

**APPENDIX L**

# HG Ministeries Youth Camp

Map ID: 6434-00-00600 & 6433-00-00100

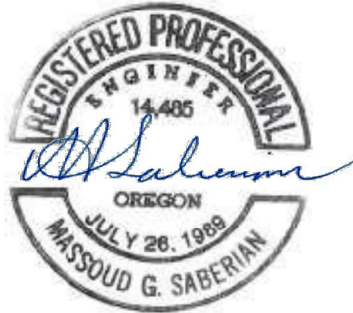
(66845 Nehalem Highway in Vernonia, OR)

## Traffic Memorandum



Prepared by:  
ETRC, LLC  
14465 SW 161<sup>st</sup> Avenue  
Portland, OR 97224

February 4, 2026



Exp. June 2026

House of God Ministries Youth Camp

David Klassen

1118 SE 182nd Ave.

Portland, OR 97233

Job #2601TR01



The purpose of this study is to assess the potential traffic impact of the proposed development on the adjacent Road as well as the new site access (See proposed site plan).

**Existing Conditions**

Highway 47 (Nehalem Highway) near Milepost 51/52 carries about 1,024 Average Daily Traffic (ADT). This information is based on data obtained from Oregon Department of Transportation Traffic Volume Tables for State Highways 2024, Site ID 3049. This daily volume is for both directions combined. The estimated AM/PM Peak for this type of low volume rural highway is about 100 peak hour trips for both directions and about 50 trips per direction.

There has not been any significant or measurable change in character, land use or traffic flow on Highway 47 north of the town of Vernonia in recent years, and it is expected to remain the same.

A review of the most recent 5-year crash history available between Mile Post 51-52 did not show any crashes.

The roadway is paved and in good condition, striped as No Passing, and about 22-24 feet wide. There is a slight dip north of the proposed access which does not hinder the line of sight to the north (~520 Feet). The line of sight to the south is about 385 feet due to a gradual horizontal curve as well as overgrown vegetation which can improve the sight distance to 420-430 feet with some vegetation removal.

The road is unposted (Basic Rule) and typical estimated 85<sup>th</sup> percentile speed (measured using radar gun) operating speed during the site visit (January 28, 2026, Cloudy with light rain) was consistently under 43-45 mph.

**Traffic Analysis and Trip Generation (Based on Full Development)**

When fully built it is envisioned that the primary use of the site will be during summer season (6 to 8 weeks) annually with most camp young attendees will be primarily driven to the site using School buses.

The site will consist of the following uses:

Use	Area (Square Feet)
One Lodge – 14,000 SF	
Dining Hall	3,595
Sanctuary	3,906
Kitchen	1,287
Classrooms	1,638
Hallway	890
Bathrooms	1,638
Storage Room	435
Courtyard	7,356
Cabins, Sleeping Houses, Gazebos	21,972

## Site Access/Site Plan

The proposed access point to the site will be about 150 feet south and opposite the existing access where the existing house (Caretaker) is located on the west side of the highway. There are no other roads, driveways or access points to other properties within 1000 feet of the proposed site access on either approach.



**Figure 2 A– Site Access on Highway 47 (Looking South ~ 385 Feet Line of Site)**



**Figure 2 B– Site Access on Hwy 47 Looking North – Over 520 Feet Line of Site**

## Study Roadways and Site Trip Generation

Based On Section 1450 of the Columbia County Zoning Ordinance, the proposed development trip generation will be below the threshold set and defined for daily (400 daily trips) and peak hour trips (25 or more hourly trips). The site trip generation was conservatively estimated based on the proposed trip ends to and from the site.

The latest ITE Trip Generation Manual (12<sup>th</sup> Edition) was reviewed, and no similar use is listed, therefore the worst-case scenario is presented below (Table 2) to demonstrate the maximum possible trip generation to and from the site including the existing house at fully built out.

There is ample onsite parking to accommodate the daily trips during youth camp operation.

While the hours of operation may be from dawn to dusk, there will be little to no trips arriving or leaving during AM or PM peak hours. The majority, if not all trips to the site are anticipated after 9 AM or after 6 PM.

