PLANNING & ZONING COMMISSION

Wendy McClure
Commission Chair

Mike Ray
Staff Liaison

p&z@ci.moscow.id.us

208.883.7008

~Agenda~

http://id-moscow.civicplus.com/agendacenter

Wednesday July 24, 2019	7:00 PM	Council Chambers 206 E 3rd Street

Call to order

1. **Approval of minutes from June 26, 2019 [ACTION ITEM]**
   ACTION: Approve minutes as presented; approve minutes with amendments; or provide staff further direction.

2. **Public Comment**
   (Time limit 15 minutes. Members of the Public may speak to the Commission regarding matters NOT on the Agenda nor currently pending before the Planning and Zoning Commission. Please state your name and address for the record and limit your remarks to three minutes.)

3. **Approval of Reasoned Statement of Relevant Criteria and Standards [ACTION ITEM]:**
   1. Proposal for rezone of a 4.40-acre parcel of land located at 2400 South Highway 95 within the Area of City Impact - LUP2019-0021
   2. Proposal for Preliminary Subdivision Plat of a 1.49-acre parcel located at 1924 Nursery Street, Paradise View Addition – LUP2019-0020

   ACTION: Review the draft Relevant Criteria and Standards documents and approve the documents; or approve the documents with modifications; or provide Staff further direction as deemed necessary.

4. **Public Hearing: Proposed Conditional Use Permit Application to expand an existing Recreational Vehicle Park at 1651 Carmichael Rd in the Area of City Impact - LUP2019-0025 [ACTION ITEM]**
   Proposed Conditional Use Permit application to expand an existing Recreational Vehicle Park in the Agriculture, Forestry, and Outdoor Recreation (AF) Zoning District per MCC 4-3-4. The subject property is within the Moscow Area of City Impact. The City of Moscow Planning and Zoning Commission will make a recommendation to the Latah County Board of County Commissioners regarding this matter.
   ACTION: Conduct the public hearing upon the proposed Conditional Use Permit and upon consideration of any testimony presented, recommend approval of the Conditional Use Permit request to Latah County and direct Staff to prepare a reasoned statement of relevant criteria and standards; or recommend approval of the Conditional Use Permit request to Latah County with conditions and direct Staff to prepare a reasoned statement of relevant criteria and standards; or recommend denial of the Conditional Use Permit request to Latah County and direct Staff to prepare a reasoned statement of relevant criteria and standards; or take other action as deemed appropriate.

5. **Accessory Dwelling Unit (ADU) Draft Ordinance Review [ACTION ITEM]**
   On April 6, 2015, City Council approved Ordinance 2015-06 which permitted ADUs in all residential zones and also established certain development standards. Since the ADU ordinance has been approved, there have been eight ADUs that have been constructed throughout the City. The Commission reviewed

NOTICE: Moscow City Council Commission meetings can be televised, videotaped and/or recorded. Individuals attending the meeting who require special assistance to accommodate physical, hearing, or other impairments, please contact the City Clerk, at (208) 883-7015 or TDD 883-7019, as soon as possible so that arrangements may be made.

the possibility of removing the requirement that lots must meet the minimum lot size of their zone in order to be eligible for an ADU at the last meeting on June 26, 2019 and directed staff to prepare and ordinance which would remove the requirement.
ACTION: Review the ADU draft ordinance and provide Staff further direction as deemed necessary.

6. **Continuing Education [ACTION ITEM]**
   Discuss the continuing education articles, *The Neighbor's Dilemma* and *Density Without Zoning*.
   ACTION: Discuss the next continuing education topic and provide staff further direction if necessary.

7. **Transportation Commission Meeting Report**
   ACTION: Receive report and provide staff further direction if necessary.

8. **Announcements**
   ACTION: Read any correspondence received and provide staff further direction if necessary.

Adjourn

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PLANNING & ZONING COMMISSION

Wendy McClure
Commission Chair

p&z@ci.moscow.id.us

Mike Ray
Staff Liaison

208.883.7008

~Meeting Minutes~
June 26, 2019

http://id-moscow.civicplus.com/agendacenter

The meeting was called to order at 7:01 PM.

MEMBERS PRESENT: Robb Parish, Vice Chair; Joel Hamilton, Mike Nelsen, Victoria Seever, Dennis Wilson

MEMBERS ABSENT: Scott Gropp, Wendy McClure, Nels Reese

ALSO IN ATTENDANCE: Mike Ray, Anne Peterson, Brandy Sullivan

1. Approval of minutes from June 12, 2019

Hamilton moved approval of the minutes as presented.

RESULT:	**ACCEPTED BY ACCLAMATION [UNANIMOUS]**
MOVER:	Hamilton
SECONDER:	Wilson

2. Public Comment

None.

3. Public Hearing: Proposal for rezone of a 4.40-acre parcel of land located at 2400 South Highway 95 within the Area of City Impact - LUP2019-0021 [ACTION ITEM]

Proposed rezone of a 4.40-acre parcel of land located at 2400 South Highway 95 within the Area of City Impact from the Agriculture/Forestry (AF) Zone to the Motor Business (MB) Zone. The subject property is within the Moscow Area of City Impact. The City of Moscow Planning and Zoning Commission will make a recommendation to the Latah County Board of County Commissioners regarding this matter.

Ray presented the application as described above. This parcel is a U-shaped piece that surrounds a parcel at 2500 S Highway 95 and another parcel to the north, which were both rezoned to Motor Business within the last year. Ray reviewed uses and zoning surrounding the Auto-Urban Commercial designated parcel. He also reviewed the annexation policy, which this parcel does not meet, so the City does not recommend annexation at this time. Staff recommended approval without conditions.

Parish opened the public hearing at 7:07 p.m.

Shelley Bennett, 2272 Moser, represented Scott Clyde who was not able to attend. His family has been working on the entire estate and Scott's was the last piece that hadn't yet been addressed.

Public hearing closed at 7:09 p.m. Seever considered this action just simple housekeeping and others concurred. Hamilton moved to recommend approval of the application to the County as presented.

RESULT:	**APPROVED BY ACCLAMATION [UNANIMOUS]**
MOVER:	Hamilton
SECONDER:	Wilson

Hamilton moved to direct staff to prepare the RCS document for review at a later meeting.

RESULT:	**APPROVED BY ACCLAMATION [UNANIMOUS]**
MOVER:	Hamilton
SECONDER:	Nelsen

4. Public Hearing: Proposal for Preliminary Subdivision Plat of a 1.49 acre parcel located at 1924 Nursery Street, Paradise View Addition – LUP2019-0020 [ACTION ITEM]

Preliminary Subdivision Plat of a 1.49 acre parcel located at 1924 Nursery Street to create seventeen (17) parcels ranging from 1,806 square feet to 5,002 square feet in size, referred to as the Paradise View Addition.

Ray presented the application as described above. It is currently designated High-Density Residential which is intended to allow 15-26 dwellings per acre in locations near arterials. Neighboring zoning includes MB, R-4 and FR, with some R-2 and R-3 in areas not immediately contiguous to subject parcel. Permitted uses in the proposed R-4 Zone include single family dwellings, two family dwellings, twinhomes, townhouses, and multi-family dwellings. Also permitted are professional offices, bed and breakfasts, daycare facilities, and parking lots. The proposed plat has access points at Nursery Street on the west and Powers Avenue to the north, and the alley is intended to serve the rear of the twinhome lots. Water mains exist on all the surrounding streets. Public Works has determined the storm and sanitary systems have adequate capacity to manage the increased load. The parkland dedication requirement has already been met as part of Indian Hills 8 and Indian Hills 9 Subdivisions. Parish asked if the alley would have sidewalks and Ray replied No. The application meets the public alley requirements.

Parish opened the public hearing at 7:21 p.m.

Nils Peterson, 841 Travois Way, presented as Director of the Moscow Affordable Housing Trust. He provided background information on what the MAHT does and the definition of "affordable." The target demographic will be people who make <80% of the Area Median Income, because those are the wages that many jobs in Moscow pay. The MAHT uses the Subsidy Retained Model as a Community Land Trust to provide a subsidy to the most income-qualified buyers as possible, and to keep properties affordable as they change ownership. (See attached.) Peterson illustrated how narrower lots increase the tax value per linear foot of public infrastructure. The proposed parcels are rear-loaded onto the alley to prevent backing-up conflicts on Powers Street and Palouse River Drive, and to also allow for a more attractive street façade.

Hamilton asked about parking and street access for the four lots on the far west side of the plat. Peterson said those lots would have grade-level garages and another parking space in the driveway. Hamilton commented that a regular street would require a fire turnaround and asked if the alley would ever connect to the adjoining property. Peterson has talked with the neighboring owner about that possibility for fire access as well as trash collection. Ray added that the eastern portion of the alley did not exceed the 150 ft requirement, so no turnaround was required.

Seever asked how ADA access would be possible with a basement garage. Peterson said the federal requirement is "to the maximum extent possible" so his goal is to demonstrate accessibility for all lots except the three with the greatest elevation change. Parish asked for more detail about the ground lease. Peterson said the MAHT will retain ownership of the land and have ground leases with homeowners. He anticipates the lease rate would be around $50 per month, and several clauses in the lease will satisfy lenders.

Public hearing closed at 7:49 p.m.

Seever commended MAHT for all their hard work. Nelsen moved to recommend approval of the application as presented.

RESULT:	**APPROVED BY ACCLAMATION [UNANIMOUS]**
MOVER:	Nelsen
SECONDER:	Seever

Wilson moved to direct staff to prepare the RCS document for review at a later meeting.

RESULT:	**APPROVED BY ACCLAMATION [UNANIMOUS]**
MOVER:	Wilson
SECONDER:	Seever

5. Accessory Dwelling Unit (ADU) Review [ACTION ITEM]

Continuing from the last meeting's discussion, Ray provided more information on the amount of nonconforming lots in the R-2 area around East City Park which precludes ADUs in those areas. Returning to the last Citizen Survey, Ray provided data regarding citizen support for ADUs in their neighborhood and the quadrant with the greatest support is also the general area where most of the nonconforming lots exist. He also reviewed the common elements discussed during the ordinance drafting, including design, entrance location, owner occupancy, required parking, maximum occupancy and maximum size, with the latter four ultimately being incorporated into the zoning code. Ray concluded that, with the exception of a few interested citizens whose lots aren't large enough for an ADU, the number of ADUs permitted to date have followed the general level of interest shown in the survey data. Parish asked if there was any downside to removing the minimum lot size requirement. Hamilton asked how small the non-conforming lots were and Ray said they vary; many met the 6,250sf minimum at the time they were platted but now the minimum size in R-2 is 7,000sf. For very small lots, the required off-street parking will probably be the issue that prevents an ADU. Hamilton thought as long as owner occupancy, required parking, and maximum occupancy are maintained he would be in support of eliminating the minimum lot size. Nelsen added that ADUs also address the affordable housing issue. Commissioners were receptive to staff drafting an ordinance amendment to eliminate the minimum lot size.

6. Subdivision Code Review [ACTION ITEM]

Ray said if both proposed documents satisfy the Commissioners, he recommended forming a private stakeholder group to review and provide input. Commissioners agreed. Staff will return in a couple months with the outcome of the subcommittee's thoughts.

7. Transportation Commission Meeting Report

Hamilton was not able to attend the last meeting but he listed the agenda items which included Jared Hopkins from ITD explaining when traffic studies are required.

8. Announcements

The July 10 meeting will be cancelled.

The meeting adjourned at 8:22 p.m.

_____

Robb Parish, Vice Chair

BEFORE THE PLANNING AND ZONING COMMISSION
OF THE CITY OF MOSCOW, COUNTY OF LATAH,
STATE OF IDAHO

REASONED STATEMENT OF RELEVANT CRITERIA AND STANDARDS

REASONED STATEMENT OF RELEVANT CRITERIA AND STANDARDS REGARDING A REQUEST FOR THE REZONE OF A FOUR POINT FOUR ZERO (4.40) ACRE AREA OF LAND LOCATED AT 2400 SOUTH HIGHWAY 95 WITHIN THE AREA OF CITY IMPACT OF THE CITY OF MOSCOW, IDAHO.

WHEREAS, the applicant filed an application for a Rezone in the Moscow Area of City Impact on May 19, 2019; and

WHEREAS, this matter came before the Moscow Planning and Zoning Commission during a duly noticed public hearing on June 26, 2019; and

WHEREAS, having reviewed the application, including all exhibits entered, and having considered the issues presented by the applicant and the opponents:

THE PLANNING AND ZONING COMMISSION OF THE CITY OF MOSCOW, IDAHO, AFTER DUE DELIBERATION AND CONSIDERATION, HEREBY CONCLUDES:

I. RELEVANT FACTS AND CONCLUSIONS

1. The Planning and Zoning Commission considered the request pursuant to the City of Moscow 1999 Comprehensive Plan, City of Moscow Zoning Ordinance, the Local Land Use Planning Act, the Moscow Area of City Impact Agreement, and other applicable development regulations.

2. Per the Moscow Area of City Impact Agreement with Latah County, the Moscow Planning and Zoning Commission is to conduct one hearing and forward a recommendation on to Latah County.

3. The subject property is a four point four zero (4.40) acre area of land generally located at 2400 S Highway 95 within the Area of City Impact.

4. The subject property is currently undeveloped and surrounds a property with an existing house, barn, and shop that was previously rezoned in May of 2019.

5. The subject property is primarily surrounded by agricultural lands to the north, east, and south that are within the Area of City Impact. Across the South Fork of the Palouse River to the northeast is Fountains Industrial Park and a runway for crop dusting operations. Across Highway 95 to the west is the current City Limits boundary and properties that are primarily commercial but do include some residential uses. Bonkerz children's play center is located to the northwest, CHS Primeland agricultural is located to the west, and Dale's Boat Service along with single family dwellings are located to the northwest.

6. Within the 2019 Moscow Comprehensive Plan, which has been adopted within the Area of City Impact, the subject property is currently designated as Auto-Urban Commercial.

7. According to the 2019 Comprehensive Plan, Auto-Urban Commercial designated areas,

> *"Provide for commercial services and developments that are motor vehicle oriented or those which require large amounts of land. These areas should be located adjacent to existing commercial developments and along major arterials where the vehicle traffic can be accommodated. Developments within these designations should be required to provide significant landscaping which would be applied to enhancing areas along the street edge, screening parking lots, and buffering adjacent uses. Such areas are most appropriately zoned Motor Business (MB)."*

8. The subject property is located in Latah County within the Area of City Impact and the applicant is proposing to rezone the property to the Motor Business (MB) Zone.

9. The subject property and adjacent properties to the north, south, and east are currently zoned Agriculture/Forestry (AF). Properties across Highway 95 to the west with the City Limits are primarily zoned Motor Business (MB) with the exception of CHS Primeland which is currently zoned Industrial (I). Immediately to the north and west are properties that were rezoned from AF to MB within the past year.

10. According to the City of Moscow Zoning Code, the purpose of the MB Zoning District is to,

> *"provide for the location and grouping of compatible uses having similar operation as they involve enterprises which depend primarily on the transient motor vehicle-based trade. By concentrating such uses the City intends to increase public convenience when utilizing such services and, within the regulation, to allow such activities to render the maximum service."*

12. Uses permitted within the MB Zone include retail enterprises, offices, eating and drinking establishments, printing and publishing houses, religious institutions, residential uses, hotels and motels, off-street parking facilities, kennels, storage facilities, laundromats, and light manufacturing.

13. The City generally encourages annexation of properties that are adjacent to the existing City Limits boundary and are able to be served by City utility services. The City has an existing annexation policy (Resolution 2007-01) which states that property located adjacent to the City shall be annexed when either of the following occurs:

    1. The property is completely surrounded by the City. The City Council in its discretion upon application of the property owner may consider an exemption from this policy where the property is used exclusively for agricultural purposes and there are no structures on or associated with the property or with the exclusive agricultural use. Any construction or placement of a structure of any nature, installation of a well or a sewer system, or like development on any portion of a property exempted under this subsection shall require annexation of the entire exempted property.

    2. The property is served by City water and/or City sewer and the property has a structure located on it or associated with it.

14. The Commission finds that the proposed rezone of the subject property does not meet the City's annexation policy for requiring annexation. The City limits boundary is in close proximity, being across Highway 95 to the west, but the property is not completely surrounded by the City as is

required within the policy. The primary issue is the lack of readily available sewer service in the area, which ends north of the Highway 95 bridge over the South Fork of the Palouse River. The small size of the property and limited utility demand also factor into the decision on whether to recommend annexation.

BASED ON THE ABOVE RELEVANT FACTS AND CONCLUSIONS, THE PLANNING AND ZONING COMMISSION OF THE CITY OF MOSCOW HEREBY FINDS THE FOLLOWING RELEVANT CRITERIA AND STANDARDS:

II. RELEVANT CRITERIA AND STANDARDS

1. **1. The proposed rezone is consistent with Comprehensive Plan goals, objectives, and implementation actions.** The proposed preliminary plat is consistent with the 2009 Comprehensive Plan Land Use Designation of Auto-Urban Commercial (AU-C).
2. **The proposed rezone would provide for the logical and orderly location of land uses and community services and facilities.** The proposed MB Zone provides for a continuation of the MB Zone to the west and the north and is consistent with the surrounding Industrial (I) Zone.
3. **The uses expected to occur as a result of the rezone will be compatible with the surrounding area.** The proposed zoning is consistent with adjacent zoning districts and will create a logical and orderly zoning configuration for the subject area. The adjacent properties in all directions are all primarily commercial except for a few residential properties located within the MB Zone on the west side of Highway 95.
4. **The size, type, and density of development expected to occur as a result of the rezone will not place an undue burden upon delivery of services provided by any political subdivision within the planning jurisdiction.** The proposed zoning and uses are suitable for the area and will not unduly burden the neighborhood of public infrastructure.
5. **The size, type, and density of development expected to occur as a result of the rezone can be adequately served by the existing transportation network, public facilities and services.** The subject property has street access via Highway 95, which can adequately serve any proposed development allowed in the MB Zone. Currently there is insufficient public utility services in the area and the Commission finds that annexation should not be required at this time.

