

DECEMBER 3, 2019
MODERN ROUNDABOUT AT ROUTE 190 AND ROUTE 319
FEDERAL AID PROJECT NO. 1134(107)
STATE PROJECT NO. 0134-0147
TOWN OF STAFFORD

ADDENDUM NO.1

This Addendum addresses the following questions and answers contained on the “CT DOT QUESTIONS AND ANSWERS WEBSITE FOR ADVERTISED CONSTRUCTION PROJECTS”:

Question and Answer Nos. 2, 3, 4, and 5.

SPECIAL PROVISIONS
NEW SPECIAL PROVISION

The following Special Provision is hereby added to the Contract:

- ITEM NO. 0913956A - PROTECTIVE FENCE (6' HIGH)

REVISED SPECIAL PROVISIONS

The following Special Provisions are hereby deleted in their entirety and replaced with the attached like-named Special Provisions:

- CONTRACT TIME AND LIQUIDATED DAMAGES
- NOTICE TO CONTRACTOR – UTILITY GENERATED SCHEDULE
- ITEM NO. 0302905A – WASHED STONE

CONTRACT ITEMS**NEW CONTRACT ITEMS**

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QUANTITY</u>
<u>0586601</u>	<u>RESET TYPE 'C' CATCH BASIN</u>	EA.	1
<u>0586620</u>	<u>RESET TYPE 'C-L' CATCH BASIN</u>	EA.	1
<u>0586760</u>	<u>TYPE 'C-L' CATCH BASIN TOP</u>	EA.	1
<u>0822001</u>	<u>TEMPORARY PRECAST CONCRETE BARRIER CURB</u>	L.F.	80
<u>0822002</u>	<u>RELOCATED TEMPORARY PRECAST CONCRETE BARRIER CURB</u>	L.F.	40
<u>0913956A</u>	<u>PROTECTIVE FENCE (6' HIGH)</u>	L.F.	191
<u>0979003</u>	<u>CONSTRUCTION BARRICADE TYPE III</u>	EA.	20

REVISED CONTRACT ITEMS

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>ORIGINAL QUANTITY</u>	<u>REVISED QUANTITY</u>
<u>0204001</u>	<u>COFFERDAM AND DEWATERING</u>	114 L.F.	715 L.F.
<u>0969062A</u>	<u>CONSTRUCTION FIELD OFFICE, MEDIUM</u>	18 MO.	19 MO.
<u>1209114</u>	<u>HOT-APPLIED PAINTED PAVEMENT MARKINGS 4" YELLOW</u>	9700 L.F.	11700 L.F.
<u>1209124</u>	<u>HOT-APPLIED PAINTED PAVEMENT MARKINGS 4" WHITE</u>	10200 L.F.	11700 L.F.
<u>1209131</u>	<u>HOT-APPLIED PAINTED LEGEND, ARROWS AND MARKINGS</u>	700 S.F.	800 S.F.

DELETED CONTRACT ITEMS

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>ORIGINAL QUANTITY</u>
<u>0602053</u>	<u>WELDED WIRE FABRIC</u>	<u>2126 LB.</u>

PLANS

NEW PLANS

The following Plan Sheets are hereby added to the Contract:

- 03.16-1.A1, 03.17-1.A1, 03.18-1.A1, 03.19-1.A1, 03.20-1.A1, 03.21-1.A1, 03.22-1.A1, 03.23-1.A1, 03.24-1.A1, 03.25-1.A1, 03.27-1.A1
- 04.17.A1, 04.18.A1, 04.19.A1
- 09.01.A1, 09.02.A1, 09.03.A1, 09.04.A1, 09.05.A1, 09.06.A1
- 10.01.A1, 10.02.A1, 10.03.A1, 10.04.A1, 10.05.A1, 10.06.A1, 10.07.A1, 10.08.A1, 10.09.A1, 10.10.A1, 10.11.A1, 10.12.A1, 10.13.A1, 10.14.A1, 10.15.A1, 10.16.A1
- HW-822.01

REVISED PLANS

The following Plan Sheets are hereby deleted and replaced with the like-numbered Plan Sheets:

- 02.01.A1
- 03.06.A1
- 04.02.A1, 04.04.A1, 04.06.A1, 04.08.A1, 04.11.A1

DELETED PLANS

The following Plan Sheets are hereby deleted in their entirety:

- 03.16, 03.17, 03.18, 03.19, 03.20, 03.21, 03.22, 03.23, 03.24, 03.25, 03.27

The Bid Proposal Form has been revised to reflect these changes.

