LEE'S SUMMIT

PUBLIC WORKS ENGINEERING DIVISION

Inspection Summary

Permit #: PRPWFR20171746, Public Works Infrastructure Permit - Residential Manor at Stoney Creek 2nd - street, storm, sewer and water

Address:

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.

Inspection Item: Inspection:		Inspector:	Outcome:	Date:
DEI-Storm - Sewer Construction Inspection		Brice Lawson	Partial	Wednesday, March 07, 2018
Partial Co	rection			
1	Corrections need to be made to the Storm Sewer Brice Lawson 01/18/2018 4:34 PM Remove excess concrete from the openings of all curb inlets RESOLVED			
	The 36" storm pipe between FES 6-1 and CI 6-2 app Make proper corrections. This may have been dam		•	•
	CI 6-2 Remove lift ca RESOLVED BL	bles		
	CI 6-3 Grout the fron RESOLVED BL	t corners of lid at the inlet fra	ame	
	CI 6-4 Grout the fron RESOLVED BL	t corners of lid at the inlet fra	ame	
	CI 6-5 Grout the fron RESOLVED BL	t corners of the lid at the inle	et frame	
	FI 3-2 Remove lift cal RESOLVED BL	bles, grout lid so it does not t	eeter	

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JB 3-1 Remove paint from the lid RESOLVED BL

FI 3-3 Grout the lid so it does not teeter, grout pipe collars, add a step, remove lift cables, align the concrete lid with the structure RESOLVED BL

FI 3-4 Align the concrete lid with the structure, remove lift cables, grout gap at corners where lid meets the structure, grout collars RESOLVED BL

FI 3-5 Remove lift cables, grout the lid at the corners, align the concrete lid with the structure walls RESOLVED BL

FI 8-1 Align the concrete lid with the structure walls, remove the lift cables and the debris fromt the weir openings RESOLVED BL

FI 5-6 Remove the lift cables, align the concrete lid with the structure, grout corners where lid meets the structure, grout the collar, remove debris from the weir openings RESOLVED BL

FI 5-5 Add a step, grout collars grout corners so the concrete lid does not teeter, remove lift cables align the concrete lid with the structure, remove debris from the weir openings RESOLVED BL

CI 5-4 Replace the damaged step, remove the anchor bolt from the wall, finish grouting the lid, install the invert bench to guide the water thru the turn STEP NOT COMPLETE AS OF 2/27/18

CI 5-3 Remove the lift cables, replace the cover with the proper cover RESOLVED BL

JB 5-2 Remove paint from the lid, fill the voids and grout collars RESOLVED BL

Outlet Structure Remove lift cables, grout lift holes, align the lid with the structure walls, grout lid to structure joint, add steps, align the top and bottom structure sections

CI 4-5 Remove lift cables, add a step, remove debris RESOLVED BL

CI 4-4 Add a step RESOLVED BL

CI 4-3 Remove anchor bolt from the wall RESOLVED BL

FI 2-6 Align the concrete lid with the structure, remove lift cables and grout collar RESOLVED BL

FI 2-5 Grout concrete lid so it does not teeter, align the concrete lid with the structure, grout collar, align steps, remove lift cables RESOLVED BL

FI 2-4 Add steps, remove lift cables, align the concrete lid with the structure RESOLVED BL

FI 2-3 Remove lift cables, grout collars, align the concrete lid with the structure RESOLVED BL

Informational

2 Brice Lawson 02/27/2018 12:24 PM

Redford informed me that the corrections have been made to the storm structures so far. I re-inspected the storm structures for lines 3, 6, 8 and part of line 5. I will mark off the corrections on the original inspection at a later time.

Partial Correction

3 Corrections need to be made to the Storm Sewer Brice Lawson 03/06/2018 11:42 AM

> CI 2-1-Remove access HDPE pipe that extends into the CI. fill the lift holes and remove the silt/debris from the invert so it can be inspected. Brice Lawson 03/07/2018 2:40 PM There was water in the CI at time of inspection. RESOLVED

> Existing FI on storm line 1-Remove the silt and water so it can be inspected. It appears that the concrete invert has been washed out. Make proper corrections. RESOLVED-There was water in the pipe FI at the time of the inspection. The contractor pumped out as much as they could.

FI 1-1 - Remove the silt from the structure so it can be inspected RESOLVED

Outlet structure - Remove the silt from the outlet structure

DEI-Site Visit

Brice Lawson

Partial

Wednesday, March 07, 2018

Informational

1 Brice Lawson 02/26/2018 3:41 PM

I met with Jamie Kidwell and Thomas Hudgens to go over the ADA ramps, sidewalk and curb that has been installed at this site. They plan to make repairs and/or look into these issues.

