



## Community Services Planning Department

April 15, 2020

**RESPONSE TO COMMENTS MAY 26, 2020**

Jason Alwine  
Matrix Design Group  
2435 Research Parkway Ste 300  
Colorado Springs, CO 80920

Reference: Aspen Ranch Construction Plans  
Generally located Northeast of the Intersection of Link Road and Kane Road

Dear Mr. Alwine:

I have completed the initial review of the Construction Drawings for Aspen Ranch. The following are items that need to be corrected and/or modified. Once all revisions have been addressed please submit 3 full size drawings. If additional agency comments are received, they will be forwarded to you for review and comment.

### AGENCY COMMENTS

#### CITY OF FOUNTAIN WATER DEPARTMENT

1. Fountain Water has concerns with the frontage width of some cul-de-sac and corner lots that only have ~30' of usable space. Water and Sanitary Sewer Utility stubs are required to have a minimum 10' horizontal separation at the property line, and neither utility is desirable to be situated beneath the Concrete Driveway (Water is prohibited). Extra consideration and caution must be taken when planning utility service alignments to these lots to fit all front-lot utilities within the lot width while maintaining the mandatory separations and other constraints. This consideration should extend to the placement of manholes and inlets near these lots that would further restrict usable width for the Wet Utilities. **RESPONSE: NOTED, SERVICES SHOWN ON PRELIM PLAT FOR INITIAL REVIEW. FUTURE CDS WILL DEPICT IN MORE DETAIL SERVICES TO MEET CITY CODE.**
2. The 15' front-lot Utility Easements shown on the Residential Local Roadway Cross-section on Sheet 4 are not reflected anywhere else on the plat documents.  
**ADDRESSED: THE ROADWAY CROSS SECTIONS AS WELL AS GENERAL NOTE #14 ON THE COVER SHEET ILLUSTRATE THE 15' FRONT LOT EASEMENT.**
3. See below comment regarding the dead-end Water Main in Silex Street; this may require an additional Utility easement dedication.  
**ADDRESSED: WATER CONNECTION MADE TO LINK RD. VIA SILEX. EASEMENTS PROVIDED AS REQUIRED.**
4. Fire Hydrant Lateral pipes shall be 6" Dia.  
**ADDRESSED: ALL FIRE HYDRANT LABELS UPDATED AS REQUIRED.**
5. The long dead-end Main in Silex Street (Sheet WT07) terminating at a Hydrant will not be permitted; the end of the main must be looped back in at either Link Rd or Watchmen Rd across

Tract F (with an easement) if grade permits.

**ADDRESSED: WATER CONNECTION MADE TO LINK RD. VIA SILEX.**

**EASEMENTS PROVIDED AS REQUIRED.**

## FOUNTAIN SANITATION DISTRICT

### Sheet 45 – 63 of 78 – 30% Construction Drawings (General Comments)

1. All manholes must be 5' in dia. for connections of 1-2 lines, and 6' in dia. for 3-4 lines connections.  
**RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
2. Label san. swr. as private or Public **ADDRESSED: ALL SAN. PIPES ARE CALLED OUT APPROPRIATELY IN THE LEGEND AND/ OR THE PLANS.**
3. Label san. swr. as existing or proposed **ADDRESSED: ALL SAN. PIPES ARE CALLED OUT APPROPRIATELY IN THE LEGEND AND/ OR THE PLANS.**
4. All proposed san. swr. lines need a drivable surface that meets AASHTO H-20 loading  
**RESPONSE: NOTED, WILL BE INCLUDED WITH FUTURE CD SUBMITTALS.**
5. Add a sheet index map to each page  
**RESPONSE: ADDED SHEET INDEX MAP AS REQUESTED. NOTED, WILL BE INCLUDED WITH FUTURE CD SUBMITTALS.**
6. Why an 8" dia. pipe in Crescent Moon Street? **RESPONSE: PER DISCUSSION WITH FSD ON 5/12 THE SANITARY PIPE SHALL REMAIN AS SHOWN TO CAPTURE FUTURE FLOWS.**
7. Correct north arrows **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
8. Add street names, where missing **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
9. Add utility line crossings, with depths, inverts from TOP and BOP  
-Table or individual labels?
10. Add sheet references "Match Sheet #" **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
11. On profile sheets, add existing, proposed, public or private as part of line label.  
**RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
12. Add FSD notes and details from FSD website. **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
13. Existing manhole at Link and Watchmen Roads will need to be completely replaced.  
**RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
14. All manholes will require a 0.3' drop, if sanitary sewer alignment changes more than 30 degrees. **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**

