TRANSPORTATION COMMISSION

Michael Kyte
Chair

~Agenda~

Bill Belknap
Staff Liaison

https://www.ci.moscow.id.us/556/Transportation-Commission

March 12, 2020	**4:00 PM**	**Council Chambers** **206 E. 3rd St.**

WELCOME AND ATTENDANCE

REGULAR AGENDA

1. **Approval of Transportation Commission Minutes from February 13, 2020 (Action Item)**
   PROPOSED ACTION: Approve minutes as presented; approve minutes with amendments; or provide staff further direction.

2. **Public Comment**

3. **Commission Communications**

4. **Review of the Transportation Commission's Role, Responsibilities and Membership (Action Item) – Michael Kyte**
   Chairman Kyte will provide a summary of the Transportation Commission's role, responsibilities, and membership as outlined within Moscow City Code for the Commissions review and discussion.

   PROPOSED ACTION: Receive report and provide recommendations as deemed appropriate.

5. **Stop Sign Warrant Analysis for Hayes and Third and Blaine and Third Intersections (Action Item) – Bill Belknap**
   During the project planning process related to installation of a vehicular bridge on Third Street, installation of four-way stop controls at the intersections of Third and Blaine and Third and Hayes Street were proposed as part of the Third Street traffic calming measures in anticipation of increased vehicular traffic on East Third Street. In response to recent discussions regarding whether to install the four-way stop controls even without the vehicular bridge installation, Engineering Staff conducted a warrant analysis study in the fall of 2019 to determine if existing traffic conditions warranted installation of four-way stop controls at the intersections of Third and Blaine and Third and Hayes Streets. Staff will provide a report on the warrant analysis for the Commission's review.

   PROPOSED ACTION: Receive report and provide recommendations as deemed appropriate.

6. **Streets Standard Review (Action Item) – Bill Belknap**
   During the most recent update to the City Standard Construction Drawings containing the adopted street standards for the construction and development of new public and private streets within the City, the use of a 28-foot residential street standard was limited to use in cul-de-sacs and one- to

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two-block unextendible streets. The Planning and Zoning Commission is currently working on the development of new subdivision standards which include clustered and traditional development options to provide greater flexibility, allowing compact and innovative developments that would likely benefit from the 28-foot street standard. Narrower streets reduce current and future maintenance and replacement costs, provide traffic calming in residential areas, and facilitate the development of more cohesive neighborhoods. Staff would like to discuss the current limitation and potential modifications to the Standard Construction Drawings.

PROPOSED ACTION: Receive report and consider providing a recommendation at a future meeting.

7. **Smart Transit Proposed New Third Route – Dan Gray/Ben Aiman**
   Smart Transit is currently seeking funding to establish a third fixed route in Moscow to expand service within the community. Smart Transit Executive Director Dan Gray and his newly appointed successor Ben Aiman will provide a report to the Commission.

   PROPOSED ACTION: Receive report.

REPORTS

- **Sustainability Commission Report – Mary Dupree**
- **Moscow Pathways Commission Bike to Work Event – Margaret Dibble**

CONTINUING EDUCATION

UPCOMING EVENTS/MEETINGS

1. **The next scheduled meeting is April 9, 2020. Commission Members must submit agenda items directly to the chair by Wednesday, April 1, 2020.**

ADJOURN

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TRANSPORTATION COMMISSION

Michael Kyte
Commission Chair

trans@ci.moscow.id.us

Bill Belknap
Staff Liaison

208.883.7011

~Meeting Minutes~
February 13, 2020

https://www.ci.moscow.id.us/556/Transportation-Commission

The meeting was called to order at 4:00 pm.

MEMBERS PRESENT: Michael Kyte, Chair; Ben Calabretta, Phil Cook, Joel Hamilton, Brian Johnson, Mike McGahan,

MEMBERS ABSENT: Mary DuPree, Don Meyer, Bob Sanders

ALSO IN ATTENDANCE: Bill Belknap, Brandy Sullivan, Anne Peterson

REGULAR AGENDA

1. Approval of Transportation Commission Minutes from January 9, 2020 (Action Item)
Johnson moved approval of the minutes as amended, seconded by Cook. Motion carried by acclamation.

2. Public Comment
None.

3. Commission Communications
- Kyte announced on DuPree's behalf that the Sustainable Environment Commission will hold a public forum in April to gather input on the Commission's goals regarding a City climate risk assessment.
- Cook asked about the comment period open until March 5th regarding a third route for SMART Transit. Kyte will reach out to ITD to learn more.
- Belknap said LHTAC has informed the City they are seeing large (~30%) cost escalations which could potentially impact and/or delay projects currently underway. Belknap will research further to determine which City projects might be affected.
- Hamilton reported that Planning & Zoning is anticipating a detailed review of 5G wireless technology. P&Z will focus on the land use aspects and the SEC will look into health concerns.
- Johnson said he heard rumors that the Gotcha! bikes might be delayed again due to shipment issues out of China. Sullivan said this may increase the urgency regarding a scooter ordinance.

4. Review of the Transportation Commission's Role, Responsibilities and Membership (Action Item) – Michael Kyte
Chairman Kyte provided a summary of the Transportation Commission's role, responsibilities, and membership as outlined within Moscow City Code for the Commissions review and discussion. He was particularly intrigued by the number of ex-officio members and was interested in Commissioners' opinion on whether the membership list should be modified. Belknap provided historical background beginning

with the Commission's formation in 1998 with five to nine volunteer citizens serving five-year terms and 15 ex-officio members. Current duties remain largely unchanged, membership has increased to nine appointed members, and ex-officio members representing high school and college students have been added. Cook said the high school and college positions have rarely been filled. Calabretta suggested the appointed membership should represent a more diverse citizenry and mobilities. Kyte thought SMART Transit ought to have an appointed voting member. Cook agreed and added that the Pathways Commission should also be represented. Belknap said it was an oddity that this Commission has such a long list of ex-officios when in practicality the Commission can call in those area experts at any time. He agreed it would be very helpful to have regular participation from SMART Transit, similar to what the Commission has now with ITD. Ultimately the Commissioners decided to attempt greater communication and agenda distribution to the ex-officio members for a year to see if that generates increased participation.

5. Report on Stop Sign Warrant Analysis for Hayes and Third and Blaine and Third Intersections (Action Item) – Scott Bontrager

During the project planning process related to the installation of the vehicular bridge on Third Street, installation of four-way stop control at the intersections of Third and Blaine and Third and Hayes were proposed as part of the Third Street traffic calming measures in anticipation of increased vehicular traffic on East Third Street. In response to recent discussions regarding whether to install the four-way stop controls even without the vehicular bridge installation, Engineering Staff conducted a warrant analysis study in the fall of 2019 to determine if the existing traffic conditions warranted installation of four-way stop controls at the intersections of Third and Blaine and Third and Hayes. Staff will provide a report on the warrant analysis for the Commission's review.

Belknap reminded the Commission of their work with the Engineering Department in 2011 to establish a policy for installation and removal of stop signs. Warrants were included in that policy as a required consideration during the installation decision-making process. He reported the warrant data for Third and Blaine Streets were as follows: Warrant 1 was not satisfied at any level; Warrant 2 was satisfied at one level; Warrant 3 was satisfied at one level; and, there has been only one recorded accident and no recorded vehicle/pedestrian accidents. Based on the above, the City Engineer does not recommend installation of an all-way stop. Calabretta said the report backs up his personal experience driving through that intersection on a regular basis. Belknap continued with warrant data for Third and Hayes Streets as follows: Warrant 1 was not satisfied at any level; Warrant 2 was satisfied at one level with a delay study indicating a combined average delay of 7.6 seconds; Warrant 3 was satisfied at one level; and, there has been only one recorded accident and no recorded vehicle/pedestrian accidents although there are pedestrian bicycle traffic generators in the immediate area. Based on the above, the City Engineer does not recommend installation of an all-way stop. Staff will disseminate detailed copies of these warrants for consideration and further discussion at the next meeting.