**Table 2 – Projected Trip Generation**

Trip Generator	Daily Trips (in/out)	AM Peak * (in)	PM Peak * (out)	Comments
Existing House	11	1	1	U Unchanged
Youth (8 School Buses max)	16	2	2	Typically, 4-6 Busses
Employees/Staff/Counselors	40	5	5	Mostly outside AM/PM Peak
Deliveries/Services	2			No delivery during peak hours
Misc. other	5	1	1	
<b>Total</b>	<b>74</b>	<b>9</b>	<b>9</b>	

(\*) - Most trips (Ingress/Egress) will occur outside of AM/PM Peak hours

## Trip Distribution

It is expected that all the traffic will travel to and from the site from south toward Town of Vernonia and beyond. There is no or very little traffic expected to arrive from the north.

## Parking

Columbia County Zoning Ordinance, Section 1416 proscribes minimum parking requirements for delineated uses. Youth Camp is not a delineated use. Section 1417 states that, "Any use not specifically listed in the foregoing list shall have the requirements of the listed use or uses deemed equivalent by the Director." The project includes a gathering hall, which is similar to "Auditorium or Meeting Room" and requires "one space for each 60 square feet of floor area in the auditorium." Section 1416.2. Additionally, the project includes sleeping areas, which are similar to a "Hotel" and requires "one space for each 2 guest rooms." Section 1416.3 Hotel. Using these parking standards would require 408 parking spaces. However, the campers will arrive and depart from the property via shared bus, and employees will carpool use the camper buses. As such, the project includes 14 parking spaces and 1 ADA parking spaces. Additionally, the project includes a 24,027 square foot overflow parking area,

which will be used for the proposed limited events. This parking will satisfy project needs. Additionally, to ensure that no parking occurs along Highway 47, the project applicant will request that ODOT place "No Parking" signs along the property frontage.

### Sight Distance

Sight distance evaluation and assessment were made at the proposed site access (Site visited on January 28, 2026). The gently rolling topography along the Highway 47 adjacent to the proposed project site consisting of straight roadway alignment, occasional minor horizontal and vertical curves near the site pose no challenge or restrictions. The applicant will remove a few recently overgrown vegetation and maintain all vegetation along the frontage of the property at least 15 feet back from the edge of the roadway.

The sight distance measurement will be based on an eye height of 3.5 feet and an object height of 3.5 feet above the road; and assumed to be 10 feet from the near edge of pavement to the front of a stopped vehicle, (actual measurement is taken 15 feet from pavement edge) Per AASHTO Standards. Stopping Sight distance at the new driveway will be about 385 feet to the south and about 520 feet to the north.

Table 3-1. Stopping Sight Distance on Level Roadways

U.S. Customary				
Design Speed (mph)	Brake Reaction Distance (ft)	Braking Distance on Level (ft)	Stopping Sight Distance	
			Calculated (ft)	Design (ft)
15	55.1	21.6	76.7	80
20	73.5	38.4	111.9	115
25	91.9	60.0	151.9	155
30	110.3	86.4	196.7	200
35	128.6	117.6	246.2	250
40	147.0	153.6	300.6	305
45	165.4	194.4	359.8	360
50	183.8	240.0	423.8	425
55	202.1	290.3	492.4	495
60	220.5	345.5	566.0	570
65	238.9	405.5	644.4	645
70	257.3	470.3	727.6	730
75	275.6	539.9	815.5	820
80	294.0	614.3	908.3	910
85	313.5	693.5	1007.0	1010

Table 3-2. Stopping Sight Distance on Grades

U.S. Customary						
Design Speed (mph)	Stopping Sight Distance (ft)					
	Downgrades			Upgrades		
	3%	6%	9%	3%	6%	9%
15	80	82	85	75	74	73
20	116	120	126	109	107	104
25	158	165	173	147	143	140
30	205	215	227	200	184	179
35	257	271	287	237	229	222
40	315	333	354	289	278	269
45	378	400	427	344	331	320
50	446	474	507	405	388	375
55	520	553	593	469	450	433
60	598	638	686	538	515	495
65	682	728	785	612	584	561
70	771	825	891	690	658	631
75	866	927	1003	772	736	704
80	965	1035	1121	859	817	782
85	1070	1149	1246	949	902	862

## **Conclusions and Recommendations**

Based on the findings of the traffic memorandum documented in this summary report, the proposed development can be developed while maintaining acceptable levels of operation and safety on the surrounding transportation system and site access based on applicable Columbia County Zoning Ordinance.