III. DECISION

Based on the above Reasoned Statement of Relevant Criteria, the Planning and Zoning Commission of the City of Moscow recommends approval of the rezone request for the four point four zero (4.40) acre property to Latah County with no conditions.

PASSED BY THE PLANNING AND ZONING COMMISSION OF THE CITY OF MOSCOW this

____ day of _____, 2019.

_____

Wendy McClure, Chair
Planning and Zoning Commission

BEFORE THE PLANNING AND ZONING COMMISSION OF THE CITY OF MOSCOW, COUNTY OF LATAH, STATE OF IDAHO

REASONED STATEMENT OF RELEVANT CRITERIA AND STANDARDS

REASONED STATEMENT OF RELEVANT CRITERIA AND STANDARDS REGARDING A REQUEST FOR A PRELIMINARY SUBDIVISION PLAT OF A ONE POINT FOUR-NINE ACRE PARCEL OF LAND LOCATED AT 1924 NURSERY STREET, KNOWN AS PARADISE VIEW ADDITION TO THE CITY OF MOSCOW, IDAHO.

WHEREAS, the applicant filed an application for a Preliminary Subdivision Plat on June 4, 2019; and

WHEREAS, this matter came before the Moscow Planning and Zoning Commission during a duly noticed public hearing on June 26, 2019; and

WHEREAS, having reviewed the application, including all exhibits entered, and having considered the issues presented by the applicant and the opponents:

THE PLANNING AND ZONING COMMISSION OF THE CITY OF MOSCOW, IDAHO, AFTER DUE DELIBERATION AND CONSIDERATION, HEREBY CONCLUDES:

I. RELEVANT FACTS AND CONCLUSIONS

1. The Planning and Zoning Commission considered the request pursuant to the City of Moscow 2009 Comprehensive Plan, City of Moscow Zoning Ordinance, the Local Land Use Planning Act, and other applicable development regulations.

2. The subject property is a one point four-nine acre (1.49) acre parcel of land located at 1924 Nursery Street.

3. The subject property is currently undeveloped and is surrounded by the Grove multi-family development to the west, Palouse Prairie Charter School to the north, a single family dwelling to the east, and various commercial uses on the south side of Palouse River Drive.

4. The subject property contains areas of steeper sloping topography, primarily in the areas of the property that are directly adjacent to Nursery Street and Palouse River Drive. There are no drainage ways or natural features that have been identified upon the subject property.

5. The subject property is currently designated as High-Density Residential (HD-R). HD-R designated areas are,

   "intended to allow the highest density residential development at common densities between 15 and 26 units per acre. Areas appropriate for this designation include those located adjacent to areas of higher activity where there is a range of uses. High-Density Residential areas should be located adjacent or in close proximity to designated arterial or collector streets. New areas of high-density residential development should be located near mixed-use activity areas and corridors that accommodate multi-modal transportation. Lands designated as High-Density Residential are generally appropriately zoned Medium Density Residential (R3), Multiple Family Residential (R-4), or Residential Office (RO)."

6. The Grove development to the west is also designated as High-Density Residential (HD-R), while properties to the north and east are designated as Auto-Urban Residential (AU-R). Commercial properties on the south side of Palouse River Drive are currently designated as Auto-Urban Commercial (AU-C).

7. The subject property is located adjacent to Nursery Street and Powers Avenue which are designated as local neighborhood streets. Adjacent to the south is Palouse River Drive which is designated as a minor arterial. Since the subject property is within Indian Hills 8th Subdivision, all of the road improvements to the three adjacent streets have already been constructed.

8. The subject property is currently located within the Multiple Family Residential (R-4) Zoning District.

9. According to the Zoning Code the R-4 Zoning District,

> *"provides for the most intense residential land uses permitted in the community. It is to be applied where activity levels are high and adequate public facilities are available, especially near the University of Idaho campus or the City Central Business Zoning District. Adequate transportation access should be given high priority in determining the appropriate location for R-4 zoning districts."*

10. Uses permitted within the R-4 Zone include single family dwellings, two family dwellings, twinhomes, townhouses, and multi-family dwellings. Also permitted are professional offices, bed and breakfasts, daycare facilities, and parking lots.

11. The minimum lot size for parcels within the R-4 Zone is 5,000 sf for single-family, two-family, and multi-family dwellings; 2,250 sf for twinhome dwellings; and 1,800 sf for townhouse dwellings. The minimum lot width is for single-family, two-family, and multi-family dwellings is 50 feet; 25 feet for twinhomes; and 18 feet for townhouses.

12. The applicant is proposing to subdivide the existing 1.49 acre parcel into seventeen parcels ranging from 1,806 sf to 5,002 sf in size. Also included in the preliminary plat is a parcel which contains the stormwater detention pond for the development.

13. All of the proposed townhouse lots meet the minimum lot size of 1,800 sf; the twinhome lots meet the minimum lot size of 2,250 sf; and the single family lot meets the 5,000 sf minimum lot size requirement. All of the proposed townhouse, twinhome, and single family lots also meet the minimum lot width requirements for the respective uses.

14. To provide access to the rear of the lots, the applicant is proposing to dedicate and construct a public alley that will extend from Nursery Street in an east/west direction and terminate 12.5 ft from the east property line. At approximately the midpoint of the subject property the alley will then extend north to connect with Powers Avenue. The alley is proposed to be 16 ft in width of pavement with 2 ft gravel shoulders on both sides, for a total width of 20 feet. The proposed alley meets City of Moscow standards for public alley design.

15. Water services currently exist within Nursery Street, Powers Avenue, and Palouse River Drive. The property is considered developable in the City's Comprehensive Water System Plan dated January 2012. Public Works has determined that the existing system has adequate potable and fire flows to serve the proposed subdivision.

16. Sanitary sewer services currently existing within Nursery Street and Powers Avenue. Public Works has determined that the system has adequate capacity to convey the additional flow from

the development. The subject property is considered developable in the Comprehensive Sewer System Plan dated September 2011.

17. The storm sewer for the subdivision is proposed to be conveyed to an existing stormwater detention pond at the southeast corner of the development. The proposed detention pond shall meet the current Moscow Stormwater Runoff Control Standards.

18. The subject property is part of Indian Hills 8th Subdivision, which the parkland dedication has already been satisfied via Harvest Park. Therefore, no further dedication is required for this proposed subdivision.

19. The applicant conducted a neighborhood meeting with affected property owners within 600 feet of the subject property on May 23, 2019 to discuss the proposed preliminary plat.

BASED ON THE ABOVE RELEVANT FACTS AND CONCLUSIONS, THE PLANNING AND ZONING COMMISSION OF THE CITY OF MOSCOW HEREBY FINDS THE FOLLOWING RELEVANT CRITERIA AND STANDARDS:

II. RELEVANT CRITERIA AND STANDARDS

1. **The proposed subdivision is in conformance with all applicable City Code requirements.** The preliminary plat is consistent with all city requirement including minimum lot area, minimum lot width, street standards, stormwater detention standards, public utilities, and parkland dedication.

2. **The proposed subdivision is in general conformance with the Comprehensive Plan.** The proposed preliminary plat is consistent with the uses and densities designated within the 2019 Comprehensive Plan land use designation of High-Density Residential (HD-R).

3. **Public Services and utilities are available or can be made available and are adequate to accommodate the proposed subdivision.** The Public Works Department has determined that the existing water and sewer systems have adequate capacity to serve the proposed subdivision.

4. **The proposed subdivision will not be detrimental to the public health, safety, or general welfare.** The proposed preliminary plat provides a diverse range of housing types and is consistent with the Comprehensive Plan. The proposal will not be detrimental to the public health, safety, and general welfare.

III. DECISION

Based on the above Reasoned Statement of Relevant Criteria, the Planning and Zoning Commission of the City of Moscow recommends approval of the preliminary subdivision plat request for the one point four-nine acre (1.49) acre parcel of land located at 1924 Nursery Street with no conditions.

PASSED BY THE PLANNING AND ZONING COMMISSION OF THE CITY OF MOSCOW this

____day of_____, 2019.

_____

Wendy McClure, Chair
Planning and Zoning Commission

COMMUNITY DEVELOPMENT DEPARTMENT
STAFF REPORT

HEARING DATE: July 24, 2019

GENERAL INFORMATION

Hearing Body: Planning and Zoning Commission

Subject: 1651 Carmichael Rd – Conditional Use Permit Application for a Recreational Vehicle Park in the Multiple Family Residential (R-4) Zoning District per MCC 4-3-4.

Attachments:

1. Notice of Public Hearing
2. Application for Conditional Use Permit
3. Site Plan
4. Stormwater Detention Plan
5. Stormwater Report

Prepared by: Mike Ray

STAFF REVIEW

Proposal: The applicant, Dan Mack, is proposing to expand an existing Recreational Vehicle (RV) Park by thirteen RV spaces at 1651 Carmichael Road in the Moscow Area of City Impact. The RV park currently has twenty-one RV spaces and the applicant is proposing to expand the RV park into a gravel area that was previously approved for RV storage. The applicant is proposing to create thirteen RV spaces with full hook-ups and an additional area with another thirteen RV spaces with only electrical connections.

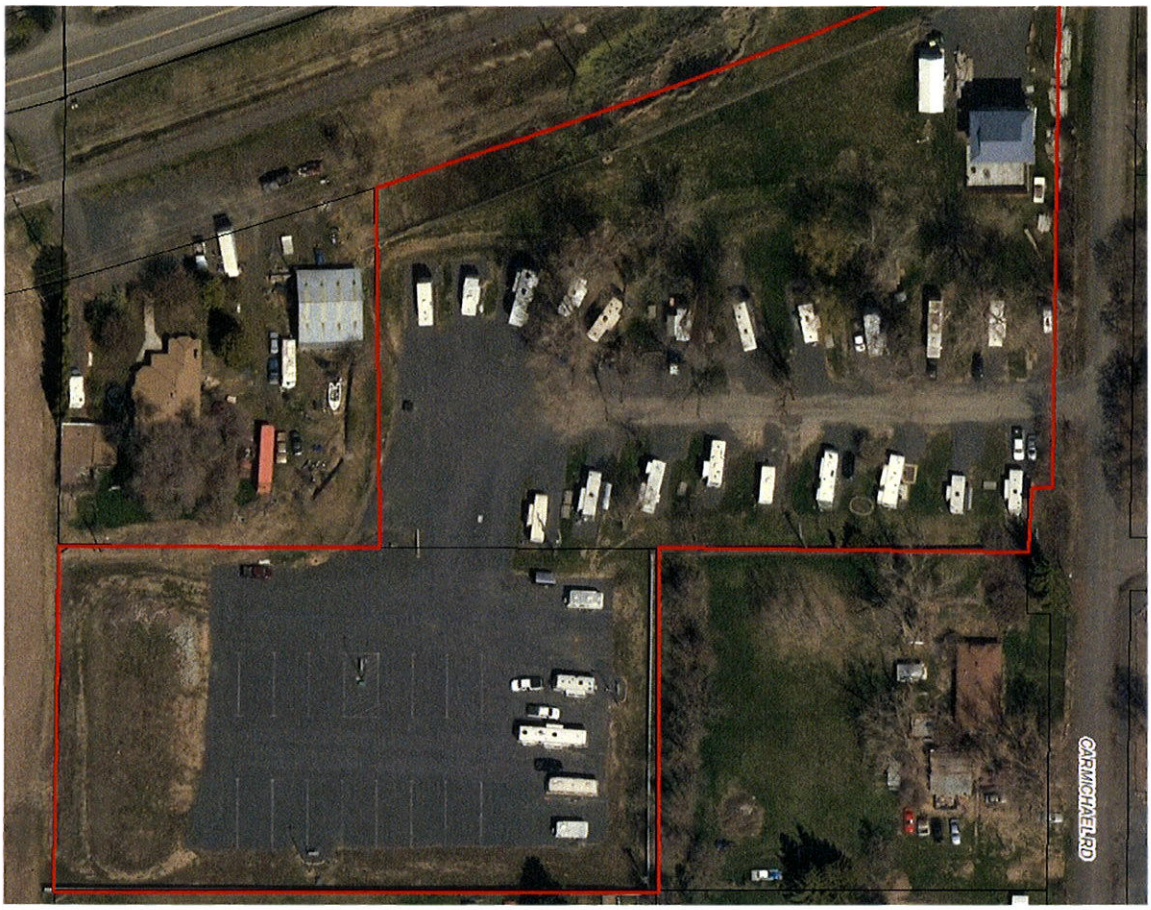
Background: A Special Use Permit was previously approved upon the subject property in 2010 in order to establish an RV Park. The subject property has historically been used as a mobile home park and the applicant had previously transitioned the use into a fifteen space RV Park using the existing infrastructure that serviced the mobile home park.

In 2014, an additional SUP was approved which allowed the applicant to expand the existing RV Park by adding six RV spaces. Then in 2016, the applicant rezoned an adjacent 1.90 acre parcel to the Agriculture/Forestry (AF), and concurrently was approved for a Conditional Use Permit to allow for RV storage. The applicant developed the 1.90 acre parcel as a large gravel parking area with stormwater detention on the west side and allowed the storage of RVs.

Site and Area Land Use: The entire subject property is an approximately 4.85 acre parcel with 385 feet of frontage along Carmichael Road. The subject property is relatively level with a gradual slope to the southwest corner of the property. Surrounding

uses are predominantly single family residential rural lots as well as undeveloped agricultural lands.

Vicinity Map



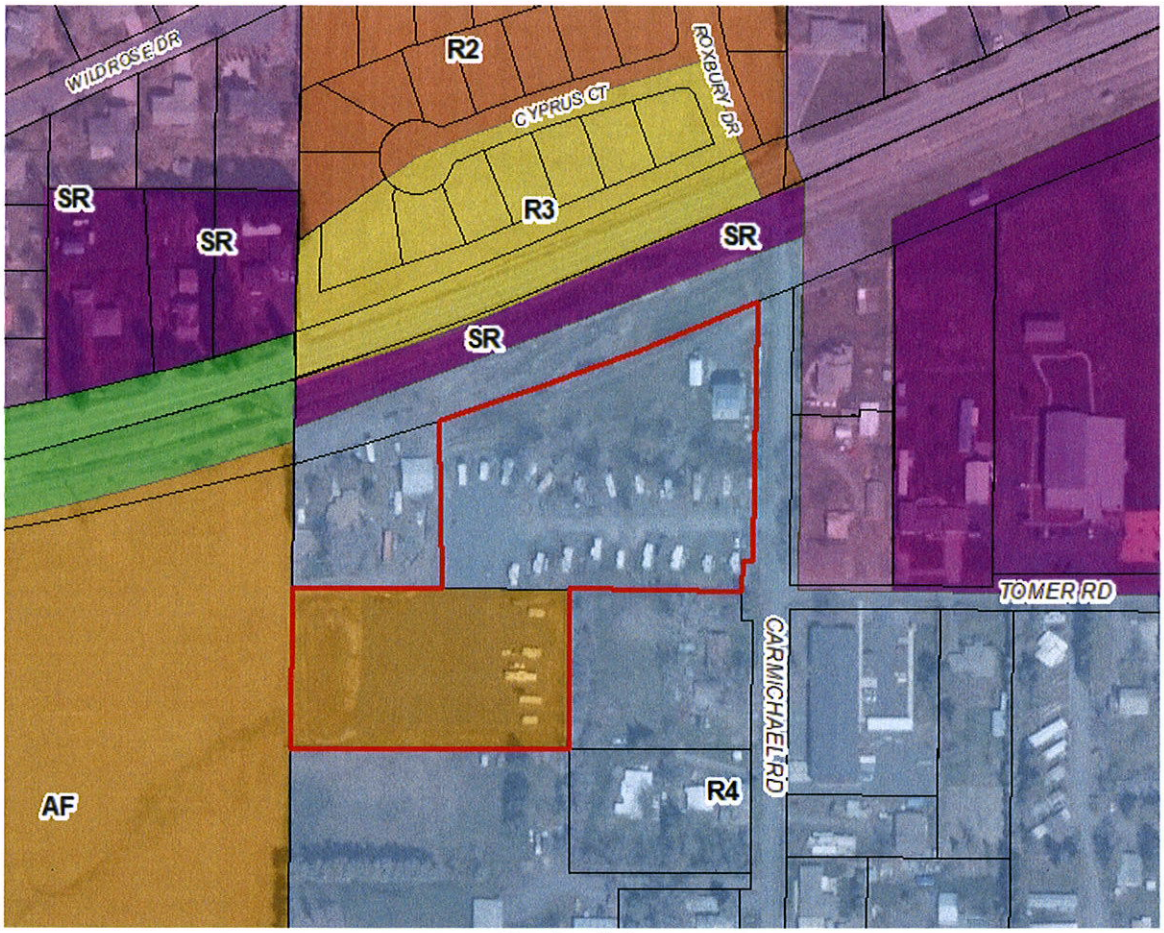
Aerial of Existing RV Park

Zoning: The subject property and adjacent properties to the south and west are currently zoned Multiple-Family Residential (R-4), while adjacent property to the east is currently zoned Single-Family Residential (R-1). The subject property is located in Latah County within the Area of City Impact.

