DILP 2023 JUL 27 AM8:31

PERMIT NUMBER: B 23002849 **DATE ACCEPTED:**

RESIDENTIAL BUILDING PERMIT APPLICATION

HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES, AND PERMITS
3430 COURT HOUSE DRIVE, ELLICOTT CITY, MD 21043 - PHONE: (410) 313-2455 OPTION #4
www.howardcountymd.gov

BUILDING SITE ADDRESS *REQUIRED*

Street Address: 17762 Hardy Road			Unit:
City: Mount Airy	State: MD		Zip Code: 21771
Subdivision/Village/Complex Name:		SDP/WP/BA #:	
Lot: 3	Tax Map:	Parcel: 04-344308	Grading Permit #:

DESCRIPTION OF WORK *REQUIRED*

Existing Use: Lawn	Proposed Use: Astronomy Equipment Shed	Estimated Cost: $20,000

Trade Work to Be Completed *(Separate Permits Required)*: ☐ Mechanical (HVACR) ☐ Electrical ☐ Plumbing ■ None

construct 23 X 26 shed

PROPERTY OWNER INFORMATION *REQUIRED*

Owner(s) Name(s) *(As it appears on tax records)*: Lee M Amoss and Nancy P Amoss		Primary Residence: ■ Yes ☐ No
Owner's Street Address: 17762 Hardy Road		
City: Mount Airy	State: MD	Zip Code: 21771
Phone: 410-707-4705	Email: LAmoss2035@gmail.com	

APPLICANT NAME *REQUIRED - INDIVIDUAL WHO SIGNS THIS APPLICATION*

Business Name: Home Owner	Contact Name: Lee Amoss	
Street Address: 17762 Hardy Road		
City: Mount Airy	State: MD	Zip Code: 21771
Phone: 410-707-4705	Email: LAmoss2035@gmail.com	

CONTRACTOR INFORMATION *REQUIRED*

Business Name: N/A - Home Owner constructing shed		
Licensee's Name:	License #:	
Street Address:		
City:	State:	Zip Code:
Phone:	Email:	

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

Business Name:	Name:	
Street Address:		
City:	State:	Zip Code:
Phone:	Email:	

BUILDING CHARACTERISTICS *REQUIRED*

Primary Structure: ☒ SF Dwelling ☐ SF Townhouse ☐ SF Duplex ☐ Mobile Home ☐ Multi-Family Dwelling (MF*) Condo: ☐ Yes ☒ No

Utilities: ☒ Electric ☐ Gas Water Supply: ☐ Public ■ Private (Well) Sewage Disposal: ☐ Public ■ Private (Septic)

Heating System: ☐ Electric ☐ Natural Gas ☐ Propane ☒ Other: None Roadside Tree Project: ■ No ☐ Yes: #

Sprinkler System: ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D ■ None Fire Alarm System: ☐ Yes ■ No ☐ Voice Evac

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

Model Name & Options:

# of Bedrooms (SF):	# of efficiency units (MF*):	# of 1 BR (MF*):	# of 2 BR (MF*):	# of 3 BR (MF*):
# Rooms:	# Full Baths:	# Half Baths:	# Fireplaces:	

Garage/Carport Info: ☐ Attached Garage ☐ Detached Garage ☐ Integral Garage ☐ Carport ☐ None

Basement/Foundation Info: ☐ Slab on Grade ■ Post & Pier ☐ Unfinished Basement ☐ Finished Basement: ☐ Full or ☐ Partial

1st Fl Width: 23ft	1st Fl Depth: 26ft	2nd Fl Width:	2nd Fl Depth:	Bsmt Width:	Bsmt Depth:

Energy Method: ☐ Prescriptive ☐ Performance ☐ UA Alternative ☐ ERI Gross Area: 598 sq ft Occupiable Area: 598 sq ft

AGREEMENT/ DISCLAIMER *REQUIRED*

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

Lee M. Amoss — APPLICANT'S ORIGINAL SIGNATURE

7/27/2023 — DATE SIGNED

FOR OFFICE USE ONLY

CHECKS PAYABLE TO: DIRECTOR OF FINANCE OF HOWARD COUNTY

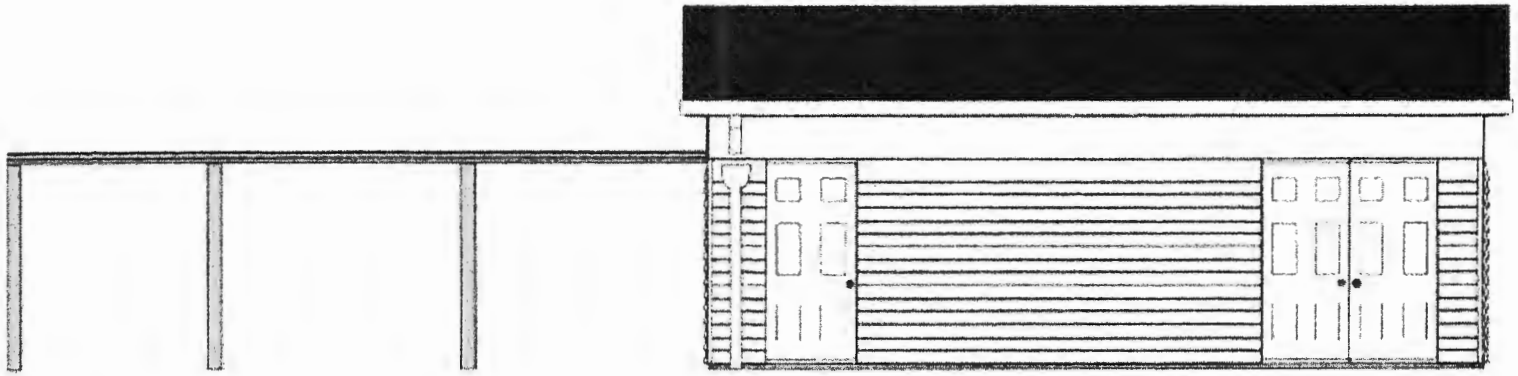
AGENCIES REQUIRED/APPROVALS:

