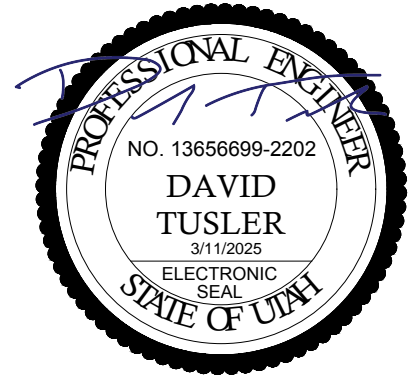


DOCUMENT 00 90 10
ADDENDUM No. 1



PART 1 GENERAL

1.1 DOCUMENT INCLUDES

- A. Changes to Plan Set.
- B. Changes to the Bid Schedule (Document 00 41 10)
- C. Clarifications

1.2 CONSTRUCTION CONTRACT

- A. The Construction Contract is known as EN012 - 20th Street & Valley Drive Intersection Improvements
- B. Date of this Addendum: March 11, 2025

PART 2 CHANGES

2.1 CHANGES TO PRIOR ADDENDA

- A. None

2.2 CHANGES TO BIDDING REQUIREMENTS

- A. New Bid Schedule 00 41 10 – BID SCHEDULE modified:
 - 1. Changed Bid Item 115 – *DETECTABLE WARNING SURFACE (GRAY)* quantity to 10 EA.
 - 2. Changed Bid Item 116 – *DETECTABLE WARNING SURFACE (YELLOW)* quantity to 3 EA.
 - 3. Changed Bid Item Description 123 - *APWA SPEC ROADBASE (1" MINUS, 8" THICK)* to *APWA SPEC ROADBASE (1" MINUS)*, changed the quantity to 700 TONS.
 - 4. Deleted Bid Item 124 – *APWA SPEC ROADBASE (1" MINUS, 6" THICK)*.
 - 5. Added Bid Item 124 - *UNTREATED BASE COURSE (UTBC)* added quantity for 30 TONS.
 - 6. Changed Bid Item 125 – *3" MINUS PIT RUN (GRANULAR BORROW)* quantity to 1500 TONS.
 - 7. Added Bid Item 126 – *GRANULAR BORROW* added quantity for 105 TONS.
 - 8. Changed Bid Item Description 126 - *ASPHALT PAVING (PG 58-28 SP - 1/2 CLASS II) 6" THICK* to *ASPHALT PAVING (PG 58-28 SP - 1/2 CLASS II)*, changed the quantity to 770 TONS, and renumbered to bid item 127.
 - 9. Changed Bid Item Description 127 - *ASPHALT PAVING (PG 64-34 SP - 1/2 CLASS III) 8" THICK* to *ASPHALT PAVING (PG 64-34 SP - 1/2 CLASS III)*, changed the quantity to 80 TONS, and renumbered to bid item 128.
 - 10. Changed Bid Item 160 - *UDOT STD POST P3, SLIP-BASE ANCHOR, AND MOUNT* quantity to 19 EA.
 - 11. Changed Bid Item 163 – *SIGNS* quantity to 30 EA.

- 12. Renumbered Bid Items 128-162.
- 13. Added Bid Item 164 - *PAVEMENT MARKING (12-INCH PREFORMED THERMOPLASTIC)* added quantity for 545 LF.
- 14. Renumbered Bid Items 163-164.

2.3 CHANGES TO AGREEMENT AND OTHER CONTRACT FORMS

A. None

2.4 CHANGES TO CONDITIONS OF THE CONTRACT

A. None

2.5 CHANGES TO SPECIFICATIONS

A. None

2.6 CHANGE TO DRAWINGS

- A. Sheet G1 - UDOT General Notes added to sheet G1.
- B. Sheet TS1 – A note has been added for pavement adjacent to Harrison denoting the UDOT pavement section. Pavement binder has been updated to PG 64-34 Per UDOT Standard Specification 02741. UTBC has been updated conform to UDOT Standard Specification 02721. Granular Borrow has been updated to conform to UDOT Standard Specification 02056.
- C. Sheet TS1 – For the UDOT pavement section, HMA thickness has been updated from 6" *HMA Class II Mix PG 58-28* to 8" *HMA (1/2 inch) PG 64-34*. UTBC thickness has been updated from 8" UTBC to 6" UTBC. Granular Borrow has been updated from 13" GB to 12" GB.
- D. Sheet RD1 – Pavement section has been updated to a UDOT section for pavement adjacent to Harrison.
- E. Sheet RD1 – Note 17 and Note 18 have been reversed. Yellow detectable warning panels adjacent to UDOT owned Harrison, Grey panels for all others.
- F. Sheet ST1 – Updated sheet to included raised crosswalk advanced signage.
- G. Sheet ST1 – Crosswalk striping on Harrison Blvd. updated from paint to thermoplastic.
- H. Sheet DT2 – Updated sheet to reference UDOT Standard Drawings.
- I. Sheet DT5 – Non-Conforming Ramp note added to detail 21.
- J. Sheet DT5 – Non-Conforming Ramp note added to detail 30 and detail 31.
- K. Sheet SG01 – Existing pole P2 has been added to the plans.
- L. Sheet SG01 – Pedestrian signal added to pole P3. 5.5' pedestrian pole updated to 11' pedestrian pole. The pole schedule was updated to reflect this change.
- M. Sheet SG01 – Existing 5.5' pedestrian pole (P8) has been updated to reset onto P9. The pole schedule was updated to reflect this change.
- N. Sheet SG01 – Pedestrian Signal Symbol has been updated on pole P5.
- O. Sheet SG01, SG02 - Renumbered all poles to account for added pole (P3).
- P. Sheet SG02 – Pedestrian signal circuit was updated to provide a circuit for the pedestrian signal head added to pole P3.

- Q. Sheet SG03 – *MAST ARM MOUNTED SIGN* was moved from a “remove” item to a “Relocate” item.
- R. Sheet SG03 – Column added for relocate *PEDESTRIAN PUSH BUTTON POLE* and *PEDESTRIAN PUSH BUTTON*. Quantity changed to 1.
- S. Sheet SG03 – Audible push button symbol updated.
- T. Sheet SG04 – *PEDESTRIAN PUSHBUTTON AND SIGN ASSEMBLY* quantity removed from Contractor Furnished Materials table.
- U. Sheet SG04 – Updated quantity of 7 *CONDUCTOR NO. 14 CABLE (PED CIRCUIT)* in the Contractor Furnished Materials Folder.
- V. Sheet SG05 – Removed quantity for *MULTI-VOLT/TYPE A (250W)* from State Furnished Materials Table.
- W. Sheet SG05 – Update quantity for *MULTI-VOLT/TYPE A (400W)*. Quantity changed to 1

2.7 CLARIFICATIONS

- A. Question: Can you send the bidders the Geotech Report on the wall?

Answer: Geotech report will not be provided to bidders. However, geotechnical conclusions and recommendations has been provided in item 2.7C. The full Geotechnical report will be provided to the successful bidder.

- B. Question: What spacing are the soil nails to be installed at?

Answer: The Contractor will determine the spacing as part of the contractor provided wall design as is dependent on the type of soil nail selected by the designer. Refer to Specification Section 13 50 30 SP – Soil Nail Retaining Walls, Section and Section 13 50 40 SP – Shotcrete for applicable requirements. Geotechnical Conclusions and Recommendations have been provided with this addendum in item 2.7C. The full Geotechnical Report will be provided to the successful bidder.

