3 - Stud wall - DF	5.50"	4.25"	1.50"	52	69/-14	121	1 1/4" Rim Board

- Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.
- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	16' 4" o/c	
Bottom Edge (Lu)	16' 4" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Floor Live (1.00)	Comments
1 - Uniform (PSF)	0 to 16' 5 9/16"	24"	10.0	10.0	Default Load

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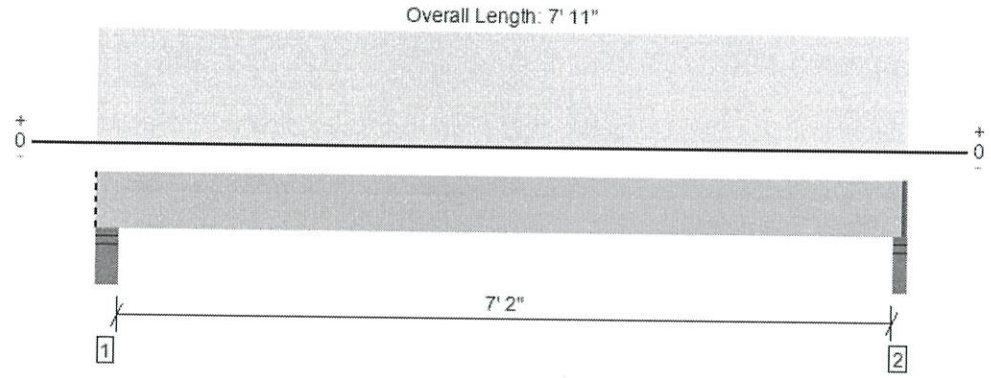
MEMBER REPORT

PASSED

ROOF, CJ4

1 piece(s) 2 x 8 DF No.2 @ 24" OC



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	151 @ 7' 8 1/2"	2109 (2.25")	Passed (7%)	--	1.0 D + 1.0 L (All Spans)
Shear (lbs)	119 @ 1' 3/4"	1305	Passed (9%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	269 @ 4' 1/2"	1360	Passed (20%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.017 @ 4' 1/2"	0.183	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.034 @ 4' 1/2"	0.367	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans)
TJ-Pro™ Rating	N/A	N/A	N/A	--	N/A

Member Length : 7' 9 3/4"
System : Floor
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.
- No composite action between deck and joist was considered in analysis.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Factored	
1 - Stud wall - DF	5.50"	5.50"	1.50"	81	81	162	Blocking
2 - Stud wall - DF	3.50"	2.25"	1.50"	78	78	155	1 1/4" Rim Board

- Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.
- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	7' 10" o/c	
Bottom Edge (Lu)	7' 10" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Floor Live (1.00)	Comments
1 - Uniform (PSF)	0 to 7' 11"	24"	10.0	10.0	Default Load

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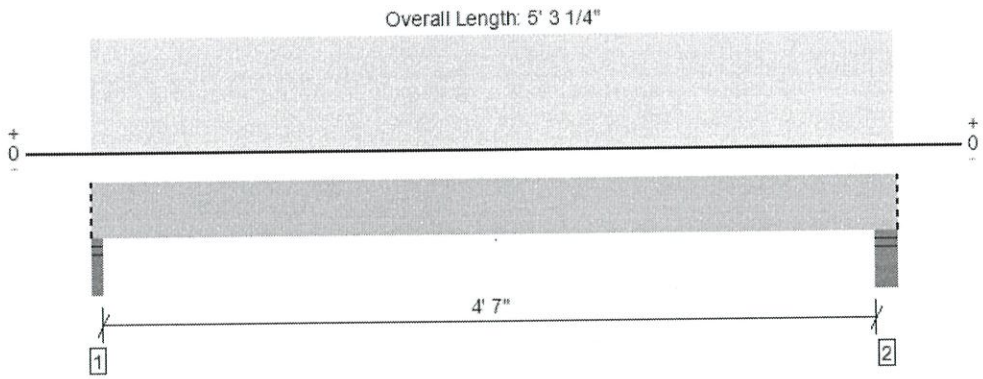
Weyerhaeuser

ROOF, R2 (not used disregard)

1 piece(s) 6 x 12 DF No.2



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	1153 @ 1 1/4"	9453 (2.75")	Passed (12%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	610 @ 1' 2 1/4"	8244	Passed (7%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	1335 @ 2' 6 1/4"	10166	Passed (13%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.004 @ 2' 6 1/4"	0.242	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.006 @ 2' 6 1/4"	0.322	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)

Member Length : 5' 3 1/4"
System : Roof
Member Type : Drop Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Lumber grading provisions must be extended over the length of the member per NDS 4.2.5.5.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Stud wall - DF	2.75"	2.75"	1.50"	463	690	1153	Blocking
2 - Stud wall - DF	5.50"	5.50"	1.50"	501	747	1248	Blocking

• Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	5' 3" o/c	
Bottom Edge (Lu)	5' 3" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 5' 3 1/4"	N/A	16.0	--	
1 - Uniform (PLF)	0 to 5' 3" (Front)	N/A	111.2	183.1	Linked from: RJ1, Support 2
2 - Uniform (PLF)	0 to 5' 3" (Front)	N/A	56.3	90.6	Linked from: RJ2, Support 1

• Side loads are assumed to not induce cross-grain tension.

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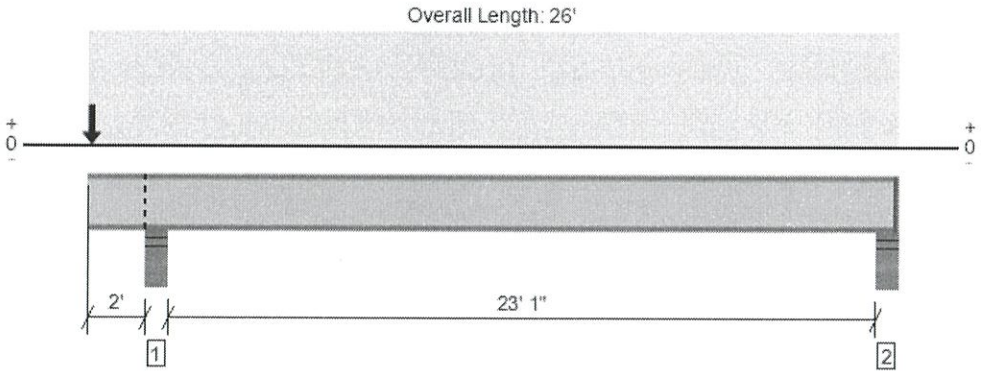
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

FLOOR, FJ1

1 piece(s) 14" TJI® 360 @ 16" OC



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	814 @ 25' 7 1/2"	1505 (3.50")	Passed (54%)	1.00	1.0 D + 1.0 L (Alt Spans)
Shear (lbs)	790 @ 25' 6 1/2"	1955	Passed (40%)	1.00	1.0 D + 1.0 L (Alt Spans)
Moment (Ft-lbs)	4564 @ 14' 1 13/16"	7335	Passed (62%)	1.00	1.0 D + 1.0 L (Alt Spans)
Live Load Defl. (in)	0.539 @ 13' 11 1/8"	0.585	Passed (L/521)	--	1.0 D + 1.0 L (Alt Spans)
Total Load Defl. (in)	0.672 @ 14' 1/16"	1.170	Passed (L/418)	--	1.0 D + 1.0 L (Alt Spans)
TJ-Pro™ Rating	42	40	Passed	--	--

Member Length : 25' 10 3/4"
System : Floor
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Overhang deflection criteria: LL (2L/480) and TL (2L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A structural analysis of the deck has not been performed.
- Deflection analysis is based on composite action with a single layer of 7/8" Weyerhaeuser Edge Gold™ Panel (32" Span Rating) that is glued and nailed down.
- Additional considerations for the TJ-Pro™ Rating include: 5/8" Gypsum ceiling.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Factored	
1 - Stud wall - DF	5.50"	5.50"	3.50"	392	748	73	1140	Blocking
2 - Stud wall - DF	5.50"	4.25"	1.75"	178	644	-6	822	1 1/4" Rim Board

- Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.
- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	4' 9" o/c	
Bottom Edge (Lu)	9' 7" o/c	

- TJI joists are only analyzed using Maximum Allowable bracing solutions.
- Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location	Spacing	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 26'	16"	12.0	40.0	-	Default Load
2 - Point (PLF)	1 1/2"	16"	85.0	-	-	
3 - Point (PLF)	1 1/2"	16"	30.0	-	50.0	

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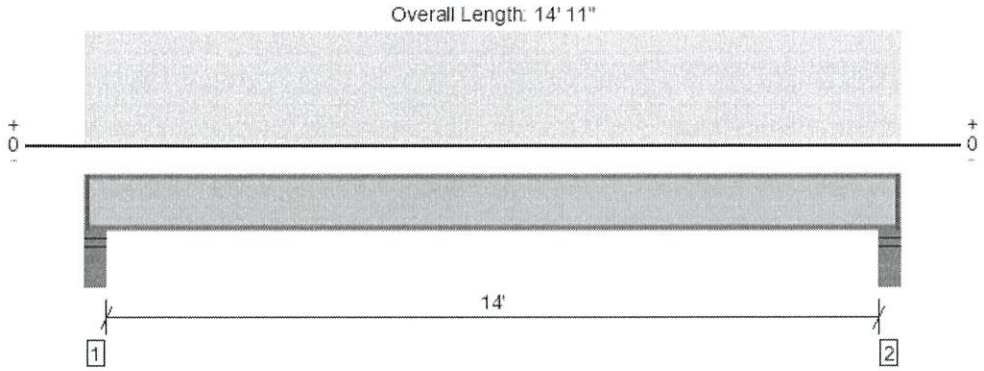
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

FLOOR, FJ2

1 piece(s) 14" TJI® 360 @ 16" OC



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	510 @ 4 1/2"	1505 (3.50")	Passed (34%)	1.00	1.0 D + 1.0 L (All Spans)
Shear (lbs)	485 @ 5 1/2"	1955	Passed (25%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	1739 @ 7' 5 1/2"	7335	Passed (24%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.085 @ 7' 5 1/2"	0.354	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.111 @ 7' 5 1/2"	0.708	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans)
TJ-Pro™ Rating	64	40	Passed	--	--

Member Length : 14' 8 1/2"
System : Floor
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A structural analysis of the deck has not been performed.
- Deflection analysis is based on composite action with a single layer of 7/8" Weyerhaeuser Edge Gold™ Panel (32" Span Rating) that is glued and nailed down.
- Additional considerations for the TJ-Pro™ Rating include: 5/8" Gypsum ceiling.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Factored	
1 - Stud wall - DF	5.50"	4.25"	1.75"	119	398	517	1 1/4" Rim Board
2 - Stud wall - DF	5.50"	4.25"	1.75"	119	398	517	1 1/4" Rim Board

- Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	7' 11" o/c	
Bottom Edge (Lu)	14' 9" o/c	

- TJI joists are only analyzed using Maximum Allowable bracing solutions.
- Maximum allowable bracing intervals based on applied load.

Vertical Load	Location	Spacing	Dead (0.90)	Floor Live (1.00)	Comments
1 - Uniform (PSF)	0 to 14' 11"	16"	12.0	40.0	Default Load

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The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

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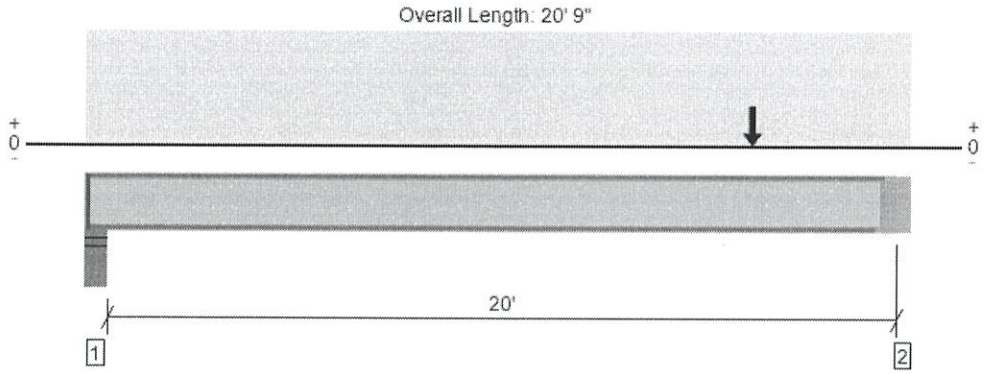
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

FLOOR, FJ3

1 piece(s) 14" TJI® 210 @ 16" OC



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	1264 @ 20' 5 1/2"	1264 (2.12")	Passed (100%)	1.15	1.0 D + 0.75 L + 0.75 S (All Spans)
Shear (lbs)	1264 @ 20' 5 1/2"	2237	Passed (57%)	1.15	1.0 D + 0.75 L + 0.75 S (All Spans)
Moment (Ft-lbs)	4346 @ 11' 6 7/8"	4490	Passed (97%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.398 @ 10' 9 1/2"	0.502	Passed (L/606)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Total Load Defl. (in)	0.639 @ 10' 11"	1.004	Passed (L/377)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
TJ-Pro™ Rating	49	40	Passed	--	--

Member Length : 20' 4 1/4"
System : Floor
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A structural analysis of the deck has not been performed.
- Deflection analysis is based on composite action with a single layer of 7/8" Weyerhaeuser Edge Gold™ Panel (32" Span Rating) that is glued and nailed down.
- Additional considerations for the TJ-Pro™ Rating include: 5/8" Gypsum ceiling.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Factored	
1 - Stud wall - DF	5.50"	4.25"	1.75"	247	556	96	802	1 1/4" Rim Board
2 - Hanger on 14" DF beam	3.50"	Hanger[1]	2.12" / - [2]	534	551	444	1281	See note [1]

- Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.
- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- [1] See Connector grid below for additional information and/or requirements.
- [2] Required Bearing Length / Required Bearing Length with Web Stiffeners

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	3' 8" o/c	
Bottom Edge (Lu)	20' 4" o/c	

•TJI joists are only analyzed using Maximum Allowable bracing solutions.
•Maximum allowable bracing intervals based on applied load.

Connector: Simpson Strong-Tie						
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories
2 - Face Mount Hanger	HU2.1/9	2.50"	N/A	14-10dx1.5	6-10dx1.5	Web Stiffeners

- Refer to manufacturer notes and instructions for proper installation and use of all connectors.

