



**REGULAR MEETING OF THE
 ARAPAHOE COUNTY PLANNING COMMISSION
 TUESDAY, JANUARY 17, 2017 @ 6:30 P.M.**

REGULAR ITEMS

ITEM 1:	CASE NO. L16-002, PROSPER WASTEWATER TREATMENT PLANT / LOCATION AND EXTENT (L&E) – Continued from 12-20-2016		
LOCATION:	South of I-70 & West of Watkins Rd – Part of the Prosper Development	VOTE:	
ACREAGE:	8.5 Acres	6	IN FAVOR
EXISTING ZONING:	MU-PUD	1	OPPOSED
PROPOSED USE:	Wastewater Treatment Plant	0	ABSENT
APPLICANT:	Prosper Regional Water & Sanitation District		ABSTAIN
CASE MANAGERS:	Planner, Sherman Feher; Engineer, Sue Liu		
REQUEST:	To Approve Location & Extent Case	<input type="checkbox"/> CONTINUED TO:	
MOTION SUMMARY:	Denial (Approval of motion to Deny).	Date: _____	
ITEM 2:	CASE NO. ASI16-001, PROSPER WASTEWATER TREATMENT PLANT / 1041 PERMIT – Continued from 12-20-2016		
LOCATION:	South of I-70 & West of Watkins Rd – Part of the Prosper Development	VOTE:	
ACREAGE:	8.5 Acres	6	IN FAVOR
EXISTING ZONING:	MU-PUD	1	OPPOSED
PROPOSED USE:	Wastewater Treatment Plant	0	ABSENT
APPLICANT:	Prosper Regional Water & Sanitation District		ABSTAIN
CASE MANAGERS:	Planner, Sherman Feher; Engineer, Sue Liu		
REQUEST:	To Recommend Approval of 1041 Permit	<input type="checkbox"/> CONTINUED TO:	
MOTION SUMMARY:	Recommended for Denial (Approval of motion to Recommend Denial; BOCC action required).	Date: _____	

ANNOUNCEMENTS:

- The next regular Planning Commission meeting is scheduled for February 7, 2017 @ 6:30 P.M., at the Lima Plaza Campus - Arapahoe Room located at 6954 S Lima St., Centennial CO 80112.
- Planning Commission agendas, Board of County Commissioner agendas, and other important Arapahoe County information may be viewed online at www.arapahoe.gov or you may contact the Planning Division at 720-874-6650.

PLANNING COMMISSION MEMBERS:

Mark Brummel - Present	Richard Rader - Present	Paul Rosenberg, Chair - Present
Diane Chaffin - Present	Jane Rieck - Present	Richard Sall - Present
Brian Weiss, Chair Pro-Tem - Present		

ARAPAHOE COUNTY PLANNING COMMISSION

PUBLIC HEARING

December 20, 2016

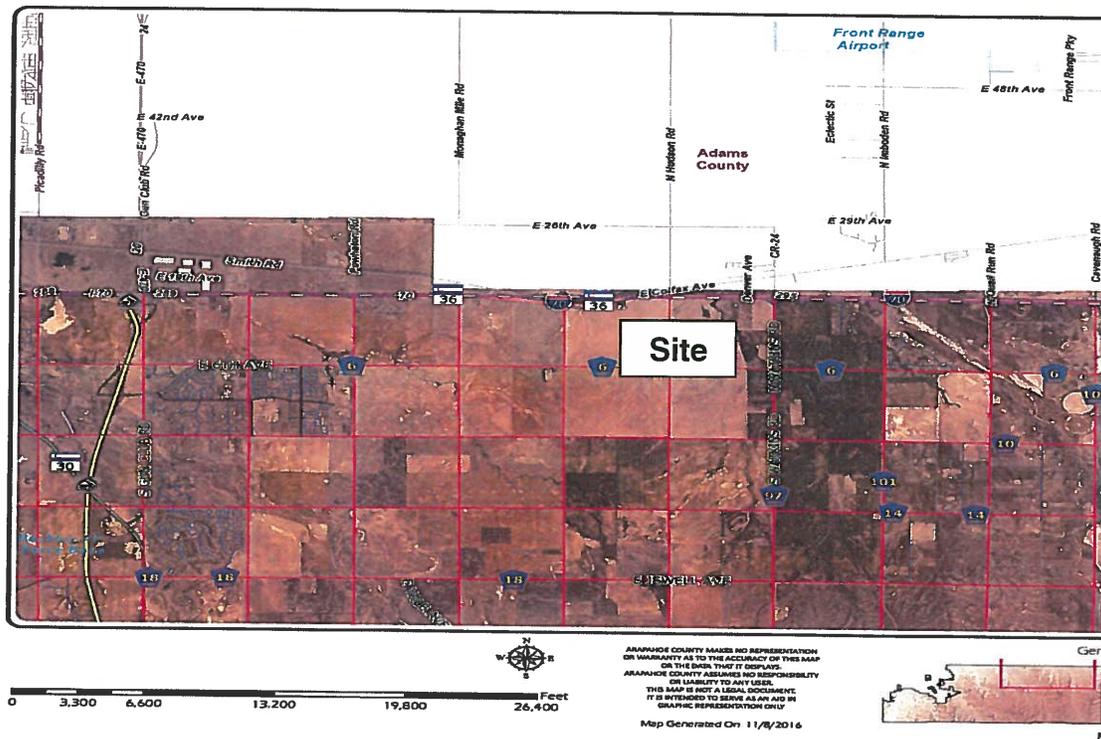
6:30 P.M.

SUBJECT: L16-002 – PROSPER WASTEWATER TREATMENT PLANT LOCATION & EXTENT

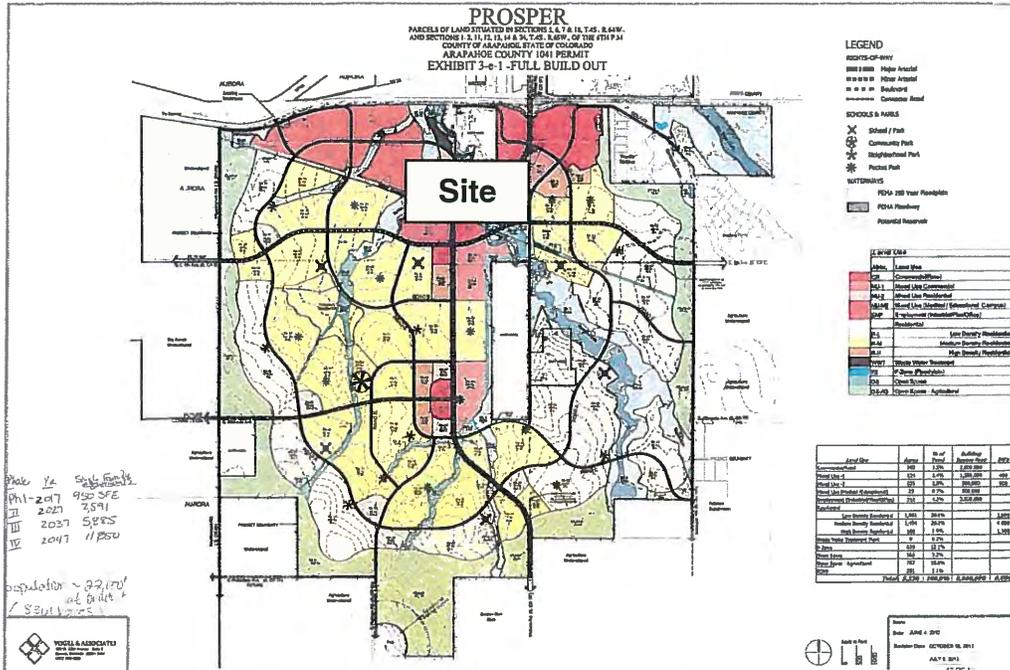
Sherman Feher, Senior Planner

December 8, 2016

VICINITY MAP: The property is located south of I-70 and approximately 2000 feet west of Watkins Road. This application is in Commissioner District No. 3.



Vicinity Map



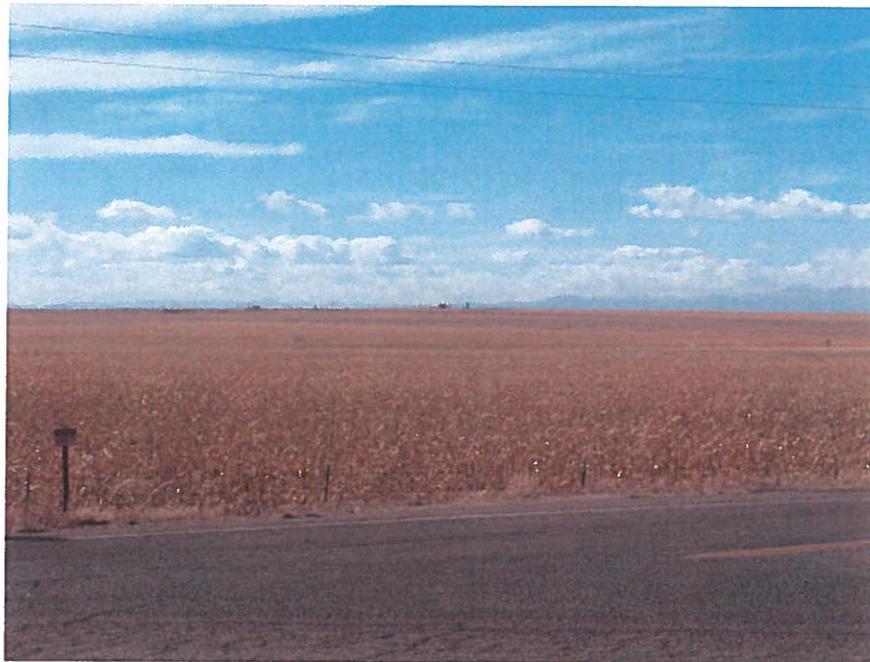
Zoning Map

ADJACENT SUBDIVISIONS, ZONING, AND LAND USES:

- North - Prosper; MU-PUD; Agriculture
- South - Prosper; MU-PUD; Agriculture
- East - Prosper; MU-PUD; Agriculture
- West - Prosper; MU-PUD; Agriculture



**Looking South
over WWTP Site**



**Looking SW over
WWTP Site**

PROPOSAL:

The applicant, The Prosper Regional Water & Sanitation District, is requesting Planning Commission approval for a Location and Extent case, known as the Prosper Wastewater Treatment Plant. This is specified in the Land Development Code as a “major facility of a public utility” as part of the Location & Extent. The applicant seeks to construct a wastewater treatment plant to serve the Prosper Development.

This Location and Extent (L&E) case is being done in conjunction with a 1041 Permit Case. Both of these cases will be heard by the Planning Commission. The Planning Commission will make the final decision on the L&E case and make a recommendation to the BOCC for the 1041 Permit case. The BOCC will make the final decision on the 1041 Permit case. The Location and Extent case primarily reviews the general location and overall extent of the project. The 1041 Permit case reviews environmental and socio-economic factors that are related to the project. There is also a Subdivision Exemption case for the property where the wastewater treatment plant will be located. The Subdivision Exemption case will be heard by the BOCC.

RECOMMENDATION:

Staff: Staff is recommending approval of this case with conditions, based on the findings listed in the staff report.

I. BACKGROUND

Zoning

The property is currently zoned MU-PUD.

II. DISCUSSION

Staff review of this application included a comparison of the project to policies and goals outlined in the Comprehensive Plan, a review of pertinent zoning regulations, background activity, and analysis of referral comments.

1. The Comprehensive Plan

The Comprehensive Plan designation for this area is in Tier 1 of the Planning Reserve. The Planning Reserve is creating a reserve of vacant land to accommodate future uses/development. Tier 1 is envisioned as the first area of development along the I-70 Corridor. One of the goals for Public Facilities and Services is Goal PFS1 IS TO “Plan for Adequate Public Facilities and Service in

Growth Areas.” As such, this proposed wastewater treatment plant is allowed by the Comprehensive Plan land use designation of Tier 1 of the Planning Reserve and is supported by the Goal for adequate public facilities.

2. Regulatory Review and additional Background Information

Chapter 13, Section 13-700 of the Land Development Code, covers the policy and regulatory aspects of a Location and Extent. This includes a specific review of – Location and Extent, Section 13-702 – General Requirements and Procedure. A Location and Extent does not have specific approval criteria but may be approved upon the finding that:

- 13-702.01A No road, park, public way, ground, or space, no public building or structure, and no major facility of a public utility shall be constructed or authorized in the unincorporated areas of Arapahoe County unless and until the proposed location and extent thereof has been submitted to and approved by the Arapahoe County Planning Commission.

- 13-702.05 The Planning Commission and the Board of County Commissioners, when applicable, may approve the facilities as submitted, approve it with conditions, or deny the facility. The conditions to be imposed are those necessary, in the discretion of the Planning Commission and Board of County Commissioners, to mitigate or eliminate any adverse impacts of the proposed facility on the surrounding area, and may include the posting of sufficient performance guarantees with the County to guarantee the construction of any improvements.

SUBMITTAL REQUIREMENTS - The applicant is in compliance with Section 13-703, sub-section 13-703.01, by submitting all of the required materials.

3. Referral Comments

The following chart is an overview of the comments. A copy of all referral comments follows the staff report. The Applicant’s response is in italics

Engineering Services	-	Comments on Engineering studies, Subdivision Improvement Agreement, and Urban Drainage. <i>The applicant has addressed or will address these comments. The remaining items will be conditions of approval.</i>
----------------------	---	--

Mapping	-	Comments on L&E Exhibit. <i>The applicant has addressed or will address these comments.</i>
Zoning Administrator	-	Comments on landscaping. <i>Applicant has addressed or will address comments.</i>
Open Spaces	-	No response.
Weed Control		No response.
Sheriff's Department		No comments.
Bennett Fire District	-	Comments regarding fire suppression, roads, hazardous materials, Knox key access etc. <i>Applicant responded to referral comments; see applicant's comments that are part of this Planning Commission packet. These items will be a condition of approval.</i>
City of Aurora		Comment on Prosper Development, floodplain mapping and Metro Wastewater Reclamation District. <i>Applicant responded to referral comments; see applicant's comments that are part of this Planning Commission packet.</i>
Colorado Parks & Wildlife	-	No response.
Army Corps of Engineers	-	No response.
Assessor's Office	-	No response.
West Arapahoe Conservation District		No response.
Tri-County Health	-	Comment on site application and utility plan, floodplains, dust and odor, and setbacks etc. <i>Applicant responded to referral comments; see applicant's comments that are part of this Planning Commission packet.</i>
REAP		No comments.
Xcel Energy	-	Add utility easements to Preliminary and Final Plats. <i>Comments noted.</i>
East End Advisory Committee	-	Janet Cook had "No comments"; No response from other members.
Urban Drainage		Comments on drainage issues and concerns. <i>The applicant has addressed or will address these comments. The remaining items will be conditions of approval.</i>

III. STAFF FINDINGS

Staff has visited the site and has reviewed the plans and supporting documentation and referral comments. Based upon review of applicable policies and approval standards in the Land Development Code and analysis of referral comments, our findings include:

1. The application for the wastewater treatment plant L&E complies with the Arapahoe County Comprehensive Plan.
2. The submitted L&E application is in conformance with the submittal and processing requirements of the Land Development Code.
3. Staff finds that the request for approval of Location and Extent for wastewater treatment plant is in conformance with policies and goals outlined in the Land Development Code for a Location & Extent.
4. The Applicant needs to obtain a permit to construct and operate a wastewater treatment plant from the Colorado Department of Public Health and Environment.
5. Bennett Fire Protection District has requested a number of items to be addressed by the applicant for the proposed wastewater treatment plant.
6. There are a number of Engineering issues and concerns that need to be addressed.

IV. RECOMMENDATION:

Considering the findings and other information provided herein, the staff recommends approval of this case, Prosper Wastewater Treatment Plant (Case No. L16-002), subject to the following conditions:

1. The applicant makes any minor modifications to plans, as requested by the Public Works and Development Department.
2. The applicant agrees to address all Engineering Services Division comments and concerns as identified within their staff reports, prior to construction.
3. The Applicant will obtain a permit to construct and operate a wastewater treatment plant from the Colorado Department of Public Health and Environment prior to construction of the wastewater treatment plant.
4. The applicant agrees to address comments issued by the Urban Drainage and Flood Control District (UDFCD).
5. The applicant will execute a Subdivision Improvement Agreement.

6. The applicant will obtain all other necessary permits prior to commencing construction of the project.
7. The applicant will comply with all items requested by the Bennett Fire Protection District regarding this project.

This is based upon:

- The proposed use is acceptable and consistent with the standards as determined by the Land Development Code.
- The proposed use benefits and serves the interest of the citizens of Arapahoe County.

V. DRAFT MOTIONS:

A. **APPROVAL:** In the case of L16-002, Prosper Wastewater Treatment Plant Location and Extent, we have read the staff report and received testimony at the public hearing. We find ourselves in agreement with staff findings including all plans and attachments as set forth in the staff report dated December 8, 2016, and move to approve this case, subject to the following conditions:

1. The applicant makes any minor modifications to plans, as requested by the Public Works and Development Department.
2. The applicant agrees to address all Engineering Services Division comments and concerns as identified within their staff reports, prior to construction.
3. The Applicant will obtain a permit to construct and operate a wastewater treatment plant from the Colorado Department of Public Health and Environment prior to construction of the wastewater treatment plant.
4. The applicant agrees to address comments issued by the Urban Drainage and Flood Control District (UDFCD).
5. The applicant will execute a Subdivision Improvement Agreement.
6. The applicant will obtain all other necessary permits prior to commencing construction of the project.
7. The applicant will comply with all items requested by the Bennett Fire Protection District regarding this project.

B. **DENIAL** (This recommendation would not be consistent with the Staff recommendation. Any alternate motion must include new findings and conditions in support of the motion for Approval where those differ from the Staff-recommended findings and conditions):

In the case of L16-002, Prosper Wastewater Treatment Plant Location and Extent, we have read the staff report and received testimony at the public hearing. We find ourselves not in agreement with staff findings regarding the

draft plan and attachments as set forth in the staff report dated December 8, 2016, and DENY the Location and Extent case.

Findings:

1. State new or amended findings to support Planning Commission recommendation of “Denial” as part of the motion.

2.

A. CONTINUE: *In the case of L16-002, Prosper Wastewater Treatment Plant, Location and Extent case, I move to continue the decision on this request to [DATE], 2016, date certain, at 6:30 p.m., at this same location [to receive further information] [to further consider information presented during the hearing].*

Attachments: Application
 Response Letter
 Referral Letters
 Location and Extent Exhibit



Public Works and Development
 6924 S. Lima Street
 Centennial, Colorado 80112
 Phone: 720-874-6650
 www.arapahoegov.com

Land Development Application
 Form must be complete

Land Development Application materials received after 2pm shall be date stamped received the following working day

APPLICANT/REPRESENTATIVE: Vogel & Associates LLC	ADDRESS: 475 West 12th Ave, Suite E Denver, CO 80204 PHONE: 303.893.4288 FAX: 303.893.6792 EMAIL: jvogel@vogelassoc.com	SIGNATURE: NAME: Jeffrey B. Vogel Principal TITLE:
OWNER(S) OF RECORD: VREI, Inc.	ADDRESS: 5641 N Broadway Denver, CO 80215 PHONE: 303.566.8000 FAX: 303.566.8099 EMAIL:	SIGNATURE: NAME: Greg Ruegsegger Vice President TITLE:
ENGINEERING FIRM: Dewberry Engineers Inc. Stacy Roberts 3 957-0637	ADDRESS: 990 S Broadway, Suite 400, Denver, CO 80209 PHONE: 303.951.0614 FAX: 303.825.2322 EMAIL: apratt@dewberry.com	CONTACT PERSON: Alan Pratt, PE

Pre-Submittal Case Number: Q15-103 Pre-Submittal Planner: Sherman Fehrer Pre-Submittal Engineer: Sarah White

Parcel ID no. (AIN no.)	1977-00-0-00-418
Parcel Address or Cross Streets:	Interstate 70 and Watkins Road
Subdivision Name & Filing No.:	None
Related Case Numbers: (Preliminary/Final Development Plan, Rezoning, and / or Plat)	Latest Approved Zoning - Z12-010 also, Z12-100 & S14-001

	EXISTING	PROPOSED
Zoning:	PUD - Waste Water Treatment	PUD - Wastewater Treatment Plant
Case/Project/Subdivision Name:	None	Prosper WWTP
Site Area (Acres):		8.22
Floor Area Ratio (FAR):		0.18
Density (Dwelling Units/Acre):		N/A
Building Square Footage:		66,450 (includes basins)
Disturbed Area (Acres):		

CASE TYPE (Administrative Case types are shaded in Gray)

<input type="checkbox"/> Preliminary Development Plan or Major Amendment <input type="checkbox"/>	<input checked="" type="checkbox"/> Location & Extent or Major Amendment <input type="checkbox"/>	<input type="checkbox"/> Administrative Site Plan	<input type="checkbox"/> Preliminary Plat
<input type="checkbox"/> Master Development Plan or Major Amendment <input type="checkbox"/>	<input type="checkbox"/> Rezoning - Conventional	<input type="checkbox"/> Administrative Amendment to _____ (PDP, FDP, etc.)	<input type="checkbox"/> Final Plat
<input type="checkbox"/> Final Development Plan or Major Amendment <input type="checkbox"/>	<input type="checkbox"/> Land Development Code Amendment	<input type="checkbox"/> Technical Amendment to _____ (PDP, FDP, etc.)	<input type="checkbox"/> Minor Subdivision
<input type="checkbox"/> Planned Sign Program or Major Amendment <input type="checkbox"/>	<input type="checkbox"/> Use by Special Review or Major Amendment <input type="checkbox"/>	<input type="checkbox"/> Commercial Mobile Radio Service (CMRS/cellular antennas)	<input type="checkbox"/> Subdivision Exemption
<input type="checkbox"/> Vacation of Right of Way/Easement/Plat	<input type="checkbox"/> Use by Special Review - Oil and Gas	<input type="checkbox"/> Plat Correction	<input type="checkbox"/> Replat (Major)
<input type="checkbox"/> 1041 - Areas & Activities of State Interest - Use by Special Review <input type="checkbox"/>	<input type="checkbox"/> Special District Title 30 <input type="checkbox"/> Title 32 <input type="checkbox"/>	<input type="checkbox"/> Administrative Oil & Gas Use by Special Review (AOGUSR)	<input type="checkbox"/> Administrative Replat
<input type="checkbox"/> Comprehensive Plan	<input type="checkbox"/> Rural Cluster	<input type="checkbox"/> Street Name Change	<input type="checkbox"/> _____

THIS SECTION FOR OFFICE USE ONLY

Case No:	L16-002	Planning Manager:	Sherman	Engineering Manager:	Sarah
Planning Fee:	Y N \$	Engineering Fee:	Y N \$	TCHD Fee?	<input type="checkbox"/> \$

This application shall be submitted with all applicable application fees. Submittal of this application does not establish a vested property right in accordance with C.R.S. 24-68-105(1). Processing and review of this application may require the submittal of additional information, subsequent reviews, and/or meetings, as outlined in the Arapahoe County Land Development Code.