6. Capital Improvement Plan Development Report – Bill Belknap

Staff will provide a report on the upcoming transportation system projects for FY2020 as well as the current effort to prepare a city-wide Capital Improvement Plan (CIP).

Belknap provided background leading to development of a new city-wide, long-range capital improvement plan that will be integrated into the City's planning and budgetary process. Cook was very excited to see priority ranking of projects which will provide the ability to save in advance and also take advantage of grant funds as they become available. Belknap said another important piece is forecasting the increased costs that occur between initial estimates and actual construction. Cook asked if there was any plan for public input to the prioritization process and Belknap said it can occur as part of the public budget process. Kyte also expressed concern about getting sufficient citizen input and thought the Commission should have an opportunity to validate the priorities set by staff. Belknap offered to email the project sheets to the Commission.

7. Letter of Support for Funding Third Street Separated Bike Lanes (Action Item) – Michael Kyte

Chairman Kyte has prepared a letter encouraging the City Council to appropriate funds within the City's upcoming FY2021 budget for the installation of the separated bike land facility on Third Street for the Commission's consideration and approval.

Upon review of the draft letter, Cook commented that he thought it was important to remind the Council of the Commission's desire to keep this project as a high priority. Commissioners chose to retain the FY21 timeline as shown in the draft letter. Johnson moved approval of the letter as written. Hamilton seconded the motion which carried by acclamation. Staff will prepare the letter for signature and disseminate to Council.

8. Downtown Parking Study Update – Bill Belknap

Belknap reported that Council has budgeted $45,000 to fund a study of the downtown public parking system, with the goals of assessing current parking, development of desirable parking system performance objectives, and identification, assessment and recommendations of potential parking management strategies. Staff are preparing the request for proposals which will be presented to Council on February 24th. Cook asked how anticipated downtown improvements might impact parking. Belknap said it's his preference to get the completed parking study data first so that can be incorporated into the downtown improvement planning.

CONTINUING EDUCATION

Kyte shared information about current federal transportation legislation.

UPCOMING EVENTS/MEETINGS

The next scheduled meeting is March 12, 2020. Commission members should submit agenda items directly to the chair by Wednesday, March 4, 2020.

ADJOURNED: 5:57 pm

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Michael Kyte, Chair

Overview
The Moscow Transportation Commission was established in 1998 by the City Council through Section 11 of Title 3 of the city code.

The Commission was given three charges that remain nearly unchanged after 20 years. (Title 3, Chapter 11, section 11-1)

- To provide advice and recommendations to the Mayor and City Council regarding intermodal transportation issues as directed with the goal of establishing a system of transportation and circulation within and around the City of Moscow that will make it possible for all people utilizing various modes of transportation to reach their destination safely and easily with minimum disturbance to adjacent uses.
- To recommend to the Mayor and the Council policies and programs with the objective of implementing transportation goals and objectives of the Moscow Comprehensive Plan.
- To advise the Mayor and City Council as to the long-range transportation needs of the City, to provide advice on integrating various transportation elements including, but not limited to, motorized vehicular traffic, bicycle traffic, pedestrian traffic, rail, air travel and public transportation

Commission Organization and Membership
Sections 11-2and 11-3 describe the organization of the Commission. The Commission consists of nine members and fourteen non-voting ex-officio members. There are several concerns with the current organization/membership list:

- The original purpose of the expansive list of ex-officio members (14) was to provide a regional perspective to transportation planning in the Moscow area. Unfortunately, this vision has never been realized. While the need for a regional perspective in transportation planning is still important, there is no process that currently exists to implement this vision. In addition, several of the organizations no longer exist and it is likely that for those that do still exist, their staffs are not aware that they are included as ex-officio members of the Transportation Commission.
- The inclusion of a high school and post-secondary student as members of the Commission has been problematic. In the past, it has been difficult to find students willing to serve, and with the often-transitory nature of a student's time in Moscow, past attendance has been inconsistent.
- The titles of the city staff liaisons have changed. Only one staff member (the Deputy City Supervisor for Community Planning and Design) now serves as liaison to the Commission.

Recommended Actions
The following actions are recommended to improve the clarity and relevance of the city code defining the Moscow Transportation Commission:

- Eliminate the following ex-officio members: Moscow Tree Committee chair, Moscow Chamber of Commerce president, Disability Action Center Executive Director, Moscow Chamber of Commerce president, Disability Action Center Executive Director, Moscow School District superintendent, University of Idaho president, Region 2, Public Transportation Advisory Council, Local Public Transportation Advisory Commission chair, Local Railroad Service Provider Representative, and the Moscow/Pullman Regional Airport manager.
- Maintain the District 2 Engineer of the Idaho Transportation Department (or designee) as an ex-officio member.
- Add: representative of the local transit provider as an ex-officio member.
- Continue the high school student and post-secondary student as ex-officio members.
- Add: representative of the University of Idaho as a voting member of the Commission.
- Eliminate the Public Works Director and the Community Development Director as ex-officio members; replace with: city staff liaison.

Summary of Membership and Ex-Officio Structure of City of Moscow Commissions		
Commission	**Number of Members**	**Other**
Board of Adjustment	7	
Planning and Zoning Commission	9	
Parks and Recreation Commission	9	• post-secondary student • high school student (non-voting)
Arts Commission	12	• city council member (non-voting) • post-secondary student • high school student (non-voting) • Latah county resident (non-voting)
Farmers Market Commission	9	• produce Market Vendor • crafts Market Vendor • specialty food Market Vendor • Moscow Chamber of Commerce representative • UI Extension representative • city council member (non-voting)
Fair and Affordable Housing Commission	9	• city officer or employee • city council member (non-voting) • Latah County resident • post-secondary student • high school student • Latah County resident
Airport Commission	7	• Pullman mayor • Moscow mayor • City of Pullman appointee • City of Moscow appointee • Port of Whitman County appointee • Latah County appointee • Commission appointee
Sustainable Environment Commission	9	• outside city residents (3 or less) • city council member (non-voting) • post-secondary student • high school student (non-voting) • Latah County resident (non-voting)
Historic Preservation Commission	9	• city council member (non-voting) • post-secondary student • high school student (non-voting) • Latah and Whitman counties residents

Summary of Membership and Ex-Officio Structure of City of Moscow Commissions		
Commission	**Number of Members**	**Other**

Transportation Commission	9	• post-secondary student
		• high school student (non-voting)
		• city council member (non-voting)
		• staff liaisons
		  ○ Public Works Director
		  ○ Community Development Director
		• ex-officio members
		  ○ Moscow Tree Committee chair
		  ○ Moscow Chamber of Commerce president
		  ○ Disability Action Center Executive Director
		  ○ ITD District 2 Engineer
		  ○ Latah County planner
		  ○ North Latah Highway District chair
		  ○ Moscow Planning and Zoning Commission chair
		  ○ Moscow School District superintendent
		  ○ University of Idaho president
		  ○ Region 2, Public Transportation Advisory Council
		  ○ Local Public Transportation Advisory Commission, chair
		  ○ Local Railroad Service Provider representative
		  ○ Moscow/Pullman Regional Airport manager
		  ○ high school student

Human Rights Commission	9-11	• post-secondary student • high school student (non-voting) • Latah County resident (non-voting)
Moscow Tree Commission	7	• staff representative: Community Forestry Administrator
Moscow Pathways Commission	7	• 6 Moscow residents • 1 Latah County resident • Staff liaison: Parks and Recreation director • City council member (non-voting)

RESOLUTION NO. 2011 - 03

A RESOLUTION OF THE CITY OF MOSCOW, IDAHO, A MUNICIPAL CORPORATION OF THE STATE OF IDAHO, CREATING A POLICY FOR STOP SIGN INSTALLATION AND REMOVAL REQUESTS IN THE CITY; PROVIDING THIS RESOLUTION TO BE EFFECTIVE UPON ITS PASSAGE, APPROVAL, AND PUBLICATION ACCORDING TO LAW.

