

## Exhibit PP

October 18, 2021

**Michael C. Robinson**

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VIA E-MAIL TO [PLANNING@CLSANDY.OR.US](mailto:PLANNING@CLSANDY.OR.US);  
SUBMITTED ON MONDAY, OCTOBER 18, 2021 BEFORE 4:00 P.M.

Mr. Jerry Crosby, Chair  
Sandy Planning Commission  
Sandy City Hall  
39250 Pioneer Blvd.  
Sandy, OR 97055

RE: City of Sandy File No. 21-014 SUB/TREE; Applicant's Second Open Record  
Period Submittal

Dear Chair Crosby and Planning Commission Members:

This office represents Roll Tide Properties Corp., the Applicant. This letter and its exhibit constitutes the Applicant's second open record period submittal and is timely submitted on Monday, October 18, 2021 before 4:00 p.m.

### **A. Testimony Schedule.**

The Planning Commission opened the initial evidentiary hearing on September 27, 2021. The Planning Commission closed the public hearing and left the written record open until October 11, 2021 for any person to submit new evidence or argument. The Planning Commission allowed a second open record period until October 18, 2021 at 4:00 PM for any person to rebut argument and evidence submitted during the first open record period. The Applicant's final written argument is due on October 25, 2021 at 4:00 p.m. This letter constitutes the Applicant's second open record period response.

### **B. Items Submitted During the First Open Record Period.**

Seven discrete documents were submitted into the record during the first open record period:

1. A letter dated October 11 from Michael Robinson on behalf of the Applicant, with eight exhibits (Exhibit NN).
2. A memorandum dated October 11 from Michael Robinson on behalf of the applicant, enclosing two excerpts from the Staff Report for the prior Bull Run application (Exhibit LL).
3. An email dated October 6 from Michael Robinson enclosing an email between Mr. Robinson and ODOT staff (Exhibit HH).

4. A letter dated October 6 from Michael Robinson granting an extension of the City's 120-day decision deadline to January 5, 2022 (Exhibit II).
5. A letter from Portland Metro Homebuilder's Association (Exhibit MM).
6. A memo dated October 6, 2021 from the City's transportation engineer, Replinger Associates (Exhibit JJ, the "Replinger Memo") commenting on updated traffic analysis provided by Mark Ard, the Applicant's transportation engineer.
7. An email dated October 7, 2021 between planning director Kelly O'Neil and Oregon Department of Land Conservation and Development Staff (Exhibit KK, the "DLCD Email") regarding applicability of Oregon Fire Code access requirements to duplexes allowed under HB 2001.

This letter responds to the last two submittals, the DLCD Email and the Replinger Memo.

**C. Response to Exhibit KK, the DLCD Email.**

The Oregon Fire Code requires two separate fire access roads into a "development" that includes more than 30 dwelling units. The Application includes two fire access routes: Dubarko Road and Fawn Street, and a third fire access will be created if and when "Street B" is extended to the south.

Exhibit KK is an email between the Planning Director and DLCD staff in which the Planning Director speculates about the impact of Oregon Fire Code accessibility requirements if the proposed lots were developed with duplexes. As explained in the application, the proposed subdivision is anticipated to provide 30 single-family dwelling units. While these lots could allow duplexes under HB 2001 (commonly known as the "Middle Housing Bill"), duplexes are not currently proposed on the lots. Therefore, whether the proposed fire access system is amendable to duplexes is not before the Commission. Regardless, as explained above, the Application includes two fire access points. Moreover, DLCD staff indicates that whether some of the lots could be developed with duplexes is not a basis upon which the City should deny the Application.

**D. Response to Exhibit JJ, the Replinger Memo.**

As noted above, John Replinger's October 6 memorandum responds to additional transportation analysis submitted by Mike Ard on September 27, 2021. Mr. Ard's September 27 memorandum addressed the Project's potential traffic impacts on the intersection of Highway 211 and Dubarko Road, provides additional information about traffic safety, and examines the impact of the project on existing and proposed local streets.

Mr. Replinger's response generally concurred with Mr. Ard's conclusions, including the following points:

- The Applicant’s traffic counts for the AM and PM peak hours are based on the correct methodology and appear reasonable.
- The Applicant’s trip generation estimate appears reasonable.
- The Applicant’s trip distribution analysis “seems reasonable” on a “city-wide scale.”
- The Applicant’s background traffic-growth assumptions are reasonable.
- The Applicant’s analysis of local street impacts is correct.
- Mr. Replinger concurs with the Applicant’s proposal to provide a four-way stop control at the Highway 211 and Dubarko Road intersection to address potential safety issues there.
- Mr. Replinger found that “sight distance is unlikely to be a problem and can be dealt with during design of the streets.”