Vertical Loads	Location	Spacing	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 20' 9"	16"	12.0	40.0	-	Default Load
2 - Point (PLF)	16' 10 1/2"	16"	126.0	-	202.5	Linked from: RJ3, Support 2
3 - Point (PLF)	16' 10 1/2"	16"	125.6	-	203.1	Linked from: RJ4, Support 2
4 - Point (PLF)	16' 10 1/2"	16"	85.0	-	-	WALL WEIGHT

ForteWEB Software Operator	Job Notes
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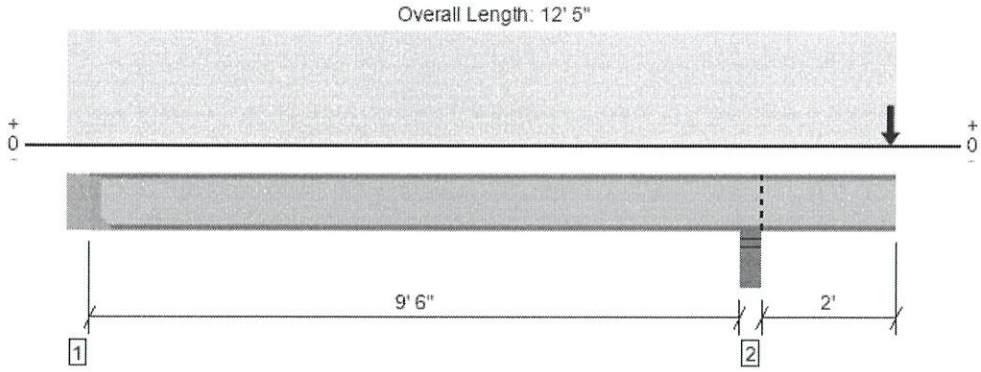
FLOOR, FJ4

1 piece(s) 14" TJI® 360 @ 16" OC



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	298 @ 5 1/2"	1080 (1.75")	Passed (28%)	1.00	1.0 D + 1.0 L (Alt Spans)
Shear (lbs)	359 @ 9' 11 1/2"	1955	Passed (18%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	641 @ 4' 9 1/16"	7335	Passed (9%)	1.00	1.0 D + 1.0 L (Alt Spans)
Live Load Defl. (in)	0.024 @ 5' 3 7/8"	0.243	Passed (L/999+)	--	1.0 D + 1.0 L (Alt Spans)
Total Load Defl. (in)	0.018 @ 12' 5"	0.223	Passed (2L/999+)	--	1.0 D + 0.75 L + 0.75 S (Alt Spans)
TJ-Pro™ Rating	69	40	Passed	--	--

Member Length : 11' 11 1/2"
System : Floor
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Overhang deflection criteria: LL (2L/480) and TL (2L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A structural analysis of the deck has not been performed.
- Deflection analysis is based on composite action with a single layer of 7/8" Weyerhaeuser Edge Gold™ Panel (32" Span Rating) that is glued and nailed down.
- Additional considerations for the TJ-Pro™ Rating include: 1/2" Gypsum ceiling.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Factored	
1 - Hanger on 14" DF beam	5.50"	Hanger[1]	1.75" / - [2]	46	284	-15	330	See note [1]
2 - Stud wall - DF	5.50"	5.50"	3.50"	306	392	82	698	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.
- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- [1] See Connector grid below for additional information and/or requirements.
- [2] Required Bearing Length / Required Bearing Length with Web Stiffeners

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	9' 7" o/c	
Bottom Edge (Lu)	9' 7" o/c	

- TJI joists are only analyzed using Maximum Allowable bracing solutions.
- Maximum allowable bracing intervals based on applied load.

Connector: Simpson Strong-Tie						
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories
1 - Face Mount Hanger	IUS2.37/14	2.00"	N/A	12-10dx1.5	2-Strong-Grip	

- Refer to manufacturer notes and instructions for proper installation and use of all connectors.

Vertical Loads	Location	Spacing	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 12' 5"	16"	12.0	40.0	-	Default Load
2 - Point (PLF)	12' 4"	16"	85.0	-	-	
3 - Point (PLF)	12' 4"	16"	30.0	-	50.0	

ForteWEB Software Operator	Job Notes
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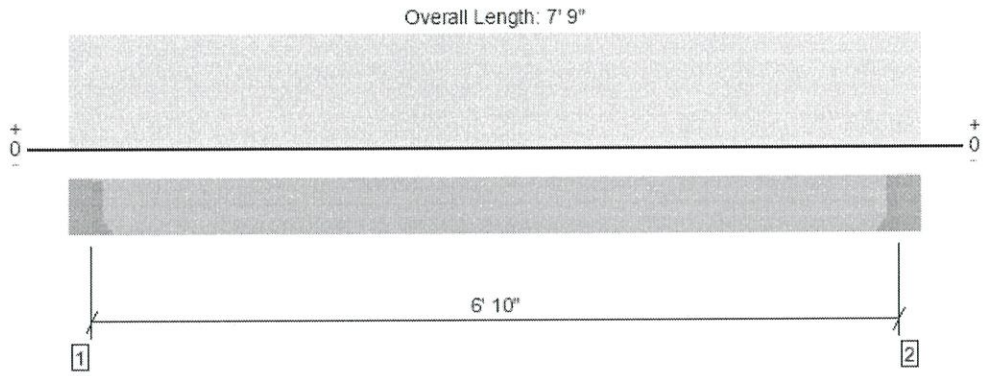
Weyerhaeuser

FLOOR, B1

2 piece(s) 1 1/2" x 14" 1.5E TimberStrand® LSL



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	3324 @ 5 1/2"	3870 (1.50")	Passed (86%)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Shear (lbs)	2189 @ 1' 7 1/2"	9660	Passed (23%)	1.15	1.0 D + 0.75 L + 0.75 S (All Spans)
Moment (Ft-lbs)	5679 @ 3' 10 1/2"	20834	Passed (27%)	1.15	1.0 D + 0.75 L + 0.75 S (All Spans)
Live Load Defl. (in)	0.039 @ 3' 10 1/2"	0.171	Passed (L/999+)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Total Load Defl. (in)	0.067 @ 3' 10 1/2"	0.342	Passed (L/999+)	--	1.0 D + 0.75 L + 0.75 S (All Spans)

Member Length : 6' 10"
System : Floor
Member Type : Flush Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Factored	
1 - Hanger on 14" DF beam	5.50"	Hanger[1]	1.50"	1596	1601	1290	3765	See note [1]
2 - Hanger on 14" DF beam	5.50"	Hanger[1]	1.50"	1595	1601	1290	3764	See note [1]

- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- [1] See Connector grid below for additional information and/or requirements.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	6' 10" o/c	
Bottom Edge (Lu)	6' 10" o/c	

•Maximum allowable bracing intervals based on applied load.

Connector: Simpson Strong-Tie						
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories
1 - Face Mount Hanger	HHUS210-2	3.00"	N/A	30-10d	10-10d	
2 - Face Mount Hanger	HHUS210-2	3.00"	N/A	30-10d	10-10d	

- Refer to manufacturer notes and instructions for proper installation and use of all connectors.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Comments
0 - Self Weight (PLF)	5 1/2" to 7' 3 1/2"	N/A	12.8	--	--	
1 - Uniform (PLF)	0 to 7' 9" (Front)	N/A	400.5	413.3	333.0	Linked from: FJ3, Support 2

- Side loads are assumed to not induce cross-grain tension.

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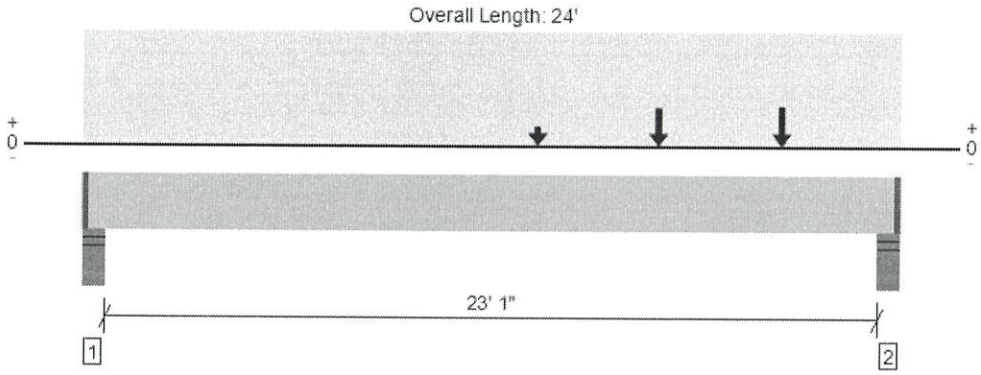
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

FLOOR, B2

1 piece(s) 7" x 14" 2.2E Parallam® PSL



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	6997 @ 23' 8"	17500 (4.00")	Passed (40%)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Shear (lbs)	6867 @ 22' 4 1/2"	21789	Passed (32%)	1.15	1.0 D + 0.75 L + 0.75 S (All Spans)
Moment (Ft-lbs)	31755 @ 16' 10 1/2"	62472	Passed (51%)	1.15	1.0 D + 0.75 L + 0.75 S (All Spans)
Live Load Defl. (in)	0.418 @ 13' 4"	0.583	Passed (L/670)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Total Load Defl. (in)	0.796 @ 13' 1/16"	1.167	Passed (L/352)	--	1.0 D + 0.75 L + 0.75 S (All Spans)

Member Length : 23' 9"
System : Floor
Member Type : Flush Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Member should be side-loaded from both sides of the member or braced to prevent rotation.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Factored	
1 - Stud wall - DF	5.50"	4.00"	1.50"	1335	914	951	2734	1 1/2" Rim Board
2 - Stud wall - DF	5.50"	4.00"	1.60"	3221	2123	2922	7004	1 1/2" Rim Board

• Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	23' 9" o/c	
Bottom Edge (Lu)	23' 9" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Comments
0 - Self Weight (PLF)	1 1/2" to 23' 10 1/2"	N/A	30.6	--	--	
1 - Uniform (PSF)	0 to 24' (Front)	1' 4"	12.0	40.0	-	Default Load
2 - Point (lb)	20' 6" (Front)	N/A	1596	1601	1290	Linked from: B1, Support 1
3 - Point (lb)	13' 4" (Front)	N/A	163	74	159	Linked from: C1, Support 1
4 - Point (lb)	16' 10 1/2" (Front)	N/A	1685	81	2424	Linked from: C1, Support 2

• Side loads are assumed to not induce cross-grain tension.

Weyerhaeuser Notes

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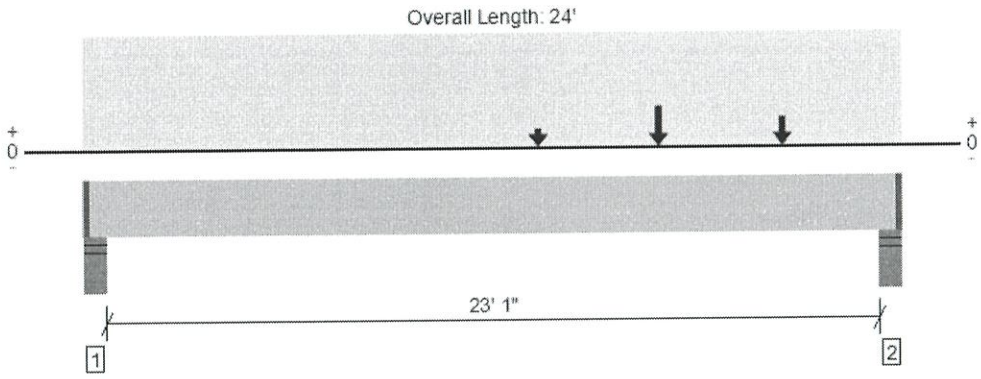
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

FLOOR, B2 with Strap Wind Down

1 piece(s) 7" x 14" 2.2E Parallam® PSL



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	7874 @ 23' 8"	17500 (4.00")	Passed (45%)	--	1.0 D + 0.45 W + 0.75 L + 0.75 S (All Spans)
Shear (lbs)	6867 @ 22' 4 1/2"	21789	Passed (32%)	1.15	1.0 D + 0.75 L + 0.75 S (All Spans)
Moment (Ft-lbs)	31755 @ 16' 10 1/2"	62472	Passed (51%)	1.15	1.0 D + 0.75 L + 0.75 S (All Spans)
Live Load Defl. (in)	0.549 @ 13' 4"	0.583	Passed (L/510)	--	1.0 D + 0.45 W + 0.75 L + 0.75 S (All Spans)
Total Load Defl. (in)	0.927 @ 13' 7/16"	1.167	Passed (L/302)	--	1.0 D + 0.45 W + 0.75 L + 0.75 S (All Spans)

Member Length : 23' 9"
System : Floor
Member Type : Flush Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Member should be side-loaded from both sides of the member or braced to prevent rotation.

Supports	Bearing Length			Loads to Supports (lbs)						Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Wind	Seismic	Factored	
1 - Stud wall - DF	5.50"	4.00"	1.50"	1335	914	951	800	523/-523	3094	1 1/2" Rim Board
2 - Stud wall - DF	5.50"	4.00"	1.80"	3221	2123	2922	1950	1273/-1273	7881	1 1/2" Rim Board

- Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	23' 9" o/c	
Bottom Edge (Lu)	23' 9" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Wind (1.60)	Seismic (1.60)	Comments
0 - Self Weight (PLF)	1 1/2" to 23' 10 1/2"	N/A	30.6	--	--	--	--	
1 - Uniform (PSF)	0 to 24' (Front)	1' 4"	12.0	40.0	-	-	-	Default Load
2 - Point (lb)	20' 6" (Front)	N/A	1596	1601	1290	-	-	Linked from: B1, Support 1
3 - Point (lb)	16' 10 1/2" (Front)	N/A	-	-	-	2750	1796	
4 - Point (lb)	13' 4" (Front)	N/A	163	74	159	-	-	Linked from: R6, Support 1
5 - Point (lb)	16' 10 1/2" (Front)	N/A	1685	81	2424	-	-	Linked from: R6, Support 2

- Side loads are assumed to not induce cross-grain tension.

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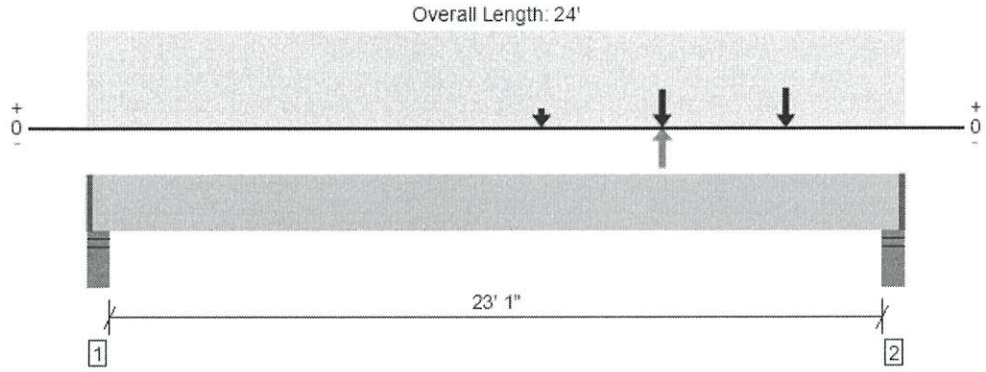
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

FLOOR, B2 with Strap Wind Up

1 piece(s) 7" x 14" 2.2E Parallam® PSL



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	7665 @ 23' 8"	17500 (4.00")	Passed (44%)	--	1.0 D - 0.525 E + 0.75 L + 0.75 S (All Spans)
Shear (lbs)	6867 @ 22' 4 1/2"	21789	Passed (32%)	1.15	1.0 D + 0.75 L + 0.75 S (All Spans)
Moment (Ft-lbs)	31755 @ 16' 10 1/2"	62472	Passed (51%)	1.15	1.0 D + 0.75 L + 0.75 S (All Spans)
Live Load Defl. (in)	0.418 @ 13' 4"	0.583	Passed (L/670)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Total Load Defl. (in)	0.796 @ 13' 1/16"	1.167	Passed (L/352)	--	1.0 D + 0.75 L + 0.75 S (All Spans)

Member Length : 23' 9"
System : Floor
Member Type : Flush Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Member should be side-loaded from both sides of the member or braced to prevent rotation.