- Informational
- 2 Brice Lawson 02/28/2018 1:50 PM
 - Brice Lawson 02/28/2018 1:46 PM

Redford Construction is working on repairing the sags in the sanitary line segments. They have repaired and backfilled the four most west sags on the site.

Informational

3 Brice Lawson 03/01/2018 1:41 PM

Redford has excavated and extended the conduit for the power supply in the ROW where it crosses Amethyst, Merryman and Alabaster.

Informational

4 Brice Lawson 03/07/2018 11:08 AM

Dawn and I went to the site to discuss the items that need to be completed prior to the issuance of sub. compl. We also looked at the latest engineers cost estimate.

Kent and I discussed the as-builts and master drainage plan that have been submitted by Eng. Solutions. We discussed some of the items that need to be completed to issue sub. compl.

Informational

5 Brice Lawson 03/07/2018 2:44 PM

Dan Harper and I met on site to discuss the remaining items that need to be completed prior to the issuance of the cert. of substantial completion.

DEI-Grading/Excavation/Fill	Brice Lawson	Partial	Wednesday,
Inspection			March 07,
			2018

Informational

1 Brice Lawson 08/09/2017 2:45 PM

Spalding Excavating began digging the temporary sediment basin. They are stipping and stock piling the top soil on the central part of the site. I spoke with Jason regarding the detention basin and he plans to build it after the cut is made in that location.

Informational

2 Brice Lawson 08/17/2017 10:02 AM

Spalding has roughed in the detention basin in the southwest corner of the site. They are performing a fill in the south portion of the site. They have roughed in the temporary

sediment basin located on the north edge of the site.

Informational

3 Brice Lawson 08/17/2017 3:45 PM

Spalding began stockpiling large rock and dirt west of the temporary sediment basin.

Informational

4 Brice Lawson 09/01/2017 3:42 PM

Spalding continues to grade outside the ROW. They were grading, filling and compacting the sump areas north of future Merryman Dr.

Informational

5 Brice Lawson 09/05/2017 11:01 AM

Spalding is grading the area north and east of the permanent detention basin. A sheepsfoot compactor is being used on parts of this area.

Redford is removing and hauling excess dirt that is left over after the major grading was completed east of SW Stoney Creek Dr. This grading was performed after sanitary line A and U were installed. The excess dirt is being hauled and stock piled on the west side of the site north of proposed Merryman Dr.

Informational

6 Tom Chandler 09/15/2017 11:11 AM Backfill on sanitary sewer main being placed today. No testing has been done today. If testing lab can make it to site today they will backfill (3) roadway crossings.

Resolved

7 Brice Lawson 09/27/2017 11:33 AM

I informed Mike with KC Testing, Thomas Hudgens and Darrin that the compaction test reports for the sanitary trenches that have been submitted so far do not have documentation for a visual inspection of the initial backfill that is being placed in the trenches. KC Testing will not perform moisture density testing of trenches that are too deep due to safety reasons. I informed them that the City will need documentation of visual inspections of the backfill of the sanitary trenched up to the point where KC Testing can perform the moisture density testing.

Informational

8 Brice Lawson 11/15/2017 10:30 AM

A crew is using a blade and a scraper and has began final grading and shaping of the proposed road subgrade on Merryman Ln and Amethyst Dr.

Informational

9 Brice Lawson 11/21/2017 11:33 AM

The road subgrade on this project has some areas that appear to be too wet. The contractor has scarified the entire road width on Amethyst north of approx. STA. 2+00 to approx. STA. 3+60. Areas on Merryman are being removed and replaced with soil that appears to be dryer.

Resolved

10 Brice Lawson 11/27/2017 3:36 PM

The swale that is east of Pryor Rd and on the north side of County Line Rd has been partially filled in with dirt. This was done when the new storm pipe was being installed. The

new storm pipe and the existing water line were at the same elevations. This area has not been backfilled.

I let Darren with Redford know that there is a resident is concerned that the ditch will not drain properly and back water up onto his property. Darren plans to backfill the storm sewer trench and allow any storm water to drain from the culvert that runs east and west under SW Pryor Rd at County Line Rd.

Informational

11 Brice Lawson 03/07/2018 11:52 AM

The City acknowledges reciept of off-site drainage sheet sealed and signed from Eng. Solutions. During a meeting with the developer it was agreed that if the drainage south of County Line Rd has a negative impact upstream then the developer would make proper corrections.

DEI-Site Visit	Brice Lawson	Partial	Wednesday,
			March 07,
			2018

Informational

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Informational

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 - Brice Lawson 02/28/2018 1:46 PM

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Informational

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Informational

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Kent and I discussed the as-builts and master drainage plan that have been submitted by Eng. Solutions. We discussed some of the items that need to be completed to issue sub. compl.