WHEREAS, the City of Moscow receives numerous requests for installation of stop signs to address the concerns of its citizens; and

WHEREAS, the City also receives requests for the removal of stop signs where they are perceived, by the requestors, to be no longer necessary; and

WHEREAS, the City wishes to provide a predictable and consistent methodology for responding to such requests; and

WHEREAS, in an effort to provide such methodology, the City has established a policy and procedure for stop sign installation and removal requests, attached hereto; and

WHEREAS, this policy is intended to inform citizens interested in requesting installation or removal of stop signs of the manner in which the City will proceed to process their requests; and

WHEREAS, this policy also addresses standards which are commonly utilized by staff in assessing such requests; and

WHEREAS, the Council supports this policy and wishes to adopt it by Resolution in order to accomplish the purposes stated herein;

NOW, THEREFORE, BE IT RESOLVED by the Mayor and City Council of the City of Moscow, Idaho that the City of Moscow Policy and Procedure for Stop Sign Installation and Removal Requests, March 2011 shall be and is hereby adopted.

1. That the City of Moscow Policy and Procedure for Stop Sign Installation and Removal Requests, March 2011 attached hereto as Exhibit "A" is adopted;

2. That this Resolution shall become effective as of 8th day of March, 2011.

PASSED AND APPROVED by the Mayor and the Council of the City of Moscow, Idaho, this 7th day of March, 2011.

Nancy Chaney, Mayor

ATTEST:

Stephanie Kalasz, City Clerk

CITY OF MOSCOW INCORPORATED JULY 12 1887 STATE OF IDAHO

EXHIBIT "A"

CITY OF MOSCOW POLICY AND PROCEDURE FOR STOP SIGN INSTALLATION AND REMOVAL REQUESTS

March 2011

BACKGROUND AND PURPOSE

The City of Moscow receives requests for the installation of stop signs to address concerns of interested citizens. Requests are also received for the removal of stop signs where they are perceived as no longer necessary. In order to provide a predictable and consistent methodology for responding to these requests, the City has established the Policy and Procedure for Stop Sign Installation and Removal Requests. This Policy is intended to inform citizens interested in requesting the installation or removal of a stop sign of the manner in which the City will process their request. This Policy also addresses standards which are commonly utilized by staff in assessing such requests.

I. Policy Objective

It is the objective of this Policy to consider installation and removal of stop signs where appropriate, based on engineering analysis and staff judgment.

Principles

A. Stop signs are reserved for the control of vehicular traffic conflicts at intersections and shall not be used as a device to control speed or to identify pedestrian crosswalks (unless otherwise warranted to control vehicular conflicts).
B. Stop signs are not installed as a means of traffic calming but may be installed in conjunction with an overall neighborhood traffic calming effort.
C. Stop signs are not to be installed against the major flow of traffic unless unusual intersection design requires such installation to insure adequate and safe operation of the intersection.
D. A stop sign is not a substitute for other traffic control devices.
E. Warrants recommended in the Manual on Uniform Traffic Control Devices (MUTCD), including the amount of daily traffic, the amount of pedestrian and bicycle activity, high traffic speed, restricted sightlines, accident records, unusual site conditions, and geometrics will be used by staff in the evaluation of all stop sign requests.
F. Accidents shall be used as the primary warrant for the installation of stop signs.
G. The functional street classification system (as shown on the latest edition of the Moscow Urban Area and Functional Classification map) shall be used as the reference system for defining street types used in the warranting procedures.
H. Stop signs shall only be installed at intersections where drivers cannot safely apply the right-of-way rule as defined by the State of Idaho Motor Vehicle Code[1].

[1] Right of Way Rule – The Failure to yield the right of way at an uncontrolled intersection. A person commits the offense of failure to yield the right of way at an uncontrolled intersection (an intersection without any traffic signs or signals) if the person, in a vehicle

Background

A. Because stop signs cause a substantial inconvenience to motorists, disrupt traffic flow, and can result in increased carbon emissions, they should only be used where warranted.
B. When stop signs are installed where the need to control right-of-way is questionable, there may be an increase in traffic delay and congestion with little or no gain in safety.
C. Accidents can sometimes increase following installation of stop signs.
D. If the motorist consistently observes that the cross street traffic is light or nonexistent, the stop sign's installation will likely be questioned by the motorist, and they will frequently roll through or run the stop sign, thus reducing the credibility of the stop sign and increasing the danger at the intersection. Excessive use of stop signs has been shown to reduce stop sign compliance by up to 25%.
E. The installation of unwarranted stop signs may actually create new speeding problems. Studies have shown that motorists tend to accelerate to higher speeds to make up for the time lost at stop signs. Other studies have found that vehicle speeds will decrease within two hundred feet (200') of a stop-controlled intersection but speeds will remain unchanged or increase between intersections.
F. Many times, the need for a stop sign can be eliminated if the sight distance is increased (by removing obstructions, for example).
G. Excessive use of stop signs may encourage some drivers to use alternative neighborhood (local) streets as a means to avoid the stop-controlled intersection, thus increasing traffic volumes and creating problems in other locations.
H. The installation of stop signs at any given intersection should only occur after a review of potential impacts on neighboring streets and when the stop control is compatible with the overall traffic management concept for the area.
I. The more stop signs on a road system, the more air pollution and noise generated from cars stopping and starting. Studies have shown that stopping five thousand (5,000) vehicles per day generates fifteen (15) tons of additional pollutants per year.

II. Procedures

A. Requesting Warrant Analysis

A written request must be submitted to the Public Works Department by residents living along the applicable street(s).

To insure that the neighbor involved has sufficient interest in the stop sign request, the written request must be on a City of Moscow Stop Sign Request Form and be signed by the owners of at least twenty five percent (25%) of the dwelling units and/or businesses along the first block of all streets emanating from the intersection. The Form will include the printed name, address and signature of the requesting

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that is approaching an uncontrolled intersection, does not look out for, and give right of way, to any driver on the right who simultaneously approaches the intersection, regardless of which driver first reaches the intersection.

citizens and an explanation of why stop signage is desired. Stop sign installation and removal warrant analysis may also originate with the Public Works Department.