Supports	Bearing Length			Loads to Supports (lbs)						Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Wind	Seismic	Factored	
1 - Stud wall - DF	5.50"	4.00"	1.50"	1335	914	951	-800	523/-523	3008	1 1/2" Rim Board
2 - Stud wall - DF	5.50"	4.00"	1.75"	3221	2123	2922	-1950	1273/-1273	7672	1 1/2" Rim Board

- Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	23' 9" o/c	
Bottom Edge (Lu)	23' 9" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Wind (1.60)	Seismic (1.60)	Comments
0 - Self Weight (PLF)	1 1/2" to 23' 10 1/2"	N/A	30.6	--	--	--	--	
1 - Uniform (PSF)	0 to 24' (Front)	1' 4"	12.0	40.0	-	-	-	Default Load
2 - Point (lb)	20' 6" (Front)	N/A	1596	1601	1290	-	-	Linked from: B1, Support 1
3 - Point (lb)	16' 10 1/2" (Front)	N/A	-	-	-	-2750	-1796	
4 - Point (lb)	13' 4" (Front)	N/A	163	74	159	-	-	Linked from: R6, Support 1
5 - Point (lb)	16' 10 1/2" (Front)	N/A	1685	81	2424	-	-	Linked from: R6, Support 2

- Side loads are assumed to not induce cross-grain tension.

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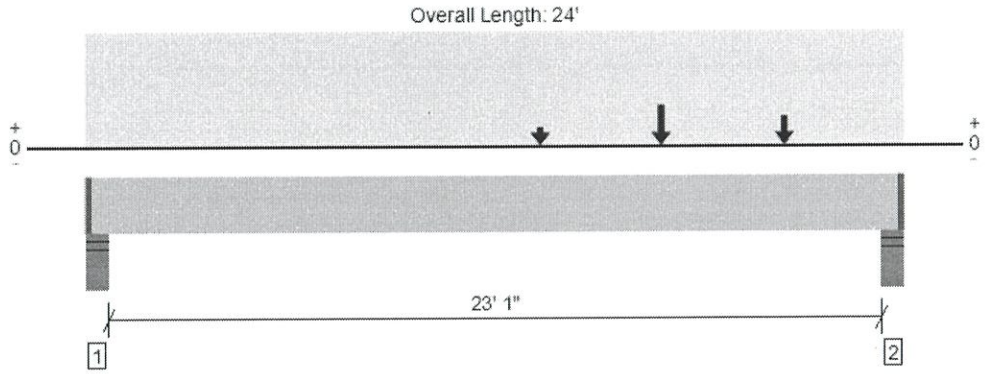
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

FLOOR, B2 with Overstrength

1 piece(s) 7" x 14" 2.2E Parallam® PSL



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	8668 @ 23' 8"	17500 (4.00")	Passed (50%)	--	1.0 D + 0.525 E + 0.75 L + 0.75 S (All Spans)
Shear (lbs)	6867 @ 22' 4 1/2"	21789	Passed (32%)	1.15	1.0 D + 0.75 L + 0.75 S (All Spans)
Moment (Ft-lbs)	31755 @ 16' 10 1/2"	62472	Passed (51%)	1.15	1.0 D + 0.75 L + 0.75 S (All Spans)
Live Load Defl. (in)	0.418 @ 13' 4"	0.583	Passed (L/670)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Total Load Defl. (in)	0.796 @ 13' 1/16"	1.167	Passed (L/352)	--	1.0 D + 0.75 L + 0.75 S (All Spans)

Member Length : 23' 9"
System : Floor
Member Type : Flush Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- -295 lbs uplift at support located at 23' 8". Strapping or other restraint may be required.
- Member should be side-loaded from both sides of the member or braced to prevent rotation.

Supports	Bearing Length			Loads to Supports (lbs)					Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Seismic	Factored	
1 - Stud wall - DF	5.50"	4.00"	1.50"	1335	914	951	1307/-1307	3420/-114	1 1/2" Rim Board
2 - Stud wall - DF	5.50"	4.00"	1.98"	3221	2123	2922	3182/-3182	8675/-295	1 1/2" Rim Board

- Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	23' 9" o/c	
Bottom Edge (Lu)	23' 9" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Seismic (1.60)	Comments
0 - Self Weight (PLF)	1 1/2" to 23' 10 1/2"	N/A	30.6	--	--	--	
1 - Uniform (PSF)	0 to 24' (Front)	1' 4"	12.0	40.0	-	-	Default Load
2 - Point (lb)	20' 6" (Front)	N/A	1596	1601	1290	-	Linked from: B1, Support 1
3 - Point (lb)	16' 10 1/2" (Front)	N/A	-	-	-	4489	
4 - Point (lb)	13' 4" (Front)	N/A	163	74	159	-	Linked from: R6, Support 1
5 - Point (lb)	16' 10 1/2" (Front)	N/A	1685	81	2424	-	Linked from: R6, Support 2

- Side loads are assumed to not induce cross-grain tension.

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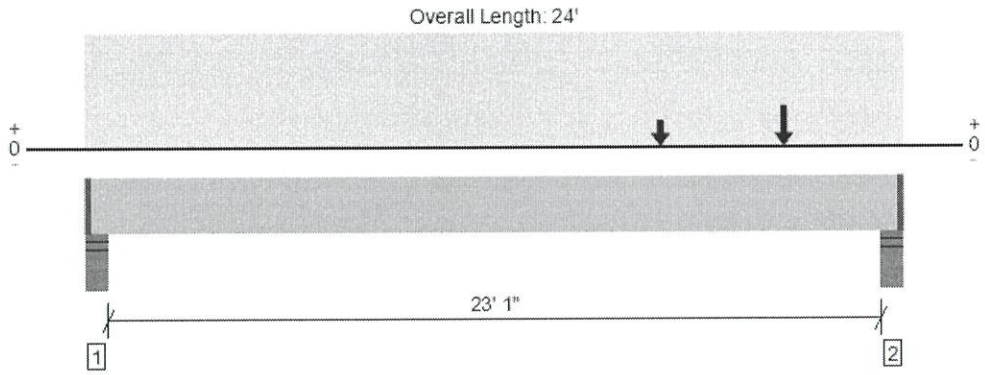
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

FLOOR, B3

1 piece(s) 5 1/4" x 14" 2.2E Parallam® PSL



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	5489 @ 23' 8"	13125 (4.00")	Passed (42%)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Shear (lbs)	4717 @ 22' 4 1/2"	14210	Passed (33%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	19131 @ 16' 10 1/2"	40743	Passed (47%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.407 @ 13' 13/16"	0.583	Passed (L/688)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Total Load Defl. (in)	0.737 @ 13' 5/16"	1.167	Passed (L/380)	--	1.0 D + 0.75 L + 0.75 S (All Spans)

Member Length : 23' 9"
System : Floor
Member Type : Flush Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Factored	
1 - Stud wall - DF	5.50"	4.00"	1.50"	915	1033	399	1989	1 1/2" Rim Board
2 - Stud wall - DF	5.50"	4.00"	1.67"	2412	2452	1660	5496	1 1/2" Rim Board

- Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	23' 9" o/c	
Bottom Edge (Lu)	23' 9" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Comments
0 - Self Weight (PLF)	1 1/2" to 23' 10 1/2"	N/A	23.0	--	--	
1 - Uniform (PSF)	0 to 24' (Front)	1' 4"	12.0	40.0	-	Default Load
2 - Point (lb)	20' 6" (Front)	N/A	1595	1601	1290	Linked from: B1, Support 2
3 - Point (lb)	16' 10 1/2" (Front)	N/A	802	604	769	Linked from: H1, Support 1

- Side loads are assumed to not induce cross-grain tension.

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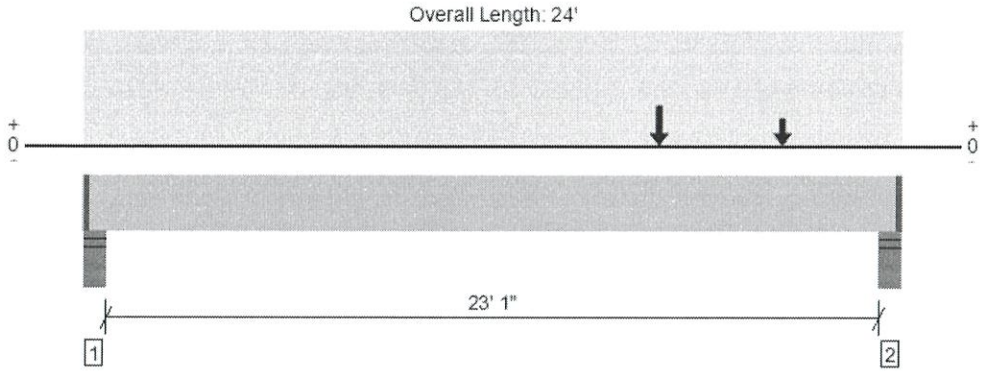
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

FLOOR, B3 with Strap Wind Down

1 piece(s) 5 1/4" x 14" 2.2E Parallam® PSL



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Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	6366 @ 23' 8"	13125 (4.00")	Passed (49%)	--	1.0 D + 0.45 W + 0.75 L + 0.75 S (All Spans)
Shear (lbs)	4717 @ 22' 4 1/2"	14210	Passed (33%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	19131 @ 16' 10 1/2"	40743	Passed (47%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.581 @ 13' 1 3/8"	0.583	Passed (L/482)	--	1.0 D + 0.45 W + 0.75 L + 0.75 S (All Spans)
Total Load Defl. (in)	0.912 @ 13' 13/16"	1.167	Passed (L/307)	--	1.0 D + 0.45 W + 0.75 L + 0.75 S (All Spans)

Member Length : 23' 9"
System : Floor
Member Type : Flush Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.

Supports	Bearing Length			Loads to Supports (lbs)						Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Wind	Seismic	Factored	
1 - Stud wall - DF	5.50"	4.00"	1.50"	915	1033	399	800	523/-523	2349	1 1/2" Rim Board
2 - Stud wall - DF	5.50"	4.00"	1.94"	2412	2452	1660	1950	1273/-1273	6373	1 1/2" Rim Board

- Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	23' 9" o/c	
Bottom Edge (Lu)	23' 9" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Wind (1.60)	Seismic (1.60)	Comments
0 - Self Weight (PLF)	1 1/2" to 23' 10 1/2"	N/A	23.0	--	--	--	--	
1 - Uniform (PSF)	0 to 24' (Front)	1' 4"	12.0	40.0	-	-	-	Default Load
2 - Point (lb)	20' 6" (Front)	N/A	1595	1601	1290	-	-	Linked from: B1, Support 2
3 - Point (lb)	16' 10 1/2" (Front)	N/A	802	604	769	-	-	Linked from: H1, Support 1
4 - Point (lb)	16' 10 1/2" (Front)	N/A	-	-	-	2750	1796	

- Side loads are assumed to not induce cross-grain tension.

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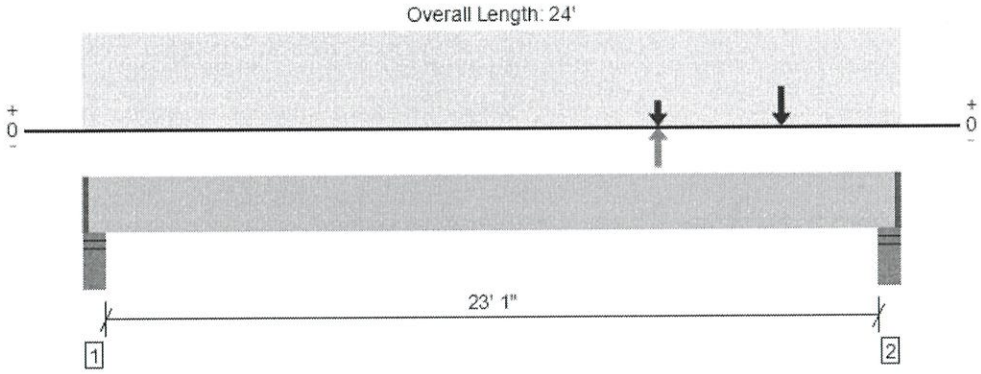
ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

FLOOR, B3 with Strap Wind Up

1 piece(s) 5 1/4" x 14" 2.2E Parallam® PSL



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	6158 @ 23' 8"	13125 (4.00")	Passed (47%)	--	1.0 D - 0.525 E + 0.75 L + 0.75 S (All Spans)
Shear (lbs)	4717 @ 22' 4 1/2"	14210	Passed (33%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	19131 @ 16' 10 1/2"	40743	Passed (47%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.407 @ 13' 13/16"	0.583	Passed (L/688)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Total Load Defl. (in)	0.737 @ 13' 5/16"	1.167	Passed (L/380)	--	1.0 D + 0.75 L + 0.75 S (All Spans)

Member Length : 23' 9"
System : Floor
Member Type : Flush Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.

Supports	Bearing Length			Loads to Supports (lbs)						Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Wind	Seismic	Factored	
1 - Stud wall - DF	5.50"	4.00"	1.50"	915	1033	399	-800	523/-523	2263	1 1/2" Rim Board
2 - Stud wall - DF	5.50"	4.00"	1.88"	2412	2452	1660	-1950	1273/-1273	6165	1 1/2" Rim Board

- Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	23' 9" o/c	
Bottom Edge (Lu)	23' 9" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Wind (1.60)	Seismic (1.60)	Comments
0 - Self Weight (PLF)	1 1/2" to 23' 10 1/2"	N/A	23.0	--	--	--	--	
1 - Uniform (PSF)	0 to 24' (Front)	1' 4"	12.0	40.0	-	-	-	Default Load
2 - Point (lb)	20' 6" (Front)	N/A	1595	1601	1290	-	-	Linked from: B1, Support 2
3 - Point (lb)	16' 10 1/2" (Front)	N/A	802	604	769	-	-	Linked from: H1, Support 1
4 - Point (lb)	16' 10 1/2" (Front)	N/A	-	-	-	-2750	-1796	

- Side loads are assumed to not induce cross-grain tension.

Weyerhaeuser Notes

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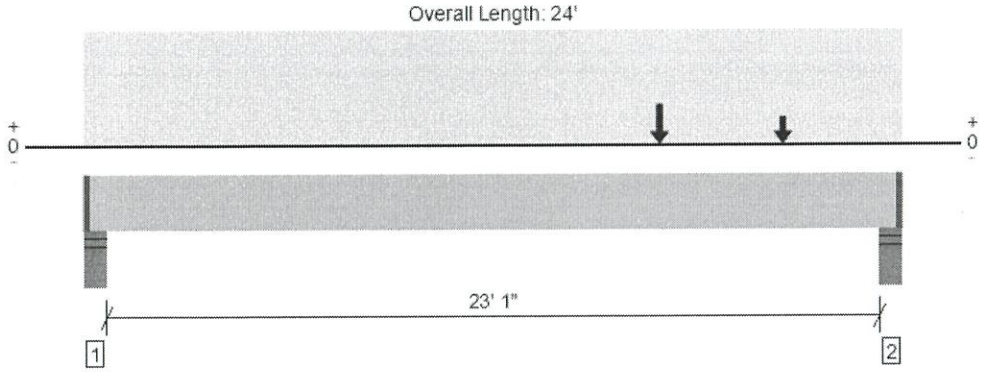
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

FLOOR, B3 with Overstrength

1 piece(s) 5 1/4" x 14" 2.2E Parallam® PSL



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	7160 @ 23' 8"	13125 (4.00")	Passed (55%)	--	1.0 D + 0.525 E + 0.75 L + 0.75 S (All Spans)
Shear (lbs)	4717 @ 22' 4 1/2"	14210	Passed (33%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	33052 @ 16' 10 1/2"	65188	Passed (51%)	1.60	1.0 D + 0.525 E + 0.75 L + 0.75 S (All Spans)
Live Load Defl. (in)	0.407 @ 13' 13/16"	0.583	Passed (L/688)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Total Load Defl. (in)	0.737 @ 13' 5/16"	1.167	Passed (L/380)	--	1.0 D + 0.75 L + 0.75 S (All Spans)

Member Length : 23' 9"
System : Floor
Member Type : Flush Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- -366 lbs uplift at support located at 4". Strapping or other restraint may be required.
- -781 lbs uplift at support located at 23' 8". Strapping or other restraint may be required.

Supports	Bearing Length			Loads to Supports (lbs)					Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Seismic	Factored	
1 - Stud wall - DF	5.50"	4.00"	1.50"	915	1033	399	1307/-1307	2675/-366	1 1/2" Rim Board
2 - Stud wall - DF	5.50"	4.00"	2.18"	2412	2452	1660	3182/-3182	7167/-781	1 1/2" Rim Board

- Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	23' 9" o/c	
Bottom Edge (Lu)	23' 9" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Seismic (1.60)	Comments
0 - Self Weight (PLF)	1 1/2" to 23' 10 1/2"	N/A	23.0	--	--	--	
1 - Uniform (PSF)	0 to 24' (Front)	1' 4"	12.0	40.0	-	-	Default Load
2 - Point (lb)	20' 6" (Front)	N/A	1595	1601	1290	-	Linked from: B1, Support 2
3 - Point (lb)	16' 10 1/2" (Front)	N/A	802	604	769	-	Linked from: H1, Support 1
4 - Point (lb)	16' 10 1/2" (Front)	N/A	-	-	-	4489	

- Side loads are assumed to not induce cross-grain tension.

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The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

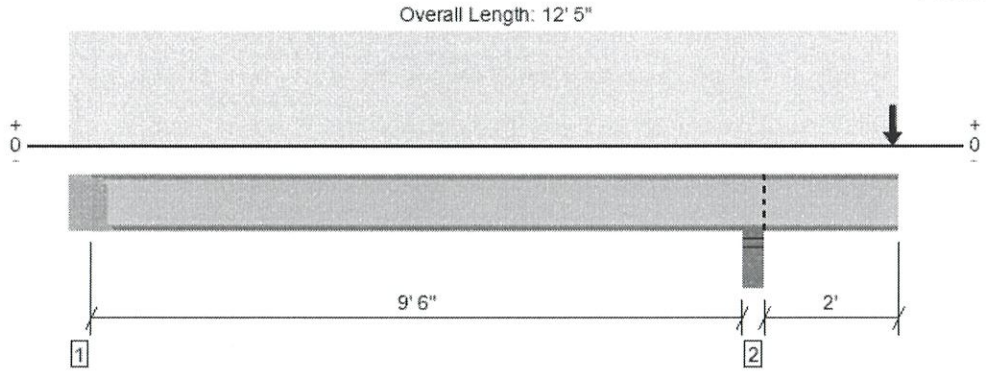
Weyerhaeuser

FLOOR, B4

2 piece(s) 14" TJI® 360 @ 16" OC

Passed
MIU Hanger At
Reaction 1

~~An excessive uplift of -522 lbs at support located at 5-1/2" failed this product.~~



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	3447 @ 10' 2 1/4"	6900 (5.25")	Passed (50%)	1.15	1.0 D + 1.0 S (All Spans)
Shear (lbs)	2758 @ 10' 5"	4497	Passed (61%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	-5908 @ 10' 2 1/4"	16871	Passed (35%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.062 @ 12' 5"	0.200	Passed (2L/856)	--	1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.109 @ 12' 5"	0.223	Passed (2L/492)	--	1.0 D + 1.0 S (All Spans)
TJ-Pro™ Rating	72	40	Passed	--	--

Member Length : 11' 11 1/2"
System : Floor
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Overhang deflection criteria: LL (0.2") and TL (2L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A structural analysis of the deck has not been performed.
- Deflection analysis is based on composite action with a single layer of 7/8" Weyerhaeuser Edge Gold™ Panel (32" Span Rating) that is glued and nailed down.
- Additional considerations for the TJ-Pro™ Rating include: 1/2" Gypsum ceiling.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Factored	
1 - Hanger on 14" DF beam	5.50"	Hanger[1]	1.75" / - [2]	-179	284	-343	105/-522	See note [1]
2 - Stud wall - DF	5.50"	5.50"	3.50"	1550	392	1897	3447	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.
- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- [1] See Connector grid below for additional information and/or requirements.
- [2] Required Bearing Length / Required Bearing Length with Web Stiffeners

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	9' 7" o/c	
Bottom Edge (Lu)	6' 1" o/c	

- TJI joists are only analyzed using Maximum Allowable bracing solutions.
- Maximum allowable bracing intervals based on applied load.

Connector: Simpson Strong-Tie						
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories
1 - Face Mount Hanger	MIU4.75/9	2.50"	N/A	16-10dx1.5	6-10dx1.5	Web Stiffeners

- Refer to manufacturer notes and instructions for proper installation and use of all connectors.

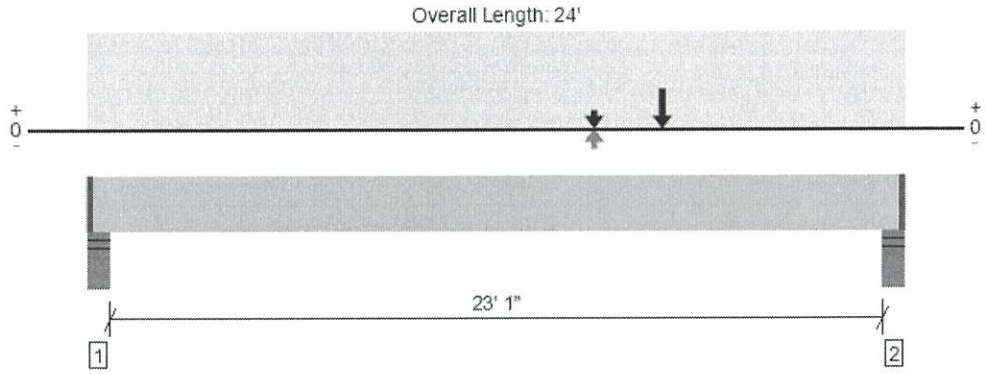
Vertical Loads	Location	Spacing	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 12' 5"	16"	12.0	40.0	-	Default Load
2 - Point (PLF)	12' 4"	16"	85.0	-	-	
3 - Point (PLF)	12' 4"	16"	30.0	-	50.0	
4 - Point (lb)	12' 4"	N/A	1019	-	1487	Linked from: H2, Support 1

ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

FLOOR, B5

1 piece(s) 7" x 14" 2.2E Parallam® PSL



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	6168 @ 23' 8"	17500 (4.00")	Passed (35%)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Shear (lbs)	5508 @ 22' 4 1/2"	18947	Passed (29%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	33820 @ 14' 3 7/16"	54324	Passed (62%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.622 @ 12' 2"	0.778	Passed (L/450)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.968 @ 12' 4 1/8"	1.167	Passed (L/289)	--	1.0 D + 1.0 L (All Spans)

Member Length : 23' 9"
System : Floor
Member Type : Flush Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Member should be side-loaded from both sides of the member or braced to prevent rotation.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Factored	
1 - Stud wall - DF	5.50"	4.00"	1.50"	1481	3479	470	4960	1 1/2" Rim Board
2 - Stud wall - DF	5.50"	4.00"	1.50"	2268	3802	1439	6198	1 1/2" Rim Board

- Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	23' 9" o/c	
Bottom Edge (Lu)	23' 9" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Comments
0 - Self Weight (PLF)	1 1/2" to 23' 10 1/2"	N/A	30.6	--	--	
1 - Uniform (PSF)	0 to 24' (Front)	1' 4"	12.0	40.0	-	Default Load
2 - Point (lb)	16' 10 1/2" (Front)	N/A	802	604	769	Linked from: H1, Support 2
3 - Uniform (PLF)	0 to 24' (Front)	N/A	34.5	213.0	-11.3	Linked from: FJ4, Support 1
4 - Point (lb)	16' 10 1/2" (Front)	N/A	1186	-	1753	Linked from: R5, Support 1
5 - Point (lb)	14' 10 1/2" (Front)	N/A	-179	284	-343	Linked from: B4, Support 1

- Side loads are assumed to not induce cross-grain tension.

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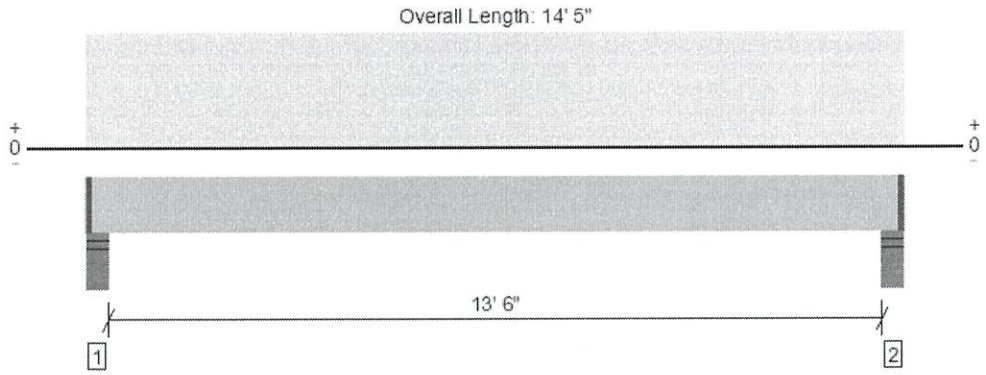
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

FLOOR, B6

1 piece(s) 5 1/2" x 14" 24F-V4 DF Glulam



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	7246 @ 4"	13750 (4.00")	Passed (53%)	--	1.0 D + 1.0 L (All Spans)
Shear (lbs)	5712 @ 1' 7 1/2"	13603	Passed (42%)	1.00	1.0 D + 1.0 L (All Spans)
Pos Moment (Ft-lbs)	24176 @ 7' 2 1/2"	35933	Passed (67%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.278 @ 7' 2 1/2"	0.344	Passed (L/594)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.363 @ 7' 2 1/2"	0.688	Passed (L/454)	--	1.0 D + 1.0 L (All Spans)

Member Length : 14' 2"
System : Floor
Member Type : Flush Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Critical positive moment adjusted by a volume/size factor of 1.00 that was calculated using length L = 13' 9".
- The effects of positive or negative camber have not been accounted for when calculating deflection.
- The specified glulam is assumed to have its strong laminations at the bottom of the beam. Install with proper side up as indicated by the manufacturer.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Factored	
1 - Stud wall - DF	5.50"	4.00"	2.11"	1738	5633	-32	7372	1 1/2" Rim Board
2 - Stud wall - DF	5.50"	4.00"	2.11"	1738	5633	-32	7372	1 1/2" Rim Board

• Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	14' 2" o/c	
Bottom Edge (Lu)	14' 2" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Comments
0 - Self Weight (PLF)	1 1/2" to 14' 3 1/2"	N/A	18.7	--	--	
1 - Uniform (PLF)	0 to 14' 5" (Front)	N/A	89.3	298.5	-	Linked from: FJ2, Support 1
2 - Uniform (PLF)	0 to 14' 5" (Front)	N/A	133.5	483.0	-4.5	Linked from: FJ1, Support 2

• Side loads are assumed to not induce cross-grain tension.

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ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

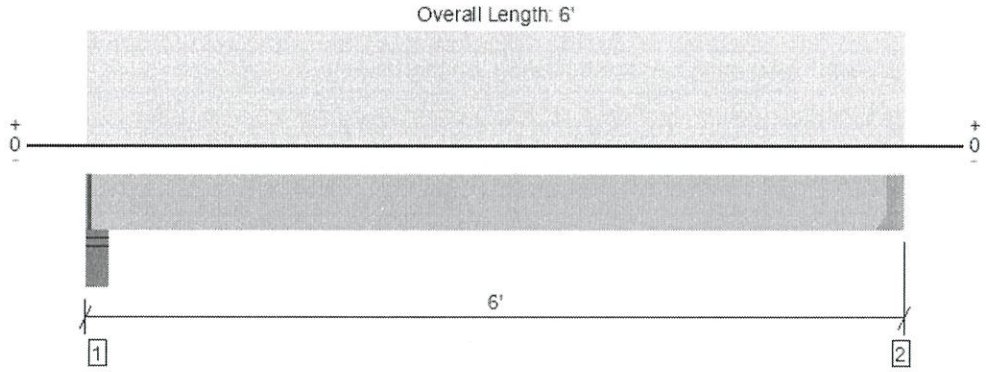
Weyerhaeuser

MEMBER REPORT

PASSED

FLOOR, DJ1

1 piece(s) 2 x 8 DF No.2 @ 16" OC



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	278 @ 5' 10 1/2"	1406 (1.50")	Passed (20%)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Shear (lbs)	206 @ 5' 3 1/4"	1305	Passed (16%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	363 @ 3' 1 1/2"	1360	Passed (27%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.023 @ 3' 1 1/2"	0.138	Passed (L/999+)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Total Load Defl. (in)	0.027 @ 3' 1 1/2"	0.275	Passed (L/999+)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
TJ-Pro™ Rating	N/A	N/A	N/A	--	N/A

Member Length : 5' 9 1/4"
System : Floor
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.
- No composite action between deck and joist was considered in analysis.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Factored	
1 - Stud wall - DF	5.50"	4.25"	1.50"	50	250	104	316	1 1/4" Rim Board
2 - Hanger on 7 1/4" DF beam	1.50"	Hanger[1]	1.50"	46	230	96	290	See note [1]

- Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.
- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- [1] See Connector grid below for additional information and/or requirements.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	5' 9" o/c	
Bottom Edge (Lu)	5' 9" o/c	

•Maximum allowable bracing intervals based on applied load.

Connector: Simpson Strong-Tie						
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories
2 - Face Mount Hanger	LU26	1.50"	N/A	6-10dx1.5	4-10dx1.5	

- Refer to manufacturer notes and instructions for proper installation and use of all connectors.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 6'	16"	12.0	60.0	25.0	Default Load

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ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

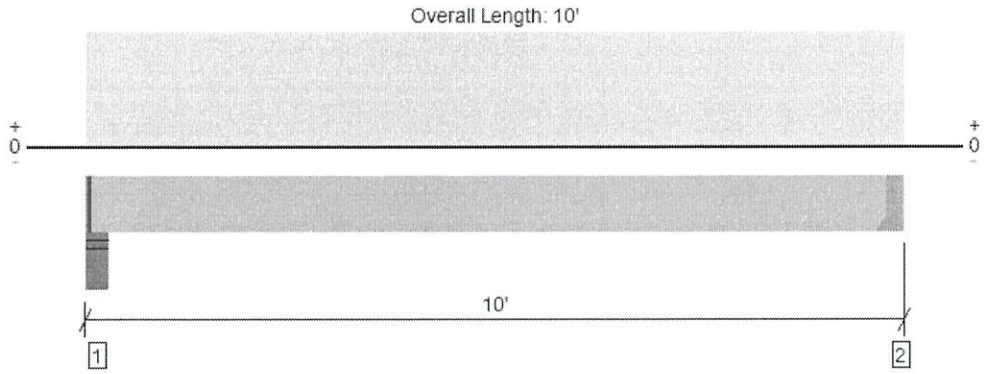
11/5/2024 9:39:46 PM UTC
ForteWEB v3.8, Engine: V8.4.1.24, Data: V8.1.6.3
File Name: McReynolds PC

MEMBER REPORT

PASSED

FLOOR, DJ2

1 piece(s) 2 x 8 DF No.2 @ 16" OC



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	480 @ 9' 10 1/2"	1406 (1.50")	Passed (34%)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Shear (lbs)	398 @ 9' 3 1/4"	1305	Passed (30%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	1083 @ 5' 1 1/2"	1360	Passed (80%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.204 @ 5' 1 1/2"	0.237	Passed (L/558)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Total Load Defl. (in)	0.243 @ 5' 1 1/2"	0.475	Passed (L/469)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
TJ-Pro™ Rating	N/A	N/A	N/A	--	N/A

Member Length : 9' 9 1/4"
System : Floor
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.
- No composite action between deck and joist was considered in analysis.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Factored	
1 - Stud wall - DF	5.50"	4.25"	1.50"	82	410	171	518	1 1/4" Rim Board
2 - Hanger on 7 1/4" DF beam	1.50"	Hanger[1]	1.50"	78	390	163	492	See note [1]

- Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.
- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- [1] See Connector grid below for additional information and/or requirements.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	8' 3" o/c	
Bottom Edge (Lu)	9' 9" o/c	

•Maximum allowable bracing intervals based on applied load.