The only disagreement that Mr. Replinger appears to have with Mr. Ard relates to the proposed mitigation for the Highway 211 and Dubarko Road intersection. Mr. Replinger concedes that the Applicant’s “proposed mitigation (conversion to all-way stop control) has some benefits or potential benefits,” but goes on to speculate that the proposed four-way stop at the Highway 211 and Dubarko Road intersection could increase delays in the northbound and southbound direction. However, Mr. Replinger does not appear to disagree that the four-way stop would increase safety at that intersection and would address level of service concerns in the eastbound and westbound direction. Ultimately, Mr. Replinger concludes that “I leave it to others to assess those opinions.”

Mr. Replinger’s discussion of the lack of a Dubarko Road extension is a transportation planning issue not directly related to the transportation impacts of the Application. Stated simply, the Applicant is not required, as a matter of law or transportation engineering, to analyze street extensions and other development that is not proposed.

In **Exhibit 1**, Mr. Ard provides a comprehensive response to the transportation engineering aspects of Mr. Replinger’s analysis. As explained therein, the only contested transportation engineering issue—the level of service at the Highway 211 and Dubarko Road intersection—is adequately addressed by the Applicant’s transportation impact study. This is because the City’s adopted method of transportation analysis relies on the “most recent edition of the Transportation Research Board’s Highway Capacity Manual”; as explained in Exhibit 1, following conversion to all-way stop control, intersection performance is improved when measured in accordance with the procedures described in the Highway Capacity Manual.

Regardless, even if the mitigation did not satisfy the City’s level of service standard, under ORS 197.195(1) it could not be a basis for denial because that standard has not been incorporated into the City’s land use regulations.

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**E. Conclusion.**

For the reasons stated in the Application, the hearing, and post-hearing testimony, the Applicant respectfully requests that the Planning Commission approve the Application.

Very truly yours,



Michael C. Robinson

MCR/jmhi  
Enclosures

cc: Mr. Dave Vandehey (*via email*) (*with enclosures*)  
Mr. Carey Sheldon (*via email*) (*with enclosures*)  
Mr. Alex Reverman (*via email*) (*with enclosures*)  
Mr. Ray Moore (*via email*) (*with enclosures*)  
Mr. Tyler Henderson (*via email*) (*with enclosures*)  
Mr. Tracy Brown (*via email*) (*with enclosures*)  
Mr. Mike Ard (*via email*) (*w/enclosures*)  
Ms. Erin Forbes (*via email*) (*w/enclosures*)  
Mr. Garrett H. Stephenson (*via email*) (*with enclosures*)  
Mr. David Doughman (*via email*) (*w/enclosures*)  
Mr. Kelly O'Neill, Jr. (*via email*) (*with enclosures*)

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## Technical Memorandum

EXPIRES 12/31/2021

**To:** Dave Vandehey, Roll Tide Properties Corporation

**From:** Michael Ard, PE

**Date:** October 15, 2021

**Re:** Deer Meadows Subdivision – Review Comment Responses

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Following submittal of the updated traffic impact study prepared for the Deer Meadows Subdivision dated September 27, 2021 we have received review comments from the city's transportation engineer, John Replinger, PE. This memorandum is written in response to his review comments dated October 6, 2021.

In his review, Mr. Replinger agrees with nearly all of the assumptions, methodologies and analysis provide in the traffic impact study. However, he maintains a few concerns which are further addressed herein.

- Concerns regarding the elimination of the Dubarko Road extension to intersect Highway 26 and the proposed new north/south collector roadway

Mr. Replinger expressed concern that the applicant does not propose extending Dubarko Road to connect with Highway 26 opposite SE Vista Loop Drive (West), and instead proposes that Dubarko Road will terminate at a new north/south collector roadway.

The TSP has not been properly incorporated into the city's development code. Accordingly, the proposed development cannot lawfully be evaluated based on whether Dubarko Road is extended to intersect Highway 26. However, a north/south collector is actually a feature described in the city's TSP. Providing a north/south collector roadway establishes a logical and useful connection which facilitates future development to the south of the subject property and could even ultimately facilitate an alternative connection to Highway 26 south of the Dubarko Road alignment.

- Concerns regarding future development within the C3 zone

Mr. Replinger expressed concerns that future traffic volumes associated with potential development within the C3 zone were not assessed in the traffic impact study.

No development is proposed on the commercially zoned property. This results in several unknowns which make a near-term analysis impossible. First, we cannot assess the expected volume of traffic that would be generated by development within the C3 zone without knowing the nature and intensity of the land use. Second, we cannot be confident that the trip distribution assumptions made for the residential uses in the current development plan would equally apply to unknown future commercial uses within the C3 zone. Third, we cannot know when future development might occur within the C3 zone.