In order to clearly define the right-of-way, the applicant must install a standard Stop Sign at the exit driveway before entering Highway 47 and remove and maintain any vegetation that might block the line of site in either direction now or in the future.

**BAUMGARTNER Douglas G**

to KNECHT, FEAR, me, vlad 

Good morning Ben,

ODOT's position on the camp development proposal remains the same as in April of last year. A new approach permit and TIA **will not** be required. If any work is proposed or required by the County in the ODOT right of way then you will need a MISC permit through the ODOT District 1 Maintenance Office. Please feel free to contact me if you have any questions.

Have a great weekend!

Doug

Douglas Baumgartner, P.E.

Region 2 Development Review Coordinator

Oregon Department of Transportation

455 Airport Rd SE, Bldg. B| Salem, OR 97301

Cell: 503.798.5793



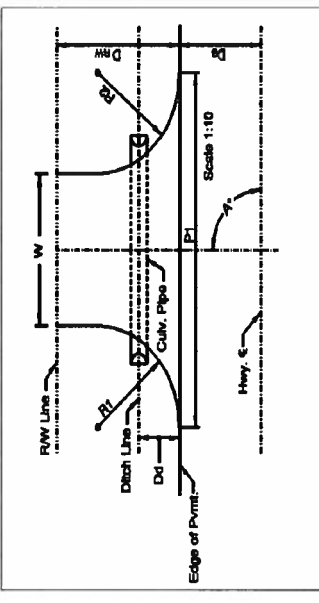
**Applicant Information**

Name:	Sa ndra and Glen Crinklaw		
Company:			
Address:	290 NE Donelson Street Hillsboro OR 97124		
Phone:	( ) - ( ) -	FAX:	( ) - ( ) -
eMail:			

**Property Information**

Address:	290 NE Donelson Street Hillsboro OR 97124		
County:	Columbia	Township:	6N
Range:	4W	Section:	34
Highway:	Nehalem	Route:	ORE47
MilePoint:	51.65	Engineering Station:	10+215
Side of Hwy:	L	Nat'l Forest?	N
Landmarks:	30 meters East of Guss Creek		

**Plan View**



**Effective Period**

A permit to operate, maintain and use an approach shall be in effect for an indefinite period of time unless:

- (a) revoked by mutual consent, or cancelled by the Regional Manager for failure of the applicant to abide by the terms and conditions;
- (b) there is a change in the use of the approach, as set forth in OAR 734-051-0110;
- (c) there is a current of potential safety or operational problem at the approach involving the volume of traffic using the approach, a change in the character of the traffic using the approach, or a change in the highway facility such that the approach can no longer be operated without due conflict with other traffic, as set forth in OAR 734-051-0380;
- (d) the highway facility is significantly improved to meet classification of the highway and the highway segment designation objectives, highway mobility standards, spacing standards and safety criteria that are inconsistent with the approach or
- (e) by other operation of law.

Failure of the applicant to comply with any of the terms and conditions of the permit shall be sufficient cause for cancellation of the permit and may result in removal of the facility by the Oregon Department of Transportation.

The Permit is issued subject to the provisions of Oregon Administrative Rules 734-051-0010 through 734-051-0480, which are by reference made a part of this permit; and which are in effect at any particular time in the duration of the permit.

**Specification**

Width (W):	6.10m	Angle (A):	90
Radius 1 (R1):	6.10m	Radius 2 (R2):	6.10m
Paving Limit (P1):	18.30m	Paving Limit (P2):	6.10m
Surf (Ds):	3.66m	Ditch (Db):	1.22m
Culvert:	Concrete	Diam.:	305mm
Sub Base Crse:		Len.:	10.67m
Base Crse:		Thickness:	
Level Crse:		Thickness:	
Wear Crse:		Thickness:	

**Maintenance of Approach**

Prior to performing any maintenance work on the approach, which will interfere with or interrupt traffic upon or along the highway, the applicant shall obtain approval and necessary permits from the District Office. In all cases where traffic signals have been required, all signal maintenance will be performed by the Oregon Department of Transportation.