1. All stop sign requests shall be submitted to the Public Works Department. The requestor submitting the stop sign request is contacted by the Public Works Department to confirm receipt of the request, and to answer any initial questions.
2.. Through discussions with the requestor, it is determined if a stop sign is the most appropriate traffic control device to address the requestor's concerns. If a stop sign is considered to be the appropriate solution, this Policy will be followed.
3. A site visit is performed to determine if any immediate safety concerns are present and, if so, what temporary corrective action should be implemented. The site is also examined for alternative solutions other than the installation of a stop sign. Alternative solutions could include the trimming of vegetation or the installation of parking restrictions to improve sight distance.
4. If no alternative measure is evident, a stop sign warrant analysis is performed. Warrants are considered the traffic engineering industry standard for determining the criteria for the installation of stop signs.
5. As a part of the warrant analysis, a temporary stop sign may be placed at the requested location to observe its effect on local traffic patterns. The temporary stop sign will be periodically monitored to ensure extensive queuing or delays, as determined by the City Engineer, are not created.
6. Input on the stop sign request is solicited from the Police and Fire Departments. Such input may include observations on traffic operations in the area of the intersection, accident history, enforcement activities, emergency vehicle access routes, and other pertinent information.
7. If the traffic warrants are met, a work order is prepared for the installation of the new stop sign(s).
8. If the traffic warrants are not met, the requestor is notified of the City's warrant findings and of any corrective action determined appropriate by staff for the subject intersection. The determination shall be posted with an information sheet at the subject intersection and a report of the determination shall be added to the City's web site. Appeals to the City Council by a person who considers him or herself to have been adversely affected by the determination must be submitted to the City Clerk within fifteen (15) days of the date of the notification. Such appeals shall be accompanied by the appropriate appeal fee, as set forth by the City Council.
9. If an appeal of Staff's warrant findings is submitted, a briefing on the item is placed on the next available Public Works/Finance Committee meeting agenda.
10. All dwelling units and businesses within one (1) block of the proposed stop sign location are notified of the time and date of the Public Works/Finance Committee and City Council meetings where the stop sign request will be heard.
11. After the Public Works/Finance Committee briefing, the item is placed on the next available City Council meeting agenda for discussion and action. Background information regarding the request including staff generated data and any petition or letters of support submitted by the public are included as exhibits for the City Council.

B. Warrant Analysis:

Two (2) or more of the following traffic warrants, as identified in the MUTCD must be met for the Public Works Department to approve the installation or continued presence of a stop sign, unless otherwise justified by the City Engineer (based upon the judgment of the City Engineer using guidance from the MUTCD).

Warrant 1. Accidents

1. A stop sign is warranted if five (5) or more reported accidents occur within a twelve (12) month period which would likely have been susceptible to correction by the installation of an all-way stop. Such accidents include right and left-turn collisions as well as right angle collisions.
2. A stop sign is warranted if three (3) or more reported accidents occur within a twelve (12) month period or five (5) or more reported accidents occur within a twenty four (24) month period which would likely have been susceptible to correction by the installation of a two way stop.
3. A stop sign is warranted on a through street if, within a two (2) year period, the intersection had at least one point five (1.5) accidents per million vehicles entering the intersection and those accidents would likely have been susceptible to correction by the installation of an all-way stop.

Warrant 2. Minimum Traffic Volumes and Speed

1. A stop sign is warranted if the number of vehicles entering the intersection from all approaches averages at least three hundred (300) vehicles per hour for any eight (8) hours of an average day, and;

2. The combined vehicular, bicycle and pedestrian volume from the minor street or highway averages at least two hundred (200) units per hour for the same eight (8) hours. A delay of at least thirty (30) seconds per vehicle must be exhibited on the minor street during the hour of greatest traffic volume.

3. On roadways where the eighty fifth (85th) percentile approach speed exceeds forty (40) MPH, the minimum vehicular volume warrant is reduced to seventy percent (70%) of the above requirement.

Warrant 3. Visibility

1. A stop sign is warranted where driver visibility is limited at the minor street approach to the intersection, and causes drivers to reduce their intersection approach speed to less than ten (10) miles per hour.

2. The minimum sight distance shall be maintained based on the roadway speed and the criteria described in the latest edition of the AASHTO publication "A Policy on Geometric Design of Highways and Streets."

III. Monitoring and Evaluation

The type, number and extent of studies performed to determine the effectiveness and impacts of stop signs will vary based upon the particular circumstances of each installation. An assessment may be performed to determine if installation or removal of the signs has achieved the desired results without creating unexpected problems. Depending upon the resources available and at the discretion of the City Engineer, the monitoring assessment of a newly installed or removed stop sign may include the following:

A. On-site observations. Immediately after installation or removal of the stop signs and at intervals thereafter, observations may be made to determine motorists' behavior patterns and any unusual operating conditions (such as running the stop sign). The observations will be scheduled during both day and night conditions.

B. Speed studies. Speed studies may be performed before and after stop sign installation or removal, to determine speeds and the effect on vehicle operating speeds.

C. Volume studies. Traffic volume counts may be made on the subject street and on those streets where traffic diversion may be expected. Counts will be made before installation or removal and after traffic patterns have stabilized, to determine the magnitude and specific location of this diversion. Both turning movements and twenty four (24) hour volume counts may be needed to quantify these impacts.

D. Stop sign obedience. Studies may be performed to evaluate stop sign compliance. High violation rates that result in a safety hazard is cause for sign removal.

E. Accident analysis. A thorough before and after accident analysis may be performed to determine if accident trends have been noticeably impacted by the stop sign installation or removal. It may be necessary to establish ongoing analysis at some locations to gauge the longer-term trends of accident rates. An increase in accidents is cause for removal or reinstallation.

F. Resident and driver studies. Within thirty (30) to sixty (60) days after installation (or at end of the established trial period), a survey of adjacent residents and other affected residential areas may be conducted to assess their concerns and perception of the stop signs' performance. Motorists continuing to travel the street may also be selectively surveyed to assess their opinion of the stop signs' effectiveness.

TRAFFIC ENGINEERING STUDY – MULTIWAY STOP APPLICATION
CITY OF MOSCOW COMMUNITY PLANNING & DESIGN

THIRD STREET AND BLAINE STREET
January, 2020

The City of Moscow's Engineering Division conducted a traffic engineering study for the purpose of determining whether the operational conditions of the intersection at Third Street and Blaine Street satisfy the requirements for the installation of a multi-way (All-Way) stop. The City of Moscow's Policy and Procedure for Stop Sign Installation and Removal Requests (Adopted 2011) and the 2009 Manual of Uniform Traffic Control Devices (MUTCD) were used as the guidelines for this analysis.

STUDY CRITERIA

Multi-way stop control can be useful as a safety measure at intersections if certain traffic conditions exist. Safety concerns associated with multi-way stops include pedestrians, bicyclists, and all road users expecting other road users to stop. Multi-way stop control is used where the volume of traffic on the intersecting roads is approximately equal. The decision to install or remove multi-way stop control shall be based on an engineering study outlined in the City of Moscow's Policy and Procedure for Stop Sign Installation and Removal Requests.

Two (2) or more of the following traffic warrants must be met to approve of the installation or continued presence of a stop sign, unless otherwise justified by the City Engineer (based upon the judgment of the City Engineer using guidance from the MUTCD).

Warrants:

1. Accidents.
    A. A Stop sign is warranted if five (5) or more reported accidents occur within a twelve (12) month period which would likely have been susceptible to correction by the installation of an All-Way Stop. Such accidents include right and left-turn collisions as well as right angle collisions.
    B. A Stop sign is warranted if three (3) or more reported accidents occur within a twelve (12) month period or five (5) or more reported accidents occur within a twenty-four (24) month period which would likely have been susceptible to correction by the installation of a Two-Way Stop.
    C. A Stop sign is warranted on a through street if, within a two (2) year period, the intersection had at least one and one-half (1.5) accidents per million vehicles entering the intersection and those accidents would likely have been susceptible to correction by the installation of an All-Way Stop.

2. Minimum Traffic Volumes and Speeds.
    A. A Stop sign is warranted if the number of vehicles entering the intersection from all approaches averages at least three hundred (300) vehicles per hour for any eight (8) hours of an average day, and;
    B. The combined vehicular, bicycle, and pedestrian volume from the minor street averages at least two hundred (200) units per hour for the same eight (8) hours. A delay of at least thirty (30) seconds must be exhibited on the minor street during the hour of greatest traffic volume.
    C. On roadways where the eighty fifth percentile (85%) approach speed exceeds forty (40) MPH, the minimum vehicular volume warrant is reduced to seventy percent (70%) of the above requirements.

3. Visibility.
    A. A Stop sign is warranted where driver visibility is limited at the minor street approach to the intersection, and causes drivers to reduce their intersection approach speed to less than ten (10) MPH.