Connector: Simpson Strong-Tie						
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories
2 - Face Mount Hanger	LU26	1.50"	N/A	6-10dx1.5	4-10dx1.5	

- Refer to manufacturer notes and instructions for proper installation and use of all connectors.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 10'	16"	12.0	60.0	25.0	Default Load

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The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
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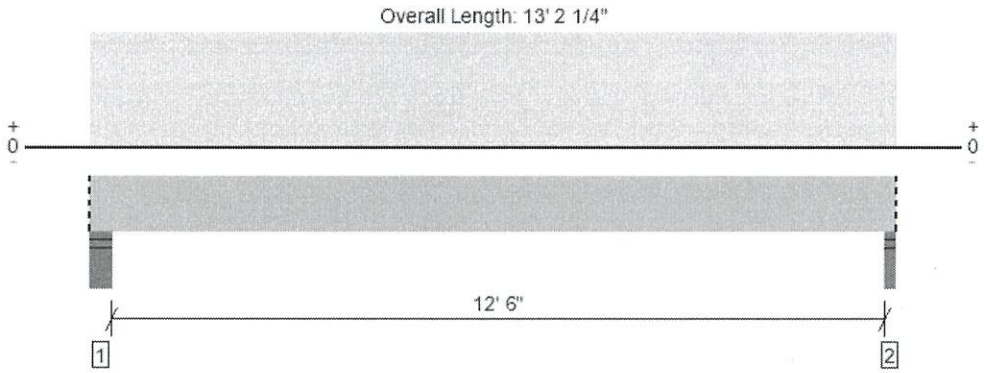
Weyerhaeuser

11/5/2024 9:39:46 PM UTC
ForteWEB v3.8, Engine: V8.4.1.24, Data: V8.1.6.3
File Name: McReynolds PC

FLOOR, DB1

1 piece(s) 6 x 10 DF No.2



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	1619 @ 13' 1"	9453 (2.75")	Passed (17%)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Shear (lbs)	1300 @ 1' 3"	5922	Passed (22%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	4841 @ 6' 8 1/2"	6032	Passed (80%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.232 @ 6' 8 1/2"	0.425	Passed (L/660)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Total Load Defl. (in)	0.291 @ 6' 8 1/2"	0.637	Passed (L/526)	--	1.0 D + 0.75 L + 0.75 S (All Spans)

Member Length : 13' 2 1/4"
System : Floor
Member Type : Drop Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Lumber grading provisions must be extended over the length of the member per NDS 4.2.5.5.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Factored	
1 - Stud wall - DF	5.50"	5.50"	1.50"	340	1258	523	1676	Blocking
2 - Stud wall - DF	2.75"	2.75"	1.50"	329	1215	505	1619	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	13' 2" o/c	
Bottom Edge (Lu)	13' 2" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 13' 2 1/4"	N/A	13.2	--	--	
1 - Uniform (PLF)	0 to 13' 2 1/4" (Front)	N/A	37.5	187.5	78.0	Linked from: DJ1, Support 1

- Side loads are assumed to not induce cross-grain tension.

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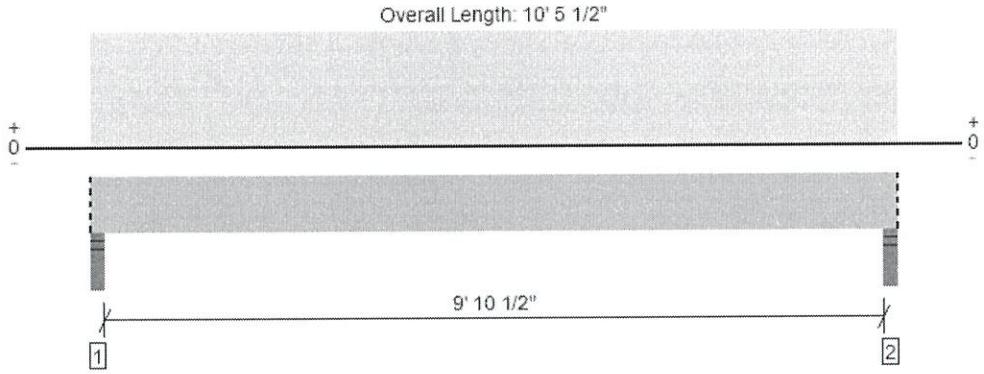
FLOOR, DB2

1 piece(s) 6 x 10 DF No.2



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	2100 @ 2"	12031 (3.50")	Passed (17%)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Shear (lbs)	1585 @ 1' 1"	5922	Passed (27%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	4898 @ 5' 2 3/4"	6032	Passed (81%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.151 @ 5' 2 3/4"	0.338	Passed (L/803)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Total Load Defl. (in)	0.186 @ 5' 2 3/4"	0.506	Passed (L/654)	--	1.0 D + 0.75 L + 0.75 S (All Spans)

Member Length : 10' 5 1/2"
System : Floor
Member Type : Drop Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Lumber grading provisions must be extended over the length of the member per NDS 4.2.5.5.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Factored	
1 - Stud wall - DF	3.50"	3.50"	1.50"	391	1608	671	2100	Blocking
2 - Stud wall - DF	3.50"	3.50"	1.50"	391	1608	671	2100	Blocking

• Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	10' 6" o/c	
Bottom Edge (Lu)	10' 6" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 10' 5 1/2"	N/A	13.2	--	--	
1 - Uniform (PLF)	0 to 10' 5 1/2" (Front)	N/A	61.5	307.5	128.3	Linked from: DJ2, Support 1

• Side loads are assumed to not induce cross-grain tension.

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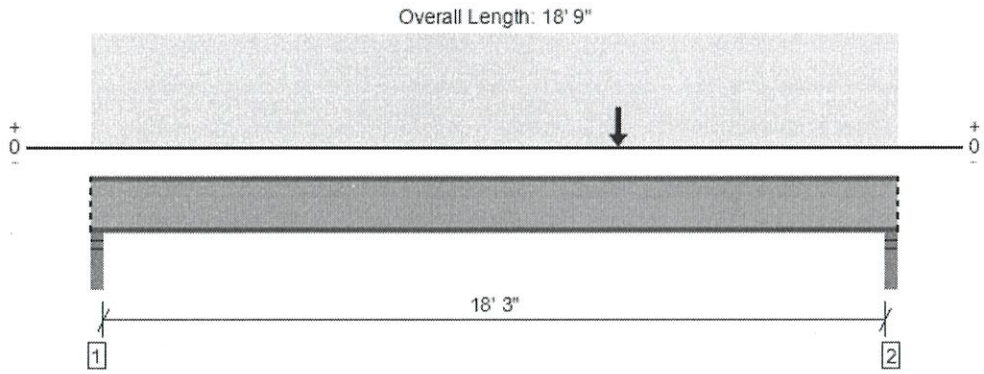
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

FLOOR, H7 (Steel)

1 piece(s) W10X26 (A992) ASTM Steel



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Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	7036 @ 18' 7 1/2"	10819 (3.00")	Passed (65%)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Shear (lbs)	6905 @ 18' 6"	53560	Passed (13%)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Moment (Ft-lbs)	33963 @ 11' 6 3/8"	36389	Passed (93%)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Live Load Defl. (in)	0.250 @ 9' 7 1/2"	0.617	Passed (L/888)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Total Load Defl. (in)	0.485 @ 9' 7 7/16"	0.925	Passed (L/458)	--	1.0 D + 0.75 L + 0.75 S (All Spans)

Member Length : 18' 9"
System : Floor
Member Type : Drop Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Applicable calculations are based on ANSI/AISC 360-16.
- A lateral-torsional buckling factor (C_b) of 1.0 has been assumed.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Factored	
1 - Stud wall - DF	3.00"	3.00"	3.00"	2929	2891	1230	6021	Blocking
2 - Stud wall - DF	3.00"	3.00"	3.00"	3411	3013	1820	7036	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	End Bearing Points	
Bottom Edge (Lu)	End Bearing Points	

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 18' 9"	N/A	26.0	--	--	
1 - Uniform (PLF)	0 to 18' 9" (Front)	N/A	229.5	294.0	61.5	Linked from: FJ4, Support 2
2 - Point (lb)	12' 3" (Front)	N/A	1550	392	1897	Linked from: B4, Support 2

- Side loads are assumed to not induce cross-grain tension.

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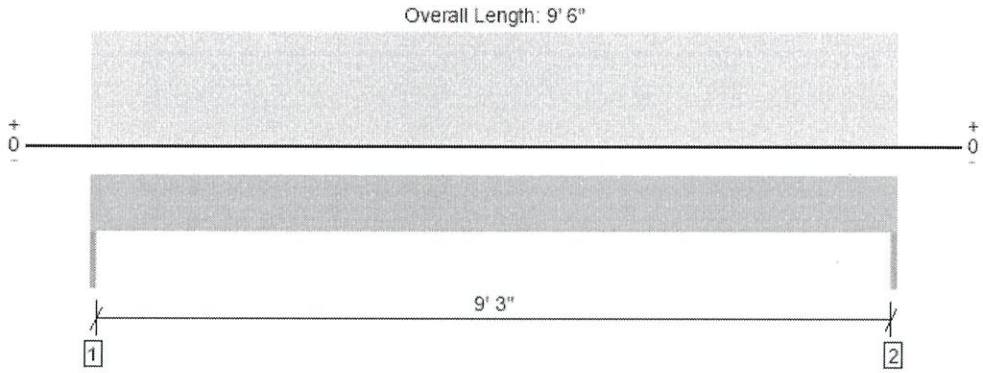
FLOOR, H8

1 piece(s) 6 x 10 DF No.2



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Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	1779 @ 0	5156 (1.50")	Passed (35%)	--	1.0 D + 1.0 L (All Spans)
Shear (lbs)	1436 @ 11"	5922	Passed (24%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	4226 @ 4' 9"	6032	Passed (70%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.081 @ 4' 9"	0.317	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.134 @ 4' 9"	0.475	Passed (L/848)	--	1.0 D + 1.0 L (All Spans)

Member Length : 9' 6"
System : Wall
Member Type : Header
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Lumber grading provisions must be extended over the length of the member per NDS 4.2.5.5.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Factored	
1 - Trimmer - DF	1.50"	1.50"	1.50"	707	1073	342	1779	None
2 - Trimmer - DF	1.50"	1.50"	1.50"	707	1073	342	1779	None

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	9' 6" o/c	
Bottom Edge (Lu)	9' 6" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location	Tributary Width	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 9' 6"	N/A	13.2	--	--	
1 - Uniform (PSF)	0 to 9' 6"	1' 4"	12.0	40.0	-	Default Load
2 - Uniform (PLF)	0 to 9' 6"	N/A	85.0	-	-	
3 - Uniform (PLF)	0 to 9' 6"	N/A	34.5	172.5	72.0	Linked from: DJ1, Support 2

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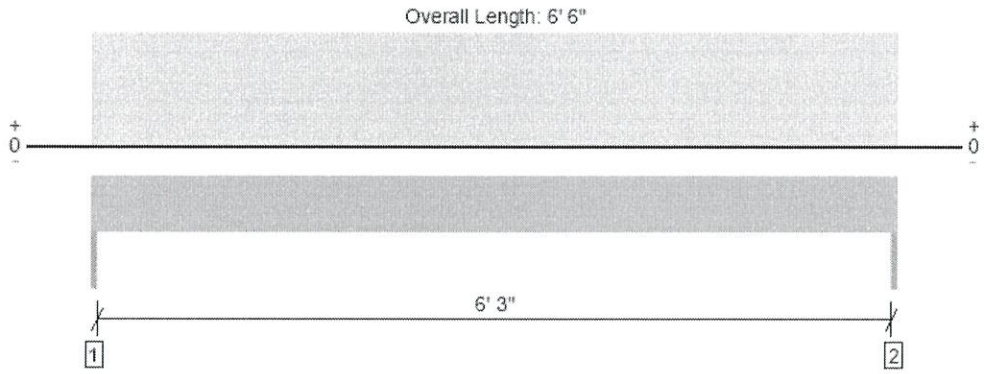
FLOOR, H9

1 piece(s) 6 x 10 DF No.2



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Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	1702 @ 0	5156 (1.50")	Passed (33%)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Shear (lbs)	1210 @ 11"	5922	Passed (20%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	2739 @ 3' 3"	6032	Passed (45%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.028 @ 3' 3"	0.217	Passed (L/999+)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Total Load Defl. (in)	0.041 @ 3' 3"	0.325	Passed (L/999+)	--	1.0 D + 0.75 L + 0.75 S (All Spans)

Member Length : 6' 6"
System : Wall
Member Type : Header
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Lumber grading provisions must be extended over the length of the member per NDS 4.2.5.5.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Factored	
1 - Trimmer - DF	1.50"	1.50"	1.50"	561	1124	397	1702	None
2 - Trimmer - DF	1.50"	1.50"	1.50"	561	1124	397	1702	None

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	6' 6" o/c	
Bottom Edge (Lu)	6' 6" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location	Tributary Width	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 6' 6"	N/A	13.2	--	--	
1 - Uniform (PSF)	0 to 6' 6"	1' 4"	12.0	40.0	-	Default Load
2 - Uniform (PLF)	0 to 6' 6"	N/A	85.0	-	-	
3 - Uniform (PLF)	0 to 6' 6"	N/A	58.5	292.5	122.3	Linked from: DJ2, Support 2

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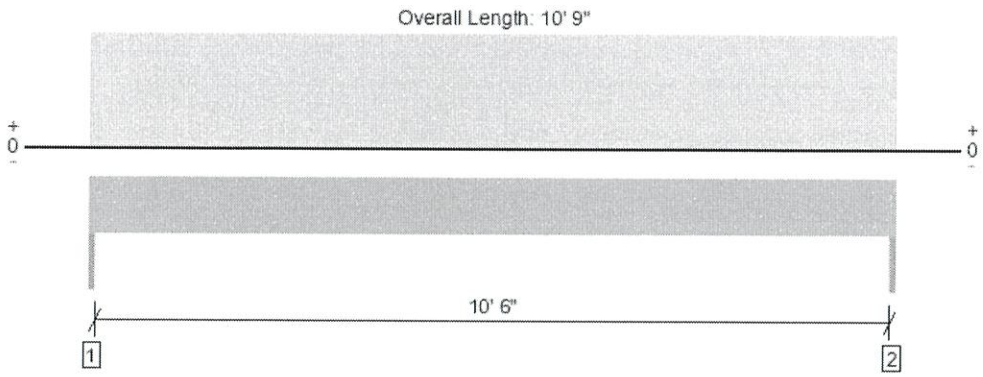
FLOOR, H10