RECEIVED

FEB 19 2016



Dewberry Engineers Inc. | 303.825.1802
990 South Broadway, Suite 400 | 303.825.2322 fax
Denver, CO 80209 | www.dewberry.com

December 21, 2015

Arapahoe County Public Works & Development
Planning Division
6924 S Lima Street
Centennial, CO 80112

Re: Prosper Development Wastewater Treatment Facility Letter of Intent

Dear Public Works & Development:

Our company, Dewberry Engineers Inc., on behalf of the property owner, Prosper Farms Investment LLC, is proposing a project within unincorporated Arapahoe County. The project is located in between Hayesmount Road and N Watkins Road just south of interstate 70 in the north portion of parcel #035150836. This project includes 8.22 acres and is currently zoned Prosper PDP WWTP.

As referenced in the Prosper Preliminary Development Plan (PDP) and 1041 Permit, the intent is to construct a Waste Water Treatment Plant (WWTP) to serve the Prosper community. The WWTP will be located within Planning Area 71 of the Prosper PDP. The proposed building structures include an administration/lab, headworks, pumping station, UV/reuse water, digester blower, solids handling, and maintenance shop.

Based on previous discussions, it is our understanding that a 1041 Permit and Location and Extents application will have to be processed and approved. It is the intent to schedule a pre-submittal meeting to discuss and review in greater detail the process and respective submittal requirements.

Developer contact information:

Vogel & Associates
Jeff Vogel, AICP, Principal
475 W 12th Ave, Suite E
Denver, CO 80204
Phone: (303) 893-4288
Email: jvogel@vogelassoc.com

Sincerely,
Dewberry Engineers Inc.

Patrick Radabaugh, PE
Project Manager



ARAPAHOE COUNTY
COLORADO'S FIRST

Planning Commission Engineering Summary Report

Date: November 10, 2016

To: Arapahoe County Planning Commissioners

Via: Sherman Feher, Planning Division

From: Sarah White, Engineering Services Division

Re: **Prosper Wastewater Treatment Plant (WWTP)**
ASI16-001 1041 Permit
L16-002 Location & Extent
X16-001 Subdivision Exemption

Purpose and Recommendation

The purpose of this report is to provide the Engineering Services Division Staff findings, comments, and recommendations regarding the above-referenced land use application(s).

Scope/Location:

Dewberry Engineers Inc., on behalf of owners VREI, Inc., is requesting approval of the 1041, Location & Extent and Subdivision Exemption for the development of the Prosper Wastewater Treatment Plant (WWTP). The proposed development is generally located within the area known as 'Prosper', south of Interstate 70, east of N. Watkins Road and north of E 6th Avenue. The proposal is for a wastewater treatment plant on approximately 9 acres. The site is proposed to be built in 4 phases based on the future development of Prosper.

The site is located within the Box Elder Creek drainage basin. Phase I development will utilize a temporary access road (reference Arapahoe County Case No. E16-029) until the permanent public road is built out as per the Prosper PDP (case no. Z12-100).

Referenced Referral Items

1041
L&E Exhibit
Subdivision Exemption
Drainage Report
Construction Drawings
O&M Manual
GESC Plans and Report

*Cc: Chuck Haskins, Engineering Services Division, Division Manager
Case Files ASI16-001, L16-002, X16-001*

Engineering Services Division Staff (Staff) has reviewed the referenced land use application(s) and has the following findings and comments:

Findings:

1. Engineering review and approval fees are included with the planning fee for the 1041 and L&E, with the exclusion of the easements that will need to be prepared by separate document(s). Fees for the Subdivision Exemption are paid.
2. This site lies within Coyote Run-Box Elder Creek watershed basin. Basin fees are still being established for this area, but are not yet determined.
3. This development lies within the boundaries of the Urban Drainage and Flood Control District (UDFCD).
4. Urban Drainage and Flood Control District (UDFCD) has been included as a referral agency. Their comments will need to be addressed prior to final approval
5. Construction activities that disturb one or more acres are required by the Environmental Protection Agency (EPA) to obtain a Construction Stormwater Permit.
6. The subdivision exemption process requires a permanent roadway or an access easement to be established. The permanent roadway as propose din the Prosper Preliminary Development Plan (PDP) is not yet constructed. Once the development around the Waste Water Treatment Plant (WWTP) begins, a permanent road will be constructed that allows access to the WWTP. In the interim, access to WWTP will be via private access road. Easement recordation information will need to be noted on the Subdivision Exemption exhibit. Engineering Case E16-029 has been submitted and is under review for the Access Road construction.
7. The WWTP will have a limited on-site staff, and generates very minimal traffic, as such a Traffic Impact Study was waived for this development.
8. Drainage easements for each detention pond outfalls will need to be dedicated to Arapahoe County via separate document.
9. Waste water treatment plants are exempt from specific critical facility regulations established by the Colorado Water Conservation Board. However, applicant in encouraged to minimize potential hazards from floodwaters. County would recommend have lowest floor elevation a minimum of 2 feet above 100-year water surface elevation, ensure on-site waste disposal is located such that outside but adjacent to 100 year floodplain - are there any additional mitigation measures needed? County discourages critical facilities within the 500 year floodplain, since these drainage ways have not been mapped for 500 yr flooding, recommend additional provisions may be needed - flood proofing bldg or elevation of facility to be at 2 ft above BFE (LDC section 12-2007.09)
10. All applicable public and private improvements (i.e., storm sewer systems, detention ponds, roadways appurtenances, etc.) associated with this development proposal shall be guaranteed within a Subdivision Improvements Agreement (SIA). The applicant will be required to enter into a Subdivision Improvement Agreement (SIA) to guarantee onsite and offsite improvements related to this development. Subdivision Improvement Agreement will be prepared by County Staff with finalization of costs.

Recommendations:

The Division of Engineering Services recommends this case favorably subject to the following conditions:

1. The applicant agrees to address the Division of Engineering Services' comments and concerns as identified within the ESD Staff Report.
2. The applicant agrees to address comments issued by the Urban Drainage and Flood Control District (UDFCD).
3. The applicant executes a Subdivision Improvement Agreement.



URBAN DRAINAGE AND FLOOD CONTROL DISTRICT

Paul A. Hindman, Executive Director
2480 W. 26th Avenue, Suite 156B
Denver, CO 80211-5304

Telephone 303-455-6277
Fax 303-455-7880
www.udfcd.org

September 30, 2016

UDFCD Maintenance Eligibility Program Referral Review Comments

To: Sarah L. White, Arapahoe County
Project: Prosper Farms WWTP
Stream: Coyote Run and Rat Run
UDFCD MEP Phase: Design
UD MEP ID: 106341/10000720

Dear Sarah,

This letter is in response to the request for our comments concerning the referenced project. We appreciate the opportunity to review this proposal. We have reviewed this proposal only as it relates to major drainage features, in this case:

- Coyote Run and Rat Run

We have the following comments to offer:

1. The Phase III Drainage Report states that the existing 100-yr floodplains for Coyote Run and Rat Run establish constraints from a layout and elevation standpoint. We agree with this assessment and recommend that the 100-year flood elevations for the adjacent major drainageways be confirmed relative to the grading and elevations of the site and treatment plant.
2. The proposed private access road is the sole access in and out of the proposed WWTP. The road is proposed to cross Rat Run. The design of the Rat Run roadway crossing should be designed for long term sustainability, with consideration of the 100-year discharge (2,500 cfs), stream channel stability and floodplain impacts. A hydraulic analysis should be conducted for the crossing. According to the Phase III Report, a future High Density Residential Land use is designated for property to the south of the WTP site. With regard to this future upstream land use, consideration should be given to installation of a stabilization check structure with the crossing. The need for additional check structures can be evaluated as future development is proposed upstream. A Floodplain Development Permit application should be submitted, with certification by the Engineer of no adverse impact to 100-year flood elevations.

3. Two storm drain outfalls to Rat Run are proposed, one each from the North and West onsite detention ponds. It appears that the discharge is to the overbank zone of the major drainageway, so a low tailwater basin is the appropriate outfall protection, as it allows outflows to sheet flow to the main channel following dissipation at the pipe outfall. Calculations for the outfalls should be included in the Drainage Report. The pond outfall profiles on Sheets 4 and 5 should include the design flow, velocity and Froude Number at the outfall and should show the FES and outlet protection. Standard UDFCD details for a typical FES (Fig 9-29), Low Tailwater Basin (Fig 9-37, as appropriate) and Riprap/Soil Riprap (Fig 8-34) should be included.
4. The overflow spillways from each pond should have a concrete crest control wall.
5. The Drainage Plan at the end of the Phase III Report should include the 100-yr flood elevations along Rat Run as indicated on the 1995 FHAD or as may be updated by analysis of the access road crossing.

Please feel free to contact me with any questions or concerns.

Sincerely,
Urban Drainage and Flood Control District



John M. Pflaum, P.E.
Floodplain Management Program



Public Works and Development
 6924 S. Lima Street Centennial, Colorado 80112 Phone: 720-874-6650; FAX 720-874-6611
www.co.arapahoe.co.us

Planning Division
 Phase II Referral Routing

Case Number / Case Name: ASI16-001, Prosper Wastewater Treatment Plant 1041 Permit / Areas of State Interest and L16-002, Prosper Wastewater Treatment Plant / Location and Extent and X16-001, Prosper Wastewater Treatment Plant/Subdivision Exemption

Planner: Sherman Feher
 Engineer: Sarah L White
 Date: July 8, 2016
 Date to be returned: August 8, 2016

Arapahoe County Agencies		Citizen's Organizations	
<input checked="" type="checkbox"/>	Assessor / Arapahoe County (Residential)	Karen Hart	
<input type="checkbox"/>	Attorney / Arapahoe County	Robert Hill	<input type="checkbox"/> CCNA-Cherry Creek Neighborhoods Ass.
<input type="checkbox"/>	Building / Arapahoe County	Steve Byer	<input type="checkbox"/> CECON-(Within Centennial)
<input checked="" type="checkbox"/>	Engineering / Arapahoe County	Sarah L. White	<input type="checkbox"/> Four Square Mile Neighborhood
<input checked="" type="checkbox"/>	Mapping / Arapahoe County	Pat Hubert	<input type="checkbox"/> South Metro Chamber of Commerce
<input type="checkbox"/>	Oil & Gas / Arapahoe County	Diane Kocls	Conservation District
<input checked="" type="checkbox"/>	Open Space / Arapahoe County	Shannon Carter	<input type="checkbox"/> Deer Trail Conservation District
<input checked="" type="checkbox"/>	Planning / Arapahoe County	Sherman Feher	<input checked="" type="checkbox"/> West Arapahoe Conservation District
<input checked="" type="checkbox"/>	Sheriff / Arapahoe County	1 to Brian McKnight 1 to Glenn Thompson	Transportation
<input checked="" type="checkbox"/>	Weed Control / Arapahoe County	Russell Johnson	<input type="checkbox"/> CDOT / State Highway Dept- Region 1
<input checked="" type="checkbox"/>	Zoning / Arapahoe County	Tammy King	<input type="checkbox"/> E-470 Authority
Referral Agencies		<input type="checkbox"/> RTD	Rick Solomon
<input type="checkbox"/>	Architectural Review Committee		Peggy Davenport
<input type="checkbox"/>	Airport or Military Base		Chris Quinn
<input type="checkbox"/>	CGS Colorado Geological Survey-Soils		Utilities: Gas, Electric & Phone
<input checked="" type="checkbox"/>	City / Town	Aurora	<input type="checkbox"/> Centurylink/Phone
<input checked="" type="checkbox"/>	Colorado Parks and Wildlife	Travis Harris	<input type="checkbox"/> Conoco Phillips / Gas Pipeline
<input type="checkbox"/>	County		<input checked="" type="checkbox"/> XCEL
<input type="checkbox"/>	DRCOG		<input type="checkbox"/> IREA
<input checked="" type="checkbox"/>	Bennett Fire Protection District	Caleb Connor	Water / Sanitation / Stormwater / Wetlands
<input type="checkbox"/>	Metro District		<input type="checkbox"/> ACWWA
<input type="checkbox"/>	Post Office Growth Coordinator	J. Hernandez	<input checked="" type="checkbox"/> U.S. Army Corp. of Engineer
<input checked="" type="checkbox"/>	Reap I-70 Regional Economic Advancement Partnership	Matt Reay and Jack Keever	<input type="checkbox"/> CCBWQA
<input type="checkbox"/>	Recreation District / Park District (External)		<input type="checkbox"/> Colorado Division of Water Resources
<input type="checkbox"/>	Bennett School District #29J Aurora School District	Keith Yach	<input type="checkbox"/> SEMSWA
<input type="checkbox"/>	Special District		<input type="checkbox"/> ECCVW&S
<input checked="" type="checkbox"/>	Tri-County Health Department	Sheila Lynch	<input checked="" type="checkbox"/> Urban Drainage & Flood
<input type="checkbox"/>			<input checked="" type="checkbox"/> Other / 5 Sets East End Adv. Committee

The enclosed case has been submitted to the Arapahoe County Planning Office for consideration. Because of the possible effect of the proposed development upon your area, the case is being referred for your comment. Please examine this request and, after review, check the appropriate line and return to the Arapahoe County Planning Office on or before the date indicated above.

COMMENTS:	SIGNATURE
<input type="checkbox"/> Have NO Comments to make on the case as submitted	
<input checked="" type="checkbox"/> Have the following comments to make related to the case: <i>SEE ATTACHED</i>	<i>ATS 7-12-16</i>

Note change to add language the the quantities must reflect the required number of plant material

002 Prosper WASTEWATER TREATMENT PLANT

PAGE 6: STANDARD NOTES: REMOVE LANGUAGE FROM #2 OR ADD QUANTITIES MUST MATCH NUMBER OF TREES AND SHRUBS PROVIDED IN LANDSCAPE SUMMARY TABLE #3 - SOIL AMENDMENT TYPE + RATIO + TILLING DEPTH

Note added for amendment, ratio, and tilling depth.

LEGEND: SEED TYPES PROVIDED

Caliper sizes, heights, and container sizes were added to plant schedule. Specific Types and quantities of plants were added to plans.

SHRUB BED - TYPES / QUANTITIES ON PLAN
TREES - CALIPER SIZES, Hgts + TYPE BREAKDOWN ON PLAN ON CHART
SHRUBS - QUANTITIES ON PLAN w/ CONTAINER SIZES ON CHART PAGE 7

PAGE 7: PLANT SCHEDULE

ALL DECIDUOUS TREES NEED QUANTITY BREAKDOWN + CALIPER SIZE

ALL ORNAMENTAL TREES NEED QUANTITY BREAKDOWN + CALIPER SIZE

ALL EVERGREEN TREES NEED QUANTITY BREAKDOWN + TREE HEIGHT

ALL SHRUBS + GRASSES NEED QUANTITY BREAKDOWN + CONTAINER SIZES - 5 GAL / 1 GAL.

ARE 1 GAL SHRUBS (GRASSES) BEING SUBSTITUTED FOR 5 GAL SHRUBS?

NO HEIGHT FOR SECURITY FENCING ON DETAIL (2)
IS VINYL CLAD FABRIC ALLOWED AS A FENCE TYPE?

Caliper sizes, heights, and container sizes were added to plant schedule. Specific Types and quantities of plants added to plant schedule.

Ornamental grasses were removed from plant schedule because none were shown on plan.

Detail shows dimension of 8'-0" for height and 8' ft. is in the detail description for the fence.

Vinyl clad fabric is the coating on the fence. No slats are proposed for the fence.

2.16.002

Cont

PAGE 2 - ALL PINES SHOULD BE TRIPLED GUYED/STAKED
REMOVE "UPLAND" FROM UPLAND EVERGREEN TREE

Detail revised to include tripled guyed/
staked, and "UPLAND" was removed
from detail title.



Public Works and Development
 6924 S. Lima Street Centennial, Colorado 80112 Phone: 720-874-6650; FAX 720-874-6611
www.co.arapahoe.co.us

Planning Division
 Phase II Referral Routing

Case Number / Case Name:	AS116-001, Prosper Wastewater Treatment Plant 1041 Permit / Areas of State Interest and L16-002, Prosper Wastewater Treatment Plant / Location and Extent and X16-001, Prosper Wastewater Treatment Plant/Subdivision Exemption
Planner:	Sherman Feher
Engineer:	Sarah L White
Date:	July 8, 2016
Date to be returned:	August 8, 2016

Arapahoe County Agencies		Citizen's Organizations	
<input checked="" type="checkbox"/>	Assessor / Arapahoe County (Residential)	Karen Hart	
<input type="checkbox"/>	Attorney / Arapahoe County	Robert Hill	<input type="checkbox"/> CCNA-Cherry Creek Neighborhoods Ass.
<input type="checkbox"/>	Building / Arapahoe County	Steve Byer	<input type="checkbox"/> CECON-(Within Centennial)
<input checked="" type="checkbox"/>	Engineering / Arapahoe County	Sarah L. White	<input type="checkbox"/> Four Square Mile Neighborhood
<input checked="" type="checkbox"/>	Mapping / Arapahoe County	Pat Hubert	<input type="checkbox"/> South Metro Chamber of Commerce
<input type="checkbox"/>	Oil & Gas / Arapahoe County	Diane Kocis	Conservation District
<input checked="" type="checkbox"/>	Open Space / Arapahoe County	Shannon Carter	<input type="checkbox"/> Deer Trail Conservation District
<input checked="" type="checkbox"/>	Planning / Arapahoe County	Sherman Feher	<input checked="" type="checkbox"/> West Arapahoe Conservation District
<input checked="" type="checkbox"/>	Sheriff / Arapahoe County	1 to Brian McKnight 1 to Glenn Thompson	Transportation
<input checked="" type="checkbox"/>	Weed Control / Arapahoe County	Russell Johnson	<input type="checkbox"/> CDOT / State Highway Dept- Region 1
<input checked="" type="checkbox"/>	Zoning / Arapahoe County	Tammy King	<input type="checkbox"/> E-470 Authority
Referral Agencies		<input type="checkbox"/> RTD	Chris Quinn
<input type="checkbox"/>	Architectural Review Committee		
<input type="checkbox"/>	Airport or Military Base		Utilities: Gas, Electric & Phone
<input type="checkbox"/>	CGS Colorado Geological Survey-Soils		<input type="checkbox"/> Centurylink/Phone
<input checked="" type="checkbox"/>	City / Town	Aurora	<input type="checkbox"/> Conoco Phillips / Gas Pipeline
<input checked="" type="checkbox"/>	Colorado Parks and Wildlife	Travis Harris	<input checked="" type="checkbox"/> XCEL
<input type="checkbox"/>	County		<input type="checkbox"/> IREA
<input type="checkbox"/>	DRCOG		Water / Sanitation / Stormwater / Wetlands
<input checked="" type="checkbox"/>	Bennett Fire Protection District	Caleb Connor	<input type="checkbox"/> ACWWA
<input type="checkbox"/>	Metro District		<input checked="" type="checkbox"/> U.S. Army Corp. of Engineer
<input type="checkbox"/>	Post Office Growth Coordinator	J. Hernandez	<input type="checkbox"/> CCBWQA
<input checked="" type="checkbox"/>	Reap I-70 Regional Economic Advancement Partnership	Matt Reay and Jack Keever	<input type="checkbox"/> Colorado Division of Water Resources
<input type="checkbox"/>	Recreation District / Park District (External)		<input type="checkbox"/> SEMSWA
<input type="checkbox"/>	Bennett School District #29J Aurora School District	Keith Yach	<input type="checkbox"/> ECCW&S
<input type="checkbox"/>	Special District		<input checked="" type="checkbox"/> Urban Drainage & Flood
<input checked="" type="checkbox"/>	Tri-County Health Department	Sheila Lynch	<input checked="" type="checkbox"/> Other / 5 Sets East End Adv. Committee
<input type="checkbox"/>			

The enclosed case has been submitted to the Arapahoe County Planning Office for consideration. Because of the possible effect of the proposed development upon your area, the case is being referred for your comment. Please examine this request and, after review, check the appropriate line and return to the Arapahoe County Planning Office on or before the date indicated above.

COMMENTS:		SIGNATURE
<input checked="" type="checkbox"/>	Have NO Comments to make on the case as submitted	<i>Sarah L White</i>
<input type="checkbox"/>	Have the following comments to make related to the case:	



Public Works and Development
 6924 S. Lima Street Centennial, Colorado 80112 Phone: 720-874-6650; FAX 720-874-6611
 www.co.arapahoe.co.us

Planning Division
Phase II Referral Routing

Case Number / Case Name: ASI16-001, Prosper Wastewater Treatment Plant 1041 Permit / Areas of State Interest and L16-002, Prosper Wastewater Treatment Plant / Location and Extent and X16-001, Prosper Wastewater Treatment Plant/Subdivision Exemption

Planner: Sherman Feher
Engineer: Sarah L White
Date: July 8, 2016
Date to be returned: August 8, 2016

Arapahoe County Agencies		Citizen's Organizations	
<input checked="" type="checkbox"/>	Assessor / Arapahoe County (Residential)	Karen Hart	
<input type="checkbox"/>	Attorney / Arapahoe County	Robert Hill	<input type="checkbox"/> CCNA-Cherry Creek Neighborhoods Ass.
<input type="checkbox"/>	Building / Arapahoe County	Steve Byer	<input type="checkbox"/> CECON-(Within Centennial)
<input checked="" type="checkbox"/>	Engineering / Arapahoe County	Sarah L. White	<input type="checkbox"/> Four Square Mile Neighborhood
<input checked="" type="checkbox"/>	Mapping / Arapahoe County	Pat Hubert	<input type="checkbox"/> South Metro Chamber of Commerce
<input type="checkbox"/>	Oil & Gas / Arapahoe County	Diane Kocis	Conservation District
<input checked="" type="checkbox"/>	Open Space / Arapahoe County	Shannon Carter	<input type="checkbox"/> Deer Trail Conservation District
<input checked="" type="checkbox"/>	Planning / Arapahoe County	Sherman Feher	<input checked="" type="checkbox"/> West Arapahoe Conservation District
<input checked="" type="checkbox"/>	Sheriff / Arapahoe County	1 to Brian McKnight 1 to Glenn Thompson	Transportation
<input checked="" type="checkbox"/>	Weed Control / Arapahoe County	Russell Johnson	<input type="checkbox"/> CDOT / State Highway Dept- Region 1
<input checked="" type="checkbox"/>	Zoning / Arapahoe County	Tammy King	<input type="checkbox"/> E-470 Authority
Referral Agencies			<input type="checkbox"/> RTD
<input type="checkbox"/>	Architectural Review Committee		<input type="checkbox"/>
<input type="checkbox"/>	Airport or Military Base		Utilities: Gas, Electric & Phone
<input type="checkbox"/>	CGS Colorado Geological Survey-Soils		<input type="checkbox"/> Centurylink/Phone
<input checked="" type="checkbox"/>	City / Town	Aurora	<input type="checkbox"/> Conoco Phillips / Gas Pipeline
<input checked="" type="checkbox"/>	Colorado Parks and Wildlife	Travis Harris	<input checked="" type="checkbox"/> XCEL
<input type="checkbox"/>	County		<input type="checkbox"/> IREA
<input type="checkbox"/>	DRCOG		Water / Sanitation / Stormwater / Wetlands
<input checked="" type="checkbox"/>	Bennett Fire Protection District	Caleb Connor	<input type="checkbox"/> ACWWA
<input type="checkbox"/>	Metro District		<input checked="" type="checkbox"/> U.S. Army Corp. of Engineer
<input type="checkbox"/>	Post Office Growth Coordinator	J. Hernandez	<input type="checkbox"/> CCBWQA
<input checked="" type="checkbox"/>	Reap I-70 Regional Economic Advancement Partnership	Matt Reay and Jack Keever	<input type="checkbox"/> Colorado Division of Water Resources
<input type="checkbox"/>	Recreation District / Park District (External)		<input type="checkbox"/> SEMSWA
<input type="checkbox"/>	Bennett School District #29J Aurora School District	Keith Yach	<input type="checkbox"/> ECCVW&S
<input type="checkbox"/>	Special District		<input checked="" type="checkbox"/> Urban Drainage & Flood
<input checked="" type="checkbox"/>	Tri-County Health Department	Sheila Lynch	<input checked="" type="checkbox"/> Other / 5 Sets East End Adv. Committee
<input type="checkbox"/>			

The enclosed case has been submitted to the Arapahoe County Planning Office for consideration. Because of the possible effect of the proposed development upon your area, the case is being referred for your comment. Please examine this request and, after review, check the appropriate line and return to the Arapahoe County Planning Office on or before the date indicated above.

COMMENTS:	SIGNATURE
<input checked="" type="checkbox"/> Have NO Comments to make on the case as submitted	<i>James Cook</i>
<input type="checkbox"/> Have the following comments to make related to the case:	



Planning Division
15151 E. Alameda Parkway, Ste. 2300
Aurora, Colorado 80012
303.739.7250

Worth Discovering • aurora.gov

August 3, 2016

Ms. Nancy Doty, Chair
Arapahoe County Commission
5334 S. Prince Street
Littleton, CO 80120

Dear Chair Doty,

Thank you for the opportunity to comment on the referral for the Prosper Wastewater Treatment Plant application. The City of Aurora has reviewed the application and has the following comments:

1. City Concerns Regarding The Prosper Development

Prosper and the adjacent Sky Ranch development do not conform to Metro Vision 2035, and, if approved, will have significant traffic, noise and water supply issues. Given these issues, the City of Aurora does not support these proposals. The applicant could seek annexation into Aurora. The annexation process includes mechanisms to address the traffic, land use, and water service issues that this development presents.

2. Public Works Department

Floodplain mapping provided with the application package appears to present current effective FEMA mapping. UDFCD recently completed a FHAD study (Olsson, 2014) which included Coyote Run and appears to show a somewhat wider floodplain (especially just upstream of the I-70 crossing) and somewhat higher flood elevations. The County may want to consider if the more recent UDFCD study constitutes the "best available information" and require its use rather than the current FEMA mapping.

The 2014 UDFCD FHAD did not include Rat Run and current effective FEMA mapping for this stream system upstream of I-70 and adjacent to the proposed WWTP site is Approximate Zone A. It is recommended as part of the WWTP design process (if not 1041 permitting) that the applicant carry out floodplain modeling to develop detailed floodplain limits and elevations for Rat Run.

UDFCD recently completed an MDP that includes Coyote Run (Olsson, 2014) and recommended "floodplain preservation" with no structural improvements for the channel reach adjacent to the proposed WWTP. It appears that the proposed site plan is adhering to this UDFCD conceptual design and the City would recommend this approach be maintained when/if updated FHAD mapping is utilized for Coyote Run and detailed floodplain information is developed for Rat Run.

The UDFCD MDP (Olsson, 2014) indicates that the Coyote Run channel slope is on the order of 0.6% in the reach adjacent to the proposed WWTP and recommends no channel check structures. A slope of 0.6% is relatively high for a developed watershed and the introduction of WWTP and urban runoff base flows into a previously intermittent stream system has the potential to significantly impact channel invert and bank stability. UDFCD has recently changed its recommended channel design slopes for urbanized watersheds to be substantially lower than 0.6%. It is recommended that the applicant address the potential need for channel checks and/or grade controls.

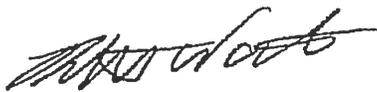
WWTP's are typically considered "critical facilities" and as such, it is recommended that an enhanced level of flood protection (> than the 100yr event) be considered. The COA standard for critical facilities is 2 feet above the 100-yr floodplain. Draft federal guidance for EO 13690 has similar requirements.

3. Metro Wastewater Reclamation District

In reviewing the maps in our records, it appears that the Prosper area is partially within our "expected service area", however that is only relevant to Special Connectors and expansion of their service area. Prosper is not within the corporate boundaries of Aurora so they are not obligated to send that flow to the District.

In the event Aurora were to annex the Prosper development in the future, the treatment plant that the developer is proposing could not be expanded, or that area would have to be excluded from the District under 32-4-515 and Board Policy Exclusion-Service Area. Even though the proposed treatment plant may be within our expected service area, unless it is within the boundaries of Aurora or they choose to serve it (Service Contract section 303), it is District staff's opinion that there is no requirement that it connects to the District's system and it would not violate our competing system prohibitions.

Cordially,



Bob Watkins
Interim Planning and Development Services Director
City of Aurora

Cc: Members of City Council
George Noe, City Manager
Nancy Freed, Deputy City Manager
Jason Batchelor, Deputy City Manager

City of Aurora Comments and Responses

1. City Concerns Regarding

The Prosper Development Prosper and the adjacent Sky Ranch development do not conform to Metro Vision 2035, and, if approved, will have significant traffic, noise and water supply issues. Given these issues, the City of Aurora does not support these proposals. The applicant could seek annexation into Aurora. The annexation process includes mechanisms to address the traffic, land use, and water service issues that this development presents.

Response: The proposed WWTP is consistent with the approved Prosper Preliminary Development Plan. It is the applicant's intent to develop the property in Arapahoe County consistent with the approved Preliminary Development Plan. The approved Preliminary Development Plan addresses issues related to land use, drainage, water service and other planning considerations.

2. Public Works Department

Floodplain mapping provided with the application package appears to present current effective FEMA mapping. UDFCD recently completed a FHAD study (Olsson, 2014) which included Coyote Run and appears to show a somewhat wider floodplain (especially just upstream of the I-70 crossing) and somewhat higher flood elevations. The County may want to consider if the more recent UDFCD study constitutes the "best available information" and require its use rather than the current FEMA mapping.

The 2014 UDFCD FHAD did not include Rat Run and current effective FEMA mapping for this stream system upstream of I-70 and adjacent to the proposed WWTP site is Approximate Zone A. It is recommended as part of the WWTP design process (if not 1041 permitting) that the applicant carry out floodplain modeling to develop detailed floodplain limits and elevations for Rat Run.

Response: We feel an obligation to continue to show the current FEMA mapping, until such time as it is updated by the more current 2014 UDFCD FHAD. We have provided (to Arapahoe County) our 100 yr modeling of Rat Run and its tributary known as Rat 1-D (or known as stream 120), for the purpose of identifying the existing conditions 100 yr flood limits, utilizing the match elevation determined from the 2014 FHAD right at the south side of Interstate 70.

UDFCD recently completed an MDP that includes Coyote Run (Olsson, 2014) and recommended "floodplain preservation" with no structural improvements for the channel reach adjacent to the proposed WWTP. It appears that the proposed site plan is adhering to this UDFCD conceptual design and the City would recommend this approach be maintained when/if updated FHAD mapping is utilized for Coyote Run and detailed floodplain information is developed for Rat Run. The UDFCD MDP (Olsson, 2014) indicates that the Coyote Run channel slope is on the order of 0.6% in the reach adjacent to the proposed WWTP and recommends no channel check structures. A slope of 0.6% is relatively high for a developed watershed and the introduction of WWTP and urban runoff base flows into a previously intermittent stream system has the potential to significantly impact channel invert and bank stability. UDFCD has recently changed its recommended channel design slopes for urbanized watersheds to be substantially lower than 0.6%. It is recommended that the applicant address the potential need for channel checks and/or grade controls.

Response: We have been directed by the County to adhere to the MDP, which we believe we have done. As stated in your comment there are no requirements for stabilization facilities in this area.

WWTP's are typically considered "critical facilities" and as such, it is recommended that an enhanced level of flood protection (> than the 100yr event) be considered. The COA standard for critical facilities is 2 feet above the 100-yr floodplain. Draft federal guidance for EO 13690 has similar requirements.

Response: Per the County, the WWTP is not considered a Critical Facility, though we do note that the proposed facilities are 2' or more above the 100 yr water surface as determined on Coyote Run (East side of site) from the 2014 FHAD, AND as determined for Rat Run (West side of site) from analysis/modeling by our firm for this project. Reference can be made to sht 3 of the CD set of plans which identifies the BFE's (100-yr Base Flood Elevations) for both Coyote Run and for Rat Run.

3. Metro Wastewater Reclamation District

In reviewing the maps in our records, it appears that the Prosper area is partially within our "expected service area", however that is only relevant to Special Connectors and expansion of their service area. Prosper is not within the corporate boundaries of Aurora so they are not obligated to send that flow to the District.

In the event Aurora were to annex the Prosper development in the future, the treatment plant that the developer is proposing could not be expanded, or that area would have to be excluded from the District under 32-4-515 and Board Policy Exclusion Service Area. Even though the proposed treatment plant may be within our expected service area, unless it is within the boundaries of Aurora or they choose to serve it (Service Contract section 303), it is District staff's opinion that there is no requirement that it connects to the District's system and it would not violate our competing system prohibitions.

Response: The intent is to develop Prosper within Arapahoe County and per the approved Preliminary Development Plan that includes the proposed WWTP site. There is not a requirement that Prosper connect to the Metro Wastewater Reclamation District.



Right of Way & Permits

1123 West 3rd Avenue
Denver, Colorado 80223
Telephone: 303.571.3306
Facsimile: 303. 571.3284
donna.f.george@xcelenergy.com

August 3, 2016

Arapahoe County Public Works and Development
6924 South Lima Street
Centennial, CO 80112

Attn: Sherman Feher

Re: Prosper Wastewater Treatment Plant, Case # ASI16-001

Public Service Company of Colorado's (PSCo) Right of Way & Permits Referral Desk has reviewed the plans and subdivision exemption plat for **Prosper Wastewater Treatment Plant**. As always, thank you for the opportunity to take part in the review process. To ensure that adequate utility easements are available within this development, PSCo requests that the following language or plat note be placed on the preliminary and final plats for the subdivision:

Minimum ten-foot (10') wide dry utility easements are hereby dedicated on private property abutting all public streets, and around the perimeter of each commercial/ industrial lot in the subdivision or platted area. These easements are dedicated to Arapahoe County for the benefit of the applicable utility providers for the installation, maintenance, and replacement of electric, gas, television, cable, and telecommunications facilities (Dry Utilities). Utility easements shall also be granted within any access easements and private streets in the subdivision. Permanent structures, improvements, objects, buildings, wells, water meters and other objects that may interfere with the utility facilities or use thereof (Interfering Objects) shall not be permitted within said utility easements and the utility providers, as grantees, may remove any Interfering Objects at no cost to such grantees, including, without limitation, vegetation. Public Service Company of Colorado (PSCo) and its successors reserve the right to require additional easements and to require the property owner to grant PSCo an easement on its standard form.

Public Service Company also requests that **all utility easements be depicted graphically on the preliminary and final plats**. While these easements may accommodate certain utilities to be installed in the subdivision, some additional easements may be required as planning and building progresses.

In addition, 31-23-214 (3), C.R.S., requires the subdivider, at the time of subdivision platting, to provide for major utility facilities such as electric substation sites, gas or electric transmission line easements and gas regulator/meter station sites as deemed necessary by PSCo. While this provision will not be required on every plat, when necessary, PSCo will work with the subdivider to identify appropriate locations. This statute also requires the subdivider to submit a letter of agreement to the municipal/county commission that adequate provision of electrical and/or gas service has been provided to the subdivisions.

The property owner/developer/contractor must contact the **Builder's Call Line** at 1-800-628-2121 or <https://xcelenergy.force.com/FastApp> (**Register** so you can track your application) and complete the application process for any new electric service. It is then the responsibility of the developer to contact the

Designer assigned to the project for approval of design details. Additional easements may need to be acquired by separate document for new facilities.

As a safety precaution, PSCo would like to remind the developer to call the **Utility Notification Center** at 1-800-922-1987 for utility locates prior to construction.

If you have any questions about this referral response, please contact me at (303) 571-3306.

Donna George
Contract Right-of-Way Referral Processor
Public Service Company of Colorado

Xcel Energy Comments and Responses

Public Service Company of Colorado's (PSCO) Right of Way & Permits Referral Desk has reviewed the plans and subdivision exemption plat for Prosper Wastewater Treatment Plant. As always, thank you for the opportunity to take part in the review process. To ensure that adequate utility easements are available within this development, PSCO requests that the following language or plat note be placed on the preliminary and final plats for the subdivision:

Minimum ten-foot (10) wide dry utility easements are hereby dedicated on private property abutting all public streets, and around the perimeter of each commercial/ industrial lot in the subdivision or platted area. These easements are dedicated to Arapahoe County for the benefit of the applicable utility providers for the installation, maintenance, and replacement of electric, gas, television, cable, and telecommunications facilities (Dry Utilities). Utility easements shall also be granted within any access easements and private streets in the subdivision. Permanent structures, improvements, objects, buildings, wells, water meters and other objects that may interfere with the utility facilities or use thereof (Interfering Objects) shall not be permitted within said utility easements and the utility providers, as grantees, may remove any interfering Objects at no cost to such grantees, including, without limitation, vegetation. Public Service Company of Colorado (PSCO) and its successors reserve the right to require additional easements and to require the property owner to grant PSCO an easement on its standard form.

Public Service Company also requests that all utility easements be depicted graphically on the preliminary and final plats. While these easements may accommodate certain utilities to be installed in the subdivision, some additional easements may be required as planning and building progresses.

In addition, 31-23-214 (3), C.R.S., requires the subdivider, at the time of subdivision platting, to provide for major utility facilities such as electric substation sites, gas or electric transmission line easements and gas regulator/meter station sites as deemed necessary by PSCO. While this provision will not be required on every plat, when necessary, PSCO will work with the subdivider to identify appropriate locations. This statute also requires the subdivider to submit a letter of agreement to the municipal/county commission that adequate provision of electrical and/or gas service has been provided to the subdivisions.

The property owner/developer/contractor must contact the Builder's Call Line at 1-800-628-2121 or <https://xcelenergy.force.com/FastApp> (Register so you can track your application) and complete the application process for any new electric service. It is then the responsibility of the developer to contact the

Designer assigned to the project for approval of design details. Additional easements may need to be acquired by separate document for new facilities.

As a safety precaution, PSCO would like to remind the developer to call the Utility Notification Center at 1-800-922-1987 for utility locates prior to construction.

Response: The requirements and development standards outlined above have been noted in our files.



BENNETT FIRE PROTECTION DISTRICT #7

DISTRICT OFFICE: 303-644-3572 FAX: 303-644-3401

EMAIL: LIFESAFETY@BENNETTFIRERESCUE.ORG

"Striving to Preserve Life and Property"

July 21st, 2016

Sherman Feher

Arapahoe County Public Works & Development

6924 S. Lima Street

Centennial, CO 80112

Re: AS116-001, Prosper Wastewater Treatment Plant 1041 Permit / Areas of State Interest and L 16-002, Prosper Wastewater Treatment Plant/ Location and Extent and X16-001, Prosper Wastewater Treatment Plant/Subdivision Exemption

Planner Feher,

In regards case AS116-001, Prosper Wastewater Treatment Plant 1041 Permit / Areas of State Interest and L 16-002, Prosper Wastewater Treatment Plant/ Location and Extent and X16-001, Prosper Wastewater Treatment Plant/Subdivision Exemption, Bennett Fire Protection District has the following comments and considerations:

- Bennett Fire Protection District currently serves this location as it falls within our Fire Protection District and has no objections to the proposed development.
- The applicant shall consult with Bennett Fire Protection District to ensure all aspects of the project conform to the District's adopted fire code (2012 IFC).
- The developer shall ensure that the proposed water systems pertaining to hydrant distribution for fire suppression is adequate to protect the proposed development as well as meet the design criteria of both Arapahoe County and the Bennett Fire Protection District. Considerations for design requirements shall include adopted codes and standards as well as ISO distribution and fire flow requirements.
- Bennett Fire Protection District will accept the proposed temporary road guidelines contained in the referral. All temporary and permanent roads constructed for any part of the development shall conform to IFC fire apparatus access requirements.
- As the proposed temporary access road will serve as the interim sole means of providing emergency services to the facility, the proposed temporary access road shall be maintained at all times during its service life of the facility. This includes, grading, maintenance, and snow removal. If at any times Bennett Fire Protection District deems the road inadequate for the provision of emergency services, the applicant shall work with the Fire District to make necessary improvements.
- The internal access road design includes roads which are 20ft in width. The current IFC standard for fire apparatus access roads with a fire hydrant is 26ft in width at the point of the hydrant. The applicant may need to make minor revisions at the hydrant locations to meet this width.
- The processing of waste water often involves the storage and use of hazardous materials. This information shall be provided to Bennett Fire Protection District to be reviewed and approved.

- Facilities which store or use hazardous materials are often classified as "H" occupancies, which require fire sprinkler suppression or special electrical considerations. Applicant shall ensure the facility design meets the District's adopted fire code requirements.
- KNOX Fire Department Key access hardware shall be provided for all vehicle access gates as well as each building on site.

Thank You



Caleb J. Connor
Fire Marshal
Life Safety Division
Bennett Fire Protection District
303-644-3572 - Headquarters / 303-532-7733 - Direct
www.BennettFireRescue.org

Bennett Fire Protection District Comments and Responses

In regards case AS116-001, Prosper Wastewater Treatment Plant 1041 Permit / Areas of State Interest and L 16-002, Prosper Wastewater Treatment Plant/ Location and Extent and X16-001, Prosper Wastewater Treatment Plant/Subdivision Exemption, Bennett Fire Protection District has the following comments and considerations:

- Bennett Fire Protection District currently serves this location as it falls within our Fire Protection District and has no objections to the proposed development.
- The applicant shall consult with Bennett Fire Protection District to ensure all aspects of the project conform to the District's adopted fire code (2012 IFC).

Response: The applicant will coordinate aspects with the Fire Code and District.

- The developer shall ensure that the proposed water systems pertaining to hydrant distribution for fire suppression is adequate to protect the proposed development as well as meet the design criteria of both Arapahoe County and the Bennett Fire Protection District. Considerations for design requirements shall include adopted codes and standards as well as ISO distribution and fire flow requirements.

Response: Fire hydrant distribution and required fire suppression will be incorporated into the final construction drawings for the site and buildings/facilities.

- Bennett Fire Protection District will accept the proposed temporary road guidelines contained in the referral. All temporary and permanent roads constructed for any part of the development shall conform to IFC fire apparatus access requirements.

Response: Access roads will meet IFC requirements for access.

- As the proposed temporary access road will serve as the interim sole means of providing emergency services to the facility, the proposed temporary access road shall be maintained at all times during its service life of the facility. This includes, grading, maintenance, and snow removal. If at any times Bennett Fire Protection District deems the road inadequate for the provision of emergency services, the applicant shall work with the Fire District to make necessary improvements.

Response: The temporary road will be maintained to provide all-season access.

- The internal access road design includes roads which are 20ft in width. The current IFC standard for fire apparatus access roads with a fire hydrant is 26ft in width at the point of the hydrant. The applicant may need to make minor revisions at the hydrant locations to meet this width.

Response: Some hydrant locations moved to intersection and other locations the road has been widened to 26' per IFC.

- The processing of waste water often involves the storage and use of hazardous materials. This information shall be provided to Bennett Fire Protection District to be reviewed and approved.

Response: Hazardous materials including the storage will be reviewed with the Bennett Fire Protection District.

- Facilities which store or use hazardous materials are often classified as "H" occupancies, which require fire sprinkler suppression or special electrical considerations. Applicant shall ensure the facility design meets the District's adopted fire code requirements.

Response: The Applicant will ensure the facility design meets the District's adopted fire code requirements including NFPA 820 requirements for Fire Protection in Wastewater Treatment and Collection Facilities.

- KNOX Fire Department Key access hardware shall be provided for all vehicle access gates as well as each building on site.

Response: A KNOX Box will be provided for the gate.



August 9, 2016

Sherman Feher.
Arapahoe County Planning Department
6924 S. Lima Street
Centennial, CO 80112

RE: ASI 116-001, Prosper Wastewater Treatment Plant 1041 Permit/Areas of State Interest
L16-002, Prosper Wastewater Treatment Plant/Location and Extent
X16-001, Prosper Wastewater Treatment Plant/Subdivision Exemption
Prosper Wastewater Treatment Plant
TCHD Case No. 3993

Dear Mr. Feher:

Thank you for the opportunity to review and comment on the 1041 Permit/Areas of State Interest, Location and Extent, and Subdivision Exemption for the proposed Prosper Wastewater Treatment Plant (WWTP). Tri-County Health Department (TCHD) staff has reviewed the application for compliance with applicable public and environmental health regulations. After reviewing the application, TCHD has the following comments.