According to the City of Moscow Zoning Code, the R-4 Zoning District,

> *"... provides for the most intense residential land uses permitted in the community. It is to be applied where activity levels are high and adequate public facilities are available, especially near the University of Idaho campus or the City Central Business Zoning District. Adequate transportation access should be given high priority in determining the appropriate location for R-4 zoning districts."*

Recreational Vehicle Parks are specially permitted uses within the R-4 Zoning District and are subject to Title 6, Chapter 4, Recreational Vehicle Parks.

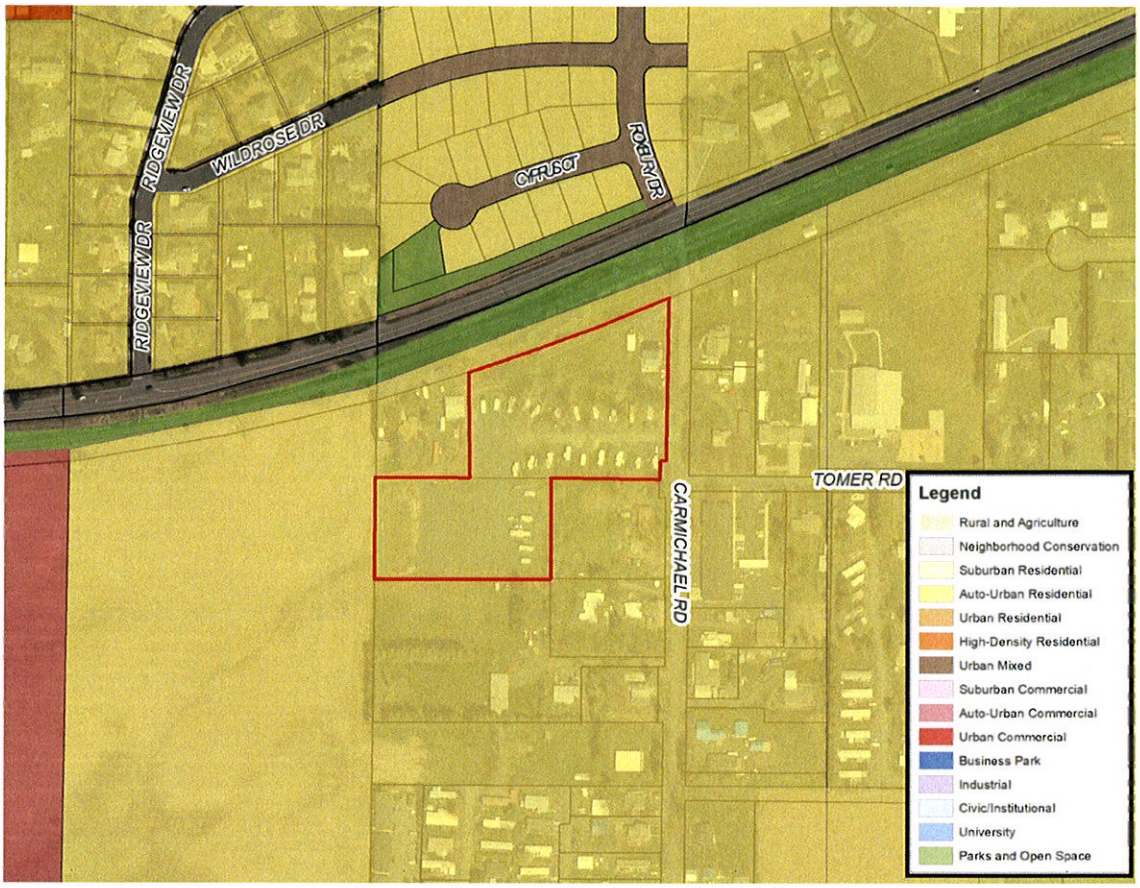


Zoning Map

Comprehensive Plan: The subject property is designated as Auto-Urban Residential (AU-R) upon the 2019 City of Moscow Comprehensive Plan Land Use Map. Surrounding properties to the west, south, and east are also designated as AU-R, while the Paradise Path to the north is designated as Parks and Open Space.

According to the Comprehensive Plan, the AU-R designated areas,

> *"designated areas contain predominantly single-family detached homes on lots ranging from 7,000 to 11,000 square feet in size and are more isolated from surrounding uses which may require residents to rely more on automobile transportation. This designation includes those areas generally anticipated to be developed for low- to moderate-density residential uses at densities between three to six units per acre which could include a mix of detached single-family, twinhome, and townhome residential dwellings. Appropriate current zoning for Auto-Urban Residential designated areas include Low Density Residential (R-1), Moderate Density Single Family Residential (R-2) and Medium Density Residential (R-3) in order to include a mixture of attached and detached dwellings where appropriate."*



Comprehensive Plan Land Use Map

RV Park Standards: MCC 6-4-10 identifies specific standards for RV Park site development which includes:

Minimum RV space size: The minimum space size determined in the RV Park standards is 40ft x 20ft, while allowing up to forty percent of the spaces to be a minimum of 25ft x 20ft. The applicant is proposing thirteen additional RV spaces with full hook-ups that are 40ft x 20ft and another thirteen spaces with only electrical connection that 40ft x 22ft. All proposed spaces which meet the minimum requirements of the RV park code.

Space Design: The design of RV spaces shall be such that the minimum space between recreational vehicles is ten feet. The applicant's proposed space between each RV is ten feet.

Toilet facilities and potable water: All RV Park facilities which allow tents or recreational vehicles which are not self-contained are required to provide toilet facilities and potable water. The applicant is not proposing to allow tents and potable water connections are proposed to be available to the thirteen RV spaces via a private well.

Common Open Space: Each RV space within the park is required to provide common open space exclusive of all setback areas and shall be developed with turf and trees. The size of the open space shall be left to the discretion of the developer. The applicant had

previously provided approximately 0.8 acres of total open space in the northeast portion of the property.

Trash Receptacles: Refuse areas shall be provided and shall be located no further than 150 ft. from any RV space. The applicant has provided a dumpster which is located at the west end of the RV Park, near the RV turnaround. This location is further than 150ft from the RV spaces on the east side of the Park, so the applicant had previously provided some individual trash cans on the eastern portion of the RV Park. An additional trash receptacle is proposed to be located in the northern portion of the expanded area.

Access, Streets, Traffic: The subject property is located adjacent to Carmichael Road which is a 20 foot wide designated collector and is currently paved with no sidewalks, curbs, or gutters. The property is 100 feet south of State Highway 8 and is separated by the Latah Trail which is directly adjacent to the subject property.

Internal private streets are required to be a minimum of twenty-eight feet wide which includes a twenty foot surface with four foot shoulders on either side. The applicant has placed ¾ inch processed rock, six inches deep for the entire twenty-eight foot wide access drive as well as each RV space. The applicant's proposed street, shoulder, and turnaround meet the requirements for streets within a RV Park development.

Buffer Yards, Setbacks, Landscaping: Setbacks and buffers are required to provide a physical and/or visual buffer to eliminate potential land use conflicts. Setbacks or buffer yards are required as follows:

Adjoining Public Streets: Portions of a RV Park that adjoin public streets shall have a Type B landscape buffer which consists of four canopy trees, six understory trees, and eight shrubs per 100 lineal feet. The subject property currently has an existing landscape buffer which is adjacent to Carmichael Rd, which satisfies the Type B landscape buffer requirement.

Adjacent to Residential and Industrial Uses: Portions of a RV Park that are adjacent to a residential or industrial use shall have a minimum setback of ten feet from the property line and shall have a six foot high, sight-obscuring fence located within the setback area. The applicant has previously constructed a six foot high fence on approximately 900 ft of the southern property line which is adjacent to a residential property. The northwestern property line which is also adjacent to a residential use currently has a six foot high fence which satisfies the requirements on this portion of the property.

Adjoining Undeveloped Land: Portions of the RV Park that are adjacent to undeveloped land shall have a Type A landscape buffer. The proposed expansion area is adjacent to undeveloped land to the west. The applicant is planning on installing a Type A landscape buffer along the entire west property line adjacent to the undeveloped property, which meets the requirement.

Landscaping: At least one canopy tree of 1.5 inch caliper and two shrubs a minimum of twelve inches in height are required per every two RV spaces. Additionally, all common areas not utilized for structures, parking or other landscaping shall be covered by turf or other vegetative ground cover. The applicant has indicated that there will be a tree and shrubs within the green strips between each of the RV spaces on the west side and surrounding the perimeter of the expanded area. A total of 13 trees and 26 shrubs will need to be provided within the expanded area.

Lighting: The applicant has provided three freestanding lights within the proposed expanded portion of the RV Park in addition to the two existing freestanding lights within the current RV Park. Three freestanding lights should be sufficient in servicing the expanded RV Park development area.

Utilities: The proposed RV Park is located in Latah County, within the Area of City Impact. Therefore, there are no requirements for the proposed Park to connect to City of Moscow water or sewer. The proposed park is currently serviced with an existing private well and sewer connections are provided via the Southeast Sewer District.

RELEVANT CRITERIA AND STANDARDS

The following are Staff's comments relating to the criteria required for approval of a Conditional Use Permit. See the attached worksheet for each of the criteria. The following statements may be used for the Relevant Criteria and Standards or changed to include or remove any statement deemed necessary or appropriate by the Board.

1. **The proposed use is a conditionally permitted use within the Zoning District.**

2. **The character of the proposed use will be in harmony with the neighborhood and surrounding land uses.**

3. **The proposed use, as approved with conditions, will not generate nuisances that would be injurious or detrimental to the adjoining properties or the neighborhood (including, but not limited to, noise, dust, glare, vibrations, odors, and the like).**

4. **The location, design, and size of the proposed use is adequately served by existing streets, public facilities, and services.**

5. **The proposed use will not endanger the public health or safety if located where proposed.**

6. **Proposed use meets all applicable development standards of the Zoning Code.**

7. **The proposed use will not be in conflict with the Comprehensive Plan.**

RECOMMENDATIONS:

Staff recommends that the City of Moscow Planning and Zoning Commission put forth a recommendation of approval of the Conditional Use Permit application for the expansion of an RV Park to Latah County with the following condition:

1. The applicant provide landscaping in the expanded RV Park area at a ratio of one canopy tree and two shrubs every two RV spaces within 90 days of final approval.

NOTICE OF PUBLIC HEARING

Proposal for Conditional Use Permit at 1651 Carmichael Rd in the Area of City Impact
Permit Application LUP2019-0025

A public hearing at which you may be present and speak will be conducted by the Moscow Planning and Zoning Commission at which time the following proposition will be discussed for land generally shown on the vicinity map below:

> Conditional Use Permit Application to expand an existing Recreational Vehicle Park in the Agriculture, Forestry, and Outdoor Recreation (AF) Zoning District per MCC 4-3-4.

The subject property is within the Moscow Area of City Impact. The City of Moscow Planning and Zoning Commission will make a recommendation to the Latah County Board of County Commissioners regarding this matter.

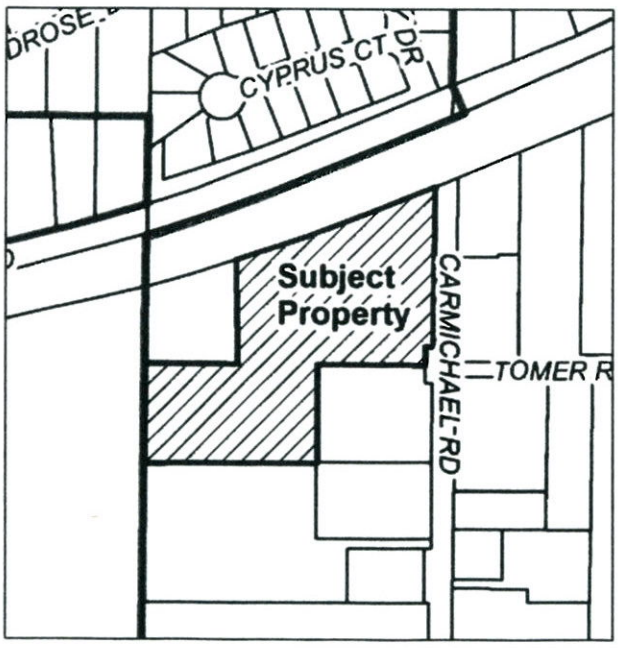
MEETING DATE: Wednesday, July 24, 2019

HEARING LOCATION: Council Chambers, Second Floor, Moscow City Hall
206 East Third Street, Moscow, Idaho

MEETING TIME: 7:00 p.m.

Note: Meeting start time is not necessarily indicative of the start time for review of the application advertised in this notice. Multiple hearings and/or agenda items may make it difficult to determine start time for review of application advertised in this notice, which could occur late in the meeting.

The file containing information on this matter is available for public review (an appointment may be necessary) at the Community Development Department located in the Paul Mann Building, 221 East Second Street, Moscow, Idaho. You may also call 883-7035 to get a meeting agenda, further information about the application, the public meeting process and/or to request a meeting with City Staff. Public participants desiring to submit textual materials (excluding petitions) to the decision-making board shall do so at least five (5) calendar working days in advance of the scheduled meeting to the Community Development Department. Additionally, you may obtain further information about the public hearing process and procedures on the City's Website at: *http://id-moscow.civicplus.com/593/Public-Hearing-Notices*



Laurie M. Hopkins, Moscow City Clerk

Anne Peterson

Anne Peterson, Deputy Clerk

Publish: Saturday, July 6, 2019

LATAH COUNTY
PLANNING and BUILDING
Ph: 208-883-7022
Fax: 208-883-7225
pb@latah.id.us

CITY OF MOSCOW
COMMUNITY DEVELOPMENT
Ph: 208-883-7035
Fax: 208-883-7033
apeterson@ci.moscow.id.us

For Office Use Only			
	Date Received		
Dept	Fee Type	Fees	Paid
LC	Application Fee	300.00	✓
	Receipt Number	2139	
	Forwarded to City	6/5/19	
CD	Hearing Date	7-24-19	

LUP2019-0025

APPLICATION FOR CONDITIONAL USE PERMIT

(Please type or print plainly with blue ink.)

GENERAL INFORMATION

1. **Applicant**

Name: DAN MACK Telephone: 208-610-4078

1651 CARMICHAEL RD MOSCOW
(home address)

Relationship to affected property (please check one):

Owner ☑ Purchaser ☐ Lessee ☐ Other ☐ (explain below)

2. **Owner of Affected Property** (if other than applicant)

Name: _____ Telephone: _____

_____
(mailing address)

3. **Location of Affected Property**: 1651 CARMICHAEL RD

Acres: 1.86 Legal Description: _____

If described by Metes and Bounds, please attach deed on a separate sheet.

4. **Proposal**: The applicant proposes the following use and/or construction for the above-described property:

RV PARKING

The proposed activities and use shall be shown on an attached site plan drawn to a standard engineer's or architect's scale. The site plan shall show, label and dimension all property lines and easements, existing and proposed buildings, parking lot and driveway(s), fencing and landscaping. A site topography map shall be provided when appropriate.

5. **Authorization**: Section _____ of the Moscow Zoning Ordinance authorizes the proposed use, subject to a Conditional Use Permit.

6. **Operating Characteristics**: Detail the operating characteristics of the proposed use. In other words, provide specific information which describes and defines how the proposed use will be conducted and what will be involved in the day to day operations of the proposed use. Applicable information may include hours of operation, number of people (employees, customers, students, etc.) involved, traffic and/or delivery information, services provided, equipment or machinery which may be involved, or any other information which helps describe and define the proposed use and impacts which it may have.

OVER NIGHT RV USE

7. *Before the City of Moscow and Latah County may issue a Conditional Use Permit, they must first make findings of compliance with the following seven relevant criteria and standards. Please indicate in the spaces provided below what you believe to be justification showing compliance with each of the relevant criteria and standards.*

Criteria #1. THE PROPOSED USE IS A CONDITIONALLY PERMITTED USE WITHIN THE ZONING DISTRICT.
Justification and compliance with criteria #1:

NEXT TO RV PARK

Criteria #2. THE CHARACTER OF THE PROPOSED USE WILL BE IN HARMONY WITH THE NEIGHBORHOOD AND SURROUNDING LAND USES.
Justification and compliance with criteria #2:

NEXT TO RV PARK

Criteria #3. THE PROPOSED USE AS APPROVED, OR AS APPROVED WITH CONDITIONS, WILL NOT GENERATE NUISANCES THAT WOULD BE INJURIOUS OR DETRIMENTAL TO ADJOINING PROPERTIES OR THE NEIGHBORHOOD (INCLUDING BUT NOT LIMITED TO NOISE, DUST, GLARE, VIBRATIONS, ODORS AND THE LIKE).
Justification and compliance with criteria #3: NO

Criteria #4. THE LOCATION, DESIGN, AND SIZE OF THE PROPOSED USE WILL BE ADEQUATELY SERVED BY EXISTING STREETS, PUBLIC FACILITIES AND SERVICES.
Justification and compliance with criteria #4: YES

Criteria #5. THE PROPOSED USE WILL NOT ENDANGER THE PUBLIC HEALTH OR SAFETY IF LOCATED WHERE PROPOSED.
Justification and compliance with criteria #5: NO

Criteria #6. THE PROPOSED USE MEETS ALL APPLICABLE DEVELOPMENT STANDARDS OF THE ZONING CODE.
Justification and compliance with criteria #6: YES

Criteria #7. THE PROPOSED USE WILL NOT BE IN CONFLICT WITH THE COMPREHENSIVE PLAN.
Justification and compliance with criteria #7: NO

CONDITIONS OF APPROVAL

The City of Moscow or Latah County may impose conditions including, but not limited to, those (1) minimizing adverse impact on other development; (2) controlling the sequence and timing of development; (3) controlling the duration of development; (4) assuring that development is maintained properly; (5) designating the exact location and nature of development; (6) requiring the provision for onsite or offsite public facilities or services; (7) requiring more restrictive standards than those generally required in an ordinance; and/or (8) requiring mitigation of effects of the proposed development upon service delivery by any political subdivision, including school districts, providing services within the planning jurisdiction.