The Detailed Estimate Sheets do not reflect these changes.

There will be a change in the number of calendar days from 360 days to **388 days** due to this Addendum.

The foregoing is hereby made a part of the contract.

AUGUST 28, 2019
FEDERAL AID PROJECT NO. 1134(107)
STATE PROJECT NO. 0134-0147

MODERN ROUNDABOUT AT ROUTE 190 AND ROUTE 319

Town of Stafford
Federal Aid Project No. 1134(107)

The State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges, Facilities and Incidental Construction, Form 817, 2016, as revised by the Supplemental Specifications dated July 2018 (otherwise referred to collectively as "ConnDOT Form 817") is hereby made part of this contract, as modified by the Special Provisions contained herein. Form 817 is available at the following DOT website link <http://www.ct.gov/dot/cwp/view.asp?a=3609&q=430362>. The current edition of the State of Connecticut Department of Transportation's "Construction Contract Bidding and Award Manual" ("Manual"), is hereby made part of this contract. If the provisions of this Manual conflict with provisions of other Department documents (not including statutes or regulations), the provisions of the Manual will govern. The Manual is available at the following DOT website link <http://www.ct.gov/dot/cwp/view.asp?a=2288&q=259258>. The Special Provisions relate in particular to the Modern Roundabout at Route 190 and Route 319 in the Town of Stafford.

CONTRACT TIME AND LIQUIDATED DAMAGES

Three Hundred Eighty Eight (388) calendar days will be allowed for completion of the work on this Contract and the liquidated damages charge to apply will be Two Thousand Dollars (\$2,000) per calendar day.

NOTICE TO CONTRACTOR – UTILITY GENERATED SCHEDULE

The attached project specific utility work schedule(s) was provided to the Connecticut Department of Transportation (Department) by the utility companies regarding their identified work on this project.

The utility scheduling information is provided to assist the Contractor in scheduling its activities. However, the Department does not ensure its accuracy and Section 1.05.06 of the Standard Specifications still is in force.

The utility scheduling information shall be incorporated into the Contractor's pre-award schedule in accordance with the Department's Bidding and Award Manual and Section 1.05.08 of the Contract.

After award, the Contractor shall conduct a utility coordination meeting or meetings to obtain contemporaneous scheduling information from the utilities prior to submitting its baseline schedule to the Department in accordance with Section **(1.05.08 – Schedules and Reports)** of the Contract.

The Contractor shall incorporate the contemporaneous utility scheduling information into its baseline schedule submittal. The baseline schedule shall include Contractor predecessor and successor activities to the utility work in such detail as acceptable to the Engineer.

UTILITY WORK SCHEDULE Rev 3/2015			
CTDOT Project Number:	134-147	Town:	STAFFORD
Project Description:	RT319+RT190 ROUNDABOUT CONSTRUCTION		
CTDOT Utilities Engineer:	CRAIG WALLACE		
Phone:	(860)594-2696	Email:	Craig.Wallace@ct.gov
Utility Company:	CROWN CASTLE FIBER		
Prepared By:	TERENCE J SHEA	Date Prepared:	2/4/2019
Phone:	(203)649-3905	Email:	terence.shea@crowncastle.com
Scope of Work			
<p>The following is a description of all utility work planned to be completed in conjunction with the CTDOT project. The narrative describes all work to be carried out by the utility or its contractor, including temporary and permanent work required by the project as well as any additional utility infrastructure work the utility intends on performing within the project limits during the construction of the project.</p>			
<p>Crown Castle Fiber's work will consist of placing new strand to relocated poles, move slack to project area, shift cable to new strand and remove old strand.</p>			
Special Considerations and Constraints			
<p>The following describes the limiting factors that must be planned for in the scheduling and performance of the utility work. For example, restrictions on cut-overs, outages, limitations on customer service interruptions (e.g. nights, weekends, holidays), seasonal and environmental shutdown periods, long lead material procurements, etc..</p>			
<p>PLEASE NOTE THAT ANY TIME FRAME GIVEN AS A START TIME OR DURATION OF WORK CAN BE AFFECTED BY MANY FACTORS INCLUDING, BUT NOT LIMITED TO, MAKE READY WORK, OTHER UTILITIES, PERMIT APPLICATIONS, CHANGES IN SCOPE, INCLEMENT WEATHER, HOLIDAYS AND EMERGENCY SITUATIONS.</p>			

UTILITY WORK SCHEDULE Rev 3/2015

CTDOT Project Number: 134-147

Utility Company: CROWN CASTLE FIBER

Prepared By: TERENCE J SHEA

Total Working Days: 4

Schedule

The following schedule identifies each major activity of utility work in sequential order to be performed by the utility or its contractor. The location of each activity of work is identified by the baseline stationing on the CTDOT plans. All activities identify the predecessor activity which must be completed before a utility work activity may progress. The duration provided is the number of working days required to complete the utility work activity based on historical information and production rates.

