

Development Review and Infrastructure Acceptance & Approval Process



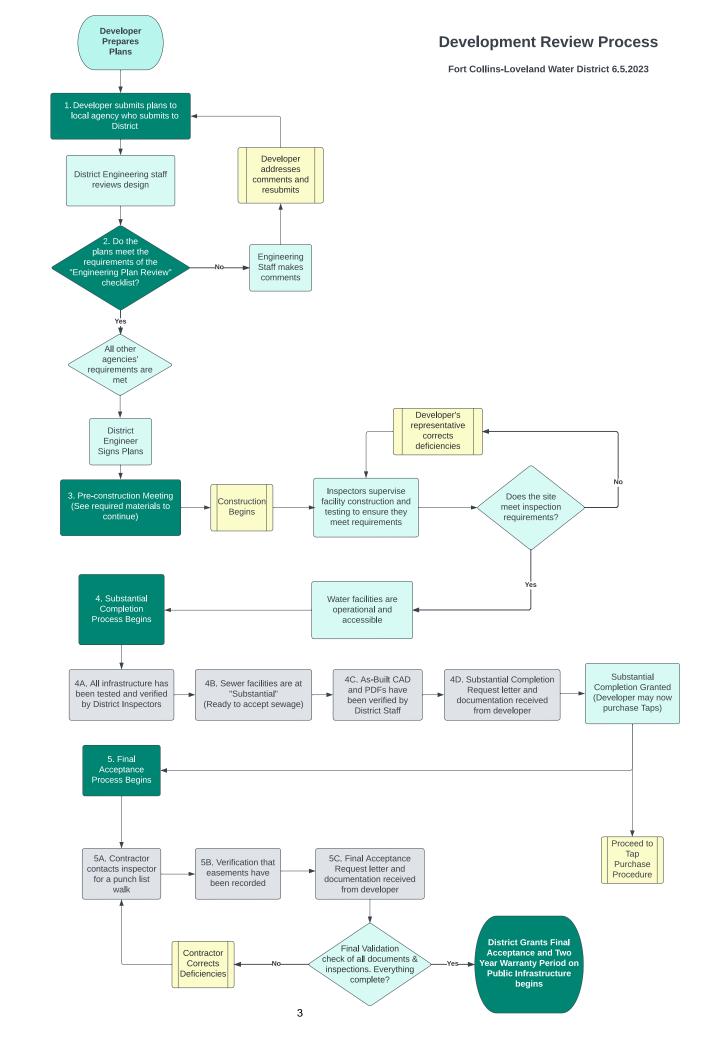
1. FCLWD Development Review Process

Every development project begins with a developer submitting plans to their local agency, who then forwards the design plans to District Engineering staff for review. District Engineering reviews plans against the enclosed plan review checklist while also considering future operational challenges that a design may cause. Once the review is complete, District Engineering sends the comments to the local agency to forward back to the applicant. Once all comments are addressed, District Engineering can sign off on the plans (preferably electronically).

After construction plans are approved by District Engineering staff via signature, the development project may move to the construction phase. This document provides the necessary steps that the developer must follow throughout the construction process. This starts with a preconstruction meeting and ends with final acceptance of the public infrastructure.

The District and developer share three critical milestones for every project. The first milestone is **a preconstruction meeting**. Contractors may not start water construction prior to attending a preconstruction meeting with District staff. The second milestone is **substantial completion**. Substantial completion officially allows the District to sell service taps for the project. The third and final milestone is **final acceptance**. Final acceptance initiates the developer's two-year warranty period on the infrastructure associated with that project, during which time the developer is responsible for maintenance of the infrastructure if necessary.

The enclosed packet provides more detailed information on the specific requirements required to cross each of the three major milestones.





