



y2consultants.com
307 733 2999

CONSULTANTS

ENGINEERING, SURVEYING & PLANNING
LANDSCAPE ARCHITECTURE, GIS
NATURAL RESOURCE SERVICES



NUTRIENT PATHOGEN EVALUATION – WAIVER REQUEST

OSPREY LANDING SUBDIVISION

Prepared by:

Y2 Consultants, LLC
Adrienne Lemmers

Reviewed By by:

Seied Zia A. Yasrobi, PE

Prepared for:

Eastern Idaho Public Health District
820 Valley Centre Drive
Driggs, ID 83422

Teton County Planning and Zoning
89 North Main Suite 6
Driggs, Idaho 83422

February 5, 2024

CONTENTS

Introduction3

Nutrient Pathogen Evaluation Applicability Criteria4

 1. Any Portion of a Proposed Development is within the County’s Wetland and Waterways Overlay Area4

 2. There is Evidence that Groundwater Comes within Ten Feet of the Ground Surface on the Proposed Development Parcel Some Time of the Year4

 3. There is Evidence that Soil Depth to Fractured Bedrock is Ten Feet or Less Anywhere on the Proposed Development Parcel.....4

 4. The Proposed Development Includes a Food Service, Commercial, or Industrial Facility Generating 600 Gallons per Day or More Wastewater5

 5. The Proposed Development is within an Area Where the Concentration of Nitrate-Nitrogen in Groundwater is 5 mg/l or Higher.....5

Conclusion5

References.....5

Appendix A : EIPH Letter Report.....A-1

FIGURES

Figure 1: Subdivision Layout3

Figure 2: Teton County GIS check for Wetland and Waterways Overlay4

Figure 3: Nitrate Samples Near Project Vicinity.....6

INTRODUCTION

The purpose of this document is to demonstrate that the proposed subdivision named, Osprey Landing, does not trigger any of the applicability criteria for a Nutrient Pathogen Evaluation. Therefore, a waiver to the Nutrient Pathogen Evaluation outlined in Teton County Code section 9-3-2 (C-3-b and C-3-b-vi) of the Title 9 Subdivision Regulations is being requested.

The project property is owned by Bidache Inc. The parcel is 30 acres located in the southwest of the southeast and quarter quarter of section 11 of T. 4 N.. and R. 45 E., B.M. in Teton County Idaho and the parcel ID is RP04N45E118401.

The parcel zoning at the time of the concept plan approval is "Agriculture/Rural Residential-2.5-Acre Min. Lot Size". The project as proposed is to subdivide the parcel into 12 lots, each lot comprised of 2.5 acres. Please see Figure 1 for the proposed layout.