Location (Station to Station)	Description of Utility Work Activity	Predecessor Activity	Duration (working days)
LIMITS	PLACE STRAND, MOVE SLACK, SHIFT CABLE AND REMOVE OLD STRAND	POLES SET, POWER AND CATV OVER.	4

UTILITY WORK SCHEDULE Rev 08 02 2016			
CTDOT Project Number:	134-147	Town:	Stafford
Project Description: Install modern roundabout at the intersection of Rte 190 & Rte 319			
CTDOT Utilities Engineer:		Craig Wallace	
Phone:	860-594-2696	Email:	Craig.Wallace@ct.gov
Utility Company: Eversource Energy			
Prepared By:	Curtis Benashski	Date Prepared:	12/14/2018
Phone:	860-871-3447	Email:	curtis.benashski@eversource.com
Scope of Work			
The following is a description of all utility work planned to be completed in conjunction with the CTDOT project. The narrative describes all work to be carried out by the utility or its contractor, including temporary and permanent work required by the project as well as any additional utility infrastructure work the utility intends on performing within the project limits during the construction of the project.			
<p>The scope of work is relocating the pole lines on Route 190 (West Stafford Rd.) and Route 319 (Orcuttville Rd.) to allow the replacement of a three way intersection with a modern roundabout. This project requires Frontier to relocate 17 poles and Eversource to relocate 8 poles. Anchors and down guys will be added as needed.</p> <p>Phase 1: Relocate 12 poles on Rte 190 West Stafford Rd. from Station 20+00 to Station 26+58, from Station 3+00 to Station 5+00. and from Station 35+47 to Station 31+00.</p> <p>Phase 2: Relocate 13 poles on Rte 319 Orcuttville Rd. from Station 50+00 to Station 41+00 and cut through.</p>			
Special Considerations and Constraints			
The following describes the limiting factors that must be planned for in the scheduling and performance of the utility work. For example, restrictions on cut-overs, outages, limitations on customer service interruptions (e.g. nights, weekends, holidays), seasonal and environmental shutdown periods, long lead material procurements, etc..			
Inclement weather. Crews working on storm duty and or emergency situations. Change in scope. Arrange for customer outages and providing generation. Off hour cutovers for commercial customers may require nights and weekends. Scheduling may result in delays. Summer Moratorium during high peak loads from June 1 until September 15. Outside line resources may be put out to bid.			

UTILITY WORK SCHEDULE Rev 3/2015

CTDOT Project Number: 134-147
 Utility Company: Eversource Energy
 Prepared By: Curtis Benashski
 Total Working Days: 163

Schedule

The following schedule identifies each major activity of utility work in sequential order to be performed by the utility or its contractor. The location of each activity of work is identified by the baseline stationing on the CTDOT plans. All activities identify the predecessor activity which must be completed before a utility work activity may progress. The duration provided is the number of working days required to complete the utility work activity based on historical information and production rates.

Location (Station to Station)	Description of Utility Work Activity	Predecessor Activity	Duration (working days)
Entire Project	Attend preconstruction meeting. Order material, schedule line resources	Notification from CDOT to proceed	70
Phase 1 Rte 190	Finalize detailed design, stake new pole and anchor locations	Precon meeting, surveying include property lines/curb lines. Grade w/in 6"	5
Phase 1 Rte 190	Install poles and anchors, frame poles, install guying, reconductor with 336 TW, arrange outages	Pole & anchor locations approved, final grade within 6", Froniter poles are set	44
Phase 1 Sta 33+25	Install 4' Schedule 40 PVC conduit from pole 732 to meters located at #106 W.Stafford Rd.	Reconductor work is complete	3
Phase 1 Sta 33+25	Install and energize cable from riser pole 732 to meters located at # 106 W. Stafford Rd	4" sch 40 PVC conduit installed. Commerical customer outage required	2
Phase 1 Rte 190	Removal of Eversource pole butts	All communications work complete	2
Phase 2 Rte 319	Identify trees to be removed (by others)	Cut and fill line identified	1
Phase 2 Rte 319	Finalize detailed design, stake new pole and anchor locations for Rte 319 and cut through	Surveying complete include property lines/curb lines. Grade w/in 6"	5
Phase 2 Rte 319	Install poles and anchors, frame poles, install guying, reconductor with 336 TW, arrange outages	Pole & anchor locations approved, final grade within 6", Froniter poles are set	29
Phase 2 Rte 319	Removal of Eversource pole butts	All communications work complete	2