- C. Question: Can you provide the list of conclusions and recommendations of the Geotech Report?

Answer: Yes – The list of Geotechnical Conclusions and Recommendations from the geotechnical report are as follows:

Based on the field study and observed site conditions, a soil nail wall is considered to be feasible at this location. Depending on the groundwater elevation relative to the depth of the temporary excavation, temporary dewatering may be required to facilitate construction below the water table. We recommend the wall be designed considering hydrostatic pressures above the base of the wall in the long-term conditions. Additional recommendations for the design and construction of the soil nail wall are as follows:

- 1. Soil nail drilled hole lengths should be a minimum of 23 feet from the wall face.*
- 2. Shotcrete facing should be embedded a minimum of 2 feet below finished grade*
- 3. Permanent shotcrete facing should be a minimum of 8 inches thick*
- 4. Permanent shotcrete reinforcement and soil nail hardware should include corrosion protection such as epoxy coating or galvanization.*
- 5. Soil nails should include Class A corrosion protection by encapsulation as recommended in the GEC 7 (FHWA, 2015)*
- 6. The design life should be a period of 75 years.*

D. Question: For Storm Drain pipe bedding (UTBC), is it expected to be fully compacted before placing the pipe?

Answer: No, the bedding needs to be loose along the middle third of the bedding to avoid any point loads on the pipe. The outer thirds of the bedding and the haunch areas will need to be compacted

END OF SECTION

DOCUMENT 00 41 10

BID SCHEDULE

PART 1 GENERAL

1.1 DOCUMENT INCLUDES

- A. Bid schedules.
- B. Measurement and payment provisions.

1.2 CONSTRUCTION CONTRACT

- A. The Construction Contract is known as:
EN012 - 20th Street & Valley Drive Intersection Improvements

1.3 REFERENCES

- A. APWA 01 29 00: Payment Procedures.
- B. Document 00 50 00: Agreement.

PART 2 BID SCHEDULES

2.1 BASE BID

- A. Bid Schedules No. 1 & 2 below describe work basic to the Contract.

The rest of this page left blank intentionally

BID SCHEDULE No. 1**20th St - Valley Drive & Harrison Blvd, EN012 - 20th Street & Valley Drive Intersection Improvements**

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT PRICE	AMOUNT
101	MOBILIZATION	1	LS		
102	TRAFFIC CONTROL	1	LS		
103	SWPP PLAN, CLEANING, DUST CONTROL, WATERING	1	LS		
104	CONSTRUCTION STAKING AND SURVEYING	1	LS		
105	QUALITY ASSURANCE AND TESTING	1	LS		
106	CLEAR AND GRUB	1	LS		
107	UTILITY INVESTIGATION	15	HR		
108	REMOVE TREE	7	EA		
109	REMOVE CURB AND GUTTER	1137	LF		
110	REMOVE FRENCH DRAIN	30	LF		
111	REMOVE MEDIAN	55	LF		
112	REMOVE BOLLARD	2	EA		
113	REMOVE CONCRETE FLATWORK (6" THICK)	990	SF		
114	REMOVE COMMERCIAL DRIVEWAY (8" THICK)	1107	SF		
115	DETECTABLE WARNING SURFACE (GRAY)	10	EA		
116	DETECTABLE WARNING SURFACE (YELLOW)	3	EA		
117	REMOVE CONCRETE SIDEWALK (4" THICK)	1225	SF		
118	REMOVE ASPHALT PAVEMENT	2890	SY		
119	ROADWAY EXCAVATION (PLAN QUANTITY)	3450	CY		
120	REMOVE STORM DRAIN BOX	4	EA		
121	REMOVE STORM DRAIN PIPE	290	LF		
122	MANHOLE - ADJUST TO GRADE	1	EA		
123	APWA SPEC ROADBASE (1" MINUS)	700	TONS		
124	UNTREATED BASE COURSE (UTBC)	30	TONS		
125	3" MINUS PIT RUN (GRANULAR BORROW)	1500	TONS		
126	GRANULAR BORROW	105	TONS		
127	ASPHALT PAVING (PG 58-28 SP - 1/2 CLASS II)	770	TONS		
128	ASPHALT PAVING (PG 64-34 SP - 1/2 CLASS III)	80	TONS		
129	INSTALL CONCRETE SIDEWALK 6" THICK	3150	SF		
130	INSTALL CONCRETE SIDEWALK 4" THICK	1050	SF		
131	INSTALL CONCRETE SIDEWALK 8" THICK	160	SF		
132	INSTALL TYPE A CURB AND GUTTER	1200	LF		
133	INSTALL APWA TYPE E CURB AND GUTTER	330	LF		
134	INSTALL CURB AND GUTTER TRANSITION	2	EA		
135	INSTALL CONCRETE WATERWAY	1000	SF		
136	INSTALL COMMERCIAL DRIVEWAY (8" THICK)	630	SF		
137	INSTALL RAISED CROSSWALK	900	SF		
138	INSTALL SPEED TABLE PAVEMENT MARKING	2	EA		
139	INSTALL BIKE PAVEMENT MARKING	4	EA		
140	INSTALL TURN LANE PAVEMENT MARKING	5	EA		

141	REMOVE SIGN	8	EA		
142	REMOVE GUARDRAIL	140	LF		
143	INSTALL MIDWEST 31" W-BEAM GUARDRAIL 6-FT WOOD POST	100	LF		
144	SOIL NAIL WALL	1400	SF		
145	HIGHWAY LIGHTING SYSTEM 20TH ST	1	LS		
146	TRAFFIC SIGNAL IMPROVEMENTS	1	LS		
147	5-FT STORM DRAIN MANHOLE (PRECAST)	2	EA		
148	RECONSTRUCT CATCH BASIN WITH OGDEN CITY STORM DRAIN MANHOLE LID AND FRAME	1	EA		
149	15" RCP STORM DRAIN CLASS III	168	LF		
150	18" RCP STORM DRAIN CLASS III	40	LF		
151	18" RCP STORM DRAIN CLASS IV	32	LF		
152	24" RCP STORM DRAIN CLASS III	96	LF		
153	24" RCP STORM DRAIN CLASS IV	176	LF		
154	CATCH BASIN w/ CURB INLET	2	EA		
155	DOUBLE CATCH BASIN w/ CURB INLET	1	EA		
156	UDOT CB9 CATCH BASIN & CLEANOUT w/ GF1 BS	2	EA		
157	COMBINATION BOX/CLEANOUT BOX	1	EA		
158	MODIFIED COMBINATION BOX/CLEANOUT BOX	2	EA		
159	PAINT STRIPING	1	LS		
160	UDOT STD POST P3, SLIP-BASE ANCHOR, AND MOUNT	19	EA		
161	VEHICLE PROTECTION SYSTEM	126	LF		
162	LANDSCAPE & IRRIGATION	1	LS		
163	SIGNS	30	EA		
164	PAVEMENT MARKING (12-INCH PREFORMED THERMOPLASTIC)	545	LF		
165	PLOWABLE END SECTION	1	EA		
166	REMOVE PAVEMENT MARKINGS	1450	SF		

Total = \$ _____

Schedule 1 Total in Words _____

Signature _____

BID SCHEDULE No. 2**20th St - Valley Drive & Harrison Blvd, EN012 - 20th Street & Valley Drive Intersection Improvements**

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT PRICE	AMOUNT
201	UTILITY INVESTIGATION	10	HRS		
202	8" DUCTILE IRON CLASS 350	300	LF		
203	3" MINUS PIT RUN (GRANULAR BORROW)	275	TON		
204	RECONNECT EXISTING SERVICE LINE	1	EA		
205	EXISTING WATER MAIN CONNECTION	2	EA		
206	INSTALL FIRE HYDRANT ASSEMBLY	1	EA		
207	1" IRRIGATION SERVICE LATERAL	1	EA		

Total = \$ _____

Schedule Total in Words _____

Signature _____

Grand Total Schedules 1 & 2= \$ _____

Grand Total in Words _____

Signature _____

PART 3 MEASUREMENTS AND PAYMENT

3.1 GENERAL

- A. See measurement and payment procedures in APWA Section 01 29 00.
- B. ENGINEER will take all measurements and compute all quantities.
- C. CONTRACTOR will verify measurement and quantities.
- D. CONTRACTOR will provide all equipment, workers, and survey crews to assist ENGINEER in making measurements.
- E. Units of measurement are listed above in the bid schedule(s).