☐ PR	☐ DPZ	☐ DED	☐ Health A. Oswald 8.2.23	☐ SHA	☐ CID

PAYMENT: Check # 4453 ACCEPTED BY: DR

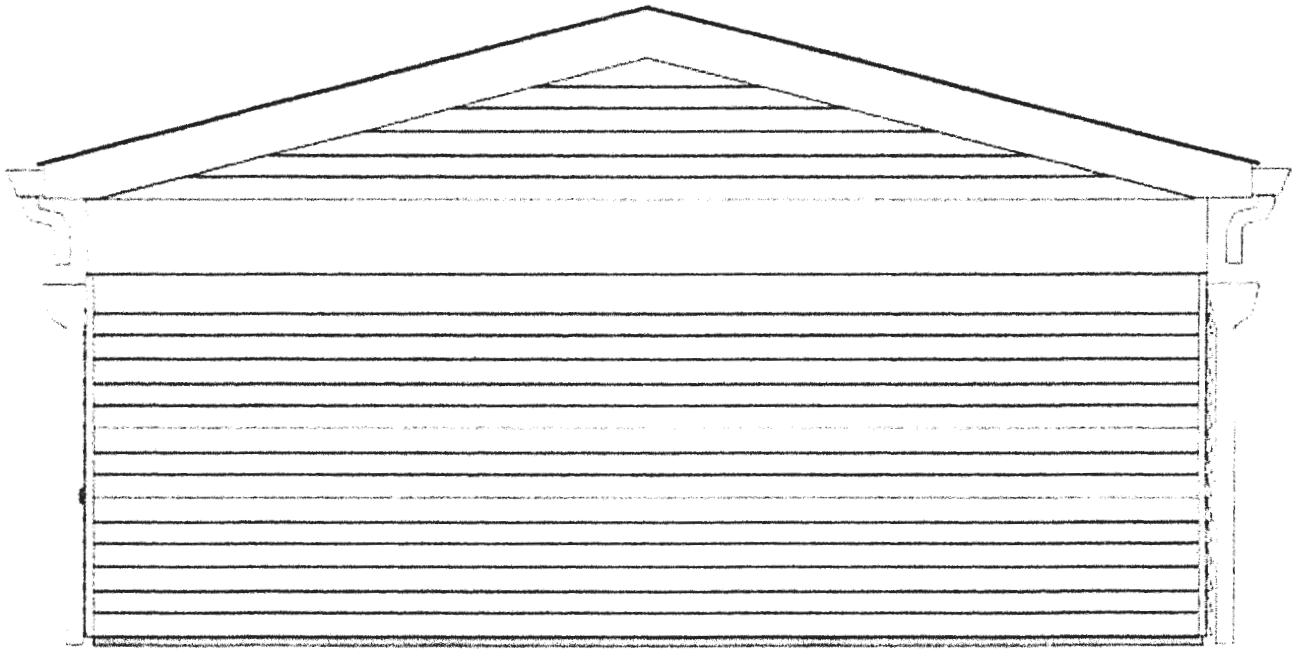
Copy 3

West Side - Eave Side 1 Elevation



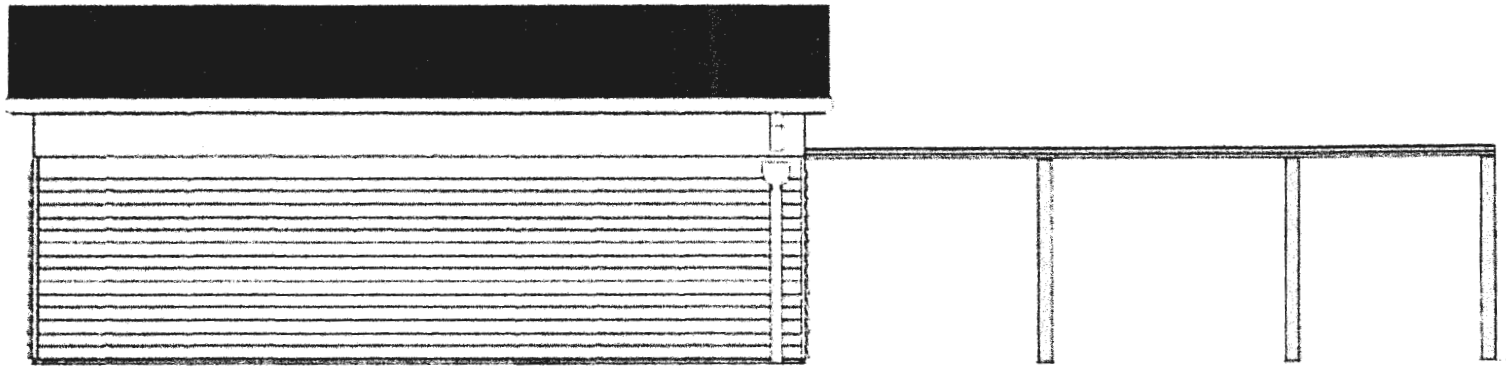
Lee Amoss
17762 Hardy Road
Mount Airy MD, 21771
Astronomy Equipment Shed - V1.0
7/28/23