The Site Application and Utility Plan for the WWTP indicate that the recommended WWTP is a Membrane Bioreactor (MBR). Section 7 b. of the Application Submittal states: "This plant will include modern wastewater treatment facilities with biological nutrient removal (BNR) and filtration for the production of reuse water. The Location and Extent drawings depicting the WWTP (Sheets 1-15) are typical of a Biological Nutrient Removal (BNR) System. TCHD recommends that the drawings be revised to reflect the preferred alternative of an MBR.

Sheet 5 of the drawings indicates that the WWTP site is bounded on the east by a floodway and on the west by floodplain. The Location and Extent Plan shows an access road to the site across the Rat Run Drainageway. Construction of the road may alter the floodplain, and future flood events may impede or prevent access to the site. TCHD recommends that the applicant address any applicable regulatory and technical issues associated with the floodplain alteration and also site access.

Section 10, Dust and Odor. The second sentence states: Odor control equipment will be installed at the influent lift station and at the Headworks Building of the WWTP. These facilities are typically the source of the majority of odors at WWTP's. The Location and Extent drawings indicate that the WWTP is in close proximity to future residences. TCHD is concerned that odors will also be produced from the aeration basins, resulting in complaints from nearby residents. Consequently, TCHD recommends that the aeration basins be covered. The Water Quality Control Division

Prosper Wastewater Treatment Plant-Areas of State Interest, Location and Extent, Subdivision
Exemption

August 9, 2016

Page 2 of 2

(WQCD) also has requirements for setbacks from residential areas. Please describe how the proposed facilities will comply with the WQCD's setback polices.

TCHD has submitted comments regarding the WWTP Site Application and Utility Plan that are relevant to the subject case. I have included our comment letter as an enclosure to this letter.

Please feel free to contact me at (720) 200-1568 or wbrown@tchd.org if you have any questions regarding TCHD's comments.

Sincerely,



Warren S. Brown, P.E.
Senior Environmental Health Consultant

Enclosure

CC: Julio Iturreria, Larry Mugler, Arapahoe County
Bret Icenogle, P.E., David Kurz, P.E., CDPHE
Sheila Lynch, Steven Chevalier, TCHD

Tri-County Health Department Comments and Responses

Thank you for the opportunity to review and comment on the 1041 Permit/Areas of State Interest, Location and Extent, and Subdivision Exemption for the proposed Prosper Wastewater Treatment Plant (WWTP). Tri-County Health Department (TCHD) staff has reviewed the application for compliance with applicable public and environmental health regulations. After reviewing the application, TCHD has the following comments.

The Site Application and Utility Plan for the WWTP indicate that the recommended WWTP is a Membrane Bioreactor (MBR). Section 7 b. of the Application Submittal states: "This plant will include modern wastewater treatment facilities with biological nutrient removal (BNR) and filtration for the production of reuse water. The Location and Extent drawings depicting the WWTP (Sheets 1-15) are typical of a Biological Nutrient Removal (BNR) System. TCHD recommends that the drawings be revised to reflect the preferred alternative of an MBR.

Response: The BNR system is presented in the Location and Extent (L&E) drawings as the largest footprint (worst case) treatment process alternative at full build-out of the WWTP (35-40 years from now). A note has been added to the L&E drawings under Specific Notes (1 of 15) and Phase Designations (2 of 15) describing the phasing in more detail. The MBR system is the selected treatment process alternative for the initial phase of the WWTP (2-5 years from now) and is described in detail in the Site Application/Utility Plan. A Site Plan has been included in the Utility Plan report to show that the Phase 1 (MBR) is an integral part of the WWTP at build-out. The Metropolitan Districts will need to determine the selected treatment process for future phases as the demand of the WWTP increases.

Sheet 5 of the drawings indicates that the WWTP site is bounded on the east by a floodway and on the west by floodplain. The Location and Extent Plan shows an access road to the site across the Rat Run Drainageway. Construction of the road may alter the floodplain, and future flood events may impede or prevent access to the site. TCHD recommends that the applicant address any applicable regulatory and technical issues associated with the floodplain alteration and also site access.

Response: We have determined that there is no alteration to the floodzone and the floodway on the east side of the property.

The proposed access road, located on the west side of the property has been designed to match the existing grade across the floodzones of Rat Run and of Rat 1-D (a tributary to Rat Run). By matching the existing grade across these drainages it is shown that the elevation of the 100 yr storm event within the drainages, will not increase, thus the roadway has no impact on the floodzones. We have provided analysis of these 2 drainages to Arapahoe County to confirm our findings. Arapahoe County is further requiring that a "No Rise Certificate" be provided by our office to confirm and document these findings.

The access roadway is comprised of a gravel surface, and is identified as temporary until such time as a future paved is completed in the area. There is no specific timetable for the future permanent roadway construction.

As the access road is placed at the natural ground elevation across the 2 drainageways, it will overflow and "flood" during storm events. Maximum flow depth at the 100 yr event has been determined to be 18" at the roadway crossings. Staff personal will be trained on use of

the roadway during pending and actual storm events. Standard vehicles may be required to be temporarily parked outside of the floodzone areas, with staff being transported into the site with all-terrain vehicles.

An ultimate emergency means of access is available to the site from I-70.

Bennett Fire Department has reviewed the site plan and accessibility route and have determined it to be sufficient.

Section 10, Dust and Odor. The second sentence states: Odor control equipment will be installed at the influent lift station and at the Headworks Building of the WWTP. These facilities are typically the source of the majority of odors at WWTP's. The Location and Extent drawings indicate that the WWTP is in close proximity to future residences. TCHD is concerned that odors will also be produced from the aeration basins, resulting in complaints from nearby residents. Consequently, TCHD recommends that the aeration basins be covered. The Water Quality Control Division (WQCD) also has requirements for setbacks from residential areas. Please describe how the proposed facilities will comply with the WQCD's setback polices.

Response: The WQCD's setback distances are not met thus odor mitigating elements will be incorporated into the design including aeration system failure alarms, covering or enclosing the digester and process basins, and providing odor control systems for the influent lift station and headworks building.



Public Works and Development
 6924 S. Lima Street Centennial, Colorado 80112 Phone: 720-874-6650; FAX 720-874-6611
www.co.arapahoe.co.us

Planning Division
Phase II Referral Routing

Case Number / Case Name: ASI16-001, Prosper Wastewater Treatment Plant 1041 Permit / Areas of State Interest and L16-002, Prosper Wastewater Treatment Plant / Location and Extent and X16-001, Prosper Wastewater Treatment Plant/Subdivision Exemption

Planner: Sherman Feher
Engineer: Sarah L White
Date: July 8, 2016
Date to be returned: August 8, 2016

Arapahoe County Agencies		Citizen's Organizations	
<input checked="" type="checkbox"/>	Assessor / Arapahoe County (Residential)	Karen Hart	
<input type="checkbox"/>	Attorney / Arapahoe County	Robert Hill	
<input type="checkbox"/>	Building / Arapahoe County	Steve Byer	
<input checked="" type="checkbox"/>	Engineering / Arapahoe County	Sarah L. White	
<input checked="" type="checkbox"/>	Mapping / Arapahoe County	Pat Hubert	
<input type="checkbox"/>	Oil & Gas / Arapahoe County	Diane Kocis	
<input checked="" type="checkbox"/>	Open Space / Arapahoe County	Shannon Carter	
<input checked="" type="checkbox"/>	Planning / Arapahoe County	Sherman Feher	
<input checked="" type="checkbox"/>	Sheriff / Arapahoe County	1 to Brian McKnight 1 to Glenn Thompson	
<input checked="" type="checkbox"/>	Weed Control / Arapahoe County	Russell Johnson	
<input checked="" type="checkbox"/>	Zoning / Arapahoe County	Tammy King	
Referral Agencies		Conservation District	
<input type="checkbox"/>	Architectural Review Committee		
<input type="checkbox"/>	Airport or Military Base		
<input type="checkbox"/>	CGS Colorado Geological Survey-Soils		
<input checked="" type="checkbox"/>	City / Town	Aurora	
<input checked="" type="checkbox"/>	Colorado Parks and Wildlife	Travis Harris	
<input type="checkbox"/>	County		
<input type="checkbox"/>	DRCOG		
<input checked="" type="checkbox"/>	Bennett Fire Protection District	Caleb Connor	
<input type="checkbox"/>	Metro District		
<input type="checkbox"/>	Post Office Growth Coordinator	J. Hernandez	
<input checked="" type="checkbox"/>	Reap I-70 Regional Economic Advancement Partnership	Matt Reay and Jack Keever	
<input type="checkbox"/>	Recreation District / Park District (External)		
<input type="checkbox"/>	Bennett School District #29J Aurora School District	Keith Yach	
<input type="checkbox"/>	Special District		
<input checked="" type="checkbox"/>	Tri-County Health Department	Sheila Lynch	
<input type="checkbox"/>			
		Transportation	
<input type="checkbox"/>		CDOT / State Highway Dept- Region 1	Rick Solomon
<input type="checkbox"/>		E-470 Authority	Peggy Davenport
<input type="checkbox"/>		RTD	Chris Quinn
		Utilities: Gas, Electric & Phone	
<input type="checkbox"/>		Centurylink/Phone	Charles Pize
<input type="checkbox"/>		Conoco Phillips / Gas Pipeline	
<input checked="" type="checkbox"/>		XCEL	Donna George
<input type="checkbox"/>		IREA	Brooks Kaufman
		Water / Sanitation / Stormwater / Wetlands	
<input type="checkbox"/>		ACWWA	
<input checked="" type="checkbox"/>		U.S. Army Corp. of Engineer	Kiel Downing
<input type="checkbox"/>		CCBWQA	
<input type="checkbox"/>		Colorado Division of Water Resources	Joanne Williams
<input type="checkbox"/>		SEMSWA	Paul Danley
<input type="checkbox"/>		ECCVW&S	Chris Douglass
<input checked="" type="checkbox"/>		Urban Drainage & Flood	David Mallory
<input checked="" type="checkbox"/>		Other / 5 Sets East End Adv. Committee	

The enclosed case has been submitted to the Arapahoe County Planning Office for consideration. Because of the possible effect of the proposed development upon your area, the case is being referred for your comment. Please examine this request and, after review, check the appropriate line and return to the Arapahoe County Planning Office on or before the date indicated above.

COMMENTS:		SIGNATURE
<input checked="" type="checkbox"/>	Have NO Comments to make on the case as submitted	<i>Chris Feher 7/11/16</i>
<input type="checkbox"/>	Have the following comments to make related to the case:	

ARAPAHOE COUNTY PLANNING COMMISSION
PUBLIC HEARING
December 20, 2016

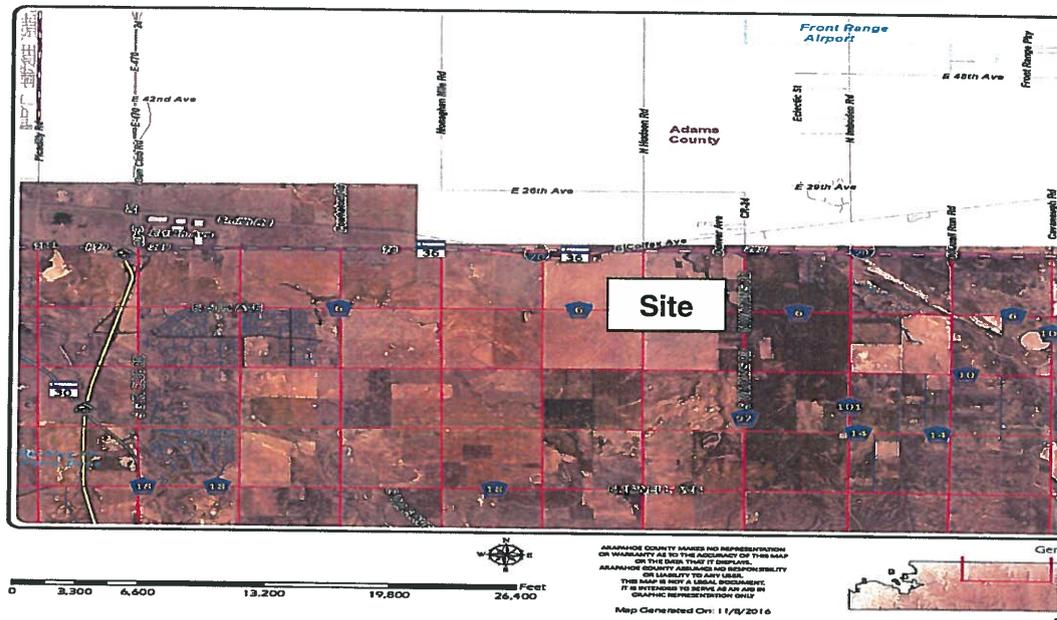
6:30 PM

SUBJECT: ASI16-001 – 1041 PERMIT: PROSPER WASTEWATER TREATMENT PLANT.

J. SHERMAN FEHER, SENIOR PLANNER

December 8, 2016

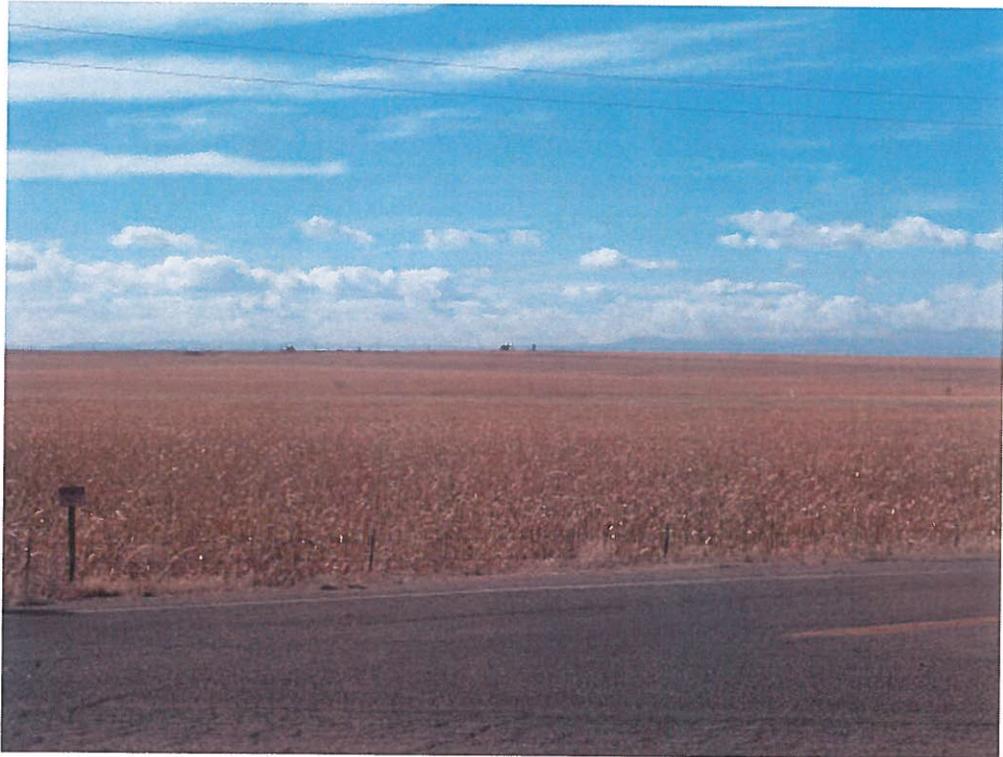
VICINITY: This proposal is in Commissioner's District #3. The site is located south of I-70 and approximately 2000 feet west of Watkins Road.



Vicinity Map



**Looking South
Over WWTP Site**



**Looking SW Over
WWTP Site**

PROPOSAL:

The applicant, Prosper Regional Water and Sanitation Service Metropolitan District, is requesting approval for a 1041 Permit known as the Prosper Wastewater Treatment Plant. The applicant desires to construct a wastewater treatment plant to serve the Prosper development.

This 1041 Permit case for "Site selection and construction of major new.....sewage treatment systems" is being done in conjunction with a Location and Extent (L&E) case. Both of these cases will be heard by the Planning Commission. The Planning Commission will make the final decision on the L&E case and make a recommendation to the BOCC for the 1041 Permit case. The BOCC will make the final decision on the 1041 Permit case. The Location and Extent case primarily reviews the general location and overall extent of the project. The 1041 Permit case reviews environmental and socio-economic factors that are related to the project. There is also a Subdivision Exemption case for the property where the wastewater treatment plant will be located. The Subdivision Exemption case will be heard by the BOCC.

RECOMMENDATIONS AND FINDINGS:

Staff: Staff recommends that the 1041 Permit application be APPROVED, subject to the findings and conditions of approval outlined herein.

I. BACKGROUND

The current zoning for the Prosper development is MU-PUD. The Prosper PDP identifies the proposed site for the wastewater treatment plant as the location for the wastewater treatment plant.

II. DISCUSSION

Comprehensive Plan:

The Comprehensive Plan designation for this area is in Tier 1 of the Planning Reserve. The Planning Reserve is creating a reserve of vacant land to accommodate future uses/development. Tier 1 is envisioned as the first area of development along the I-70 Corridor. One of the goals for Public Facilities and Services is Goal PFS1 IS TO "Plan for Adequate Public Facilities and Service in Growth Areas." As such, this proposed wastewater treatment plant is allowed by the Comprehensive Plan land use designation of Tier 1 of the Planning Reserve and is supported by the Goal for adequate public facilities.

1041 Permit Submittal Requirements:

The applicant has complied with all of the submittal requirements outlined in Section IIIC and IIID in the 1041 regulations.

Referral Comments:

The following are referral comments, as well as the applicant's response to the comments (in italics).

Engineering Services	-	Comments on Engineering studies, Subdivision Improvement Agreement, and Urban Drainage. <i>The applicant has addressed or will address these comments. The remaining items will be conditions of approval.</i>
Mapping	-	No comments.
Zoning Administrator	-	Comments on landscaping. <i>Applicant has addressed or will address comments.</i>
Open Spaces	-	No response.
Weed Control		No response.
Sheriff's Department		No comments.
Bennett Fire District	-	Comments regarding fire suppression, roads, hazardous materials, Knox key access etc. <i>Applicant responded to referral comments; see applicant's comments that are part of this Planning Commission packet.</i>
City of Aurora		Comment on Prosper Development, floodplain mapping and Metro Wastewater Reclamation District. <i>Applicant responded to referral comments; see applicant's comments that are part of this Planning Commission packet.</i>
Colorado Parks & Wildlife	-	No response.
Army Corps of Engineers	-	No response.
Assessor's Office	-	No response.
West Arapahoe Conservation District		No response.
Tri-County Health	-	Comment on site application and utility plan, floodplains, dust and odor, and setbacks etc. <i>Applicant responded to referral comments; see applicant's comments that are part of this Planning Commission packet.</i>

REAP		No comments.
Xcel Energy	-	Add utility easements to Preliminary and Final Plats. <i>Comments noted.</i>
East End Advisory Committee	-	Janet Cook had "No comments"; No response from other members.
Urban Drainage		Comments on drainage issues and concerns. <i>The applicant has addressed or will address these comments. The remaining items will be conditions of approval.</i>

Approval Criteria

The 1041 Permit approval criteria for a Wastewater Treatment Plant/Sewage Plant shall comply with the criteria set forth in the 1041 Regulations, Part V, Sections A and B, along with Appendix A. All of these criteria shall be used in determining whether such 1041 Permit should be approved.

Ordinance Review and Additional Background Information

A permit may be approved if the proposed activity complies with the following general criteria. In determining whether the proposed activity complies with the criteria, the Planning Commission and Board of County Commissioners may take into consideration, the construction, operation and cumulative impacts of the proposed activity.

A. General Approval Criteria [See applicant's response to approval criteria in page 3 of the 1041 application report. Staff response to approval criteria in italics below]

1. Documentation that prior to site disturbance associated with the Proposed Project, the applicant can and will obtain all necessary property rights, permits and approvals. The Board may, at its discretion, defer making a final decision on the application until outstanding property rights, permits and approvals are obtained.

The applicant can and will obtain all necessary property rights, permits and approvals prior to construction.

2. The Proposed Project considers the relevant provisions of the regional water quality plans.

There are no regional water quality plans for this area.

3. The applicant has the necessary expertise and financial capability to develop and operate the Proposed Project consistent with all requirements and conditions.

The applicant has provided the Planning Division with some general information that shows that Prosper Water and Wastewater District has the expertise and the financial capability to develop the Proposed Project.

4. The Proposed Project is technically and financially feasible.

The applicant has conducted studies that indicate that the Proposed Project is technically and financially feasible.

5. The Proposed Project is not subject to significant risk from natural hazards.

The applicant will design the Proposed Project to minimize the risks from natural hazards, such as high winds and floods.

6. The Proposed Project is in general conformity with the applicable comprehensive plans.

The Proposed Project is in general conformity with the Arapahoe County Comprehensive Plan which allows for Public Facilities and Services in "Tier 1/Planning Reserve" designated areas of the County.

7. The Proposed Project will not have a significant adverse effect on the capability of local government to provide services or exceed the capacity of service delivery systems.

This Proposed Project is anticipated to have minimal impacts on provision of services from Arapahoe County and other special districts.

8. The Proposed Project will not create an undue financial burden on existing or future residents of the County.

This Proposed Project will be financed as part of the metro district and will have minimal demand for public services in Arapahoe County.

9. The Proposed Project will not significantly degrade any substantial sector of the local economy.

The Proposed Project has been designed to minimize the effects on the agricultural sector.

10. The Proposed Project will not unduly degrade the quality or quantity of recreational opportunities and experience.

The Proposed Project will not unduly degrade the quality or quantity of recreational opportunities and experience in the area because it covers a relatively small area of the Prosper development which has other areas that are designated for recreation.

11. The planning, design and operation of the Proposed Project will reflect principles of resource conservation, energy efficiency and recycling or reuse.

The Proposed Project is designed to minimize adverse impacts to resources.

12. The Proposed Project will not significantly degrade the environment. Appendix "A" includes the considerations that will be used to determine whether there will be significant degradation of the environment. For purposes of this section, the term environment shall include:
 - a. Air quality.
 - b. Visual quality.
 - c. Surface water quality.
 - d. Groundwater quality.
 - e. Wetlands, flood plains, streambed meander limits, recharge areas, and riparian areas.
 - f. Terrestrial and aquatic animal life.
 - g. Terrestrial and aquatic plant life.
 - h. Soils and geologic conditions.