DEI-Sanitary Sewer	Brice Lawson	Partial	Wednesday,
Construction Inspection			March 07,

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Resolved

Existing City Sanitary Manhole #60-082 at tie-in: Grout the sides of the pipe up to the springline of the new pipe inside the manhole. Make a smooth transition from the new pipe to the existing flowline with proper slope. Eliminate any vertical offset. RESOLVED Brice Lawson 02/15/2018 4:10 PM

MH A-1: Remove wire mesh, debris and paint from the lid RESOLVED BL

MH A-2: Remove green paint from the lid **RESOLVED BL**

MH A-3: Remove green paint from the lid **RESOLVED BL**

MH A-4: Remove green paint from the lid **RESOLVED BL**

MH A-5: Remove green paint from lid. Backfill around the frame to achieve positive drainage away the manhole frame RESOLVED BL

MH A-6: Remove green paint from the lid. Complete the backfill of the manhole frame and achieve positive drainage away from the manhole frame **RESOLVED BL**

MH A-7: Backfill around the manhole frame and achieve positive drainage away from the frame. Remove green paint from the lid. Remove excess joint mastic at the adjustment ring ioint.

RESOLVED BL

MH B-1: Remove green paint from lid. Remove excess mastic from adjustmen ring joint. Properly backfill around manhole frame to achieve positive drainage away from the frame.RESOLVED BL

MH B-2: Remove debris from manhole floor, remove wire mesh, remove the vertical strip of what appears to be mastic from the barrel section, remove green paint from the lid **RESOLVED BL**

MH B-3: Remove the paint from the lid RESOLVED BL

MH E-1: Remove the excess mastic at the horizontal joints, remove debris from the manhole floor, remove the paint from the lid, raise the manhole so that the top of the lid is 2% to 4% above the back of curb RESOLVED BL

MH C-1: Remove paint from the lid, remove debris from invert bench, repair the top of the cone at the void that is allowing the mastic to fall out of the joint, complete grading around the frame to achieve positive drainage away from the frame RESOLVED BL

MH C-2: Remove the green paint from the lid RESOLVED BL

MH C-3: Remove green paint from the lid. Raise the manhole top so that the top is 2% to 4% above the back of the curb. Grade around the frame to achieve positive drainage away from the frame. RESOLVED BL

MH C-4: Remove debris from the manhole floor, remove paint from the lid. Raise the manhole lid so that it is 2% to 4% above the back of curb. FYI- a maximum of 1' of adjustment rings can be used. RESLOVED BL

MH D-1: The top of the lid does not appear to be installed at the elevation shown on the revised drawings. Make necessary corrections to get the top at the correct elevation. Replace manhole lid with the proper lid. Backfill around the frame to achieve positive drainage away from the frame. RESOLVED BL

MH D-2: Remove paint from the lid, fill the lift hole in the cone section behind the steps, properly grade around frame to achieve positive drainage away from the frame.RESOLVED BL

Should the tracer boxes be attached to the post with something that is more durable than ductape

Tracer boxes should be installed on a post that extends atleast 3' above grade. The posts need to be painted green. RESOLVED

Lot 93-Repair tracer wire and tracer box 2/22/18 attach the tracer box to the post RESOLVED

Lot 99-Raise the tracer box in elevation so it is easily seen RESOLVED

Lot 97- Move the tracer box so that it is above the service line and 1' from the property line RESOLVED BL

Lot 98-Repair broken tracer wire and retest the tracer wire in the presence of an inspector RESOLVED BL

Lot 78-repair the tracer box post RESOLVED BL

Lot 42-Attach the tracer wire to the tracer box RESOLVED

Lot 69-Install the tracer box on a post at least 3' above grade RESOLVED

Lot 48-Install the tracer box on a post at least 3' above grade RESOLVED BL

Lot 65-paint the tracer box post green RESOLVED

Lot 64-paint the tracer box post green RESOLVED BL

Lots 63, 62, 61, 60, 58, 57, 56, 55-paint the tracer box post green RESOLVED BL

Lot 54-repair/replace tracer box post and paint green RESOLVED BL

Informational

2 A main inspection has uncovered the following problems.

Brice Lawson 01/22/2018 3:46 PM

The invert for the existing MH #60-082 has been installed. It looked like it was very flat after installation. I looked at it today after the weekend and the sewage is not draining properly from this manhole. I plan to follow up with Water Utilities to see if they need to look at the line segment below this manhole.