## CITY ENGINEER

### General Comment

The construction plans submitted do not meet the minimum requirements for a complete review at this time. Comments below provide guidance as to what the City of Fountain requires for subsequent submittals. Comments below are not definitive in nature, as we understand this is not a final construction document submittal. However, the comments that have been made correlate with the design information presented so far.

### Cross Sections

1. Provide total ROW dimensions as well as dimensions from the centerline to the flowline on all cross sections. **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS. PRELIM PLAT CROSS SECTIONS HAVE BEEN PROVIDED.**
2. Please revise the LINK ROAD – NO TURN LANE INTERIM CONDITION cross section. The City of Fountain Phase 4 project for Link Road will **move** the centerline of Link Road to the Section Line at the intersection of Watchmen Road and between Watchmen Road and Squirrel Creek Road. The Aspen Ranch development is to **move** the centerline of Link Road to the Section Line; please revise the cross section accordingly. Also, this portion of Link Road is to be milled and overlaid. Please email with any questions. **RESPONSE: LINK RD. CROSS SECTION UPDATED ON DT03 AS REQUESTED.**
3. Call out the vertical height all type 1 curb and gutter (detail may be forthcoming). **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
4. Add the street classification and design speed on all cross sections. **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
5. Add utility lines and corresponding dimensions on all cross sections. **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
6. Show, label and dimension all proposed paved shoulders. **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
7. Show the median curb and gutter and dimension the median locations in relation to the centerline. **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
8. Show, label and dimension all cut/fill slopes within and outside of the proposed ROW and ensure they meet all AASHTO Roadside Design requirements for clear zone **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
9. Type 5 ramp curb and gutter is not allowed along parks or along the side of a lot. Revise the residential local roadway sections. The pavement mat should always be 32.34' in width for local roadways. **RESPONSE: REVISED CURB TYPES AND CALLOUTS ALONG THE PARK FRONTAGE AND ALONG THE SIDES OF CORNER LOTS TO BE VERTICAL CURB.**
10. The Kane Road ultimate cross section should match the Link Road ultimate cross section. **RESPONSE: KANE RD. CROSS SECTION UPDATED ON DT03 AS REQUESTED TO MATCH LINK RD. LINE WORK ON PRELIM PLAT ALSO UPDATED.**
11. Revise the Kane Road Interim cross section to have 23' of asphalt from centerline to lip of pan and 6' of asphalt on the other side of centerline. **RESPONSE: KANE RD. CROSS SECTION UPDATED ON DT03 AS REQUESTED TO MATCH LINK RD. LINE WORK ON PRELIM PLAT ALSO UPDATED.**

#### Grading and Erosion Control Plans

The City of Fountain follows the City of Colorado Springs Subdivision Policy Manual (see GEC check list in Section I, Chapter 5) and DCM Volume 2 standards for temporary and permanent BMP's. These criteria must be used for the preparation of the GEC plan. Specific comments based on your 30% design submittal are as follows:

1. Provide the plan view and cross section view schematic details showing the proposed lot drainage patterns and grading types (A, B, walkout, garden, and transition). **ADDRESSED: LOT LABEL DESCRIPTIONS AND SECTIONS ADDED TO SHEET DT02.**
2. Show and label the proposed storm sewer system. **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**