**Property Owner Information**

Name:	Sa ndra and Glen Crinklaw		
Company:			
Address:	290 NE Donelson Street Hillsboro OR 97124 USA		
Phone:	( ) - ( ) -	FAX:	( ) - ( ) -
eMail:			

**Tax Lot Information**

Name: \_\_\_\_\_  
600

**This permit is not valid until signed by a duly authorized representative of the Oregon Department of Transportation.**

Applicant Signature	Date
<i>[Signature]</i>	7-7-02
Authorized DOT Signature	Date
<i>[Signature]</i>	02-19-2002



# PERMIT NO: 50540

## PERMIT FOR ENCROACHMENT, CONSTRUCTION ON OR USE OF STATE HIGHWAY

Application Id: 1219 Highway Number: 102 MilePoint 51.65 PROVISIONS

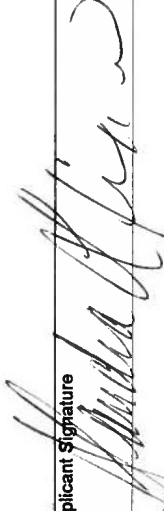
**Applicant: Sa ndra and Glen Crinklaw**

**Company:**

- 140.301 Construction Plans are approved in general only. The District Manager or representative may require field changes. When revisions are made in the field, as-constructed drawings must be submitted to the District.
- 150.101 The permit and all specifications, details, typical drawings and standard drawings attached to the permit shall take precedence over all plans, drawings and specifications produced by the Architect or Engineer representing the Applicant or Contractor.
- 150.201 Within 48 hours before beginning permit work and again after completing permit work, the Applicant (or agent) shall notify the District permitting representative.
- 150.401 Applicant (or agent) shall furnish "as constructed" drawings, to this office, within 45 calendar days of the completion of the permitted activity. The drawing media shall be 11" X 17" and reproducible or Microstation® compatible.
- 150.402 Applicant shall hire a certified testing inspector to monitor construction and assure compliance with the specifications and provisions contained in this permit
- 150.411 Applicant (or agent) shall have on the job site, at all times, a copy of the permit and all attachments. The permit shall be readily available for inspection.
- 150.501 The permitted work is located within the Oregon Utility Notification Center (OUNC) area. The OUNC is a utilities notification system to notify owners of utilities about excavation work performed in the vicinity of their facilities. The utilities notification system telephone number is 1-800-332-2344.
- 150.703 Remove all dirt and debris from the highway at the end of each work shift or more frequently if a hazard to the traveling public exists or as directed by the District Manager.
- 170.001 The Applicant shall file a biological assessment with ODOT, Environmental Service Section, when ODOT has documented the probable existence of a threatened or endangered animal species, as defined by 36 CFR part 800, of the National Historic Preservation Act or where the Applicant or ODOT has knowledge of the existence of a threatened or endangered animal species which the proposed permit or construction will likely destroy actual habitat or impose unacceptable impacts.
- 170.302 The Applicant shall request an archeology review, by ODOT Environmental Section and conduct Phase 2 testing, as defined by 36 CFR part 800, of the National Historic Preservation Act, whenever the permitted activity involves ground disturbance or more than 200 cubic feet or excavation deeper than one foot, when ODOT has documented the probable existence of a in archeological or culturally sensitive area or when either ODOT or the Applicant has knowledge of the existence of archeological or cultural site.
- 180.501 Complete all work to be done under this permit before the elapse of \_\_\_\_\_ calendar days or not later than \_\_\_\_\_ (See Custom Provisions for exact number of calendar days and date).
- 200.021 The work area during construction or maintenance performed under the permit provisions shall be protected in accordance with the current Manual on Uniform Traffic Control Devices for Streets and Highways, US Department of Transportation, and the Oregon Department of Transportation supplements thereto. Flaggers must have certification and must carry proof indicating their completion of an approved workzone traffic control course. All traffic control devices shall be maintained according to the ATTSSA Quality Standards for Work Zone Traffic Control Devices handbook.
- 225.051 Submit the following in writing five days before the permitted activity.  
 - Proposed Traffic Control Plan (TCP) showing all Traffic Control Measures (TCM). Include the proposed order and duration of all TCM. Do not start work on any stage of construction until all TCM are in place and the TCP is operating satisfactorily.