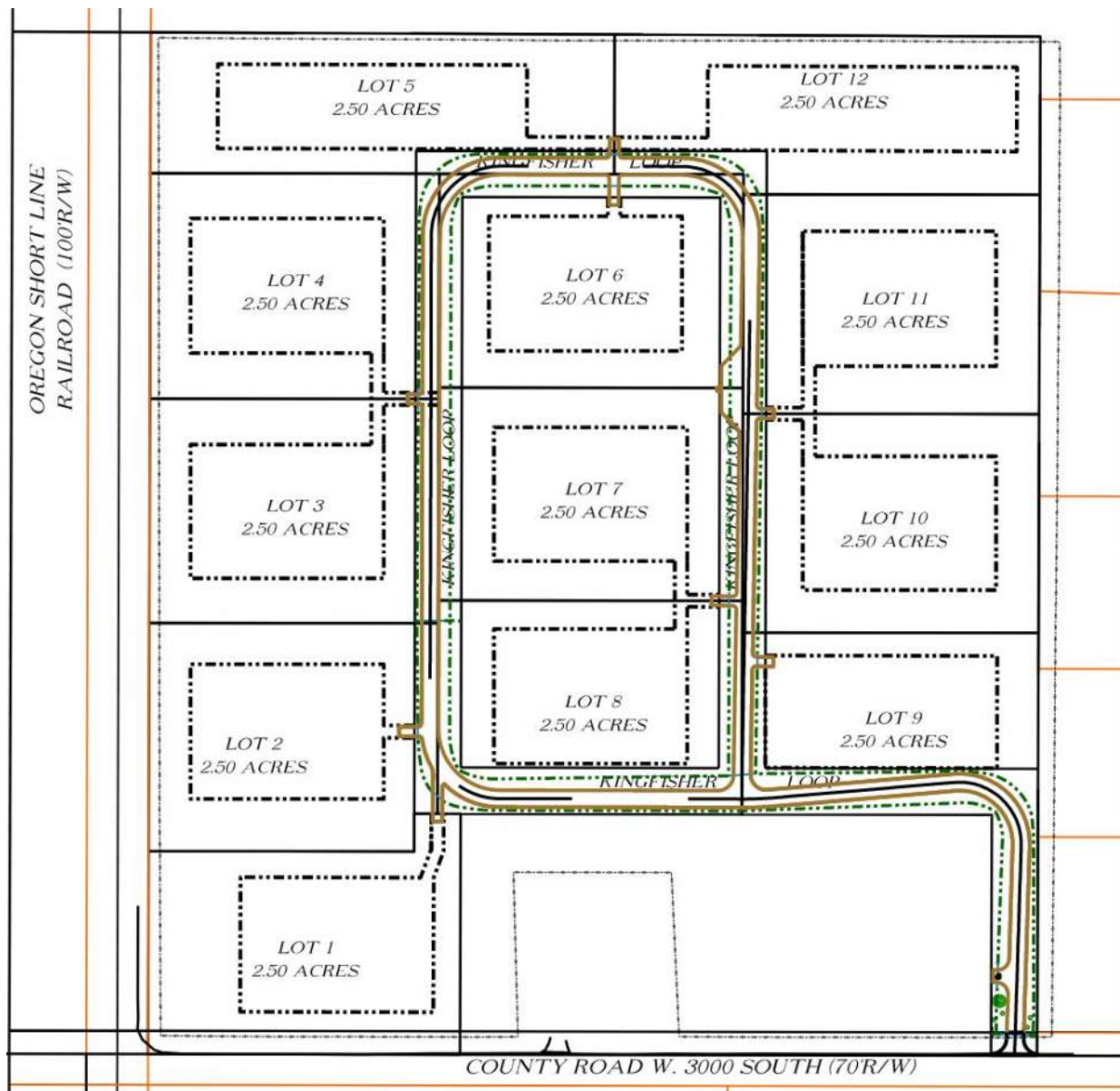


Figure 1: Subdivision Layout

NUTRIENT PATHOGEN EVALUATION APPLICABILITY CRITERIA

1. ANY PORTION OF A PROPOSED DEVELOPMENT IS WITHIN THE COUNTY'S WETLAND AND WATERWAYS OVERLAY AREA

The Teton County, Idaho GIS website was viewed on September 19, 2022. All the wetland and waterway levels were turned on. The project site does not lay within area of the wetland and waterways overlay area as shown in Figure 2. The only mapped waterway in the area is Dick Creek, which is to the west and south of the site but does not cross the property.



Figure 2: Teton County GIS check for Wetland and Waterways Overlay

2. THERE IS EVIDENCE THAT GROUNDWATER COMES WITHIN TEN FEET OF THE GROUND SURFACE ON THE PROPOSED DEVELOPMENT PARCEL SOME TIME OF THE YEAR

Eastern Idaho Public Health (EIPH) provided a letter dated July 19, 2022. That letter provided soil descriptions of three test pits that were excavated down to 10 feet deep across the site. No evidence of groundwater was found in any of the test pits down to 10 feet below ground surface (bgs). The EIPH letter is attached to this document in Appendix A.

3. THERE IS EVIDENCE THAT SOIL DEPTH TO FRACTURED BEDROCK IS TEN FEET OR LESS ANYWHERE ON THE PROPOSED DEVELOPMENT PARCEL

Three test pits were excavated on site down to a 10-foot depth. No bedrock was encountered in the test pits.

4. THE PROPOSED DEVELOPMENT INCLUDES A FOOD SERVICE, COMMERCIAL, OR INDUSTRIAL FACILITY GENERATING 600 GALLONS PER DAY OR MORE WASTEWATER

All twelve lots are proposed only for residential development. There will be no non-residential use or properties generating a design flow of 600 gallons per day or more.

5. THE PROPOSED DEVELOPMENT IS WITHIN AN AREA WHERE THE CONCENTRATION OF NITRATE-NITROGEN IN GROUNDWATER IS 5 MG/L OR HIGHER

The Idaho Department of Environmental Quality (IDEQ) 2020 Nitrate Priority Area GIS server was used to determine nearby background nitrate concentrations. The figure on the following page illustrates the nearby sample points. To the north, there are several sample points ranging from 0.01 mg/L up to 3.46 mg/L. There is one sampling point to the east with a concentration of 0.17 mg/L. Several points lie towards the west and south. These concentrations range from 0.12 to 1.01 mg/L. There are no points within the project area that have a concentration of Nitrate-Nitrogen of 5 mg/L or higher.

CONCLUSION

The proposed Osprey Landing Subdivision does not meet any of the applicability requirements for a Nutrient Pathogen Study. Therefore, a waiver is requested for the study for this project.

REFERENCES

Idaho Department of Environmental Quality. September 29, 2022. 2020 Nitrate Priority Areas.
<https://mapcase.deq.idaho.gov/npa/>.

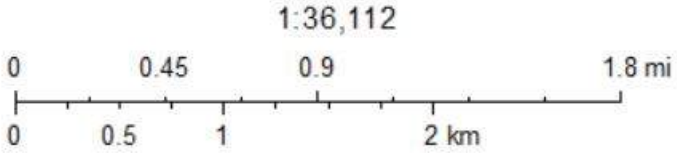
Teton County Code. Title 09 Subdivision Regulations. 2013.

Teton County Online Geographic Information System. September 19, 2022.
<https://tetonidaho.maps.arcgis.com/apps/webappviewer/index.html?id=7cad88173b644a6a8e8c1147e94aa524>.



September 19, 2022

- Idaho Cities/Towns
 - Nitrate Priority Areas (2020)
- Nitrate Monitoring Wells (2020)**
- < 1.99 mg/l
 - 2.00 - 4.99 mg/l
 - 5.00 - 9.99 mg/l



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c)

Figure 3: Nitrate Samples Near Project Vicinity

Appendix A: EIPH LETTER REPORT

07/19/2022

Teton County Planning and Zoning
89 North Main Suite 6
Driggs, Idaho 83422

Sadek Darwiche
PO Box 1677
Jackson, WY 83001

Re: Osprey Landing

I have reviewed the application to have RP04N45E118401 subdivided into twelve (12) lots to be known as Osprey Landing and have determined the parcel and proposed lots are suitable for sub-surface waste disposal systems to serve residences. Each lot will be evaluated specifically when application is made by owner to install a septic system.

Soil information observed shows minor variations across the parcel. Please see the detailed Test Hole Information page for more thorough soil description of each test hole. The following is a generalization of the soils observed in the three (3) test holes.

0-6 inches top soil of silty loam with 25% rock content of gravel and small cobblestones

6-72 inches of silty sandy loam matrix with 70-80% rock content. Clasts are 2-12 inches in diameter and increase in size and amount with depth.

72-120 inches gravelly sand with 70% rock content.

No bedrock was encountered, and no evidence of ground water was observed in any test pit.

Hardpan of approximately 12 inches thick was encountered at a depth of 36 inches in Test Hole 2. This test hole was located on the small bench in the North portion of the parcel. Lots in this area will need to have site evaluations to determine the depth and thickness of this hardpan (also referred to as Tillite). Depth and thickness will dictate the maximum depth of drainfields and type of system that will be required on a lot with this component. No groundwater evidence was seen any test hole. No bedrock was encountered in any test hole.