1 piece(s) 6 x 10 DF No.2



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Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	901 @ 0	5156 (1.50")	Passed (17%)	--	1.0 D + 1.0 L (All Spans)
Shear (lbs)	747 @ 11"	5922	Passed (13%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	2421 @ 5' 4 1/2"	6032	Passed (40%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.031 @ 5' 4 1/2"	0.358	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.099 @ 5' 4 1/2"	0.538	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans)

Member Length : 10' 9"
System : Wall
Member Type : Header
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Lumber grading provisions must be extended over the length of the member per NDS 4.2.5.5.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Factored	
1 - Trimmer - DF	1.50"	1.50"	1.50"	614	287	901	None
2 - Trimmer - DF	1.50"	1.50"	1.50"	614	287	901	None

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	10' 9" o/c	
Bottom Edge (Lu)	10' 9" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location	Tributary Width	Dead (0.90)	Floor Live (1.00)	Comments
0 - Self Weight (PLF)	0 to 10' 9"	N/A	13.2	--	
1 - Uniform (PSF)	0 to 10' 9"	1' 4"	12.0	40.0	Default Load
2 - Uniform (PLF)	0 to 10' 9"	N/A	85.0	-	

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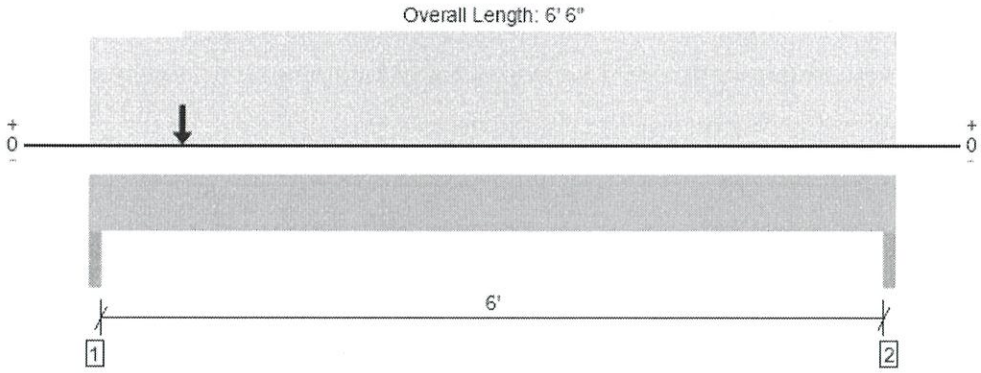
Weyerhaeuser

FLOOR, H11

1 piece(s) 6 x 10 DF No.2



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	5770 @ 1 1/2"	10313 (3.00")	Passed (56%)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Shear (lbs)	3833 @ 1' 1/2"	6810	Passed (56%)	1.15	1.0 D + 0.75 L + 0.75 S (All Spans)
Moment (Ft-lbs)	5920 @ 2' 11 13/16"	6937	Passed (85%)	1.15	1.0 D + 0.75 L + 0.75 S (All Spans)
Live Load Defl. (in)	0.046 @ 3' 2 3/16"	0.208	Passed (L/999+)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Total Load Defl. (in)	0.083 @ 3' 2 1/8"	0.313	Passed (L/902)	--	1.0 D + 0.75 L + 0.75 S (All Spans)

Member Length : 6' 6"
System : Wall
Member Type : Header
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Lumber grading provisions must be extended over the length of the member per NDS 4.2.5.5.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Factored	
1 - Trimmer - DF	3.00"	3.00"	1.68"	2658	2216	1934	5770	None
2 - Trimmer - DF	3.00"	3.00"	1.50"	1621	1448	1222	3623	None

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	6' 6" o/c	
Bottom Edge (Lu)	6' 6" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location	Tributary Width	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 6' 6"	N/A	13.2	--	--	
1 - Uniform (PSF)	0 to 9"	11' 9"	12.0	40.0	-	
2 - Uniform (PLF)	9" to 6' 6"	N/A	185.3	417.0	72.0	Linked from: FJ3, Support 1
3 - Uniform (PLF)	0 to 6' 6"	N/A	85.0	-	-	
4 - Uniform (PLF)	0 to 6' 6"	N/A	174.5	-	275.5	Linked from: RJ3, Support 1
5 - Point (lb)	9"	N/A	1335	914	951	Linked from: B2, Support 1

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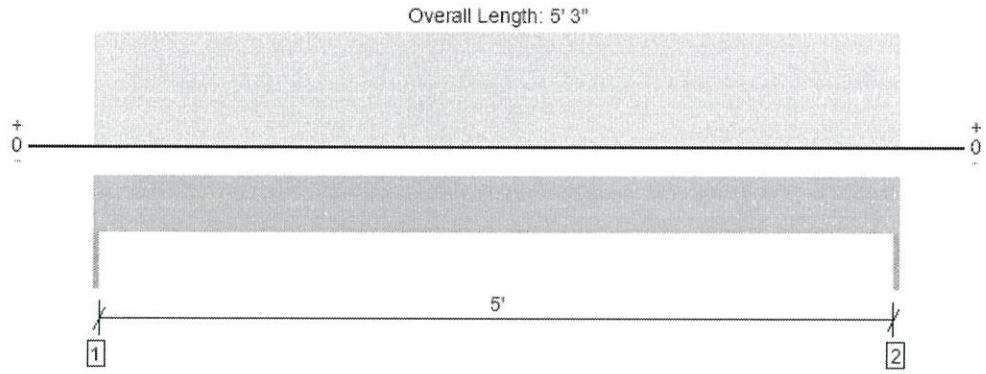
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

FLOOR, H12

1 piece(s) 4 x 10 DF No.2



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	2266 @ 0	3281 (1.50")	Passed (69%)	--	1.0 D + 1.0 L (All Spans)
Shear (lbs)	1493 @ 10 3/4"	3885	Passed (38%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	2974 @ 2' 7 1/2"	4492	Passed (66%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.026 @ 2' 7 1/2"	0.175	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.040 @ 2' 7 1/2"	0.262	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans)

Member Length : 5' 3"
System : Wall
Member Type : Header
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Factored	
1 - Trimmer - DF	1.50"	1.50"	1.50"	793	1473	144	2266	None
2 - Trimmer - DF	1.50"	1.50"	1.50"	793	1473	144	2266	None

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	5' 3" o/c	
Bottom Edge (Lu)	5' 3" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location	Tributary Width	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 5' 3"	N/A	8.2	--	--	
1 - Uniform (PLF)	0 to 5' 3"	N/A	294.0	561.0	54.8	Linked from: FJ1, Support 1

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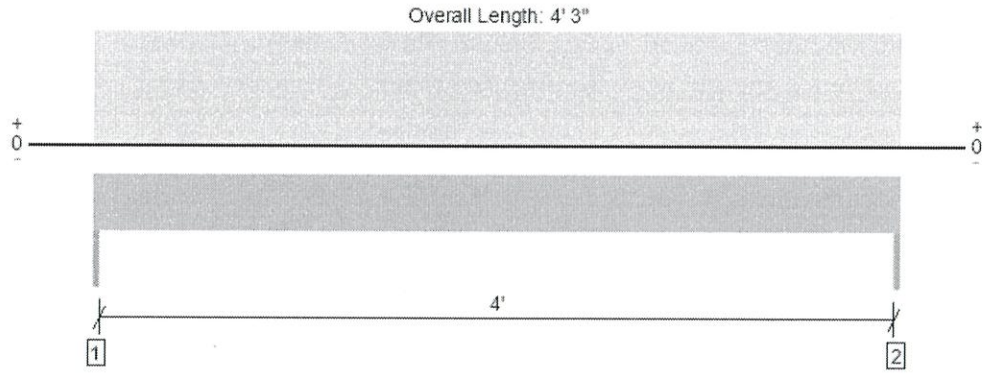
Weyerhaeuser

FLOOR, H13

1 piece(s) 4 x 10 DF No.2



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	1613 @ 0	3281 (1.50")	Passed (49%)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Shear (lbs)	933 @ 10 3/4"	4468	Passed (21%)	1.15	1.0 D + 0.75 L + 0.75 S (All Spans)
Moment (Ft-lbs)	1713 @ 2' 1 1/2"	5166	Passed (33%)	1.15	1.0 D + 0.75 L + 0.75 S (All Spans)
Live Load Defl. (in)	0.008 @ 2' 1 1/2"	0.142	Passed (L/999+)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Total Load Defl. (in)	0.015 @ 2' 1 1/2"	0.213	Passed (L/999+)	--	1.0 D + 0.75 L + 0.75 S (All Spans)

Member Length : 4' 3"
System : Wall
Member Type : Header
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Factored	
1 - Trimmer - DF	1.50"	1.50"	1.50"	726	634	547	1613	None
2 - Trimmer - DF	1.50"	1.50"	1.50"	726	634	547	1613	None

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	4' 3" o/c	
Bottom Edge (Lu)	4' 3" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location	Tributary Width	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 4' 3"	N/A	8.2	--	--	
1 - Uniform (PLF)	0 to 4' 3"	N/A	89.3	298.5	-	Linked from: FJ2, Support 2
2 - Uniform (PLF)	0 to 4' 3"	N/A	85.0	-	-	
3 - Uniform (PLF)	0 to 4' 3"	N/A	159.4	-	257.5	Linked from: RJ1, Support 1

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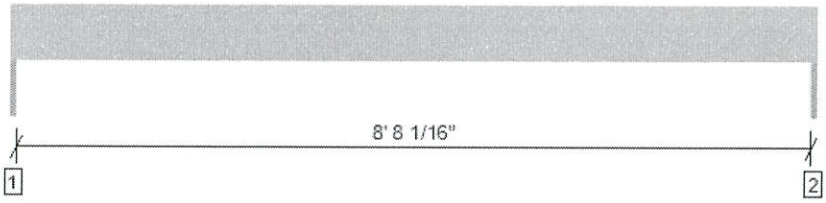
Weyerhaeuser

FLOOR, RIM JOIST AT STAIRS

1 piece(s) 3 1/2" x 14" 1.55E TimberStrand® LSL

Overall Length: 8' 11 1/16"



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	68 @ 0	4069 (1.50")	Passed (2%)	--	1.0 D (All Spans)
Shear (lbs)	49 @ 1' 3 1/2"	9114	Passed (1%)	0.90	1.0 D (All Spans)
Moment (Ft-lbs)	152 @ 4' 5 1/2"	19656	Passed (1%)	0.90	1.0 D (All Spans)
Vert Live Load Defl. (in)	0.000 @ 0	0.297	Passed (2L/999+)	--	1.0 D (All Spans)
Vert Total Load Defl. (in)	0.002 @ 4' 5 1/2"	0.446	Passed (L/999+)	--	1.0 D (All Spans)
Lat Member Reaction (lbs)	1445 @ 8' 11 1/16"	N/A	Passed (N/A)	1.60	1.0 D + 0.6 W
Lat Shear (lbs)	1310 @ 5"	7840	Passed (17%)	1.60	1.0 D + 0.6 W
Lat Moment (Ft-lbs)	3222 @ mid-span	9966	Passed (32%)	1.60	1.0 D + 0.6 W
Lat Deflection (in)	0.424 @ mid-span	0.446	Passed (L/253)	--	1.0 D + 0.6 W
Bi-Axial Bending	0.33	1.00	Passed (33%)	1.60	1.0 D + 0.6 W

Member Length : 8' 11 1/16"
System : Wall
Member Type : Header
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Lateral deflection criteria: Wind (L/240)

Supports	Bearing Length			Loads to Supports (lbs)		Accessories
	Total	Available	Required	Dead	Factored	
1 - Trimmer - DF	1.50"	1.50"	1.50"	68	68	None
2 - Trimmer - DF	1.50"	1.50"	1.50"	68	68	None

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	8' 11" o/c	
Bottom Edge (Lu)	8' 11" o/c	

•Maximum allowable bracing intervals based on applied load.

Lateral Connections						
Supports	Stud Size	Stud Material	Connector	Type/Model	Quantity	Nailing
Left	2X	Douglas Fir-Larch		N/A	N/A	N/A
Right	2X	Douglas Fir-Larch		N/A	N/A	N/A

Vertical Load	Location	Tributary Width	Dead (0.90)	Comments
0 - Self Weight (PLF)	0 to 8' 11 1/16"	N/A	15.3	

Lateral Load	Location	Tributary Width	Wind (1.60)	Comments
1 - Uniform (PSF)	Full Length	9'	60.0	

• IBC Table 1604.3, footnote f: Deflection checks are performed using 42% of this lateral wind load.

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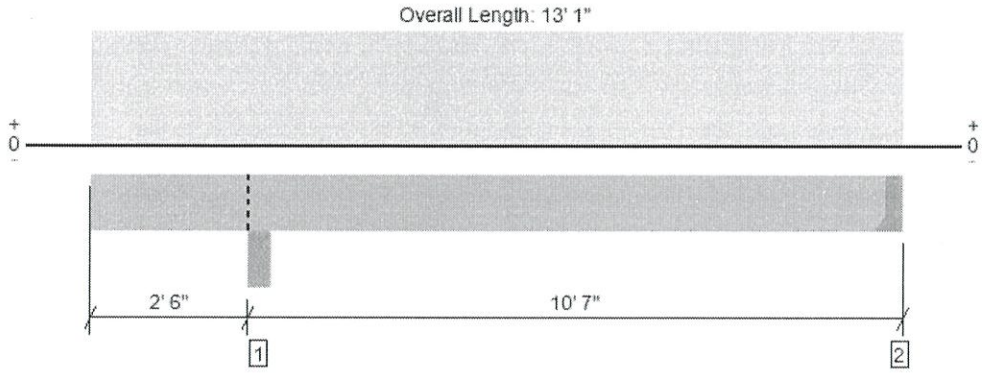
Weyerhaeuser

Low Roof, LRJ1

1 piece(s) 2 x 10 DF No.2 @ 24" OC



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	389 @ 12' 11 1/2"	1406 (1.50")	Passed (28%)	--	1.0 D + 1.0 S (Alt Spans)
Shear (lbs)	358 @ 3' 8 3/4"	1915	Passed (19%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	947 @ 8' 1 1/8"	2334	Passed (41%)	1.15	1.0 D + 1.0 S (Alt Spans)
Live Load Defl. (in)	0.071 @ 7' 10 15/16"	0.512	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.110 @ 7' 11 1/4"	0.682	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)

Member Length : 12' 11 1/2"
System : Roof
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 0.25/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Beveled Plate - DF	5.50"	5.50"	1.50"	246	410	657	Blocking
2 - Hanger on 9 1/4" DF beam	1.50"	Hanger[1]	1.50"	146	253	399	See note [1]

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.
- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- [1] See Connector grid below for additional information and/or requirements.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	13' o/c	
Bottom Edge (Lu)	13' o/c	

•Maximum allowable bracing intervals based on applied load.