UTILITY WORK SCHEDULE Rev 3/2015			
CTDOT Project Number:	134-147	Town:	STAFFORD
Project Description: MODERN ROUNDABOUT RT190 & RT319			
CTDOT Utilities Engineer:	CRAIG WALLACE		
Phone:	860 594-2696	Email:	Craig.wallace@ct.gov
Utility Company:	FRONTIER COMMUNICATIONS		
Prepared By:	MARC SWEENEY	Date Prepared:	12/7/2018
Phone:	860-521-0692	Email:	marc.sweeney@ftr.com
Scope of Work			
<p>The following is a description of all utility work planned to be completed in conjunction with the CTDOT project. The narrative describes all work to be carried out by the utility or its contractor, including temporary and permanent work required by the project as well as any additional utility infrastructure work the utility intends on performing within the project limits during the construction of the project.</p>			
<p>This project will require Frontier Communications to relocate P818, P820, P821, P824, P827, P828, P829, P830, P831, P834, P835 with 45'-2 poles. Relocate P822, P823 with 50'-2 poles. Place new stub poles P828S, P823S with 40'-2 poles. Replace P820S with a 35'-2 pole. These poles will be located within the existing/new ROW obtained by the State. New fiber cable and copper cables will need to be replaced from STA 32+00 to 21+00 W Stafford Rd. All old poles, anchors & down guys, crossbox will be removed. Due to limitations of fiber, new fiber will need to be placed to nearest existing splice which is beyond construction limits.</p>			
Special Considerations and Constraints			
<p>The following describes the limiting factors that must be planned for in the scheduling and performance of the utility work. For example, restrictions on cut-overs, outages, limitations on customer service interruptions (e.g. nights, weekends, holidays), seasonal and environmental shutdown periods, long lead material procurements, etc..</p>			
<p>PLEASE NOTE THAT ANY TIME FRAME GIVEN AS A START TIME OR DURATION OF WORK CAN BE AFFECTED BY MANY FACTORS INCLUDING, BUT NOT LIMITED TO, MAKE READY WORK, OTHER UTILITIES, PERMIT APPLICATIONS, CHANGES IN SCOPE, INCLEMENT WEATHER, HOLIDAYS AND EMERGENCY SITUATIONS.</p>			

UTILITY WORK SCHEDULE Rev 3/2015			
CTDOT Project Number: 134-147 PHASE 1			
Utility Company: FRONTIER COMMUNICATIONS			
Prepared By: MARC SWEENEY		Total Working Days: 113	
Schedule			
The following schedule identifies each major activity of utility work in sequential order to be performed by the utility or its contractor. The location of each activity of work is identified by the baseline stationing on the CTDOT plans. All activities identify the predecessor activity which must be completed before a utility work activity may progress. The duration provided is the number of working days required to complete the utility work activity based on historical information and production rates.			
Location (Station to Station)	Description of Utility Work Activity	Predecessor Activity	Duration (working days)
	MISC PRE WORK	NONE	2
21+00 to 4+00	LAYOUT OF NEW POLE LINE AND ANCHORS, STAKE AND MARK OUT	GRADE BROUGHT TO WITHIN 1' NEW CURB LINES & ROW STAKED	5
21+00 to 4+00	RELOCATE 7 POLES W STAFFORD RD	NEW POLE LINE STAKED AND MARKED OUT	9
20+00 TO 32+00	COPPER CABLES: PLACE NEW CABLES, TERMS, XBOX, CUT OVER (W STAFFORD RD)	POLES PLACED (EVERSOURCE & FTR), OTHER UTILITIES SHIFTED	34
33+00 TO 34+00	REDIRECT CONDUIT FEEDING # 106 W STAFFORD RD	NEW POLES & CABLES PLACED AND CUT OVER	1
20+00 TO 32+00	REMOVE COPPER CABLES & MISC (W STAFFORD RD)	COPPER CABLES SPLICED AND CUT OVER	9
32+00 TO 34+00	FIBER CABLES: RELOCATE FIBER ACCESS POINT	POLES PLACED, OTHER UTILITIES SHIFTED	1
	FIBER CABLES: PLACE NEW CABLE, CUT OVER	POLES PLACED, OTHER UTILITIES SHIFTED	42
	FIBER CABLES: REMOVAL	FIBER CABLES FUSED & CUT OVER	4
20+00 TO 32+00	REMOVE, SHIFT POLES (W STAFFORD RD)	ALL OTHER UTILITIES SHIFTED	6