South Side - Gable Side 1 Elevation



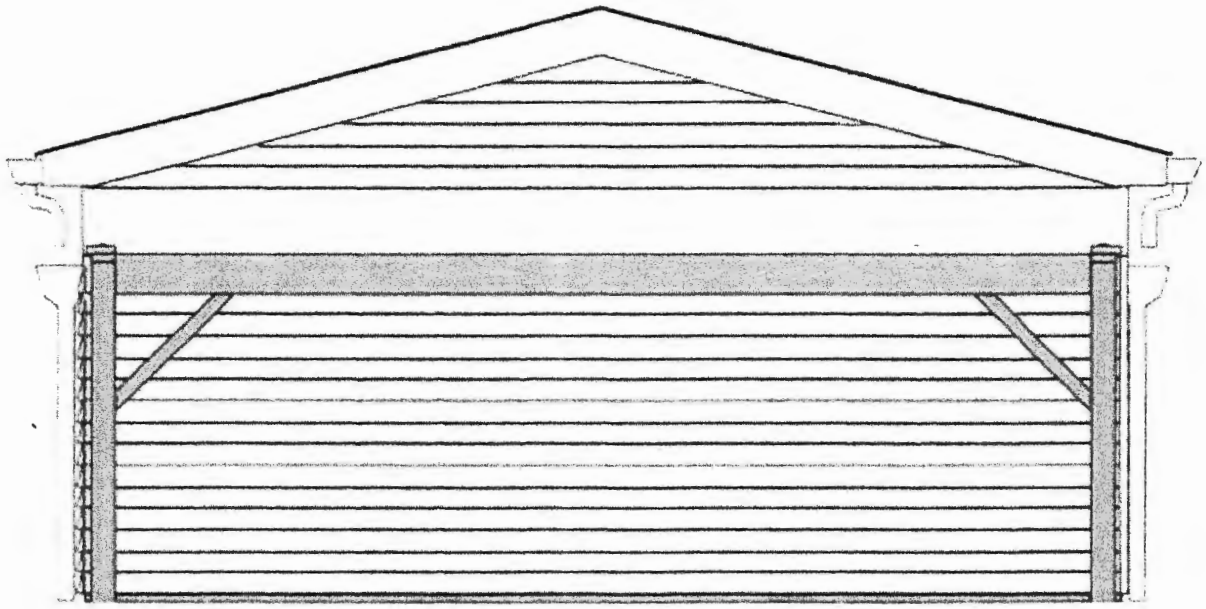
Lee Amoss
17762 Hardy Road
Mount Airy MD, 21771
Astronomy Equipment Shed - V1.0
7/28/23

East Side - Eave Side 2 Elevation



Lee Amoss
17762 Hardy Road
Mount Airy MD, 21771
Astronomy Equipment Shed - V1.0
7/28/23