    B. The minimum sight distance shall be maintained based on the roadway speed and the criteria described in the latest edition of the AASHTO publication, "A Policy on Geometric Design of Highways and Streets."

MUTCD's Options Guidance**:**

Other criteria that may be considered in an engineering study include:

A. The need to control left-turn conflicts.

B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes.

C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to reasonably safely negotiate the intersection unless conflicting cross traffic is also required to stop.

STUDY RESULTS

Warrant 1 - Accidents: ***Not Satisfied at any level.***

To meet the All-Way Stop requirement, the interaction must have at least five (5) accidents in the previous year. A query from the Idaho Transportation Department's accident reports shows that the intersection of Third Street and Blaine Street had no recorded accidents in that time. (*Warrant 1.A is not satisfied.)*

To meet the Two-Way Stop control requirement, there would have to be three (3) accidents within the last year, or five (5) in the last two (2) years. Idaho Transportation Department's accident reports shows that the intersection of Third Street and Blaine Street had only one (1) recorded accidents in the previous two (2) years. The intersection doesn't meet the minimum, but Third Street already has Two-Way Stop control At Blaine Street. (*Warrant 1.B is not satisfied.)*

In the previous two (2) years there must be a minimum of 1.5 accidents per million vehicles entering the intersection. In this study 0.56 accidents per million vehicles was calculated. To meet this warrant, the number of traffic accidents would have to raise significantly. (*Warrant 1.C is not satisfied.)*

Warrant 2 – Traffic Volume & Speed: ***Satisfied at one level.***

The number of approaching vehicles did exceed the required minimum from Blaine Street and Third Street. The warrant requires an average of at least 300 vehicles per hour, for a peak 8 hours. For this study, an average of 624 vehicles per hour was observed from between 11 AM and 7 PM. The intersection also exceeded the required minimum average of 200 units per hour for the minor street over the same 8 hours. Third Street had an average of 280 units per hour. A delay study has not been conducted for the Third Street approaches to Blaine Street since previous observations showed a significantly lower delay than the required thirty (30) seconds. The thirty (30) second delay at this intersection would be highly unlikely. (*Warrant 2.A and 2.B are not both satisfied.)*

The eighty-fifth percentile (85%) of the approach speeds do not exceed 40 MPH in order to consider a reduction to 70% of the above volume and delay requirements. With the posted speed limits of 25 MPH and 85% of 24-27 MPH, this intersection will not see speeds high enough. Even with the reduction, the traffic delays are not expected to be low enough to meet this warrant minimum of 21 seconds (70% of 30 seconds). (*Warrant 2.C is not satisfied.)*

Warrant 3 - Visibility: ***Satisfied at one level.***

Since there are already Stop signs on the Third Street approaches at Blaine Street, visibility does not affect the speed of approaching vehicles. Traffic speeds entering

the intersection are not limited by visibility, and do not get reduced to below 10 MPH because of it. (*Warrant 3.A is not satisfied.)*

To meet the warrant, sight distances must be less than the AASHTO minimum requirements. Since there is already stop control on Third Street, only Blaine Street needed to be evaluated. With the Geometric Design of Highways and Streets 2018, Table 9.5, the minimum sight distance is 115 feet for a 25 mph street, and 70 feet for 15 mph when the school zone speed is active. The measured sight distances along Blaine Street are below the minimum requirements because of on street parking. The eastbound approach of Third Street is only able to see about 75 feet to the south and about 110 feet to the north. The westbound approach is only able to see about 110 to the north. (*Warrant 3.B is satisfied.)*

Other Criteria Considered:

A. In the previous two (2) years, there has been only one recorded accident at this intersection and that accident was not turning related; a westbound driver failed to yield to a southbound car when pulling through the intersection. In the last five (5) years there has been four (4) intersection related accidents reported. Despite Third Street being a Minor Arterial, there is a relatively low volume of traffic through this area. The intersection at Blaine Street is within a dense residential area.

B. There have been no recorded vehicle and pedestrian/bicycle accidents at the intersection of Third and Blaine Streets, however, a need to control vehicle/pedestrian conflicts in this area may exist due to adjacent public facilities. Major pedestrian/bicycle traffic generators in the immediate vicinity include Lena Whitmore Elementary School, East City Park, and Third Street is a designated Bike Route with an intersection of the Neighborhood Green route just to the east. Both Third and Blaine Streets are within the School Zone for Lena Whitmore at this intersection. The installation of an All-Way Stop or alternative control measures may reduce conflicts for those pedestrians and bicyclists navigating any leg of this intersection.

C. There are some sight limitations for east/west bound traffic stopping on Third Street, especially when cars are parked along Blaine Street. If cross traffic on Blaine Street is required to stop, i.e. an All-Way Stop, then this concern may be diminished.

Conclusion:

Based on this overall assessment of the warrants for Multi-way (All-Way) Stop controlled intersections, as defined by the City of Moscow's Policy and Procedure for Stop Sign Installation and Removal Requests (Adopted 2011) and the current MUTCD, the intersection of Blaine Street at Third Street fails to meet the required qualifications. The traffic volumes were high enough to qualify and there may be sight distance issues at various times, but there were too few traffic accidents and traffic delays to fully qualify in two of the three warrants. An All-Way Stop controlled intersection is not recommended at this time based upon current warrant information.

TRAFFIC ENGINEERING STUDY – MULTIWAY STOP APPLICATION
CITY OF MOSCOW COMMUNITY PLANNING & DESIGN

THIRD STREET AND HAYES STREET
January, 2020

The City of Moscow's Engineering Division conducted a traffic engineering study for the purpose of determining whether the operational conditions of the intersection at Third Street and Blaine Street satisfy the requirements for the installation of a multi-way (All-Way) stop. The City of Moscow's Policy and Procedure for Stop Sign Installation and Removal Requests (Adopted 2011) and the 2009 Manual of Uniform Traffic Control Devices (MUTCD) were used as the guidelines for this analysis.

STUDY CRITERIA

Multi-way stop control can be useful as a safety measure at intersections if certain traffic conditions exist. Safety concerns associated with multi-way stops include pedestrians, bicyclists, and all road users expecting other road users to stop. Multi-way stop control is used where the volume of traffic on the intersecting roads is approximately equal. The decision to install or remove multi-way stop control shall be based on an engineering study outlined in the City of Moscow's Policy and Procedure for Stop Sign Installation and Removal Requests.

Two (2) or more of the following traffic warrants must be met to approve of the installation or continued presence of a stop sign, unless otherwise justified by the City Engineer (based upon the judgment of the City Engineer using guidance from the MUTCD).

Warrants:

1. Accidents.
    A. A Stop sign is warranted if five (5) or more reported accidents occur within a twelve (12) month period which would likely have been susceptible to correction by the installation of an All-Way Stop. Such accidents include right and left-turn collisions as well as right angle collisions.
    B. A Stop sign is warranted if three (3) or more reported accidents occur within a twelve (12) month period or five (5) or more reported accidents occur within a twenty-four (24) month period which would likely have been susceptible to correction by the installation of a Two-Way Stop.
    C. A Stop sign is warranted on a through street if, within a two (2) year period, the intersection had at least one and one-half (1.5) accidents per million vehicles entering the intersection and those accidents would likely have been susceptible to correction by the installation of an All-Way Stop.

2. Minimum Traffic Volumes and Speeds.
    A. A Stop sign is warranted if the number of vehicles entering the intersection from all approaches averages at least three hundred (300) vehicles per hour for any eight (8) hours of an average day, and;
    B. The combined vehicular, bicycle, and pedestrian volume from the minor street averages at least two hundred (200) units per hour for the same eight (8) hours. A delay of at least thirty (30) seconds must be exhibited on the minor street during the hour of greatest traffic volume.
    C. On roadways where the eighty fifth percentile (85%) approach speed exceeds forty (40) MPH, the minimum vehicular volume warrant is reduced to seventy percent (70%) of the above requirements.

