Addendum No. 5 City of Taylor Issued 02-21-2025 TAY323302T

SECTION 00 91 13 ADDENDUM NO. 05

EUREKA CORRIDOR AND FRANK & POET DRAIN IMPROVEMENTS

DATE OF ISSUE: December 19, 2024

DATE OF ADVERTISEMENT: December 19, 2024

DATE OF BID OPENING <u>February 25, 2025</u>

PROJECT NO.: QuestCDN 9470865

This Addendum is hereby incorporated into the Original Contract Documents for bidding referred to above and is considered binding as though originally appearing therein. Receipt of this Addendum must be noted in the place provided in Section 00 42 43 – Proposal.

To all prospective bidders and others concerned, YOU ARE HEREBY ADVISED THAT the Contract Documents for the above referenced Project are revised in the following particulars:

I. ADVERTISEMENT FOR BIDS

A. There are no revisions in Addendum No. 5.

II. PROCUREMENT AND CONTRACTING REQUIREMENTS

A. There are no revisions in Addendum No. 5

III. SPECIFICATIONS

- A. **Section 00 42 43 Proposal:** Replace this specification in its entirety as found in Attachment 1. The changes to this specification are identified below:
 - i. Space has been provided for bidders to acknowledge two additional addenda.
 - ii. Item No. 106, and Item No. 107, have been added to the bid form.
 - iii. Item No. 99 removed from bid form.
 - iv. Correction of unit of measure for items No. 45 and 46.
- B. **Section 01 22 00 Unit Prices:** Replace this specification in its entirety as found in Attachment 2. The changes to this specification are identified below:
 - i. Unit price descriptions for Item No. 106, and Item No. 107, have been added to the bid form.
 - ii. Amended description for Item No. 30 to exclude bituminous pavement and instead use concrete pavement and aggregate base.
 - iii. Item No. 99 removed.

IV. PLANS

A. There are no new Plan Sheets in Addendum No. 5

V. Bidder Questions

Qu	estion:	Reference:	Response:
1)	Please see attachment for our formal request for product substitution consideration on Eureka Road Corridor and Frank & Poet Drain Improvements Project. We are substituting CEM-KOTE FLEX ST Polymer-Modified Flexible Cementitious Waterproofing for your consideration.		See Addendum 3
2)	Will there be a bid extension issued for this project?		See Addendum 3
3)	Do you have an engineer's estimate for this job?		See Addendum 3
4)	Do you have the pay items set up in an Excel spreadsheet that you could send?		See Addendum 3
5)	Due to the unique nature of this project and the use of non-standard (non-MDOT) bid items we request an extension of the bid date by 2 weeks for us to properly assess the proposed work, engage the appropriate subcontractors and suppliers, and address any responses/clarifications to questions.		See Addendum 3
6)	Reference Proposal/Bid Form – The unit of measure for Items 47 to 53 is listed as "EA", but it appears the unit of measure for these items should be "LF", please review and revise as needed		See Addendum 4.
7)	Reference Proposal/Bid Form, Item 105 – Allowance, Contingency (7.5% of Total Contract): A. Please clarify if this should be calculated as 7.5% of the total of Base Bid – Eureka Road Corridor (Items 1 to 104) or should this 7.5% allowance also consider the costs associated with the Base Bid – Off-Site Mitigation (Lakes of Taylor) items.		See Addendum 4.
	B. Please consider moving this allowance to a standalone line (not included in any total/subtotal) on bid form. Estimating systems cannot handle performing this calculation when it is included in a total/subtotal and including it in the total/subtotal. Keeping it standalone will allow for a more simplistic calculation and including it within a subtotal does not seem to provide any benefit when evaluating bids.		

8) Reference General Construction Notes, note 2 (sht. G-0.02) – Based on the will be significant effort to associated with locating utilities and to make su appropriately account for this please consider adding a bid item (similar to this exploratory excavation work.	been added to Sections 00 42 43 and 00 01
9) Reference General Construction Notes, note 24 (sht. G-0.02) – This note the pay item "Culvert Cleanout", but this item is not included on the bid for existing and proposed culverts are to be cleaned, please provide the abov pay item. If required, please confirm that this note is only applicable to the and corrugated steel arch pipes and not the pipes that outfall into this drain	m. If the 43 and 00 01 22. Existing culverts along the drain alignment are to be cleaned out. Pipes box culvert that outfall into the open drain are not
 10) Reference Railroad Notes, note 4 (sht. G-0.02) – This note references that contractor is to obtain railroad protective insurance. A. Is this required for this project? 1. If so, what are the limits of the policy? 2. If so, will we be required to have flagmen while we are performing the railroad? B. If so, please provide an allowance item for railroad flagmen (similar to 	work near
11) Reference Maintaining Traffic – The maintenance of traffic plans provides traffic shift for the work associated with the box culvert/enclosed portion of improvements. There are no restrictions as to the duration of the shift, ple that there are no duration restrictions to keep traffic in this configuration.	the drain
12) Reference Maintaining Traffic – For the open-channel portions of the drair improvements we understand that we are to utilize the MDOT standards in plans. There are no restrictions regards the types of closures (single lane lane), lengths of closures, and durations of closures. Please clarify what r we will need to adhere to regarding the performance of the open-channel	ncluded in the , double estrictions
13) Reference Maintaining Traffic – We did not see and restrictions as to imple traffic shift for the box culvert/enclosed portion of the drain improvements performing the open-channel drain improvements concurrently. Please of can perform work on the box culvert/enclosed portion and open-channel proconcurrently.	and onfirm that we
14) Reference Item 19, Excavation, Site – Can you please provide additional is as to what excavation is included in this item, the bid item description is so vague, and we cannot figure what is associated with this item.	
15) Reference Item 22, Excavation, Open Channel – The bid quantity for this 17,000 CY, does this simply represent the excavation from existing grade final grade? Or does this quantity include the over-excavation needed to applicable stone treatments in the channel?	to proposed

16) Reference Plan Sheets C-4.02 to C-4.06 – Theses cross-sections for the open-channel portion of the drain show that we will need to placement fill to construct the channel – where is the cost to place this fill to be paid? Please confirm that existing material generated from the channel excavation can be utilized for this fill.	See Addendum 3
 17) Reference Item 69, Lower Existing Water Main (8"); A. Is this item for the water main deflection shown on C-1.01? 1. If so, the plans are calling it to be 12" and the bid item is calling it out as 8", please clarify. 2. If not, where is the work associated with the "Lower Existing Water Main (8") item? 	See Addendum 4.
18) Reference Plan Sheet S-1.01 – The profile of the culvert shown on this page depicts a deflection of a 16" water main, it is assumed that this deflection is existing, please confirm.	See Addendum 4.
 19) Reference Item 70, Segmental Retaining Wall: A. Can elevation views of these walls be provided? B. On the plan sheets a "BW" elevation is provided for each wall location – is this the elevation at the top of the leveling pad or is this the elevation at the proposed grade in front of the wall? 	See Addendum 4.
20) Reference Item 99, Underpass Structural Repairs – This a lump sum item and there are no plan sheets depicting the work that needs to be completed for this item and the work cannot be reasonable assessed by the potential bidders. To bid this item of work we will either need scope of repairs with quantities of work to include in this item or preferably add the appropriate bid items with estimated quantities that we can bid. Please provide details for the proposed repair work.	See Addendum 4.
21) Reference Item 100, Underpass Retaining Wall – Can elevation views of these walls be provided?	See Addendum 3
22) Reference Off-Site Mitigation (Lakes of Taylor) – At the pre-bid meeting access to this location was discussed, can you please provide some additional information as to how we are to gain access to this location?	See Addendum 3
23) Reference Plan Sheet S-1.01 – Is the "Typical Racho Road Section" on this sheet the existing typical section or proposed typical section? If it is proposed, would it be allowed to utilize a different roadway section for this, for example the standard Wayne County roadway pavement section noted on plan sheet G-0.02?	Whitetopping will not be required to be replaced. Reinforced 9-inch concrete to be placed for pavement replacement associated with the Racho Road culvert replacement. Grade differential to be addressed with additional aggregate base thickness.

	Contractor to field verify aggregate type and match existing aggregate base material.
24) Are there any restrictions due to fishery issues?	See Addendum 3
25) Please clarify the limitations of Pay Item No. 13; "Irrigation System, Remove and Replace, Southland Mall".	See Addendum 4.
26) Please provide a copy of the Pre-Bid Presentation.	See Addendum 3
27) There is a standard detail on Sheet C-5.06 that shows chain-link fence on top of a retaining wall. Is this detail applicable to any or all the headwalls? Is there anywhere else that this detail applies?	See Addendum 4.
28) There is a specification section for fencing that covers chain-link and woven wire fencing. The Proposal sheets only include "Split rail fence" – item 17, and "Railing Ameristar" – items 39 and 40. There is no pay item for Chain-link fence. Please clarify if chain-link fence is required anywhere on this project.	See Addendum 4. g,
29) Sheets C.8.12 and 8.18 show what appears to be railing along the sidewalk on bosides of the road. Please confirm that this is railing, and if so, is it to be installed or of the proposed retaining wall? Does the detail on Sheet C-5.06 apply to this? Please provide additional installation details.	n top
30) For the fence portion of this project, I cannot find any specs on the Chain Link Fenshown on page 12 of the print C-2.05 and page 13 C-2.04. Please advise what it of for as far as height and color?	
31) Bench, Gillette series, model B82, can you provide the size, material and backing?	? See Addendum 4.
32) Base Bid-Off Site Mitigation - What is the access to the offsite mitigation area at the Lakes of Taylor Golf Course? Ease of accessibility will have a large impact on this lump sum item.	
33) The DRAFT EGLE permit in the contract documents indicates that "no work shall occur within fish spawning or migration timelines…". Can the engineer confirm whether or not fish restrictions will be a part of this project, and if so, what timeline these restrictions will be in place?	See addendum 3.