COMPLIANCE

1. In the event of failure to comply with the plans proof by the Board of Adjustment, or with any conditions imposed upon the Conditional Use Permit, the permit shall be immediately revoked and shall be automatically null and void.
2. Where plans are submitted and approved as part of the application for a Conditional Use Permit, modifications of the original plans may be required by the Board as a condition of approval.
3. Where plans approved by the Board of Adjustment are modified following such approval, such plan modifications must be submitted to and determined by City staff to be in substantial conformance with the plans approved by the Board. If plan modifications are not in substantial conformance, the plan modifications must be resubmitted to the Board for an additional public hearing as an amendment to the Conditional Use Permit application.

REVOCATIONS

If a Building Permit and/or Certificate of Occupancy pertaining to the Conditional Use Permit is not obtained for the subject property within one year from the date of the Board of Adjustment's final decision, the Conditional Use Permit shall be immediately revoked and shall be automatically null and void. If the use and/or occupancy for which the Conditional Use Permit is approved ceases for a period of twelve consecutive months, unless otherwise provided for in the Conditional Use Permit, then the Conditional Use Permit shall be immediately revoked and shall be automatically null and void.

Application Submittal:

This application must be completed and submitted with the below described items to the Moscow Community Development Director at least twenty-one days prior to the hearing at which the application is to be considered by the Board or the application will not be processed.

The following items must be submitted with this application before it will be processed:

1. Application Fee
2. Site Plan, drawn to scale
3. Floor Plans, drawn to scale
4. Elevation Drawings, drawn to scale (for new construction only)

I understand this information is a public record and may be posted to a public website.

Alan Mark — Applicant's Signature — 6/5/19 — Date

Alan Mark — Owner's Signature — 6/5/19 — Date

DUMPSTER

40 x 30

40'

40'

40 x 22

TYPE 'A' BUFFER

10'

40 x 20

City of Moscow; Access Geographic, LLC, Tempe, Arizona in conjunction with Zennacle Geospatial and Peregrine Aerial Surveys

RAMBLER RV SITE EXPANSION

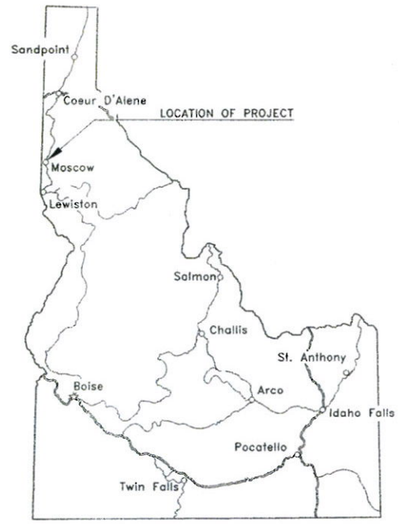
CITY OF MOSCOW
LATAH COUNTY, IDAHO

BASIS OF ELEVATION

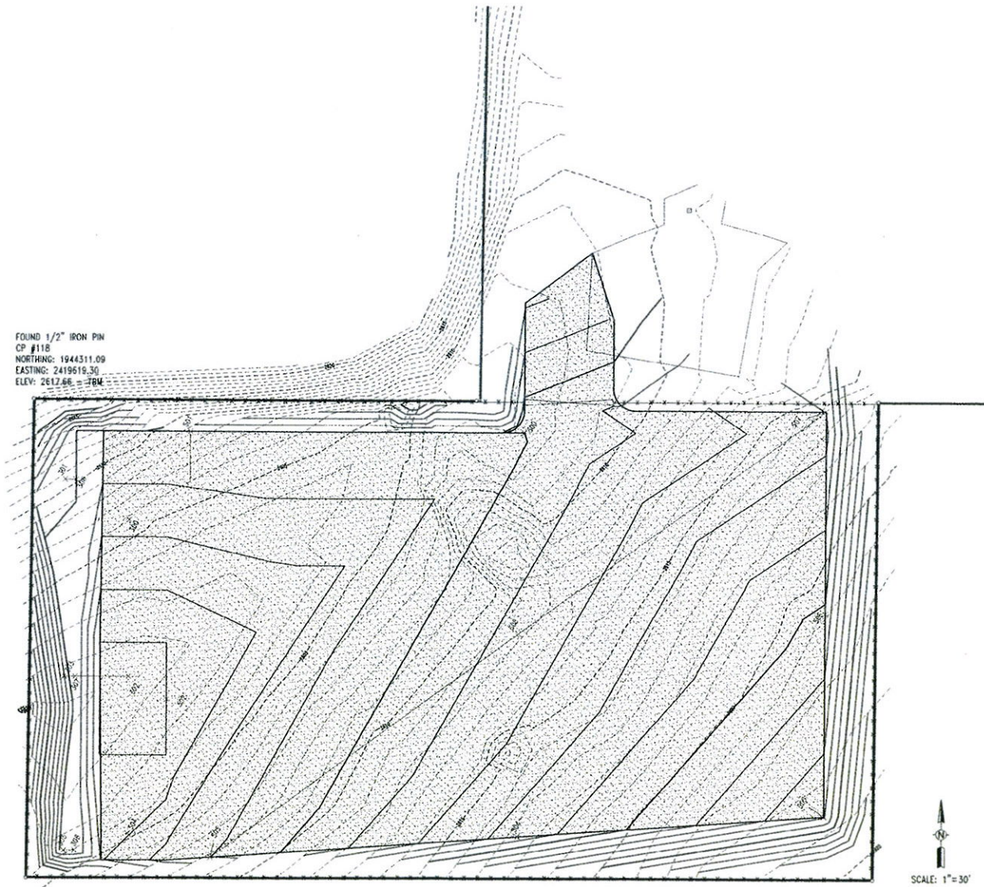
THE BASIS OF ELEVATION FOR THIS PROJECT IS NAVD88, ESTABLISHED BY GPS. THE GPS BASE POSITION BEING CORRECTED BY NGS ONLINE POSITIONING USER SERVICE (OPUS).
A TEMPORARY BENCH MARK (TBM) WAS ESTABLISHED AT THE IRON PIN AT THE NORTHWEST CORNER OF THIS PARCEL. SHOWN HEREON AS CP #118, ELEVATION: 2617.66 FEET.

DRAWING INDEX

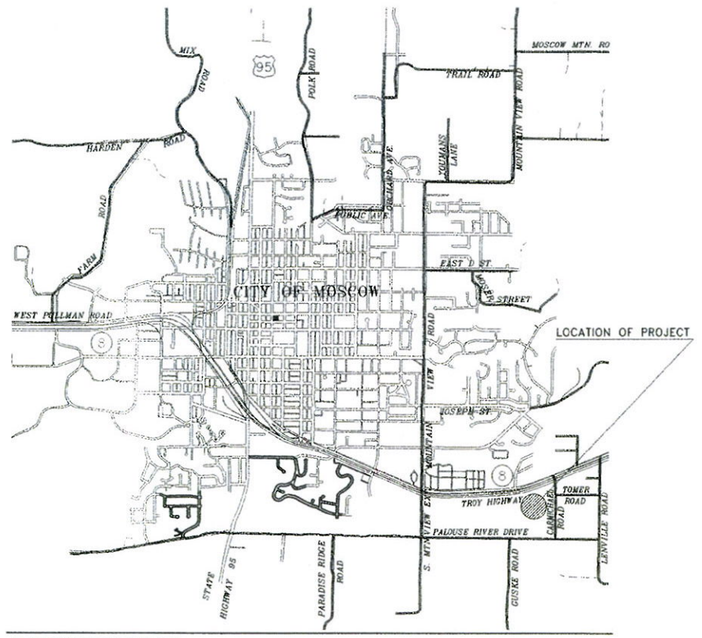
Sheet Number	Sheet Title
C1	COVER SHEET
C2	EROSION CONTROL, GRADING AND LAYOUT PLAN



Know what's below. Call before you dig. 811



CARMICHAEL ROAD



VICINITY MAP

Hedge & Associates, Inc.
Engineers • Planners • Landscape Architects
P.O. Box 8728
835 S. Main Street, Suite
Moscow Idaho 83843
(208) 882-3500

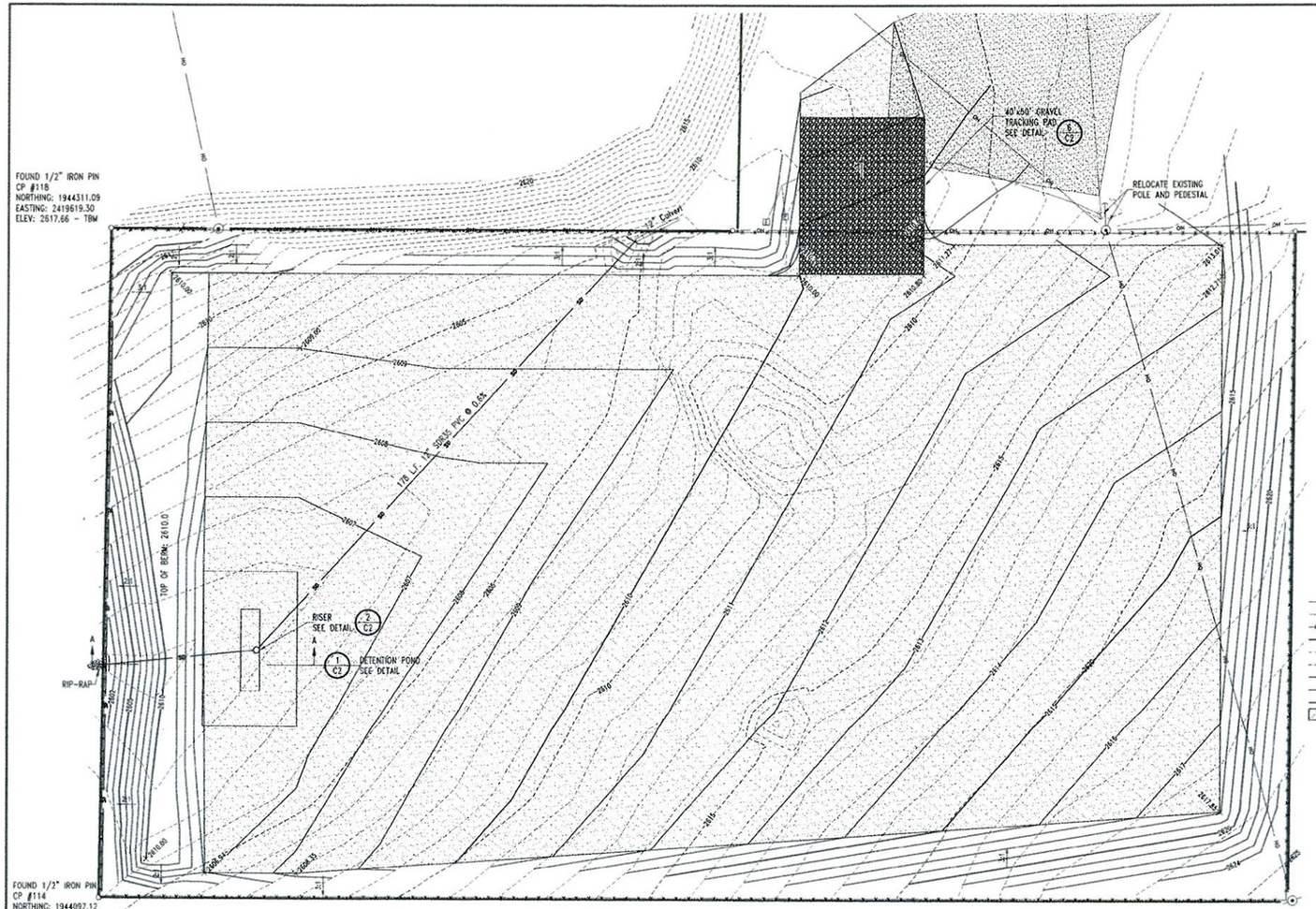
PROFESSIONAL ENGINEER LICENSED 13384 7-8-16 STATE OF IDAHO SCOTT BECKER

RAMBLER RV SITE EXPANSION
COVER SHEET
DAN MACK
1851 CARMICHAEL ROAD
LATAH COUNTY, IDAHO
(208) 610-4078

Designed By:	SB
Drafted by:	SW
Checked by:	SB
File Name:	3745 COVER.dwg
Tab:	COVER
Layer Style:	STANDARD
Plot Style	OCE.CTB
Project:	3745-11-15
Date:	7/8/2016

C1

P:\3745 Rambler RV\DWG Work\COVER.dwg, 7/8/2016 8:57:19 AM



811 Know what's below. Call before you dig.

LEGEND

- FOUND IRON PIN
- EXISTING UTILITY POLE
- EXISTING POWER PEDESTAL
- EXISTING POWER METER
- CB CATCH BASIN
- +2617.65 SPOT ELEVATION – FINISHED GRADE
- OH EXISTING OVERHEAD UTILITY LINE
- P EXISTING UNDERGROUND POWER LINE
- CHAIN LINK FENCE
- SD STORM DRAIN
- EXISTING 1' CONTOUR INTERVAL
- EXISTING 5' CONTOUR INTERVAL
- PROPOSED 1' CONTOUR INTERVAL
- PROPOSED 5' CONTOUR INTERVAL
- SF SILT FENCING
- GRAVEL SURFACE

SCALE: 1"=20'

BASIS OF ELEVATION

THE BASIS OF ELEVATION FOR THIS PROJECT IS NAVD88, ESTABLISHED BY GPS. THE GPS BASE POSITION BEING CORRECTED BY NGS ONLINE POSITIONING USER SERVICE (OPUS).
A TEMPORARY BENCH MARK (TBM) WAS ESTABLISHED AT THE IRON PIN AT THE NORTHWEST CORNER OF THIS PARCEL. SHOWN HEREON AS CP #118, ELEVATION: 2617.66 FEET.

GRADING NOTES

ESTIMATED GRADING QUANTITIES

RAW CUT VOLUME = 4,166 C.Y.

RAW FILL VOLUME = 3,908 C.Y.

1. THIS PLAN IS ACCURATE FOR GRADING AND THE RELATED EROSION AND SEDIMENT CONTROL PURPOSES ONLY.
2. ALL AREAS TO RECEIVE EMBANKMENT (FILL) SHALL FIRST BE CLEARED AND GRUBBED.
3. ALL TOPSOIL SHALL BE EXCAVATED AND REMOVED FROM EMBANKMENT (FILL) AREAS. EXCAVATED TOPSOIL MATERIAL MAY BE STOCKPILED ON-SITE FOR USE AS LANDSCAPING MATERIAL – PROVIDE SILT FENCE AROUND STOCKPILES.
4. BORROW FOR EMBANKMENT (FILL) SHALL CONSIST OF NATIVE PALOUSE LOESS OR CLAY, OR ANY APPROVED GRAVELLY MATERIAL. ALL BORROW SHALL BE FREE OF ROOTS, BARK, TOPSOIL, ORGANIC OR OTHER DELETERIOUS MATERIALS.
5. COMPACT ALL EMBANKMENT (FILL) TO 95% MINIMUM OF THE PROCTOR VALUE DENSITY DETERMINED BY THE AASHTO T-99 METHOD. THE METHOD FOR CONSTRUCTING EMBANKMENT (FILL) SHALL BE SUCH THAT 95% MINIMUM DENSITIES ARE ACHIEVED THROUGHOUT.
6. WHERE EMBANKMENT (FILL) IS PLACED ON AN EXISTING SLOPE 4:1 OR STEEPER THE EXISTING SLOPE SHALL BE BENCHED HORIZONTAL PRIOR TO PLACING BORROW. THE WIDTH OF THE BENCHES SHALL NOT BE LESS THAN FIVE (5) FEET IN WIDTH.
7. COMPACTION TESTING SHALL BE PROVIDED BY THE OWNER. COMPACTION TEST LOCATIONS SHALL BE RECORDED ON A SITE PLAN SHOWING TEST NUMBER, DATE, AND ELEVATION OF EACH TEST. A REPORT OF THESE TESTS SHALL BE PROVIDED TO THE OWNERS, ENGINEER, CONTRACTOR, AND CITY. THERE SHALL BE A SUFFICIENT NUMBER OF TESTS TO ASSURE THAT 95% MINIMUM COMPACTION HAS BEEN ACHIEVED THROUGHOUT ALL EMBANKMENT (FILL) AREAS.
8. OWNER IS RESPONSIBLE TO SECURE ALL NECESSARY AUTHORIZATION FOR GRADING ACTIVITIES REQUIRED ON ADJACENT PROPERTIES.
9. COMPLIANCE WITH NPDES PHASE II IS REQUIRED

EROSION CONTROL NOTES

1. EROSION CONTROL MEASURES AS SET FORTH IN THIS PLAN SHALL APPLY TO ALL CONSTRUCTION ACTIVITY RELATIVE TO THIS SITE, INCLUDING BUT NOT LIMITED TO, ALL EARTHWORK AND INSTALLATION OF PUBLIC IMPROVEMENTS.
2. SHOULD THE ENGINEER DETERMINE THAT THE EROSION CONTROL MEASURES INSTALLED AS INDICATED ON THIS EROSION CONTROL PLAN ARE INADEQUATE AND/OR INEFFECTIVE, THE CITY ENGINEER SHALL DIRECT THE IMPLEMENTATION OF ADDITIONAL EROSION CONTROL MEASURES (AT THE EXPENSE OF THE DEVELOPER) TO ALLEVIATE INADEQUACIES.
3. THE OWNER AND/OR DEVELOPER OF THE PROPERTY IS ULTIMATELY RESPONSIBLE FOR THE FURNISHING, INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES NECESSARY FOR FULL COMPLIANCE WITH MOSCOW CITY CODE.