This third element, project timing, is critical to evaluation of a proposed development. When preparing a traffic impact study, the year of project completion is used to project background traffic levels (absent the development) and make comparisons to traffic volumes with the addition of site trips from the development. This comparison is what allows a determination of whether the transportation system will meet established mobility standards and is the framework within which appropriate mitigation can be determined. Since nothing is currently proposed within the C3 zone, we cannot reasonably expect that this portion of the property will develop in the near future and cannot even be sure that it will develop even within the long-range planning horizon.

In this instance, the property already has appropriate zoning and no changes to the zoning are proposed. Accordingly, a long-range planning horizon analysis is not required for the proposed development. The provisions of Oregon's Transportation Planning Rule do not apply to the outright permitted use currently being proposed. The analysis provided properly accounts for the development currently being proposed, and any future development application will require its own analysis based on the actual characteristics and timing of the future development.

- Concerns that the distribution of site trips assumed in the TSP may be impacted by the elimination of the Dubarko Road extension

Mr. Replinger expressed concerns that travel patterns in the site vicinity may be impacted by deletion of the Dubarko Road extension as measured at the planning horizon.

Since no Dubarko Road connection exists currently, near term impacts on traffic distribution patterns will be minimally impacted by the proposed development. Since the proposed development is in conformance with the underlying zoning and no zone change is proposed for the property, our obligation is to analyze conditions at the time of project completion with and without the addition of site trips from the proposed development. That analysis was provided in the Traffic Impact Study prepared for the project, and appropriate safety and operational mitigations were recommended. Trip distribution patterns will remain similar to existing conditions upon completion of the proposed development.

Any analysis beyond the year of the current project completion will need to be conducted in conjunction with future development applications and/or the city's ongoing update to its Transportation System Plan. However, such an analysis cannot be required in conjunction with a permitted use, particularly one that provides needed housing.

- Concerns regarding the adequacy of the proposed mitigation at Highway 211 and Dubarko Road





Mr. Replinger indicated that “It is somewhat misleading to describe the intersection [of Highway 211 at Dubarko Road] as operating ‘better than under background conditions.’”

The city’s development code contains no operational standards directly applicable to intersections in the City of Sandy. Instead, the code merely states, “*The study must demonstrate that the transportation impacts from the proposed development will comply with the City’s level-of-service and average daily traffic standards and the Oregon Department of Transportation’s mobility standard*” (Sec. 17.84.50.B.4). Although not stated explicitly in this code section, the city’s operational standards are found in the Transportation System Plan, which has not been properly incorporated into the development code. Accordingly, these standards cannot lawfully be applied.

However, it should be noted that even if the city’s standards had applied to this application, the assertion that intersection operation is improved remains accurate as defined by the City of Sandy. The city’s Transportation System Plan provides:

*Mobility standards are established to delineate the maximum level of congestion that will be accepted on a given facility or within a specified area. The road authority – City, State or County – sets and applies specific standards for their facilities.*

*The City of Sandy mobility standard requires a minimum level of service (LOS) D for signalized, as well as unsignalized intersections. Level of service shall be based on the most recent edition of the Transportation Research Board’s Highway Capacity Manual.*

From this text, two things are made clear.

First, the text provides that the applicable road authority sets and applies the specific standards for their facilities. Accordingly, the analyzed state highway intersections would be subject to the mobility standards established in the Oregon Highway Plan based on intersection volume-to-capacity ratios, while the intersections operating under City of Sandy jurisdiction would be subject to the city’s level-of-service based mobility standards.

Second, the text describes that signalized and unsignalized intersections operating under the jurisdiction of the City of Sandy should operate at level of service “D” or better based on the methodology described in the Highway Capacity Manual (HCM).

In the Traffic Impact Study dated November 27, 2021 the intersection of Highway 211 at Dubarko Road is described as operating at level of service F under year 2023 background conditions and level of service E under year 2023 background plus site trips conditions following conversion of the intersection to all-way



stop control. These results were reported based on evaluation of the worst approach movement in order to provide an “apples to apples” comparison between the two scenarios in which both background traffic conditions and future background plus site trips mitigated conditions are compared using the same metric.