3.2 MOBILIZATION, Bid Item No. 101

- A. Measured by lump sum (LS).
- B. Payment covers cost of mobilization, demobilization, installation of temporary facilities and bringing all necessary construction equipment to the site. Payment will be made on a percentage basis as follows.

Percent of Amount Bid for Mobilization to be Paid	Percent of Original Contract Amount Earned
5	40
15	20
40	30
50	10

3.3 TRAFFIC CONTROL, Bid Item No. 102

- A. Measured by lump sum (LS).
- B. Payment covers traffic control plan (accepted by Ogden City), traffic control technician, flaggers (if necessary), temporary pavement markings, signs, barricades, and all traffic control devices (Refer to Section 01 55 26, Traffic Control) meeting MUTCD and Ogden City Standards. The traffic control plan shall be stamped by a Professional Engineer and submitted to both Emergency service and Ogden City's traffic engineer for approval.
- C. 20th Street and Valley Street are expected to be closed to thru traffic during the project.
- D. Payment covers any necessary Contractor coordination with UTA for construction constraints on bus service on 20th Street.

3.4 SWPP PLAN, SITE CLEANING, DUST CONTROL, WATERING, Bid Item No. 103

- A. Measured by lump sum (LS).
- B. Payment covers the CONTRACTOR in obtaining coverage and following all requirements of the State of Utah DWQ General Permit for Storm Water Discharges from Construction Activities or the "Construction General Permit" (CGP). Permit

No.RC00000found at:<https://documents.deq.utah.gov/water-quality/stormwater/construction/DWQ-2020-013890.pdf>. The CONTRACTOR will be listed as an Operator and Ogden City will be listed as the Owner. Payment covers the CONTRACTOR to meet all requirements of the CGP. Requirements of this permit include, but are not limited to:

- a. Preparation and maintenance of a storm water pollution prevention plan (SWPPP). The SWPPP must be submitted to and approved by City prior to beginning construction.
 - b. Submitting a Notice of Intent (NOI) prior to construction.
 - c. Maintaining active permit coverage throughout all phases of construction. It is the responsibility of the CONTRACTOR to ensure that permit coverage does not expire. Once the site meets the conditions for terminating CGP coverage, the CONTRACTOR must pass a final inspection with the City SWPPP inspector prior to submitting the Notice Of Termination (NOT) to DWQ.
 - d. Installing and maintaining all storm water Best Management Practices (BMPs) in accordance with the approved SWPPP that are not listed as separate bid items, which may include; silt fence, construction fencing, inlet protection, inlet clean-out (if necessary).
 - e. Performing necessary Contractor SWPPP inspections in accordance with the SWPPP.
 - f. Maintaining all required documentation (inspection reports, corrective action reports, SWPPPs, etc.). Ogden City may request documents associated with the project for up to three years from the date the site is finalized.
- B. The CGP outlines the required steps for preparing and maintaining the SWPPP, provides guidelines, examples, templates, BMP specifications, etc.
- C. Payment shall cover dust control/watering of the site, daily maintenance of the construction zone, **daily sweeping at a minimum**, maintaining BMP devices, and maintaining general cleanliness of the site and staging areas during the construction process to the satisfaction of the City. Trenches shall be maintained at all times to avoid ruts larger than a 2-inch depth.
- D. Payment shall cover temporary water meter rental fees billed to the Contractor from the City. Contractor will NOT be billed for water usage for the project but must utilize a meter to obtain City water for the project.

3.5 CONSTRUCTION STAKING AND SURVEYING, Bid Items 104

- A. Measured by lump sum (LS).
- B. Payment shall be as a portion of the lump sum price bid and shall include all costs to provide construction surveying and staking for the project including all labor by the Contractor's Surveyor, equipment, materials and supplies necessary to provide survey preparation, control, staking offsets and markers necessary for construction of the water main, roadway, curb & gutter elevations, sidewalk elevations, driveways, and appurtenances associated with the project.

3.6 QUALITY ASSURANCE AND TESTING, Bid Items 105

- A. Measurement will be made by lump sum (LS).
- B. Payment shall be for all costs for the Contractor to supply 3rd party testing for quality control/assurance throughout the duration of the project. Testing is to follow Ogden City Standards and be according to APWA Section 01 45 00.
- C. Payment shall include submittals to the ENGINEER before construction and reports to the ENGINEER during construction. Notify Owner (ENGINEER or Inspector) to coordinate location of tests.
- D. Payment shall include testing on all concrete according to APWA Section 03 30 05. Frequency of testing shall be per day of pouring and not per truck.
- E. Payment shall include testing on all asphalt surfaces according to Ogden Standards and Section 32 12 05 SP. Asphalt shall be considered 500 tons to 1500 tons of asphalt and shall be tested accordingly.

3.7 CLEAR AND GRUB, Bid Items 106

- A. Measured by lump sum (LS).
- B. Clear and grub includes the removal of items within the cut/fill line including but is not limited to incidental landscaping items and tree roots/STUMPS. Excavated backfill material may be used as fill at locations outside of the roadway section as allowed by the ENGINEER. Includes disposal of excess excavated material.
- C. Excavation completed for CONTRACTOR'S benefit or excavation error, dewatering of excavation slough or overbreak is incidental work.
- D. For material ordered removed and replaced (authorized extra excavation and backfill), measurement of quantities for payment shall be made to the following **pay limits**.
 - 1. Upper limit of excavation is the proposed excavation limit.
 - 2. Lower and lateral limits are as authorized by ENGINEER.
 - 3. Volumes of open spaces (e.g. manholes, pipes, etc.) will not be measured in backfill calculations.

3.8 UTILITY INVESTIGATION, Bid Items 107, 201

- A. Measurement will be made by counting the actual number of hours of work completed by the machine and operator to investigate miscellaneous underground features as required by the ENGINEER (HR). No allowance of time will be made for transporting the backhoe to and from the job site when the backhoe is located on the site of the Contract.
- B. Payment covers furnishing and providing labor and equipment for investigation of existing miscellaneous pipelines, wires and cables, and sub-surface features as **required by the ENGINEER**. ENGINEER must approve time before Contractor is to proceed with any paid utility investigation.

3.9 REMOVE TREE, Bid Items 108

- A. Measured per each tree and stump (EA) removed as one.
- B. Payment includes removal and disposal of tree and stump and grinding of stump. Contractor shall remove stump and root 12 inches below existing ground or base of proposed grade (ex. base of pavement section or base of driveway UTBC) whichever is greater.