3. Visibility.
    A. A Stop sign is warranted where driver visibility is limited at the minor street approach to the intersection, and causes drivers to reduce their intersection approach speed to less than ten (10) MPH.

    B. The minimum sight distance shall be maintained based on the roadway speed and the criteria described in the latest edition of the AASHTO publication, "A Policy on Geometric Design of Highways and Streets."

MUTCD's Options Guidance**:**

Other criteria that may be considered in an engineering study include:

A. The need to control left-turn conflicts.

B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes.

C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to reasonably safely negotiate the intersection unless conflicting cross traffic is also required to stop.

STUDY RESULTS

Warrant 1 - Accidents: ***Not Satisfied at any level.***

To meet the All-Way Stop requirement, the intersection must have at least five (5) accidents in the previous year. A query from the Idaho Transportation Department's accident reports shows that the intersection of Third Street and Hayes Street had no recorded accidents in that time. (*Warrant 1.A is not satisfied.)*

To meet the Two-Way Stop control requirement, there would have to be three (3) accidents within the last year, or five (5) in the last two (2) years. Idaho Transportation Department's accident reports shows that the intersection of Third Street and Hayes Street had only one (1) recorded accidents in the previous two (2) years. The intersection doesn't meet the minimum, but Third Street already has Two-Way Stop control at Hayes Street. (*Warrant 1.B is not satisfied.)*

In the previous two (2) years there must be a minimum of 1.5 accidents per million vehicles entering the intersection. In this study 0.23 accidents per million vehicles was calculated. To meet this warrant, the number of traffic accidents would have to raise significantly. (*Warrant 1.C is not satisfied.)*

Warrant 2 – Traffic Volume & Speed: ***Satisfied at one level.***

The number of vehicles approaching the intersection did exceed the required minimum from Hayes Street and Third Street. The warrant requires an average of at least 300 vehicles per hour over a peak 8 hours, and 436 vehicles per hour were observed between 10 AM and 6 PM. The intersection also exceeded the minimum average of 200 units per hour (combined vehicle and pedestrian volumes) for the minor street over the same 8 hours. Third Street had an average of 225 units per hour. To meet this warrant there also had to be a traffic delay of at least 30 seconds during the peak hour. A delay study was conducted in October, 2018 that showed an average delay on the Third Street approaches being 12.0 seconds on the west side and 3.2 seconds on the east side, with a combined average delay of 7.6 seconds. (*Warrant 2.A and 2.B are not both satisfied.)*

The eighty-fifth percentile (85%) of the approach speeds do not exceed 40 MPH in order to consider a reduction to 70% of the above volume and delay requirements. With the posted speed limits at 25 and 30 MPH and 85% speeds of 23.5 and 28.5 MPH, this intersection will not see speeds high enough. Even with the reduction, this warrant would not be meet because the traffic delay would have to be at least 21 seconds (70% of the 30 second minimum above). (*Warrant 2.C is not satisfied.)*

Warrant 3 - Visibility: ***Satisfied at one level.***

To meet the warrant, visibility must be restrictive enough to slow approach traffic to below 10 MPH. There are currently Stop signs on the Third Street approaches at

Hayes Street, visibility does not affect the speed of approaching vehicles since they have to stop. Traffic approaching from Hayes street has no issues with visibility that is reducing speeds. (*Warrant 3.A is not satisfied.)*

To meet the warrant, sight distances must be less than the AASHTO minimum requirements. Since there is already stop control on Third Street, only Hayes was studied. With the Geometric Design of Highways and Streets 2018, Table 9.5, Hayes Street has a minimum sight distance of 140 feet for 30 mph street. The only vision barrier for the intersection is parking on the west side of Hayes Street, south of Third Street. The eastbound traffic on Third Street can only see about 85 feet down Hayes Street if there are parked cars. The measured sight distances along Hayes Street are below the minimum AASHTO requirements for the eastbound approach on Third Street. (*Warrant 3.B is satisfied.)*

Other Criteria Considered:

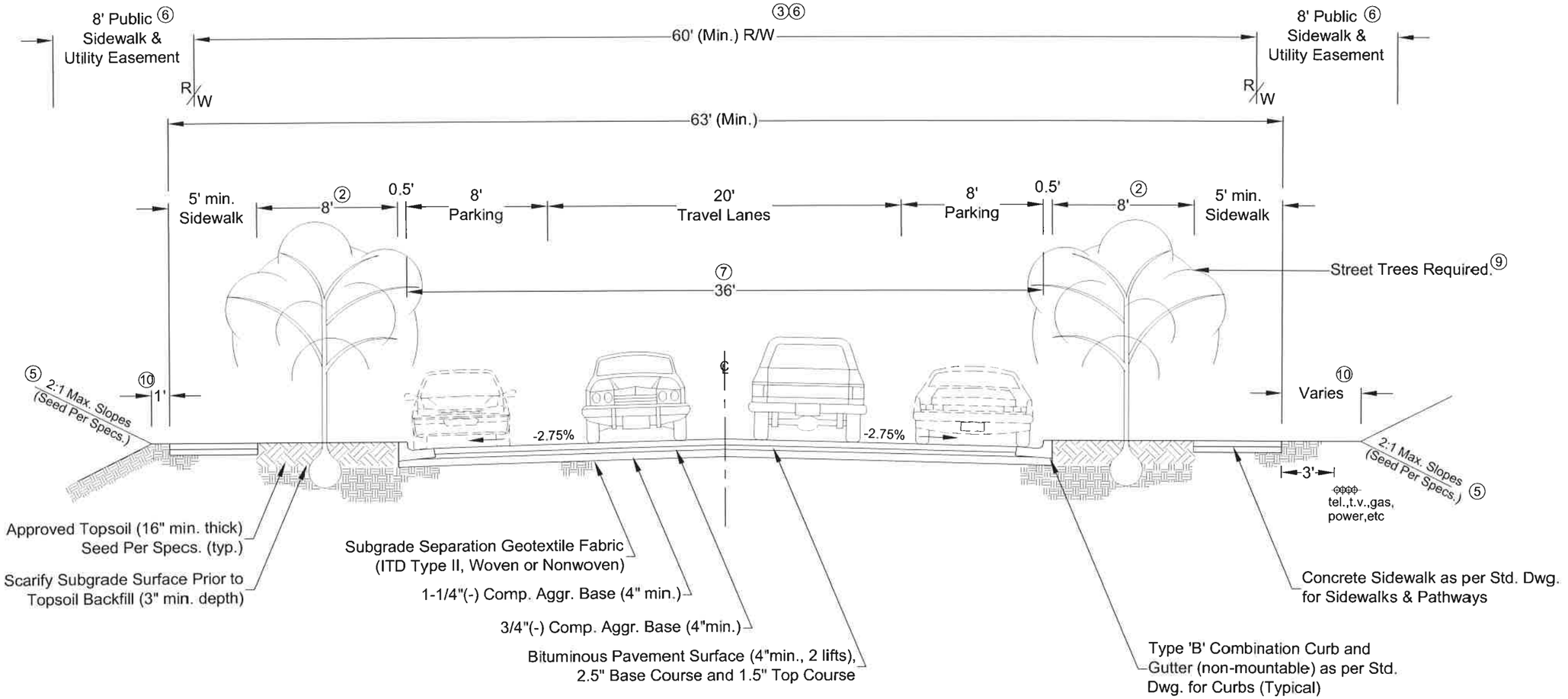
A. In the previous two (2) years, there has been only one recorded accident at this intersection and that one accident was not turning related; an eastbound driver had failed to stop at the existing stop sign. Third Street is a Minor Arterial, but traffic volumes are relatively low going east of Hayes Street.