2. Engineering Plan Review

FCLWD engineering staff reviews all utility construction design plans to ensure that the proposed design conforms to the standard construction specifications as well as the below plan review checklist. Please submit your design plans to your local review agency (Loveland, Fort Collins, Windsor, Timnath or Larimer County). Your local agency will coordinate with the District to incorporate review of the water utilities into the project. Once all comments are addressed, Engineering signs off on plans.

Cover Sheet:

Include District signature block (posted on District website) District Engineer, to be Point of Contact for FCLWD 5150 Snead Dr., Fort Collins, CO, (970) 226-3104

Water Utility Notes as printed on drawings (typically on a stand-alone notes sheet or the utility plan sheet):

FORT COLLINS-LOVELAND WATER DISTRICT NOTES

- 1. ALL CONSTRUCTION OF WATER INFRASTRUCTURE SHALL BE PERFORMED ACCORDING TO THE FORT COLLINS-LOVELAND WATER DISTRICT STANDARDS AND SPECIFICATIONS.
- 2. CONSTRUCTION OF WATER INFRASTRUCTURE REQUIRES A PRECON MEET-ING WITH DISTRICT INSPECTION STAFF PRIOR TO CONSTRUCTION.
- 3. CONTRACTOR SHALL NOTIFY DISTRICT INSPECTORS PRIOR TO STARTING WORK. ADDITIONALLY, CONTRACTOR SHALL NOTIFY DISTRICT INSPECTORS 48 HOURS PRIOR TO CONNECTING TO ANY EXISTING DISTRICT INFRASTRUCTURE.
- 4. ALL WATER LINES SHALL BE A MINIMUM OF (5) FIVE FEET AND A MAXIMUM OF (6) SIX FEET BELOW FINAL GRADE.
- 5. ALL COMMERCIAL, IRRIGATION, MULTI-FAMILY AND FIRE SPRINKLER LINES SHALL HAVE A BACKFLOW PREVENTION DEVICE AS APPROVED BY THE DISTRICT.
- 6. THE RUNNING HYDROSTATIC PRESSURE TEST SHALL BE WITNESSED BY DISTRICT INSPECTORS. WATERLINE BACTERIA TESTS SHALL ALSO BE TAKEN BY DISTRICT INSPECTORS.

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- 7. ALL DISTRICT VALVES SHALL BE OPERATED BY DISTRICT OPERATIONS STAFF ONLY.
- 8. ONCE THE SYSTEM IS OPERATIONAL, ALL TESTS HAVE PASSED, AND ASBUILT DRAWINGS (PDF AND DWG) HAVE BEEN APPROVED BY THE DISTRICT, THE CONTRACTOR SHALL REQUEST "SUBSTANTIAL COMPLETION" WITH A LETTER TO THE DISTRICT.
- 9. ONCE ALL PUNCH LIST ITEMS ARE COMPLETE AND EASEMENTS ARE RECORDED, THE CONTRACTOR SHALL REQUEST "FINAL ACCEPTANCE" WITH A LETTER TO THE DISTRICT THAT INCLUDES THE DOLLAR VALUE OF THE WATER IMPROVEMENTS.

Utility Plans:

Water Mains:

Water mains are within Right-of-Way (ROW) or utility easement (20' wide easement for water mains of any size)

10' separation (horizontal) from any sewer, storm, or non-potable water

10' separation (horizontal) from tree trunks

6' separation (horizontal) from dry utilities

1.5' separation (vertical) from any other utilities

Material called out as PVC for pipes up to 12". For pipes larger than 12" the District holds the right to require alternate pipe materials as site conditions warrant.

Gate Valves used for lines 12" or smaller; butterfly valves 14" or larger.

Plan and profile included for lines 8" and larger

High points along water mains incorporate a form of air release (combo air vac preferred) Joint restraints used on all fittings with required length of restrained pipe per FCLWD restraint length table, aside from when connecting to existing mains which require thrust blocks.

Subdivisions must have more than 1 point of connection to an existing main (i.e., looping)

5' minimum burial depth, 6' maximum.