3.10 REMOVE CURB AND GUTTER, Bid Item 109

- A. Measurement will be made by linear foot (LF), measured along the top back of curb (TBC).
- B. Payment covers the cost of furnishing all necessary materials and equipment, labor, placement, compaction, and testing to place curb and gutter in accordance with Ogden City Standard Drawing RD-4 (Refer to Section 32 16 13, Driveway, Sidewalk, Curb, Gutter).
- C. Payment includes formwork, joints, expansion, and dowelling into the existing curb and gutter.
- D. Payment includes curb & gutter transitions from type "A" (Or B1) to existing.
- E. Payment includes sealing the concrete with a curing compound.

3.11 REMOVE FRENCH DRAIN, Bid Item 110

- A. Measurement will be made per linear foot (LF) of removed French drain.
- B. Payment includes all labor, materials, and equipment required to remove and dispose of existing French drain components, including perforated pipe, gravel, and geotextile fabric.
- C. Payment also includes excavation, backfilling, compaction, and surface restoration to match existing conditions.
- D. Any existing connections to the storm drain system that must be capped or reconfigured as a result of the removal shall be considered incidental to this item.
- E. The contractor shall coordinate with the Engineer to ensure proper removal and restoration of the impacted area.
- F. All work shall conform to APWA Standard Specification 02 41 13.

3.12 REMOVE MEDIAN, Bid Item 111

- A. Measurement will be made per linear foot (LF) of median curb removed measured along the top back of curb.
- B. Payment includes all labor, materials, and equipment required to saw cut, remove, and dispose of existing concrete, asphalt, or other materials within the median.
- C. Payment also includes excavation, backfilling, compaction, and surface restoration to match surrounding conditions.
- D. The contractor shall coordinate with the Engineer to ensure proper removal and

restoration of the impacted area.

- E. All work shall conform to APWA Standard Specification 02 41 13.

3.13 REMOVE BOLLARD, Bid Item 112

- A. Measurement will be made per each (EA) bollard removed.
- B. Payment includes all labor, materials, and equipment required to remove and dispose of existing bollards, including concrete footings if applicable.
- C. Payment also includes excavation, backfilling, compaction, and surface restoration to match surrounding conditions.
- D. Any adjacent pavement, sidewalk, or landscaping disturbed during removal shall be repaired to match existing or better conditions.
- E. The contractor shall coordinate with the Engineer to ensure proper removal and restoration of the impacted area.
- F. All work shall conform to APWA Standard Specification 02 41 13.

3.14 REMOVE CONCRETE FLATWORK (6" THICK), Bid Items 113

- A. Measurement will be made by square foot (SF) of any existing concrete in its place is incidental to this item. This item is to cover concrete removal for driveway approaches and pedestrian ramps (6" thick).
- B. Payment covers all cost of labor, materials, equipment, and appurtenances required to remove and dispose of concrete as shown on the project plans, including sidewalks, and driveways. Saw cutting shall be considered incidental to removal of concrete. (Refer to Section 02 41 14, Pavement Removal)

3.15 REMOVE COMMERCIAL DRIVEWAY (8" THICK), Bid Item 114

- A. Measurement will be made by square foot (SF) of any existing concrete removed. This item is to cover concrete removal for driveway approaches and pedestrian ramps (8" thick).
- B. Payment covers all cost of labor, materials, equipment, and appurtenances required to remove and dispose of concrete as shown on the project plans, including driveways. Saw cutting shall be considered incidental to removal of concrete. (Refer to Section 02 41 14, Pavement Removal)

3.16 DETECTABLE WARNING SURFACE (GRAY), Bid Items 115

- A. Measurement shall be per each ramp location (EA) basis. Measurement to be by each new ped ramp location as identified on the bid schedule and in the plan set.
- B. Payment shall be at the per each price and shall include all costs for labor, materials, tools, and equipment required to furnish and install the detectable warning surface that is gray in color. Also includes all other work necessary to complete this item to specifications,

Ogden City Standards, and APWA standard plan #238.

3.17 DETECTABLE WARNING SURFACE (YELLOW), Bid Items 116

- A. Measurement shall be per each ramp location (EA) basis. Measurement to be by each new ped ramp location as identified on the bid schedule and in the plan set.
- B. Payment shall be at the per each price and shall include all costs for labor, materials, tools, and equipment required to furnish and install the detectable warning surface that is gray in color. Also includes all other work necessary to complete this item to specifications, Ogden City Standards, and APWA standard plan #238.

3.18 REMOVE CONCRETE SIDEWALK (4" THICK), Bid Items 117

- A. Measurement will be made by square foot (SF) of any existing concrete removed. This item is to cover concrete removal for sidewalks (4" thick).
- B. Payment covers All cost of labor, materials, equipment, and appurtenances required to remove and dispose of concrete as shown on the project plans, including sidewalks, and driveways. Saw cutting shall be considered incidental to removal of concrete. (Refer to Section 02 41 14, Pavement Removal)

3.19 REMOVE ASPHALT PAVEMENT, Bid Items 118

- A. Measured by square yard (SY) of asphalt pavement removed.
- B. Remove Asphalt Pavement shall be limited to the locations indicated on the Drawings (plan quantity) or as directed by the Engineer. No direct payment shall be made for removal at locations not on the Drawings unless written direction is provided by the Engineer. The unit price named shall include all costs associated with; saw cutting; demolition, removal, and disposal of waste material; and all other work or materials required to complete the work. (Refer to Section 02 41 14, Pavement Removal).

3.20 ROADWAY EXCAVATION (PLAN QUANTITY), Bid Items 119

- A. Measured by cubic yard (CY).
- B. Payment includes all costs incidental to roadway excavation. Pay quantities will be computed in the original position to the neat lines and grades or pay limits of excavation specified using the given plan quantities.
- C. Roadway excavation includes the removal of all items, not including roadway asphalt, within the proposed roadway area including, but not limited to native soil, dirt fill, rocks, boulders, tree roots, and any other material removed to the designed depth for the proposed engineered roadway. Includes the hauling and disposal of excavated material.
- D. Excavation completed for CONTRACTOR'S benefit or excavation error, dewatering of excavation slough or overbreak is incidental work.
- E. For material ordered removed and replaced (authorized extra excavation and backfill), measurement of quantities for payment shall be made to the following **pay limits**.

1. Upper limit of excavation is the proposed excavation limit.
2. Lower and lateral limits are as authorized by ENGINEER.

3.21 REMOVE STORM DRAIN BOX, Bid Items 120

- A. Measured by each structure (EA) removed.
- B. Payment includes all costs and equipment incidental to catch basin/manhole/junction box/inlet removal and disposal. Includes any necessary approved backfill to the necessary grade under the direction of the ENGINEER.
- C. Payment also includes any hauling, labor, disposal, compaction and testing which may be required by the ENGINEER.

3.22 REMOVE STORM DRAIN PIPE, Bid Items 121

- A. Measurement shall be made per linear foot (LF) basis, measured in the field, to the nearest foot. Unless indicated otherwise, measurement to be along the pipe from the inside face to inside face of manholes or other structures, or to the end of the pipe where no structure exists.
- B. Payment shall be made at the linear foot price and shall include all costs for labor, tools, materials, and equipment involved in excavating, removing, hauling and disposing of the existing storm drainpipe as shown on the drawings. Payment also includes excavation; and restoring any adjacent facilities disturbed by construction activities associated with this item.
- C. The concrete plug of the removed pipe connection to the existing and preserved storm structure is incidental to the work and included in the bid item.