UTILITY WORK SCHEDULE Rev 3/2015				
CTDOT Project Number: 134-147 PHASE 2				
Utility Company: FRONTIER COMMUNICATIONS				
Prepared By: MARC SWEENEY		Total Working Days: 32		
Schedule				
The following schedule identifies each major activity of utility work in sequential order to be performed by the utility or its contractor. The location of each activity of work is identified by the baseline stationing on the CTDOT plans. All activities identify the predecessor activity which must be completed before a utility work activity may progress. The duration provided is the number of working days required to complete the utility work activity based on historical information and production rates.				
Location (Station to Station)	Description of Utility Work Activity	Predecessor Activity	Duration (working days)	
41+00 TO 49+00	LAYOUT OF NEW POLE LINE AND ANCHORS, STAKE AND MARK OUT	GRADE BROUGHT TO WITHIN 1' NEW CURB LINES & ROW STAKED	5	
41+00 TO 49+00	RELOCATE 9 POLES ORCUTTVILLE RD	NEW POLE LINE STAKED AND MARKED OUT	11	
31+50 to 44+00	PLACE 50PR CABLE/TERMS FROM P730 W STAFFORD RD TO P820 ORCUTTVILLE RD, CUT OVER	POLES PLACED (EVERSOURCE & FTR), OTHER UTILITIES SHIFTED	8	
31+50 to 44+00	REMOVE OLD CABLES & POLES, SHIFT (ORCUTTVILLE RD)	ALL OTHER UTILITIES SHIFTED	8	

UTILITY WORK SCHEDULE Rev 3/2015		
CTDOT Project Number:	Pro. No. 134-147	Town: Stafford
Project Description: Roundabout on Routes 190 and 319		
CTDOT Utilities Engineer: Craig Wallace		
Phone:	(860) 594-2696	Email: Craig.wallace@ct.gov
Utility Company: Cox Communications		
Prepared By:	Denise Mazzoli	Date Prepared: 2/25/2019
Phone:	860-250-1378	Email: Denise.mazzoli@cox.com
Scope of Work		
<p>The following is a description of all utility work planned to be completed in conjunction with the CTDOT project. The narrative describes all work to be carried out by the utility or its contractor, including temporary and permanent work required by the project as well as any additional utility infrastructure work the utility intends on performing within the project limits during the construction of the project.</p> <p>Majority of this work for this new roundabout will include pole shifts of the poles that will be new. There is one area (P-823 to P-731) on the Unnamed road that may need to be rebuilt due to new pole location and will determine once the new pole is in. There is also a section of 8 spans of cable that will need to be rebuilt and wrecked out (P834 to pole ES new pole). this will take 45days to create the work order order material and schedule with the contractor..</p>		
Special Considerations and Constraints		
<p>The following describes the limiting factors that must be planned for in the scheduling and performance of the utility work. For example, restrictions on cut-overs, outages, limitations on customer service interruptions (e.g. nights, weekends, holidays), seasonal and environmental shutdown periods, long lead material procurements, etc..</p> <p>All of our cutover of live plant will need to be completed in our maintenance window 12-6am. Black out (no cutting into live plant) times will be determined when work starts.</p>		

UTILITY WORK SCHEDULE Rev 3/2015			
CTDOT Project Number: 134-147		Total Working Days: 45	
Utility Company: cox communications		Schedule	
Prepared By: denise mazzoli		The following schedule identifies each major activity of utility work in sequential order to be performed by the utility or its contractor. The location of each activity of work is identified by the baseline stationing on the CTDOT plans. All activities identify the predecessor activity which must be completed before a utility work activity may progress. The duration provided is the number of working days required to complete the utility work activity based on historical information and production rates.	
Location (Station to Station)	Description of Utility Work Activity	Predecessor Activity	Duration (working days)
multiple locations	pole shifts		15
intersections	rebuild spans to accommodate pole relocations	pole shifts	30