North Side - Gable Side 2 Elevation

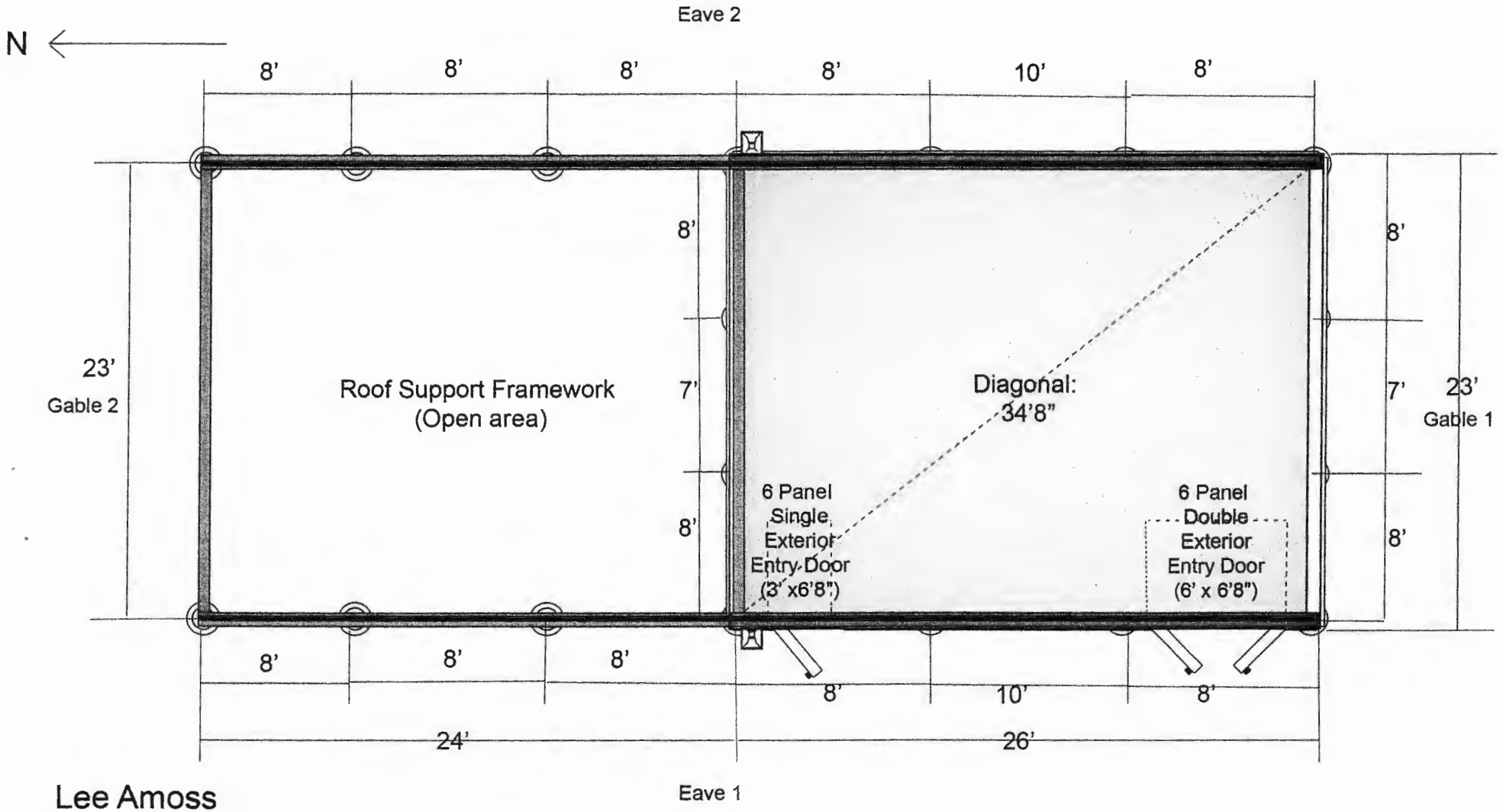


Lee Amoss
17762 Hardy Road
Mount Airy MD, 21771
Astronomy Equipment Shed - V1.0
7/28/23

Pole Layout

Personal Use (598 sq. ft.)

Concrete piers 36" deep
Galvanize 4x4 Column Base
4"x4" Treated Posts



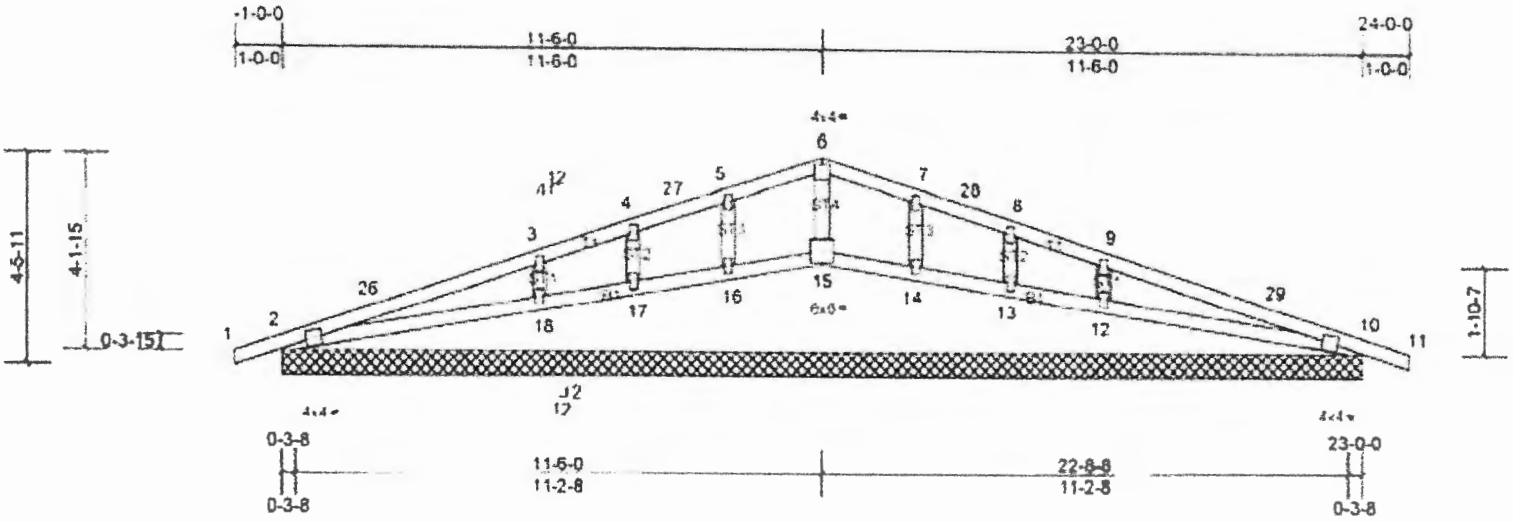
Lee Amoss
17762 Hardy Road
Mount Airy MD, 21771
Astronomy Equipment Shed - V1.0
7/28/23