34) Wetland/stream mitigation at the golf course:	The contractor will be allowed to select preferred planting times in coordination with
What is the maintenance requirement for this area "native and natural areas maintenance"?	Lakes of Taylor and the City of Taylor. Construction is preferred to occur in winter as much as possible to minimize disruption
B. Will the contractor be allowed to choose the best planting times in 2025, 2026? What is the required completion date?	of golf course activities.
C. Is invasive brush and clearing anticipated for winter of 2025 or 2026?	The construction calendar is to be determined by selected contractor in coordination with Lakes of Taylor and the
D. Is there a proposed hydraulic model for the stream? What is the maximum water level variation between post-storm flood level and base flow?	City of Taylor.
E. Could you clarify whether only the slopes and toes require	There is no proposed hydraulic model for the stream.
A. What is the corrugation, gauge, and coating of the proposed CMP pipe arch as the specification shown on sheet 541 does not reference the actual data for the proposed pipe arch. B. Do the connecting bands require gaskets or other specific requirements?	 A. It is intended that it is to match existing. Field measurements of the CMP size and steel thickness will be required. Gaskets as required to provide soil tightness at the joints.
36) Item 76:	See Addendum 4.
A. Do you have a quantity you could provide for the MDOT lawn restoration?	
37) Item 53:	It is intended that it is to match existing. Field measurements of the CMP size and steel
A. What is the corrugation, gauge, and coating of the proposed CMP pipe arch as the specification shown on sheet 541 does not reference the actual data for the proposed pipe arch.	thickness will be required. Gaskets as required to provide soil tightness at the joints.
B. Do the connecting bands require gaskets or other specific requirements?	at the joints.

Question:		Reference:	Response:	
38) Item 76	Do you have a quantity you could provide for the MDOT lawn		See Addendum 4.	
,	restoration?			
39) Item 13 A.	As we understand, this refers to only the Southland Mall portion approximately 1850 LF along Eureka Rd in addition to the		All new construction is acceptable as the project extents include the full area between Eureka curb to the Southland Mall circular drive. Cutting and capping at the	
	section where it heads NE and ends at Racho Blvd. Does the Southland Mall include the bordering properties such as Chik-Fil-A and Culvers?		construction extents is acceptable. Chik-Fil-A and Culvers are distinct properties from the Southland Mall.	
В.	The spec is written as a general cover-all concept with no detail or irrigation as-builts; therefore, we must assume the entire area is irrigated. Our experience with this type of work turns out that it is best not to try and salvage existing items but rather document prior to construction and then rebuild after construction. Will this concept of all-new be acceptable to CM?			
C.	It appears the scope is a complete excavation from Eureka Curb to Southland Mall Circular Drive, as well as a new sidewalk. Please confirm we understand this scope of construction correctly.			
D.	Would it be acceptable to cut and cap at the construction extents?			
that lev	SC cover - May we use natural fiber blankets where slopes dictate el of tensile strength is needed? Where BFM is to be applied with seed, may we use s75 Bionet Blanket to be used on slopes?		Yes, the items listed are acceptable. Chain link fence is used only where mounted on top of concrete headwalls and	
A.	For the fence portion of this project, I cannot find any specs on the Chain Link Fence shown on page 12 of the print C-2.05 and page 13 C-2.04. Please advise what it calls for as far as height and color?		wingwalls as shown in Typical Retaining Wall Section. Concrete Faced Sheet Pile Wall" detail on sheet C-5.06.	

A. Bench, Gillette series, model B82, can you provide the size, material and backing?	See Addendum 4.
42) Line 47-53 A. The unit is EA, are these units' lineal feet (LN FT) or each (EA)?	See Addendum 3
43) Will and Engineering Estimate be given to bidding contractors?	See Addendum 3
A. What material will we use for the Low Flow Channel Substrate? B. C-5.02 detail "Channel Substrate" Fill, what material will we be using?	Low flow channel substrate shall consist of rounded, washed #57 river gravel.
A. C-5.02 Open channel reaches – Fabric wrapped Low Flow Channel Bank, Fabric wrapped soil lift, 10" topsoil wrapped in coir matting. May we use on-site topsoil for this scope of work?	Yes. On-site topsoil can be reused to fill coir matting.
46) Sheet C-5.04 has a note that refers to design live load of HL-93. Sheet S-1.01 has a note that refers to design live load of HL-93 Modified. Which is correct?	Sheet C-5.04 note refers to the culvert enclosure at the west end of the project. Sheet S-1.01 has a note that refers to the culvert enclosure at the west end of the project

47) There are no lengths of precast concrete walls shown in the table on Sheet C-5.04, yet there are lengths of precast concrete wingwalls shown in the table on Sheet S-1.02. Will lengths be provided for Walls A, B, C, D, E, and F on the table on Sheet C-5.04?	The following are lengths of wingwalls for the walls in the table on Sheet C-5.04: NOTE: Walls with additive dimensions are measured from culvert to bend and then to end of wall. A. East Wall = 25'-6": West Wall = 15' B. North Wall = 10'-6" & 9'-8": South Wall = 25'-0" C. North Wall = 12'-0" & 9'-6": South Wall = 12'-0" + 17'-10" D. North Wall = 10'-10" & 10'-2": South Wall = 13'-3" + 24'-8" E. North Wall = 12'-6" & 8'-6": South Wall = 13'-5" + 24'-5" F. North Wall = 7'-6" & 15'-2": South Wall = 11'-2" + 24'-10"
48) Typical Wall Section, Sheet C-5.04 shows a thickened wall section at the top. What is the purpose and is this required?	It is for aesthetics only. In lieu of the thickened wall, a constant wall thickness can be provided with a horizontal 1" double cant strip place 6" below top of wall.
49) There are proposed storm connections shown at the walls of the precast culvert. Is it acceptable to provide precast openings in the walls at these locations and provide additional reinforcement in the walls for the steel cut by the opening?	No exceptions are taken for this construction method.
50) Bid Tab Item #44 states a quantity of 805 If of 20'x6' precast box culvert. Measuring off the stationing of culvert (693.94 If) and adding in 135 If for Racho Road culvert comes to 829 If. Can this quantity be verified?	The quantity of 20' x 6' precast concrete culvert is 805 LF. The alignment predominately follows the center of the proposed culvert and is accurate at the start and end sections; however, the total alignment is not a precise centerline measurement of the culvert and the quantity provided should be used.

51) Within Addendum #4 the bid form changed the unit of measure from "EA" to "LF" for following items	This was accidental and has been corrected.
Line 45 6" Side Culvert Connection to Box	
Line 46 12" Side Culvert Connection to Box	
 52) There is a callout on plan sheet L-1.02 that states "Limb Up Existing Honeylocusts to 8' Incidental to Tree Removal Item" Can you please clarify what is meant by "limb up". Can you please consider adding a bid item with a quantity per each needed for this scope – this callout is somewhat vague and the number needed is not clear. 	In between Cornell St and Syracuse Ct, there are two existing Honeylocusts. This callout intends for all existing limbs on these two up to 8' height to be trimmed to allow for clear pedestrian movement. No additional bid item will be added for this work.
53) Is this a prevailing wage job?	No. This project is not required to use prevailing wages.
54) When is the clearing/tree removal needing to be done?	Tree clearing needs to be done in advance of other project components, but no specific timeline is required.
A. The details shown on C-9.02 are a generic sheet from ASSA ABLOY; please specify what style you are looking for and if 2 or 3 horizontal rails are desired. B. Is the Majestic style preferred due to the proximity of the walking	The preferred railing type to be used for Line Items 39 and 40 is the Aegis II, 2 Rail Panel in the Majestic style in the specified height.
path?	

56) Items 39 and 40	There are three types of fences or railing that are itemized line items on this project.
A. The specifications call for 3 types of fences; (#1) - 3 rail white vinyl approximately 4' tall 1250 LF, (#2) – 6' chain link with wire 350 LF, (#3) – 42" Ameristar black railing 625 LF. However, the itemized proposal sheet calls out for "Railing, Ameristar/Assa Abloy 4' Ht" on line 39 and "Railing, Ameristar/Assa Abloy, 6' Ht." on line 40 as the only options to submit the proposal. Can you give some directions as to how to get these numbers to you?	For questions regarding chain link fencing, please see Addendum 4.
A. Has anyone contacted the golf course directly? We are not clea about whether to include some sort of budget for the unknown irrigation at Lakes of Taylor, and what bucket to include the allowance in.	Staff at the Lakes of Taylor golf course are aware of the project and have been partners throughout the design process. Replacement of the disturbed irrigation system within the Off-Site Mitigation Project should be accounted for in the associated Lump Sum pay item.
 A. I do not see any information on the material Coir Fiber Matting. There are different levels or grades of this product. What is the brand and type (grade) of the matting? 	Coir fiber matting shall be 700 GSM Woven Coir with 48% open area. Multiple manufacturers provide this product.
 59) Item 76 A. Lawn restoration is being sold as a lump sum, we have no idea as to the amount of area that will be disturbed by another trade. 	
60) May we reuse the topsoil needed to construct the project?	Yes, topsoil moved during construction can be reused.