Casing is required when line crosses under a pipe greater than 24".



Water Services:

Water services are consistent size and continuous material (no couplers other than the setter) all the way from the tap on the main to 5' downstream of the meter pit. After 5', the water line is considered private, and the developer can change size and material as desired.

Service line to be perpendicular to the main until 5' downstream of the meter pit.

Meter Pit to be within ROW or utility easement (20' wide easement for water lines of any size)

Meter pit size to match District requirements for the service line size (i.e., 24" pit for 3/4" and 1" service lines; 48" meter vault for 1-1/2" and 2" services; larger vaults for services 3" and larger)

No curb stop upstream of the water meter pit

10' separation (horizontal) from any sewer, storm, or non-potable water

10' separation (horizontal) from tree trunks

6' separation (horizontal) from dry utilities

1.5' separation (vertical) from any other utilities

A note that reads "All commercial, irrigation, and fire sprinkler lines shall have a backflow prevention device as approved by the District."

All Irrigation services shall have a curb stop downstream of meter pit or vault.

Fire Sprinkler Lines:

Material is PVC from main to valve (line is private downstream of valve)

A Gate Valve shall be located directly off the tap on the water main.

Reduced Pressure Principle Backflow Prevention Device is required and may be located in building.

Hydrants:

Hydrant and associated line are in the ROW or 20' wide utility easement.

Hydrant dead-end length does not exceed 250'

Hydrant is at least 2' from back of curb.

Valve is located upstream of the hydrant with no services in between the valve and hydrant.

Distance from above ground utilities such as electric transformers, pedestals, or light poles shall be 10' on either side.



3. Preconstruction Meeting

After construction plans are approved by District engineering staff via signature, the development project may move to the construction phase. Prior to any water utility construction, the development team must attend a preconstruction (pre-con) meeting with District staff. This is an opportunity to communicate District expectations and answer any initial questions the developer may have.

Prior to scheduling a pre-con, the District needs the following documents:

- Signed Construction Plans, in the following formats:
 - o Electronic PDF
 - o Two (2) 11"x17" plan sets delivered to FCLWD
- Material submittals for all material related to water utility construction, approved by District Staff

Once District staff receives and approves all of the above documentation, then they will begin scheduling a preconstruction meeting. Review times on material submittals may take five to ten business days. Please schedule accordingly.

At a minimum, the contractor installing the public infrastructure must be at the preconstruction meeting. The owner and engineer may attend as well. At the preconstruction meeting, the project team will establish one official point of contact between the District and the developer moving forward. This single point of contact will be the team's representative as the project moves through substantial and final completion, and will be responsible for any corrections, punch-list or warranty items on the project.



4. Substantial Completion

After the preconstruction meeting has passed and the water utility infrastructure has been tested and verified by District inspectors, the developer may apply for Substantial Completion. Substantial Completion allows the District to begin selling service taps for the approved project. To receive Substantial Completion approval, the developer must complete the following:

• Field Inspection:

- All water facilities must be tested and verified by District inspectors according to standard construction specifications to confirm the facilities meet the requirements.
- All facilities are to grade and accessible with an all-weather surface. For roadway
 facilities, minimum acceptable accessibility requirement is road base material,
 with preventative measures taken to avoid damage to facilities until asphalt is installed.
- A "Substantial Completion" walk through has been completed by the District's inspector, developer or developer representative, and contractors' superintendents. It is the developer's or developer's representative's responsibility to schedule the walk through.

• As-Built Drawings:

 Verification that as-built CAD and PDF drawings have been sent to and approved by District Engineering. Please see the requirements on the next sheets for as-built CAD and PDF requirements.