IT IS NECESSARY FOR ANY PROJECT LARGER THAN ONE ACRE IN SIZE TO HAVE AN EPA NOTICE OF INTENT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER AN NPDES GENERAL PERMIT (NOI PHASE II) FORM ON FILE WITH THE EPA STORM WATER NOTICE PROCESSING CENTER AT:

FOR REGULAR U.S. MAIL DELIVERY:
EPA STORMWATER NOTICE PROCESSING CENTER
MAIL CODE 4203M
U.S. EPA
1200 PENNSYLVANIA AVENUE, NW
WASHINGTON, DC 20460

FOR OVERNIGHT/EXPRESS MAIL DELIVERY:
EPA STORMWATER NOTICE PROCESSING CENTER
ROOM 7420
U.S. EPA
1201 CONSTITUTION AVENUE, NW
WASHINGTON, DC 20004

PRIOR TO CONSTRUCTION ACTIVITIES:

1. INFORM CITY, AND OTHER INSPECTORS, OF WORK SCHEDULED FOR WEEKENDS OR HOLIDAY.
2. CONSTRUCT GRAVEL PADS AT ENTRANCES TO SITE, AS INDICATED ON PLAN.
3. PLACE SILT FENCING AND CHECK DAMS AS INDICATED ON PLAN PRIOR TO ANY EXCAVATION OR EMBANKMENT WORK. IN GENERAL, CHECK DAMS SHALL BE PLACED AT MINIMUM 100 FOOT SPACING IN ALL SWALES AND DITCHES AND AT MINIMUM 50 FOOT SPACING ALONG SILT FENCE. ON SLOPES GREATER THAN 10% CHECK DAMS SHALL BE MADE OF ROCK, STRAW BALES, OR SILT FENCE, PER MOSCOW CITY STANDARDS.
4. GRADE ACCESS ROAD(S) TO ROADWAY CROSS-SLOPE TO PROVIDE DRAINAGE TO ROADSIDE DITCHES.
5. PLACE SILT FENCING AND STRAW BALES TO PROTECT EXISTING STORM WATER DRAINAGE FACILITIES THAT WILL BE IMPACTED BY THIS WORK. PROTECT EXISTING FACILITIES ON ADJACENT PROPERTY, AS NECESSARY. EXISTING CATCH BASINS SHALL BE PROTECTED BY PLACING STRAW BALES COMPLETELY AROUND CATCH BASINS. MAINTAIN UNIMPEDED FLOW INTO CATCH BASINS THROUGHOUT CONSTRUCTION.
6. CONSTRUCT TEMPORARY SEDIMENT POND(S) IN THE LOCATION(S) AS SHOWN ON THE PLAN, INCLUDING DIRECTIVE DITCHES ALSO AS SHOWN THEREON AND/OR OTHERWISE REQUIRED.

DURING CONSTRUCTION ACTIVITIES AND WINTER SHUTDOWN, AS NECESSARY:

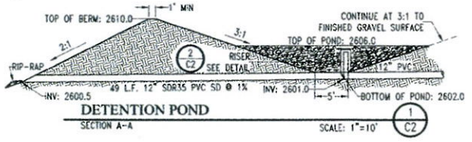
1. SUSPEND ALL EXCAVATION AND EMBANKMENT WORK DURING RAIN STORMS TO MINIMIZE EROSION AND SEDIMENT IMPACTS. MONITOR SITE CONDITIONS DURING AND FOLLOWING RAIN EVENTS FOR EROSION AND SEDIMENT CONTROL PROBLEMS – INSTALL CORRECTIVE MEASURES AND INITIATE CLEANUP MEASURES AS REQUIRED.
2. SPRAY WATER ON DISTURBED AREAS TO CONTROL DUST EROSION DURING DRY SEASON.
3. CONSTRUCT STORM WATER FACILITIES AS EARLY AS POSSIBLE DURING CONSTRUCTION. PROTECT NEW STORM WATER FACILITIES SIMILAR TO EXISTING (SEE NOTE 5 OF "PRIOR TO CONSTRUCTION ACTIVITIES").
4. SEED AND MULCH ALL DISTURBED AREAS.
5. ALL GRADED AREAS, FINISHED OR UNFINISHED, SHALL HAVE ACCEPTABLE EROSION CONTROL MEASURES APPLIED PRIOR TO OCTOBER 1 – NO EXCEPTIONS WITHOUT PRIOR WRITTEN CITY APPROVAL. ACCEPTABLE EROSION CONTROL MEASURES SHALL BE CONSIDERED ONE OF THE FOLLOWING:
   a. HYDRAULICALLY APPLIED MIXTURE OF MULCH AND TACKIFIER – OF A TYPE AND APPLICATION RATE RECOMMENDED FOR MOSCOW AREA OPEN SOIL EROSION PROTECTION – SEED TO BE INCLUDED IF AREA IS FINISH GRADED.
   b. AREAS SLOPING LESS THAN 4:1 TILLED WITH A FARM IMPLEMENT SUCH AS A DISC, PLOW OR SPRING TOOTH THAT RESULTS IN COARSE SURFACE TEXTURE.
   c. STRAW SPREAD AND TRACKED INTO THE SURFACE. TRACK PERPENDICULAR TO THE DIRECTION OF FLOW.
   d. EROSION CONTROL BLANKETS – INCLUDING AN APPROVED GRASS SEED/FERTILIZER MIX IF AREA IS FINISH GRADED.
   e. OTHER METHODS AS SPECIFICALLY APPROVED BY THE CITY ENGINEER.
6. ALL SLOPES 4:1 OR STEEPER SHALL BE CAT-TRACKED PERPENDICULAR TO THE DIRECTION OF FLOW PRIOR TO OCTOBER 1 – IN ADDITION TO ONE OF THE ACCEPTABLE EROSION CONTROL MEASURES SET FORTH IN NO. 5 ABOVE.
7. SEED MIXTURES SHALL INCLUDE FERTILIZERS OF THE TYPE AND RATE OF APPLICATION AS RECOMMENDED BY GENERALLY ACCEPTED AREA PRACTICES.
8. PRIOR TO OCTOBER 1 CONTINUOUS EROSION CONTROL BLANKETS PLUS STRAW BALES AND/OR ROCK CHECK DAMS @ 100 FOOT INTERVALS SHALL BE INSTALLED IN ALL AREAS HAVING A POTENTIAL FOR CONCENTRATED WATER FLOW (I.E. SWALES AND DRAINAGE CHANNELS).
9. SEDIMENT PONDS INCLUDING CUTOFF / DIRECTIVE DITCHING, AS REQUIRED AND AS SHOWN ON THE PLANS SHALL BE IN PLACE AND OPERATIONAL PRIOR TO OCTOBER 1.

UPON COMPLETION OF CONSTRUCTION ACTIVITIES:

1. SILT FENCING SHALL REMAIN AFTER THE COMPLETION OF CONSTRUCTION UNTIL SUFFICIENT VEGETATION IS ESTABLISHED TO PREVENT EROSION AND MOBILIZATION OF SEDIMENT, AND UNTIL APPROVAL FOR REMOVAL IS OBTAINED FROM THE CITY ENGINEER.
2. PERIODIC MAINTENANCE OF EROSION CONTROL MEASURES IS REQUIRED UNTIL PERMANENT DRAINAGE FACILITIES ARE OPERATIONAL AND SUFFICIENT VEGETATION IS ESTABLISHED. SUCH MAINTENANCE INCLUDES, BUT IS NOT LIMITED TO: CLEANING OF CATCH BASINS AND STORM SEWER MANHOLES; MAINTAINING SILT FENCING AND STRAW BALE STRUCTURE; REMOVAL OF ACCUMULATED SOIL; AND STREET CLEANING. A TYPICAL SCHEDULE FOR SUCH MAINTENANCE WOULD BE AT LEAST ONCE PER MONTH AND AFTER ALL SIGNIFICANT STORM EVENTS.

UPON ESTABLISHMENT OF SUFFICIENT VEGETATION AND PERMANENT DRAINAGE FACILITIES OPERATION:

1. REMOVE ALL EROSION CONTROL MEASURES UPON RECEIPT OF APPROVAL FOR SUCH REMOVAL FROM CITY ENGINEER. CLEAR STREETS AND SIDEWALKS OF ACCUMULATED SILT, MUD, AND DEBRIS.
2. CONTINUED EROSION CONTROL IS THE PROPERTY OWNER'S RESPONSIBILITY AFTER EROSION CONTROL MEASURES ARE REMOVED, AND RECEIPT OF APPROVAL FROM THE CITY ENGINEER.



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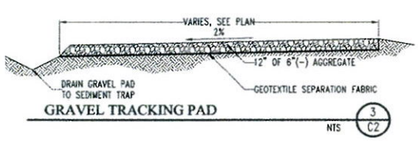
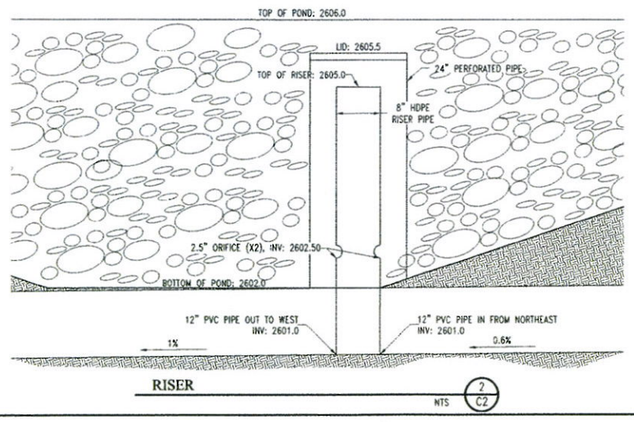
SECTION A-A
SCALE: 1"=10' 1/C2



GRAVEL TRACKING PAD
NTS 3/C2



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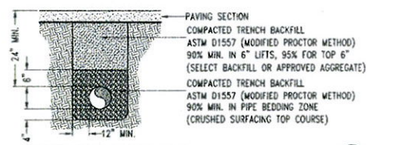
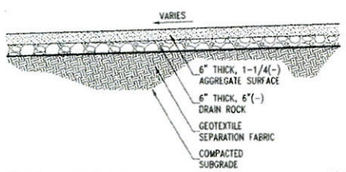
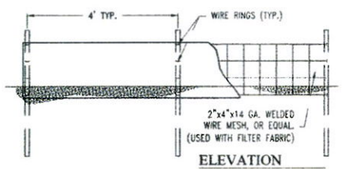


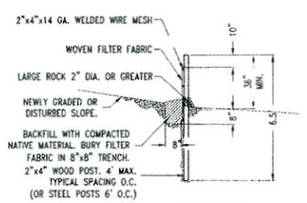
STORM DRAIN TRENCH
TYPICAL SECTION
NTS 4/C2



GRAVEL SURFACE
TYPICAL SECTION
NTS 5/C2



ELEVATION



SECTION

SILT FENCING DETAIL
NTS 6/C2

Hodge & Associates, Inc.
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615 S. Washington Street
Moscow Idaho 83843
(208) 882-3520

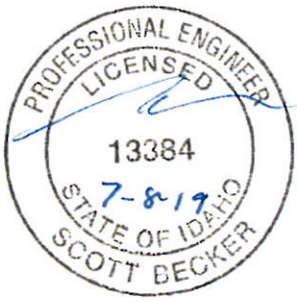
PROFESSIONAL ENGINEER LICENSED 13384 7-8-19 STATE OF IDAHO SCOTT BECKER

RAMBLER RV SITE EXPANSION
EROSION CONTROL, GRADING AND LAYOUT PLAN
DAN MACK
1451 CARMICHAEL ROAD
LATAH COUNTY, IDAHO
(208) 610-4178

Designed By:	SB
Drafted by:	SW
Checked by:	SB
File Name:	3745 GRADING.dwg
Tab:	GRADING
Layer Style:	STANDARD
Plot Style	OCE.CTB
Project:	3745-11-15
Date:	7/3/2019

C2

STORMWATER DRAINAGE REPORT
RAMBLER RV STORAGE
1651 CARMICHAEL ROAD
MOSCOW, IDAHO



Prepared by
Scott Becker, P.E.

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hodge@moscow.com

July 2019

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Appendix I Pre-Developed HydroCAD Summary

Appendix II Post-Developed HydroCAD Summary

1.0 Introduction

Rambler RV Storage is a recreation vehicle storage lot located at 1651 Carmichael Road Moscow, Idaho. The lot consists of a crushed stone surface having a drain rock base that provides stormwater runoff storage in the aggregate and base material.

The lot was developed in 2016 and included the construction of a stormwater detention pond designed to accommodate the stormwater runoff volume for the project. A recent inquiry regarding the detention pond specifications is prompting further analysis be conducted to confirm compliance with the City of Moscow standards.

The purpose of this report is to verify and describe the methods and measures taken to control the quantity of stormwater runoff which accompany the development of property for the Rambler RV Storage in Moscow Idaho. The methods, descriptions, and design calculations in this report conform to the Moscow Stormwater Runoff Control Standards (MSRCS) and *Stormwater Runoff Control* and are under the jurisdiction of the City of Moscow relative to the collection, treatment, and disposal of stormwater runoff.

2.0 Project Description

The stormwater management concept for this project is to provide the required stormwater collection and discharge as outlined in the MSRCS and required by the City of Moscow. The proposed stormwater runoff control facilities will provide zero net increase runoff from the property.

3.0 Model and Design Parameters

The specific hydrologic analysis method used in this analysis is the Soil Conservation Service (SCS) Hydrograph method. This is a "single-event hydrograph" method used for computing peak runoff rates and runoff volumes for the design of runoff control systems and runoff treatment Best Management Practices (BMPs). The rainfall-runoff hydrograph methods require the input of a rainfall distribution or design storm hyetograph. This analysis uses the 24-hour SCS Type II rainfall distribution. The analysis will compare the pre-developed condition to the post-developed condition at full build-out.

The computer software used for this analysis is "HydroCAD" by HydroCAD Software Solutions LLC. This program uses runoff coefficients for various ground covers, regional precipitation depths, intensities and durations, travel times, and times of concentration to analyze a storm event through an entire site.

The rainfall-runoff hydrograph method requires the input of a rainfall distribution or design storm hyetograph. The precipitation magnitude-frequency estimates are provided by National Oceanic and Atmospheric Administration (NOAA) Atlas II. The isopluvial maps show the total depth of rainfall for storms of several recurrence intervals. The design storms used in this analysis are summarized below.

The pre-developed site consisted of grass and weeds having sparse coverage and hydrologic soil group B. The post-developed site consists of crushed stone surface and grass cover.

A pre-development condition and a post-development condition were modeled using HydroCAD. A summary of the design parameters is included in Table 1.

Table 1 Summary of Design Parameters

Description	Pre-Developed Parameter	Post-Developed Parameter	Comment
Hydrograph Type	SCS Runoff	SCS Runoff	
SCS Storm Type	Type II	Type II	
Hydrologic Soil Type	B	B	
Curve Number	CN = 79 Grassland, Poor	Weighted CN = 88 Gravel and >75% Grass Cover	
T_c Method	TR-55	TR-55	
Total Precipitation	1.50 in.	1.50 in.	2-year 24-hour
	2.10 in.	2.10 in.	10-year 24-hour
	2.50 in.	2.50 in.	25-year 24-hour
	2.90 in.	2.90 in.	100-year 24-hour
Antecedent Moisture Condition	II (average condition)	II (average condition)	
Average Annual Precipitation	22-24 inches	22-24 inches	

SCS = Soil Conservation Service
T_c = Time of concentration
TR-55 = Technical Release 55 issued by Soil Conservation Service

4.0 Results

Model results for the pre-development and post-development peak runoff conditions are summarized in Tables 2 and 3, respectively.