Job	Truss	Truss Type	Qty	Ply	Lee Amoss- 17762 Hardy Rd RF
2304069-2304069A	GE1	Scissor	2	1	Job Reference (optional)

84 Lumber - Components, Mt. Airy

Run: 8.7 S Mar 29 2023 Print: 8.700 S May 29 2023 MiTek Industries, Inc. Thu Jul 13 10:00:29 Page 1

ID:mUwoVXt4umo2d0tUwzE1m4z-aX1-gOH8cW6G4cNqMNBvdUa0FKnSnUN10JKCRpGuYyX61



Scale = 1:47.8

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	30.0	Plate Grip DOL	1.00	TC	0.39	Vert(LL)	n/a	-	n/a	999	MT20	197/144
(Roof Snow = 30.0)		Lumber DOL	1.15	BC	0.38	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 87 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.2 or 2x4 SPF No.2

BRACING

TOP CHORD Sheathed or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS All bearings 23-0-0

(lb) Max Uplift All uplift 100 (lb) or less at joint(s) 13, 17 except 2=-169 (LC 3), 10=-169 (LC 3), 12=-204 (LC 3), 14=-128 (LC 3), 16=-128 (LC 3), 18=-204 (LC 3), 19=-169 (LC 3), 23=-169 (LC 3)

Max Grav All reactions 250 (lb) or less at joint(s) 13, 15, 17 except 2=323 (LC 1), 10=323 (LC 1), 12=568 (LC 1), 14=261 (LC 1), 16=261 (LC 1), 18=568 (LC 1), 19=323 (LC 1), 23=323 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-18=-383/169, 9-12=-383/159

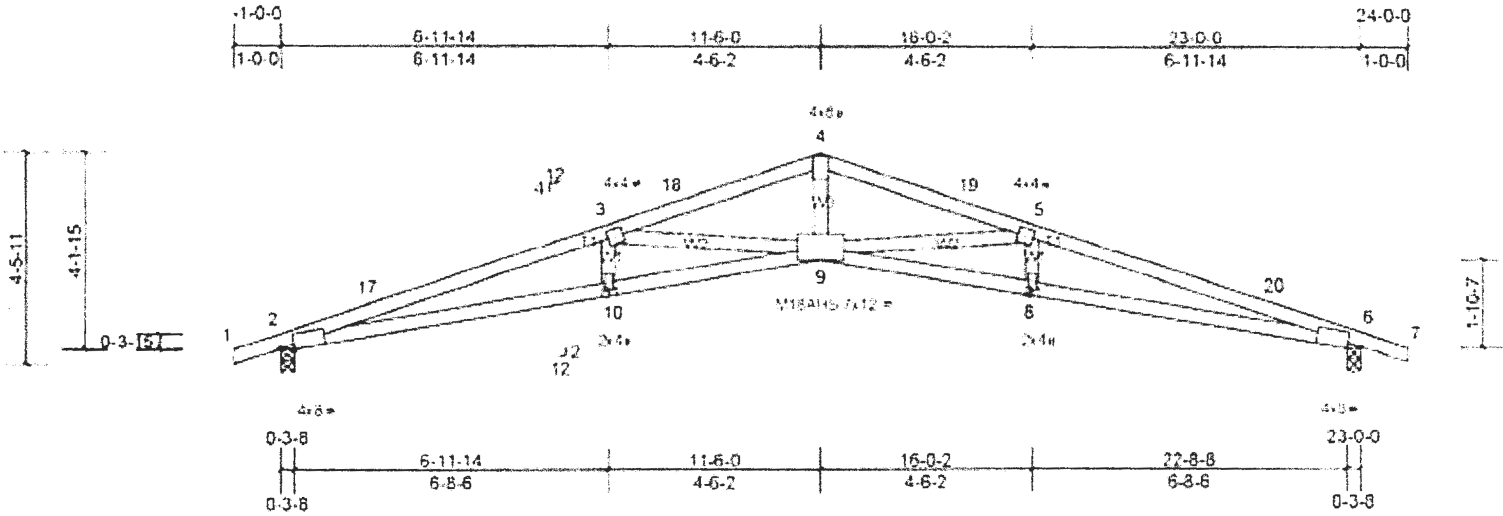
NOTES

1) Wind: ASCE 7-10; Vult=110mph (3-second gust) Vasd=87mph; TCDL=4.0psf; BCDL=6.0psf; h=0ft; Cat. II; Exp B; Enclosed; GCpi=0.18; MWFRS (envelope) and C-C Corner (3) -1-0-0 to 2-0-0; Exterior (2) 2-0-0 to 8-6-0, Corner (3) 8-6-0 to 14-6-0; Exterior (2) 14-6-0 to 21-6-0; Corner (3) 21-6-0 to 24-0-0; Lumber DOL=1.00 plate grip DOL=1.00
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI.
3) TCLL: ASCE 7-10; Pf=30.0 psf (flat roof snow); Category II; Exp B; Partially Exp.; Ct=1.10
4) This truss has been checked for uniform snow load only, except as noted.
5) This truss has been designed for greater of min roof live load of 10.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 169 lb uplift at joint 2, 169 lb uplift at joint 10, 128 lb uplift at joint 16, 203 lb uplift at joint 18, 128 lb uplift at joint 14, 203 lb uplift at joint 12, 169 lb uplift at joint 2 and 169 lb uplift at joint 10.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 15, 16, 17, 18, 14, 13, 12.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Lee Amoss- 17762 Hardy Rd RF
2304069-2304069A	T01	Scissor	12	1	Job Reference (optional)