The analysis of the submitted application and referral comments has determined that the Proposed Project has no significant environmental impacts. The applicant has sited and designed the Project to minimize environmental impacts.

13. The Proposed Project will not cause a nuisance.

The Proposed Project will not cause undue nuisances outside of the WWTP area.

14. The Proposed Project will not significantly degrade areas of paleontological, historic, or archaeological importance.

The Proposed Project appears to not degrade any areas of paleontological, historic, or archaeological importance in the Project area.

15. The Proposed Project will not result in unreasonable risk of releases of hazardous materials. In making this determination as to such risk, the Board's consideration shall include:

- a. Plans for compliance with Federal and State handling, storage, disposal and transportation requirements.

The applicant will comply with Federal and State hazardous materials regulations.

- b. Use of waste minimization techniques.

The applicant will use waste minimization techniques.

- c. Adequacy of spill prevention and response plans. The applicant intends to comply with all local, state, and federal laws and regulations related to hazardous materials, including spill prevention and response plans.

The applicant intends to comply with all regulations related to hazardous materials, including spill prevention and response plans.

16. The benefits accruing to the County and its citizens from the proposed activity outweigh the losses of any resources within the County, or the losses of opportunities to develop such resources.

This Proposed Project enhances the productive use of resources within the County.

17. The Proposed Project is the best alternative available based on consideration of need, existing technology, cost, impact and these regulations.

Per the discussion in the alternatives section of the applicant's 1041 application, the applicant has generally chosen the best overall alternative.

18. The Proposed Project will not unduly degrade the quality or quantity of agricultural activities.

The Proposed Project will not significantly degrade the quality or quantity of agricultural activities.

19. The Proposed Project will not significantly interfere with the preservation of cultural resources, including historical structures and sites, agricultural resources, the rural lifestyle and the opportunity for solitude in the natural environment.

The Proposed Project will not significantly interfere with any of the above-mentioned cultural resources criteria.

20. The Proposed Project will not cause significant degradation of land-use patterns in the area around the Proposed Project.

The Proposed Project will not cause significant degradation of land-use patterns in the area.

21. The applicant has complied with all applicable provisions of these regulations and has paid all applicable fees.

The applicant has sought to comply with all applicable 1041 Permit regulations and has paid a deposit that will apply towards the fees.

B. Additional Criteria Applicable to Wastewater Treatment Plant/Sewage Plant

In addition to the general criteria set forth in Section V, Part A of the 1041 Permit Regulations, above, the following additional criteria shall apply to major water and sewer projects.

1. To the extent practicable, Domestic Water and Wastewater Treatment Systems shall be consolidated with existing facilities within the area. The determination of whether consolidation is practicable shall include but not be limited to the following considerations:
 - a. Distance to and capacity of nearest Domestic Water or Wastewater Treatment System.
 - b. Technical, legal, managerial and financial feasibility of connecting to existing Domestic Water or Wastewater Treatment System.
 - c. Scope of the Service Area for existing Domestic Water or Wastewater Treatment.
 - d. Projected growth and development in the Service Area of existing Domestic Water or Wastewater Treatment System.

It does not appear that the Proposed Project can easily be consolidated with other existing facilities with the area based on the criteria provided above.

2. The Proposed project will not result in duplicative services within the County.

The Proposed Project will not result in duplicative services in this area of the County.

3. The Proposed Project will be constructed in areas that will result in the proper utilization of existing treatment plants and the orderly development of domestic water and sewage treatment systems of adjacent communities.

The Proposed Project will generally result in the proper utilization of existing treatment plants and the orderly development of treatment systems of adjacent communities.

4. If the Proposed Project is designed to serve areas within the County, it is necessary that the Proposed Project meet community development and population demands in those areas.

The Proposed Project is designed to serve areas that will meet community development and population demands in those areas.

5. The Proposed Project shall emphasize the most efficient use of water, including, to the extent permissible under existing law, the recycling, reuse and conservation of water.

The Proposed Project will emphasize the efficient use of water through recycling and conservation of water.

6. The Applicant shall demonstrate sufficient managerial expertise and capacity to operate the facility.

The Applicant has generally demonstrated sufficient managerial expertise to operate the facility.

7. Major extensions of domestic water and sewage treatment systems shall be permitted in those areas in which the anticipated growth and development that may occur as the result of such extension can be accommodated within the financial and environmental capacity of the area to sustain such growth and development.

The Proposed Project is not a major extension of domestic water and sewage treatment systems but is proposed to service only the Prosper development.

III. STAFF FINDINGS: 1041 PERMIT

Staff has visited the site and has reviewed the plans and supporting documentation and referral comments, as well as citizen input in response to this application. Based upon review of the Comprehensive Plan, development regulations, and analysis of referral comments, our findings include:

1. The proposed 1041 Permit application is in conformance with the Arapahoe County Comprehensive Plan, in that it provides for development of public facilities and services within the "Tier 1/Planning Reserve" Land Use Area.
2. The proposed 1041 Permit application appears to be consistent with Arapahoe County 1041 Permit Regulations.
3. This application appears to meet all of the approval criteria for this 1041 Permit application, provided all of the conditions of approval are met.
4. The Applicant needs to obtain a permit to construct and operate a wastewater treatment plant from the Colorado Department of Public Health and Environment.
5. There are a number of Engineering and Urban Drainage comments that need to be addressed.

IV. RECOMMENDATION FOR 1041 PERMIT:

Considering the findings and other information provided herein, staff recommends approval of the 1041 Permit, case number, ASI16-001, for the Prosper Wastewater Treatment Plant, subject to the following:

1. The applicant makes any modifications to plans, as requested by the Public Works & Development Department, prior to any construction is started on this project.
2. The applicant agrees to address all Engineering Services Division comments and concerns as identified within their staff reports, prior to construction.
3. The Applicant will obtain a permit to construct and operate a wastewater treatment plant from the Colorado Department of Public Health and Environment prior to construction of the wastewater treatment plant.
4. The applicant agrees to address comments issued by the Urban Drainage and Flood Control District (UDFCD).
5. The applicant will execute a Subdivision Improvement Agreement.

This is based upon:

- The proposal is in conformance with the Arapahoe County Comprehensive Plan.
- The proposal is in conformance with Arapahoe County Land Development Code, specifically the 1041 Permit Regulations.

V. DRAFT MOTIONS FOR 1041 PERMIT:

A. APPROVAL: In the case of ASI16-001 – Prosper Wastewater Treatment Plant case, we have read the staff report and received testimony at the public hearing. We find ourselves in agreement with staff findings for the 1041 Permit application including all plans and attachments as set forth in the staff report dated December 8, 2016, and recommend approval to the BOCC, subject to the following conditions:

1. The applicant makes any modifications to plans, as requested by the Public Works & Development Department, prior to any construction is started on this project.
2. The applicant agrees to address all Engineering Services Division comments and concerns as identified within their staff reports, prior to construction.
3. The Applicant will obtain a permit to construct and operate a wastewater treatment plant from the Colorado Department of Public Health and Environment prior to construction of the wastewater treatment plant.
4. The applicant agrees to address comments issued by the Urban Drainage and Flood Control District (UDFCD).
5. The applicant will execute a Subdivision Improvement Agreement.

B. DENIAL *(This recommendation would not be consistent with the Staff recommendation. Any alternate motion must include new findings and conditions in support of the motion for Approval where those differ from the Staff-recommended findings and conditions):*

In the case of ASI16-001, Prosper Wastewater Treatment Plant 1041 Permit, we have read the staff report and received testimony at the public hearing. We find ourselves not in agreement with staff findings regarding the draft plan and attachments as set forth in the staff report dated December 8, 2016, and recommend the Board of County Commissioners DENY the request for approval of the 1041 Permit.

Findings:

1. *State new or amended findings to support Planning Commission recommendation of "Denial" as part of the motion.*
- 2.

C. CONTINUE: In the case of ASI16-0001, Prosper Wastewater Treatment Plant 1041 Permit, I move to continue the decision on this request to [DATE], 2016, date certain, at 6:30 p.m., at this same location [to receive further information] [to further consider information presented during the hearing].

Attachments

Application, for 1041 Permit

Referral Comments

Engineering Staff Report



Public Works and Development
 6924 S. Lima Street
 Centennial, Colorado 80112
 Phone: 720-874-6650
www.arapahoe.gov

Land Development Application
 Form must be complete

Land Development Application materials received after 2pm shall be date stamped received the following working day

APPLICANT/REPRESENTATIVE: Vogel & Associates LLC	ADDRESS: 475 West 12th Ave, Suite E Denver, CO 80204 PHONE: 303.893.4288 FAX: 303.893.6792 EMAIL: ivogel@vogelassoc.com	SIGNATURE: NAME: Jeffrey B. Vogel TITLE: Principal
OWNER(S) OF RECORD: VREI, Inc.	ADDRESS: 5641 N Broadway Denver, CO 80215 PHONE: 303.566.8000 FAX: 303.566.8099 EMAIL:	SIGNATURE: NAME: Greg Ruegsegger TITLE: Vice President
ENGINEERING FIRM: Dewberry Engineers Inc. <i>Stacy Roberts 3-957-0637</i>	ADDRESS: 990 S Broadway, Suite 400, Denver, CO 80209 PHONE: 303.951.0614 FAX: 303.825.2322 EMAIL: apratt@dewberry.com	CONTACT PERSON: Alan Pratt, PE

Pre-Submittal Case Number: **Q15-103** Pre-Submittal Planner: **Sherman Fehrer** Pre-Submittal Engineer: **Sarah White**

Parcel ID no. (AJN no.)	1977-00-0-00-418
Parcel Address or Cross Streets:	Interstate 70 and Watkins Road
Subdivision Name & Filing No.:	None
Related Case Numbers: (Preliminary/Final Development Plan, Rezoning, and / or Plat)	Latest Approved Zoning - Z12-010 also, Z12-100 & S14-001

	EXISTING	PROPOSED
Zoning:	PUD - Waste Water Treatment	PUD - Wastewater Treatment Plant
Case/Project/Subdivision Name:	None	Prosper WWTP
Site Area (Acres):		8.22
Floor Area Ratio (FAR):		0.18
Density (Dwelling Units/Acre):		N/A
Building Square Footage:		66,450 (includes basins)
Disturbed Area (Acres):		

CASE TYPE (Administrative Case types are shaded in Gray)

<input type="checkbox"/> Preliminary Development Plan or Major Amendment <input type="checkbox"/>	<input checked="" type="checkbox"/> Location & Extent or Major Amendment <input type="checkbox"/>	<input type="checkbox"/> Administrative Site Plan	<input type="checkbox"/> Preliminary Plat
<input type="checkbox"/> Master Development Plan or Major Amendment <input type="checkbox"/>	<input type="checkbox"/> Rezoning - Conventional	<input type="checkbox"/> Administrative Amendment to _____ (PDP, FDP, etc.)	<input type="checkbox"/> Final Plat
<input type="checkbox"/> Final Development Plan or Major Amendment <input type="checkbox"/>	<input type="checkbox"/> Land Development Code Amendment	<input type="checkbox"/> Technical Amendment to _____ (PDP, FDP, etc.)	<input type="checkbox"/> Minor Subdivision
<input type="checkbox"/> Planned Sign Program or Major Amendment <input type="checkbox"/>	<input type="checkbox"/> Use by Special Review or Major Amendment <input type="checkbox"/>	<input type="checkbox"/> Commercial Mobile Radio Service (CMRS/cellular antennas)	<input type="checkbox"/> Subdivision Exemption
<input type="checkbox"/> Vacation of Right of Way/Easement/Plat	<input type="checkbox"/> Use by Special Review - Oil and Gas	<input type="checkbox"/> Plat Correction	<input type="checkbox"/> Replat (Major)
<input type="checkbox"/> 1041 - Areas & Activities of State Interest - Use by Special Review <input type="checkbox"/>	<input type="checkbox"/> Special District Title 30 <input type="checkbox"/> <input type="checkbox"/> Title 32 <input type="checkbox"/>	<input type="checkbox"/> Administrative Oil & Gas Use by Special Review (AOGUSR)	<input type="checkbox"/> Administrative Replat
<input type="checkbox"/> Comprehensive Plan	<input type="checkbox"/> Rural Cluster	<input type="checkbox"/> Street Name Change	<input type="checkbox"/> _____

THIS SECTION FOR OFFICE USE ONLY

Case No: L16-007	Planning Manager: Sherman	Engineering Manager: Sarah
Planning Fee: Y N \$	Engineering Fee: Y N \$	TCHD Fee? <input type="checkbox"/> \$

This application shall be submitted with all applicable application fees. Submittal of this application does not establish a vested property right in accordance with C.R.S. 24-68-105(1). Processing and review of this application may require the submittal of additional information, subsequent reviews, and/or meetings, as outlined in the Arapahoe County Land Development Code.

RECEIVED

FEB 19 2016



Dewberry Engineers Inc. | 303.825.1802
990 South Broadway, Suite 400 | 303.825.2322 fax
Denver, CO 80209 | www.dewberry.com

December 21, 2015

Arapahoe County Public Works & Development
Planning Division
6924 S Lima Street
Centennial, CO 80112

Re: Prosper Development Wastewater Treatment Facility Letter of Intent

Dear Public Works & Development:

Our company, Dewberry Engineers Inc., on behalf of the property owner, Prosper Farms Investment LLC, is proposing a project within unincorporated Arapahoe County. The project is located in between Hayesmount Road and N Watkins Road just south of interstate 70 in the north portion of parcel #035150836. This project includes 8.22 acres and is currently zoned Prosper PDP WWTP.

As referenced in the Prosper Preliminary Development Plan (PDP) and 1041 Permit, the intent is to construct a Waste Water Treatment Plant (WWTP) to serve the Prosper community. The WWTP will be located within Planning Area 71 of the Prosper PDP. The proposed building structures include an administration/lab, headworks, pumping station, UV/reuse water, digester blower, solids handling, and maintenance shop.

Based on previous discussions, it is our understanding that a 1041 Permit and Location and Extents application will have to be processed and approved. It is the intent to schedule a pre-submittal meeting to discuss and review in greater detail the process and respective submittal requirements.

Developer contact information:

Vogel & Associates
Jeff Vogel, AICP, Principal
475 W 12th Ave, Suite E
Denver, CO 80204
Phone: (303) 893-4288
Email: jvogel@vogelassoc.com

Sincerely,
Dewberry Engineers Inc.

Patrick Radabaugh, PE
Project Manager



ARAPAHOE COUNTY
COLORADO'S FIRST

Planning Commission Engineering Summary Report

Date: November 10, 2016
To: Arapahoe County Planning Commissioners
Via: Sherman Feher, Planning Division
From: Sarah White, Engineering Services Division
Re: **Prosper Wastewater Treatment Plant (WWTP)**
ASI16-001 1041 Permit
L16-002 Location & Extent
X16-001 Subdivision Exemption

Purpose and Recommendation

The purpose of this report is to provide the Engineering Services Division Staff findings, comments, and recommendations regarding the above-referenced land use application(s).

Scope/Location:

Dewberry Engineers Inc., on behalf of owners VREI, Inc., is requesting approval of the 1041, Location & Extent and Subdivision Exemption for the development of the Prosper Wastewater Treatment Plant (WWTP). The proposed development is generally located within the area known as 'Prosper', south of Interstate 70, east of N. Watkins Road and north of E 6th Avenue. The proposal is for a wastewater treatment plant on approximately 9 acres. The site is proposed to be built in 4 phases based on the future development of Prosper.

The site is located within the Box Elder Creek drainage basin. Phase I development will utilize a temporary access road (reference Arapahoe County Case No. E16-029) until the permanent public road is built out as per the Prosper PDP (case no. Z12-100).

Referenced Referral Items

1041
L&E Exhibit
Subdivision Exemption
Drainage Report
Construction Drawings
O&M Manual
GESC Plans and Report

Cc: *Chuck Haskins, Engineering Services Division, Division Manager*
Case Files ASI16-001, L16-002, X16-001

Engineering Services Division Staff (Staff) has reviewed the referenced land use application(s) and has the following findings and comments:

Findings:

1. Engineering review and approval fees are included with the planning fee for the 1041 and L&E, with the exclusion of the easements that will need to be prepared by separate document(s). Fees for the Subdivision Exemption are paid.
2. This site lies within Coyote Run-Box Elder Creek watershed basin. Basin fees are still being established for this area, but are not yet determined.
3. This development lies within the boundaries of the Urban Drainage and Flood Control District (UDFCD).
4. Urban Drainage and Flood Control District (UDFCD) has been included as a referral agency. Their comments will need to be addressed prior to final approval
5. Construction activities that disturb one or more acres are required by the Environmental Protection Agency (EPA) to obtain a Construction Stormwater Permit.
6. The subdivision exemption process requires a permanent roadway or an access easement to be established. The permanent roadway as propose din the Prosper Preliminary Development Plan (PDP) is not yet constructed. Once the development around the Waste Water Treatment Plant (WWTP) begins, a permanent road will be constructed that allows access to the WWTP. In the interim, access to WWTP will be via private access road. Easement recordation information will need to be noted on the Subdivision Exemption exhibit. Engineering Case E16-029 has been submitted and is under review for the Access Road construction.
7. The WWTP will have a limited on-site staff, and generates very minimal traffic, as such a Traffic Impact Study was waived for this development.
8. Drainage easements for each detention pond outfalls will need to be dedicated to Arapahoe County via separate document.
9. Waste water treatment plants are exempt from specific critical facility regulations established by the Colorado Water Conservation Board. However, applicant in encouraged to minimize potential hazards from floodwaters. County would recommend have lowest floor elevation a minimum of 2 feet above 100-year water surface elevation, ensure on-site waste disposal is located such that outside but adjacent to 100 year floodplain - are there any additional mitigation measures needed? County discourages critical facilities within the 500 year floodplain, since these drainage ways have not been mapped for 500 yr flooding, recommend additional provisions may be needed - flood proofing bldg or elevation of facility to be at 2 ft above BFE (LDC section 12-2007.09)
10. All applicable public and private improvements (i.e., storm sewer systems, detention ponds, roadways appurtenances, etc.) associated with this development proposal shall be guaranteed within a Subdivision Improvements Agreement (SIA). The applicant will be required to enter into a Subdivision Improvement Agreement (SIA) to guarantee onsite and offsite improvements related to this development. Subdivision Improvement Agreement will be prepared by County Staff with finalization of costs.

Recommendations:

The Division of Engineering Services recommends this case favorably subject to the following conditions:

1. The applicant agrees to address the Division of Engineering Services' comments and concerns as identified within the ESD Staff Report.
2. The applicant agrees to address comments issued by the Urban Drainage and Flood Control District (UDFCD).
3. The applicant executes a Subdivision Improvement Agreement.



URBAN DRAINAGE AND FLOOD CONTROL DISTRICT

Paul A. Hindman, Executive Director
2480 W. 26th Avenue, Suite 156B
Denver, CO 80211-5304

Telephone 303-455-6277
Fax 303-455-7880
www.udfcd.org

September 30, 2016

UDFCD Maintenance Eligibility Program Referral Review Comments

To: Sarah L. White, Arapahoe County
Project: Prosper Farms WWTP
Stream: Coyote Run and Rat Run
UDFCD MEP Phase: Design
UD MEP ID: 106341/10000720

Dear Sarah,

This letter is in response to the request for our comments concerning the referenced project. We appreciate the opportunity to review this proposal. We have reviewed this proposal only as it relates to major drainage features, in this case:

- Coyote Run and Rat Run

We have the following comments to offer:

1. The Phase III Drainage Report states that the existing 100-yr floodplains for Coyote Run and Rat Run establish constraints from a layout and elevation standpoint. We agree with this assessment and recommend that the 100-year flood elevations for the adjacent major drainageways be confirmed relative to the grading and elevations of the site and treatment plant.
2. The proposed private access road is the sole access in and out of the proposed WWTP. The road is proposed to cross Rat Run. The design of the Rat Run roadway crossing should be designed for long term sustainability, with consideration of the 100-year discharge (2,500 cfs), stream channel stability and floodplain impacts. A hydraulic analysis should be conducted for the crossing. According to the Phase III Report, a future High Density Residential Land use is designated for property to the south of the WTP site. With regard to this future upstream land use, consideration should be given to installation of a stabilization check structure with the crossing. The need for additional check structures can be evaluated as future development is proposed upstream. A Floodplain Development Permit application should be submitted, with certification by the Engineer of no adverse impact to 100-year flood elevations.

3. Two storm drain outfalls to Rat Run are proposed, one each from the North and West onsite detention ponds. It appears that the discharge is to the overbank zone of the major drainageway, so a low tailwater basin is the appropriate outfall protection, as it allows outflows to sheet flow to the main channel following dissipation at the pipe outfall. Calculations for the outfalls should be included in the Drainage Report. The pond outfall profiles on Sheets 4 and 5 should include the design flow, velocity and Froude Number at the outfall and should show the FES and outlet protection. Standard UDFCD details for a typical FES (Fig 9-29), Low Tailwater Basin (Fig 9-37, as appropriate) and Riprap/Soil Riprap (Fig 8-34) should be included.
4. The overflow spillways from each pond should have a concrete crest control wall.
5. The Drainage Plan at the end of the Phase III Report should include the 100-yr flood elevations along Rat Run as indicated on the 1995 FHAD or as may be updated by analysis of the access road crossing.

Please feel free to contact me with any questions or concerns.