• Substantial Completion Request Letter:

- o Provide a letter addressed to District Engineering staff requesting Substantial Completion. At a minimum, this letter shall include:
 - The lot(s), block(s), Larimer County Parcel Numbers, and street addresses as recorded with the County. If there are more than 4 parcels for approval, this information must be presented in a table in both PDF and Excel formats.
 - Supporting exhibits showing the locations of the lots listed above.
 - Sizes & locations of any multifamily, irrigation and/or conservation taps



Requirements for CAD and PDF Record Drawings June 2023

Minimum Requirements for CAD Record Drawings

General

- District Coordinate System (Northern Colorado, US Feet) NAD 83 or NAD 27
- Drawing must be in model space.
- No Referenced Drawings or Attachments in drawing; everything should be bound in.
- Delete old linework.
- All proxy AEC objects must be exploded into basic AutoCAD objects.

Water Utilities

- Locations of all water lines and points associated with the water.
- Show all water mains with designated sizes and materials.
- Show all fire lines with designated sizes and materials.
- Show all valves including but not limited to air release valves, blow off valves, butterfly valves, check valves, gate valves, pressure reducing valves with designated sizes.
- Show all service lines from the main to the meter with designated sizes.
- Show all fittings with designated sizes including but not limited to horizontal and vertical bends, couplings, reducers, crosses, tees, plugs and water services.
- Show all fire hydrant assemblies with tees, water lines and gate valves.
- Show all casings with designated sizes, materials, and lengths.
- Show location of cathodic protection / corrosion test stations.

Minimum Requirements PDF Record Drawings

- Certified Record Drawings shall be submitted by the Design Engineer to the Water Inspector for review and approval.
- Cover sheet shall be labeled "DRAWINGS OF RECORD" and be stamped by a registered P.E. in the State of Colorado.
- Construction information shall be recorded concurrently with construction progress.
- Record Drawings shall include, as a minimum, the following:
 - · Field dimensions, elevations, and details.
 - · Changes which are made by modification.
 - · Details which are not on the original Construction Drawings.
 - · Horizontal and vertical locations of underground utilities and appurtenances.
 - · Depths of various elements of work in relation to project datum.
 - · All dimensions shall be referenced to property pins if surface improvements have not been constructed.

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Date: 10-19-20

To: Nate Ensley, PE

PE

Fort Collins / Loveland Water District South Fort Collins Sanitation District

Re: Rendezvous Filing No.2 - Request For Substantial Completion – Phase 2G-1

Mr. Nate Ensley, PE,

As of Monday, October 19th, 2020, Connell Resources, Inc. has completed all the major sanitary sewer infrastructure and potable waterline work for Rendezvous Filing No.2 – Contractor Phasing 2G-1. Initial walk through for all sanitary sewer and potable waterline infrastructure have been completed with the district's inspector and all punch list items will be addressed by Thursday October 22nd, 2020. Final walk throughs with the district inspectors will be completed this week as well. Galloway Engineering is correctly working on final asbuilt documentation and will have this submitted to the district no later than Friday, October 23rd, 2020.

Rendezvous Filing No.2 is located in Timnath, CO. Attached to this letter is a full list of the lots included in this substantial completion request along with an address map. We have also included an overall utility plan indicating the utilities installed to date that will correspond to the as-builts to be submitted by Galloway Engineering.

This letter is requesting Substantial Completion for Rendezvous Filing No.2 – Contractor Phasing 2G-1 for all the major sanitary sewer and potable waterline infrastructure.

If any additional documentation is required, please let us know as soon as possible.