A. Please define the areas for this scope of work. Please give an area quantity for this scope of work so all bidders bid the same amount of work for these 2-line items.	Item 99 has been removed from this project. Item 100, the underpass retaining wall, is detailed on sheet C-9.01 in the detail labeled "Elevated Sidewalk at Underpass". The underpasses that will receive this treatment are drawn on sheets C-8.12 and C-8.18 and labeled "Retaining Wall on Roadside of Raised Walk, with Railing".
A. Underpass retaining wall – Please define this scope of work, including which underpasses receive this scope of work?	The underpass retaining wall is detailed on sheet C-9.01 in the detail labeled "Elevated Sidewalk at Underpass". The underpasses that will receive this treatment are drawn on sheets C-8.12 and C-8.18 and labeled "Retaining Wall on Roadside of Raised Walk, with Railing".
A. Underpass structural repair – Please define this scope of work, including where underpasses get structural repairs?	This item has been removed from the project.
64) Plan sheet G-0.04, sheet legend references sheets C-3.00 to C-3.04 but these are missing from the bid set. Please advise.	Sheets C-3.00 to C-3.04 are not part of this project. The note should read "C-1.01 – C-2.09"
65) Golf Course – Unknown/Unforeseen conditions according to the Golf Course Superintendent there could be a large impact on the irrigation system. Is there a line item for unforeseen conditions for the scope of work?	It should be assumed irrigation will be disturbed and require replacement. The full extent of disruption will depend on the means and methods determined by the Contractor.

66) What stone is acceptable for the channel improvements – limestone or natural boulders, or both?

Per Section 31 35 20 Stream Channel Structures. Rock boulders shall consist of angular rock obtained from an approved source and shall consist of natural hard stone. It The solid rock shall have a minimum density of at least 140 lb/CF with approximate dimensions as indicated on the plans and details. Rock shall be a natural rock, limestone, quartzite or other hard stone. Rock sizes can be variable within the ranges as specified in this section. Rock variability shall utilize the full range as specified, but rocks should be shaped at the edges such that rock placed on top or next to each other will be "locked" together. "Locking" shall minimize the potential for movement and provide minimal space for water or solids to pass through the joint.

Both limestone and natural boulders are acceptable given they are angular to achieve the desired interlocking aspect and that they meet the desired sizes as shown in the plans.

- 67) After a review of the site, our concrete contractors and concrete restoration contractors have the following questions:
 - A. Regarding Bid Item 99 Underpass Structural Repairs, please clarify which structures are to be included in this item? There is a rail bridge, the I-75 overpass, and several other structures that could require repair.
 - B. Regarding Bid Item 99 Underpass Structural Repairs, please reconsider providing quantities for Hand Chipping, Patch Forming, and Concrete Patching. Based on the current direction for each contractor to determine their own quantity of repair we have multiple concerns:
 - 1. This will create unequal bids with varying scopes and pricing.
 - 2. This could also present issues during construction. For example, if based on a site review, we include 500 SF of concrete repairs, but then during construction we are required by the design team to perform 1,000 SF of concrete repairs. How does that get addressed?
 - 3. Conversely, if we include 10,000 SF of concrete repair to ensure that we are covered for the project and only need to perform 1,000 SF then you are paying 10 times more than would be necessary.
 - C. The Addendum 4 question #20 response also mentions Conc Surface Coating, are the full underpass structures to be coated or just any complete repairs?
 - D. Please provide repair details related to the Underpass Structural Repair scope, these details are necessary for understanding repair type, repair depth, reinforcing steel, dowel installation, galvanic anode inclusion, etc. Each of these items' effects pricing.

Item 99 has been removed from the project.

This Addendum is hereby incorporated into the Original Contract Documents for bidding referred to above and is considered binding as though originally appearing therein. Receipt of this Addendum must be noted in the place provided in Section 00 42 43 – Proposal.

Addendum No. 4 City of Taylor Issued: 02-07-2025 TAY323302T

ATTACHMENTS

Attachment 1: Specification Section 00 42 43 - Proposal Attachment 2: Specification Section 01 22 00 - Unit Prices

This Addendum is hereby incorporated into the original Contract Documents for the bidding referred to above and is considered as binding as though originally appearing therein. Receipt of this Addendum must be noted in the place provided in Section 00 42 43 – Proposal.

SECTION 00 42 43 PROPOSAL

Owner: City of Taylor, 23555 Goddard Road, Taylor, Mi, 48180

Project: Eureka Road Corridor and Frank & Poet Drain Improvements

Project Location: Eureka Rd between Telegraph Rd and Allen Rd, Taylor, Michigan and Lakes of Taylor Golf Course located at 25505 Northline Road, Taylor, MI, 48180

BIDDER INFORMATION

Bidder	Name:			
By (Pri	nted Name):			
Email:				
the for Contra in acco In subi Bidder Pro	m included in the Corct Documents for the ordance with the Contmitting their Bid, Bidde has examined copies bject Manual dated Do	ntract Documents to con Contract Price and with ract Documents. er represents, as more f s of Contract Documents ecember 2024 understa	I, to enter into an Agreement with the plete all Work as specified or indication the Contract Time indicated in the fully set forth in the Agreement, that is, (consisting of Plans dated Decements and accepts as sufficient for the the receipt of which has been acknowledged.	ated in the e Agreement, and : hber 2024 and e purpose,
		•		•
В.	Addendum	_ Acknowledged by:		Date:
C.	Addendum	_ Acknowledged by:		Date:
D.	Addendum	_Acknowledged by:		Date:
E.	Addendum	_ Acknowledged by:		Date:

Bidder has examined the surface and subsurface conditions where the Work is to be performed, the legal requirements and local conditions affecting cost, progress, furnishing or performance of the Work, and has made such independent investigations as Bidder deems necessary.

Bidder, by submitting a Bid, agrees that their Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any Agreement or rules of any group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any person, firm or a corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for himself any advantage over any other Bidder or over the Owner.

Bidder agrees to complete the Work, in accordance with the Contract Documents, for the following Contract Price:

BASE BID - EUREKA ROAD CORRIDOR

Item	Description	Quantity	Unit	Unit Price	Amount
1	Mobilization (5%)	1	LS	\$	\$
2	Bypass Pumping	1	LS	\$	\$
3	Traffic Maintenance and Control	1	LS	\$	\$

4	Soil Erosion Sedimentation Control, Complete	1	LS	\$	\$
5	Culvert, Remove Racho Rd	135	LF	\$	\$
6	Concrete Curb & Gutter, Remove, Racho Rd	200	LF	\$	\$
7	Concrete, Remove, Curb & Gutter	1,980	LF		
8	Concrete, Remove, Pavement	6,000	SY	\$	\$
9	Remove Bituminous Pavement	433	SY		
10	Tree and Stump, Remove	69	EA	\$	\$
11	Stump, Remove	1	EA	\$	\$
12	Guardrail, Remove	739	LF	\$	\$
13	Irrigation System, Remove and Replace, Southland Mall	1	LS	\$	\$
14	Allowance, Irrigation System Replacements, Other Areas	1	AL	\$20,000.00	\$20,000.00
15	Tree Protection Fencing	4,572	LF	\$	\$
16	Streetscape Lighting Modifications and Replacements, Contractor to coordinate with DTE	1	AL	\$200,000.00	\$200,000.00
17	Remove and Replace Split Rail Fence	1,165	LF	\$	\$
18	Clearing and Grubbing	21	AC	\$	\$
19	Excavation, Site	3,100	CY	\$	\$
20	Excavation, Culvert	4,550	CY	\$	\$
21	Excavation Culvert, Racho Rd	531	CY	\$	\$
22	Excavation, Open Channel	18,005	CY	\$	\$
23	Structural Backfill, Culvert	3,700	CY	\$	\$
24	MDOT Plain Rip Rap	655	CY	\$	\$
25	Substrate/Channel Fill (Pool Bottom Areas, 8" Depth)	350	CY	\$	\$
26	Rock Channel Lining, Complete	3,560	SY	\$	\$
27	Rock Grade Control Structure, Complete	215	SY	\$	\$
28	Fabric-Wrapped Low Flow Channel Bank	1180	SY	\$	\$
29	Bituminous Patch to Match Existing Conditions	433	SY	\$	\$
30	Road Reconstruction, Racho Rd	685	SY	\$	\$
31	Pavement, Concrete (4")	9,651	SY	\$	\$
32	Pavement, Concrete (6-8" at drives)	1,054	SY	\$	\$
33	Concrete, Straight Curb	87	SF		
34	Concrete, Standard Curb & Gutter	54	LF	\$	\$
35	Concrete, Standard Curb & Gutter, Racho Rd	200	LF	\$	\$
36	Crosswalk Restriping	1	EA	\$	\$
37	Sidewalk Ramp, Concrete	4,130	SF	\$	\$
38	Fire Hydrant, Salvage, Remove and	1	EA	\$	\$