B. There have been no recorded vehicle and pedestrian/bicycle accidents at the intersection of Third and Hayes Streets, however, a need to control vehicle/pedestrian conflicts in this area may exist due to adjacent public facilities. Major pedestrian/bicycle traffic generators in the immediate vicinity include Lena Whitmore Elementary School, East City Park, and Third Street is a designated Bike Route (Moderate Difficulty classification). The installation of an All-Way Stop or alternative control measures may reduce conflicts for pedestrians and bicyclists navigating any leg of this intersection.

C. There is a sight limitation for east/west traffic stopping on Third Street, especially when cars are parked along Hayes Street to the south. If cross traffic on Hayes Street is required to stop, i.e. an All-Way Stop, then this concern may be diminished.

Conclusion:

Based on this overall assessment of the warrants for Multi-way (All-Way) Stop controlled intersections, as defined by the City of Moscow's Policy and Procedure for Stop Sign Installation and Removal Requests (Adopted 2011) and the current MUTCD, the intersection of Hayes Street at Third Street fails to meet two (2) of the three (3) required warrant qualifications. The traffic volumes were high enough to qualify and there may be sight distance issues at various times, but there were too few traffic accidents and traffic delays. An All-Way Stop controlled intersection is not recommended at this time based upon current information.



Notes:

1. This street section should be used as the minimum standard for all streets not classified as Collector or Arterial, or under conditions in which the Standard Drawing for Alternate Local Street (28' Street) is allowed.
2. The eight foot (8') wide green strip may be narrowed to a minimum width of five feet (5') in areas of excessive cuts and fills, as approved by City Engineer.
3. Center streets in platted right-of-way, unless approved otherwise by the City Engineer. Additional right-of-way shall be required as necessary to accommodate topography, utilities, or other needs as determined by the City Engineer.
4. Compact all subgrade and base aggregate to 95% of AASHTO T99 max. proctor density.
5. Seed all roadside backfill and excavations as per Standard Specifications.
6. Wider platted rights-of-way allow narrower easements, proportionately. Additional easements may be required as necessary.
7. Maximum street centerline profile grade shall equal 10.0% or as approved by the City Engineer.
8. Subgrade underdrain systems are required in inherently "wet" areas, as specified by the City Engineer, see Standard Drawing for Subsurface Drainage.
9. Tree selection and planting shall comply with the City's Arboricultural Standards and Specification Guide.
10. This dimension shall be four feet (4') where standard franchise utility pedestals (excluding transformers) are to be located and shall be six feet (6') where pedestals and an AVISTA power transformer pad is required (see Standard Drawing for Franchise Utility Details).

REVISIONS	
DESCRIPTION	
DATE	

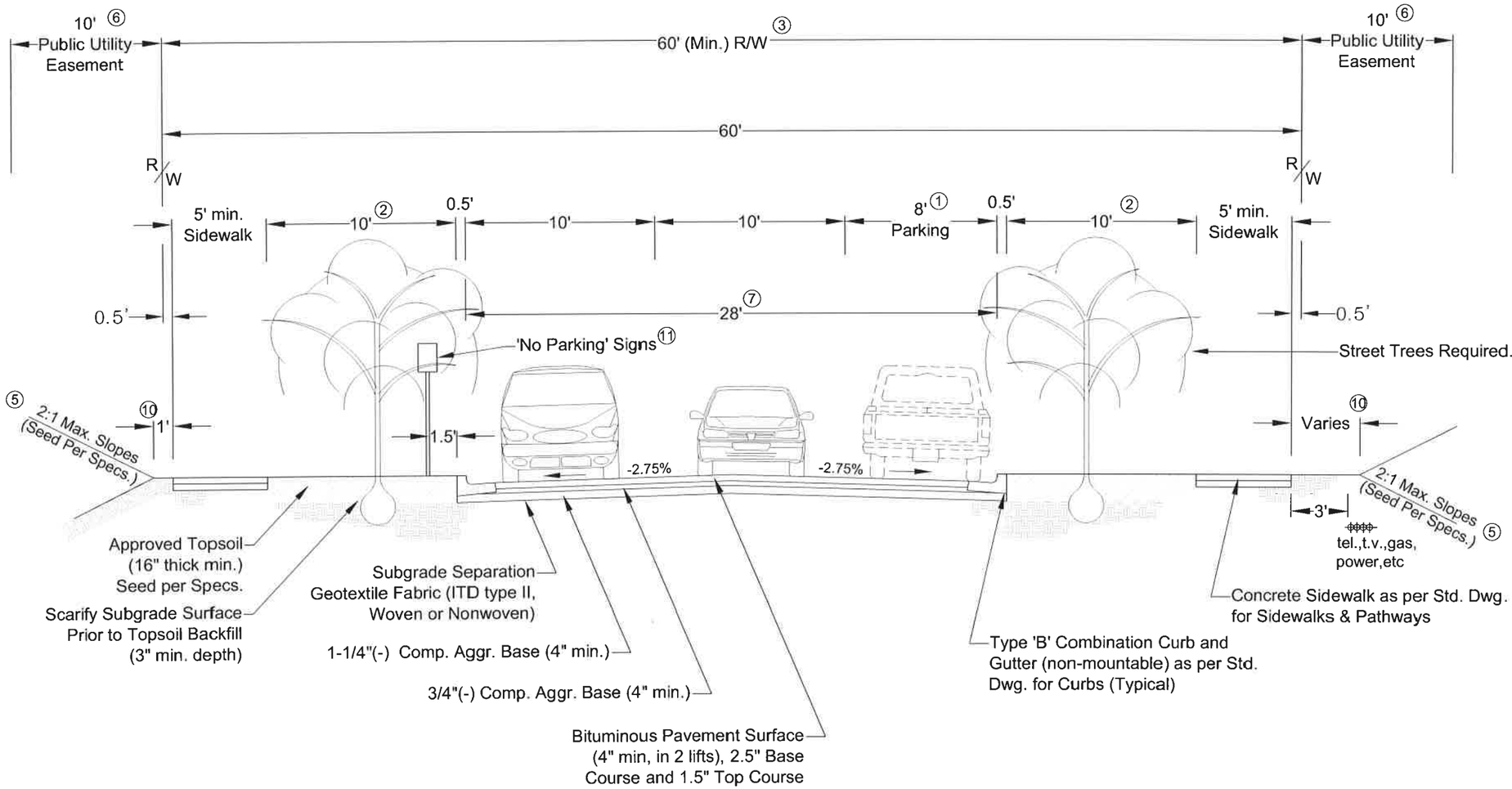
PROFESSIONAL ENGINEER REGISTERED STATE OF IDAHO KEVIN LILLY 8832 5-19-14

DRAFTED BY: C.Edwards
CHECKED BY: K.Lilly
DRAWING SCALE: NTS
DATE: 3-31-2014

Local Street (36' Street)

CITY OF MOSCOW
ENGINEERING DEPARTMENT

DRAWING NUMBER:
1a



Notes:

1. Use of this street standard shall be limited to cul-de-sacs and one to two block unextendable streets. In addition, this standard shall only be used in Residential Zones unless otherwise approved by the City Engineer. Engineering plans for subdivisions must specify on which side of street parking will be allowed.
2. The 10' wide green strip may be narrowed to a minimum width of five feet (5') in areas of excessive cuts and fills, as approved by City Engineer.
3. Center streets in platted right-of-way, unless approved otherwise by the City Engineer. Additional right-of-way shall be required as necessary to accommodate topography, utilities, or other needs as determined by the City Engineer.
4. Compact all subgrade and base aggregate to 95% of AASHTO T99 max. proctor density.
5. Seed all roadside backfill and excavations as per Standard Specifications.
6. Wider platted rights-of-way allow narrower easements, proportionately. Additional easement may be required as necessary.
7. Maximum street centerline profile grade shall equal 10.0% or as approved by the City Engineer.
8. Subgrade underdrain systems are required in inherently "wet" areas, as specified by the Engineer, see Standard Drawing for Subsurface Drainage.
9. Tree selection and planting shall comply with the City's Arboricultural Standards and Specification Guide.
10. This dimension shall be four feet (4') where standard franchise utility pedestals (excluding transformers) are to be located and shall be six feet (6') where pedestals and an AVISTA power transformer pad is required (see Standard Drawing for Franchise Utility Details).
11. All signs to be furnished and installed by 'Developer.' Signs and installation to be in accordance with MUTCD.