Sincerely,
Urban Drainage and Flood Control District



John M. Pflaum, P.E.
Floodplain Management Program



Public Works and Development
 6924 S. Lima Street Centennial, Colorado 80112 Phone: 720-874-6650; FAX 720-874-6611
www.co.arapahoe.co.us

Planning Division
Phase II Referral Routing

Case Number / Case Name: ASI16-001, Prosper Wastewater Treatment Plant 1041 Permit / Areas of State Interest and L16-002, Prosper Wastewater Treatment Plant / Location and Extent and X16-001, Prosper Wastewater Treatment Plant/Subdivision Exemption

Planner: Sherman Feher
 Engineer: Sarah L White
 Date: July 8, 2016
 Date to be returned: August 8, 2016

Arapahoe County Agencies		Citizen's Organizations	
<input checked="" type="checkbox"/>	Assessor / Arapahoe County (Residential)	Karen Hart	
<input type="checkbox"/>	Attorney / Arapahoe County	Robert Hill	<input type="checkbox"/> CCNA-Cherry Creek Neighborhoods Ass.
<input type="checkbox"/>	Building / Arapahoe County	Steve Byer	<input type="checkbox"/> CECON-(Within Centennial)
<input checked="" type="checkbox"/>	Engineering / Arapahoe County	Sarah L. White	<input type="checkbox"/> Four Square Mile Neighborhood
<input checked="" type="checkbox"/>	Mapping / Arapahoe County	Pat Hubert	<input type="checkbox"/> South Metro Chamber of Commerce
<input type="checkbox"/>	Oil & Gas / Arapahoe County	Diane Kocls	Conservation District
<input checked="" type="checkbox"/>	Open Space / Arapahoe County	Shannon Carter	<input type="checkbox"/> Deer Trail Conservation District
<input checked="" type="checkbox"/>	Planning / Arapahoe County	Sherman Feher	<input checked="" type="checkbox"/> West Arapahoe Conservation District
<input checked="" type="checkbox"/>	Sheriff / Arapahoe County	1 to Brian McKnight 1 to Glenn Thompson	Transportation
<input checked="" type="checkbox"/>	Weed Control / Arapahoe County	Russell Johnson	<input type="checkbox"/> CDOT / State Highway Dept- Region 1
<input checked="" type="checkbox"/>	Zoning / Arapahoe County	Tammy King	<input type="checkbox"/> E-470 Authority
Referral Agencies			<input type="checkbox"/> RTD
<input type="checkbox"/>	Architectural Review Committee		
<input type="checkbox"/>	Airport or Military Base		Utilities: Gas, Electric & Phone
<input type="checkbox"/>	CGS Colorado Geological Survey-Solls		<input type="checkbox"/> Centurylink/Phone
<input checked="" type="checkbox"/>	City / Town	Aurora	<input type="checkbox"/> Conoco Phillips / Gas Pipeline
<input checked="" type="checkbox"/>	Colorado Parks and Wildlife	Travis Harris	<input checked="" type="checkbox"/> XCEL
<input type="checkbox"/>	County		<input type="checkbox"/> IREA
<input type="checkbox"/>	DRCOG		Water / Sanitation / Stormwater / Wetlands
<input checked="" type="checkbox"/>	Bennett Fire Protection District	Caleb Connor	<input type="checkbox"/> ACWWA
<input type="checkbox"/>	Metro District		<input checked="" type="checkbox"/> U.S. Army Corp. of Engineer
<input type="checkbox"/>	Post Office Growth Coordinator	J. Hernandez	<input type="checkbox"/> CCBWQA
<input checked="" type="checkbox"/>	Reap I-70 Regional Economic Advancement Partnership	Matt Reay and Jack Keever	<input type="checkbox"/> Colorado Division of Water Resources
<input type="checkbox"/>	Recreation District / Park District (External)		<input type="checkbox"/> SEMSWA
<input type="checkbox"/>	Bennett School District #29J Aurora School District	Keith Yach	<input type="checkbox"/> ECCVW&S
<input type="checkbox"/>	Special District		<input checked="" type="checkbox"/> Urban Drainage & Flood
<input checked="" type="checkbox"/>	Tri-County Health Department	Shelia Lynch	<input checked="" type="checkbox"/> Other / 5 Sets East End Adv. Committee
<input type="checkbox"/>			

The enclosed case has been submitted to the Arapahoe County Planning Office for consideration. Because of the possible effect of the proposed development upon your area, the case is being referred for your comment. Please examine this request and, after review, check the appropriate line and return to the Arapahoe County Planning Office on or before the date indicated above.

COMMENTS:	SIGNATURE
<input type="checkbox"/> Have NO Comments to make on the case as submitted	
<input checked="" type="checkbox"/> Have the following comments to make related to the case: SEE ATTACHED	AJS 7-12-16

Note change to add language the the quantities must reflect the required number of plant material

002 Prosper WASTEWATER TREATMENT PLANT

Note added for amendment, ratio, and tilling depth.

PAGE 6: STANDARD NOTES: REMOVE LANGUAGE FROM #2 OR ADD QUANTITIES MUST MATCH NUMBER OF TREES AND SHRUBS PROVIDED IN LANDSCAPE SUMMARY TABLE #3 - SOIL AMENDMENT TYPE + RATIO + TILLING DEPTH

Caliper sizes, heights, and container sizes were added to plant schedule. Specific Types and quantities of plants were added to plans.

LEGEND: SEED TYPES PROVIDED
SHRUB BED - TYPES/QUANTITIES ON PLAN
TREES - CALIPER SIZES, Hgts + TYPE BREAKDOWN ON PLAN ON CHART
SHRUBS - QUANTITIES ON PLAN w/ CONTAINER SIZES ON CHART PAGE 7

Caliper sizes, heights, and container sizes were added to plant schedule. Specific Types and quantities of plants added to plant schedule.

PAGE 7: PLANT SCHEDULE
ALL DECIDUOUS TREES NEED QUANTITY BREAKDOWN + CALIPER SIZE
ALL ORNAMENTAL TREES NEED QUANTITY BREAKDOWN + CALIPER SIZE
ALL EVERGREEN TREES NEED QUANTITY BREAKDOWN + TREE HEIGHT

Ornamental grasses were removed from plant schedule because none were shown on plan.

ALL SHRUBS + GRASSES NEED QUANTITY BREAKDOWN + CONTAINER SIZES - 5 GAL / 1 GAL.
ARE 1 GAL SHRUBS (GRASSES) BEING SUBSTITUTED FOR 5 GAL SHRUBS?

Detail shows dimension of 8'-0" for height and 8' ft. is in the detail description for the fence.

NO HEIGHT FOR SECURITY FENCING ON DETAIL (2)
IS VINYL CLAD FABRIC ALLOWED AS A FENCE TYPE?

Vinyl clad fabric is the coating on the fence. No slats are proposed for the fence.

L16-002

Cont

PAGE 7 - ALL PINES SHOULD BE TRIPLED GUYED/STAKED
REMOVE "UPLAND" FROM UPLAND EVERGREEN TREE

Detail revised to include tripled guyed/
staked. and "UPLAND" was removed
from detail title.





Public Works and Development
 6924 S. Lima Street Centennial, Colorado 80112 Phone: 720-874-6650; FAX 720-874-6611
www.co.arapahoe.co.us

Planning Division
Phase II Referral Routing

Case Number / Case Name:	ASI16-001, Prosper Wastewater Treatment Plant 1041 Permit / Areas of State Interest and L16-002, Prosper Wastewater Treatment Plant / Location and Extent and X16-001, Prosper Wastewater Treatment Plant/Subdivision Exemption
Planner:	Sherman Feher
Engineer:	Sarah L White
Date:	July 8, 2016
Date to be returned:	August 8, 2016

Arapahoe County Agencies		Citizen's Organizations	
<input checked="" type="checkbox"/>	Assessor / Arapahoe County (Residential)	Karen Hart	
<input type="checkbox"/>	Attorney / Arapahoe County	Robert Hill	<input type="checkbox"/> CCNA-Cherry Creek Neighborhoods Ass.
<input type="checkbox"/>	Building / Arapahoe County	Steve Byer	<input type="checkbox"/> CECON-(Within Centennial)
<input checked="" type="checkbox"/>	Engineering / Arapahoe County	Sarah L. White	<input type="checkbox"/> Four Square Mile Neighborhood
<input checked="" type="checkbox"/>	Mapping / Arapahoe County	Pat Huberl	<input type="checkbox"/> South Metro Chamber of Commerce
<input type="checkbox"/>	Oil & Gas / Arapahoe County	Diane Kocis	Conservation District
<input checked="" type="checkbox"/>	Open Space / Arapahoe County	Shannon Carter	<input type="checkbox"/> Deer Trail Conservation District
<input checked="" type="checkbox"/>	Planning / Arapahoe County	Sherman Feher	<input checked="" type="checkbox"/> West Arapahoe Conservation District
<input checked="" type="checkbox"/>	Sheriff / Arapahoe County	1 to Brian McKnight 1 to Glenn Thompson	Transportation
<input checked="" type="checkbox"/>	Weed Control / Arapahoe County	Russell Johnson	<input type="checkbox"/> CDOT / State Highway Dept- Region 1
<input checked="" type="checkbox"/>	Zoning / Arapahoe County	Tammy King	<input type="checkbox"/> E-470 Authority
Referral Agencies			<input type="checkbox"/> RTD
<input type="checkbox"/>	Architectural Review Committee		
<input type="checkbox"/>	Airport or Military Base		Utilities: Gas, Electric & Phone
<input type="checkbox"/>	CGS Colorado Geological Survey-Soils		<input type="checkbox"/> Centurylink/Phone
<input checked="" type="checkbox"/>	City / Town	Aurora	<input type="checkbox"/> Conoco Phillips / Gas Pipeline
<input checked="" type="checkbox"/>	Colorado Parks and Wildlife	Travis Harris	<input checked="" type="checkbox"/> XCEL
<input type="checkbox"/>	County		<input type="checkbox"/> IREA
<input type="checkbox"/>	DRCOG		Water / Sanitation / Stormwater / Wetlands
<input checked="" type="checkbox"/>	Bennett Fire Protection District	Caleb Connor	<input type="checkbox"/> ACWWA
<input type="checkbox"/>	Metro District		<input checked="" type="checkbox"/> U.S. Army Corp. of Engineer
<input type="checkbox"/>	Post Office Growth Coordinator	J. Hernandez	<input type="checkbox"/> CCBWQA
<input checked="" type="checkbox"/>	Reap I-70 Regional Economic Advancement Partnership	Matt Reay and Jack Keever	<input type="checkbox"/> Colorado Division of Water Resources
<input type="checkbox"/>	Recreation District / Park District (External)		<input type="checkbox"/> SEMSWA
<input type="checkbox"/>	Bennett School District #29J Aurora School District	Keith Yach	<input type="checkbox"/> ECCVW&S
<input type="checkbox"/>	Special District		<input checked="" type="checkbox"/> Urban Drainage & Flood
<input checked="" type="checkbox"/>	Tri-County Health Department	Sheila Lynch	<input checked="" type="checkbox"/> Other / 5 Sets East End Adv. Committee
<input type="checkbox"/>			

The enclosed case has been submitted to the Arapahoe County Planning Office for consideration. Because of the possible effect of the proposed development upon your area, the case is being referred for your comment. Please examine this request and, after review, check the appropriate line and return to the Arapahoe County Planning Office on or before the date indicated above.

COMMENTS:	SIGNATURE
<input checked="" type="checkbox"/> Have NO Comments to make on the case as submitted	<i>Gary W. Duke</i>
<input type="checkbox"/> Have the following comments to make related to the case:	



Public Works and Development
 6924 S. Lima Street Centennial, Colorado 80112 Phone: 720-874-6650; FAX 720-874-6611
 www.co.arapahoe.co.us

Planning Division
Phase II Referral Routing

Case Number / Case Name: ASI16-001, Prosper Wastewater Treatment Plant 1041 Permit / Areas of State Interest and L16-002, Prosper Wastewater Treatment Plant / Location and Extent and X16-001, Prosper Wastewater Treatment Plant/Subdivision Exemption

Planner: Sherman Feher
Engineer: Sarah L White
Date: July 8, 2016
Date to be returned: August 8, 2016

Arapahoe County Agencies		Citizen's Organizations	
<input checked="" type="checkbox"/>	Assessor / Arapahoe County (Residential)	Karen Hart	
<input type="checkbox"/>	Attorney / Arapahoe County	Robert Hill	<input type="checkbox"/> CCNA-Cherry Creek Neighborhoods Ass.
<input type="checkbox"/>	Building / Arapahoe County	Steve Byer	<input type="checkbox"/> CECON-(Within Centennial)
<input checked="" type="checkbox"/>	Engineering / Arapahoe County	Sarah L. White	<input type="checkbox"/> Four Square Mile Neighborhood
<input checked="" type="checkbox"/>	Mapping / Arapahoe County	Pat Hubert	<input type="checkbox"/> South Metro Chamber of Commerce
<input type="checkbox"/>	Oil & Gas / Arapahoe County	Diane Kocis	Conservation District
<input checked="" type="checkbox"/>	Open Space / Arapahoe County	Shannon Carter	<input type="checkbox"/> Deer Trail Conservation District
<input checked="" type="checkbox"/>	Planning / Arapahoe County	Sherman Feher	<input checked="" type="checkbox"/> West Arapahoe Conservation District
<input checked="" type="checkbox"/>	Sheriff / Arapahoe County	1 to Brian McKnight 1 to Glenn Thompson	Tasha Chevarria Transportation
<input checked="" type="checkbox"/>	Weed Control / Arapahoe County	Russell Johnson	<input type="checkbox"/> CDOT / State Highway Dept- Region 1
<input checked="" type="checkbox"/>	Zoning / Arapahoe County	Tammy King	<input type="checkbox"/> E-470 Authority
Referral Agencies			<input type="checkbox"/> RTD
<input type="checkbox"/>	Architectural Review Committee		<input type="checkbox"/>
<input type="checkbox"/>	Airport or Military Base		Utilities: Gas, Electric & Phone
<input type="checkbox"/>	CGS Colorado Geological Survey-Soils		<input type="checkbox"/> Centurylink/Phone
<input checked="" type="checkbox"/>	City / Town	Aurora	<input type="checkbox"/> Conoco Phillips / Gas Pipeline
<input checked="" type="checkbox"/>	Colorado Parks and Wildlife	Travis Harris	<input checked="" type="checkbox"/> XCEL
<input type="checkbox"/>	County		<input type="checkbox"/> IREA
<input type="checkbox"/>	DRCOG		Water / Sanitation / Stormwater / Wetlands
<input checked="" type="checkbox"/>	Bennett Fire Protection District	Caleb Connor	<input type="checkbox"/> ACWWA
<input type="checkbox"/>	Metro District		<input checked="" type="checkbox"/> U.S. Army Corp. of Engineer
<input type="checkbox"/>	Post Office Growth Coordinator	J. Hernandez	<input type="checkbox"/> CCBWQA
<input checked="" type="checkbox"/>	Reap I-70 Regional Economic Advancement Partnership	Matt Reay and Jack Keever	<input type="checkbox"/> Colorado Division of Water Resources
<input type="checkbox"/>	Recreation District / Park District (External)		<input type="checkbox"/> SEMSWA
<input type="checkbox"/>	Bennett School District #29J Aurora School District	Keith Yach	<input type="checkbox"/> ECCW&S
<input type="checkbox"/>	Special District		<input checked="" type="checkbox"/> Urban Drainage & Flood
<input checked="" type="checkbox"/>	Tri-County Health Department	Sheila Lynch	<input checked="" type="checkbox"/> Other / 5 Sets East End Adv. Committee
<input type="checkbox"/>			

The enclosed case has been submitted to the Arapahoe County Planning Office for consideration. Because of the possible effect of the proposed development upon your area, the case is being referred for your comment. Please examine this request and, after review, check the appropriate line and return to the Arapahoe County Planning Office on or before the date indicated above.

COMMENTS:	SIGNATURE
<input checked="" type="checkbox"/> Have NO Comments to make on the case as submitted	<i>Joeth Cook</i>
<input type="checkbox"/> Have the following comments to make related to the case:	



August 3, 2016

Ms. Nancy Doty, Chair
Arapahoe County Commission
5334 S. Prince Street
Littleton, CO 80120

Dear Chair Doty,

Thank you for the opportunity to comment on the referral for the Prosper Wastewater Treatment Plant application. The City of Aurora has reviewed the application and has the following comments:

1. City Concerns Regarding The Prosper Development

Prosper and the adjacent Sky Ranch development do not conform to Metro Vision 2035, and, if approved, will have significant traffic, noise and water supply issues. Given these issues, the City of Aurora does not support these proposals. The applicant could seek annexation into Aurora. The annexation process includes mechanisms to address the traffic, land use, and water service issues that this development presents.

2. Public Works Department

Floodplain mapping provided with the application package appears to present current effective FEMA mapping. UDFCD recently completed a FHAD study (Olsson, 2014) which included Coyote Run and appears to show a somewhat wider floodplain (especially just upstream of the I-70 crossing) and somewhat higher flood elevations. The County may want to consider if the more recent UDFCD study constitutes the "best available information" and require its use rather than the current FEMA mapping.

The 2014 UDFCD FHAD did not include Rat Run and current effective FEMA mapping for this stream system upstream of I-70 and adjacent to the proposed WWTP site is Approximate Zone A. It is recommended as part of the WWTP design process (if not 1041 permitting) that the applicant carry out floodplain modeling to develop detailed floodplain limits and elevations for Rat Run.

UDFCD recently completed an MDP that includes Coyote Run (Olsson, 2014) and recommended "floodplain preservation" with no structural improvements for the channel reach adjacent to the proposed WWTP. It appears that the proposed site plan is adhering to this UDFCD conceptual design and the City would recommend this approach be maintained when/if updated FHAD mapping is utilized for Coyote Run and detailed floodplain information is developed for Rat Run.

Ms. Nancy Doty, Chair
Arapahoe County Board of County Commissioners
August 3, 2016
Page 2

The UDFCD MDP (Olsson, 2014) indicates that the Coyote Run channel slope is on the order of 0.6% in the reach adjacent to the proposed WWTP and recommends no channel check structures. A slope of 0.6% is relatively high for a developed watershed and the introduction of WWTP and urban runoff base flows into a previously intermittent stream system has the potential to significantly impact channel invert and bank stability. UDFCD has recently changed its recommended channel design slopes for urbanized watersheds to be substantially lower than 0.6%. It is recommended that the applicant address the potential need for channel checks and/or grade controls.

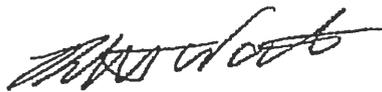
WWTP's are typically considered "critical facilities" and as such, it is recommended that an enhanced level of flood protection (> than the 100yr event) be considered. The COA standard for critical facilities is 2 feet above the 100-yr floodplain. Draft federal guidance for EO 13690 has similar requirements.

3. Metro Wastewater Reclamation District

In reviewing the maps in our records, it appears that the Prosper area is partially within our "expected service area", however that is only relevant to Special Connectors and expansion of their service area. Prosper is not within the corporate boundaries of Aurora so they are not obligated to send that flow to the District.

In the event Aurora were to annex the Prosper development in the future, the treatment plant that the developer is proposing could not be expanded, or that area would have to be excluded from the District under 32-4-515 and Board Policy Exclusion-Service Area. Even though the proposed treatment plant may be within our expected service area, unless it is within the boundaries of Aurora or they choose to serve it (Service Contract section 303), it is District staff's opinion that there is no requirement that it connects to the District's system and it would not violate our competing system prohibitions.

Cordially,



Bob Watkins
Interim Planning and Development Services Director
City of Aurora

Cc: Members of City Council
George Noe, City Manager
Nancy Freed, Deputy City Manager
Jason Batchelor, Deputy City Manager

City of Aurora Comments and Responses

1. City Concerns Regarding

The Prosper Development Prosper and the adjacent Sky Ranch development do not conform to Metro Vision 2035, and, if approved, will have significant traffic, noise and water supply issues. Given these issues, the City of Aurora does not support these proposals. The applicant could seek annexation into Aurora. The annexation process includes mechanisms to address the traffic, land use, and water service issues that this development presents.

Response: The proposed WWTP is consistent with the approved Prosper Preliminary Development Plan. It is the applicant's intent to develop the property in Arapahoe County consistent with the approved Preliminary Development Plan. The approved Preliminary Development Plan addresses issues related to land use, drainage, water service and other planning considerations.

2. Public Works Department

Floodplain mapping provided with the application package appears to present current effective FEMA mapping. UDFCD recently completed a FHAD study (Olsson, 2014) which included Coyote Run and appears to show a somewhat wider floodplain (especially just upstream of the I-70 crossing) and somewhat higher flood elevations. The County may want to consider if the more recent UDFCD study constitutes the "best available information" and require its use rather than the current FEMA mapping.

The 2014 UDFCD FHAD did not include Rat Run and current effective FEMA mapping for this stream system upstream of I-70 and adjacent to the proposed WWTP site is Approximate Zone A. It is recommended as part of the WWTP design process (if not 1041 permitting) that the applicant carry out floodplain modeling to develop detailed floodplain limits and elevations for Rat Run.

Response: We feel an obligation to continue to show the current FEMA mapping, until such time as it is updated by the more current 2014 UDFCD FHAD. We have provided (to Arapahoe County) our 100 yr modeling of Rat Run and its tributary known as Rat 1-D (or known as stream 120), for the purpose of identifying the existing conditions 100 yr flood limits, utilizing the match elevation determined from the 2014 FHAD right at the south side of Interstate 70.

UDFCD recently completed an MDP that includes Coyote Run (Olsson, 2014) and recommended "floodplain preservation" with no structural improvements for the channel reach adjacent to the proposed WWTP. It appears that the proposed site plan is adhering to this UDFCD conceptual design and the City would recommend this approach be maintained when/if updated FHAD mapping is utilized for Coyote Run and detailed floodplain information is developed for Rat Run. The UDFCD MDP (Olsson, 2014) indicates that the Coyote Run channel slope is on the order of 0.6% in the reach adjacent to the proposed WWTP and recommends no channel check structures. A slope of 0.6% is relatively high for a developed watershed and the introduction of WWTP and urban runoff base flows into a previously intermittent stream system has the potential to significantly impact channel invert and bank stability. UDFCD has recently changed its recommended channel design slopes for urbanized watersheds to be substantially lower than 0.6%. It is recommended that the applicant address the potential need for channel checks and/or grade controls.

Response: We have been directed by the County to adhere to the MDP, which we believe we have done. As stated in your comment there are no requirements for stabilization facilities in this area.

WWTP's are typically considered "critical facilities" and as such, it is recommended that an enhanced level of flood protection (> than the 100yr event) be considered. The COA standard for critical facilities is 2 feet above the 100-yr floodplain. Draft federal guidance for EO 13690 has similar requirements.

Response: Per the County, the WWTP is not considered a Critical Facility, though we do note that the proposed facilities are 2' or more above the 100 yr water surface as determined on Coyote Run (East side of site) from the 2014 FHAD, AND as determined for Rat Run (West side of site) from analysis/modeling by our firm for this project. Reference can be made to sht 3 of the CD set of plans which identifies the BFE's (100-yr Base Flood Elevations) for both Coyote Run and for Rat Run.

3. Metro Wastewater Reclamation District

In reviewing the maps in our records, it appears that the Prosper area is partially within our "expected service area", however that is only relevant to Special Connectors and expansion of their service area. Prosper is not within the corporate boundaries of Aurora so they are not obligated to send that flow to the District.