However, most jurisdictions evaluate the level of service for all-way stop control based on the average intersection delay (similar to a signalized intersection), rather than the average delay for the worst approach movement. This is because all-way stop control intersections alternate between serving the different approach movements and no individual movement is subject to indefinite delays where the driver needs to constantly remain vigilant in looking for a safe gap in the traffic flow. Using the Synchro analysis output worksheet previously provided in the November 27<sup>th</sup> traffic impact study, the average intersection delay during the morning peak hour with conversion to all-way stop control is 17.4 seconds (level of service C), and the average intersection delay during the evening peak hour is 27.2 seconds (level of service D). Accordingly, if future intersection operation is evaluated based on average intersection delay it is projected to meet the city’s level of service standard.

Regardless of which option is used to assess intersection operation, the level of service is improved following implementation of our proposed mitigation. Since intersection level of service is the city’s explicitly defined metric for evaluating compliance with the mobility standard, intersection operation is improved per the city’s own definition.

If the City wishes to pursue alternative improvements to the intersection of Highway 211 at Dubarko Road, it may be possible to achieve operation at level of service “D” for all approach movements under year 2023 background plus site trips conditions. One potential mitigation that could achieve this goal would be the installation of all-way stop control along with construction of a new northbound right-turn lane from Highway 211 onto Dubarko Road. With both improvements in place, the worst intersection approach would operate at level of service “D” or better during the peak hours. Detailed analysis worksheets showing the results of this potential mitigation are provided in the attached technical appendix.



## Appendix

HCM 6th AWSC  
3: Highway 211 & Dubarko Road

10/15/2021

Intersection	
Intersection Delay, s/veh	16.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗		↖	↗		↖	↗
Traffic Vol, veh/h	7	11	48	44	53	86	27	297	13	17	197	2
Future Vol, veh/h	7	11	48	44	53	86	27	297	13	17	197	2
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	5	5	5	4	4	4	5	5	5	4	4	4
Mvmt Flow	9	14	62	56	68	110	35	381	17	22	253	3
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	10.1	11.3	21.2	14.5
HCM LOS	B	B	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	8%	0%	39%	0%	45%	0%	8%	0%
Vol Thru, %	92%	0%	61%	0%	55%	0%	92%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	324	13	18	48	97	86	214	2
LT Vol	27	0	7	0	44	0	17	0
Through Vol	297	0	11	0	53	0	197	0
RT Vol	0	13	0	48	0	86	0	2
Lane Flow Rate	415	17	23	62	124	110	274	3
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.698	0.025	0.047	0.11	0.243	0.187	0.476	0.004
Departure Headway (Hd)	6.047	5.297	7.36	6.445	7.034	6.09	6.241	5.491
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	598	673	484	552	509	587	576	648
Service Time	3.801	3.05	5.147	4.231	4.805	3.86	4.003	3.252
HCM Lane V/C Ratio	0.694	0.025	0.048	0.112	0.244	0.187	0.476	0.005
HCM Control Delay	21.7	8.2	10.5	10	12.1	10.3	14.6	8.3
HCM Lane LOS	C	A	B	A	B	B	B	A
HCM 95th-tile Q	5.6	0.1	0.1	0.4	0.9	0.7	2.6	0

HCM 6th AWSC  
3: Highway 211 & Dubarko Road

10/15/2021

Intersection	
Intersection Delay, s/veh	21.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗		↖	↗		↖	↗
Traffic Vol, veh/h	7	48	60	40	40	51	72	345	71	54	376	20
Future Vol, veh/h	7	48	60	40	40	51	72	345	71	54	376	20
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	3	3	3	3	3	3	2	2	2	2	2	2
Mvmt Flow	7	49	62	41	41	53	74	356	73	56	388	21
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	11	11.5	22.1	25.4
HCM LOS	B	B	C	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	17%	0%	13%	0%	50%	0%	13%	0%
Vol Thru, %	83%	0%	87%	0%	50%	0%	87%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	417	71	55	60	80	51	430	20
LT Vol	72	0	7	0	40	0	54	0
Through Vol	345	0	48	0	40	0	376	0
RT Vol	0	71	0	60	0	51	0	20
Lane Flow Rate	430	73	57	62	82	53	443	21
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.736	0.109	0.121	0.119	0.179	0.1	0.761	0.031
Departure Headway (Hd)	6.164	5.366	7.699	6.913	7.827	6.855	6.181	5.407
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	585	662	468	521	461	526	581	656
Service Time	3.948	3.149	5.403	4.618	5.531	4.555	3.965	3.191
HCM Lane V/C Ratio	0.735	0.11	0.122	0.119	0.178	0.101	0.762	0.032
HCM Control Delay	24.4	8.8	11.5	10.6	12.2	10.3	26.2	8.4
HCM Lane LOS	C	A	B	B	B	B	D	A
HCM 95th-tile Q	6.3	0.4	0.4	0.4	0.6	0.3	6.8	0.1