UTILITY WORK SCHEDULE Rev 08 02 2016	
CTDOT Project Number: 134-147	Town: Stafford
Project Description: Modern Roundabout at Rte 190 and 319	
CTDOT Utilities Engineer: Craig Wallace	
Phone: 860-594-2696	Email: Craig.Wallace@ct.gov
Utility Company: The Connecticut Water Company	
Prepared By: Christopher Wojciak	Date Prepared: 11/5/2019
Phone: 860-292-2840	Email: cwojciak@ctwater.com
Scope of Work	
<p>The following is a description of all utility work planned to be completed in conjunction with the CTDOT project. The narrative describes all work to be carried out by the utility or its contractor, including temporary and permanent work required by the project as well as any additional utility infrastructure work the utility intends on performing within the project limits during the construction of the project.</p> <p>CT Water will self perform (through a CT Water approved contractor) installation of 12" water main within the project limits. Coordination with State's contractor required for timing of installation.</p>	
Special Considerations and Constraints	
<p>The following describes the limiting factors that must be planned for in the scheduling and performance of the utility work. For example, restrictions on cut-overs, outages, limitations on customer service interruptions (e.g. nights, weekends, holidays), seasonal and environmental shutdown periods, long lead material procurements, etc..</p> <p>State's contractor to notify CT Water minimum 3 weeks (21 days) in advance of completion of culvert installations and semi-final grading.</p>	

UTILITY WORK SCHEDULE Rev 3/2015				
CTDOT Project Number: 134-147				
Utility Company: The Connecticut Water Company				
Prepared By: Christopher Wojciak		Total Working Days: 21		
Schedule				
The following schedule identifies each major activity of utility work in sequential order to be performed by the utility or its contractor. The location of each activity of work is identified by the baseline stationing on the CTDOT plans. All activities identify the predecessor activity which must be completed before a utility work activity may progress. The duration provided is the number of working days required to complete the utility work activity based on historical information and production rates.				
Location (Station to Station)	Description of Utility Work Activity	Predecessor Activity	Duration (working days)	
20+50 to 26+58	CT Water to install 12" water main	State contractor semi final grading	7	
26+58 to 35+47	CT Water to install 12" water main	State contractor culvert installation & semi final grading	7	
35+47 to 31+00	CT Water to install 12" water main	State contractor semi final grading	7	

UTILITY WORK SCHEDULE Rev 08 02 2016			
CTDOT Project Number:	134-147	Town:	Stafford
Project Description: RT319+Rt190 Roundabout Construction			
CTDOT Utilities Engineer: Craig Wallace			
Phone:	(860)594-2696	Email:	Craig.Wallace@ct.gov
Utility Company: All Phase Enterprises Inc.			
Prepared By:	Alan Seagrave	Date Prepared:	11/7/2019
Phone:	(860)982-2308	Email:	al.jr@allphase.coxatwork.com
Scope of Work			
<p>The following is a description of all utility work planned to be completed in conjunction with the CTDOT project. The narrative describes all work to be carried out by the utility or its contractor, including temporary and permanent work required by the project as well as any additional utility infrastructure work the utility intends on performing within the project limits during the construction of the project.</p> <p>The scope of work is for the Installation of Sewer Main in RT-190 (West Stafford Road). Phase 1: Excavation and install of sewer pipe from station 74+62 to SMH1 (DOT STA 34+78.65) Install of SMH1. Phase 2: Excavation and install sewer pipe from SMH2 (DOT Sta 35+23.29) to SMH3 (DOT Sta 3+40.65) install of SMH2 and SMH3. Phase 3: Install of Pipe across Boxed Culvert from SMH1 to SMH2. Phase 4: Excavation and install of sewer pipe from SMH3 (DOT Sta 3+40.65) to SMH4 (DOT Sta 24+50.55) and Install of SMH4. Phase 5: Excavation and install of sewer pipe from SMH4 (DOT Sta 24+50.55) to SMH5 (DOT Sta 21+50.82) and Install of SMH5. Phase 6: Excavation and install of sewer pipe from SMH5 (DOT Sta 21+50.82) to SMH6 (Station 61+74.4) and Install of SMH6 install of sewer line from SMH6 to Sta 60+00.</p>			
Special Considerations and Constraints			
<p>The following describes the limiting factors that must be planned for in the scheduling and performance of the utility work. For example, restrictions on cut-overs, outages, limitations on customer service interruptions (e.g. nights, weekends, holidays), seasonal and environmental shutdown periods, long lead material procurements, etc..</p> <p>Please note that any time frame given as a start time or duration of work can be affected by many factors including, but not limited to, Make ready work, other utilities, permit applications, changes in scope, unforeseen excavation conditions, inclement weather, Holidays and emergency situations.</p>			

UTILITY WORK SCHEDULE Rev 3/2015

CTDOT Project Number: 134-147
 Utility Company: All Phase Enterprises Inc.
 Prepared By: Alan Seagrave
 Total Working Days: 85

Schedule

The following schedule identifies each major activity of utility work in sequential order to be performed by the utility or its contractor. The location of each activity of work is identified by the baseline stationing on the CTDOT plans. All activities identify the predecessor activity which must be completed before a utility work activity may progress. The duration provided is the number of working days required to complete the utility work activity based on historical information and production rates.