Applicant Signature

Date

  
 2-07-02



## PERMIT NO: 50540

### PERMIT FOR ENCROACHMENT, CONSTRUCTION ON OR USE OF STATE HIGHWAY

#### PROVISIONS

Application Id: 1219 Highway Number: 102 MilePoint 51.65

**Applicant: Sa ndra and Glen Crinklaw**

**Company:**

- 280.101 All grass and small brush, within the work area, shall be rotary or flail mowed to ground level prior to any excavation. ORS 570.570 Necessitates the duty to thoroughly clean machinery before moving said machinery over any public road or from one farm to another. All hay, straw or other crop residue infested with noxious weeds described in ORS 570.515 to 570.600 having partially or fully formed seeds shall not be moved from the land on which grown.
- 320.401 During construction, any ground that is disturbed shall have any plants designated as noxious weeds removed or sprayed using the "best practices" as set out by the Oregon Department of Agriculture.
- 330.001 All rock shall be produced from an ODOT Certified material source.
- 330.411 Native material found to be unsatisfactory for compaction shall be disposed off of the project and Department controlled property. The site shall be shaped to drain, contoured, trimmed and seeded with native grasses in a manner satisfactory to the District Manager.
- 330.421 Only earth or rock shall be used as fill material. The site shall be shaped to maintain existing drainage, contoured, trimmed and seeded with native grasses in a manner satisfactory to the District Manager.
- 390.001 Slope stabilization in areas of erosion shall be inlaid with an approved rip rap material.
- 445.002 Culvert pipe shall be reinforced concrete. Culvert must be installed according to ODOT§ 002410.000.
- 445.411 Replacement Paving - Comply with the provisions of §00445.41(a-2) of the Standard Specifications for Highway Construction 1996.
- (2) Replacement Surfacing:
- a. Aggregate Base - After pipe has been installed and the trench backfilled to proper elevation according to Section 00405, for pipes 1800 mm and less in diameter and Section 00510 for pipes over 1800 mm in diameter, place and compact aggregate base or foundation material to a thickness of 450 mm or the thickness of the removed aggregate base, whichever is greater.

Applicant Signature 	Date 2-7-02
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## PERMIT NO: 50540

### PERMIT FOR ENCROACHMENT, CONSTRUCTION ON OR USE OF STATE HIGHWAY

#### PROVISIONS

Application Id: 1219 Highway Number: 102 MilePoint 51.65

Applicant: Sa ndra and Glen Crinklaw

Company:

445.412 Any area of cut or damaged concrete shall be restored in accordance Drawing RD300 and "Typical Section-Pipe Section Under Sidewalk" See \$00445.410.