	Replace			
39	Railing, Ameristar/Assa Abloy, 4' Ht.	1,293	LF	\$ \$
40	Railing, Ameristar/Assa Abloy, 6' Ht.	328	LF	\$ \$
41	Bench, Gillette Series, Model B82	13	EA	\$ \$
42	Trash Receptacle, Steel Strap Model CN-R/SS2-36	13	EA	\$ \$
43	Culvert Bedding, 12" Depth, Complete	725	CY	\$ \$
44	Box Culvert, 20' x 6', Complete	805	LF	\$ \$
45	6" Side Culvert Connection to Box	1	EA	\$ \$
46	12" Side Culvert Connection to Box	9	EA	\$ \$
47	Storm Sewer, 6 inch, Trench A	33	LF	\$ \$
48	Storm Sewer, 10 inch, Trench A	19	LF	\$ \$
49	Storm Sewer, 12 inch, Trench A	327	LF	\$ \$
50	Storm Sewer, 18 inch, Trench A	18	LF	\$ \$
51	Storm Sewer, 24 inch, Trench A	5	LF	\$ \$
52	Storm Sewer, 30 inch, Trench A	43	LF	\$ \$
53	Storm Sewer, 36" x 54" Ellip, Trench A	5	LF	\$ \$
54	Manhole Access on Box Culvert	3	EA	\$ \$
55	Manhole Structure, 36" Diameter,	21	EA	\$ \$
	Concrete			
56	Manhole Structure, 48" Diameter, Concrete	21	EA	\$ \$
57	Manhole Structure, 60" Diameter, Concrete	3	EA	\$ \$
58	Manhole Structure, Elliptical 108" Diameter, Concrete	1	EA	\$ \$
59	Standard, Catch Basin Structure, 36" Diameter, Concrete	1	EA	\$ \$
60	Connection to Existing Culvert with Concrete Collar	7	EA	\$ \$
61	Removal of Existing Headwalls	10	EA	\$ \$
62	Removal of Existing Wingwalls	14	EA	\$ \$
63	0 0	3	EA	\$ \$
64	Wingwalls for 20' x 6' Box Culvert	6	EA	\$ \$
65		5	EA	\$ \$
66	Wingwalls For Ex Culverts, Concrete	10	EA	\$ \$
67	Headwalls for Storm Structures, Concrete	10	EA	\$ \$
68	Sheet Pile Improvements for Existing Headwall & Wingwalls	10	EA	\$ \$
69	Lower Existing Water Main (8")	90	LF	\$ \$
70	Road Sign, Salvage, Remove and Relocate	15	EA	\$ \$
71	Segmental Retaining Wall	1,200	SF	\$ \$
72	Restoration, Coir Fiber Matting, Complete	18,400	SY	\$ \$

73	Restoration, Floodplain Terrace, Complete	11,000	SY	\$	\$
74	Restoration, Riparian Bank, Complete	7,400	SY	\$	\$
75	Restoration, Low Profile Prairie, Complete	4,600	SY	\$	\$
76	Restoration, Lawn (MDOT Roadside Seeding), Complete	1	LS	\$	\$
77	Tree, Acer rubrum (2.5")	37	EA	\$	\$
78	Tree, Acer saccharum (2.5")	29	EA	\$	\$
79	Tree, Carpinus betulus (2.5")	14	EA	\$	\$
80	Tree, Carpinus caroliniana (2.5")	12	EA	\$	\$
81	Tree, Cornus florida (2")	10	EA	\$	\$
82	Tree, Cercis canadensis (6')	12	EA	\$	\$
83	Tree, Celtis occidentalis (2.5")	18	EA	\$	\$
84	Tree, Crataegus virdis 'Winter King' (2")	30	EA	\$	\$
85	Tree, Fagus grandiflora (2.5")	11	EA	\$	\$
86	Tree, Ginkgo biloba (2.5")	11	EA	\$	\$
87	Tree, Gymnocladus dioicus 'Espresso' (2.5")	24	EA	\$	\$
88	Tree, Gleditsia triacanthos var. Inermis (2.5")	7	EA	\$	\$
89	Tree, Liquidambar styraciflua 'Cherokee' (2.5")	18	EA	\$	\$
90	Tree, Liriodendron tulipifera (2.5")	7	EA	\$	\$
91	Tree, Platanus acerifolia (2.5")	12	EA	\$	\$
92	Tree, Quercus alba (2.5")	27	EA	\$	\$
93	Tree, Quercus macrocarpa (2.5")	33	EA	\$	\$
94	Tree, Quercus palustris (2.5")	23	EA	\$	\$
95	Tree, Tilia americana (2.5")	9	EA	\$	\$
96	Tree, Tilia cordata (2.5")	22	EA	\$	\$
97	Tree, Ulmus americana 'Princeton Valley' (2.5")	14	EA	\$	\$
98	Tree, Zelkova serrata 'Village Green' (2.5")	19	EA	\$	\$
99	Underpass Structural Repairs	4	LS	\$	\$
100	Underpass Retaining Wall	1,260	LF	\$	\$
101	Soil Evaluation	1	LS	\$	\$
102	Easement Acquisition	1	AL	\$175,000	\$175,500
103	1 Year Maintenance Contract	1	LS	\$	\$
104	Permit Fees, Eureka Road Corridor	1	AL	\$40,000	\$40,000
106	Exploratory Investigation	1	LS	\$	\$
107	Culvert Cleanout	1	LS	\$	\$

Total Base Bid Contract Price (Items 1 through104, 106, 107)

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ADDITIVE ALTERNATE NO. 1

In the event the Owner elects to do the following Work, the Bidder agrees to complete the Work, in accordance with the Contract documents for the following Contract Price:

Item	Description	Quantity	Unit	Unit Price	Amount
1	Meijer Sidewalk-East Connection	1	LS	\$	\$

Total Additive Alternate Contract Price (Items 1 through 1)

ADDITIVE ALTERNATE NO. 2

In the event the Owner elects to do the following Work, the Bidder agrees to complete the Work, in accordance with the Contract documents for the following Contract Price:

Item	Description	Quantity	Unit	Unit Price	Amount
1	Meijer Sidewalk-West Connection	1	LS	\$	\$

Total Additive Alternate Contract Price (Items 1 through 1)

\$_____

ADDITIVE ALTERNATE NO. 3

In the event the Owner elects to do the following Work, the Bidder agrees to complete the Work, in accordance with the Contract documents for the following Contract Price:

Item	Description	Quantity	Unit	Unit Price	Amount
1	Pergola and Related Appurtenances, Southland Mall	1	LS	\$	\$

Total Additive Alternate Contract Price (Items 1 through 1)

\$

BASE BID - OFF-SITE MITIGATION (LAKES OF TAYLOR)

In the event the Owner elects to do the following Work, the Bidder agrees to complete the Work, in accordance with the Contract documents for the following Contract Price:

Item	Description	Quantity	Unit	Unit Price	Amount
1	Off-Site Mitigation (Lakes of Taylor)	1	LS	\$	\$
2	Allowance, Permit Fees, Off-Site Mitigation, Lakes of Taylor	1	AL	\$15,000	\$15,000

Total Base Bid - Off - Site Mitigation (Lakes of Taylor) Contract Price (Items 1 through 2) \$______

Bidder, by submitting a Bid, thereby certifies that Bidder or a qualified designated person in Bidder's employ has examined the Contract Documents provided by the Owner for bidding purposes. Further, they certify that Bidder or Bidder's qualified employee has reviewed the Bidder's proposed construction methods and finds them compatible with the conditions which Bidder anticipates from the information provided for Bidding.

Bidder, by submitting a Bid, agrees to complete the Work under any job circumstances or field conditions present and/or ascertainable prior to bidding. In addition, Bidder agrees to complete the Work under whatever conditions Bidder may create by Bidder's own sequence of construction, construction methods, or other conditions he may create, at no additional cost to the Owner.

Bidder, by submitting a Bid, declares that Bidder has familiarized them self with the location of the proposed Work and the conditions under which it must be constructed. Also, Bidder has carefully examined the Plans, the Specifications, and the Contract Documents, which Bidder understands and accepts as sufficient for the purpose, and agrees that Bidder will Contract with the Owner to furnish all labor, material, tools, and equipment necessary to do all Work specified and prescribed for the completion of the Project.

Bidder will provide a bid bond, in the amount of at least **five (5)** percent of the amount Bid, drawn payable to City of Taylor as security for the proper execution of the Agreement.

Bidder, by submitting a Bid, agrees that if awarded Contract, to sign the Agreement and submit satisfactory bonds and certificates of insurance coverage and other evidence of insurance required by the Contract Documents within 15 days after the date of Owner's Notice of Award.

Bidder, by submitting a Bid, agrees that time is of the essence and, if awarded Contract, that the Work will be Completed on or before the dates/days as specified in the Agreement.

Liquidated damages, as specified in the General Conditions, Supplementary Conditions and Agreement, will also apply to the Substantial Completion date.

Engineering and inspection costs incurred after the final completion date will be paid by the Contractor to the Owner as specified in the Conditions of the Contract and Agreement.

Proposals may not be withdrawn for a period of 90 days after bid opening.