There is a variation in elevation from the south portion to the north portion of the parcel. Elevation change is less than 10 feet, but should be considered when proposing locations of septic systems to make best use of gravity flow.

Eastern Idaho Public Health gives preliminary approval of the application to divide RP04N45E118401 creating the Osprey Landing Subdivision. Individual subsurface sewage disposal systems may be allowed in accordance with IDAPA 58.01.03 and the Technical Guidance Manual for Individual Subsurface Waste Disposal. All current Idaho Rules must be met. Suitability criteria and required separation distances are to be maintained.

A copy of the final plat is to be provided to the Health District at the time the Health Certificate is signed. The application fee balance if any will also be collected prior to signing the Health Certificate. If this application /plan changes for any reason, please coordinate those changes in advance, with this office.



Kathleen Price
REHS/MSG
Eastern Idaho Public Health District
kprice@eiph.idaho.gov
208-354-2220

SUBDIVISION ON-SITE

Conducted on: July 13 2022 Time: Travel — On-site —

I. NAME OF SUBDIVISION: Osprey Landing

II. LOCATION (COUNTY): Teton - RPO 4N45E 118401

III. GENERAL INFORMATION:

A. Current Land Use: - Pasture -

B. Adjoining Property Use: Residential/Ag -

C. Surface Water (on or near development): Irrigation Ditch SW corner.

D. Slope: Minor N → S and Minor E → W -

E. Drainage Areas Present: No. Minor Changes in Elevation

F. Rock Outcrop Present: No. Higher on north portion.

G. Wetland Indications: No

IV. EVALUATION:

A. Individual water and sewer:
Does each lot appear to have sufficient area to install proposed system and to meet minimum separation requirements? Yes ✓ No —

B. Individual water and central sewer:
Does there appear to be sufficient area for central system and replacement area? Yes — No —

C. Individual sewer and central water system:
Does each lot appear to have sufficient area to install proposed system and to meet minimum separation requirements? Yes — No —

D. Individual sewer and public water system:
Does each lot have sufficient area to install proposed system and to meet minimum separation requirements? Yes — No —

COMMENTS:

- See Prelim Letter -

EHS: R. Ricci

TEST HOLE INFORMATION

SUBDIVISION Osprey Landing DATE 7-13-2022

Test Hole # 1
Location: Lot 9 + 10 Boundary
Depth: 120"

6" Top soil w/ 25% rock
Sandy silt + loam matrix A2b
w/ 70%+ rock content
2-12" Diameter rock clasts most 5-6"
52" greater rock content w/
depth - A2a
medium to coarse sand.
108" larger rocks no fines.
120" Dry / No Bedrock

AAE @ 120"
Test Hole # _____
Location: _____
Depth: _____

Test Hole # 2
Location: Lot 4
Depth: 120"

36" Sandy silt loam B₁
w/ 70% rock
48" Hard pan 12-18" thick
Silty sandy matrix
80% rock A2b
108" gravelly.
Extremely sandy.
No fines.
120" Dry / No Bedrock
Higher elevation
area.

Test Hole # _____
Location: _____
Depth: _____

Test Hole # 3
Location: Between Lot 8 + 2
Depth: 120"

36" Sandy
Silt loam ~~A2b~~ B₁
40% rock content
Much less sand
than in other T.A.s.
less rock content B₁
No Bedrock or G.W.
Vegetation change.
larger sage.
wild flowers

Test Hole # _____
Location: _____
Depth: _____

No hard pan in TH 1 + TH 3.
Size @ B₁ or B₂.
depending on Depth.