ID:EnUAjuP3wvRdSnUnGuHz_sX0-9bWpo7uwVnLWyKbn1tJ1tqkBgUnR31O6ZpRxiyX60



Scale = 1:47.6

Plate Offsets (X, Y): [2:0-3-8,Edge], [6:0-3-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	30.0	Plate Grip DOL	1.00	TC	0.93	Vert(LL)	-0.47	9-10	>584	240	MT20	244/190
(Roof Snow = 30.0)		Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.79	9-10	>347	180	M18AHS	142/136
TCDL	10.0	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.39	6	n/a	n/a		
BCLL	0.0	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 92 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.2 or 2x4 SPF No.2

BRACING
TOP CHORD Sheathed or 1-10-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=1230/0-3-8, (min. 0-1-15), 6=1230/0-3-8, (min. 0-1-15)
Max Uplift 2=-342 (LC 3), 6=-342 (LC 3)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-17=-4860/1170, 3-17=-4808/1170, 3-18=-3585/878, 4-18=-3524/878, 4-19=-3524/879, 5-19=-3584/878, 5-20=-4806/1170, 6-20=-4861/1170
BOT CHORD 2-10=-1074/4634, 9-10=-1074/4633, 8-9=-1074/4633, 6-8=-1074/4634
WEBS 4-9=-430/1892, 5-9=-1225/321, 3-9=-1225/321

NOTES
1) Wind: ASCE 7-10; Vult=110mph (3-second gust) Vasd=87mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 8-6-0, Exterior (2) 8-6-0 to 14-0-0, Interior (1) 14-0-0 to 21-0-0, Exterior (2) 21-0-0 to 24-0-0; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pf=30.0 psf (flat roof snow); Category II; Exp B; Partially Exp.; Ct=1.10
3) This truss has been checked for uniform snow load only, except as noted.
4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
5) All plates are MT20 plates unless otherwise indicated.
6) Bearing at joint(s) 2, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 342 lb uplift at joint 2 and 342 lb uplift at joint 6.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

Gable Side 1 Cross Section

Pulins: 2x4 construction grade
fastened laying flat 30" OC
Sub Facia: 2x6 construction grade
Drip Flashing: Quality Aluminum products
white 10' style D 1" overhang drip edge
Facia covering: Brite White steel post
and facia trim 6 x 10ft 2"
Undereave: Crane Plastics white vinyl
soffit 12" x 12 ft

Corner & Intermediate posts: 4"x4"
treated posts 8ft
Exteriors and Interior carriers: Yellow
Pine #1 2x8

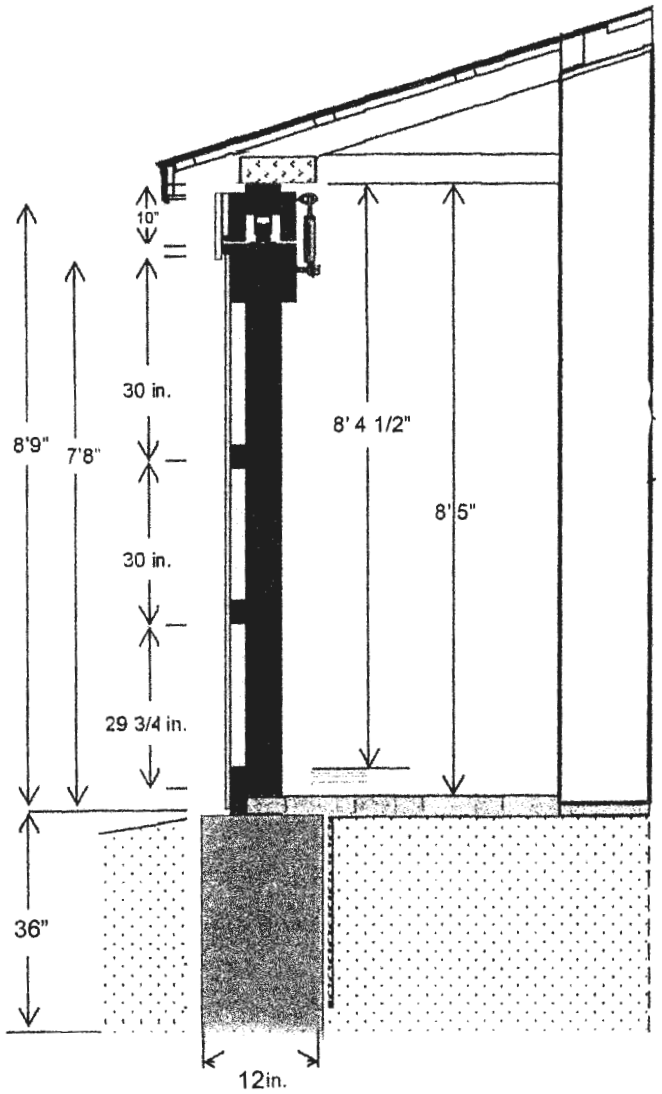
Wall Layer 1: 1/2 4x8 plywood
Wall Layer 2: Tyvek House Wrap
Wall Layer 3: Armstrong Grey double
dutch 4" vinyl siding