In the event Aurora were to annex the Prosper development in the future, the treatment plant that the developer is proposing could not be expanded, or that area would have to be excluded from the District under 32-4-515 and Board Policy Exclusion Service Area. Even though the proposed treatment plant may be within our expected service area, unless it is within the boundaries of Aurora or they choose to serve it (Service Contract section 303), it is District staff's opinion that there is no requirement that it connects to the District's system and it would not violate our competing system prohibitions.

Response: The intent is to develop Prosper within Arapahoe County and per the approved Preliminary Development Plan that includes the proposed WWTP site. There is not a requirement that Prosper connect to the Metro Wastewater Reclamation District.



Right of Way & Permits

1123 West 3rd Avenue
Denver, Colorado 80223
Telephone: 303.571.3306
Facsimile: 303.571.3284
donna.l.george@xcelenergy.com

August 3, 2016

Arapahoe County Public Works and Development
6924 South Lima Street
Centennial, CO 80112

Attn: Sherman Feher

Re: Prosper Wastewater Treatment Plant, Case # ASI16-001

Public Service Company of Colorado's (PSCo) Right of Way & Permits Referral Desk has reviewed the plans and subdivision exemption plat for **Prosper Wastewater Treatment Plant**. As always, thank you for the opportunity to take part in the review process. To ensure that adequate utility easements are available within this development, PSCo requests that the following language or plat note be placed on the preliminary and final plats for the subdivision:

Minimum ten-foot (10') wide dry utility easements are hereby dedicated on private property abutting all public streets, and around the perimeter of each commercial/ industrial lot in the subdivision or platted area. These easements are dedicated to Arapahoe County for the benefit of the applicable utility providers for the installation, maintenance, and replacement of electric, gas, television, cable, and telecommunications facilities (Dry Utilities). Utility easements shall also be granted within any access easements and private streets in the subdivision. Permanent structures, improvements, objects, buildings, wells, water meters and other objects that may interfere with the utility facilities or use thereof (Interfering Objects) shall not be permitted within said utility easements and the utility providers, as grantees, may remove any Interfering Objects at no cost to such grantees, including, without limitation, vegetation. Public Service Company of Colorado (PSCo) and its successors reserve the right to require additional easements and to require the property owner to grant PSCo an easement on its standard form.

Public Service Company also requests that **all utility easements be depicted graphically on the preliminary and final plats**. While these easements may accommodate certain utilities to be installed in the subdivision, some additional easements may be required as planning and building progresses.

In addition, 31-23-214 (3), C.R.S., requires the subdivider, at the time of subdivision platting, to provide for major utility facilities such as electric substation sites, gas or electric transmission line easements and gas regulator/meter station sites as deemed necessary by PSCo. While this provision will not be required on every plat, when necessary, PSCo will work with the subdivider to identify appropriate locations. This statute also requires the subdivider to submit a letter of agreement to the municipal/county commission that adequate provision of electrical and/or gas service has been provided to the subdivisions.

The property owner/developer/contractor must contact the **Builder's Call Line** at 1-800-628-2121 or <https://xcelenergy.force.com/FastApp> (**Register** so you can track your application) and complete the application process for any new electric service. It is then the responsibility of the developer to contact the

Designer assigned to the project for approval of design details. Additional easements may need to be acquired by separate document for new facilities.

As a safety precaution, PSCo would like to remind the developer to call the **Utility Notification Center** at 1-800-922-1987 for utility locates prior to construction.

If you have any questions about this referral response, please contact me at (303) 571-3306.

Donna George
Contract Right-of-Way Referral Processor
Public Service Company of Colorado

Xcel Energy Comments and Responses

Public Service Company of Colorado's (PSCO) Right of Way & Permits Referral Desk has reviewed the plans and subdivision exemption plat for Prosper Wastewater Treatment Plant. As always, thank you for the opportunity to take part in the review process. To ensure that adequate utility easements are available within this development, PSCO requests that the following language or plat note be placed on the preliminary and final plats for the subdivision:

Minimum ten-foot (10) wide dry utility easements are hereby dedicated on private property abutting all public streets. and around the perimeter of each commercial/ industrial lot in the subdivision or platted area. These easements are dedicated to Arapahoe County for the benefit of the applicable utility providers for the installation, maintenance, and replacement of electric, gas, television, cable, and telecommunications facilities (Dry Utilities). Utility easements shall also be granted within any access easements and private streets in the subdivision. Permanent structures, improvements, objects, buildings, wells, water meters and other objects that may interfere with the utility facilities or use thereof (Interfering Objects) shall not be permitted within said utility easements and the utility providers, as grantees, may remove any interfering Objects at no cost to such grantees, including, without limitation, vegetation. Public Service Company of Colorado (PSCO) and its successors reserve the right to require additional easements and to require the property owner to grant PSCO an easement on its standard form.

Public Service Company also requests that all utility easements be depicted graphically on the preliminary and final plats. While these easements may accommodate certain utilities to be installed in the subdivision, some additional easements may be required as planning and building progresses.

In addition, 31-23-214 (3), C.R.S., requires the subdivider, at the time of subdivision platting, to provide for major utility facilities such as electric substation sites, gas or electric transmission line easements and gas regulator/meter station sites as deemed necessary by PSCO. While this provision will not be required on every plat, when necessary, PSCO will work with the subdivider to identify appropriate locations. This statute also requires the subdivider to submit a letter of agreement to the municipal/county commission that adequate provision of electrical and/or gas service has been provided to the subdivisions.

The property owner/developer/contractor must contact the Builder's Call Line at 1-800-628-2121 or <https://xcelenergy.force.com/FastApp> (Register so you can track your application) and complete the application process for any new electric service. It is then the responsibility of the developer to contact the

Designer assigned to the project for approval of design details. Additional easements may need to be acquired by separate document for new facilities.

As a safety precaution, PSCO would like to remind the developer to call the Utility Notification Center at 1-800-922-1987 for utility locates prior to construction.

Response: The requirements and development standards outlined above have been noted in our files.



BENNETT FIRE PROTECTION DISTRICT #7

DISTRICT OFFICE: 303-644-3572 FAX: 303-644-3401

EMAIL: LIFESAFETY@BENNETTFIRERESCUE.ORG

"Striving to Preserve Life and Property"

July 21st, 2016

Sherman Feher

Arapahoe County Public Works & Development

6924 S. Lima Street

Centennial, CO 80112

Re: AS116-001, Prosper Wastewater Treatment Plant 1041 Permit / Areas of State Interest and L 16-002, Prosper Wastewater Treatment Plant/ Location and Extent and X16-001, Prosper Wastewater Treatment Plant/Subdivision Exemption

Planner Feher,

In regards case AS116-001, Prosper Wastewater Treatment Plant 1041 Permit / Areas of State Interest and L 16-002, Prosper Wastewater Treatment Plant/ Location and Extent and X16-001, Prosper Wastewater Treatment Plant/Subdivision Exemption, Bennett Fire Protection District has the following comments and considerations:

- Bennett Fire Protection District currently serves this location as it falls within our Fire Protection District and has no objections to the proposed development.
- The applicant shall consult with Bennett Fire Protection District to ensure all aspects of the project conform to the District's adopted fire code (2012 IFC).
- The developer shall ensure that the proposed water systems pertaining to hydrant distribution for fire suppression is adequate to protect the proposed development as well as meet the design criteria of both Arapahoe County and the Bennett Fire Protection District. Considerations for design requirements shall include adopted codes and standards as well as ISO distribution and fire flow requirements.
- Bennett Fire Protection District will accept the proposed temporary road guidelines contained in the referral. All temporary and permanent roads constructed for any part of the development shall conform to IFC fire apparatus access requirements.
- As the proposed temporary access road will serve as the interim sole means of providing emergency services to the facility, the proposed temporary access road shall be maintained at all times during its service life of the facility. This includes, grading, maintenance, and snow removal. If at any times Bennett Fire Protection District deems the road inadequate for the provision of emergency services, the applicant shall work with the Fire District to make necessary improvements.
- The internal access road design includes roads which are 20ft in width. The current IFC standard for fire apparatus access roads with a fire hydrant is 26ft in width at the point of the hydrant. The applicant may need to make minor revisions at the hydrant locations to meet this width.
- The processing of waste water often involves the storage and use of hazardous materials. This information shall be provided to Bennett Fire Protection District to be reviewed and approved.

- Facilities which store or use hazardous materials are often classified as "H" occupancies, which require fire sprinkler suppression or special electrical considerations. Applicant shall ensure the facility design meets the District's adopted fire code requirements.
- KNOX Fire Department Key access hardware shall be provided for all vehicle access gates as well as each building on site.

Thank You



Caleb J. Connor
Fire Marshal
Life Safety Division
Bennett Fire Protection District
303-644-3572 - Headquarters / 303-532-7733 - Direct
www.BennettFireRescue.org

Bennett Fire Protection District Comments and Responses

In regards case AS116-001, Prosper Wastewater Treatment Plant 1041 Permit / Areas of State Interest and L 16-002, Prosper Wastewater Treatment Plant/ Location and Extent and X16-001, Prosper Wastewater Treatment Plant/Subdivision Exemption, Bennett Fire Protection District has the following comments and considerations:

- Bennett Fire Protection District currently serves this location as it falls within our Fire Protection District and has no objections to the proposed development.
- The applicant shall consult with Bennett Fire Protection District to ensure all aspects of the project conform to the District's adopted fire code (2012 IFC).

Response: The applicant will coordinate aspects with the Fire Code and District.

- The developer shall ensure that the proposed water systems pertaining to hydrant distribution for fire suppression is adequate to protect the proposed development as well as meet the design criteria of both Arapahoe County and the Bennett Fire Protection District. Considerations for design requirements shall include adopted codes and standards as well as ISO distribution and fire flow requirements.

Response: Fire hydrant distribution and required fire suppression will be incorporated into the final construction drawings for the site and buildings/facilities.

- Bennett Fire Protection District will accept the proposed temporary road guidelines contained in the referral. All temporary and permanent roads constructed for any part of the development shall conform to IFC fire apparatus access requirements.

Response: Access roads will meet IFC requirements for access.

- As the proposed temporary access road will serve as the interim sole means of providing emergency services to the facility, the proposed temporary access road shall be maintained at all times during its service life of the facility. This includes, grading, maintenance, and snow removal. If at any times Bennett Fire Protection District deems the road inadequate for the provision of emergency services, the applicant shall work with the Fire District to make necessary improvements.

Response: The temporary road will be maintained to provide all-season access.

- The internal access road design includes roads which are 20ft in width. The current IFC standard for fire apparatus access roads with a fire hydrant is 26ft in width at the point of the hydrant. The applicant may need to make minor revisions at the hydrant locations to meet this width.

Response: Some hydrant locations moved to intersection and other locations the road has been widened to 26' per IFC.

- The processing of waste water often involves the storage and use of hazardous materials. This information shall be provided to Bennett Fire Protection District to be reviewed and approved.

Response: Hazardous materials including the storage will be reviewed with the Bennett Fire Protection District.

- Facilities which store or use hazardous materials are often classified as "H" occupancies, which require fire sprinkler suppression or special electrical considerations. Applicant shall ensure the facility design meets the District's adopted fire code requirements.

Response: The Applicant will ensure the facility design meets the District's adopted fire code requirements including NFPA 820 requirements for Fire Protection in Wastewater Treatment and Collection Facilities.

- KNOX Fire Department Key access hardware shall be provided for all vehicle access gates as well as each building on site.

Response: A KNOX Box will be provided for the gate.



August 9, 2016

Sherman Feher.
Arapahoe County Planning Department
6924 S. Lima Street
Centennial, CO 80112

RE: ASI 116-001, Prosper Wastewater Treatment Plant 1041 Permit/Areas of State Interest
L16-002, Prosper Wastewater Treatment Plant/Location and Extent
X16-001, Prosper Wastewater Treatment Plant/Subdivision Exemption
Prosper Wastewater Treatment Plant
TCHD Case No. 3993

Dear Mr. Feher:

Thank you for the opportunity to review and comment on the 1041 Permit/Areas of State Interest, Location and Extent, and Subdivision Exemption for the proposed Prosper Wastewater Treatment Plant (WWTP). Tri-County Health Department (TCHD) staff has reviewed the application for compliance with applicable public and environmental health regulations. After reviewing the application, TCHD has the following comments.

The Site Application and Utility Plan for the WWTP indicate that the recommended WWTP is a Membrane Bioreactor (MBR). Section 7 b. of the Application Submittal states: "This plant will include modern wastewater treatment facilities with biological nutrient removal (BNR) and filtration for the production of reuse water. The Location and Extent drawings depicting the WWTP (Sheets 1-15) are typical of a Biological Nutrient Removal (BNR) System. TCHD recommends that the drawings be revised to reflect the preferred alternative of an MBR.

Sheet 5 of the drawings indicates that the WWTP site is bounded on the east by a floodway and on the west by floodplain. The Location and Extent Plan shows an access road to the site across the Rat Run Drainageway. Construction of the road may alter the floodplain, and future flood events may impede or prevent access to the site. TCHD recommends that the applicant address any applicable regulatory and technical issues associated with the floodplain alteration and also site access.

Section 10, Dust and Odor. The second sentence states: Odor control equipment will be installed at the influent lift station and at the Headworks Building of the WWTP. These facilities are typically the source of the majority of odors at WWTP's. The Location and Extent drawings indicate that the WWTP is in close proximity to future residences. TCHD is concerned that odors will also be produced from the aeration basins, resulting in complaints from nearby residents. Consequently, TCHD recommends that the aeration basins be covered. The Water Quality Control Division

Prosper Wastewater Treatment Plant-Areas of State Interest, Location and Extent, Subdivision
Exemption

August 9, 2016

Page 2 of 2

(WQCD) also has requirements for setbacks from residential areas. Please describe how the proposed facilities will comply with the WQCD's setback polices.

TCHD has submitted comments regarding the WWTP Site Application and Utility Plan that are relevant to the subject case. I have included our comment letter as an enclosure to this letter.

Please feel free to contact me at (720) 200-1568 or wbrown@tchd.org if you have any questions regarding TCHD's comments.

Sincerely,



Warren S. Brown, P.E.
Senior Environmental Health Consultant

Enclosure

CC: Julio Iturreria, Larry Mugler, Arapahoe County
Bret Icenogle, P.E., David Kurz, P.E., CDPHE
Sheila Lynch, Steven Chevalier, TCHD

Tri-County Health Department Comments and Responses

Thank you for the opportunity to review and comment on the 1041 Permit/Areas of State Interest, Location and Extent, and Subdivision Exemption for the proposed Prosper Wastewater Treatment Plant (WWTP). Tri-County Health Department (TCHD) staff has reviewed the application for compliance with applicable public and environmental health regulations. After reviewing the application, TCHD has the following comments.

The Site Application and Utility Plan for the WWTP indicate that the recommended WWTP is a Membrane Bioreactor (MBR). Section 7 b. of the Application Submittal states: "This plant will include modern wastewater treatment facilities with biological nutrient removal (BNR) and filtration for the production of reuse water. The Location and Extent drawings depicting the WWTP (Sheets 1-15) are typical of a Biological Nutrient Removal (BNR) System. TCHD recommends that the drawings be revised to reflect the preferred alternative of an MBR.

Response: The BNR system is presented in the Location and Extent (L&E) drawings as the largest footprint (worst case) treatment process alternative at full build-out of the WWTP (35-40 years from now). A note has been added to the L&E drawings under Specific Notes (1 of 15) and Phase Designations (2 of 15) describing the phasing in more detail. The MBR system is the selected treatment process alternative for the initial phase of the WWTP (2-5 years from now) and is described in detail in the Site Application/Utility Plan. A Site Plan has been included in the Utility Plan report to show that the Phase 1 (MBR) is an integral part of the WWTP at build-out. The Metropolitan Districts will need to determine the selected treatment process for future phases as the demand of the WWTP increases.

Sheet 5 of the drawings indicates that the WWTP site is bounded on the east by a floodway and on the west by floodplain. The Location and Extent Plan shows an access road to the site across the Rat Run Drainageway. Construction of the road may alter the floodplain, and future flood events may impede or prevent access to the site. TCHD recommends that the applicant address any applicable regulatory and technical issues associated with the floodplain alteration and also site access.

Response: We have determined that there is no alteration to the floodzone and the floodway on the east side of the property.

The proposed access road, located on the west side of the property has been designed to match the existing grade across the floodzones of Rat Run and of Rat 1-D (a tributary to Rat Run). By matching the existing grade across these drainages it is shown that the elevation of the 100 yr storm event within the drainages, will not increase, thus the roadway has no impact on the floodzones. We have provided analysis of these 2 drainages to Arapahoe County to confirm our findings. Arapahoe County is further requiring that a "No Rise Certificate" be provided by our office to confirm and document these findings.

The access roadway is comprised of a gravel surface, and is identified as temporary until such time as a future paved is completed in the area. There is no specific timetable for the future permanent roadway construction.

As the access road is placed at the natural ground elevation across the 2 drainageways, it will overflow and "flood" during storm events. Maximum flow depth at the 100 yr event has been determined to be 18" at the roadway crossings. Staff personal will be trained on use of

the roadway during pending and actual storm events. Standard vehicles may be required to be temporarily parked outside of the floodzone areas, with staff being transported into the site with all-terrain vehicles.

An ultimate emergency means of access is available to the site from I-70.

Bennett Fire Department has reviewed the site plan and accessibility route and have determined it to be sufficient.

Section 10, Dust and Odor. The second sentence states: Odor control equipment will be installed at the influent lift station and at the Headworks Building of the WWTP. These facilities are typically the source of the majority of odors at WWTP's. The Location and Extent drawings indicate that the WWTP is in close proximity to future residences. TCHD is concerned that odors will also be produced from the aeration basins, resulting in complaints from nearby residents. Consequently, TCHD recommends that the aeration basins be covered. The Water Quality Control Division (WQCD) also has requirements for setbacks from residential areas. Please describe how the proposed facilities will comply with the WQCD's setback polices.

Response: The WQCD's setback distances are not met thus odor mitigating elements will be incorporated into the design including aeration system failure alarms, covering or enclosing the digester and process basins, and providing odor control systems for the influent lift station and headworks building.



Public Works and Development
 6924 S. Lima Street Centennial, Colorado 80112 Phone: 720-874-6650; FAX 720-874-6611
www.co.arapahoe.co.us

Planning Division
Phase II Referral Routing

Case Number / Case Name: ASI16-001, Prosper Wastewater Treatment Plant 1041 Permit / Areas of State Interest and L16-002, Prosper Wastewater Treatment Plant / Location and Extent and X16-001, Prosper Wastewater Treatment Plant/Subdivision Exemption

Planner: Sherman Feher
Engineer: Sarah L White
Date: July 8, 2016
Date to be returned: August 8, 2016

Arapahoe County Agencies			
<input checked="" type="checkbox"/>	Assessor / Arapahoe County (Residential)	Karen Hart	
<input type="checkbox"/>	Attorney / Arapahoe County	Robert Hill	
<input type="checkbox"/>	Building / Arapahoe County	Steve Byer	
<input checked="" type="checkbox"/>	Engineering / Arapahoe County	Sarah L. White	
<input checked="" type="checkbox"/>	Mapping / Arapahoe County	Pat Hubert	
<input type="checkbox"/>	Oil & Gas / Arapahoe County	Diane Kocis	
<input checked="" type="checkbox"/>	Open Space / Arapahoe County	Shannon Carter	
<input checked="" type="checkbox"/>	Planning / Arapahoe County	Sherman Feher	
<input checked="" type="checkbox"/>	Sheriff / Arapahoe County	1 to Brian McKnight 1 to Glenn Thompson	
<input checked="" type="checkbox"/>	Weed Control / Arapahoe County	Russell Johnson	
<input checked="" type="checkbox"/>	Zoning / Arapahoe County	Tammy King	
Referral Agencies			
<input type="checkbox"/>	Architectural Review Committee		
<input type="checkbox"/>	Airport or Military Base		
<input type="checkbox"/>	CGS Colorado Geological Survey-Soils		
<input checked="" type="checkbox"/>	City / Town	Aurora	
<input checked="" type="checkbox"/>	Colorado Parks and Wildlife	Travis Harris	
<input type="checkbox"/>	County		
<input type="checkbox"/>	DRCOG		
<input checked="" type="checkbox"/>	Bennett Fire Protection District	Caleb Connor	
<input type="checkbox"/>	Metro District		
<input type="checkbox"/>	Post Office Growth Coordinator	J. Hernandez	
<input checked="" type="checkbox"/>	Reap I-70 Regional Economic Advancement Partnership	Matt Reay and Jack Kever	
<input type="checkbox"/>	Recreation District / Park District (External)		
<input type="checkbox"/>	Bennett School District #29J Aurora School District	Keith Yach	
<input type="checkbox"/>	Special District		
<input checked="" type="checkbox"/>	Tri-County Health Department	Shella Lynch	
<input type="checkbox"/>			
Citizen's Organizations			
<input type="checkbox"/>	CCNA-Cherry Creek Neighborhoods Ass.		
<input type="checkbox"/>	CECON-(Within Centennial)		
<input type="checkbox"/>	Four Square Mile Neighborhood		
<input type="checkbox"/>	South Metro Chamber of Commerce		
Conservation District			
<input type="checkbox"/>	Deer Trail Conservation District		
<input checked="" type="checkbox"/>	West Arapahoe Conservation District		Tasha Chevarria
Transportation			
<input type="checkbox"/>	CDOT / State Highway Dept- Region 1		Rick Solomon
<input type="checkbox"/>	E-470 Authority		Peggy Davenport
<input type="checkbox"/>	RTD		Chris Quinn
Utilities: Gas, Electric & Phone			
<input type="checkbox"/>	Centurylink/Phone		Charles Pface
<input type="checkbox"/>	Conoco Phillips / Gas Pipeline		
<input checked="" type="checkbox"/>	XCEL		Donna George
<input type="checkbox"/>	IREA		Brooks Kaufman
Water / Sanitation / Stormwater / Wetlands			
<input type="checkbox"/>	ACWWA		
<input checked="" type="checkbox"/>	U.S. Army Corp. of Engineer		Kiel Downing
<input type="checkbox"/>	CCBWQA		
<input type="checkbox"/>	Colorado Division of Water Resources		Joanne Williams
<input type="checkbox"/>	SEMSWA		Paul Danley
<input type="checkbox"/>	ECCVW&S		Chris Douglass
<input checked="" type="checkbox"/>	Urban Drainage & Flood		David Mallory
<input checked="" type="checkbox"/>	Other / 5 Sets East End Adv. Committee		

The enclosed case has been submitted to the Arapahoe County Planning Office for consideration. Because of the possible effect of the proposed development upon your area, the case is being referred for your comment. Please examine this request and, after review, check the appropriate line and return to the Arapahoe County Planning Office on or before the date indicated above.