3.23 MANHOLE – ADJUST TO GRADE, Bid Items 122

- A. Measurement will be made by actual count per each (EA) adjusted to finish grade with collar installed. Manholes are expected to be lowered for paving, then raised to grade with collar after paving.
- B. Payment covers all tools, labor, materials, and equipment to lower and raise existing structures to be flush with new grade as shown on Drawings. Payment covers all costs associated with raising/lowering the existing structure; including grade rings, removal and disposal of existing materials, concrete collars, concrete seal, reinforcement rebar, labor, and all other appurtenant work not otherwise stipulated to be paid for separately.
- C. Payment covers the required coordination with Ogden City for ordering manhole lids for existing manholes. New manhole covers will NOT be paid for with this item.
- D. Concrete for collars shall be obtained from batched concrete (i.e. Jack B. Parsons, Geneva, etc.). Concrete must be batched with fiber reinforcement and sealed with a curing compound.

3.24 APWA SPEC ROADBASE (1" MINUS), Bid Items 123

- A. Measurement will be made by tons (TONS) of untreated base course placed and compacted.
- B. Payment covers the cost of furnishing all necessary materials, aggregate base course, labor, hauling, placement, and compaction to produce an acceptably deep aggregate base course layer per Ogden City Standard Drawings RD-3 and project plan specified thickness. Payment covers the cost of installing the full thickness of aggregate base course layer and preparation for pavement installation. (Refer to Section 33 05 25, Pavement Restoration).
- C. Payment covers the cost of all excavation, removal/disposal of existing, and all grading/compaction to finish grade before concrete pour and/or before asphalt paving.
- D. No payment will be made for aggregate base course purchased and installed as a temporary construction measure.
- E. Aggregate base course shall be untreated. No recycled roadbase (or any recycled material) will be accepted for roadbase on the project.

3.25 UNTREATED BASE COURSE (UTBC), Bid Items 124

- A. Measurement will be made by tons (TONS) of untreated base course placed and compacted.
- B. Payment covers the cost of furnishing all necessary materials, aggregate base course, labor, hauling, placement, and compaction to produce an acceptably deep aggregate base course layer per Ogden City Standard Drawings RD-3, **UDOT Standard Specifications** and project plan specified thickness. Payment covers the cost of installing the full thickness of aggregate base course layer and preparation for pavement installation. (Refer to Section 33 05 25, Pavement Restoration).
- C. Payment covers the cost of all excavation, removal/disposal of existing, and all grading/compaction to finish grade before concrete pour and/or before asphalt paving.
- D. No payment will be made for aggregate base course purchased and installed as a temporary construction measure.
- E. Aggregate base course shall be untreated. No recycled roadbase (or any recycled material) will be accepted for roadbase on the project.

3.26 3" MINUS PIT RUN (GRANULAR BORROW), Bid Items **125, 203**

- A. Measurement will be made by tons (TONS) of 3" Minus structural fill placed and compacted.
- B. Payment covers the cost of furnishing all necessary materials, granular borrow, labor, hauling, placement, and compaction to produce an acceptably deep structural fill layer per Ogden City Standard Drawings RD-3 and project plan specified thickness. Payment covers the cost of installing the full thickness of granular borrow layer and preparation for roadbase installation.
- C. Payment covers the cost of all excavation, removal/disposal of existing.

3.27 GRANULAR BORROW, Bid Items 126

- D. Measurement will be made by tons (TONS) of 3” Minus structural fill placed and compacted.
- E. Payment covers the cost of furnishing all necessary materials, granular borrow, labor, hauling, placement, and compaction to produce an acceptably deep structural fill layer per Ogden City Standard Drawings RD-3, **UDOT Standard Specifications** and project plan specified thickness. Payment covers the cost of installing the full thickness of granular borrow layer and preparation for roadbase installation.
- F. Payment covers the cost of all excavation, removal/disposal of existing.

3.28 ASPHALT PAVING (PG 58-28 SP - 1/2 CLASS II), Bid Items 127

- A. Measurement will be made by tons (TONS) of HMA placed per project plans and specifications. Asphalt shall be Class II per Section 32 12 05 SP.
- B. Payment covers the cost of furnishing all necessary materials, asphalt, tack coat equipment, labor, hauling, placement, and compaction to produce an acceptably deep excavation asphalt section per Ogden City Standard Drawing RD-3. Payment covers the cost of installing the full thickness of hot-mixed, hot laid asphalt concrete pavement (with no more than 15% recycled asphalt content per Ogden City Standards). Refer to Section 32 12 05 SP, Bituminous Concrete for more details.

3.29 ASPHALT PAVING (PG 64-34 SP – ½ CLASS II), Bid Items 128

- C. Measurement will be made by tons (TONS) of HMA placed per project plans and specifications. Asphalt shall be Class II per Section 32 12 05 SP.
- D. Payment covers the cost of furnishing all necessary materials, asphalt, tack coat equipment, labor, hauling, placement, and compaction to produce an acceptably deep excavation asphalt section per Ogden City Standard Drawing RD-3 and **UDOT Standard Specifications**. Payment covers the cost of installing the full thickness of hot-mixed, hot laid asphalt concrete pavement (with no more than 15% recycled asphalt content per Ogden City Standards). Refer to Section 32 12 05 SP, Bituminous Concrete for more details.

3.30 INSTALL CONCRETE SIDEWALK __” THICK, Bid Items **No. 129, 130, 131**

- A. Measurement will be made by square foot (SF) of concrete sidewalk installed.
- B. Payment includes all costs associated with labor, materials, equipment, coordination, and appurtenances required to install concrete sidewalk and flatwork as shown on the project plans, complete and in place. This includes:
 - 1 Excavation, grading, and subgrade preparation.
 - 2 Formwork, reinforcement (if required), concrete placement, and finishing.
 - 3 Curing and protection of newly installed sidewalk.
 - 4 Backfilling and restoration of disturbed areas.

5 Removal and disposal of excess materials and debris.

C. All work shall conform to APWA Standard Specification 32 16 13.

3.31 INSTALL TYPE A CURB AND GUTTER, Bid Item No. 132

INSTALL APWA TYPE E CURB AND GUTTER, Bid Item No. 133

A. Measurement will be made by linear foot (LF) of concrete curb and gutter installed.

B. Payment includes all costs associated with labor, materials, equipment, coordination, and appurtenances required to install curb and gutter as detailed in the plans and specified in the APWA Standard Plans and Ogden City Standards, complete and in place. This includes:

- 1 Excavation, grading, and subgrade preparation.
- 2 Formwork, reinforcement (if required), concrete placement, and finishing.
- 3 Curing and protection of newly installed curb and gutter.
- 4 Backfilling and restoration of disturbed areas.
- 5 Removal and disposal of excess materials and debris.

C. All work shall conform to APWA Standard Specification 32 16 13.

3.32 INSTALL CURB AND GUTTER TRANSITION, Bid Item No. 134

A. Measurement will be made by each (EA) concrete curb transition installed.

B. Payment includes all costs associated with labor, materials, equipment, coordination, and appurtenances required to install curb and gutter as detailed in the plans and specified in the APWA Standard Plans and Ogden City Standards, complete and in place. This includes:

- 1 Excavation, grading, and subgrade preparation.
- 2 Formwork, reinforcement (if required), concrete placement, and finishing.
- 3 Curing and protection of newly installed curb and gutter.
- 4 Backfilling and restoration of disturbed areas.
- 5 Removal and disposal of excess materials and debris.

C. All work shall conform to APWA Standard Specification 32 16 13.

3.33 INSTALL CONCRETE WATERWAY, Bid Item No. 135

INSTALL COMMERCIAL DRIVEWAY (8" THICK), Bid Item 136

INSTALL RAISED CROSSWALK, Bid Item 137

A. Measurement will be made by square foot (SF) of Concrete item installed.

B. Payment includes all costs associated with labor, materials, equipment, coordination, and appurtenances required to install the concrete waterway as detailed in the plans and

specified in the APWA Standard Plans and Ogden City Standards, complete and in place. This includes:

- 1 Excavation, grading, and subgrade preparation.
- 2 Formwork, reinforcement (if required), concrete placement, and finishing.
- 3 Curing and protection of newly installed concrete waterway.
- 4 Backfilling and restoration of disturbed areas.
- 5 Removal and disposal of excess materials and debris.

C. All work shall conform to APWA Standard Specification 32 16 13.

3.34 INSTALL SPEED TABLE PAVEMENT MARKING, Bid Item 138

INSTALL BIKE PAVEMENT MARKING, Bid Item 139

INSTALL TURN LANE PAVEMENT MARKING, Bid Item 140

- A. Measured per each (EA) installed pavement marking.
- B. Payment includes furnishing and installing pavement marking symbols per Ogden City, MUTCD and APWA standards.
- C. All work shall conform to APWA Standard Specification 32 17 23. Includes necessary surface preparation and coatings.

3.35 REMOVE SIGN, Bid Item 141

- A. Measured per each (EA) sign removed.
- B. Payment includes removal, transportation, and disposal of the sign and post. Payment also include includes all labor, equipment, and materials necessary to remove the sign without damage to adjacent infrastructure. Any existing foundations or supports that interfere with new construction shall be removed and disposed of.
- C. The contractor shall coordinate with the Engineer to determine if removed signs are to be salvaged or disposed of.
- D. All work shall conform to APWA Standard Specification 02 41 13.

3.36 REMOVE GUARDRAIL, Bid Item 142

- A. Measured by linear foot (LF) of guardrail removed.
- B. Payment includes dismantling, removal, and disposal of existing guardrail components.
- C. All work shall conform to APWA Standard Specification 02 41 13

3.37 INSTALL MIDWEST 31" W-BEAM GUARDRAIL 6-FT WOOD POST, Bid Item 143

- A. Measured by linear foot (LF) of installed guardrail.
- B. Payment includes furnishing and installing Midwest 31" W-beam guardrail with 6-ft wood posts, including all materials, labor, and equipment necessary for installation per project plans

C. All work shall conform to APWA Standard Specification 34 71 13.

3.38 SOIL NAIL WALL, Bid Item 144

- A. Measurement will be made per square foot (SF) of installed soil nail retaining wall, including all necessary design, construction, and testing requirements.
- B. Payment includes all labor, materials, tools, equipment, and design services necessary to construct a complete soil nail retaining wall as shown on the project plans and in accordance with approved submittals.
- C. Work includes, but is not limited to:
 - 1 Design and engineering of the soil nail wall by a professional engineer licensed in the State of Utah, including preparation and submission of calculations and drawings.
 - 2 Excavation, grading, and preparation of the installation area.
 - 3 Drilling and installation of soil nails, including grouting and tensioning.
 - 4 Application of initial and final shotcrete facing, including reinforcement and architectural treatment per approved test panels.
 - 5 Installation of drainage elements, including weep holes and geocomposite drains.
 - 6 Monitoring and control of deformations, verification and proof testing of soil nails, and required documentation of testing results.
 - 7 Cleanup and restoration of all disturbed areas to pre-construction conditions.
- D. All work shall conform to Special Provision 13 50 30 S.

3.39 HIGHWAY LIGHTING SYSTEM 20TH ST, Bid Item 145

- A. Measured per lump sum (LS).
- B. Payment includes all labor, materials, and equipment necessary for a fully operational lighting system, including poles, luminaires, conduit, conductors, junction boxes, trenching, and connections per Ogden City and APWA Standards
- C. Includes the installation of foundations, grounding systems, and all necessary wiring.
- D. Includes installation of electrical service for the landscape controller and Strong Box SB-16SS.
- E. The contractor shall coordinate with the power company for electrical service connections.
- F. All work shall conform to APWA Standard Specification 26 56 19. Testing and commissioning of the lighting system must be completed before final acceptance.

3.40 TRAFFIC SIGNAL IMPROVEMENTS, Bid Item 146

- A. Measured per lump sum (LS).
- B. Payment includes all labor, equipment, materials, and installation necessary to complete the traffic signal improvements, including signal poles, controllers, detection systems, conduit, conductors, and connections to existing infrastructure per UDOT Standards.

C. All work shall conform to APWA Standard Specification 34 41 13.

3.41 5-FT STORM DRAIN MANHOLE (PRECAST), Bid Item 147
RECONSTRUCT CATCH BASIN WITH OGDEN CITY STORM DRAIN MANHOLE
LID AND FRAME, Bid Item 148
CATCHBASIN W/ CURB INLET, Bid Item 154
DOUBLE CATCHBASIN W/ CURB INLET, Bid Item 155
UDOT CB9 CATCH BASIN & CLEANOUT W/ GF1 BS, Bid Item 156
COMBINATION BOX / CLEANOUT BOX, Bid Item 157
MODIFIED COMBINATION BOX / CLEANOUT BOX, Bid Item 158

- A. Measured and paid for on a per each (EA). Measurement to be by actual field count of each type, and size of installed precast concrete structure identified on the bid schedule and in the plan set.
- B. Payment includes all labor, equipment, furnishing and installing each type of precast concrete storm drain manhole or precast concrete storm drain catch basin, complete, including, but not limited to: additional excavation; reinforced concrete; supplying and installing all precast structures, risers, grates, and covers; ladder rungs; grouted channel troughs; connection to existing and/or new pipes, backfill material, compaction, testing, materials and labor for backfill, and all other items needed to complete the work including cleaning and placing structures in service.
- C. Payment also covers all costs for labor, equipment, and material required to raise and concrete collar the structure to the finished asphalt grade.
- D. The connection to any pipe culvert or other drainage feature will be incidental to construction and no separate payment will be made for this work.
- E. The City will make no separate payment for testing upon failure of visual inspection.
- F. Payment for base course and asphalt restoration are covered under their respective bid items.

3.42 ___” RCP STORM DRAIN CLASS ___, Bid Items 149 – 153

- A. Measured and paid for on a linear foot basis (LF), measured in the field along centerline of pipe, to the nearest foot, for the type, size and class indicated in the Bid Schedule between structures. Unless indicated otherwise, measurement to be along the pipe from the inside face to inside face of manholes, catch basins, or other structures, or to the end of the pipe where no structure exists, with no deduction for fittings.
- B. Payment includes but is not limited to: Furnishing and installing pipe of the material, type, size and class indicated, including gaskets, adapters, plugs; trench excavation; excavation for bells; utility potholing; capping or plugging of the existing storm drain pipe(s) to be abandoned; supplying, installing, compacting and testing imported trench zone and pipe zone materials in accordance with the drawings and Ogden City Standards; trench boxes or shoring as needed; dewatering; management of storm water during construction; trench dewatering; connection of the existing storm drain to the new storm drain; reconnection of

existing storm drain laterals to the new storm drain manholes; connecting new storm drain to existing structures; pipe cutting; field collars; field closures; cleaning new pipe and providing CCTV inspection of new pipe prior to acceptance by owner, commissioning pipelines. There will be no payment for over excavation unless approved in written form by the engineer prior to the excavation. Payment shall also include measures to protect the new pipeline from being damaged or filled with sediment from a runoff event during construction.

- C. Payment for base course material and asphalt surface restoration are covered under their respective bid items.

3.43 PAINT STRIPING, Bid Item 159

- A. Measurement will be made by lump sum (LS).
- B. Payment covers the cost of furnishing all necessary materials, labor, and transportation to restripe the roadway after patching/paving is completed. All impacted striping shall be restored as shown in the plans.
- C. Payment covers any temporary measures required (i.e., traffic control, tabbing) to delineate striping between paving and striping.

3.44 UDOT STD POST P3, SLIP-BASE ANCHOR, AND MOUNT, Bid Item 160

- A. Measured per each post system (EA).
- B. Payment includes all work incidental to the installation of post according to UDOT Standard, including but not limited to the post, anchor hardware, and concrete foundation. Posts shall only be bolted in the sidewalk if there is no park strip and the sidewalk is 6' wide or greater.
- C. As part of this bid item, contractor shall restore and return "in like kind" and in better or equal condition, the area impacted as a result of the sign installation.
- D. Refer to UDOT Standard drawings SN1, SN2B, SN8, SN9A, SN9B, SN10, SN11A, SN12A & SN12B for post, hardware, and anchor elements.

3.45 VEHICLE PROTECTION SYSTEM, Bid Item 161

- A. Measured by linear foot (LF) of installed vehicle protection system.
- B. Payment includes all labor, equipment, and materials necessary for a complete and functional system per the manufacturer's specifications.
- C. The system shall include all components (i.e., cables, supports, posts, foundations, and hardware) required for proper installation.
- D. Payment includes excavation, backfill, concrete foundation installation, assembly of posts and rails, cable tensioning, and all necessary fittings.
- E. All visible components shall be coated with black PVC coating.
- F. Installation shall be in accordance with the approved manufacturer's specifications and

applicable Ogden City Standards.

- G. All work shall conform to APWA Standard Specification 34 71 13, Special Provision 09 96 00 S and 32 31 00 S.

3.46 LANDSCAPE & IRRIGATION, Bid Item 162

- A. Measurement will be made by lump sum (LS) for all landscape work completed.
- B. Payment includes all labor, materials, and equipment required for furnishing, installing, and maintaining all landscaping elements, including topsoil, sod, mulch, trees, shrubs, and other plantings.
- C. Payment includes all excavation, grading, and placement of imported topsoil and soil amendments to support healthy plant growth.
- D. Payment includes the complete installation of an irrigation system, including piping, valves, sprinkler heads, controllers, meter, and connection to the water supply.
- E. Contractor shall be responsible for coordination with the local utility provider for the installation of water service to the irrigation system.
- F. Payment includes staking and planting of trees and shrubs per the project plans, ensuring proper spacing, depth, and alignment.
- G. All plant materials shall be installed per best horticultural practices, including mulching, staking, and initial watering to ensure establishment.
- H. Payment includes an establishment and maintenance period of 90 days, during which the contractor shall be responsible for irrigation, weeding, fertilizing, mowing, pruning, and replacing any dead or unhealthy plantings at no additional cost.
- I. The contractor shall restore all disturbed areas, including reseeding or resodding any areas impacted by construction.
- J. All landscape work shall conform to APWA Standard Specification 32 92 00, 32 93 13, 32 93 43, and 31 98 00 and Ogden City Standards.

3.47 SIGNS, Bid Items 163

- A. Measured per each sign (EA).
- B. Payment includes all work incidental to the fabrication, installation, and placement of a sign, including but not limited to the sign and mounting hardware.

3.48 PAVEMENT MARKING (12-INCH PREFORMED THERMOPLASTIC), Bid Items 164

- A. Measurement will be made by linear foot (LF).
- B. Payment covers the cost of furnishing all necessary materials, labor, and transportation to restripe the roadway after patching/paving is completed. All impacted striping shall be restored as shown in the plans as required by UDOT specifications.
- C. Payment covers any temporary measures required (i.e. traffic control, tabbing) to delineate striping between paving and striping.

3.49 PLOWABLE END SECTION, Bid Items 165

- A. Measurement shall be made per each (EA) installed plowable end section.
- B. Payment includes all labor, materials, tools, and equipment necessary to furnish and install the plowable end section in accordance with project plans and specifications.
- C. Work includes, but is not limited to:
 - 1 Excavation, grading, and preparation of the installation area.
 - 2 Placement and securing of the plowable end section, ensuring proper alignment with adjacent infrastructure.
 - 3 Backfilling and compaction around the installed unit to match existing or proposed grades.
 - 4 Concrete, hardware, and necessary reinforcement required for proper installation.
 - 5 Restoration of any disturbed surfaces, including adjacent pavement, landscape, or curb and gutter.
 - 6 Testing and verification that the installation meets Ogden City and APWA standards.
- D. The contractor shall coordinate with the Engineer to ensure proper location, alignment, and compliance with all applicable standards.
- E. All work shall conform to APWA Standard Specification 32 16 13 and Ogden City Standards.

3.50 REMOVE PAVEMENT MARKINGS, Bid Items 166

- A. Measurement shall be made per square foot (SF) of pavement markings removed.
- B. Payment includes all labor, materials, tools, and equipment necessary to remove existing pavement markings as indicated in the project plans.
- C. Work includes, but is not limited to:
 - 1 Removal of all types of pavement markings, including paint, thermoplastic, and epoxy.

- 2 Use of appropriate removal methods such as grinding, water blasting, or other approved techniques to minimize damage to the underlying pavement.
 - 3 Proper disposal of all debris and waste material generated during the removal process.
 - 4 Cleaning of the pavement surface to ensure it is free of residual marking materials.
 - 5 Restoration of the pavement surface as necessary to prevent hazards, including filling or sealing any surface damage caused by removal operations.
- D. Removal shall be limited to areas designated on the plans and does not include payment for temporary striping removal.
- E. The contractor shall ensure that all removed markings are completely eliminated to prevent confusion for motorists and pedestrians.
- F. All work shall conform to APWA Standard Specification 32 17 23 and Ogden City Standards.