Vicinity Map

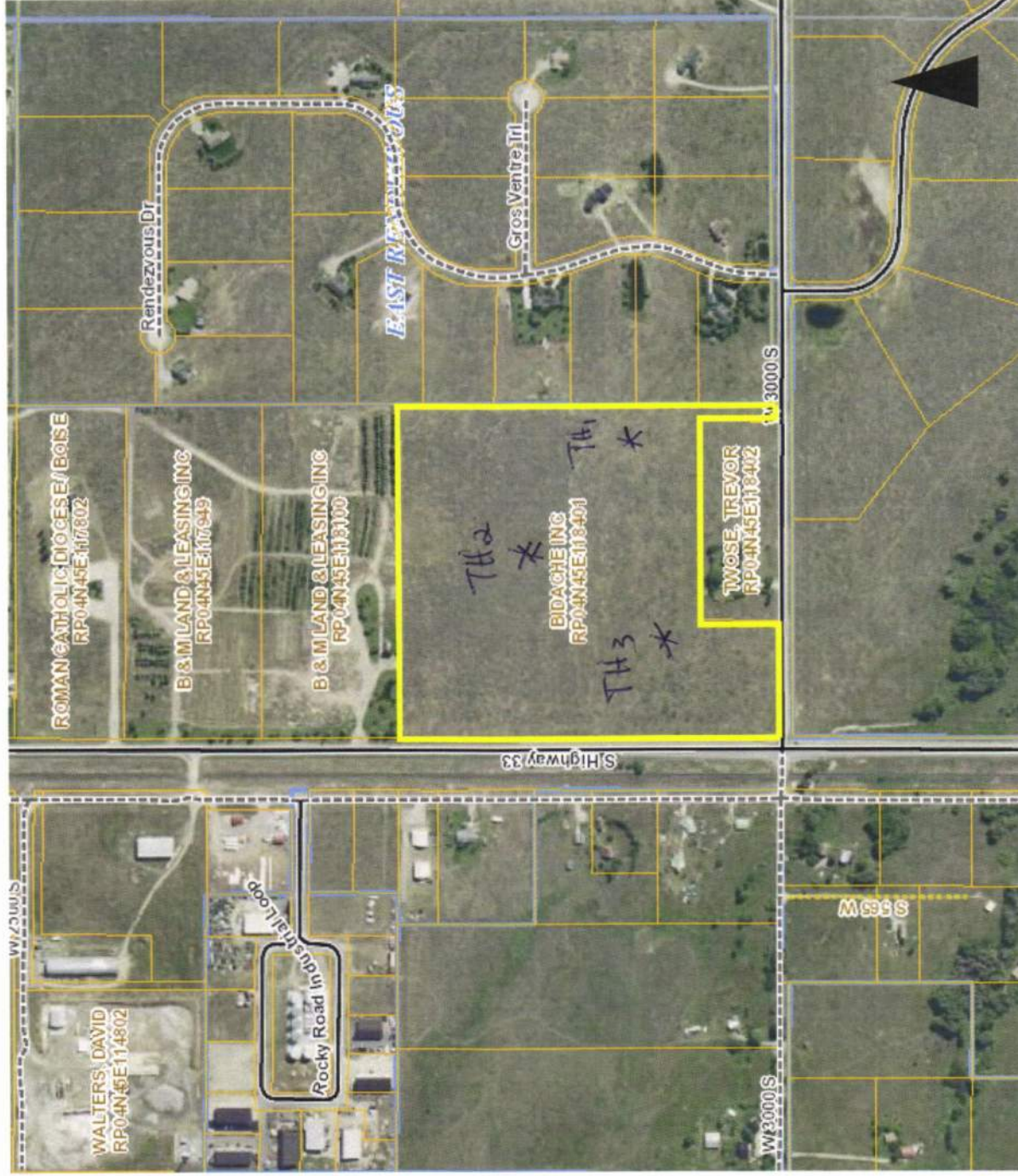
~ Test Hole Locations.

unable to produce.

Global Earth Map.

No internet available

in office July 18, 2002



Map not to scale

06/29/21

Osprey Landing - Concept Plan

2

Y2 CONSULTANTS

Y2 CONSULTANTS
10000 N. 10th Ave., Suite 100
Denver, CO 80231
(303) 750-1000
www.y2consultants.com