Exterior Skit board: Treated 2 x 6

Siding begins 3in. below skit board

Earth Grade begins 4" below top of skirt
board

Roof Layer 1: 2x4 purlins spaced 30" OC
Roof Layer 2: Black Galvanized Steel Roof panels



4/12 Pitch Truss System with a
standard heel
Truss Spacing: 24" OC
Truss Loading Informaton:
TCLL/TCDL/BCLL/BCDL 30-10-0-10

Total Truss Load = 30 P.S.F
Brace Per Truss Manufacturer's
Recommendations

Interior Finished floor height to be 1-1/2"
below the top of the skirt board

4" Concrete floor W/Structural Strength
- 3000 P.S.I

Contrete Piers 36" deep, 12" diameter

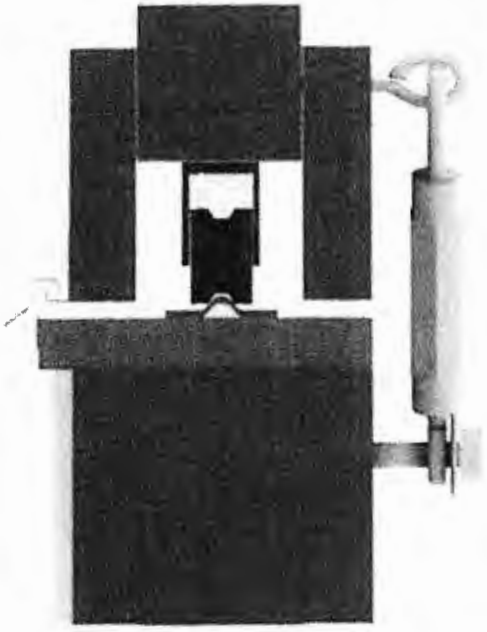
Lee Amoss
17762 Hardy Road
Mount Airy MD, 21771
Astronomy Equipment Shed - V1.0
7/28/23