Regards,

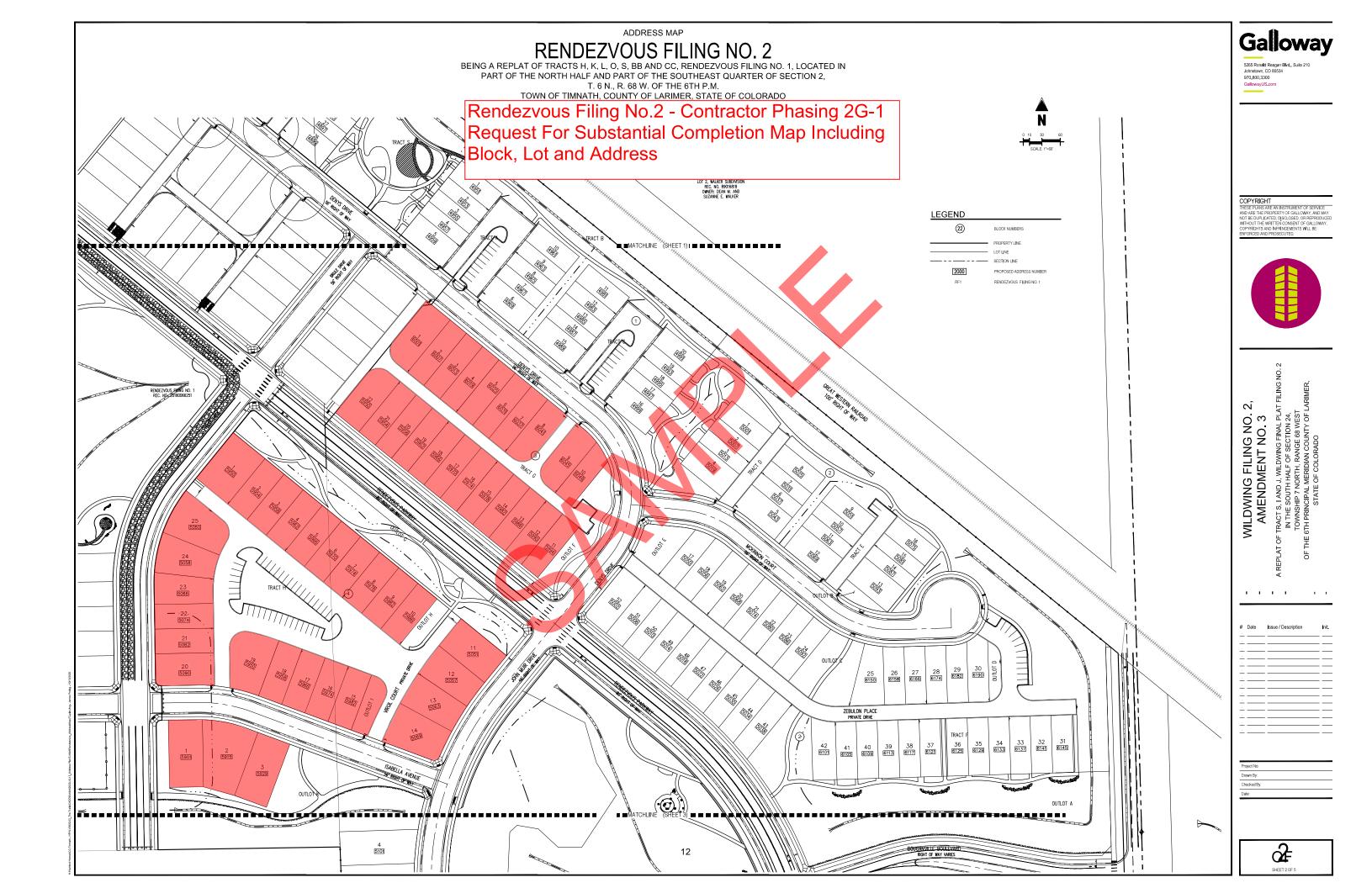
Shane T. Westlind
Project Manager/Estimator
Connell Resources, Inc.

