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**PUBLIC WORKS ENGINEERING DIVISION**

## Inspection Summary

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Permit #: PRPWFR20171420,  
CREEKSIDE AT RAINTREE

Address:

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This work has been inspected and the inspection results noted below. Please call for re-inspection once all corrective actions have been completed. Do not cover any work until approved.

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Inspection Item:

Inspection:	Inspector:	Outcome:	Date:
DEI-Water Line - Construction Inspection Informational	Brice Lawson	Partial	Friday, April 27, 2018
1	Brice Lawson 01/29/2018 3:10 PM The contractor has began installing the 8" PVC water main for water main 1-1 from approx. STA. 1+36 towards the east. The pipe is being bedded in clean rock. The fire hydrant at STA. 1+91.45 has been moved to STA. 1+96.45 due to an existing power line. The hydrant has been set on a concrete block that is approx. 2' by 2'. Informational		
2	Brice Lawson 01/30/2018 4:04 PM Precision has installed 8" C900 PVC water main on line 1-1 from approx. STA. 2+60 to approx. STA. 3+52. An 8" Tee and 8" Mueller gate valve were installed with the valve on the west side of the tee. The 8" C900 water line has been installed from STA. 5+40 to approx. STA. 6+98.1. The pipe was connected to the tee fitting at STA. 6+98.1. The pipe is being bedded and covered with clean rock. The tracer wire is being taped to the top of the pipe. It is difficult to verify that the water line is being placed as shown on plans as there are very few off set stakes and no F/L elevations for the water main. Informational		
3	Brice Lawson 01/31/2018 1:28 PM Precision has installed the water main on line 1-2 from STA. 5+40 to STA. 4+66.63. The fire hydrant and 6" gate valve have been installed at STA. 4+78.70. The pipe is being bedded in clean rock. The tracer wire is being installed along the top of the pipe. The water main is 4' to 5' below existing grade. Informational		
4	Brice Lawson 02/02/2018 11:24 AM The water line for line 1-2 has been installed from STA. 3+20 to STA. 1+99. The 8" C900 water pipe is being installed on a bed of clean rock. The tracer wire has been installed		

above it. The 45 degree bends have been installed and the bolts have been sprayed with under coating. The fittings have been wrapped with poly wrap and sealed with tape.

It appears that the end of the sanitary service stub for lot 24 does not extend to the north side of the water line. I asked Jake with Precision if they would want to extend this now while they know where the lines are. He is going to check with the developer.

Informational

5 Brice Lawson 02/07/2018 3:07 PM

Precision has installed the 8" PVC water main from the tee fitting at STA. 6+98.91 to approx. STA. 9+89.00. The 8" Mueller 2361 gate valve was installed at STA. 6+98.91 on the south side of the tee fitting. The tee fitting has been installed at STA. 7+90.54. The pipe is being bedded in clean rock. The tracer wire is being installed along the top of the pipe. Epoxy splice connectors are being used.

Informational

6 Brice Lawson 02/08/2018 5:21 PM

The 8" C900 water main has been installed from STA. 9+89 to STA. 12+00. This section of water main was installed and backfilled before it was inspected. It appears tracer wire was installed with this pipe. It appears that the marker tape has been installed. This section of water main trench was being backfilled and the soil was being compacted with a sheepsfoot compactor. KC Testing was on site performing compaction testing on the trench backfill. The tester informed me that the test are passing and that the compaction efforts appear to be proper.

The contractor has excavated a trench to install the water main from STA. 12+00 to STA. 14+16.58. I informed the contractor that the trench looks too deep according to the proposed fill on the plans. He checked his grade and confirmed that the trench was excavated too deep. He plans to backfill the trench and get compaction tests performed on the fill. I will be off on vacation the next couple days and Tom Chandler will be covering this project. Tom came out to the site today and I informed him of what is going on with the water main trench. He is aware of this issue.

Informational

7 Backfield and tested from station 12+00 to station 14+10. Will install water later today.

Informational

8 Tom Chandler 02/09/2018 3:59 PM Installed from station 12+00 up to station 14+10. Will install hydrant and thrust restraints on 2/12/2018.

Informational

9 Tom Chandler 02/12/2018 4:24 PM Was working on some hydrants today. Did not really get much done on them. Planning on pouring thrust restraints on 02/13/2018.

Informational

10 Brice Lawson 02/13/2018 3:33 PM

Precision is working on installing the water main and fire hydrant for water line 1-2 near STA. 13+96.94. They let me know that they will not have 42" of cover over the main at the tee for the hydrant. They also don't think that the hydrant will stand plumb. I suggested that they talk to the design engineer about these issues. I also suggested getting survey

stakes that show finish grade elevations and top of water main elevation so the water main elevation could be verified on site.

Informational

11 Brice Lawson 04/10/2018 3:32 PM

A revision to water line 1-2 dated 4/5/18 was submitted, approved and delivered to the contractor. The revision includes moving the water line to the east at the southeast side of the south cul-de-sac.

Informational

12 Brice Lawson 04/13/2018 4:26 PM

Precision is working on installing water line 1-2 near STA. 13.99. They are planning to work tomorrow depending on the weather. They did not give me proper notice to work overtime. Bryan plans to come by the job site tomorrow.

Informational

13 Brice Lawson 04/17/2018 7:38 AM

Precision has installed the remainder of the water main for water line 1-2 from STA. 13+86 to STA. 14+17.08. The fire hydrant has been installed at STA. 13+99. It appears that the pipe has been bedded and covered in clean rock. It appears that the tracer wire has been installed over the pipe. The DI fittings have been wrapped in poly encasement. The thrust blocks have been installed at the fire hydrant and tee fitting at STA. 13+99. The thrust block has been installed on the end of the line cap at STA. 14+17.08. The thrust blocks have been installed on the 45 degree bends at STA. 13+86.29, STA. 13+13.67. The pipe and thrust blocks were covered with rock when I arrived on site. I saw the fittings and tracer wire on 4/16/18.

Informational

14 Brice Lawson 04/17/2018 3:24 PM

Precision has installed the thrust blocks on the 45 bends at STA. 11+99.58 and STA. 12+59.91 on water line 1-2. They were working on backfilling the water line in the south cul-de-sac. They are excavating the pit for the water tie-in that is scheduled for tomorrow. The tie-in location is at STA. 1+12.23 on water line 1-2. It appears that the contractor has the corrects water main appurtenances to perform the tie-in.

Informational

15 Tom Chandler 04/18/2018 3:41 PM Water tie-in has been completed. Water department came back out to put water main back in service and flush the line. Contractor poured thrust blocks for the tee and bend as well. New valve installed is closed as well.

Informational

16 Matt Munger 04/18/2018 10:15 AM

I observed the Contractors cut in the tee, I observed them swab the fittings and pipe with bleach. I left before the water was turned back on but Tom C. was on site to oversee the work.

Informational

17 Brice Lawson 04/27/2018 9:57 AM

Precision has requested to fill the new water main that has been constructed with water to get the air out of the mains in preparation for the hydrostatic test. Some of the valve boxes need to be cut down to access the operating nut. The excavation pit at the tie-in location

needs to be partially backfilled so I can access the valve. The contractor verified that the bolts on the retainer gland need to be tightened where the retainer gland attaches to the temporary cap on the end of the water main. The temporary cap is near the proposed tie-in location at STA.1+00 on water line 1-1. They plan to take care of these items and call back to schedule the filling of the water main.

#### Corrective Action Required

18 Brice Lawson 04/27/2018 4:27 PM

The new water main was slowly filled and flushed at each fire hydrant to get the air out of the line in preparation for the hydrostatic test. When the line filled up a leak was noticed where the temporary cap was installed near the proposed tie-in at STA. 1+00 on water line 1-1. The valve that isolates the new water main from the existing water main was closed after the new water line was filled and flushed to remove air. The contractor noticed that the all-thread securing the cap was not properly secured. The contractor is working on making the corrections to the cap.

Make proper corrections to the water main where it was leaking

DEI-Water Line - Construction Brice Lawson  
Inspection

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**Comments:**

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