Location (Station to Station)	Description of Utility Work Activity	Predecessor Activity	Duration (working days)
Entire Project	Attend Preconstruction meeting, Order Material,CTDOT occurrence Permit,Schedule Manpower	Notification from CDOT to Proceed	0
Phase 1- Sta 74+62 to Sta 34+78.65	Lay out , Excavation and Install Sewer Pipe existing MH and install SMH1	Install 242 ft Pipe and rework existing MH and Install SMH1	8
Phase 2 - sta 35+23.29 to sta 3+40.65	Lay out , Excavation and Install Sewer Pipe SMH2 and SMH3	Install 146 ft Pipe and install of SMH2 and SMH3	7
Phase 3 - culvert work	Lay out , Install of Pipe across box culvert opening from SMH1 to SMH2	Install 40 ft Pipe between SMH1 and SMH2	5
Phase 4 - sta 3+40.65 to sta 24+50.55	Lay out , Excavation and Install Sewer Pipe SMH4	Install 260 ft Pipe and install of SMH3 and SMH4, Concrete encase Install SMH4	20
Phase 5 - Sta 24.50.55 to Sta 21+50.82	Lay out , Excavation and Install Sewer Pipe SMH5	Install 300 ft Pipe and install of SMH4 and SMH5, Install SMH5	20
Phase 6 - Sta 21+50.82 to Sta 61+74.4 to Sta 60+00	Lay out , Saw cut road, Excavation and Install Sewer Pipe, Patch Rd Install SMH6	Install 475 ft Pipe and install of SMH5 to SMH6, Install SMH6 (not in project area)	25

ITEM # 0302905A – WASHED STONE

Description: This work shall consist of furnishing, placing and shaping Washed Stone as shown on the plans to a depth of 4” or as directed by the Engineer.

Materials: The materials for this work shall conform to the following:

Washed Stone: Washed Stone shall be durable, washed free of loam, sand, clay, and other foreign material. Washed Stone shall conform to the following:

1. Type: Trap Rock or as acceptable to the Engineer.
2. Color: Uniform beige or grey as acceptable to the Engineer.
3. Size: 2” ± ½” or as acceptable to the Engineer.

The Engineer reserves the right to draw samples as necessary to assure that the material conforms to these specifications.

Geo-textile: Geo-textile shall conform to Section M.08.01-26 of the Standard Specification, and include all staples or other materials incidental to installation.

Construction Methods: The areas on which Washed Stone is to be placed shall be graded to a reasonably true surface. The Contractor shall cover all areas with Geo-textile as per the Manufacturer’s recommendation and approved by the Engineer.

Washed Stone shall be spread to a depth of 4” and shaped to the lines and grades shown on the plans or as directed by the Engineer. The depth stated in the contract to which the stone is to be placed is that required after settlement of the material has taken place.

Method of Measurement: This work will be measured for payment by the number of square yards of area on which Washed Stone has been placed and work accepted.

Basis of Payment: This work will be paid for at the contract unit price per square yards for "Washed Stone" which price shall include all materials, equipment, tools, labor and work incidental thereto.

Pay Item
Washed Stone

Pay Unit
Square Yard

ITEM #0913956A - PROTECTIVE FENCE (6' HIGH)

Description: Work under this item consists of furnishing and installing chain link fencing in accordance with the details shown on the plans and with these specifications.

Materials: Materials for this work shall be as follows:

1. **Chain Link Fabric:** The fabric shall be a black Polyvinyl Chloride (PVC) - coated steel chain link type, conforming to the specifications of ASTM F668, Class 2b, thermally fused and bonded. The #9 gage core wire shall be galvanized, PVC-coated, then woven to create a continuous fabric having a two inch mesh, knuckled at both top and bottom. The PVC coating shall be the color black as described in ASTM F934.
2. **Posts and Rails:** All rails and posts shall conform to the requirements of ASTM A53, Type E or S, Grade B, except that the hydrostatic test need not be performed. Pipe shall be Schedule 40, round pipe. Posts and rails may conform to the requirements of AASHTO M 181, Grade 2. All rails and posts shall be hot-dip galvanized in accordance with ASTM A123 after fabrication and welding of the base plates.
3. **Fence Fittings:** All materials shall conform to the requirements of ASTM F626. The ties used to fasten the fabric to the post and rails shall not be less than #6 and #9 gage respectively. All fence fittings and accessories shall be galvanized as specified in ASTM F626.
4. **Base plates:** Base plates shall conform to ASTM A709, Grade 36 and shall be shop welded to the fence posts. All burrs and sharp edges shall be removed and smoothed before galvanizing.
5. **Molded Pads:** All molded pads shall be manufactured from new unvulcanized elastomer and unused synthetic fibers, with a weight proportion of fiber content equal to approximately one-half of the total weight of the pad. The pads shall be formed into single sheets of 1/8 inch minimum thickness with a tolerance of plus or minus 10 percent. The pads shall have a Durometer hardness within the range of 70 to 90.
6. **Galvanizing Compound:** Galvanizing compound shall conform to the requirements of Federal Specification TT-P-641b or Military Specification MIL-P-21035.
7. **Preset Anchorage:** The anchorage shall be fabricated as detailed on the contract plans. Wire rod struts shall conform to ASTM A510, Grade 1030 and shall have a minimum tensile strength of 100,000 psi. These wire rod struts shall be securely welded to the ferrules with the welds capable of developing the tensile strength of the struts. Materials for ferrules shall conform to ASTM A108, Grade 12L14. A plastic cap shall be provided for sealing the bottom of each ferrule before placing concrete. Removable plastic washers of the same diameter as the ferrule and approximately 3/32" in thickness shall be provided for the top of each ferrule and shall be left in

place until the temporary supporting bolts are removed. Removable plastic caps shall be provided for sealing the top of each ferrule until the erection of railing posts.

All bolts with the exception of those used to anchor the base plates shall conform to the requirements of ASTM A307, Grade A. Bolts used to anchor the base plates shall conform to ASTM F3125 Grade A325. The washers shall be standard, circular plate washers conforming to the requirements of ASTM F844. After fabrication the preset anchorage shall be hot-dip galvanized in accordance with ASTM A123. Bolts and washers shall be galvanized in accordance with the requirements of ASTM F2329. A sample anchorage shall be submitted to the Engineer for approval prior to incorporation into the project.

Materials Certification and Testing: The Contractor shall furnish a Materials Certificate in accordance with Article 1.06.07 for the fabric, posts, rails, all fittings. A sample of PVC-coated fabric shall be submitted to the Department for testing the bond of the coating in accordance with the requirements of ASTM F668, Class 2b.

Shop Drawings: Before fabricating any materials, the Contractor shall submit shop drawings to the Engineer for approval in accordance with Article 1.05.02. These drawings shall include but not be limited to the following information: a layout plan showing all post and rail spacing, all fence and anchorage details, material lists and material designations and the name and telephone number of a person to contact who can answer questions about the shop drawings.

Construction Methods: The protective fence shall be accurately fabricated and installed in accordance with the plans and as directed by the Engineer.

The anchorages shall be fabricated for installation perpendicular to the grade of the parapets. The anchorage shall be accurately positioned and restrained against movement during the placement of the concrete.

Posts, with bottoms to be angle cut as required for grade, shall be welded to the base plates before galvanizing. Where required, the bottom of post shall be angle-cut and provided with a ¼-inch diameter drain hole according to the details shown on the plans. All welding shall conform to the requirements of Subarticle 6.03.03-4.

All base plates shall have full contact with the molded pad and concrete bearing surface and shall be caulked all around with a waterproof silicone rubber sealant.

All rails shall be erected to produce a smooth, continuous appearance with posts placed vertically and with all rails set parallel to the grade of the walls. The fabric shall be stretched tightly between end posts and securely fastened with stretcher bar bands. The fabric shall be attached to the rails and line posts as shown on the plans. Dome caps shall be installed on top of all posts.

Damage to the galvanized coating shall be repaired in accordance with ASTM A780 with two coats of galvanizing compound. The final dry film thickness of the galvanizing compound shall be a minimum of 2 to 3 mils.

PVC-coated fabric shall be handled with care so the coating is not damaged. Damage to PVC coating shall be repaired as directed by the manufacturer.

Method of Measurement: This work will be measured for payment by the number of linear feet of completed and accepted fence, measured horizontally from centerline to centerline of posts.

Basis of Payment: This work will be paid for at the contract unit price per linear foot for “Protective Fence (6’ High)”, complete and accepted in place, which price includes all materials, equipment, tools and work incidental thereto.

Pay Item
Protective Fence (6’ High)

Pay Unit
l.f.