Table 2 Pre-development Results

Event	Stormwater Runoff (cfs)
2-year	0.43
10-year	1.17
25-year	1.76
100-year	2.39

cfs = cubic feet per second

Table 3 Post-development Stormwater Runoff Control Facility Results

Event	Stormwater Runoff (cfs)	Storage ($ft^{3)}$	Elevation (ft)
2-year	0.43	1,197	2,605.02
10-year	0.81	2,351	2,605.15
25-year	1.21	3,119	2,605.24
100-year	1.39	3,978	2,605.33

cfs = cubic feet per second
ft^3 = cubic feet

The post-development stormwater runoff discharge rate does not exceed the pre-development rate of stormwater runoff for the 2-year storm, 10-year storm, or 25-year storm.

Appendices I and II contain HydroCAD output files for each node of analysis.

5.0 Conclusions

The model results indicate a prismatic stormwater detention pond having a width of 6-ft, length of 26-ft, side slope of 3:1, and 60% voids combined with storage in the crushed stone and base material of the lot having 40% voids provides the necessary stormwater runoff storage for the development. However, the existing control structure requires modification to maintain stormwater runoff discharge rates at pre-developed rates as directed in the *Moscow Stormwater Runoff Control Standards* (City of Moscow 2000) and *Stormwater Runoff Control* (City of Moscow 2015).

6.0 References

City of Moscow, 2000. *City of Moscow Stormwater Runoff Control Standards and Stormwater Runoff Control Standards.* April.

City of Moscow, 2015. *Moscow City Code, Title 5 – Public Ways and Property, Chapter 15, Stormwater Runoff Control.* December.

Appendix I

Pre-Developed HydroCAD Summary

Events for Subcatchment 1S: Rambler Predeveloped

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
2-yr	1.50	0.43	0.040	0.26
10-yr	2.10	1.17	0.091	0.58
25-yr	2.50	1.76	0.130	0.84
100-yr	**2.90**	**2.39**	**0.174**	**1.12**

Summary for Subcatchment 1S: Rambler Predeveloped

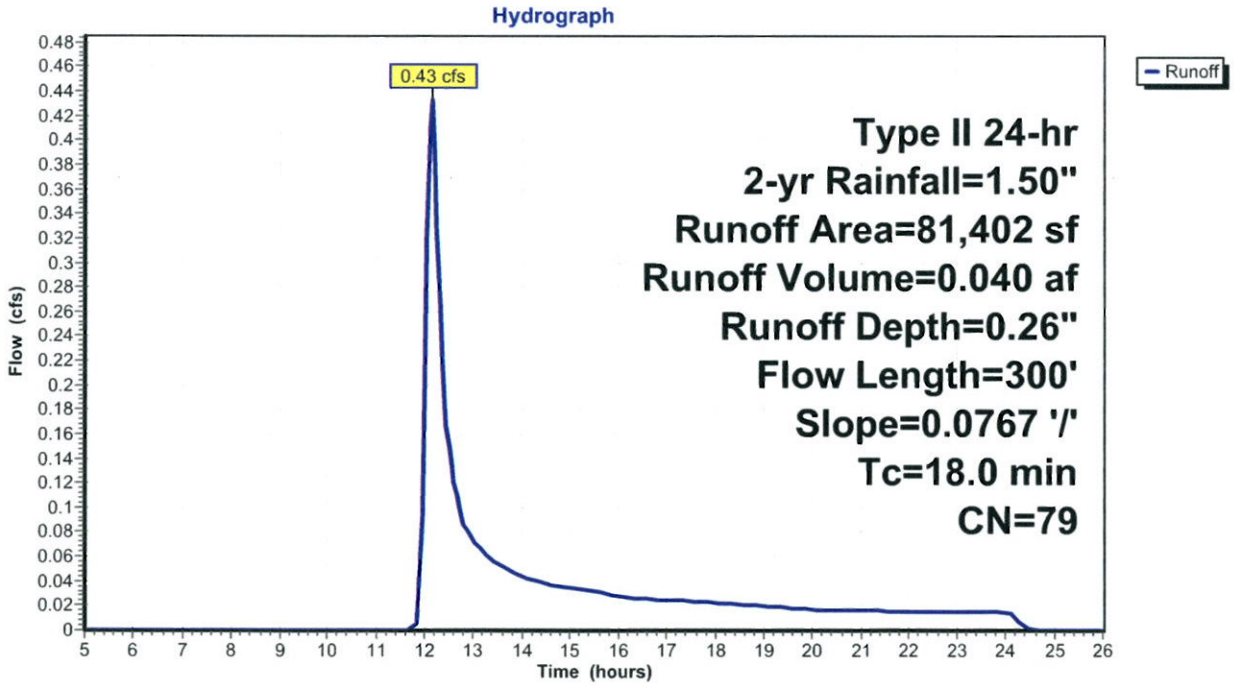
Runoff = 0.43 cfs @ 12.14 hrs, Volume= 0.040 af, Depth= 0.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-26.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=1.50"

Area (sf)	CN	Description
81,402	79	Pasture/grassland/range, Poor, HSG B
81,402		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.0	300	0.0767	0.28		**Sheet Flow,** Range n= 0.130 P2= 1.50"

Subcatchment 1S: Rambler Predeveloped



Summary for Subcatchment 1S: Rambler Predeveloped

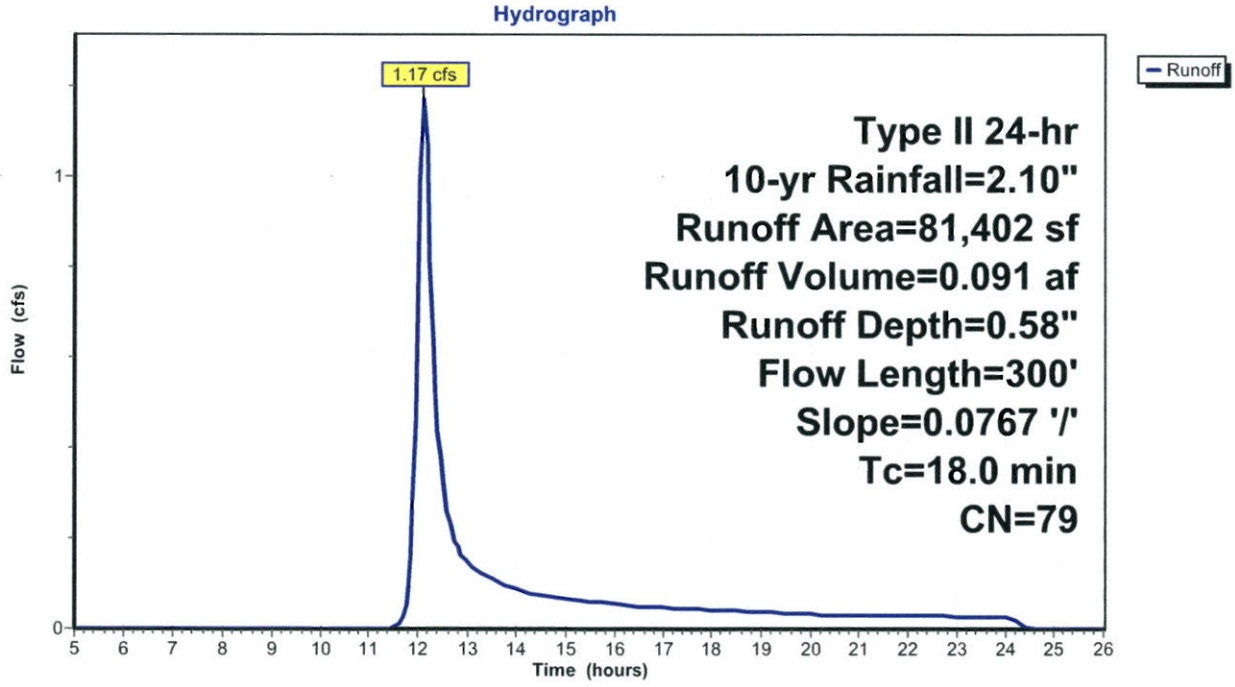
Runoff = 1.17 cfs @ 12.12 hrs, Volume= 0.091 af, Depth= 0.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-26.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=2.10"

Area (sf)	CN	Description
81,402	79	Pasture/grassland/range, Poor, HSG B
81,402		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.0	300	0.0767	0.28		**Sheet Flow,** Range n= 0.130 P2= 1.50"

Subcatchment 1S: Rambler Predeveloped



Summary for Subcatchment 1S: Rambler Predeveloped

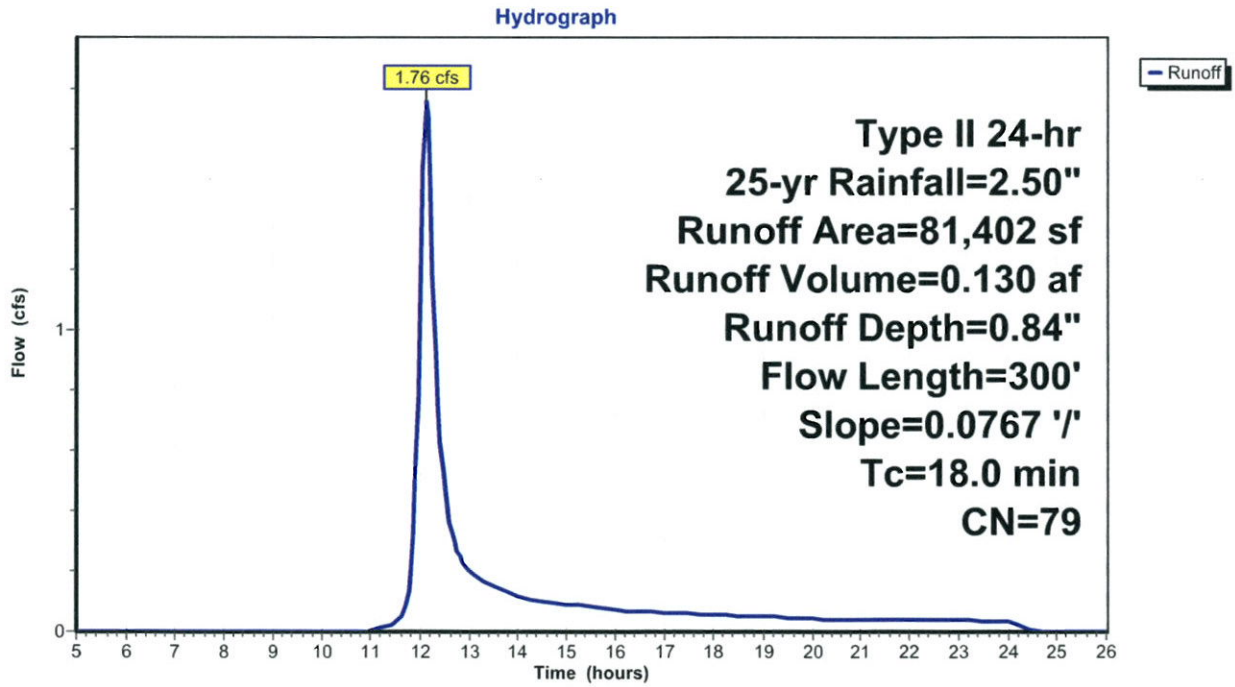
Runoff = 1.76 cfs @ 12.12 hrs, Volume= 0.130 af, Depth= 0.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-26.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=2.50"

Area (sf)	CN	Description
81,402	79	Pasture/grassland/range, Poor, HSG B
81,402		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.0	300	0.0767	0.28		**Sheet Flow,** Range n= 0.130 P2= 1.50"

Subcatchment 1S: Rambler Predeveloped



Summary for Subcatchment 1S: Rambler Predeveloped

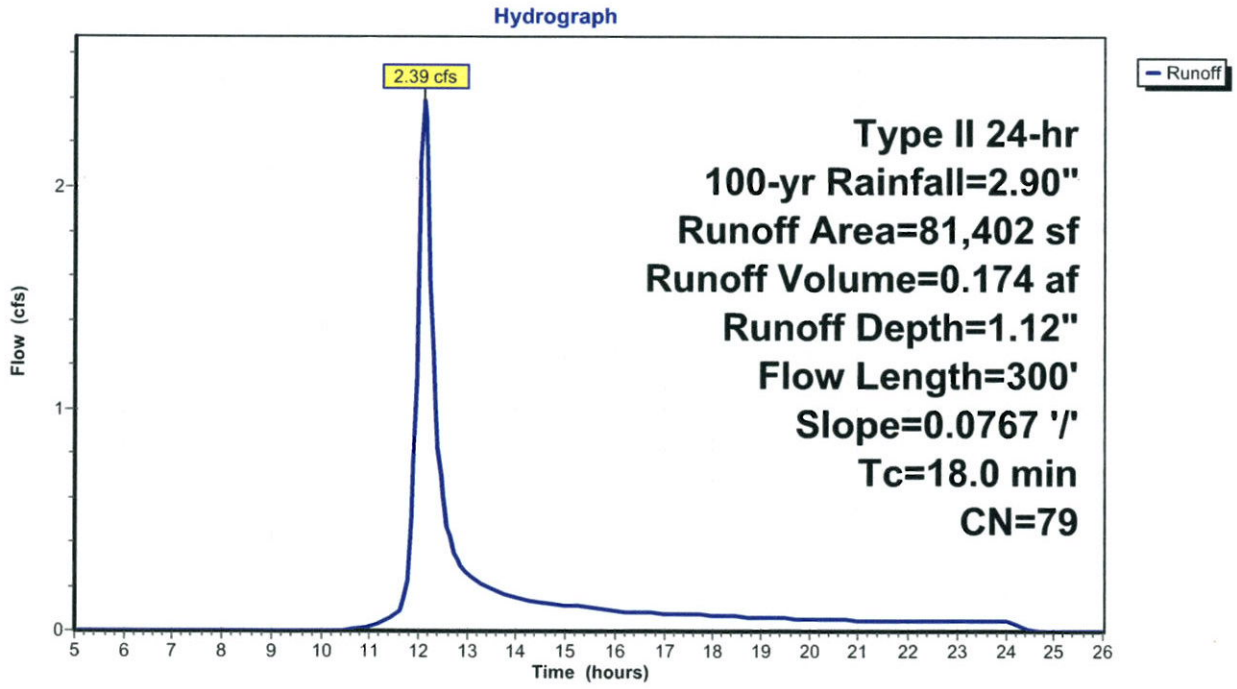
Runoff = 2.39 cfs @ 12.11 hrs, Volume= 0.174 af, Depth= 1.12"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-26.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-yr Rainfall=2.90"

Area (sf)	CN	Description
81,402	79	Pasture/grassland/range, Poor, HSG B
81,402		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.0	300	0.0767	0.28		**Sheet Flow,** Range n= 0.130 P2= 1.50"

Subcatchment 1S: Rambler Predeveloped



Appendix II

Post-Developed HydroCAD Summary

Events for Subcatchment 1S: Rambler Postdeveloped

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
2-yr	1.50	1.83	0.091	0.58
10-yr	2.10	3.30	0.163	1.05
25-yr	2.50	4.33	0.215	1.38
100-yr	**2.90**	**5.38**	**0.269**	**1.73**

Summary for Subcatchment 1S: Rambler Postdeveloped

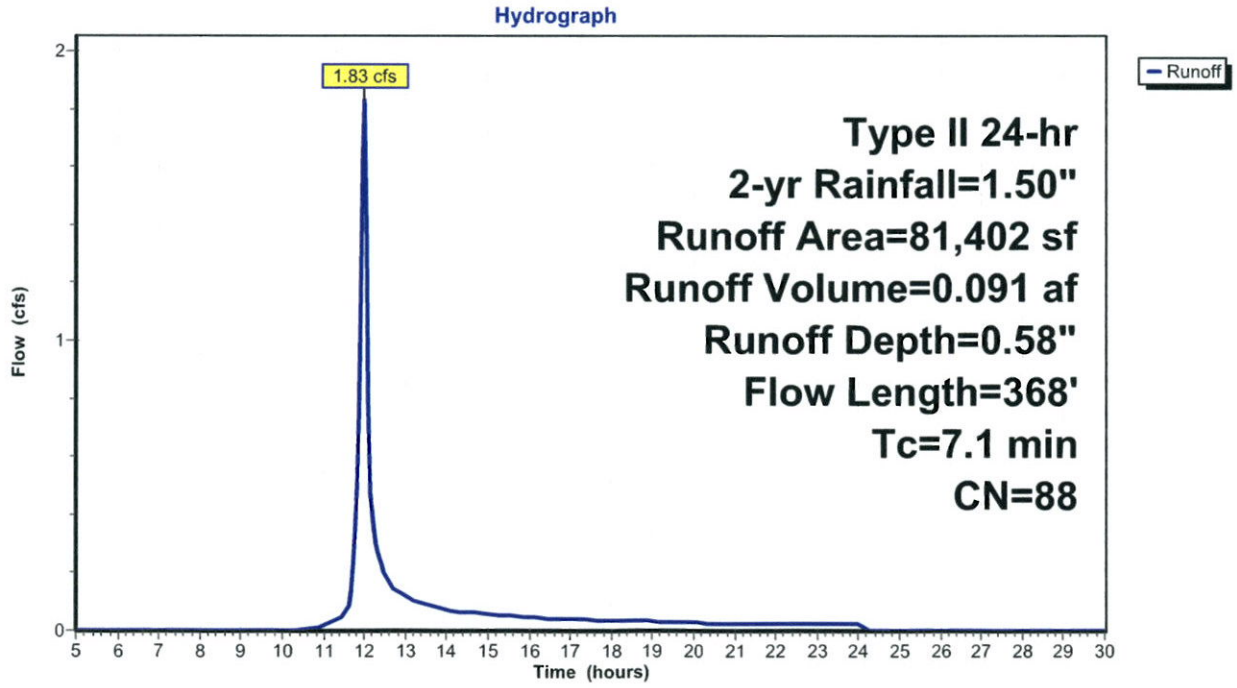
Runoff = 1.83 cfs @ 11.99 hrs, Volume= 0.091 af, Depth= 0.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-30.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=1.50"

Area (sf)	CN	Description
19,333	61	>75% Grass cover, Good, HSG B
62,069	96	Gravel surface, HSG B
81,402	88	Weighted Average
81,402		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.0	28	0.2142	0.23		**Sheet Flow,** Grass: Short n= 0.150 P2= 1.50"
4.5	272	0.0147	1.02		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 1.50"
0.6	68	0.0147	1.95		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
7.1	368	Total			

Subcatchment 1S: Rambler Postdeveloped



Summary for Subcatchment 1S: Rambler Postdeveloped

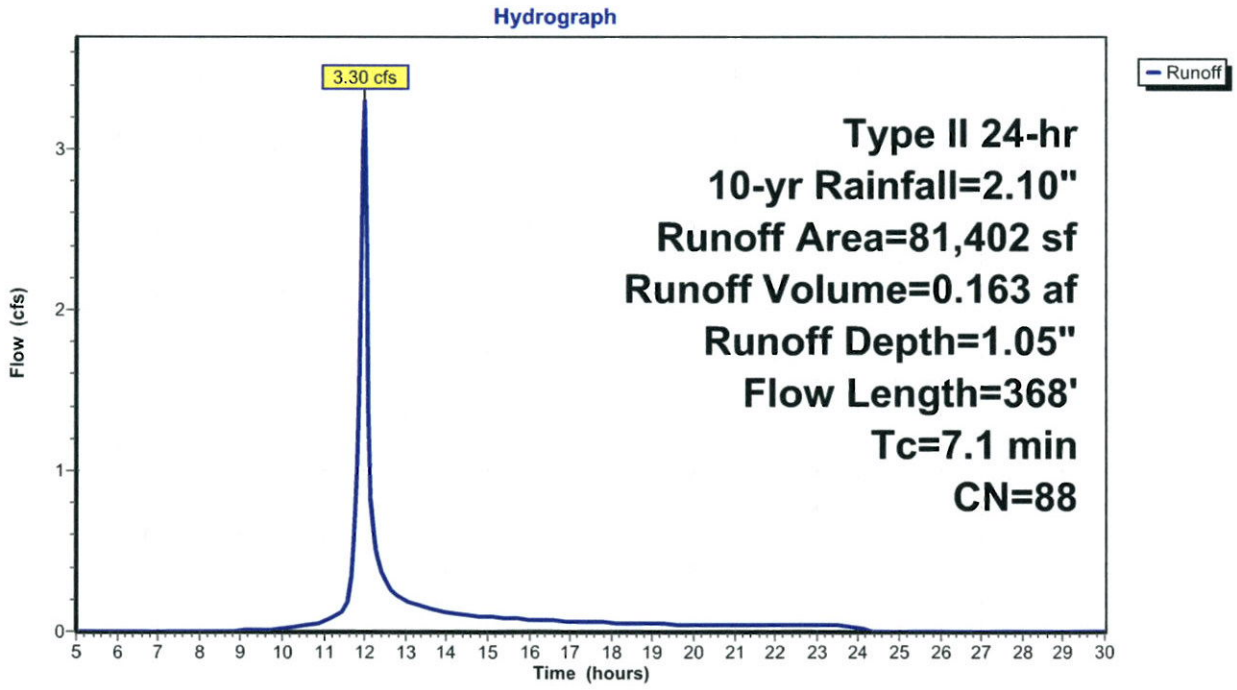
Runoff = 3.30 cfs @ 11.99 hrs, Volume= 0.163 af, Depth= 1.05"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-30.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=2.10"

Area (sf)	CN	Description
19,333	61	>75% Grass cover, Good, HSG B
62,069	96	Gravel surface, HSG B
81,402	88	Weighted Average
81,402		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.0	28	0.2142	0.23		**Sheet Flow,** Grass: Short n= 0.150 P2= 1.50"
4.5	272	0.0147	1.02		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 1.50"
0.6	68	0.0147	1.95		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
7.1	368	Total			

Subcatchment 1S: Rambler Postdeveloped



Summary for Subcatchment 1S: Rambler Postdeveloped

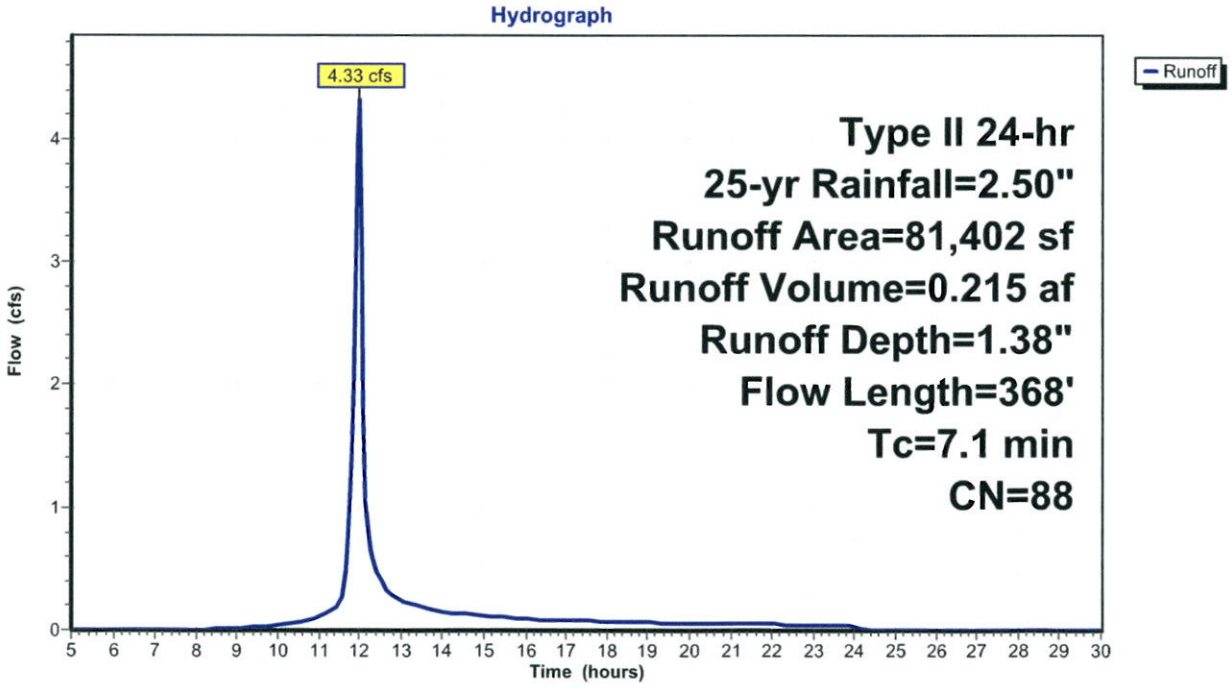
Runoff = 4.33 cfs @ 11.98 hrs, Volume= 0.215 af, Depth= 1.38"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-30.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=2.50"

Area (sf)	CN	Description
19,333	61	>75% Grass cover, Good, HSG B
62,069	96	Gravel surface, HSG B
81,402	88	Weighted Average
81,402		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.0	28	0.2142	0.23		**Sheet Flow,** Grass: Short n= 0.150 P2= 1.50"
4.5	272	0.0147	1.02		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 1.50"
0.6	68	0.0147	1.95		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
7.1	368	Total			

Subcatchment 1S: Rambler Postdeveloped



Summary for Subcatchment 1S: Rambler Postdeveloped

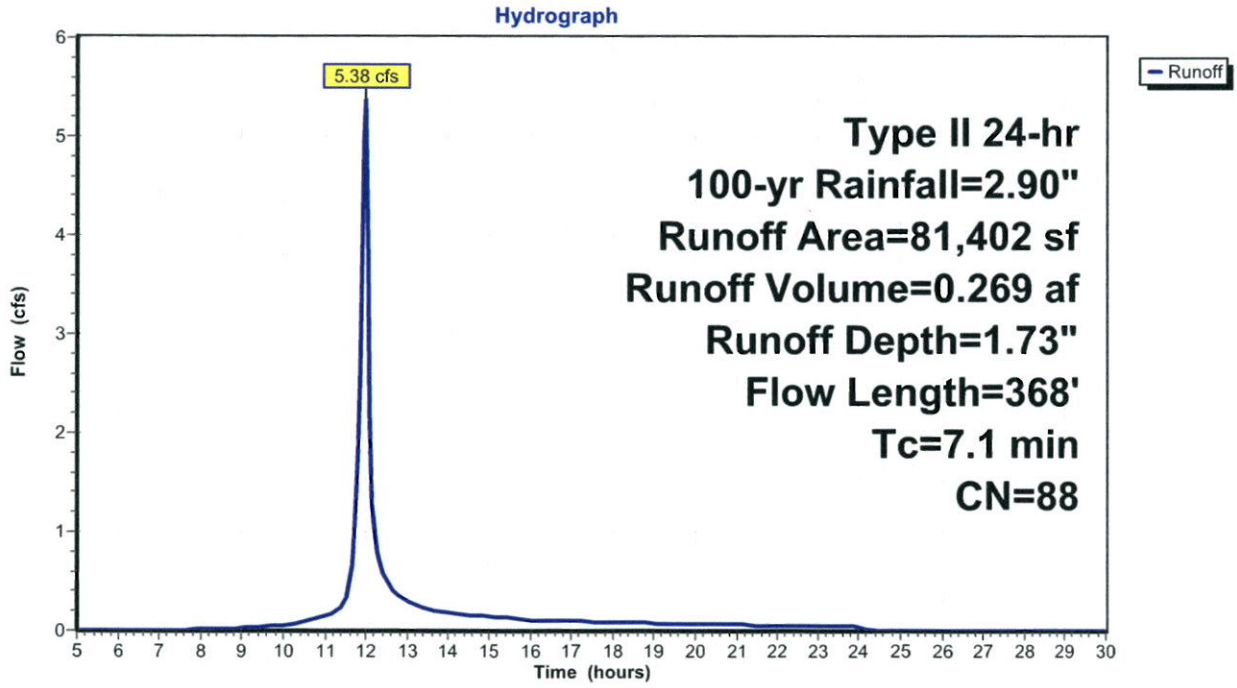
Runoff = 5.38 cfs @ 11.98 hrs, Volume= 0.269 af, Depth= 1.73"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-30.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-yr Rainfall=2.90"

Area (sf)	CN	Description
19,333	61	>75% Grass cover, Good, HSG B
62,069	96	Gravel surface, HSG B
81,402	88	Weighted Average
81,402		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.0	28	0.2142	0.23		**Sheet Flow,** Grass: Short n= 0.150 P2= 1.50"
4.5	272	0.0147	1.02		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 1.50"
0.6	68	0.0147	1.95		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
7.1	368	Total			

Subcatchment 1S: Rambler Postdeveloped



Events for Pond 1P: Storage

Event	Inflow (cfs)	Primary (cfs)	Elevation (feet)	Storage (cubic-feet)
2-yr	1.83	0.43	2,605.02	1,197
10-yr	3.30	0.81	2,605.15	2,351
25-yr	4.33	1.21	2,605.24	3,119
100-yr	**5.38**	**1.39**	**2,605.33**	**3,978**

Summary for Pond 1P: Storage

Inflow Area = 1.869 ac, 0.00% Impervious, Inflow Depth = 0.58" for 2-yr event
Inflow = 1.83 cfs @ 11.99 hrs, Volume= 0.091 af
Outflow = 0.43 cfs @ 12.17 hrs, Volume= 0.089 af, Atten= 77%, Lag= 10.9 min
Primary = 0.43 cfs @ 12.17 hrs, Volume= 0.089 af

Routing by Stor-Ind method, Time Span= 5.00-30.00 hrs, dt= 0.05 hrs
Peak Elev= 2,605.02' @ 12.17 hrs Surf.Area= 21,754 sf Storage= 1,197 cf

Plug-Flow detention time= 34.0 min calculated for 0.089 af (98% of inflow)
Center-of-Mass det. time= 24.9 min (873.5 - 848.6)

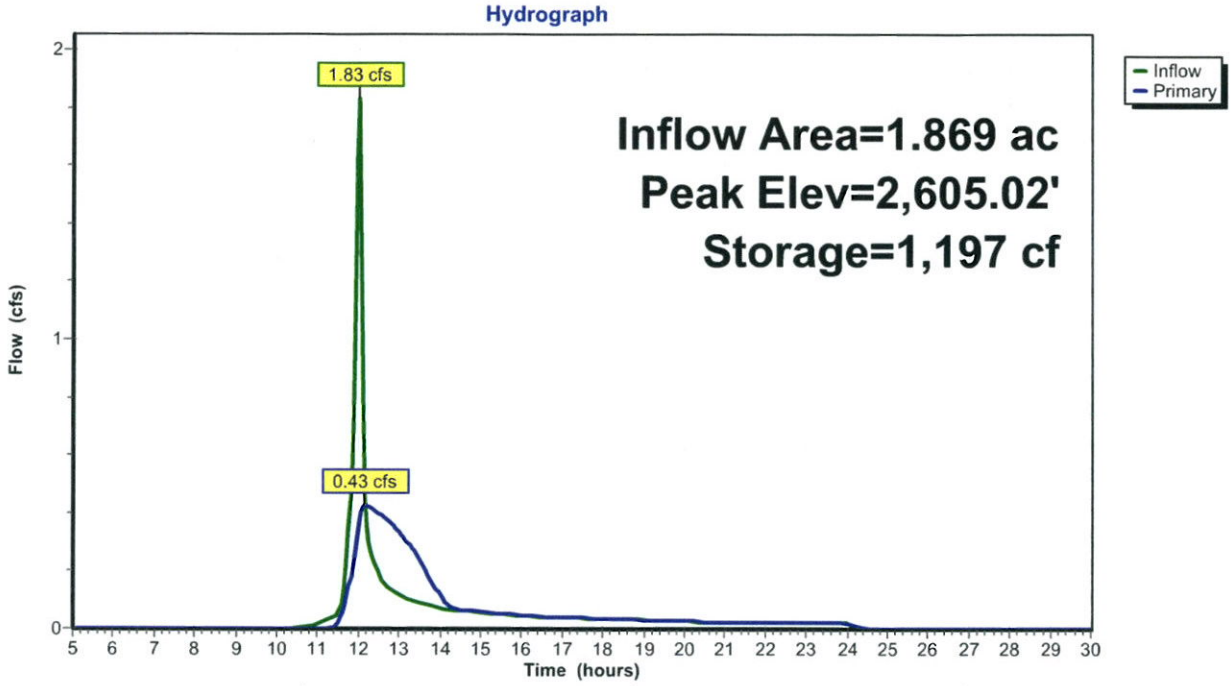
Volume	Invert	Avail.Storage	Storage Description
#1	2,602.00'	1,757 cf	**6.00'W x 26.00'L x 4.00'H Prismatoid Z=3.0** 2,928 cf Overall x 60.0% Voids
#2	2,605.00'	8,276 cf	**Custom Stage Data (Irregular)**Listed below (Recalc) 20,689 cf Overall x 40.0% Voids
		10,032 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
2,605.00	20,689	560.0	0	0	20,689
2,606.00	20,689	560.0	20,689	20,689	21,249

Device	Routing	Invert	Outlet Devices
#1	Primary	2,602.00'	**12.0" Round Culvert** L= 50.0' Ke= 0.630 Inlet / Outlet Invert= 2,602.00' / 2,600.50' S= 0.0300 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.79 sf
#2	Device 1	2,602.50'	**2.2" Vert. Orifice/Grate X 2.00** C= 0.600
#3	Device 1	2,605.00'	**8.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.42 cfs @ 12.17 hrs HW=2,605.02' (Free Discharge)
└**1=Culvert** (Passes 0.42 cfs of 5.53 cfs potential flow)
  ├**2=Orifice/Grate** (Orifice Controls 0.40 cfs @ 7.51 fps)
  └**3=Orifice/Grate** (Weir Controls 0.02 cfs @ 0.49 fps)

Pond 1P: Storage



Summary for Pond 1P: Storage

Inflow Area = 1.869 ac, 0.00% Impervious, Inflow Depth = 1.05" for 10-yr event
Inflow = 3.30 cfs @ 11.99 hrs, Volume= 0.163 af
Outflow = 0.81 cfs @ 12.16 hrs, Volume= 0.162 af, Atten= 75%, Lag= 10.6 min
Primary = 0.81 cfs @ 12.16 hrs, Volume= 0.162 af

Routing by Stor-Ind method, Time Span= 5.00-30.00 hrs, dt= 0.05 hrs
Peak Elev= 2,605.15' @ 12.16 hrs Surf.Area= 21,808 sf Storage= 2,351 cf

Plug-Flow detention time= 37.0 min calculated for 0.161 af (99% of inflow)
Center-of-Mass det. time= 31.8 min (863.2 - 831.4)

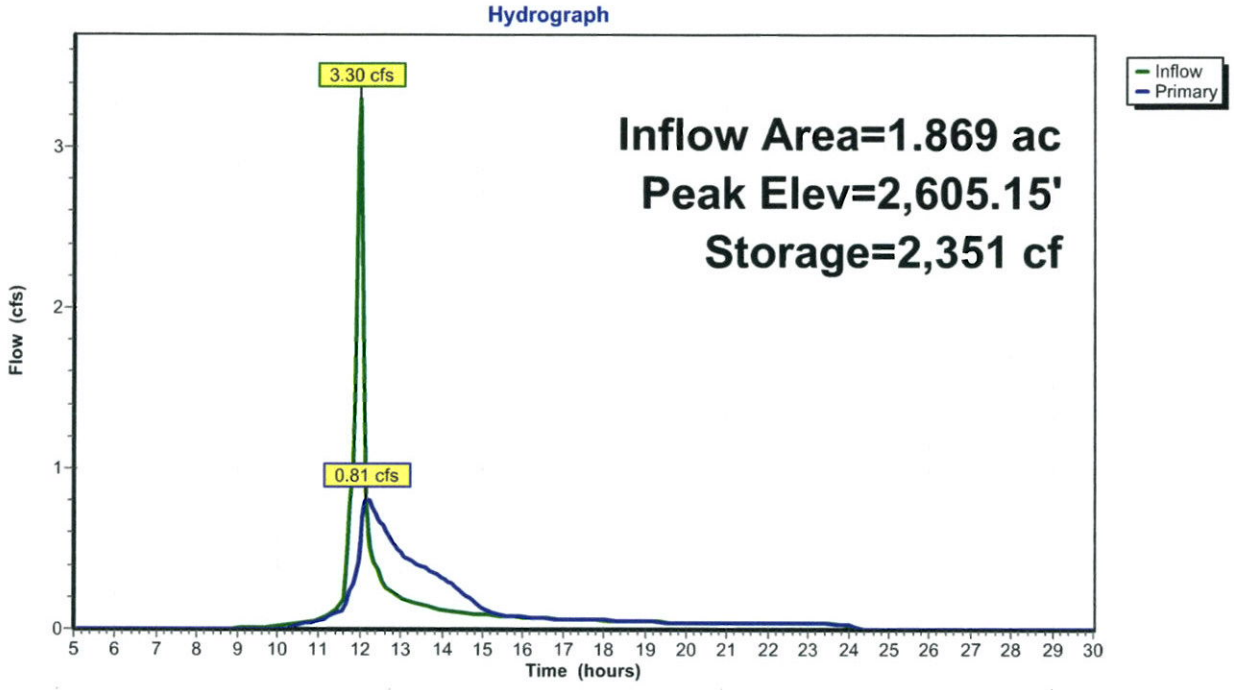
Volume	Invert	Avail.Storage	Storage Description
#1	2,602.00'	1,757 cf	**6.00'W x 26.00'L x 4.00'H Prismatoid Z=3.0** 2,928 cf Overall x 60.0% Voids
#2	2,605.00'	8,276 cf	**Custom Stage Data (Irregular)**Listed below (Recalc) 20,689 cf Overall x 40.0% Voids
		10,032 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
2,605.00	20,689	560.0	0	0	20,689
2,606.00	20,689	560.0	20,689	20,689	21,249

Device	Routing	Invert	Outlet Devices
#1	Primary	2,602.00'	**12.0" Round Culvert** L= 50.0' Ke= 0.630 Inlet / Outlet Invert= 2,602.00' / 2,600.50' S= 0.0300 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.79 sf
#2	Device 1	2,602.50'	**2.2" Vert. Orifice/Grate X 2.00** C= 0.600
#3	Device 1	2,605.00'	**8.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.81 cfs @ 12.16 hrs HW=2,605.15' (Free Discharge)
└**1=Culvert** (Passes 0.81 cfs of 5.67 cfs potential flow)
  ├**2=Orifice/Grate** (Orifice Controls 0.41 cfs @ 7.70 fps)
  └**3=Orifice/Grate** (Weir Controls 0.40 cfs @ 1.27 fps)

Pond 1P: Storage



Summary for Pond 1P: Storage

Inflow Area = 1.869 ac, 0.00% Impervious, Inflow Depth = 1.38" for 25-yr event
Inflow = 4.33 cfs @ 11.98 hrs, Volume= 0.215 af
Outflow = 1.21 cfs @ 12.15 hrs, Volume= 0.214 af, Atten= 72%, Lag= 9.7 min
Primary = 1.21 cfs @ 12.15 hrs, Volume= 0.214 af

Routing by Stor-Ind method, Time Span= 5.00-30.00 hrs, dt= 0.05 hrs
Peak Elev= 2,605.24' @ 12.15 hrs Surf.Area= 21,844 sf Storage= 3,119 cf

Plug-Flow detention time= 36.6 min calculated for 0.213 af (99% of inflow)
Center-of-Mass det. time= 32.7 min (856.2 - 823.5)

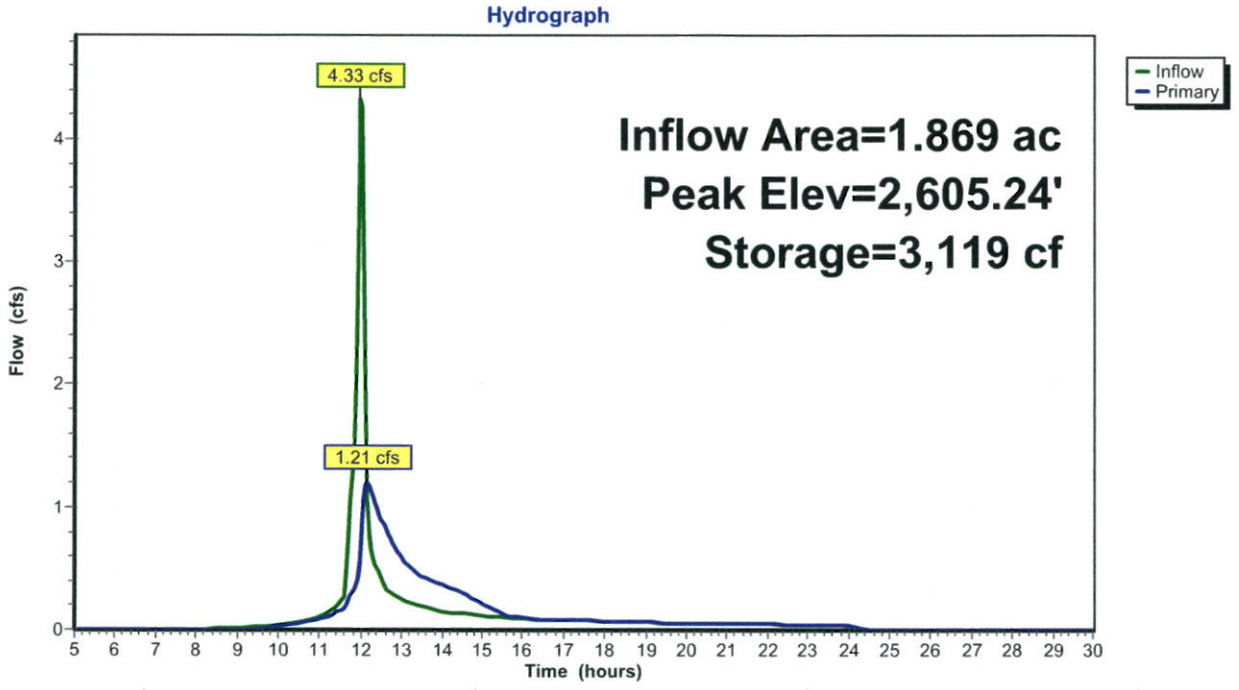
Volume	Invert	Avail.Storage	Storage Description
#1	2,602.00'	1,757 cf	**6.00'W x 26.00'L x 4.00'H Prismatoid Z=3.0** 2,928 cf Overall x 60.0% Voids
#2	2,605.00'	8,276 cf	**Custom Stage Data (Irregular)**Listed below (Recalc) 20,689 cf Overall x 40.0% Voids
		10,032 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
2,605.00	20,689	560.0	0	0	20,689
2,606.00	20,689	560.0	20,689	20,689	21,249

Device	Routing	Invert	Outlet Devices
#1	Primary	2,602.00'	**12.0" Round Culvert** L= 50.0' Ke= 0.630 Inlet / Outlet Invert= 2,602.00' / 2,600.50' S= 0.0300 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.79 sf
#2	Device 1	2,602.50'	**2.2" Vert. Orifice/Grate X 2.00** C= 0.600
#3	Device 1	2,605.00'	**8.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.21 cfs @ 12.15 hrs HW=2,605.24' (Free Discharge)
↑**1=Culvert** (Passes 1.21 cfs of 5.76 cfs potential flow)
↑**2=Orifice/Grate** (Orifice Controls 0.41 cfs @ 7.83 fps)
3=Orifice/Grate (Weir Controls 0.79 cfs @ 1.59 fps)

Pond 1P: Storage



Summary for Pond 1P: Storage

Inflow Area = 1.869 ac, 0.00% Impervious, Inflow Depth = 1.73" for 100-yr event
Inflow = 5.38 cfs @ 11.98 hrs, Volume= 0.269 af
Outflow = 1.39 cfs @ 12.15 hrs, Volume= 0.268 af, Atten= 74%, Lag= 10.2 min
Primary = 1.39 cfs @ 12.15 hrs, Volume= 0.268 af

Routing by Stor-Ind method, Time Span= 5.00-30.00 hrs, dt= 0.05 hrs
Peak Elev= 2,605.33' @ 12.15 hrs Surf.Area= 21,885 sf Storage= 3,978 cf

Plug-Flow detention time= 37.3 min calculated for 0.268 af (99% of inflow)
Center-of-Mass det. time= 33.8 min (850.9 - 817.1)

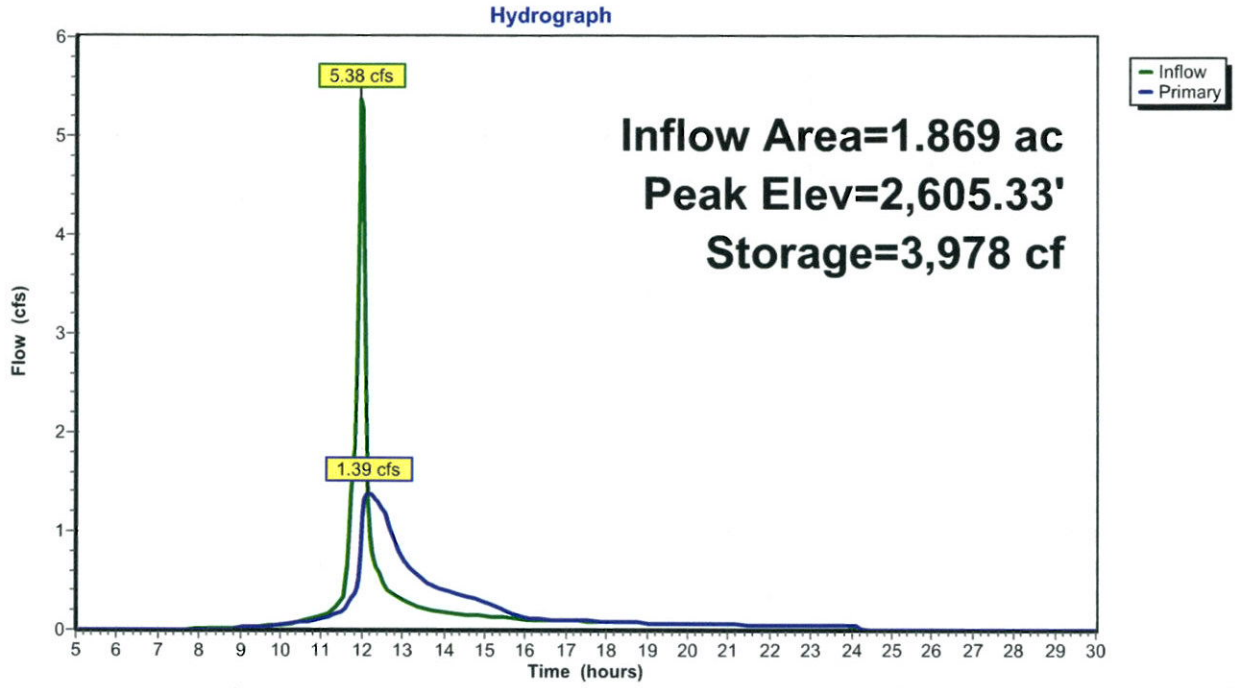
Volume	Invert	Avail.Storage	Storage Description
#1	2,602.00'	1,757 cf	**6.00'W x 26.00'L x 4.00'H Prismatoid Z=3.0** 2,928 cf Overall x 60.0% Voids
#2	2,605.00'	8,276 cf	**Custom Stage Data (Irregular)**Listed below (Recalc) 20,689 cf Overall x 40.0% Voids
		10,032 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
2,605.00	20,689	560.0	0	0	20,689
2,606.00	20,689	560.0	20,689	20,689	21,249

Device	Routing	Invert	Outlet Devices
#1	Primary	2,602.00'	**12.0" Round Culvert** L= 50.0' Ke= 0.630 Inlet / Outlet Invert= 2,602.00' / 2,600.50' S= 0.0300 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.79 sf
#2	Device 1	2,602.50'	**2.2" Vert. Orifice/Grate X 2.00** C= 0.600
#3	Device 1	2,605.00'	**8.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.39 cfs @ 12.15 hrs HW=2,605.33' (Free Discharge)
↑**1=Culvert** (Passes 1.39 cfs of 5.86 cfs potential flow)
↑**2=Orifice/Grate** (Orifice Controls 0.42 cfs @ 7.97 fps)
3=Orifice/Grate (Orifice Controls 0.97 cfs @ 2.78 fps)

Pond 1P: Storage



ORDINANCE NO. 2019 -

AN ORDINANCE OF THE CITY OF MOSCOW, IDAHO, A MUNICIPAL CORPORATION OF THE STATE OF IDAHO; PROVIDING FOR THE AMENDMENT OF MOSCOW CITY CODE TITLE 4, CHAPTER 3, ----------; PROVIDING THAT THE PROVISIONS OF THIS ORDINANCE BE DEEMED SEVERABLE; AND PROVIDING FOR THIS ORDINANCE TO BE IN FULL FORCE AND EFFECT FROM THE DATE OF ITS PASSAGE, APPROVAL AND PUBLICATION ACCORDING TO LAW.

WHEREAS,

NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF MOSCOW, IDAHO, AS FOLLOWS:

SECTION 1: That Moscow City Code Title 4, Chapter 3 be amended as follows:

• • •

Sec. 3-5. Specific Use Standards.

A. Accessory Dwelling Units:

1. Applicability and Purpose. These standards shall apply to Accessory Dwelling Units which are permitted by this Code. These standards are intended to help promote the benefits of Accessory Dwelling Units, while also preserving neighborhood character and creating predictability and certainty for established neighborhoods.

2. Specific Standards.

a. General. Accessory Dwelling Units must meet all applicable regulations for the zoning district in which they are located, except as otherwise expressly stated within this Section. ~~Lots that currently do not meet the minimum lot size for a single family dwelling shall be ineligible for an Accessory Dwelling Unit.~~

b. Size. The floor area of the Accessory Dwelling Unit may not exceed six hundred (600) square feet or forty percent (40%) of the gross floor area of the principal dwelling, whichever is less.

c. Maximum Occupancy. The number of persons allowed to reside within an Accessory Dwelling Unit shall be limited to two (2).

d. Owner Occupancy.

i. Prior to the issuance of a building permit for an Accessory Dwelling Unit, the property owner must record a deed restriction upon the property which states that the property owner will reside on the property, within either the principal dwelling or Accessory Dwelling Unit. The deed restriction must be approved by the City Attorney and shall be binding upon the heirs, assigns, and subsequent purchasers of the property.

ii. Owner occupancy means a property owner, as reflected in real property records, who makes his or her legal residence at the property, as evidenced by voter registration or similar means and actually resides at the property for more than six (6) months out of any given year. Owner occupancy may also include a named natural person with an ownership or benefit in a private trust, but shall not extend to corporate trusts.

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iii. The Community Development Director may waive this requirement for temporary absences of greater than six (6) months for military service, employment sabbatical, or family medical leave qualified absences. Temporary leave waivers for other reasons must be reviewed and approved by the City Council.

iv. In the event the owner is unable to reside on the property as required herein, only one (1) of the dwelling units on the property may be occupied.

e. Off-street parking. One (1) off-street parking space shall be required for the Accessory Dwelling Unit, in addition to that required for the principal dwelling.

. . .

SECTION 2: SEVERABILITY. Provisions of this Ordinance shall be deemed severable and the invalidity of any provision of this Ordinance shall not affect the validity of remaining provisions. The remaining sections of Title 4 shall be in full force and effect.

SECTION 3: EFFECT ON OTHER ORDINANCES. Where the definitions contained in this Ordinance are in conflict with relevant portions of the City of Moscow, Idaho, Municipal Code, the definitions contained within those portions of the Moscow Municipal Code will be unaffected until such time, if any, as they are amended to be consistent with this Ordinance.

SECTION 4: EFFECTIVE DATE. This Ordinance shall be effective upon its passage, approval, and publication according to law.

PASSED by the City Council and APPROVED by the Mayor this _____ day of _____, 2019.

_____
Bill Lambert, Mayor

ATTEST:

_____
Laurie M. Hopkins, City Clerk

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