The following documents are made a condition of this Proposal:

- A. Required Bid Security
- B. Legal Status of Bidder
- C. Non-Collusion Affidavit
- D. Current Certificate of Insurance

SECTION 01 22 00 UNIT PRICES

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. This Section describes the method of measurement and basis of payment for items of Work included in the Contract and specified in Section 00 42 43 Proposal. Contractor will provide labor, material, tools, equipment and services required to complete the Work specified herein and indicated on the Plans.
- B. The scope and quantity of Work estimated in the Proposal is the best estimate of the Engineer. It is anticipated that the quantity of Work to be completed will vary from the estimated quantities in Section 00 42 43 Proposal.
- C. Owner will make no allowances for items not included in Section 00 42 43 Proposal.

1.2 ITEMS OF THE PROPOSAL

BASE BID - EUREKA ROAD CORRIDOR

Item 1

Mobilization (5%) will be paid for at the Contract Unit Price on a Lump Sum basis. Price paid will be payment in full for labor, material, and equipment necessary for preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies, and incidentals to the project site; for the establishment of Contractor's, Engineer's, and Owner's field offices, and other facilities necessary to undertake the work on the project; and for other work and operations which must be performed, or for expenses incurred, prior to beginning work on the various contract items on the project site. It will also include preconstruction costs, including insurance and bonds, exclusive of bidding costs, which are necessary direct costs to the project and are of a general nature rather than directly attributable to other pay items under the contract. Mobilization is not to exceed 5% of total contract price.

Item 2

Bypass Pumping, will be paid for at the Contract Unit Price on a Lump Sum basis. Price will be payment in full for labor, material, and equipment required to set up, operate, and maintain bypass pumping as necessary to divert the flow of water or sewage around the section of pipe in which liner preparation and installation is being performed. This pay item will include, but is not limited to, contractor design and sequencing of the by-pass pumping, bulkheads, pumping equipment capable of handling the anticipated flows, stand-by pumps, piping, valves, joints, fittings, thrust and restraint blocks, standby power source, pump operators available 24-hours a day, barricading, restoration, cleanup, and other related appurtenances necessary to complete the job, whether specifically mentioned or implied.

Traffic Maintenance and Control will be paid for at the Contract Unit Price on a Lump Sum basis. Price paid will be payment in full for labor, material, and equipment required for maintaining traffic, and will include, but is not limited to, furnishing, installing, operating, and maintaining barricades, lighted arrow boards, drums, traffic control devices, signs, channeling devices, cones, flagmen, flag control, pavement markings, warning flashers, concrete barriers, minor traffic devices, and other items necessary to complete the job, whether specifically mentioned or implied.

Item 4

Soil Erosion and Sedimentation Control, Comple will be paid for at the Contract Unit Price on a Lump Sum basis. Price paid will be payment in full for labor, material, and equipment required for furnishing, installing, and maintaining erosion control devices as shown on the plans or as determined by the Engineer and will include, but is not limited to, furnishing, installing, and maintaining, geotextile silt fence, straw bales, sediment traps, filter bags, establishing permanent erosion control, removal of devices, and other items necessary to complete the job, whether specifically mentioned or implied.

Item 5

Culvert, Remove of the size and type specified will be paid for at the Contract Unit Price on a per Linear Foot (LFT) basis. Price paid will be payment in full for labor, material and equipment necessary for removal of culverts, and will include, but is not limited to, excavation, sheeting, shoring, bracing and dewatering, protection of existing improvements, removal and disposal of unsuitable material and debris, removal and disposal of end sections and headwalls, backfill, backfilling, rebuilding and reconnecting live sewers, maintaining a satisfactory sewer bypass service, maintaining drainage, and other items necessary to complete the job, whether specifically mentioned or implied.

Removing culverts will be determined by field measure of storm sewer and culverts removed.

Items 6-7

Concrete Curb and Gutter, Remove will be paid for at the Contract Unit Price per Linear Foot (LFT). Price paid will be payment in full for labor, material, and equipment necessary for the removal of concrete curb and gutter, as shown on the Plans or as determined by Engineer, and will include, but is not limited to, saw cutting, removal and disposal of unsuitable materials, furnishing, placing and compacting backfill, backfilling, protection of existing improvements, barricading, and for other items necessary to complete the job, whether specifically mentioned or implied.

Measurement for removal of concrete curb and gutter will be determined by field measure of concrete curb and gutter removed.

Concrete Pavement, Remove will be paid for at the Contract Unit Price per Square Yard (SY). Price paid will be payment in full for labor, material, and equipment necessary for the removal of concrete pavement in excess of six (6) inches thick, or for the removal of concrete base course with asphalt surfacing in excess of six (6) inches thick, as shown on the Plans or as determined by Engineer. This work will include, but is not limited to saw cutting, removal and disposal of asphaltic surface courses and integral curbs, removal and disposal of unsuitable materials, furnishing, placing, and compacting backfill, protection of existing improvements, barricading, and for other items necessary to complete the job, whether specifically mentioned or implied. Pay item includes removal of composite paving material on Racho Rd.

Measurement for removal of concrete pavement in excess of six (6) inches thick, and for concrete base course with asphalt surfacing will be determined by field measure of concrete pavement or concrete base course with asphalt surfacing removed.

Item 9

Bituminous Pavement, Remove regardless of thickness, will be paid for at the Contract Unit Price per Square Yard (SYD). Price paid will be payment in full for labor, material and equipment necessary for removing bituminous pavement, and will include, but is not limited to, sawcutting, excavation, protection of existing improvements, removal and disposal of unsuitable material, barricading, miscellaneous restoration or cleanup, and other items necessary to complete the Work, whether specifically mentioned or implied.

Measurement for removal of bituminous pavement will be determined by field measure of bituminous pavement removed.

Item 10

Tree and Stump, Remove will be paid for at the Contract Unit Price per Each. Price paid will be payment in full for labor, material, and equipment necessary for the complete removal and disposal of each tree or stump.

Removal and disposal of stumps, hedges, brush, shrubs, roots, and trees having a diameter of less than six (6) inches will be considered incidental to the Project. Removal of trees in clearing and grubbing areas will not be paid for separately.

Item 11

Stump, Remove will be paid for at the Contract Unit Price per Each. Price paid will be payment in full for labor, material, and equipment necessary for the complete removal and disposal of each stump.

Item 12

Guardrail, Remove will be paid for at the Contract Unit Price per Linear Foot (LFT). Price paid will be payment in full for labor, material, and equipment necessary for removal of existing guardrail and replacing after construction, as shown on the Plans, or as determined by Engineer. Work will include, but is not limited to, removal guardrails, buffered end sections, end shoes, steel fasteners, specials, wire rope and fittings, reflectorized washers, wood posts, concrete

anchorage, furnishing and installing new material for material that could not be salvaged, necessary excavation and backfill, repair of galvanized surfaces, barricading, and other items necessary to complete the job, whether specifically mentioned or implied.

Measurement for removal of guardrail will be determined by field measure of guardrail removed.

Item 13

Irrigation System, Remove and Replace Southland Mall, will be paid for at the Contract Unit Price on a per Lump Sum basis. Price paid will be payment in full for labor, material, and equipment required for repairing of existing irrigation system and replacing it will include, but is not limited to, excavation, protection of remaining system, reinstalling valves, piping, connections, fittings, heads, boxes, and controllers; furnishing and installing new material; removal and disposal of unsuitable materials, furnishing, placing and compacting backfill, protection of existing improvements; restoration, and other items necessary to complete the job, whether specifically mentioned or implied.

Item 14

Allowance for Irrigation System Replacements in Other Areas, will be paid for at the actual cost as invoiced by the irrigation contractor involved. Price paid will be payment in full for labor, material, and equipment required for repairing of existing irrigation system and replacing it will include, but is not limited to, excavation, protection of remaining system, reinstalling valves, piping, connections, fittings, heads, boxes, and controllers; furnishing and installing new material; removal and disposal of unsuitable materials, furnishing, placing and compacting backfill, protection of existing improvements; restoration, and other items necessary to complete the job, whether specifically mentioned or implied. The Contractor shall not be allowed any markups from the amount as invoiced by the irrigation company. All costs for coordination, profit, overhead, and the time necessary to obtain irrigation service, shall be incidental to the Project.

Item 15

Tree Protection Fencing will be paid for at the Contract Unit Price per Linear Foot (LF). Price paid will be payment in full for labor, material, and equipment required for installation of tree protection fencing as specified on plans, and other items necessary to complete the Work, whether specifically mentioned or implied.

Item 16

Allowance, Streetscape Lighting Modifications and Replacements, Contractor to Coordinate with DTE, Allowance for utility company service fees will be paid for at the actual cost as invoiced by the utility company involved. The Contractor shall not be allowed any markups from the amount as invoiced by the utility company. All costs for coordination, profit, overhead, and the time necessary to obtain streetscape lighting modifications and replacements shall be incidental to the project.

Item 17

Split Rail Fence, Remove and Replace will be paid for at the Contract Unit Price per Linear Foot (LFT). Price paid will be payment in full for labor, material, and equipment required for the removal and disposal of the existing fencing, as shown on the Plans, or as determined by Engineer, and will include, but is not limited to, removal of fencing, gates, and posts, the removal of attached parts and connections, removal and disposal of unsuitable materials, furnishing, placing and compacting backfill, protection of existing improvements, barricading, furnishing and installing temporary fencing, and other items necessary to complete the job, whether specifically mentioned or implied. Item also includes installation of replacement fence as specified on plans according to manufacturer's instructions.