3.51 8" DUCTILE IRON CLASS 350, Bid Item 202

- A. Measurement shall be made per linear foot (LF) of 8" Ductile Iron Class 350 water line installed as measured from connection point to connection point along the centerline of the pipeline.
 - B. Payment shall be made at the linear foot price bid and shall include all material, labor, tools, and equipment to coordinate construction, install water line including shoring or stabilization, de-watering, and dust control following all water line trench standards per plan W-18.
- 6 Payment covers the cost of incidental work such as potholing, fittings, corporation stops, couplings, joint lubricants, gaskets, jackhammer work; underground line marking tape; landscape replacement if damaged by CONTRACTOR'S operations; restoration of all utilities damaged as a result of operations; site dewatering; water main repair or replacement if damaged by CONTRACTOR; and similar work to complete the installation of the water line.
 - 7 Furnishing and installing DI bends, crosses, tees, and fittings identified on the construction drawings except those specifically listed in other bid items; plugging of existing pipes as required on the plans, etc.
 - 8 Polywrap all ductile iron fittings & valves with 8 Mil Polyethylene sheet and Tape Wrap.
 - 9 All costs for concrete thrust blocks, including fabric wrapping to protect bolts and followers from the concrete. Install the concrete thrust blocking with the minimum bearing surface indicated in the project plans.
 - 10 Provide and install all MEGA-LUG followers, pipe joint restraints as labeled in the plans, or approved equal on all fittings, tees, and bends, all costs for the labor and equipment to saw cut the pipe for connections as required.
 - 11 All pipe shall have 12 AWG Copper-Clad Steel (CCS) tracer wire installed with the pipe. Tracer wires shall terminate in a Snakepit tracer box style (CD14BT or

- approved equal) according to Ogden City Standard W-1B. Marking tape shall also be installed with the pipe per Ogden City Standards.
- 12 All splices shall use locking connectors and NOT wire nut direct bury splice kits.
 - 13 All water main termination/tie-in locations shall be grounded using a magnesium grounding rod connected to the tracer wire with a locking connector.
 - 14 All service connections shall utilize mainline to service connectors without cuts to the tracer wire.
 - 15 Cost to clean the interior of the line by sweeping and/or spraying to remove any accumulated debris, sand, or foreign materials prior to the installation of the pipe in the trench. Payment includes the cost to pressure test the line, perform bacteria tests on the line, disinfect the line and flush the line (Bacteriological sample costs will NOT be billed to the Contractor unless Contractor fails 2 or more tests). Payment includes all costs associated with dust control including evenings and weekends between 7:00 am and 9:00 pm, or as required by the City Engineer.
- C. Payment shall include all trenching costs associated with this item including all import pipe bedding (material and placement), backfilling, and compaction. Payment includes all excavation and removal of material for installation of the pipe. Sand bedding shall be placed a minimum of 6 inches below the bottom of pipe and 12 inches above the top of pipe with 12 inches on each side of pipe bedded and haunched according to pipe manufacturers' recommendations and Ogden City Standards. Material placed as backfill above the pipe bedding material shall be APWA 3" Minus Granular Fill Borrow (separate bid item) or better.

3.52 RECONNECT EXISTING SERVICE LINE, Bid Item 204

- A. Measurement will be made per each (EA) service line reconnected.
- B. Payment includes all labor, materials, and equipment required to reconnect existing water service lines to the newly installed water main, ensuring a fully functional system.
- C. Includes excavation, fittings, valves, couplings, thrust restraints, tapping sleeves, backfill, and compaction necessary for a complete reconnection.
- D. All work shall be performed in accordance with Ogden City Standards and APWA Standard Specification 33 12 16.
- E. Testing, flushing, disinfection, and pressure testing of the reconnected service line shall be completed prior to acceptance.
- F. Any pavement, curb, gutter, or landscaping disturbed during reconnection shall be restored to its original or better condition.

3.53 EXISTING WATER MAIN CONNECTION, Bid Item 205

- A. Measurement shall be made per each (EA) connection made to the existing water main. No additional payment will be made for additional connections due to contractor phasing of construction requiring connections from new main to new main.
- B. Payment shall be made at the unit price bid and shall include all labor, materials, tools, and equipment to furnish and install the fittings necessary to complete the connection between the existing pipe and the new pipe. Payment includes all costs to locate and

excavate the existing water main and connect the new C-900 DR18 to the existing main as shown on the plans. Payment includes removal of up to 30 feet of the existing pipe, if required, to make the connection with the existing pipes including looping the new C-900 DR18 pipe to match the elevation of the existing waterline, prepare the ends of the pipe and to remove and legally dispose of the removed pipe and fittings. Contractor is responsible to pothole and verify the pipe depth, material and size of existing Waterlines prior to ordering parts and fittings. Payment includes all costs to furnish and install sleeve connections with MEGA-LUG followers or approved equal on the mechanical joint ends and all costs for required concrete thrust blocks.

- C. Payment includes all costs to coordinate with the Ogden City Water Department for all water shutdowns necessary for installation of the complete connection. Payment includes 48-hour advance written notifications to all residents affected by any water service interruption.
- D. Payment includes costs for excavation, backfill and compaction, compaction testing, blue staking, potholing, legal waste disposal, all landscaping related and sod restoration not covered under other items, and plugging and blocking the end of the mains to be abandoned, and all associated work items required to complete this bid item. Total length of pipe for connection shall not exceed 20 feet.
- E. Payment includes all connection pieces to be properly swabbed and disinfected with chlorine.
- F. Payment shall be made at the unit price bid and shall include all costs to remove the existing pipe, saw-cut, remove, and legally dispose of pipe waste materials; plugging of existing pipes as required on the plans; provide trench excavation with legal disposal of excavated waste materials, shoring or stabilization, and de-watering; excavate existing excess material.

3.54 INSTALL FIRE HYDRANT ASSEMBLY, Bid Item 206

- A. Measurement will be made by actual count per each (EA) installed.
- B. Payment covers the cost of excavation, soil preparation, potholing, installing the new fire hydrant with surface coatings and fittings, 6-inch ductile iron supply main piping (and bedding) and any required bends/loops around existing utilities, connection of the new fire hydrant to new water main with ductile iron pipe with exterior of pipe tape wrapped; gate valves with cast iron slip-type valve boxes, traffic lids, concrete collar (w/seal); miscellaneous tees, sleeves, bends, gaskets, bolts, nuts; approved joint restraining devices; greasing and wrapping all exposed fittings, bolts and nuts; pipeline dewatering; concrete thrust restraints; concrete box repair, painting and other miscellaneous devices; snake pit boxes with tracer wire, collars; and all other materials/labor necessary to install new fire hydrant assembly according to Ogden City Standard Drawings W-1A, W-1B, & W-2.
- C. Payment includes painting the fire hydrant barrel safety yellow and the caps/bonnet the color determined from a flow test performed by the water department after paving is completed. Bonnet/caps color is expected to be Jay Blue.

3.55 1" IRRIGATION SERVICE LATERAL, Bid Item 207

- A. Measurement will be made per each (EA) installed 1" irrigation service lateral.

- B. Payment shall be made at the unit price bid and includes all labor, tools, materials, and equipment required to furnish and install a complete and operational irrigation service lateral, including connection to the existing water supply.
- C. Work includes, but is not limited to:
 - 1 Excavation, backfilling, and compaction for service lateral installation.
 - 2 Installation of 1" service line, valves, fittings, and associated appurtenances.
 - 3 Installation of Reduced Pressure Zone (RPZ) Assembly including proper elevation, air gap clearance, and mounting per local and state regulations.
 - 4 Installation of stop and waste valve, ball valves, and swing connection assembly.
 - 5 Connection to the secondary water supply or culinary water supply, including proper cross-connection protection.
 - 6 Installation of a secondary valve box and irrigation box for access to control components.
 - 7 Installation of flexible pipe material, swing joints, and quick-connect fittings as shown in the detail.
 - 8 Pressure testing and backflow testing by a Certified Backflow Tester within 10 days of initial usage.
 - 9 Final inspection and verification of operation per project specifications.
- D. The contractor shall coordinate with the appropriate water provider for connection approval, inspection, and compliance with all applicable Ogden City and APWA Standards.
- E. All disturbed areas, including pavement, landscaping, and concrete, shall be restored to original or better condition.
- F. All work shall conform to APWA Standard Specification 33 12 33 and Ogden City Standards.

END OF DOCUMENT