Cc.:

Chris Pletcher, PE – FCLWD/SFCSD Terry Thompson – FCLWD – SFCSD Steve Cicione – Hartford Homes Chris Dejulio – Connell Resources, Inc. James Prelog, PE – Galloway Engineering

RENDEZVOUS / TRAILSIDE 2G1 SUBSTANTIAL ACCEPTANCE LIST

Block	Lot	Subdivision	Address	Parcel No.
6	1	Rendezvous Second	5901 Isabella Ave.	8602426001
6	2	Rendezvous Second	5915 Isabella Ave.	8602426002
6	3	Rendezvous Second	5929 Isabella Ave.	8602426003
4	1	Rendezvous Second	5950 Rendezvous Pkwy	8602124001
4	2	Rendezvous Second	5954 Rendezvous Pkwy	8602124002
4	3	Rendezvous Second	5958 Rendezvous Pkwy	8602124003
4	4	Rendezvous Second	5962 Rendezvous Pkwy	8602124004
4	5	Rendezvous Second	5966 Rendezvous Pkwy	8602124005
4	6	Rendezvous Second	5970 Rendezvous Pkwy	8602124006
4	7	Rendezvous Second	5974 Rendezvous Pkwy	8602124007
4	8	Rendezvous Second	5978 Rendezvous Pkwy	8602124008
4	9	Rendezvous Second	5982 Rendezvous Pkwy	8602124009
4	10	Rendezvous Second	5986 Rendezvous Pkwy	8602124010
4	11	Rendezvous Second	5051 John Muir Drive	8602124011
4	12	Rendezvous Second	5057 John Muir Drive	8602124012
4	13	Rendezvous Second	5063 John Muir Drive	8602124013
4	14	Rendezvous Second	5069 John Muir Drive	8602124014
4	15	Rendezvous Second	5982 Isabella Ave.	8602124015
4	16	Rendezvous Second	5974 Isabella Ave.	8602124016
4	17	Rendezvous Second	5966 Isabella Ave.	8602124017
4	18	Rendezvous Second	5958 Isabella Ave.	8602124018
4	19	Rendezvous Second	5950 Isabella Ave.	8602124019
4	20	Rendezvous Second	5090 Brule Drive	8602124020
4	21	Rendezvous Second	5082 Brule Drive	8602124021
4	22	Rendezvous Second	5074 Brule Drive	8602124022
4	23	Rendezvous Second	5066 Brule Drive	8602124023
4	24	Rendezvous Second	5058 Brule Drive	8602124024
4	25	Rendezvous Second	5050 Brule Drive	8602124025
3	1	Rendezvous Second	6001 Denys Drive	8602123001
3	2	Rendezvous Second	6007 Denys Drive	8602123002
3	3	Rendezvous Second	6013 Denys Drive	8602123003
3	4	Rendezvous Second	6019 Denys Drive	8602123004
3	5	Rendezvous Second	6025 Denys Drive	8602123005
3	6	Rendezvous Second	6031 Denys Drive	8602123006
3	7	Rendezvous Second	6037 Denys Drive	8602123007
3	8	Rendezvous Second	6041 Denys Drive	8602123008
3	9	Rendezvous Second	6045 Denys Drive	8602123009
3	10	Rendezvous Second	6049 Denys Drive	8602123010
3	11	Rendezvous Second	5994 Rendezvous Pkwy	8602123011
3	12	Rendezvous Second	5990 Rendezvous Pkwy	8602123012
3	13	Rendezvous Second	5986 Rendezvous Pkwy	8602123013





5. Final Acceptance

Once a project is approved for Substantial Completion, the Developer has six (6) months to gain Final Acceptance. Final Acceptance initiates the start of a two-year warranty period for the developer. The developer is responsible for repairing any infrastructure during this warranty period. The following is a list of items required for Final Acceptance:

- *Punch List Items:* <u>Verification</u> that all water punch list items are complete per the following checklist:
 - o Tracer wire has been tested and verified by the District.
 - o All facilities are operational and accessible.
 - O A "Final" walk through has been completed by the District's inspector, developer or developer's representative, and contractor's superintendents to confirm that the facilities meet the requirements published in the Standard Construction Specifications. It is the developer's or developer's representative's responsibility to schedule the walk through.
- *Easements Recorded:* <u>Verification</u> that any easements associated with the project have been recorded (a reception number is acceptable).
- *Final Acceptance Request Letter:* Provide a letter addressed to District engineering staff requesting Final Acceptance. At a minimum, this letter shall include:
 - Cost of the public water infrastructure
 - Substantial Completion Letter from the District

Once the District issues Final Acceptance, the District is responsible for utility locate requests. The developer is required to repair any damaged or broken infrastructure until two (2) years after Final Acceptance.