Measurement for Split Rail Fence, Removal and Replacement will be determined by field measure of fence removed and replaced.

Item 18

Clearing and Grubbing will be paid for at the Contract Unit Price per Acre (Ac). Price paid will be payment in full for labor, material, and equipment necessary for clearing and grubbing and will include, but is not limited to, cutting, chipping, removing and disposing of trees, stumps, brush, hedges, roots, corduroy, logs, matted roots, other vegetation and debris, also the protection of plant life, existing structures and improvements not designated for removal, also the backfill, backfilling of holes, restoration, and for other items necessary to complete the job, whether specifically mentioned or implied.

Clearing and grubbing will be measured in acres, as specified. The area in acres of clearing and grubbing, within the limits shown on the Plans or authorized by Engineer will be computed as the area bounded by the outside line of the trees removed. The length of the clearing and grubbing area will be measured along the road centerline or reference line established by Engineer.

Items 19-22

Excavation, of the type specified on plans, will be paid for at the Contract Unit Price per Cubic Yard (CYD). Price paid will be payment in full for labor, material, and equipment necessary for excavation to the lines and grades shown on the plans, and will include, but is not limited to, excavation and disposal of unsuitable material including, but not limited to, asphalt pavement, removal of temporary roadway, asphalt approaches and asphalt drives, aggregate surfaces, concrete end headers, rocks, earth, large stones, culverts, sewers, abandoned utilities, structures, the excavation, removal, and stockpiling of topsoil, protecting existing improvements, filling holes and voids with compacted granular backfill, the excavation and disposal of other items exposed in excavating to the subgrade, also for fine grading and compacting the subgrade, barricading, and other items necessary to complete the job, whether specifically mentioned or implied.

Payment for earth excavation will be per cubic yard with the quantity of earth excavation calculated from existing and proposed grades. The quantity paid will be

based on plan quantity unless there is a field change which affects the plan quantity. No field measurement for payment of this item will be done at the time of construction.

Item 23

Structural Backfill will be paid for at the Contract Unit Price per Cubic Yard (CYD). Price paid will be payment in full for labor, material, and equipment required for furnishing and installing trench structural backfill, in areas as shown on the plans or as determined by Engineer, and will include, but is not limited to, construction, excavation, protection of existing improvements and utilities, removal and disposal of unsuitable and excess material, miscellaneous restoration, and other items necessary to complete the job, whether specifically mentioned or implied.

Measurement for trench structural backfill will be per cubic yard determined by certified batch plant delivery tickets submitted to Engineer at the time of placement.

Item 24

Rip-Rap of the size, type, and material specified will be paid for at the Contract Unit Price per Cubic Yard (CYD). Price paid will be payment in full for labor, material and equipment necessary for furnishing and installing riprap, and will include, but is not limited to, necessary sub-grade preparation, removal and disposal of excess and unsuitable material, placing riprap, geotextile filter fabric, and other items necessary to complete the Work, whether specifically mentioned or implied.

Measurement for riprap will be in square yards determined by field measure of riprap in place.

Item 25

Substrate/Channel Fill (Pool Bottom Low Flow Areas, 8" Depth) of the size, type, and material specified will be paid for at the Contract Unit Price per Cubic Yard (CYD). Price paid will be payment in full for labor, material and equipment necessary for furnishing and installing fill, and will include, but is not limited to, necessary sub-grade preparation, removal and disposal of excess and unsuitable material, placing fill, geotextile filter fabric, and other items necessary to complete the Work, whether specifically mentioned or implied.

Item 26

Rock Channel Lining, Complete, of the size, type, and material specified will be paid for at the Contract Unit Price per Square Yard (SYD). Price paid will be payment in full for labor, material and equipment necessary for furnishing and installing riprap, and will include, but is not limited to, necessary sub-grade preparation, removal and disposal of excess and unsuitable material, placing riprap, geotextile filter fabric, and other items necessary to complete the Work, whether specifically mentioned or implied.

Measurement for rock channel lining will be in square yards determined by field measure.

Rock Grade Control Structure, Complete, of the size, type, and material specified will be paid for at the Contract Unit Price per Square Yard (SYD). Price paid will be payment in full for labor, material and equipment necessary for furnishing and installing structure, and will include, but is not limited to, necessary sub-grade preparation, removal and disposal of excess and unsuitable material, placing structure, geotextile filter fabric, and other items necessary to complete the Work, whether specifically mentioned or implied.

Measurement for rock grade control structure will be in square yards determined by field measure of in place.

Item 28

Fabric Wrapped Low Flow Channel Bank, Complete, of the size, type, and material specified will be paid for at the Contract Unit Price per Square Yard (SYD). Price paid will be payment in full for labor, material and equipment necessary for furnishing and installing fabric wrapped low flow channel bank, and will include, but is not limited to, necessary sub-grade preparation, removal and disposal of excess and unsuitable material, placing, geotextile filter fabric, and other items necessary to complete the Work, whether specifically mentioned or implied.

Measurement for fabric wrapped channel bank will be in square yards determined by field measure in place.

Item 29

Bituminous Patch to Match Existing Conditions, will be paid for at the Contract Unit Price per Square Yard (SYD). Price paid will be payment in full for labor, material, and equipment necessary for the bituminous pavement patch and will include, but is not limited to, excavation, protection of existing improvements, also compacting and fine grading subgrade, also furnishing, placing and compacting backfill and subbase, also the furnishing, placing, rolling and compacting the various bituminous lifts or courses, also the furnishing and applying of prime and bond coats, barricading, restoration, and for other items necessary to complete the job, whether specifically mentioned or implied.

Measurement for bituminous pavement patch will be determined by field measure of bituminous pavement in place.

Item 30

Road Reconstruction, Racho Rd., of the type and thickness specified will be paid for at the Contract Unit Price per Square Yard (SYD). Price paid will be payment in full for labor, material, and equipment necessary for the concrete pavement and aggregate base and will include, but is not limited to, excavation, protection of existing improvements, also compacting and fine grading subgrade, also furnishing, placing and compacting backfill and subbase, barricading, restoration, and for other items necessary to complete the job, whether specifically mentioned or implied.

Measurement for Road reconstruction, Racho Rd by field measurement of concrete pavement in place.

Items 31-32

Pavement, Concrete of the type and thickness specified will be paid for at the Contract Unit Price per Square Yard (SYD). Price paid will be payment in full for labor, material, and equipment necessary for the concrete pavement and will include, but is not limited to, excavation, construction, protection of existing improvements, furnishing, placing and compacting backfill and subbase, also compacting and fine grading subgrade, also the furnishing and installing of hook bolt assemblies, tie bar assemblies, dowel bar assemblies, contraction joint basket assemblies, expansion joint basket assemblies, polyethylene planks, polystyrene or other fillers, hot-poured elastic joint compound, mesh reinforcement, bar mat reinforcement, also forming, placing, jointing, finishing, texturing and curing the concrete, also providing protection against rain and cold weather, also for barricading, restoration, pavement gapping, part width construction, and other items necessary to complete the job, whether specifically mentioned or implied.

Measurement for concrete pavement will be determined by field measure of concrete in place.

Item 33-34

Curb, Concrete of the type and height specified will be paid for at the Contract Unit Price per Linear Foot (LFT). Price paid will be payment in full for labor, material, and equipment necessary for the concrete curb and gutter section and will include, but is not limited to, excavation, construction, protection of existing improvements, furnishing, placing, and compacting backfill and subbase, compacting and fine grading subgrade, providing and installing hook bolt assemblies, tie bar assemblies, reinforcing steel, also forming, placing, jointing, finishing, texturing and curing the concrete, providing protection against rain and cold weather, backfilling, barricading, restoration, gapping, and other items necessary to complete the job, whether specifically mentioned or implied.

Measurement for concrete curb and gutter will be determined by field measure of curb and gutter in place.

Item 35

Standard Curb and Gutter, Concrete, Racho Road of the type and height specified will be paid for at the Contract Unit Price per Linear Foot (LFT). Price paid will be payment in full for labor, material, and equipment necessary for the concrete curb and gutter sectionand will include, but is not limited to, excavation, construction, protection of existing improvements, furnishing, placing, and compacting backfill and subbase, compacting and fine grading subgrade, providing and installing hook bolt assemblies, tie bar assemblies, reinforcing steel, also forming, placing, jointing, finishing, texturing and curing the concrete, providing protection against rain and cold weather, backfilling, barricading, restoration, gapping, and other items necessary to complete the job, whether specifically mentioned or implied.

Measurement for concrete curb and gutter will be in linear feet, determined by field measure of curb and gutter in place.

Crosswalk Restriping of the type, width, and color specified will be paid for at the Contract Unit Price per Each. Price paid shall be payment in full for labor, material, and equipment necessary for pavement word and/or symbol markings and shall include, but not be limited to, preparation of surface, layout, removing old markings, applying proposed pavement markings, pavement word and/or symbol markings, glass beads, providing temporary barricading, cleanup, and other items necessary to complete the job, whether specifically mentioned or implied.

Item 37

Sidewalk Ramp, Concrete, of the type and thickness specified on the Plans, will be paid for at the Contract Unit Price per Square Foot (SFT). Price paid shall be payment in full for labor, material, and equipment necessary for sidewalk ramps and shall include, but is not limited to, excavation, construction, protection of existing improvements, undercutting and backfilling the subgrade, compacting and fine grading subgrade, furnishing, placing, and compacting backfill and subbase, construction of expansion joints, also forming, placing, jointing, finishing and curing the concrete, construction of detectable warning, providing protection against rain and cold weather, barricading, restoration, and other items necessary to complete the job, whether specifically mentioned or implied.

Measurement for sidewalk ramps will be determined by field measure of sidewalk ramps in place. Sidewalk ramps will be measured from back of curb to the key flag or to the end of the monolithic rolled curb, whichever is less.

Item 38

Fire Hydrant, Salvage, Remove and Replace will be paid for at the Contract Unit Price per Each. Price paid shall be payment in full for labor, material and equipment necessary to remove and replace fire hydrant, and shall include, but is not limited to, excavation, sheeting, shoring, bracing and dewatering, protection of existing improvements, removal of thrust block, fire hydrant, and valve, capping water main as necessary, furnishing and installing connecting piping and fittings, re-installing fire hydrant and valve, connection to water main (including fittings and appurtenances as necessary), construction of thrust blocks, backfilling, disposal of excess excavated material, restoration, and other items necessary to complete the Work, whether specifically mentioned or implied.

Items 39-40

Railing, of the size, type, and material specified, will be paid for at the Contract Unit Price per Linear Foot (LFT). Price paid will be payment in full for labor, material, and equipment necessary to install the railing as shown on the Plans or as determined by Engineer, and will include, but is not limited to, the installation of the specified railing, as well as attached parts, connections anchorage; removal and disposal of unsuitable materials; furnishing, protection of existing improvements; barricading; and other items necessary to complete the job, whether specifically mentioned or implied.

Measurement for railing will be determined by field measure of railing replaced.

Benches, will be paid for at the Contract Unit Price per Each. Price paid will be payment in full for installing the benches, as shown on the plans, or as determined by Engineer, and will include, but is not limited to, the installation of the specified benches, as well as attached parts, connections anchorage; removal and disposal of unsuitable materials; furnishing, protection of existing improvements; barricading; and other items necessary to complete the job, whether specifically mentioned or implied.

Item 42

Trash Receptacle, will be paid for at the Contract Unit Price per Each. Price paid will be payment in full for installing the litter bins, as shown on the plans, or as determined by Engineer, and will include, but is not limited to, the installation of the specified trash receptacles, as well as attached parts, connections anchorage; removal and disposal of unsuitable materials; furnishing, protection of existing improvements; barricading; and other items necessary to complete the job, whether specifically mentioned or implied.

Item 43

Culvert Bedding, 12" Depth, Complete, of the size, type, and material specified will be paid for at the Contract Unit Price per [Cubic Yard (CYD)]. Price paid will be payment in full for labor, material and equipment necessary for furnishing and installing bedding material, and will include, but is not limited to, necessary subgrade preparation, removal and disposal of excess and unsuitable material, placing fill, geotextile filter fabric, and other items necessary to complete the Work, whether specifically mentioned or implied.

Measurement for culvert bedding will be in cubic yards determined by field measure of bedding in place.

Items 44-53

Storm Sewers and Culverts, of the type and diameter specified on the Plans, in open cut trench will be paid for at the Contract Unit Price per Linear Foot (LFT). Price paid shall be payment in full for labor, material, and equipment necessary for storm sewer pipe and culvert pipe in open cut treand shall include but is not limited to, excavation, sheeting, shoring, bracing, and dewatering, construction, protection of existing improvements, sand backfill, sand, stone or concrete pipe bedding, placing and removing of stoppers and bulkheads, final inspection which includes cleaning, stubs in drainage structures, connection to drainage structures and sewers, end sections, barricading, restoration, cleanup and other items necessary to complete the job, whether specifically mentioned or implied.

Measurement for storm sewers and culverts, will be measured per linear feet in place, from center to center of manholes, catch basins, standard inlets, headwalls, or other standard drainage structures, with no deduction in length for intermediate standard structures.

Manhole Access on Box Culvert, will be paid for at the Contract Unit Price per Each. Price paid shall be payment in full for labor, material, and equipment necessary for a complete manhole, and shall include, but is not limited to, frame and cover, adjusting rings, cone section, bottom section, flexible joint connections, excavation, sheeting, shoring and bracing, dewatering, sand backfill and other items necessary to complete the job, whether specifically mentioned or implied.

Items 55-58

Manhole, Standard of the type and diameter indicated, for depths up to eight (8) feet and for the first eight (8) feet of deeper manholes will be paid for at the Contract Unit Price per Each. Price paid shall be payment in full for labor, material, and equipment necessary for a complete manhole, and shall include, but is not limited to, all excavation, dewatering, construction, frame and cover, adjusting rings, cone section, bottom section, flexible joint connections, sand backfill and other items necessary to complete the job, whether specifically mentioned or implied.

Item 59

Catch Basin Structure, Standard, of the size, type, and material specified will be paid for at the Contract Unit Price per Each. Price paid will be payment in full for labor, material and equipment necessary for installation of struxture, and will include, but is not limited to, excavation, sheeting, shoring, bracing and dewatering, protection of existing improvements, removal and disposal of unsuitable material and debris, backfill, backfilling, connecting live sewers, providing and maintaining a satisfactory sewer bypass service, maintaining drainage, and other items necessary to complete the job, whether specifically mentioned or implied.

Item 60

Connection to Existing Culvert with Concrete Collar, will be paid for at the Contract Unit Price per Each. Price paid shall be payment in full for labor, material, and equipment necessary for a complete manhole, and shall include, but is not limited to, frame and cover, adjusting rings, cone section, bottom section, flexible joint connections, excavation, sheeting, shoring and bracing, dewatering, sand backfill and other items necessary to complete the job, whether specifically mentioned or implied.

Items 61-62

Remove Existing Headwalls & WIngwalls, of the type and diameter specified on the Plans, will be paid for at the Contract Unit Price per Each. Price paid shall be payment in full for labor, material, and equipment required for removing end sections and shall include, but is not limited to, excavation, sheeting, shoring and bracing, wood handrail with mesh panel, construction, dewatering, preparation, protection of existing improvements, and other items necessary to complete the job, whether specifically mentioned or implied.

Items 63-67

Headwalls & Wingwalls, of the type and diameter specified on the Plans, will be paid for at the Contract Unit Price per Each. Price paid shall be payment in full for labor, material, and equipment required for installing end sections and shall include, but is not limited to, excavation, wood handrail with mesh panel, construction, dewatering, preparation, protection of existing improvements, stone pipe bedding, sand backfill, headwall, reinforcement, baffle, mortar, wingwalls, foundation, connection to proposed sewer, backfilling, barricading, restoration, and other items necessary to complete the job, whether specifically mentioned or implied.

Item 68

Sheet Pile Improvements for Existing Headwalls & Wingwalls will be paid for at the Contract Unit Price per Each. Price paid will be payment in full for labor, material and equipment necessary to furnish and install sheet pile steel, and will include, but is not limited to, construction, excavation, furnishing and installing steel post, concrete footing, filling with concrete, painting, and other items necessary to complete the Work, whether specifically mentioned or implied.

Item 69

Lower Existing Water Main, 8" as specified on the plans, will be paid for at the Contract Unit Price per Linear Foot (LFT). Price paid shall be payment in full for labor, material, and equipment necessary for furnishing and installing water main and shall include, but is not limited to, specials and fittings, excavation, sheeting and bracing, shoring, draining, dewatering, laying, jointing, bedding, testing, disinfecting, backfilling (including backfill with special materials where specified), disposal of excess excavated material, temporary blow-offs, thrust blocks, encasement, barricading, restoration, final cleanup, connections to existing mains and other items necessary to complete the job, whether specifically mentioned or implied.

Measurement for water main will be in linear feet along the centerline of the pipe taken from end-to-end with no reduction for fittings and valves.

Item 70

1. **Road Sign, Salvage, Remove and Relocate,** will be paid for at the Contract Unit Price on a per Each basis. Price paid will be payment in full for labor, materials, and equipment required for removing, salvaging, relocating, and reinstalling existing signs as specified on plans, and will include, but is not limited to, removing sign, post, and hardware, construction, furnishing and driving post, backfill, cleanup, restoration, and other items necessary to complete the job, whether specifically mentioned or implied.

Item 71

Segmental Retaining Wall, will be paid for at the Contract Unit Price per Square Foot (SFT) of segmental retaining wall in place. Price paid shall be payment in full for labor, material, and equipment necessary for furnishing and placing the segmental retaining wall, and shall include, but is not limited to, excavation, subgrade preparation, removal and disposal of excess material, furnishing wall

materials, anchors and fasteners, and other items necessary to complete the job, whether specifically mentioned or implied.

Item 72

Restoration, Coir Fiber Matting, Complete, will be paid for at the Contract Unit Price per Square Yard (SYD). Price paid will be payment in full for labor, material, and equipment required for furnishing and placing matting, and will include, but is not limited to, construction, preparation of subgrade, securing matting, securing pins and washers, construction of seams, and other items necessary to complete the job, whether specifically mentioned or implied.