REVISIONS	
DESCRIPTION	
DATE	

PROFESSIONAL ENGINEER REGISTERED 8832 STATE OF IDAHO KEVIN LILLY 5-19-14

DRAFTED BY: C.Edwards
CHECKED BY: K.Lilly
DRAWING SCALE: NTS
DATE: 3-31-2014

Alternate Local Street (28' Street)

CITY OF MOSCOW
ENGINEERING DEPARTMENT

DRAWING NUMBER: 1b

City of Moscow
Public Works & Services

Memo

To: Bill Belknap, Deputy City Supervisor – Community Planning & Design

From: Tyler Palmer, Deputy City Supervisor – Public Works & Services

C.c. Steve Schulte, Streets/Storm Manager

Scott Bontrager, City Engineer

Date: March 5, 2020

Re: Lifecycle Cost and Other Advantages of a 28' Residential Street Profile

Bill,

For several years I have advocated for narrower street profile options where feasible. Transportation funding is a continual challenge for local government, and, as such, it is imperative that we do not over-build, and thus force ourselves into inflated maintenance costs in perpetuity. In residential areas, when we construct on-street parking, we are constructing a linear public parking lot. The utilization of this parking infrastructure is generally very low, and the costs are exaggeratedly high as we are building the full profile to a roadway standard.

A narrower profile is a way for us to achieve many goals; traffic calming, higher utilization of the roadway, improved snow removal services, and significant cost savings. For example, a 28' profile (10' travel lanes and an 8' parking lane), in one mile, can save the City well in excess of $500,000 over a 50-year lifecycle when compared to the same mile at a 36' width (our current standard). I believe that, while not universally applicable, this profile would serve many of our residential areas quite well.

I am attaching a spreadsheet that shows the savings strictly from a pavement management perspective. You will see that the savings for surface treatments, overlay, and eventual replacement, by themselves total over $500,000. This reduction of 22% of the surface area that we treat and maintain can very quickly ring up large savings.

There is ample research demonstrating that a narrower profile helps calm traffic. We never get calls from residents complaining that vehicles are going too slow through their neighborhoods, and with the rapid transition to electric vehicles, even air-quality concerns wane with slower

speeds. We currently have 28’ profiles with parking on both sides of the street in a few locations, and, while less than ideal at times, we rarely get complaints.

There are other maintenance cost savings that make this option attractive. A 28’ profile with parking on one side, with an adequate green-strip, allows us to push snow consistently away from parked vehicles to an area with room for snow storage. The diminished passes with a plow truck are estimated to generate a savings of about $14,000/mile over the same 50-year period, and would allow us to quicken the pace of plowing, thus improving services. A peripheral benefit to this scheme is that we could site the waterline on the parking-side of the center-line of the road, and place hydrants in the green-strip on the parking side. The hydrant would provide gaps in parking to allow larger vehicles room for passing, and keep hydrants from becoming buried by plows during heavy snow years.

On these low-volume residential streets, a shared lane is a comfortable for most cyclists, and sidewalks are available and likely used by those uncomfortable using the street. This approach could allow us to focus our limited funds for cycling infrastructure on providing separated bike lanes on key facilities, and not incurring the expense of continued striping of residential bike lanes that are underutilized, and unnecessary given the volume and speeds of the target facilities.

Our storm system would also benefit from a narrower street. With less impervious surface, we would diminish the loading in our storm system, and reduce the surface area covered by our sweepers. With the known limitations of Paradise Creek, any reduction in impervious surface not only helps us meet the water quality standards in our Phase II Stormwater Permit, but also helps with flood mitigation.

I am happy to discuss this further, and look forward to a hearing the thoughts of the Community Planning & Design Group on the concept.

Regards,

Tyler

***Lifecycle Cost Assesment Residential Mile**

Treatment:	Lifecycle Occurance:	Cost/SQYRD	36' Profile	28'Profile	Savings
Slurry Seal	3	$ 1.75	$ 36,960.00	$ 28,743.75	**$ 8,216.25**
AR Chip Seal	1	$ 10.00	$ 211,200.00	$ 164,250.00	**$ 46,950.00**
Grind and Overlay	1	$ 30.00	$ 633,600.00	$ 492,750.00	**$ 140,850.00**
Rebuild	1	$ 65.00	$ 1,372,800.00	$ 1,067,625.00	**$ 305,175.00**
Totals			**$ 2,254,560.00**	**$ 1,753,368.75**	**$ 501,191.25**

	*40 year lifecycle
Estimated Snow Removal Savings	$ 13,200.00

City of Moscow
Community Planning and Design

Memo

To: Bill Belknap – Deputy City Supervisor, Community Planning and Design

From: Mike Ray, AICP - Planning Manager

Date: March 3, 2020

Re: Proposed Subdivision Code Amendments Related to the Application of City Street Standards

Over the past two years the Planning and Zoning Commission has been working on revisions to the subdivision code, which is the chapter of the City Code that establishes the process and standards for the subdivision of land within the City of Moscow. Within the proposed subdivision code are design standards that are intended to promote the public health, safety, and welfare, as well as implement the goals, objectives, and policies of various City plans such as the Comprehensive Plan, Parks and Recreation Master Plan, Multimodal Transportation Plan, and Comprehensive Utility Plans. The subdivision design standards are also intended to provide efficient circulation through coordinated and connected street, bike and pedestrian path systems, secure adequate infrastructure for streets, emergency services, parks, recreation facilities, and utilities necessary to serve proposed subdivisions. The existing and proposed subdivision codes require that streets, alleys, sidewalks, and pathways be constructed in accordance with City Standard Construction and Specification Drawings.

As part of the proposed update to the subdivision code, the Planning and Zoning Commission has been working on subdivision concepts that allow alternatives to conventional subdivision development. The two concepts that have been discussed have been the traditional subdivision and the conservation subdivision options. The traditional subdivision development option would encourage a traditional neighborhood development pattern which is characterized by smaller lot sizes, a mixture of housing types, neighborhood open space, and a gridded street system with alleys that is pedestrian oriented. The conservation subdivision development option would allow and encourage subdivision development at a higher density, while preserving sensitive areas such as floodplains, steep slopes, wetlands, critical habitat, natural areas, as well as general open space. It is contemplated that both of these new subdivision concepts should utilize local streets where the width is less than the typical suburban residential street standard.

During the formation of the alternate subdivision concepts, the Planning and Zoning Commission discussed the need to review the City's Standard Construction and

Specification Drawings to determine whether there is an existing street standard that could be applied in the development of subdivisions utilizing the two alternative options. In my review of the existing street standards, it appears that the Alternate Local Street (28' Street) standard would be the most appropriate to be utilized for traditional and conservation subdivision development. However, the use of this street standard is currently limited to cul-de-sacs and one to two block unextendible streets. In order to implement the alternative subdivision concepts that are being proposed, I would recommend removing the current limitations on the use of the Alternate Local Street (28' Street) standard.