Warranty Expiration Process:

Prior to the expiration of the 2-year warranty, (typically two months before expiration), the District will conduct an inspection of the project and note any repairs needed. The District will inform the developer of the required repairs and the developer will cause the repairs to be completed. If no repairs are required, the warranty period will expire with no further action by the District or the developer. The warranty period shall extend if noted repairs are not completed.



Date:

To:

Nate Ensley, PE

PE

Fort Collins / Loveland Water District South Fort Collins Sanitation District

Re:

Rendezvous Filing No.2 - Request For Final Completion - Phase 2G-1

Mr. Nate Ensley, PE,

As of Thursday, October 29th, 2020, Connell Resources, Inc. has completed all the major sanitary sewer infrastructure and potable waterline work for Rendezvous Filing No.2 -Contractor Phasing 2G-1. Substantial Completion has been granted by the district as of October 28th, 2020 and final as-built documentation will be submitted to Galloway Engineering no later than October 30th, 2020. All punch list items have been completed per the district's inspectors.

Rendezvous Filing No.2 – Phase 2G-1 is in Timnath, CO (reference attached Substantial Completion letter, map, lots, blocks and parcel numbers).

The total estimated dollar amount for major infrastructure work is listed below for Rendezvous Filing No.2 – Phase 2G-1:

\$544,302.00 SFCSD Sanitary Sewer Infrastructure =

FCLWD Potable Waterline Infrastructure = \$550,828.00

This letter is requesting Final Completion for Rendezvous Filing No.2 – Phase 2G-1 for all the major sanitary sewer and potable waterline infrastructure and the start of our 2-year warranty period

If any additional documentation is required, please let us know as soon as possible.

Regards,

Shane T. Westlind

Project Manager/Estimator

Connell Resources, Inc.

Cc.:

Chris Pletcher, PE – FCLWD/SFCSD

Terry Thompson – FCLWD/SFCSD

Steve Cicione – Hartford Homes

Patrick McMeekin – Hartford Homes

Chris Dejulio - Connell Resources, Inc.

James Prelog, PE – Galloway Engineering

CONNELL



FORT COLLINS-LOVELAND WATER DISTRICT SOUTH FORT COLLINS SANITATION DISTRICT

5150 Snead Dr., Fort Collins, CO 80525 Phone 970.226.3104 Fax 970.226.0186

www.fclwd.com

December 4th, 2020

Shane Westlind Connell Resources, Inc. 7785 Highland Meadows Parkway, Suite 100 Fort Collins, CO 80528

RE: Rendezvous Filing 2 – Phase 2G-1 Final Completion Acceptance Letter

Dear Shane:

This letter is to advise you that the Fort Collins-Loveland Water District and the South Fort Collins Sanitation District have approved the above-mentioned project for final completion, effective on December 4, 2020. The warranty period will expire two years from the effective date.

The asset value of the public water system improvements is \$550,828.00 The asset value of the public sewer system improvements is \$544,302.00

Please feel free to contact me at the phone number listed above if you have any questions or require additional information.

Sincerely,

Nate Ensley, PE *Civil Engineer 1*

Fort Collins-Loveland Water District South Fort Collins Sanitation District

cc: Chris Pletcher, PE, District Engineer

Zach Gilbert, Operations Superintendent

Amanda Proctor, Controller

Kerry Flint, Administrative Associate

Debbie Way, Billing Supervisor