Connector: Simpson Strong-Tie						
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories
2 - Face Mount Hanger	LRU28Z	1.94"	N/A	6-10dx1.5	5-10d	

- Refer to manufacturer notes and instructions for proper installation and use of all connectors.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 13' 1"	24"	15.0	25.0	Default Load

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The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

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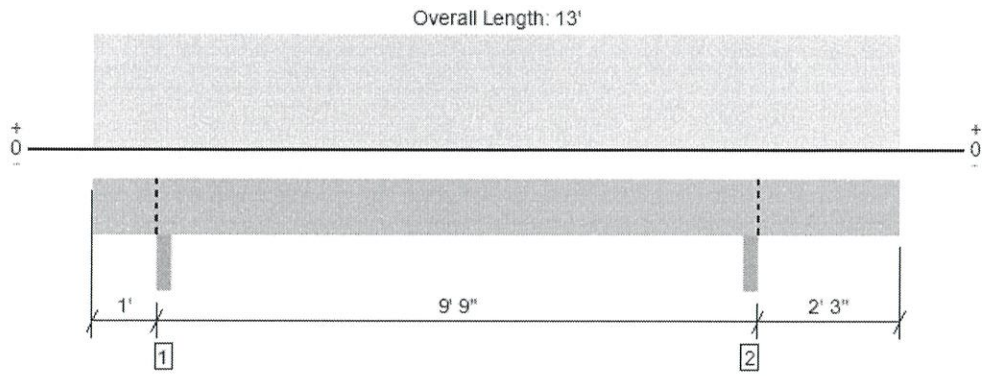
Weyerhaeuser

Low Roof, LRJ2

1 piece(s) 2 x 10 DF No.2 @ 24" OC



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	591 @ 10' 7 1/4"	3282 (3.50")	Passed (18%)	--	1.0 D + 1.0 S (Adj Spans)
Shear (lbs)	325 @ 9' 8 1/4"	1915	Passed (17%)	1.15	1.0 D + 1.0 S (Adj Spans)
Moment (Ft-lbs)	799 @ 5' 8 9/16"	2334	Passed (34%)	1.15	1.0 D + 1.0 S (Alt Spans)
Live Load Defl. (in)	0.052 @ 5' 10"	0.473	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.079 @ 5' 9 3/4"	0.631	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)

Member Length : 13'
System : Roof
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 0.25/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Beam - DF	3.50"	3.50"	1.50"	169	290	459	Blocking
2 - Beam - DF	3.50"	3.50"	1.50"	221	370	591	Blocking

• Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	13' o/c	
Bottom Edge (Lu)	13' o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 13'	24"	15.0	25.0	Default Load

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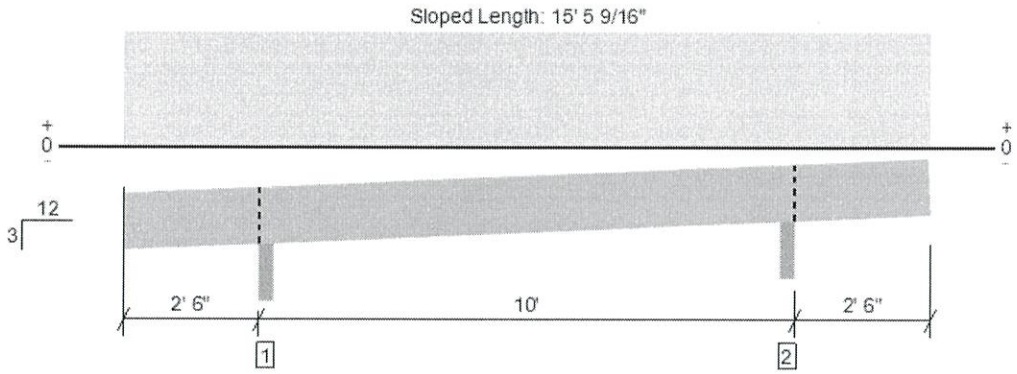
Weyerhaeuser

Low Roof, LRJ3

1 piece(s) 2 x 12 DF No.2 @ 24" OC



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	616 @ 2' 7 3/4"	3382 (3.50")	Passed (18%)	--	1.0 D + 1.0 S (Adj Spans)
Shear (lbs)	316 @ 3' 8 7/16"	2329	Passed (14%)	1.15	1.0 D + 1.0 S (Adj Spans)
Moment (Ft-lbs)	758 @ 7' 6"	3138	Passed (24%)	1.15	1.0 D + 1.0 S (Alt Spans)
Live Load Defl. (in)	0.031 @ 7' 6"	0.500	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.045 @ 7' 6"	0.667	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)

Member Length : 15' 8 3/8"
System : Roof
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 3/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Beveled Plate - DF	3.50"	3.50"	1.50"	232	384	616	Blocking
2 - Beveled Plate - DF	3.50"	3.50"	1.50"	232	384	616	Blocking

• Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	15' 6" o/c	
Bottom Edge (Lu)	15' 6" o/c	

•Maximum allowable bracing intervals based on applied load.

•Dimensions for lateral bracing intervals are measured along the length of the member for sloped conditions.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 15'	24"	15.0	25.0	Default Load

Weyerhaeuser Notes

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The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

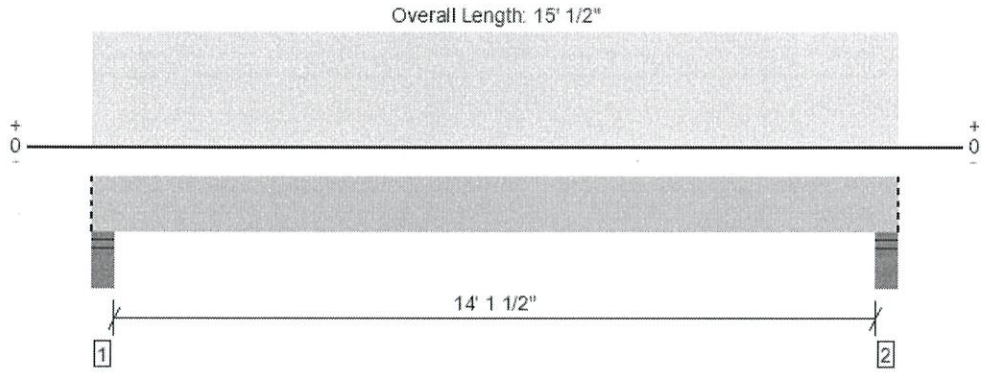
ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

11/5/2024 9:39:46 PM UTC
ForteWEB v3.8, Engine: V8.4.1.24, Data: V8.1.6.3
File Name: McReynolds PC

Low Roof, LRB1

1 piece(s) 6 x 12 DF No.2



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	2587 @ 4"	18906 (5.50")	Passed (14%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	2100 @ 1' 5"	8244	Passed (25%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	8886 @ 7' 6 1/4"	10166	Passed (87%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.217 @ 7' 6 1/4"	0.719	Passed (L/794)	--	1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.365 @ 7' 6 1/4"	0.958	Passed (L/473)	--	1.0 D + 1.0 S (All Spans)

Member Length : 15' 1/2"
System : Roof
Member Type : Drop Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Lumber grading provisions must be extended over the length of the member per NDS 4.2.5.5.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Stud wall - DF	5.50"	5.50"	1.50"	1046	1542	2587	Blocking
2 - Stud wall - DF	5.50"	5.50"	1.50"	1046	1542	2587	Blocking

• Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	15' 1" o/c	
Bottom Edge (Lu)	15' 1" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 15' 1/2"	N/A	16.0	--	
1 - Uniform (PLF)	0 to 15' 1/2" (Front)	N/A	123.0	205.0	Linked from: LRJ1, Support 1

• Side loads are assumed to not induce cross-grain tension.

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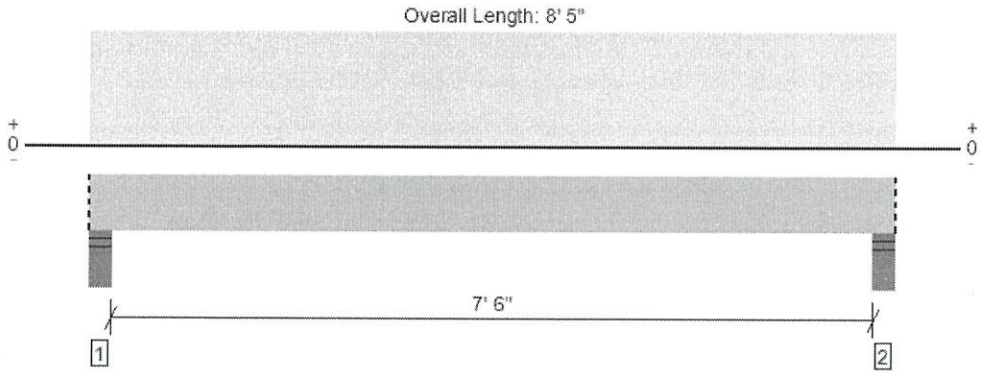
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

Low Roof, LRB2

1 piece(s) 6 x 10 DF No.2



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	2543 @ 4"	18906 (5.50")	Passed (13%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	1788 @ 1' 3"	6810	Passed (26%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	4536 @ 4' 2 1/2"	6937	Passed (65%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.059 @ 4' 2 1/2"	0.387	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.096 @ 4' 2 1/2"	0.517	Passed (L/969)	--	1.0 D + 1.0 S (All Spans)

Member Length : 8' 5"
System : Roof
Member Type : Drop Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Lumber grading provisions must be extended over the length of the member per NDS 4.2.5.5.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Factored	
1 - Stud wall - DF	5.50"	5.50"	1.50"	986	1557	2543	Blocking
2 - Stud wall - DF	5.50"	5.50"	1.50"	986	1557	2543	Blocking

• Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	8' 5" o/c	
Bottom Edge (Lu)	8' 5" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 8' 5"	N/A	13.2	--	
1 - Uniform (PLF)	0 to 8' 5" (Front)	N/A	110.5	185.0	Linked from: LRJ2, Support 2
2 - Uniform (PLF)	0 to 8' 5" (Front)	N/A	110.5	185.0	Linked from: LRJ2, Support 2

• Side loads are assumed to not induce cross-grain tension.

Weyerhaeuser Notes

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ForteWEB Software Operator	Job Notes
Matt Nava Nava Contracting and Engineering (503) 238-0633 Mattsnava@gmail.com	

Weyerhaeuser

Client: Mali McReynolds
Project: Pacific City, Oregon

M.V.Nava
11/05/24

SUMMARY

	P(seismic)	P(wind)	P(wind) 9.6 psf	v(seismic)	v(wind)	Length	No.	
1								
Upper	2566	2127	749	253	210			C/2
Rup1				1843	1437	10.1	1	
Main	4026	5354	1757	120	160			S/0
Rup1				652	568	17.6	1	
Rup2				890	880	9.3	1	
Rup3				963	977	6.7	1	
2								
Upper	3662	4879	1886	172	230			S/6 or S/2
Rup1				1208	1612	9.3	1	
Rup2				1237	1650	7.8	1	
Rup3				1302	1736	4.2	1	
Main	5451	7866	3041	214	308			C/8
Rup1				1669	2338	15.5	1	
Rup2				1826	2544	10.0	1	
3								
Upper	1686	1745	600	76	78			S/0
Rup1				310	237	16.3	1	
Rup2				497	483	6.0	1	
Main	2756	3355	1107	89	109			S/0
Rup1				386	346	15.9	1	
Rup2				411	378	15.0	1	

Client: Mali McReynolds
Project: Pacific City, Oregon

M.V.Nava
11/05/24

SUMMARY CONTINUED

	P(seismic)	P(wind)	P(wind)	v(seismic)	v(wind)	Length	No.	
A			9.6 psf					
Upper	2277	1656	1032	569	414			WSWH18x
Rup1				4535	3288	1.0	4	
Main	3284	5279	2271	821	1320			WSWH18x
Rup1				12313	15798	1.0	4	
B								
Upper	3607	2632	1851	424	310			D/3
Rup1				3240	2273	8.5	1	
Main	5395	8242	4020	635	970			E/10
Rup1				9085	11243	8.5	1	
C								
Upper	1395	1167	818	116	97			S/0
Rup1				821	634	6.0	1	
Rup2				875	706	3.0	2	
Main	2529	3991	1748	440	694			D/8
Rup1				6005	8066	2.9	2	

Client: Mali McReynolds
Project: Pacific City, Oregon

By: M.V.Nava
Date: 11/05/24

Seismic Design Category	II	Per IBC Table 1604.5			
Seismic Site Class	D	Tble 1613.2.3	Roof Dead Load		15
Importance Factor	1.00	Per Tble 1604.5	Roof Snow Load		25
Seismic Use Group	I		Seismic Addtl Snow Load		0

Mapped Spectral Response Coefficients

Ss	1.279	Per section 1613.2.1	Fa =	1.2	Per Tble 1613.2.3(1)
S1	0.667	Per section 1613.2.1	Fv =	1.5	Per Tble 1613.2.3(2)
Sds =	1.028				
Sdl =	0.670		.6-.14Sds = 0.4560358		

Analysis Procedure Used **ASCE 7 – 16**

p=1.3 **Load Combinations: 0.6D+(0.7E OR 0.6W)**

	Horizontal Irregularity			Vertical Irregularity	
1a and 1b	Torsional for non-flexible diaphragms		1a and 1b	Soft Story	**ok**
2	Reentrant Corners	**ok**	2	Weight	**ok**
3	Diaphragm Discontinuity	**ok**	3	Geometrical	**ok**
4	Out of Plane Offset	**ok**	4	In-Plane Discontinuity	**ok**
5	Nonparallel System	**ok**	5	Weak Story	**ok**

Lt Framed Construction Building Does Not Exceed five stories in height excluding basement **ok**

25 % INCREASE IN SEISMIC DIAPHRAGM COLLECTOR FORCES REQUIRED BY SECTION 12.3.3.4

Load Direction:
Front to Back (Building Grids 1 - 5)

Basic Seismic force resisting system(s):		Response Modification Factor(s) R	Seismic Overstrength Omega	Deflection Amplificatio Cd
A. 15. Light-frame (wood) walls sheathed w/wood structural	x	6.5	3	4

$V = \frac{Sds * W}{R} = 0.158\ W$ Front - to - Back Load Direction

Load Direction:
Side - to - Side (Building Grids A - E)

Basic Seismic force resisting system(s):		Response Modification Factor(s) R	Seismic Overstrength Omega	Deflection Amplication Cd
A. 15. Light-frame (wood) walls sheathed w/wood structural	x	6.5	3	4

$V = \frac{Sds * W}{R} = 0.158\ W$ Front - to - Back Load Direction

Client: Mali McReynolds
Project: Pacific City, Oregon

By: M.V.Nava
Date: 11/05/24

Basic Wind Speed 3 Sec Gust **135** mph
Wind Exposure **D**

Importance Factor Per IBC Table 1604.5 **1.00**
Building Category per IBC Table 1604.5 **II**

Front - to - Back Slope:	**4** : 12		Roof Angle	18.4	Degrees
Left - to - Right Slope	**4** :12		Roof Angle	18.4	Degrees
Roof Height	**23.875**	**23.875**			
Eave Height	**17.5**	**17.5**			
Roof Mean Height	20.7				

Least Building Dimension **38.5** ft

Analysis Procedure Used **ASCE 7 – 10, Envelope Procedure Ch. 28**
Load Combinations: 0.6D+(0.7E OR 0.6W)

Mean Roof Height does not exceed least horiz dimension	**ok**
Mean Roof Height does not exceed 60 ft/Exp B or 30ft/Exp C	**ok**
Building is not located on upper half of isolated hill or escarpment	**ok**
Building is regular in shape and approximately symmetrical	**ok**
Roof Slope is less than 12:12	ok

Height and Exposure Adjustment Coefficient per Figure 28.6-1 (λ) **1.55**

Mean Roof Height	B	C	D
15 ft	1	1.21	1.47
20	1	1.29	1.55
25	1	1.35	1.61
30	1	1.4	1.66
35	1.05	1.45	1.7
40	1.09	1.49	1.74
45	1.12	1.53	1.78

Simplified Design Wind Pressure:

		Zone A	Zone B	Zone C	Zone D
Front - to - Back Direction: angle =	4 :12				
	Ps30 =	**40.1**	**-10.5**	**26.7**	**-5.9**
Ps = (λ)*(Importance Factor)*0.6*(Ps30)					
	Ps =Design Wind Pressure =	37.25	-9.77	24.83	-5.44
Left - to - Right Direction: angle	4 :12				
	Ps30 =	**40.05**	**-10.50**	**26.7**	**-5.85**
Ps = (λ)*(Importance Factor)*0.6*(Ps30)					
	Ps =Design Wind Pressure =	37.25	-9.77	24.83	-5.44

Building Zone Dimension a:

10 % least Building Dimension	3.85
.04 % least Building Dimension	1.54
.4h =	7
a = 3.85	

Client: Mali McReynolds
Project: Pacific City, Oregon

By: M.V.Nava
Date: 11/05/24

Wind — Basic Wind Speed = 135
Exposure D

Building Dimension a = 3.85

Building Dimension a

	Zone A	Zone B	Zone C	Zone D
	37.2465	-9.765	24.831	-5.4405
		3.85		**3.85**
Lines :		1	2	3
Eave Ht		**17.5**	**17.5**	**17.5**
Wall Trib		**10.125**	**19.25**	**9.125**
L(tot)		10.125	21.257	22.25
Upper		**9.5**	**9.5**	**9.5**
Wall Trib		**12**	**19.25**	**7.25**
L(tot)		33.503	25.5	30.875
Main		**5**	**5**	**5**

Roof Loads			
Upper Roof	**930**	**2967**	**647**
Main Roof	**1252**		
Upper			
P	2127	4879	1745
v	210	230	78
Rup1	1437	1612	237
Rup2	1680	1650	483
Rup2	1680	1736	627
Main			
P	5354	7866	3355
v	160	308	109
Rup1	568	2338	346
Rup2	880	2544	378
Rup3	977	2919	941
Base P	7333	9291	5187

TOTAL BASE WIND
21811 lb

Client: Mali McReynolds
Project: Pacific City, Oregon
By: M.V.Nava
Date: 11/05/24
Wind Basic Wind Speed = 3.85
Exposure 3
Building Dimension a = 3.85

	Zone A	Zone B	Zone C	Zone D
	16	8	16	8
	9.6	4.8	9.6	4.8
		3.85	**0**	**3.85**
Lines :		1	2	3
Eave Ht		**17.5**	**17.5**	**17.5**
Wall Trib		**10.125**	**19.25**	**9.125**
L(tot)		**10.125**	**21.257**	**22.25**
Upper		**9.5**	**9.5**	**9.5**
Wall Trib		**12**	**19.25**	**7.25**
L(tot)		**33.503**	**25.5**	**30.875**
Main		**5**	**5**	**5**

27.1.5 Minimum Design Wind Loads
Ps=0.6*Ps30

Roof Loads			
Upper Roof	**360**	**1147**	**250**
Main Roof	**360**		
Upper			
P	749	1886	600
v	74	89	27
Rup1	349	486	-174
Rup2	592	524	72
Rup2	592	610	216
Main			
P	1757	3041	1107
v	52	119	36
Rup1	-245	547	-278
Rup2	68	753	-246
Rup3	165	1128	317
Base P	2963	3959	2219

TOTAL BASE WIND
9141 lb

Client: Mali McReynolds
Project: Pacific City, Oregon

By: M.V.Nava
Date: 11/05/24

Wind Basic Wind Speed = **135.00**

Exposure **D**

Zone A	Zone B	Zone C	Zone D
37.2465	-9.765	24.831	-5.4405
	3.85		3.85

Building dimension a 3.85

Lines :	A	B	C
Eave Ht	**17.5**	**17.5**	**17.5**
Wall Trib	**14.75**	**26.5**	**11.75**
L(tot)	4	8.5	12
Upper	**9.5**	**9.5**	**9.5**
Wall Trib	**14.75**	**25.25**	**10.5**
L(tot)	4	8.5	5.75
Main	**0**	**0**	**0**

Roof Loads			
Upper Roof	**0**	**0**	**0**
Upper			
P	1656	2632	1167
v	414	310	97
Rup1	3288	2273	634
Rup2	3312	2477	706
Rup3	3312	2477	778
Main			
P	5279	8242	3991
v	1320	970	694
Rup1	15798	11243	8066
Rup2	15851	11689	8217
Rup3	15851	11689	8217
Base P	5978	9245	4896

TOTAL BASE WIND
20119 lb

Client: Mali McReynolds
Project: Pacific City, Oregon

By: M.V.Nava
Date: 11/05/24

Wind Basic Wind Speed = **135.00** Exposure **D**

Zone A	Zone B	Zone C	Zone D
16	8	16	8
9.6	4.8	9.6	4.8
	3.85	0	3.85

27.1.5 Minimum Design Wind Loads
Ps=0.6*Ps30

Building dimension a 3.85

Lines :	A	B	C
Eave Ht	**17.5**	**17.5**	**17.5**
Wall Trib	**14.75**	**26.5**	**11.75**
L(tot)	**4**	**8.5**	**12**
Upper	**9.5**	**9.5**	**9.5**
Wall Trib	**14.75**	**25.25**	**10.5**
L(tot)	**4**	**8.5**	**5.75**
Main	**0**	**0**	**0**

Roof Loads

Upper Roof	**466**	**833**	**367**
P			
P	1032	1851	818
v	258	218	68
Rup1	2041	1538	401
Rup2	2065	1742	473
Rup3	2065	1742	545
P			
P	2271	4020	1748
v	568	473	304
Rup1	7407	5788	3876
Rup2	7459	6234	4027
Rup3	7459	6234	4027
Base P	2575	4666	2185

TOTAL BASE WIND
9426 lb

Client: Mali McReynolds
Project: Pacific City, Oregon

By: M.V.Nava
Date: 11/05/24

Line 1

Seismic Calculations

A. 15. Light-frame (wood) walls sheathed w/wood structural panels rated for shear resistance

V = (Sds)Wt/R Sds = 1.028316 R= 6.5

V = 0.1582 (Wt)

Lvl	Ht.	Wt.	wxhx	wxhx Totwxhx	Fx	V (total)	V(design)
Eave	17.5	13,185	230733.56	0.623856	2,819		
Upper	9.5	13,823	131320.88	0.3550646	1,605	2,819	2,566
Main	5	1,559	7796.25	0.0210795	95	4,424	4,026
Base		28,567	369850.69	1	4,519	4,519	4,113

Tot Wt = 28,567 lbs
V(base) = 4,519 lbs

Q=p x .7E =1.3 x .7 E =.91 x E
Design V = 0.91 E

Lvl	L (tot)	v (Design)
Upper	10.13	253
Main	33.50	120

Uplift:

	L(tot)	L1	Rup,1	L2	Rup,2	L3	Rup,3
Upper	10.13	10.13	1843	0	2027	0.0	2027
Main	33.50	17.58	652	9.25	890	6.7	963

Client: Mali McReynolds
Project: Pacific City, Oregon

By: M.V.Nava
Date: 11/05/24

Line 2

Seismic Calculations

A. 15. Light-frame (wood) walls sheathed w/wood structural panels rated for shear resistance

V = (Sds)Wt/R Sds = 1.028 R= 6.5

V = 0.1582 (Wt)

Lvl	Ht.	Wt.	wxhx	wxhx Totwxhx	Fx	V (total)	V(design)
Eave	17.5	19,320	338093.44	0.6596152	4,024		
Upper	9.5	17,390	165203.81	0.3223101	1,966	4,024	3,662
Main	5	1,853	9264.375	0.0180747	110	5,990	5,451
Base		38,562	512561.63	1	6,101	6,101	5552

Tot Wt = 38,562 lbs
V(base) = 6,101 lbs

Q=p x .7E =1.3 x .7 E =.91 x E
Design V = 0.91 E

Lvl	L (tot)	v (Design)
Upper	21.26	172
Main	25.50	214

Uplift:

	L(tot,used)	L1	Rup,1	L2	Rup,2	L3	Rup,3
Upper	21.26	9.34	1208	7.75	1237	4.2	1302
Main	25.50	15.50	1669	10	1826	0.0	2111

Client: Mali McReynolds
Project: Pacific City, Oregon

By: M.V.Nava
Date: 11/05/24

Line 3

Seismic Calculations

A. 15. Light-frame (wood) walls sheathed w/wood structural panels rated for shear resistance

V = (Sds)Wt/R Sds = 1.028316 R= 6.5

V = 0.1582025 (Wt)

Lvl	Ht.	Wt.	wxhx	wxhx Totwxhx	Fx	V (total)	V(design)
Eave	17.5	8,543	149506.88	0.5993663	1,853		
Upper	9.5	9,992	94922.813	0.3805413	1,176	1,853	1,686
Main	5	1,002	5011.875	0.0200924	62	3,029	2,756
Base		19,538	249441.56	1	3,091	3,091	0

Tot Wt = 19,538 lbs
V(base) = 3,091 lbs

Q=p x .7E =1.3 x .7 E =.91 x E
Design V = 0.91 E

Lvl	L (tot)	v (Design)
Upper	22.25	76
Main	30.88	89

Uplift:

	L(tot,used)	L1	Rup,1	L2	Rup,2	L3	Rup,3
Upper	22.25	16.25	310	6	497	0.0	606
Main	30.88	15.88	386	15	411	0.0	839

Client: Mali McReynolds
Project: Pacific City, Oregon

By: M.V.Nava
Date: 11/05/24

Line A

Seismic Calculations

A. 15. Light-frame (wood) walls sheathed w/wood structural panels rated for shear resistance

V = (Sds)Wt/R Sds = 1.028316 R= 6.5

V = 0.1582 (Wt)

Lvl	Ht.	Wt.	wxhx	wxhx Totwxhx	Fx	V (total)	V(design)
Eave	17.5	13,051	228394.69	0.6932186	2,502		
Upper	9.5	10,640	101075.25	0.3067814	1,107	2,502	2,277
Main	0	1,377	0	0	0	3,609	3,284
		25,068	329469.94	1	3,609	3,609	3284

Tot Wt = 25,068 lbs
V(base) = 3,609 lbs

Q=p x .7E =1.3 x .7 E =.91 x E
Design V = 0.91 E

Lvl	L (tot)	v (Design)
Upper	4.00	569
Main	4.00	821

Uplift:

	L(tot,used)	L1	Rup,1	L2	Rup,2	L3	Rup,3
Upper	4.00	1.00	4535	0	4553	0	4553
Main	4.00	1.00	12313	0	12353	0	12353

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Line B

Seismic Calculations

A. 15. Light-frame (wood) walls sheathed w/wood structural panels rated for shear resistance

V = (Sds)Wt/R Sds = 1.028316 R= 6.5

V = 0.1582 (Wt)

Lvl	Ht.	Wt.	wxhx	wxhx Totwxhx	Fx	V (total)	V(design)
Eave	17.5	20,585	360241.88	0.6686383	3,964		
Upper	9.5	18,792	178527.56	0.3313617	1,964	3,964	3,607
Main	0	1,802	0	0	0	5,928	5,395
		41,180	538769.44	1	5,928	5,928	5395

Tot Wt = 41,180 lbs
V(base) = 5,928 lbs

Q=p x .7E =1.3 x .7 E =.91 x E
Design V = 0.91 E

Lvl	L (tot)	v (Design)
Upper	8.50	424
Main	8.50	635

Uplift:

	L(tot,used)	L1	Rup,1	L2	Rup,2	L3	Rup,3
Upper	8.50	8.50	3240	0	3395	0	3395
Main	8.50	8.50	9085	0	9425	0	9425

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Project: Pacific City, Oregon

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Line C

Seismic Calculations

A. 15. Light-frame (wood) walls sheathed w/wood structural panels rated for shear resistance

V = (Sds)Wt/R Sds = 1.028316 R= 6.5

V = 0.1582 (Wt)

Lvl	Ht.	Wt.	wxhx	wxhx Totwxhx	Fx	V (total)	V(design)
Eave	17.5	7,365	128887.5	0.5516097	1,533		
Upper	9.5	11,028	104769.56	0.4483903	1,246	1,533	1,395
Main	0	911	0	0	0	2,779	2,529
Base		19,305	233657.06	1	2,779	2,779	2529

Tot Wt = 19,305 lbs
V(base) = 2,779 lbs

Q=p x .7E =1.3 x .7 E =.91 x E
Design V = 0.91 E

Lvl	L (tot)	v (Design)
Upper	12.00	116
Main	5.75	440

Uplift:

	L(tot,used)	L1	Rup,1	L2	Rup,2	L3	Rup,3
Upper	12.00	6.00	821	3	875	0	930
Main	5.75	2.88	6005	0	6119	0	6119

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Roof DL **15** psf

Lines :	1	2	3	A	B	C
Upper Roof						
Trib Width	12.67	19.25	11.625	16.25	26.5	13
Length	55.5	55.5	38	43.5	43.5	29
Lower Roof						
Trib Width	12.5		13.5		7.75	11.75
Length	17		16		12.5	28.5
Upper						
Wall Trib	10.125	19.25	9.125	14.75	26.5	11.75
# of walls	**2**	**2**	**2**	**2**	**2**	**2**
Wall Length	53	53	35	38.5	38.5	24
# of walls	**1**	**1**	**1**	**1**	**1**	**1**
Main						
Wal Trib	12	19.25	7.25	14.75	25.25	10.5
# of walls	**2**	**2**	**2**	**2**	**2**	**2**
Wall Length	53	53	35	38.5	38.5	24
# of walls	**1**	**1**	**1**	**1**	**1**	**1**

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	Wt	Line Qnty	1 Wt		Line Qnty	2 Wt		Line Qnty	3 Wt
Upper Roof	15	703.185	10547.775		1068.375	16025.625		441.75	6626.25
2nd Wall	36	73.25	2637	36	91.5	3294	36	53.25	1917
			13184.775			**19319.625**			**8543.25**
Lower Roof	15	212.5	3187.5					216	3240
2nd Wall	36	73.25	2637	36	91.5	3294	36	53.25	1917
2nd Floor	12	536.625	6439.5		1020.25	12243		319.375	3832.5
1st Wall	20.25	77	1559.25	20.25	91.5	1852.875	20.25	49.5	1002.375
			13823.25			**17389.875**			**9991.875**
1st Wall	20.25	77	1559.25	20.25	91.5	1852.875	20.25	49.5	1002.375
			1559.25			**1852.875**			**1002.375**

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	Wt	Line Qnty	**A** Wt	Line Qnty	**B** Wt	Line Qnty	**C** Wt
Upper Roof	15	706.875	10603.125	1152.75	17291.25	377	5655
2nd Wall	36	68	2448	91.5	3294	47.5	1710
			13051.125		**20585.25**		**7365**
Lower Roof	15			96.875	1453.125	334.875	5023.125
2nd Wall	36	68	2448	91.5	3294	47.5	1710
2nd Floor	12	567.875	6814.5	1020.25	12243	282	3384
1st Wall	20.25	68	1377	89	1802.25	45	911.25
			10639.5		**18792.375**		**11028.375**
1st Wall	20.25	68	1377	89	1802.25	45	911.25
			1377		**1802.25**		**911.25**

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Shear Walls	No.	Length	No.	Length	No.	Length	No	Length
A								
Upper	4	1	0	0	0	0	0	0
Main	4	1	0	0	0	0	0	0
B								
Upper	1	8.5	0	0	0	0	0	0
Main	1	8.5	0	0	0	0	0	0
C								
Upper	1	6	2	3	0	0	0	0
Main	2	2.875	0	0	0	0	0	0