#### 00445.41 Installation in Paved Areas:

- (a) General - Install pipes, within paved areas that are to be preserved, by open excavation, tunneling, jacking, or boring methods as allowed by ODOT Permit. Regardless of the method used, do not disturb the adjoining pavement more than necessary.
- (b) Open Excavation Method - Where open excavation method is used, cut, remove, and restore the pavement as follows:
- (1) Pavement Cuts - Saw cut the pavement along each edge of the area to be removed when no pavement overlay will occur or when the surface is carrying traffic. All other pavements may be saw or wheel cut. Limit the area being cut, to the least width and extent practical for installation. Cuts shall be clean, vertical and made true to lines designated within a tolerance of 25 mm. Depths of the cuts shall be sufficient to permit the removal of pavement between or alongside them without damage to pavement or structures to be left in place. Remove and dispose of pavement lying within the limits of the cuts and from any adjoining areas damaged by the cutting and removal operations according to Section 00310.
- (2) Replacement Surfacing:
- a. Aggregate Base - After pipe has been installed and the trench backfilled to proper elevation, according to Section 00405, for pipes 1800 mm and less in diameter and Section 00510 for pipes over 1800 mm in diameter, place and compact aggregate base or foundation material to a thickness of 450 mm or the thickness of the removed aggregate base, whichever is greater.
- b. Pavement - Unless otherwise approved, the kind of replacement pavement to be constructed shall correspond with the same kind removed from the area. Replace highway shoulders, driveways, curbs, gutters, walks, dikes, walls and other similar asphalt or portland cement concrete structures with construction at least equal in all respects to that of the structures or parts of structures removed, similar and matching that of adjoining, undisturbed structures. Perform replacement work as follows:
- Trim all loose fragments from abutting edges of old pavement.
  - Apply asphalt tack coat to edges of existing asphalt concrete.
  - Thoroughly moisten edges of old portland cement concrete with water.
  - Place, shape, compact, and finish the asphalt or portland cement concrete to established grade and cross section according to Sections 00745 (Light Duty) and 00440, as appropriate.
  - Respective thickness' of new pavement shall equal removed pavement thickness or the following, whichever is greater:

Material	Minimum Compacted Thickness, mm	
	Traveled-Way Area	Other Areas
Asphalt Concrete	130	100
Portland Cement Concrete	200	200

445.413 It is the responsibility of the applicant to ensure that an acceptable pavement design is established that matches up with the existing state pavement and subgrade to accommodate future anticipated traffic vehicle loads

Applicant Signature

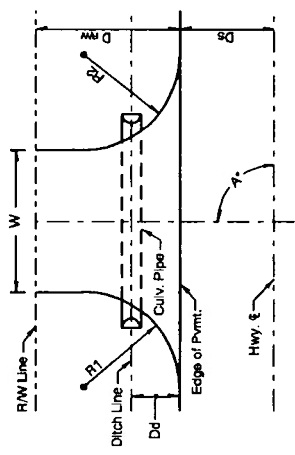
Date

*Sandra Crinklaw*

7-7-02



## Type A - Ditch Section Approach Road



See Page One for Approach Road Dimensions.  
 Pipe ends sloped at 1: \_\_\_\_\_  
 Note: Slope ends of culverts within the clear zone as follows:  
 Posted speeds < 45 mph - 1:4  
 Posted speeds > 45 mph - 1:6  
 Safety End Section sloped at 1: \_\_\_\_\_  
 Note: Culvert pipes that are parallel to the road, and in the clear zone, with diameters >600 mm require Safety End Sections with safety bars.

### Plan Drawing and Dimensions

### Standard Drawing References

- Refer to the following Standard Drawings for all "Type A" Permits:
- Standard Drawing:  
RD300: Pipe Backfill/Compaction.
  - When Metal Pipes are used, refer to Standard Drawing:  
RD309: Sloped Ends for Metal Pipe  
RD318: Safety End Section for Metal Pipe  
RD354: Coupling Bands
  - When Concrete Pipes are used, refer to Standard Drawing:  
RD312: Sloped Ends for Concrete Pipe.  
RD321: Safety End Section for Concrete Pipe.
  - For profile, slope, surfacing, refer to Standard Drawing:  
RD715: Approaches and Non-Sidewalk Driveways.

Notes:  
 Concrete Culvert Pipe - Use Class V reinforced concrete pipe.  
 Metal Culvert Pipe - Use 2.01 mm thkn. aluminized steel pipe.  
 Submit Alternate Pipe Materials for review and approval, to District Manager or designated representative.

- Dc = This is an old dimension replaced by Ds
- Ds = Distance from Roadway Centerline to Edge of Pavement at approach
- Dd = Distance from EP to Ditch
- Dr/W = Distance from Edge of Pavement to Right-of-Way line
- Dd = Distance from Edge of Pavement to Centerline of driveway pipe
- Dp = This is an old dimension replace by Ds
- K = Distance from back of curb to back of driveway
- W = Width
- P1 = Paving Limit 1
- P2 = Paving Limit 2
- R1 = Radius 1
- R2 = Radius 2
- A = Angle of approach
- CL = Centerline

REGION	PROJECT NUMBER	SHEET NO.
10		