3. Show and label the emergency overflow grading at the sump inlet locations within the drainage tracts. **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
4. The grading for the main open space/park area is graded too steep. If this area is going to accommodate playing fields, this needs to be designed to be flatter. **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
5. Show and label all temporary construction easements and permanent easements required for construction on properties owned by others. **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
6. Show and label all geotechnical test holes on the plan and make reference to the report. **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
7. Based on the plan submitted, there are lots that appear to not to have a usable backyard. Was this the intent? **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**

### Street Plans

The City of Fountain follows the City of Colorado Springs Subdivision Policy Manual (see Plan and Profile check list in Chapter 6, section 6.5) and Traffic Manual. Drainage design criteria can be found in the City of Colorado Drainage Criteria Manual (DCM), Volume 1. These criteria must be used for the preparation of the street, storm sewer and signing & striping plans. Specific comments based on your 30% design submittal are as follows:

1. For the 30% design submittal a centerline profile is fine. For final design, curb line profiles are required per criteria. **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
2. Some of the vertical curves located near intersections have PVI's less than the 50' requirement as measured from the PC of the curb return. Revise accordingly. **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
3. Some of the high points at intersections (e.g. – Castlebra and Crescent Moon) do not appear to be high enough to prevent flow from turning the corner. Please ensure all high points created near intersections are set to ensure all flow is routed through the intersection via the cross pan. **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
4. Type 5 ramp curb and gutter is not allowed along parks or along the side of a lot. Revise all geometry accordingly. **RESPONSE: REVISED CURB TYPES AND CALLOUTS ALONG THE PARK FRONTAGE AND ALONG THE SIDES OF CORNER LOTS TO BE VERTICAL CURB.**
5. Adjust the ROW of the lot opposite all knuckles to ensure adequate sight distance is accounted for. **ADDRESSED: SIGHT TRIANGLES ADDED AT ALL KNUCKLES. NO CHANGE IN ROW, SIGHT DISTANCE EASEMENTS WILL BE PROVIDED AS NECESSARY TO ENSURE ADEQUATE SIGHT DISTANCE.**
6. Per the traffic criteria, all local residential streets should include geometric features at intervals of 600' maximum. Examples of features include chokers (chicanes), traffic circles, median island/barriers, cul-de-sacs, and curvature. Cronin, Blaurock and Lackawanna appear to be in excess of 600'. **ADDRESSED: ADDED BUMP OUTS/ CHOKERS ALONG LACKAWANNA, BLAUROCK AND CRONIN WHERE FEASIBLE DUE TO GRADES, DRIVEWAYS, AND PROPOSED PED. CROSSINGS.**
7. A few of the vertical curve K values appear to be lower than what is required per the Traffic Manual which defers to the AASHTO Policy on Geometric Design of Highways and Streets. Revise all curve lengths accordingly. **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
8. Remove the pedestrian ramps crossing link Road at Watchmen Road.

9. Show and label the proposed storm sewer. **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
10. Label the curb return radii. **ADDRESSED: ADDED GENERAL RADII NOTE WITHIN LEGEND OR ON PLAN AS NEEDED.**

#### Storm Sewer Plans

The City of Fountain follows the City of Colorado Springs Drainage Criteria Manual (DCM), Volume 1. These criteria must be used for the preparation of the storm sewer plans. Specific comments based on your 30% design submittal are as follows:

1. Revise all storm sewer systems to ensure adequate spacing between manholes for maintenance is provided per the DCM. Refer to standards for the application of different types and sizes based on pipe size and the angle of intersection. **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
2. Ensure all 30" diameter and smaller pipes have slopes greater than 0.5%. Check and adjust the grades of all pipes to meet the DCM standards for minimum slopes for cleanout velocity and constructability. **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
3. A critical issue was brought up during a City Council meeting regarding this project and groundwater issues at the southeast corner of the property. This must be addressed early on in the design process. Include all necessary mitigation measures in the storm sewer plan set. See Preliminary Plat set comments for the Sub-Surface Soils report. **RESPONSE: NOTED, SEE RESPONSE TO COMMENTS ON PRELIM PLAT REVIEW LETTER.**
4. Provide a maintenance access road to access the pond's outlet structure. **RESPONSE: NOTED, ACCESS ROAD SHOWN ON PRELIM PLAT TO BE REVISED WITH FUTURE CDS.**
5. Connect the forebays to the primary trickle channel. **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**