Overhang and Roof Trolley Detail

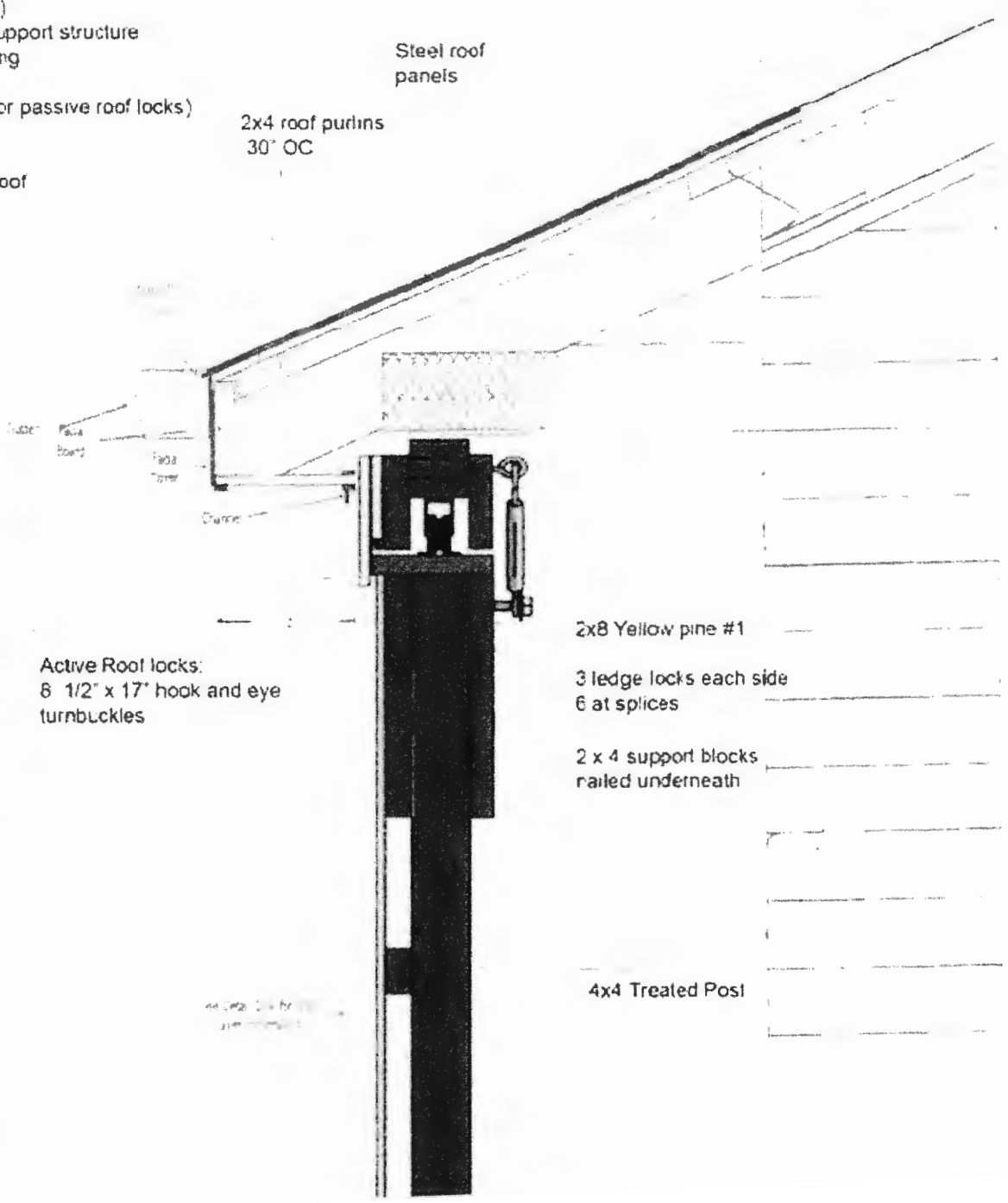
Roof Trolley Details

V-Grove casters (600lbs rating 6ft OC - 5 per trolley/side, (10 total)
V-Track: Runs entire length of Eave walls including exterior roof support structure
Trolley Core: 3- treated 2x4 boards, layered & interwoven - 26ft long
Trolley side plates 2x8
J Channel Aluminum or Galvanized along trolleys & eave walls (For passive roof locks)
Trusses attached to trolley using Truss brackets

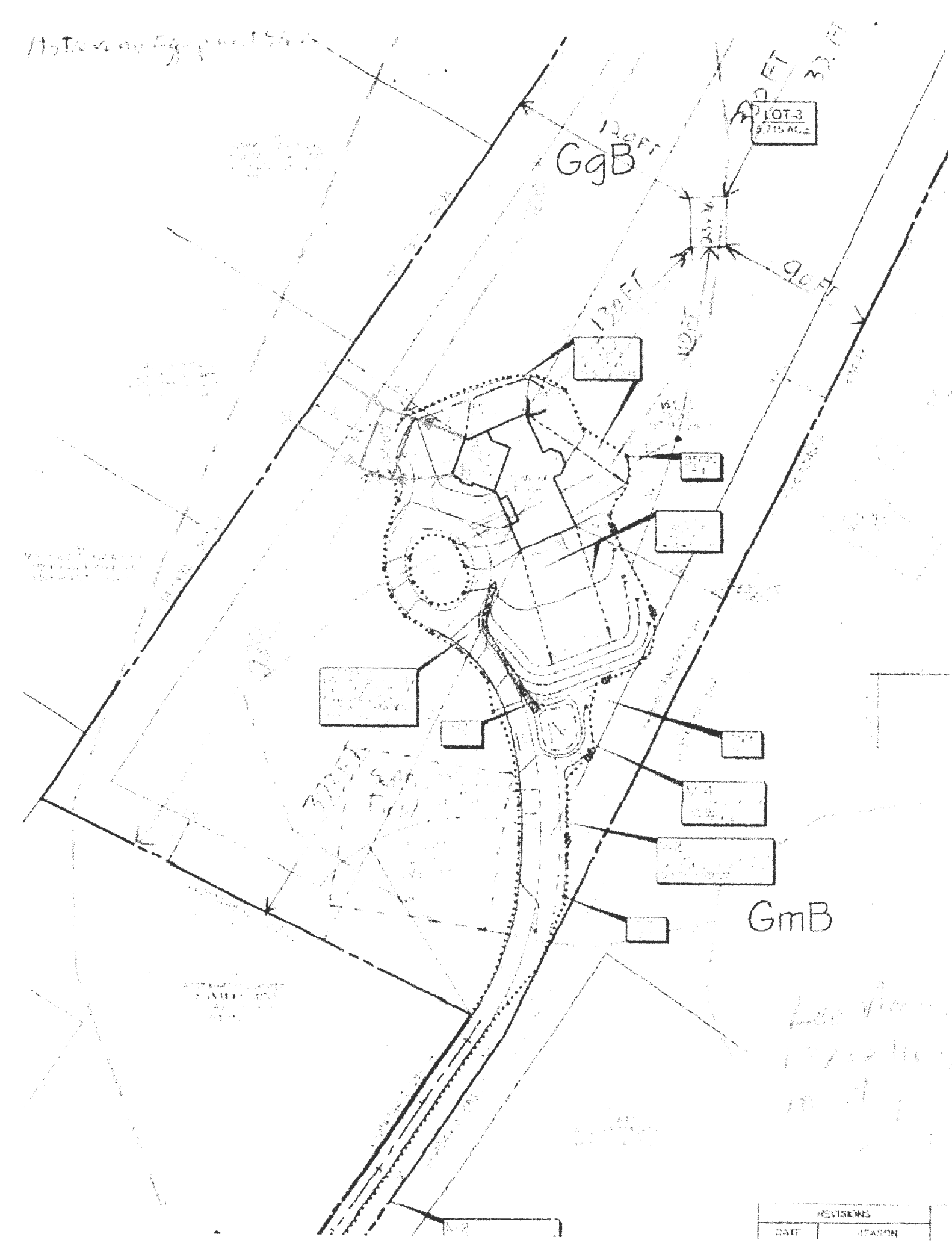
Active Roof locks: 8 1/2" x 17" hook and eye turnbuckles to lock roof into place when closed every 12' on eave side running between trolley/roof assembly and eave walls



Interlocking J Channel Passive Roof lift lock)



Lee Amoss
17762 Hardy Road
Mount Airy MD, 21771
Astronomy Equipment Shed - V1.0
7/28/23


LOT-3
GgB
GmB
REVISIONS
DATE
REASON