COMMENTS:		SIGNATURE
<input checked="" type="checkbox"/>	Have NO Comments to make on the case as submitted	<i>Chris Quinn</i> 7/11/16
<input type="checkbox"/>	Have the following comments to make related to the case:	

Prosper Wastewater Treatment Plant

Arapahoe County Planning Commission Hearing

January 17, 2017



GENERAL OVERVIEW

- ▶ General Wastewater Treatment Plant (WWTP) Processes
 - ▶ Physical
 - ▶ Screening
 - ▶ Settling
 - ▶ Biological
 - ▶ Micoorganisms
 - ▶ Chemical

PROSPER WWTP

- ▶ Lift Station #1
 - ▶ Pumps raise water to headworks
- ▶ Headworks
 - ▶ Screening of larger particles
 - ▶ Grit removal
- ▶ Lift Station #2 and Flow Equalization
- ▶ Aerations Basins and Membrane Filtration
- ▶ Disinfection with Ultraviolet Light
- ▶ Aerobic Digestion of Solids Removed from Waste Stream

WWTP: AEROBIC VS. ANAEROBIC

- ▶ Modern WWTPs Typically Use Both Aerobic and Anaerobic Processes
- ▶ Aerobic Processes
 - ▶ Aeration Basins
 - ▶ Sludge Digestion
- ▶ Anaerobic Processes
 - ▶ Denitrification (in anaerobic or anoxic tanks)
 - ▶ Sludge Digestion
- ▶ CDPHE Regulations Apply to Both Processes

WWTP REGULATIONS-WATER QUALITY

- ▶ Colorado Department of Public Health and Environment (CDPHE) Regulates all Aspects of WWTPs
 - ▶ Effluent limits
 - ▶ Site Application Process
 - ▶ Design Review
 - ▶ Permitting
 - ▶ Operational Inspections
 - ▶ Enforcement
- ▶ Tri-County Health Department
 - ▶ Reviews Site Application

ODOR REGULATIONS-CDPHE

- ▶ CDPHE Air Quality Control Commission
- ▶ Regulation Number 2-Odor Emission
 - ▶ Violation determined by certified personnel using the Barneby-Cheney Scentometer or “Nasal Ranger”
 - ▶ Violation if odor detected after dilution with 7 volumes of Air
 - ▶ An Odor Complaint May not Result in a Violation
- ▶ Construction Permit for WWTP
 - ▶ Required for some WWTPs

BARNEBY CHENEY SCENTOMETER



PROSPER WWTP-PROPOSED ODOR CONTROLS

- ▶ Maintain Setback Distances
- ▶ Aeration System Failure Alarms
- ▶ Cover/Enclose Digester and Process Basins
- ▶ Odor Control Systems at Influent Lift Station and Headworks
 - ▶ Activated carbon

ODOR COMPLAINTS FROM WWTPs

- ▶ CDPHE Air Pollution Control Division-Compliance and Enforcement Division
 - ▶ 200-300 Complaints about Northglenn WWTP around 2006 & 2007
 - ▶ Northglenn implemented odor controls
 - ▶ Complaints substantially reduced
 - ▶ Most Complaints Were Not Violations
 - ▶ 3 Odor Complaints Related to Other WWTPs Since 2000
- ▶ TCHD Queried Complaint Database Past 3 Years
 - ▶ No odor complaints

TCHD ROLE IN ODOR COMPLAINTS

- ▶ TCHD Has Personnel Trained in Odor Evaluation
- ▶ TCHD Can Investigate Odor Complaints and/or Coordinate Complaints with CDPHE
- ▶ An Odor Complaint May not Result in a Violation, Due to Air Dilution in Scentometer

EXISTING WWTP's

- ▶ Littleton-Englewood
 - ▶ 2900 S. Platte River Drive
- ▶ City of Aurora-Sand Creek
 - ▶ 11405 E. 30th Avenue
- ▶ Arapahoe County Water and Wastewater Authority-Lone Tree
 - ▶ 13031 E. Caley Avenue
- ▶ Stonegate
 - ▶ 9145 S. Jordan Road
- ▶ Parker (2 plants)
 - ▶ 18100 E. Woodman Drive
 - ▶ 18201 Plaza Drive

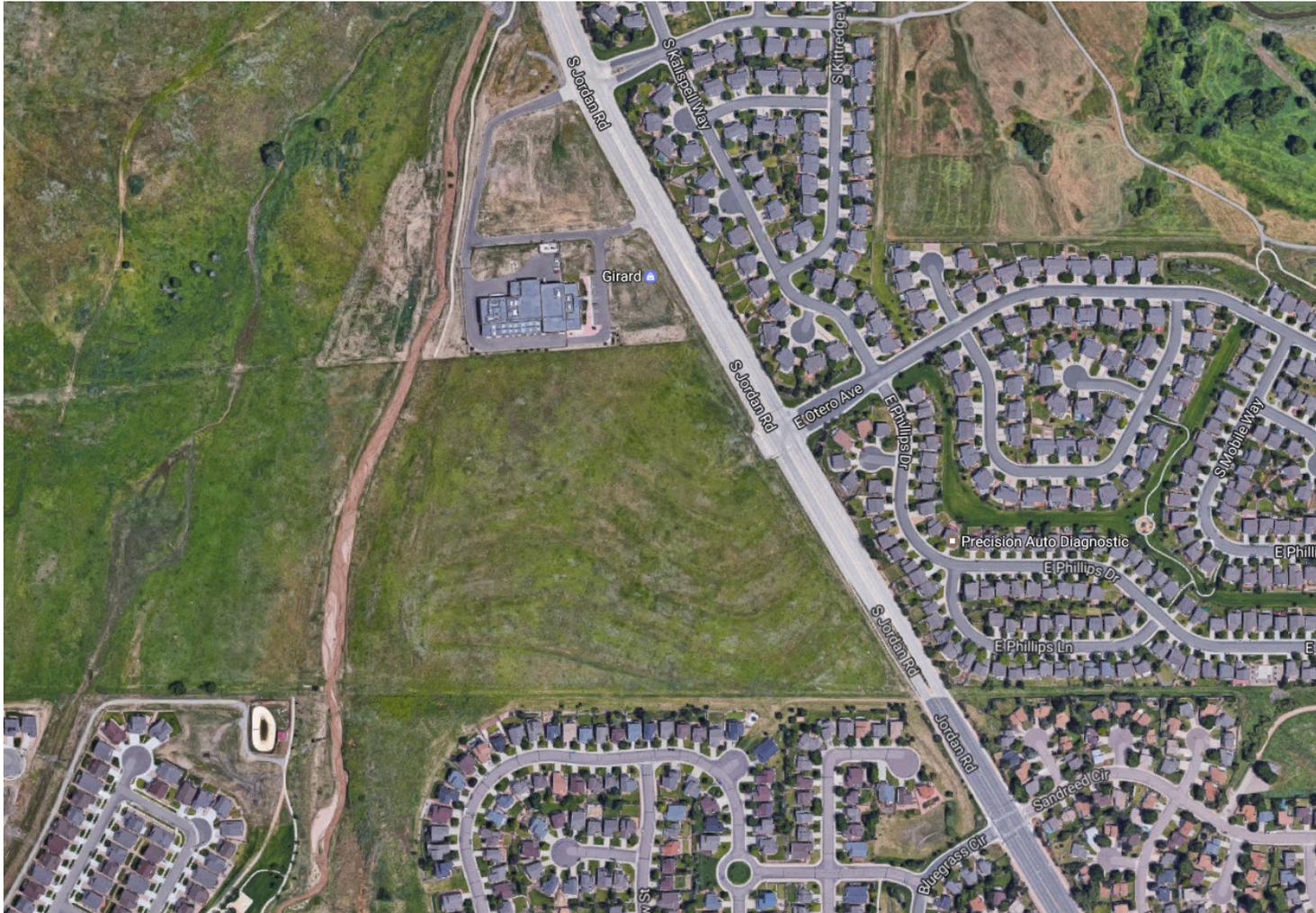
AURORA-SAND CREEK



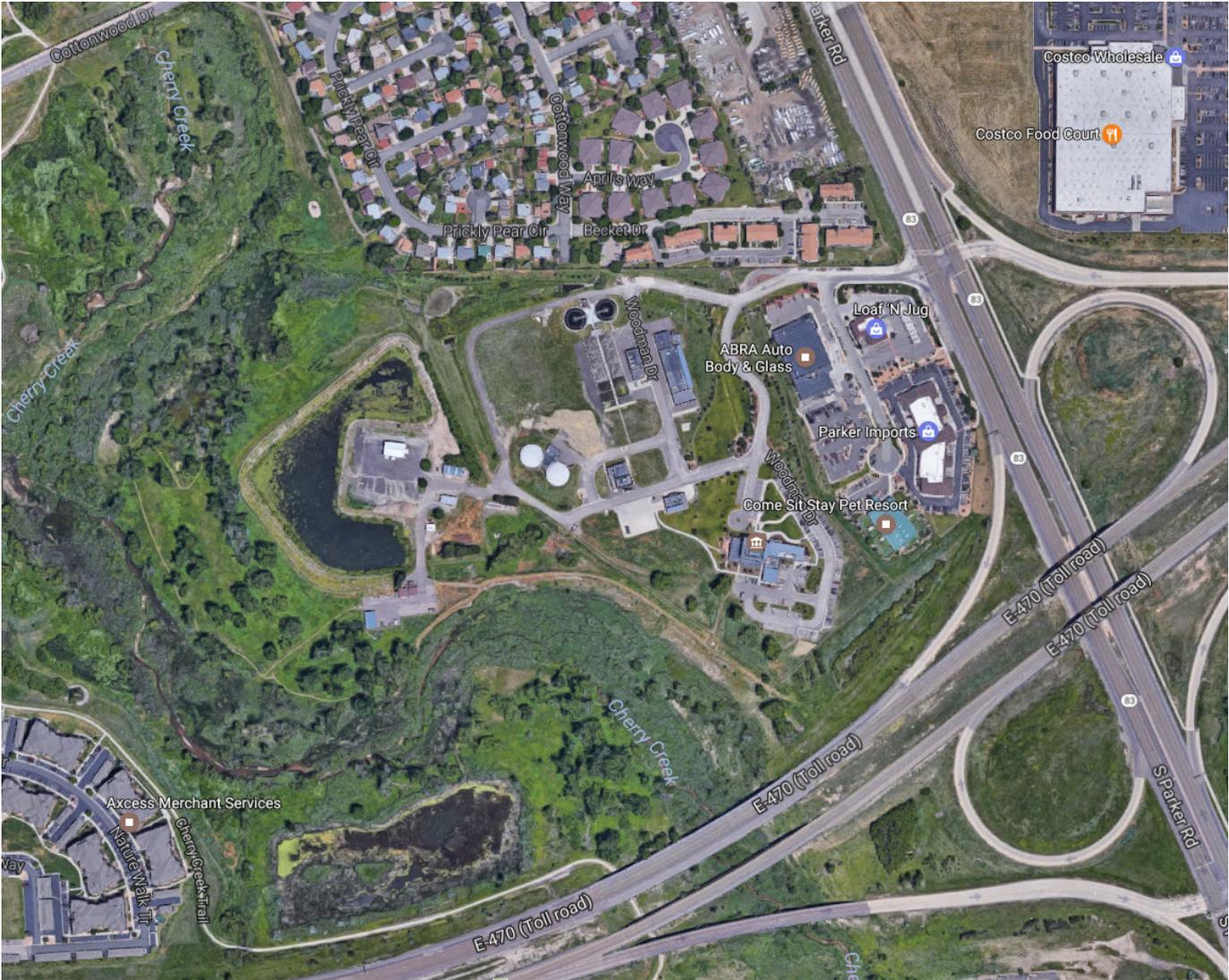
ACWWA-LONE TREE



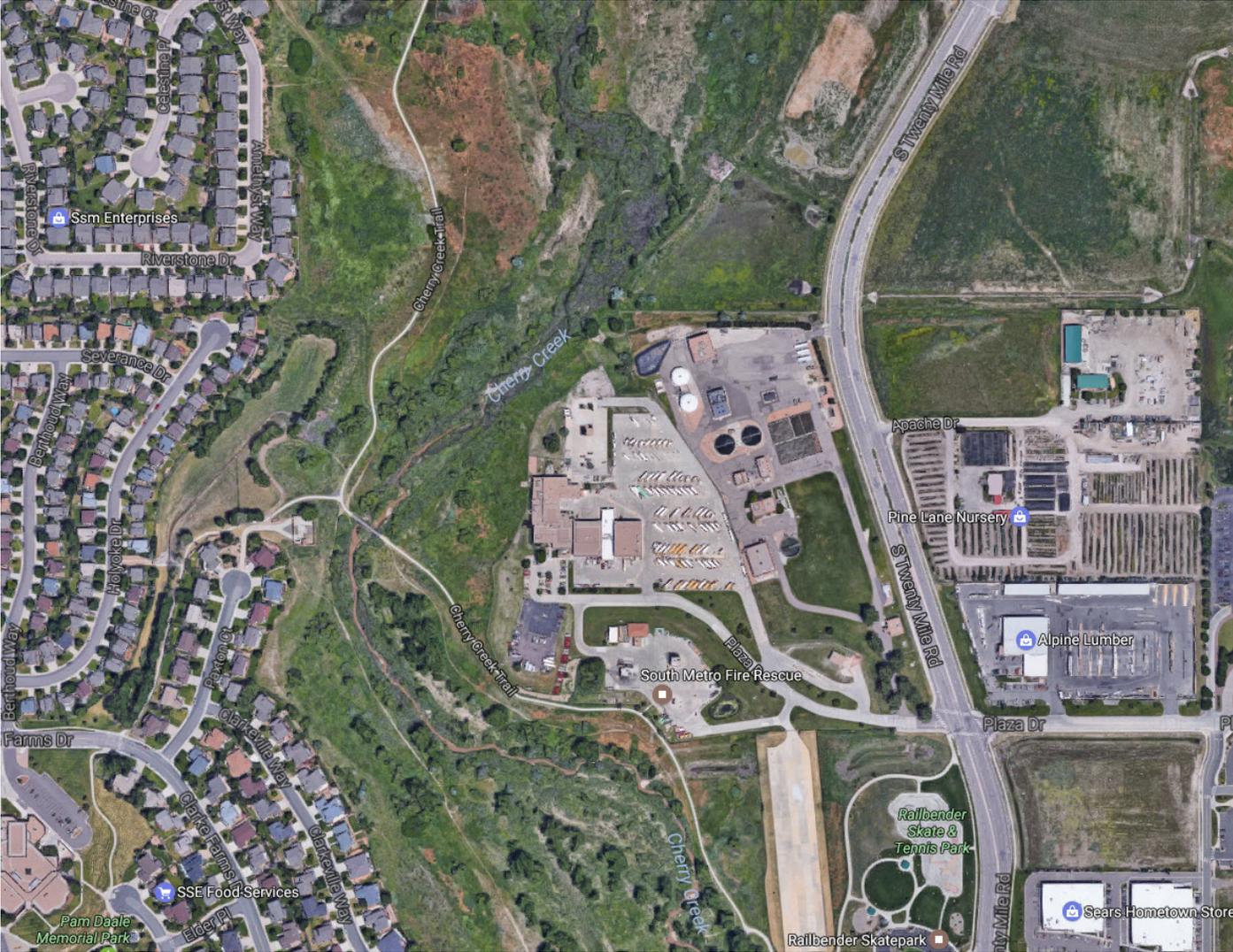
STONEGATE



PARKER-WOODMAN DRIVE



PARKER-PLAZA DRIVE





ARAPAHOE COUNTY
COLORADO'S FIRST

MEETING OF THE ARAPAHOE COUNTY PLANNING COMMISSION

TUESDAY, JANUARY 17, 2017 AT 6:30 P.M.

LIMA PLAZA - ARAPAHOE ROOM - 6954 S LIMA ST, CENTENNIAL CO 80112

(Continued from December 20, 106)

CASE NO. L16-002, PROSPER WASTEWATER TREATMENT PLANT, LOCATION & EXTENT

CASE NO. ASI 16-001, PROSPER WASTEWATER TREATMENT PLANT, 1041 PERMIT

No.	NAME	ADDRESS	Are you IN FAVOR of approval or OPPOSED?	Do you wish to address the Board on this matter? Yes or No?
1	Father Dennis T. McDonald	277 S. Watkins Road Watkins, CO 80137	OPPOSED	Yes, please
2	Warren Brown	6162 S Willow Dr, Greenwood Village		
3	Tara RAGOWITZ	950 19 th ST DENVER	IN FAVOR	
4	Dominic Cantelmi	910 Sunset Ct Castle Rock	opposed	NO
5	Dyan Cantelmi	910 Sunset Ct Castle Rock	opposed	NO
6	Ferris Gilman	Byers, Co.	Opposed	
7	Victoria Banks	Aurora Co 4087S Odessa Cir	Opposed	No
8	Adamah Banks	Aurora Co 4087S Odessa Cir	opposed	No
9	Maria del Rosario Lichon	4440 W. Harback Rd, CO 80102	opposed	No
10	DAVID EDDY	2960 WAGNER ST 80136	OPPOSED	YES
11	Terri McDermott	4321 S. Evanston Ct Aurora 80015	OPPOSED	no
12	Adam Banks	Aurora CO	Opposed	NO
13	Michael Cantelmi	910 Sunset Ct. Castle Rock	opposed	Yes
14	Christina Cantelmi	910 Sunset Ct. Castle Rock	opposed	NO
15	Anna Cantelmi	910 Sunset Ct Castle Rock	opposed	No
16	Alicia Cantelmi	" "	opposed	No
17	Dominic G Cantelmi	" "	opposed	No
18	Anthony Cantelmi	" "	opposed	No
19	Thomas Cantelmi	" "	opposed	No
20	Joseph Cantelmi	" "	opposed	No



ARAPAHOE COUNTY
COLORADO'S FIRST

MEETING OF THE ARAPAHOE COUNTY PLANNING COMMISSION

TUESDAY, JANUARY 17, 2017 AT 6:30 P.M.

LIMA PLAZA - ARAPAHOE ROOM - 6954 S LIMA ST, CENTENNIAL CO 80112

(Continued from December 20, 106)

CASE NO. L16-002, PROSPER WASTEWATER TREATMENT PLANT, LOCATION & EXTENT

CASE NO. ASI 16-001, PROSPER WASTEWATER TREATMENT PLANT, 1041 PERMIT

No.	NAME	ADDRESS	Are you IN FAVOR of approval or OPPOSED?	Do you wish to address the Board on this matter? Yes or No?
1	Patrick Pantelmi	910 Sunset Ct Castle Rock	Opposed	NO
2	Emily Banks	4087 S. Adessa Cir Aurora	opposed	no
3	Rachel Banks	" "	Opposed "	no
4	Maria Cichos	4440 W. Harbach Rd, CO 80102	opposed	NO
5	David Cichos Jr.	4440 W. Harbach Rd, CO 80102	opposed	NO
6	Annie Eddy	2960 Wagner St. Strasburg CO 80136	approved	NO
7	Kate Eddy	" " "	Approved	NO
8	David S. Ed	2960 Wagner St. Strasburg CO 80136	Opposed	NO
9	Jonathan Cichos	7190 Marib RD Bennett	opposed	NO
10	Jacob Cichos	↓ Same	opposed	NO
11	Joshua Cichos		opposed	NO
12	Joseph Cichos		opposed	NO
13	Suliana Cichos		opposed	NO
14	Sharonna Banks		4087 S. Adessa Cir 80013	opposed
15	Sulick Eddy	2960 Wagner St Strasburg	opposed	yes
16	Greg Smith	5716 S. Quatar Ct.	opposed	No
17	Grider Lee	467 Valley Way	Opposed	yes
18	Megan Dowd	1696 Geneva St. Aurora	opposed	yes
19	Laura May	8946 Wagner Lane Westminster	opposed	no
20	Anthony May	8946 Wagner Ln Westminster	Opposed	yes



ARAPAHOE COUNTY
COLORADO'S FIRST

MEETING OF THE ARAPAHOE COUNTY PLANNING COMMISSION

TUESDAY, JANUARY 17, 2017 AT 6:30 P.M.

LIMA PLAZA - ARAPAHOE ROOM - 6954 S LIMA ST, CENTENNIAL CO 80112

(Continued from December 20, 106)

CASE NO. L16-002, PROSPER WASTEWATER TREATMENT PLANT, LOCATION & EXTENT

CASE NO. ASI 16-001, PROSPER WASTEWATER TREATMENT PLANT, 1041 PERMIT

No.	NAME	ADDRESS	Are you IN FAVOR of approval or OPPOSED?	Do you wish to address the Board on this matter? Yes or No?
1	David Cochran	4440 N Harbuck Rd	OPPOSED	Yes
2	Scott Lehman	34501 E. Quincy	---	No
3	Elizabeth Wilson	32505 E Colfax Ave	opposed	yes
4	Patricia Michel	32505 E Colfax Ave 32505 E. Colfax Ave	opposed	NO
5	SOE ARDIZZONE	32511 E COLFAX AVE	OPPOSED	YES
6	Nicholas McManus	2775 Watkins Rd.	OPPOSED	NO
7	JOSEPH GILMOR	67 S Dutch Valley	opposed	yes
8	Zachary Wilson	24525 E Bellwood Dr Aurora 80016	opposed	yes
9	A. Mike Gilmor	67 S Dutch Valley	opposed	yes
10	Amy Gilmor	"	opposed	yes
11	Faith Gilmor	"	opposed	NO
12	Nathan Buchholz	290 Pahlia St Bennett CO	opposed	Yes
13	Citlalli Buchholz	" "	opposed	No
14	Nathalie Buchholz	" "	opposed	No
15	Evan Buchholz	" "	opposed	No
16	Isabel Buchholz	" "	opposed	No
17	Rosemary Berry	118 N. Kellerman St. Aurora	OPPOSED	NO
18	Brigid Berry	" "	OPPOSED	NO
19	Caithlin Berry	" "	OPPOSED	NO
20	RAYMOND GILLEGOS	25734 E. 1 ST Pl Aurora, Co 80018	"	Yes

NANCY 4
DOMINIQUE 4
ISAAC 4
CYNTHIA 4

Over

Kevin Lenzel
- Conrad Cichos
Mathew Cichos
G. BERRY
Benett
Bennett
Watkins

52870 E 16th Ave. 80136

Opposed
opposed
opposed
opposed

No
yes
no