#### Miscellaneous Comments

1. Provide a Storm Water Management Plan. **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
2. Provide an Inspection and Maintenance Plan for the pond facility. See attached for City of Fountain template. **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**
3. Provide a Private Detention Pond Maintenance Agreement using the City of Fountain template. See attached for City of Fountain template. **RESPONSE: NOTED, TO BE REVISED WITH FUTURE CDS.**

#### ELECTRIC DEPARTMENT

This memorandum is in response to the Request for Approval of 30% Construction for the subdivision to be known as Aspen Ranch, located northeast of the intersection of Link Road and Kane Road.

Upon reviewing the materials submitted for this request, the City of Fountain Electric Department has noted that we intend to serve this development and we have no objections to this request.

We have determined that additional easements may be required to accommodate the existing Mountain View Electric powerlines that are located along Link Rd. These additional easements will be obtained at the developer's expense.

Please note that the developer will be responsible for all costs associated with the extension of service to your development to include procurement of additional easements, off site upgrades, electric installation and materials. Keep in mind this will also include the installation of roadway lighting both within the development and along Link Road that will be required. This lighting will be installed at the developer's expense by the City of Fountain Electric Department.

As a reminder, this will be an underground front lot design and therefore the electric service must be the first dry utility installed after all wet utilities. In addition, service for your project must be installed with a redundant loop feed for reliability purposes; as such, phasing of your project and coordination of the installation of electric service for your development will be paramount if you have deadlines you wish to meet.

The electric design for your project will be completed once phasing for your project has been determined. At that time we will have additional comments for the Site Development Plans as the project progresses. Also keep in mind; some materials have long lead times, up to 12 weeks, planning will be essential to ensure any deadlines the developer would like to maintain. It should also be noted that should we encounter more than 12" of Frost or Rock during the excavation process for this project, the City of Fountain will notify the developer and additional boring and material costs will be negotiated if required. Electric must be installed prior to gas, phone, or cable, all easements must be within 6" of final grade, and all the survey stakes must be in place and clearly identified transformer location and easements before our crews commence construction.

When planning the utility easement please do not include it as part of the drainage easement so that restoration maintenance on lines can be accomplished during adverse weather conditions. To ensure the electric design meets all requirements, the developer must provide an electronic CAD copy of the Final Construction Plans once they are completed.

As we utilize Autocad and ArcMap, the electronic copy *must be projected in NAD 1983 State Plane Colorado Central FIPS (feet) and **all external references and layers removed.*** Keep in mind if any modifications are made to the drawings for this project, a new electronic copy is required. Please contact Tracy Tillman at 322-2061 with any questions or concerns you may have regarding this response.

**ADDRESSED: PER DISCUSSION WITH FOUNTAIN ELEC. THE PROPOSED EASEMENT ALONG LINK RD. AS SHOWN IS ACCEPTABLE. ADDITIONAL LABELING AS BEEN ADDED FOR BETTER CLARITY. THE PRELIMINARY PLAT HAS BEEN FORWARD TO ELECTRIC PLANNING STAFF TO BEGIN DISCUSSION ON DESIGN.**

The following agencies have not yet responded.

Black Hills Energy

Fountain Fire Department

This concludes the review comments on the drawings and documents for the above project. Should you have any questions, please feel free to contact me at (719) 322-2015.

Sincerely,

Kristy Martinez, AICP

Planning Supervisor ([Kristy@fountaincolorado.org](mailto:Kristy@fountaincolorado.org))

CC: File