Measurement for fiber matting will be determined by field measure of matting in place. No allowance will be made for material in laps and seams or for securing pins. No measure of nor payment will be made for coir fibe replaced because of defects in manufacture, contamination or damage due to either fault or negligence of Contractor.

Items 73-75

Restoration, Complete, of the type specified will be paid for at the Contract Unit Price per Square Yard (SYD) of area seeded. Price paid shall be payment in full for providing labor, material, and equipment, necessary for seeding and shall include, but is not limited to, soil preparation, providing topsoil, grading, shaping, placing and spreading topsoil, seeding, mulching, mulch anchoring, fertilizing, discing and harrowing, rolling, watering, mowing, lawn establishment, reseeding and other items necessary to complete the job, whether specifically mentioned or implied. Contractor shall seed areas disturbed by Contractor's operations.

Seeding will be field measured by area in Square Yard (for the areas indicated on the plans to be seeded.

Areas disturbed outside of the areas indicated on the plans shall be seeded at Contractor's expense.

Items 76

Restoration Lawn, Complete, of the type specified will be paid for at the Contract Unit Price per Lump Sum of area seeded. Price paid shall be payment in full for providing labor, material, and equipment, necessary for seeding and shall include, but is not limited to, soil preparation, providing topsoil, grading, shaping, placing and spreading topsoil, seeding, mulching, mulch anchoring, fertilizing, discing and harrowing, rolling, watering, mowing, lawn establishment, reseeding and other items necessary to complete the job, whether specifically mentioned or implied. Contractor shall seed areas disturbed by Contractor's operations.

Areas disturbed outside of the areas indicated on the plans shall be seeded at Contractor's expense.

Items 77-98

Tree, of the type and size specified will be paid for at the Contract Unit Price per Each. Price paid shall be payment in full for labor, material, and equipment necessary for planting specified plant material(s) and shall include, but is not limited to, selection and transporting, protection, hole excavation, pruning, planting, topsoil or planting mixture backfilling, mulching, watering, guying and bracing, wrapping, dressing, warranty of plant material establishment; cleanup and other items necessary to complete the job, whether specifically mentioned or implied.

Item 99

Underpass Structural Repairs will be paid for at the Contract Unit Price on a Lump Sum basis. Price paid shall be payment in full for all labor, material, and equipment necessary to complete the construction of underpass structural repairs. Work shall include but is not limited to, all excavation, dewatering, saw cutting and removal of deteriorated concrete and reinforcement steel, forming, installation of reinforcement steel, concrete placement, stripping of the same, barricading, restoration, and all other items necessary to complete the job whether specifically mentioned or implied

Item 100

Underpass Retaining Wall will be paid for at the Contract Unit Price on a Linear Foot basis. Price paid shall be payment in full for all labor, material, and equipment necessary to complete the construction of underpass retaining wall. Work shall include but is not limited to, all excavation, dewatering, forming, installation of reinforcement steel, concrete placement, stripping and backfill, barricading, restoration, and all other items necessary to complete the job whether specifically mentioned or implied.

Item 101

Soil Evaluation will be paid for at the Contract Unit Price on a Lump Sum basis. Price paid shall be payment in full for all labor, material, and equipment required for soil evaluation to confirm soil is suitable for re-installation of fire station mast arm as specified in plans.

Item 102

Allowance, Easement Acquisition to cover costs to complete and obtain outstanding easements that are required for the specified Work. Contractor shall submit appropriate documentation to validate the actual cost of completing and obtaining the outstanding easement(s) and markups are not allowed. The amount of the allowance shall be adjusted accordingly by Change Order to recognize the allowable cost incurred by Contractor at direction of Owner.

Item 103

1 Year Maintenance Contract will be paid for at the Contract Unit Price on a Lump Sum basis. Price paid shall be payment in full for all labor, material, and equipment required for maintaining all planted material in a vigorous, healthy, sound growing condition and shall include, but is not limited to, cultivating; weeding; pruning; watering; mowing; fertilizing; mulching; re-guying; repairing or replacing damaged, diseased, dead, or infested plant material; and all other items necessary to complete the job, whether specifically mentioned or implied, for the period of the maintenance contract.

Item 104

Allowance, Permit Fees, Eureka Road Corridor, to cover costs to complete and obtain outstanding permits that are required for the specified Work. Contractor shall submit appropriate documentation to validate the actual cost of completing and obtaining the outstanding permit(s). The amount of the allowance shall be adjusted accordingly by Change Order to recognize the allowable cost incurred by Contractor at direction of Owner.

Item 106

Exploratory Investigation, will be paid for at the Contract Unit Price on a Lump Sum basis. Conduct exploratory investigation to expose and verify the location and elevation of existing utilities in accordance with the contract. Start trenching operations after MISS DIG System, Inc. or the owner stakes the utilities. Repair utilities, damaged during excavation, before backfilling.

Backfill exploratory trenches within 24 hours of excavating, or as directed by the Engineer. Place backfill material in the exploratory trenches after the Engineer approves sections for backfilling. Ensure the Engineer approves materials and method for replacing pavement.

Item 107

Culvert Cleanout of the type and diameter specified, will be paid for at the Contract Unit Price on a Lump Sum basis. Price paid shall be payment in full for labor, material, and equipment required for cleanout of the existing culvert and shall include, but is not limited to, excavation, protection of existing improvements and utilities, removal and disposal of rocks, stumps, brush, sticks, silt, sediment, rubbish, debris, roots, concrete, excess, unsuitable, and miscellaneous objects, sedimentation control, restoration, and other items necessary to complete the job, whether specifically mentioned or implied.

Item Alternate 1

Meijer Sidewalk-East Connection, will be paid for will be paid for at the Contract Unit Price on a Lump Sum basis. Price paid will be payment in full for labor, material, and equipment necessary for the concrete pavement and crosswalk striping as specifed on plan sheet C-8.04 and will include, but is not limited to, excavation, construction, protection of existing improvements, furnishing, placing and compacting backfill and subbase, also compacting and fine grading subgrade, also the furnishing and installing of hook bolt assemblies, tie bar assemblies, dowel bar assemblies, contraction joint basket assemblies, expansion joint basket assemblies, polyethylene planks, polystyrene or other fillers, hot-poured elastic joint compound, mesh reinforcement, bar mat reinforcement, also forming, placing, jointing, finishing, texturing and curing the concrete, also providing protection against rain

and cold weather, also for barricading, restoration, pavement gapping, part width construction, and other items necessary to complete the job, whether specifically mentioned or implied.

Item Alternate 2

Meijer Sidewalk-West Connection, will be paid for will be paid for at the Contract Unit Price on a Lump Sum basis. Price paid will be payment in full for labor, material, and equipment necessary for the concrete pavement and crosswalk striping as specified on plan sheet C-8.03 and C-8.04 and will include, but is not limited to, excavation, construction, protection of existing improvements, furnishing, placing and compacting backfill and subbase, also compacting and fine grading subgrade, also the furnishing and installing of hook bolt assemblies, tie bar assemblies, dowel bar assemblies, contraction joint basket assemblies, expansion joint basket assemblies, polyethylene planks, polystyrene or other fillers, hot-poured elastic joint compound, mesh reinforcement, bar mat reinforcement, also forming, placing, jointing, finishing, texturing and curing the concrete, also providing protection against rain and cold weather, also for barricading, restoration, pavement gapping, part width construction, and other items necessary to complete the job, whether specifically mentioned or implied.

Item Alternate 3

Pergola and Related Appurtenances, Southland Mall, will be paid for at the Contract Unit Price on a Lump Sum basis. Price paid will be payment in full for installing the shade structure, as shown on the plans, or as determined by Engineer, and will include, but is not limited to, the installation of the specified shade structure, as well as attached parts, connections anchorage; labor, material, and equipment necessary for furnishing and pouring the concrete seat wall, base material, excavation, subgrade preparation; removal and disposal of unsuitable materials; furnishing, protection of existing improvements; barricading; and other items necessary to complete the job, whether specifically mentioned or implied.

BASE BID - OFF-SITE MITIGATION (LAKES OF TAYLOR): Item 1

Off-Site Mitigation (Lakes of Taylor), will be paid for at the Contract Unit Price on a Lump Sum basis. Price paid will be payment in full for installing the project items as specified in the attached plans, or as determined by Engineer, and will include, but is not limited to, installing approximately 400 lineal feet of stream channel restoration, culvert replacement restoration activities at the Lakes of Taylor Golf Course; bituminious asphalt patching with related base and subbase material; installation of trees, shrubs, and perennial plantings with associated soil; and other items necessary to complete the job, whether specifically mentioned or implied.

BASE BID – OFF-SITE MITIGATION (LAKES OF TAYLOR): Item 2

Allowance, Permit Fees, Off-Site Mitigation, Lakes of Taylor, to cover costs to complete and obtain outstanding permits that are required for the specified Work. Contractor shall submit appropriate documentation to validate the actual cost of completing and obtaining the outstanding permit(s) and no markups are allowed.

The amount of the allowance shall be adjusted accordingly by Change Order to recognize the allowable cost incurred by Contractor at direction of Owner.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION 01 22 00