Corrective Action Required

A main inspection has uncovered the following problems.
Brice Lawson 02/15/2018 4:16 PM
The following sags in the sanitary mains were found during the video inspection. Make

proper corrections.

sag starts @ 53' to 58' from MH 60-282 B/F 2/28/18 sag starts @ 62' to 71'from MH 60-282 B/F 3/2/18 sag starts @ 95' to MH 60-281 B/F 3/2/18 sag starts @ 73' to 85' from MH 60-278 B/F 2/28/18 sag starts @ 376' to MH 60-279 B/F 3/1/18 sag starts @ 264' to 270' from MH 60-287 B/F 2/27/18 sag starts @ 336' to MH 60-286 B/F 2/27/18 sag starts @ 261' to 266' from MH 60-285 upstream B/F 2/27/18 sag starts @ 228' to 241' from MH 60-293 B/F 2/27/18

The service connection is 3.5' from MH 60-285. Wyes should not be installed any closer that 4' to a manhole. Make proper corrrections.

Brice Lawson 02/26/2018 3:43 PM

The service connection was measured by Redford and the Water Dept. and was confirmed to be 4' from the manhole. No repair needed. RESOLVED

Brice Lawson 03/05/2018 9:07 AM

All nine of the sags were repaired by Redford Construction. They excavated down to the pipes, picked up the pipes and chalked rock under the pipes to repair the sags. All of the repaired areas have been backfilled.

Informational

4 Brice Lawson 02/26/2018 3:53 PM

Redford has excavated down to the sewer main to repair the sag located upstream of MH 285 and the sag located 336' from MH 60-287 to MH 60-286.

Informational

5 Brice Lawson 03/01/2018 1:32 PM

Redford Construction let me know that the following sags have been repaired. The excavated areas have also been backfilled. They let me know that the marker tape is being installed in the trench.

Sags: between D-1 and D-2 between C-1 and B-3 between B-1 and B-2 between A-6 and A-5 between A-2 and A-1

They have excavated down to the sags between A-3 and A-2 and are in the process of repairing the sags.

Informational

6 Tom Chandler 03/02/2018 3:44 PM Finished repairs to line from MH A-2 to MH A-3 and

backfilled. Added adjustment ring to MH that needed it.

DEI-Storm - Sewer Construction Inspection		Brice Lawson	Partial	Wednesday, March 07, 2018	
Partial Cor	rection				
1	Corrections need to Brice Lawson 01/18/	be made to the Storn /2018 4:34 PM	n Sewer		
	Remove excess conc RESOLVED	rete from the openin	gs of all curb inlets		
	The 36" storm pipe between FES 6-1 and CI 6-2 appears to be seperated and squashed. Make proper corrections. This may have been damaged during road construction.				
	CI 6-2 Remove lift cables RESOLVED BL				
	CI 6-3 Grout the front corners of lid at the inlet frame RESOLVED BL				
	CI 6-4 Grout the front corners of lid at the inlet frame RESOLVED BL				
	CI 6-5 Grout the front corners of the lid at the inlet frame RESOLVED BL				
	FI 3-2 Remove lift ca RESOLVED BL	bles, grout lid so it do	bes not teeter		
	JB 3-1 Remove paint RESOLVED BL	from the lid			
	FI 3-3 Grout the lid so it does not teeter, grout pipe collars, add a step, remove lift cables, align the concrete lid with the structure RESOLVED BL				
	-	rete lid with the struc structure, grout colla	cture, remove lift cables, g rs	rout gap at corners	
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structure walls

RESOLVED BL

FI 8-1 Align the concrete lid with the structure walls, remove the lift cables and the debris fromt the weir openings RESOLVED BL

FI 5-6 Remove the lift cables, align the concrete lid with the structure, grout corners where lid meets the structure, grout the collar, remove debris from the weir openings RESOLVED BL

FI 5-5 Add a step, grout collars grout corners so the concrete lid does not teeter, remove lift cables align the concrete lid with the structure, remove debris from the weir openings RESOLVED BL

CI 5-4 Replace the damaged step, remove the anchor bolt from the wall, finish grouting the lid, install the invert bench to guide the water thru the turn STEP NOT COMPLETE AS OF 2/27/18 RESOLVED

CI 5-3 Remove the lift cables, replace the cover with the proper cover RESOLVED BL

JB 5-2 Remove paint from the lid, fill the voids and grout collars RESOLVED BL

Outlet Structure Remove lift cables, grout lift holes, align the lid with the structure walls, grout lid to structure joint, add steps, align the top and bottom structure sections

CI 4-5 Remove lift cables, add a step, remove debris RESOLVED BL

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FI 2-6 Align the concrete lid with the structure, remove lift cables and grout collar RESOLVED BL

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Informational

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> Existing FI on storm line 1-Remove the silt and water so it can be inspected. It appears that the concrete invert has been washed out. Make proper corrections.

FI 1-1 - Remove the silt from the structure so it can be inspected RESOLVED

Outlet structure - Remove the silt from the outlet structure

Comments: