CITY OF MENIFEE

SUBDIVISION IMPROVEMENT AGREEMENT TRACT MAP NO. 36658-2

FOR THE CONSTRUCTION OF STREET, DRAINAGE, WATER, AND SEWER IMPROVEMENTS

THIS SUBDIVISION IMPROVEMENT AGREEMENT	(the "Agreement")	is made and entered into this
day of	, 20	, by and between Pulte
Homes Co. LLC., hereinafter referred to as "Subdivid	er," and the City of M	lenifee, a municipal corporation
of the State of California, hereinafter referred to as "C	City. City and Subdiv	vider may sometimes herein be
referred to individually as a "party" and collectively as	the "parties."	

RECITALS:

- A. Subdivider has prepared and submitted to City for final approval and recordation a final map or Tract map (the "Map") of a unit of land in the City of Menifee, County of Riverside, which unit of land is known as Tract No. 36658-2 (the "Tract") pursuant to the provisions of Section 66410, et seq. of the California Government Code (the "Subdivision Map Act"). The Subdivision Map Act and City ordinances and regulations relating to the filing, approval and recordation of subdivision maps are sometimes collectively referred to in this Agreement as the "Subdivision Laws."
- B. A tentative map of the Tract has been approved subject to the Subdivision Laws and to the requirements and conditions contained in Planning Commission Resolution No. <u>15-466</u> (the "Resolution of Approval"). The Resolution of Approval is on file in the office of the City Clerk and is incorporated into this Agreement by reference.
- C. Prior to approval of the Map, Subdivider is required to install or agree to install certain public and private improvements (the "Improvements").
- D. The Improvements have not been installed and accepted at this time.
- E. It is therefore necessary that Subdivider and City enter into an agreement for the installation of the Improvements as provided in Section 66462 of the Subdivision Map Act. In consideration of approval of a final map for the Tract by the City Council, Subdivider desires to enter into this Agreement, whereby Subdivider promises to install and complete, at Subdivider's own expense, all the public improvement work required by City in connection with the proposed Tract. Subdivider has secured this Agreement by improvement security required by the Subdivision Laws and approved by the City.

NOW, THEREFORE, it is agreed by and between the parties hereto as follows:

- Improvement Plans. Prior to submittal of the Map for approval by the City Council, Subdivider shall
 furnish complete original improvement plans for the construction, installation and completion of the
 Improvements meeting the requirements of the City Engineer. The Improvement Plans for the Tract
 shall be maintained on file in the office of the City Engineer and shall be incorporated into this
 Agreement by reference. All references in this Agreement to the Improvement Plans shall include
 reference to any specifications for the Improvements as approved by the City Engineer.
- 2. <u>Improvements</u>. Subdivider shall construct the Improvements required to be constructed or agreed to be constructed under the Resolution of Approval and this Agreement as more specifically described in Exhibit "A." attached hereto and expressly made a part hereof by this reference and shall bear the full cost thereof. The methods, standards, specifications, sequence, and scheduling of construction shall be as approved by the City Engineer. Subdivider shall complete construction of backbone water and sewer improvements servicing water and sewer improvements covered under this agreement. Backbone improvements referenced herein are provided under a separate agreement and security instrument. Agreement and Securities for subdivision improvements are provided as follows:

Agreement for Tract #36658-2 For the Construction of Backbone Street and Drainage, Flood Control, Water System and Sewer Improvements, executed March 31, 2023. Bond No. US00124296SU23A by XL Specialty Insurance Co., 505 Eagleview Blvd, Exton, PA 19341. Faithful Performance Bond \$18,330,000.

Agreement for Tract #36658-2 For the Construction of Onsite Street and Drainage, Water System and Sewer Improvements, executed March 14, 2023. Bond No. LICX1974060 by Lexon Insurance Company, 12890 Lebanon Road, Mt. Juliet, TN 37122. Faithful Performance Bond \$4,282,500.

- 3. <u>Improvement Security</u>. Subdivider shall at all times guarantee Subdivider's performance of this Agreement by furnishing to City, and maintaining, good and sufficient security as required by the Subdivision Laws on forms and in the amounts approved by City for the purposes as follows:
 - A. One class of security to be provided by Subdivider, hereinafter referred to as "performance security," shall assure the faithful performance of this Agreement including construction of the Improvements, payment of Subdivider's fair share of Improvements which have been or will be constructed by others ("Participatory Improvements"), and payment of plan check and permit fees. The performance security shall also include good and sufficient security in the amount of one hundred percent (100%) of the estimated cost of setting subdivision monuments as stated hereafter in this Agreement ("Monumentation Security"). A second class of security to be provided by Subdivider, hereinafter referred to as "payment security," shall assure the payment of the cost of labor, equipment and materials supplied to construct the Improvements. A third class of security to be provided by Subdivider, hereinafter referred to as "warranty security," shall serve as a guarantee and warranty of the Improvements for a period of one year following the completion and acceptance of the Improvements. Subdivider shall furnish performance and payment security prior to and as a condition precedent to City Council approval of the Map. Subdivider shall provide warranty security after Improvements are complete and accepted by the City Council and prior to or concurrently with the final release of performance security. Warranty security shall not be required for Monumentation or Participatory Improvements. However, the City may utilize Monumentation Security for performance of or payment for the work in accordance with the Subdivision Map Act.

As part of the obligation secured by each of the performance security, payment security and warranty security, and in addition to the face amount of each such security, each such security shall include and assure the payment of costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by City in successfully enforcing the obligations thereby secured.

- B. Improvement security shall conform with Section 66499 of the California Government Code and may be one or more of the following:
 - 1) A cash deposit with City or a responsible escrow agent or trust company, at City's option.
 - 2) Surety bonds, of the form specified in subsection 66499.2 of the California Government Code, issued by a surety or sureties listed in the U.S. Department of Treasury Circular 570 (latest version).
 - 3) Certificates of deposit, in City's name, from one or more financial institutions subject to regulation by the state or federal government and having a financial quality rating of "A" or better and a commitment reliability rating of "R-2" or better on the Investment Data Exchange (of the Los Angeles County Treasurer's office).
 - 4) Irrevocable letters of credit, in a form acceptable to and approved by the City Attorney, issued by one or more financial institutions meeting the requirements of Paragraph (3), pledging that the funds necessary to carry out the completion of the Improvements are on deposit, guaranteed for payment, and constitute a trust fund which is not subject to levy or attachment by any creditor of the depositor until released by City. Letters of credit shall guarantee that all or any portion of the funds available pursuant to the letters of credit will be paid upon the written demand of City and that such written demand need not present documentation of any type as a condition of payment, including proof of loss. The duration of any such letter of credit shall be for a period of not less than one year from the execution of the agreement with which it is provided and shall state, on its face, that the letter of credit will be automatically renewed until such time that City authorizes its expiration.
- C. All securities shall be furnished in accordance with the provisions of Exhibit A. The amount of the performance security shall equal one hundred percent (100%) of the estimated cost of

constructing the Improvements, including payment of plan check and permit fees, as estimated by the City Engineer or a duly authorized representative of the City Engineer. The amount of Payment security shall equal the amount of the amount of performance security, except as otherwise set forth in Exhibit A, and shall be furnished as a separate security. Warranty security shall equal Ten Percent (10%) of the amount of performance security except as otherwise set forth in Exhibit A. The securities required by this Agreement shall be kept on file with the City Clerk. The terms of the security documents specified in this Agreement are incorporated into this Agreement by this reference. If any security is replaced by another approved security, the replacement shall be filed with the City Clerk and, upon filing, shall be deemed to have been made a part of and incorporated into this Agreement. Upon filing of a replacement security with the City Clerk, the former security may be released. The City Engineer shall approve replacement of security.

- D. At the time of submittal of security, Subdivider shall pay to City administrative fees applicable to the form of security provided. Administrative fees shall apply to the subdivision (final map, Tract map or waiver of Tract map) rather than to individual security instruments. The fees shall be paid separately for each different form and/or source (surety or financial institution) of security initially submitted and for substitution of securities but shall not be required for submittal of warranty security if the warranty security is of the same form and from the same source as the performance security it replaces. Administrative fees for security shall be as follows:
 - 1) For certificates of deposit, bonds and letters of credit as described in Paragraphs 2), 3) and 4) of SECTION 3.B., which require the establishment of evidence of the reliability of the surety or financial institution, the administrative fee shall be One Hundred Fifty Dollars (\$150.00).
 - 3) For other forms of security listed in Section 3 B, above, there will be no administrative fee.
- E. Security shall not expire, be reduced, or become wholly or partially invalid for any reason, including non-payment of premiums, modifications of this Agreement and/or expiration of the time for performance stated in this Agreement.
- F. Security shall be released in the following manner:
 - Performance security shall be released upon the final completion and acceptance or approval, by the City Council of the Improvements subject to the provisions of Section 10 of this Agreement.
 - 2) The City Engineer may authorize a one-time 50% reduction of performance security as work progresses, upon application by Subdivider. In no event shall security be reduced below that required to guarantee the completion of the act or work or obligation secured, plus Ten Percent (10%).
 - 3) If City receives no notice of recorded claims of lien, labor and materials security shall be released in full 90 days after final acceptance and/or approval by the City Council, of the Improvements. If City receives notice of any recorded lien, the provisions of the Subdivision Map Act shall apply.
 - 4) No security given for the guarantee or warranty of work shall be released until the expiration of the warranty period and until any claims filed during the warranty period have been settled. As provided in paragraph 13 of this Agreement, the warranty period shall not commence until final acceptance of all the work and improvements by the City pursuant to Paragraph 10. Warranty security not utilized during the warranty period shall be released one year after final acceptance or approval by the City Council of all Improvements. However, if at the end of the one-year warranty period, there are one or more outstanding requests by City for performance of work or provision of materials under the terms of the warranty, warranty security shall be retained until the outstanding requests are satisfied or until Subdivider has made other arrangements satisfactory to the City Engineer.
 - 5) City may retain from any security released an amount sufficient to cover costs and reasonable expenses and fees, including reasonable attorneys' fees.

- 4. <u>Permits Required</u>. Prior to commencing any phase of work, Subdivider shall obtain all permits required for that phase of work and pay all required fees. Work performed under a permit or permits shall comply with all provisions of the required permits.
- 5. Off-site Improvements. When the construction of one or more of the Improvements requires or necessitates the acquisition of real property not owned by Subdivider or City, Subdivider shall use its best efforts purchase such real property at a reasonable price. In the event that Subdivider is unsuccessful, despite its best efforts, to acquire such real property at a reasonable price, Subdivider may request in writing that City attempt to acquire such real property. City may, but is not required to, agree to attempt to acquire such real property on behalf of Subdivider. If City so agrees, City and Subdivider shall enter a separate written agreement in a form acceptable to the City Attorney. Said separate agreement shall provide that Subdivider advance to City funds in an amount approved by the City to acquire the real property. Any unexpended portion of said advance shall be refunded to Subdivider. In no event shall the failure of Subdivider or City to acquire such real property excuse, waive, or otherwise terminate Subdivider's obligation to construct the applicable improvement pursuant to this Agreement or the Conditions of Approval.

6. Completion of Improvements; Inspection.

- 6.1 Construction of Improvements. Subdivider shall begin construction of the Improvements within ninety (90) days and shall complete construction within twelve (12) months after the approval of this Agreement. Portions of the Improvements may be completed at a later date, as determined by the City Engineer or as set forth in Exhibit A. Failure by Subdivider to begin or complete construction of the Improvements within the specified time periods shall constitute cause for City, in its sole discretion and when it deems necessary, to declare Subdivider in default of this agreement, to revise improvement security requirements as necessary to ensure completion of the improvements, and/or to require modifications in the standards or sequencing of the Improvements in response to changes in standards or conditions affecting or affected by the Improvements. Said failure shall not otherwise affect the validity of this agreement or Subdivider's obligations hereunder. The City may use the Securities to construct the improvements or portions thereof at the City's sole discretion.
- 6.2 <u>Inspection</u>. Subdivider shall at all times maintain proper facilities and safe access for inspection of the public improvements by City and to the shops wherein any work is in preparation. Upon completion of the work, the Subdivider may request a final inspection by the City Engineer or the City Engineer's authorized representative. If the City Engineer or the designated representative determines that the work has been completed in accordance with this Agreement, then the City Engineer shall certify the completion of the public improvements to the City Council. No improvements shall be finally accepted unless all aspects of the work have been inspected and determined to have been completed in accordance with the Improvement Plans and City standards and accepted by the City as described in Paragraph 10 of this Agreement. Subdivider shall bear all costs of plan check, inspection and certification.
- 7. <u>Force Majeure</u>. In the event that Subdivider is unable to perform within the time limits herein due to strikes, act of God, or other events beyond Subdivider's control, the time limits for obligations affected by such events will be extended by the period of such events.
- 8. <u>Time Extension</u>. Subdivider may make application in writing to the City Council for an extension of time for completion of the Improvements. The City Council, in its sole and absolute discretion, may approve or deny the request or conditionally approve the extension with additions or revisions to the terms and conditions of this Agreement.
 - As a condition of the time extension, Subdivider shall furnish securities, similar in form and substance to those required in SECTION 3 hereinabove, to cover the period of extension. The value of the securities shall be sufficient to ensure the performance of and payment for Improvements that remain incomplete at the time of the extension, and to provide warranty security on completed Improvements, as determined by the City Engineer.
- 9. <u>Survey Monuments</u>. Before final acceptance of street improvements, Subdivider shall place survey monuments in accordance with the provisions of Sections 66495, et sec. of the Subdivision Map Act and of the Menifee Municipal Code. Subdivider shall provide the City Engineer written proof that the

- monuments have been set, evidence of payment and receipt thereof by the engineer or surveyor setting the monuments, and intersection monument tie-outs for monuments set in public streets.
- 10. Final Acceptance of Improvements. At the completion of construction and prior to acceptance of the Improvements by City, Subdivider shall submit a request for final approval by City. The request shall be accompanied by any required certifications from Subdivider's engineers or surveyors, approval letters from other agencies having jurisdiction over and approval authority for improvements required by this Agreement or the Conditions of Approval, and any required construction quality documentation not previously submitted.
 - Upon receipt of said request, the City Engineer or a duly authorized representative will review the required documentation and will inspect the Improvements. If the Improvements are determined to be in accordance with applicable City standards and specifications, and as provided herein, obligations required by the Conditions set forth in the Resolution of Approval and this Agreement have been satisfied, and Subdivider has provided revised plans as required in Paragraph 12, hereinafter, the City Engineer shall recommend acceptance of the Improvements by the City Council.
- 11. <u>Injury to Improvements</u>. Until such time as the Improvements are accepted by City in accordance with Paragraph 10, Subdivider shall be responsible for and bear the risk of loss to any of the improvements constructed or installed. Until such time as all Improvements required by this Agreement are fully completed and accepted by City, Subdivider will be responsible for the care, maintenance of, and any damage to such improvements. City shall not, nor shall any officer or employee thereof, be liable or responsible for any accident, loss or damage, regardless of cause, happening or occurring to the work or improvements specified in this Agreement prior to the completion and acceptance of the work or improvements. All such risks shall be the responsibility of and are hereby assumed by Subdivider.
- 12. Revisions to Plans. When the Improvements have been inspected and approved by the City Engineer, Subdivider shall make any necessary revisions to the original plans held by City, so the plans depict the actual Improvements constructed. When necessary, revisions have been made, each separate sheet of the plans shall be clearly marked with the words "As-Built," "As-Constructed," or "Record Drawing," the marking shall be stamped by an engineer or surveyor, as appropriate for the improvements thereon, who is licensed to practice in California, and the plans shall be resubmitted to the City Engineer.
- 13. Improvement Warranty. Subdivider hereby guarantees the Improvements to City for a period of one (1) year, beginning on the date of final acceptance of the Improvements by the City Council, against any defective work or labor done, or defective materials furnished, and shall repair or replace such defective work or materials. If within the warranty period any work or improvement or part of any work or improvement done, furnished, installed, constructed or caused to be done, furnished, installed or constructed by Subdivider fails to fulfill any of the requirements of this Agreement or the improvement plans and specifications referred to herein, Subdivider shall without delay and without any cost to City, repair or replace or reconstruct any defective or otherwise unsatisfactory part or parts of the work or structure. Should Subdivider fail to act promptly or in accordance with this requirement, Subdivider hereby authorizes City, at City's sole option, to perform the work twenty (20) days after mailing written notice of default to Subdivider and to Subdivider's Surety, and agrees to pay the cost of such work by City. Should City determine that an urgency requires repairs or replacements to be made before Subdivider can be notified, City may, in its sole discretion, make the necessary repairs or replacement or perform the necessary work and Subdivider shall pay to City the cost of such repairs.
- 14. Release of Security. City shall retain and release securities in accordance with the provisions of Section 3 of this agreement. Prior to the release of payment security, the City Engineer may require Subdivider to provide a title report or other evidence sufficient to show claims of lien, if any, that may affect the amount of payment security released.
- 15. <u>City Right to Cure</u>. If Subdivider fails to perform any obligation hereunder and such obligation has not been performed, or commenced and diligently pursued, within sixty (60) days after written notice of default from City, then City may perform the obligation, and Subdivider shall pay the entire cost of such performance by City including costs of suit and reasonable attorney's fees incurred by City in enforcing such obligation. In cases of emergency or compelling public interest, as determined by the

City Engineer, the requirement for written notice of default and/or the passage of sixty (60) days shall be deemed waived and all other provisions of this Article shall remain in effect.

16. <u>Injury to Public Improvements</u>, <u>Public Property or Public Utility Facilities</u>. Subdivider shall replace or have replaced, or repair or have repaired, as the case may be, all public improvements, public utilities facilities and surveying or subdivision monuments which are destroyed or damaged as a result of any work performed under this Agreement. Subdivider shall bear the entire cost of replacement or repairs of any and all public or public utility property damaged or destroyed by reason of any work done under this Agreement, whether such property is owned by the United States or any agency thereof, or the State of California, or any agency or political subdivision thereof, or by City or any public or private utility corporation or by any combination of such owners. Any repair or replacement shall be to the satisfaction, and subject to the approval, of the City Engineer.

17. Indemnification.

a. Neither City nor any and all of its officials, employees and agents ("Indemnified Parties") shall not be liable for any injury to persons or property occasioned by reason of the acts or omissions of Subdivider, its agents or employees in the performance of this Agreement. Subdivider further agrees to protect and hold harmless Indemnified Parties form any and all claims, demands, causes of action, liability or loss of any sort, including, but not limited to, attorney fees and litigation expenses, because of, or arising out of, acts or omissions of Subdivider, its agents or employees in the performance of this Agreement, including all claims, demands, causes of action, liability, or loss because of, or arising out of, in whole or in part, the design of construction of the Improvements. This indemnification and agreement to hold harmless shall extend to injuries to persons and damages or taking of property resulting from the design or construction of said subdivision, and the public improvements as provided herein, and in addition, to adjacent property owners as a consequence of the diversion of waters from the design or construction of public drainage systems, streets and other public improvements.

- b. Acceptance by City of the Improvements shall not constitute an assumption by City of any responsibility for any damage or taking covered by this paragraph. City shall not be responsible for the design or construction of the subdivision or the improvements pursuant to the approved Improvement Plans or map, regardless of any negligent action or inaction taken by City in approving the plans or map, unless the particular improvement design was specifically required by City over written objection by Subdivider submitted to the City Engineer before approval of the particular improvement design, which objection indicated that the particular improvement design was dangerous or defective and suggested an alternative safe and feasible design. Except as may be provided above, City shall not be liable for any negligence, nonfeasance, misfeasance or malfeasance in approving, reviewing, checking, or correcting any plans or specifications or in approving, reviewing or inspecting any work or construction. Nothing contained in this paragraph is intended to or shall be deemed to limit or waive any protections or immunities afforded by law to City or any and all of its officials, employees and agents ("Indemnified Parties"), by virtue of city's approval of the plan or design of the Improvements, including without limitation the protections and immunities afforded by Government Code Section 830.6. After acceptance of the improvements, Subdivider shall remain obligated to eliminate any defect in design or dangerous condition caused by the design or construction defect; however, Subdivider shall not be responsible for routine maintenance. Provisions of this paragraph shall remain in full force and effect for ten (10) years following the acceptance by City of the Improvements. It is the intent of this paragraph that Subdivider shall be responsible for all liability for design and construction of the Improvements installed or work done pursuant to this Agreement and that city shall not be liable for any negligence, nonfeasance, misfeasance or malfeasance in approving, reviewing, checking, or correcting any plans or specifications or in approving, reviewing or inspecting any work or construction. The Improvement Security shall not be required to cover the provisions of this paragraph.
- 18. No Modification of Conditions. This Agreement shall in no respect act to modify or amend any provision of the Conditions of Approval. In the event that any requirement or condition of this Agreement is inconsistent with or fails to include one or more provisions of the Conditions of Approval, which document(s) is (are) incorporated herein by reference, the provisions in the Conditions of Approval shall remain in effect and shall control.

- 19. <u>Severability</u>. In the event that a court of competent jurisdiction determines that any provision or provisions of this Agreement are unenforceable, all provisions not so held shall remain in full force and effect.
- 20. <u>Subdivider No Agent of City</u>. Neither Subdivider nor any of Subdivider's agents, employees, or contractors are or shall be considered to be agents of City in connection with the performance of Subdivider's obligations under this Agreement.

18. General Provisions.

City Clerk

- A. All notices pursuant to this Agreement shall be in writing and shall be personally delivered or sent by registered or certified mail, return receipt requested, to the parties at their respective addresses indicated hereon. Notices personally delivered shall be effective upon delivery. Notices mailed as provided herein and sent postage prepaid shall be effective upon the date of delivery or refusal indicated on the return receipt. Either party may change its address for notices hereunder by notice to the other given in the manner provided in this subparagraph.
- B. The terms, conditions, covenants, and agreements set forth herein shall apply to and bind the heirs, executors, administrators, assigns, and successors of the parties hereto.
- Neither party to this Agreement relies upon any warranty or representation not contained in this Agreement.
- D. This Agreement shall be governed by and interpreted with respect to the laws of the State of California.
- E. In the event of any dispute between the parties with respect to this Agreement, the prevailing party shall be entitled to prompt payment of its reasonable attorneys' fees from the non-prevailing party.
- F. Any failure or delay by either party in asserting any of its rights and remedies as to any default shall not operate as a waiver of any default or of any such rights or remedies provided for hereunder.
- G. Time is of the essence in the performance of each and every provision of this Agreement.
- H. The Recitals to this Agreement are hereby incorporated into and expressly made a part of the terms of this Agreement.
- I. This Agreement constitutes the entire agreement of the parties with respect to the subject matter. All modifications, amendments, or waivers of the terms of this Agreement must be in writing and signed by the appropriate representatives of the parties.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first written above.

CITY:	City of Menifee 29844 Haun Rd. Menifee, CA 92586 (951) 672-6777		
Arman	do Villa, City Manager	Date	
ATTES	T:		

Pulte Homes Company, LLC 27401 Los Altos, Suite 400 Mission Viejo, CA 92691 By: Title: Vice Pes, dut		<u>4.27.23</u> Date	
By:		Date	
Reviewed and Approved:			
City Engineer	Date		
Approved as to Form:			

Date

City Attorney

Exhibit A

SECURITY – TRACT MAP NO. 36658-2 STREET, DRAINAGE, WATER, AND SEWER IMPROVEMENTS

CITY OF MENIFEE ENGINEERING DEPARTMENT CONSTRUCTION COST WORKSHEET

PARCEL MAP OR TRACT MAP NO. 2/3/2023 TR 36658-2 DATE: IP17-051 IP: FAITHFUL PERFORMANCE MATERIAL & LABOR **SECURITY SECURITY** (100% of Estimated (**50% of Estimated **IMPROVEMENTS** Construction Costs) Construction Costs) 3,056,500.00 Street/Drainage 3,056,656.03 1,528,250.00 \$ *Flood Control 0.00 0.00 0.00 \$ Dom Wtr \$ 601,999.20 602,000.00 301,000.00 **EMWD** \$ Rec Wtr **EMWD** \$ 0.00 0.00 0.00 Sewer **EMWD** \$ 624,038.40 624,000.00 312,000.00 Total 2,141,250.00 4,282,693.63 4,282,500.00 Warranty Retention (10%) 428,250.00

DESIGN ENGINEER'S CALCULATION OF IMPROVEMENT BONDING COSTS

Construction items and their quantities, as shown on the attached sheets, are accurate for the improvements required to construct the above project and the mathmatical extensions, using City's unit costs, are accurate for determining bonding costs

Above amounts do G do not G include additional 20% for recordation prior to having signed plans (Ordinance460, Section 10.3E).

Muc Re	2/3/2023		NO STATE OF THE PROPERTY OF TH
Signature	Date		★ NO. 83363 ★
Michael Brendecke	83363	3/31/2025	STORY
Name Typed or printed	RCE#	Exp. Date	OF CALIFORNIA

Civil Engineer's Stamp

*** PLEASE READ INSTRUCTIONS BELOW ***

- 1. Quantities are to be taken from the Improvement Plans. Unit cost are to be as provided on "City of Menifee Improvement Requirement Worksheet."
- 2. Show Performance Bond Amounts to the nearest \$500.00. Material and Labor Bond Amounts are 50% of Performance Bond Amountss. **100% for Flood Control items.
- 3. For Construction items not covered by "The City of Menifee Improvement Requirements Worksheet", Design Engineer is to provide his opinion of construction cost and use that cost. If City of Menifee Unit Costs are determined to be too low, in the opinion of the design engineer, the higher costs as provided by the Design Engineer should be used.

^{*}Flood Control Construction Cost Estimate to be provided by Flood Control District. Provide a copy of Flood Control District letter stating cost estmate.

STREET AND DRAINAGE IMPROVEMENTS

ITEM	QUANTITY	UNIT	UNIT	AMOUNT
			COST	
ROADWAY SECTION 1 Area	=	S.F.		
Excavation				
1. Projects with Grading Plan for Roadway				
Area x 0.50' (hinge point to hinge point)		C.Y.	\$ 25.0	0.00
2. Projects without a Grading Plan Cut (c)	=	C.Y.		
Road area and side slopes to daylight Fill (f)	=	C.Y.		
If balance, provide (a.) only, either cut or fill If export, provide (a.)&(b.) a = fill, b = cut - fill If import, provide (a)&(c), a = cut, c = fill - cut (Unit costs for (a),(b), & (c) are 20% of actual costs to assure that work will be corrected to eliminate hazardous conditions.)				
(a.) Excavate and Fill	-	C.Y.	\$ 0.4	0.00
(b.) Excavate and Export	-	C.Y.	\$ 1.1	0.00
(c.) Import and Fill	-	C.Y.	\$ 2.8	0.00
Asphalt Concrete (144 lbs/cu.ft)	5,115	5 TON	\$ 90.0	0 \$ 460,350.00
Thickness in Feet (0.33' min.) :	= 0.33			
Agg Base Class II	4,559	C.Y.	\$ 50.0	0 \$ 227,950.00
Thickness in Feet :	= 0.5			
Asphalt Emulsion (Fog Seal/Paint Binder)		Ton	\$ 600.0	0.00
ROADWAY SECTION 2 Area :	=	S.F.		
Excavation				
Projects with Grading Plan for Roadway				
Area x 0.50' (hinge point to hinge point)		C.Y.	\$ 25.0	0.00
2. Projects without a Grading Plan: Cut (c)	=	C.Y.		
Road area and side slopes to daylight Fill (f)	=	C.Y.		
(a.) Excavate and Fill	-	C.Y.	\$ 0.4	0.00
(b.) Excavate and Export	-	C.Y.	\$ 1.1	0.00
(c.) Import and Fill	-	C.Y.	\$ 2.8	0.00
Asphalt Concrete (144 lbs/cu.ft)	-	TON	\$ 90.0	0.00
Thickness in Feet (0.33' min.)	= 0.39			
Agg Base Class II	-	C.Y.	\$ 50.0	0 \$ 0.00
Thickness in Feet	= 0.5			
Asphalt Emulsion (Fog Seal/Paint Binder)	-	Ton	\$ 600.0	0.00
ROADWAY SECTION 3 Area :	=	S.F.		
Excavation				
1. Projects with Grading Plan for Roadway				
Area x 0.50' (hinge point to hinge point)		C.Y.	\$ 25.0	0.00
2. Projects without a Grading Plan: Cut (c)	=	C.Y.		
Fill (f)	=	C.Y.		
(a.) Excavate and Fill	_	C.Y.	\$ 0.4	0.00
(b.) Excavate and Export	-	C.Y.	\$ 1.1	0.00
(c.) Import and Fill	-	C.Y.	\$ 2.8	0.00
Asphalt Concrete (144 lbs/cu.ft)	-	TON	\$ 90.0	
Thickness in Feet (0.33' min.)	= 0.39			
Agg Base Class II	-	C.Y.	\$ 50.0	0.00
Thickness in Feet	= 0.5			
Asphalt Emulsion (Fog Seal/Paint Binder)	-	Ton	\$ 600.0	0.00
Sawcut Exist. A.C. Pavement		L.F.	\$ 1.0	
Cold Plane A.C. Pavement		S.F.	\$ 0.5	

Grinding A.C. , in place		S.Y.	\$	0.60 \$	0.00
Remove A.C. Pavement		S.Y.	\$	8.00 \$	0.00
Remove Curb and Gutter		L.F.	\$	18.00 \$	0.00
Remove A.C. Dike		L.F.	\$	3.00 \$	0.00
Remove Chain Link Fence		L.F.	\$	7.50 \$	0.00
Remove Barricade		L.F.	\$	10.00 \$	0.00
Relocate Mailbox		EA.	\$	250.00 \$	0.00
AC overlay (min. 0.10')		S.F.	\$	0.90 \$	0.00
Curb and Gutter (Type A-6)	12,351	L.F.	\$	14.00 \$	172,914.00
Curb and Gutter (Type A-8)	,	L.F.	\$	16.00 \$	0.00
Type "C" Curb		L.F.	\$	12.00 \$	0.00
Type "D-1" Curb		L.F.	\$	10.00 \$	0.00
Type "6A" Curb	355	L.F.	\$	15.00 \$	5,325.00
A.C. Dike (6")(incl. material & labor)	000	L.F.	\$	8.00 \$	0.00
A.C. Dike (8")(incl. material & labor)		L.F.	\$	10.00 \$	0.00
P.C.C. Cross Gutter and Spandrels	2,507	S.F.	\$	10.00 \$	25,070.00
P.C.C. Sidewalk	55,179	S.F.	\$	6.00 \$	
P.C.C. Driveway Approach (120 EA.)	20,485	S.F.	\$	8.00 \$	331,074.00 163,880.00
	20,465				
P.C.C. Dip Section Std. 307	40	S.F.	\$	6.00 \$	0.00
ADA Access Ramp Type 1 (w/ new construction)	10	EA.	\$	1,500.00 \$	15,000.00
ADA Access Ramp (in existing improvements)		EA.	\$	2,500.00 \$	0.00
Barricades		L.F.	\$	100.00 \$	0.00
Metal Beam Guard Railing		L.F.	\$	35.00 \$	0.00
Utility Trench, one side (Edison, Telephone, Cable)					
(total length of Streets)	6,255	L.F.	\$	10.00 \$	62,550.00
Chain Link Fence (6')		L.F.	\$	15.00 \$	0.00
Relocate Fence		L.F.	\$	12.00 \$	0.00
Pipe Gate		EA.	\$	1,000.00 \$	0.00
Relocate Power Pole		EA.	\$	10,000.00 \$	0.00
Street Lights (including conduit)	37	EA.	\$	5,000.00 \$	185,000.00
Adjust Water Valve to Grade (if no water plan)		EA.	\$	150.00 \$	0.00
Adjust MH to Grade (if no sewer plan)		EA.	\$	400.00 \$	0.00
Curb Cuts	32	EA.	\$	10.00 \$	320.00
			\$	\$	0.00
			\$	\$	0.00
			\$	\$	0.00
			\$	\$	0.00
			\$	\$	0.00
			\$	\$	0.00
			\$	\$	0.00
			\$	\$	0.00
			\$	\$	0.00
			\$	\$	0.00
			\$	\$	0.00
LANDSCAPING			Ψ	Ψ	0.00
Maintenance Walk STD 113		S.F.	\$	4.00 \$	0.00
		S.F.		10.00 \$	0.00
Colored Stamped Concrete			\$		
Street Trees (15 Gallon)		EA	\$	100.00 \$	0.00
Landscape and Irrigation		S.F.	\$	3.50 \$	0.00
Landscape Fill Material		C.Y.	\$	27.00 \$	0.00
Water Meter		EA	\$	7,000.00 \$	0.00
Electric Meter		S.F.	\$	10,000.00 \$	0.00
Remove trees		EA	\$	3,000.00 \$	0.00
			\$	\$	0.00
			\$	\$	0.00
			\$	\$	0.00
			\$	\$	0.00

DRAINAGE				\$	\$	0.00
Remove Concrete Bulkhead		1	EA.	\$ 200.00	\$	200.00
Slope Anchors for Pipes		•	EA.	\$ 300.00		0.00
Cut Off Wall (Std 2')			C.Y.	\$ 400.00		0.00
A. C. Overside Drain			EA.	\$ 500.00		0.00
Under Sidewalk Drain Std 309			EA	\$ 2,000.00		0.00
Flat Outlet Drainage Structure Std 303			EA	\$ 2,000.00		0.00
Curb Outlet Drainage Structure Std 308			EA	\$ 2,000.00		0.00
Terrace Drain & Down Drain			S.F.	\$ 6.50	-	0.00
Interceptor Drain			S.F.	\$ 6.50		0.00
R.C. Box Culvert (2 - 3'X5')			C.Y.	\$ 400.00		0.00
Concrete Channel			C.Y.	\$ 200.00		0.00
Rip Rap (1/4 Ton) Methob B (1.9 tons /CY)			C.Y.	\$ 80.00		0.00
Rip Rap (1/2 Ton) Method B			C.Y.	\$ 90.00		0.00
Rip Rap (172 Ton) Method B			C.Y.	\$ 100.00		0.00
Rip Rap (2 Ton) Method B			C.Y.	\$ 110.00		0.00
			C.Y.	\$ 100.00		0.00
Grouted Rip Rap (1/4 Ton) Method B			C.Y.	\$ 120.00		0.00
Grouted Rip Rap (1/2 Ton) Method B						
Grouted Rip Rap (1 Ton) Method B			C.Y.	\$ 130.00		0.00
Grouted Rip Rap (2 Ton) Method B	222		C.Y.	\$ 140.00		0.00
18" R.C.P. round, arch or elliptical	332		L.F.	\$ 113.00		37,516.00
24" R.C.P. round, arch or elliptical	216		L.F.	\$ 132.00	•	28,512.00
30" R.C.P. round, arch or elliptical	550		L.F.	\$ 153.00		0.00
36" R.C.P. round, arch or elliptical	558		L.F.	\$ 178.00		99,324.00
42" R.C.P. round, arch or elliptical			L.F.	\$ 204.00		0.00
48" R.C.P. round, arch or elliptical			L.F.	\$ 235.00		0.00
18" C.S.P. or HDPE N12			L.F.	\$ 40.00		0.00
24" C.S.P. or HDPE N12			L.F.	\$ 50.00		0.00
30" C.S.P. or HDPE N12			L.F.	\$ 60.00		0.00
36" C.S.P. or HDPE N12			L.F.	\$ 70.00		0.00
42" C.S.P. or HDPE N12			L.F.	\$ 80.00		0.00
48" C.S.P. or HDPE N12			L.F.	\$ 100.00		0.00
Catch Basin W=4'			EA.	\$ 2,500.00		0.00
Catch Basin W=7'	•		EA.	\$ 4,000.00		0.00
Catch Basin W=14'	2		EA.	\$ 7,500.00		15,000.00
Catch Basin W=21'	6		EA.	\$ 11,000.00		66,000.00
Catch Basin W=28'			EA.	\$ 14,500.00		0.00
Inlet Type IX or X			EA.	\$ 2,500.00		0.00
Junction Structure No. 1	_		EA.	\$ 3,500.00		0.00
Junction Structure No. 2	3		EA.	\$ 4,500.00	-	13,500.00
Junction Structure No. 6			EA.	\$ 5,000.00		0.00
Transition Structure No. 1			EA.	\$ 12,500.00		0.00
Transition Structure No. 2			EA.	\$ 12,500.00		0.00
Transition Structure No. 3			EA.	\$ 4,500.00	-	0.00
Manhole No. 1	3		EA.	\$ 5,000.00		15,000.00
Manhole No. 2			EA.	\$ 6,500.00		0.00
Manhole No. 3			EA.	\$ 2,700.00		0.00
Manhole No. 4	2		EA.	\$ 6,500.00		13,000.00
Structural Reinforcement Concrete			C.Y.	\$ 400.00		0.00
Headwall for 36" or smaller storm drain			EA.	\$ 3,500.00	-	0.00
3" PVC for Under-driveway drains		122	L.F.	\$ 20.00		2,440.00
Filterra Internal Bypass Curb Inlet		4	E.A.	\$ 10,300.00		41,200.00
Concrete Collar		1	E.A.	\$ 400.00		400.00
				\$	\$	0.00
				\$	\$	0.00
				\$	\$	0.00

				\$		\$	0.00
				\$		\$	0.00
SIGNING, STRIPING AND SIGNA	1 6			φ		Ψ	0.00
Remove Painted Traffic Stripes and Markin			S.F	\$	2.50	¢	0.00
4" Painted Solid Stripes	193		L.F.	\$	0.21		0.00
4" Painted Solid Stripes (2 Coats)			L.F.	\$	0.30	_	0.00
4" Painted Broken Stripes			L.F.	\$	0.30	_	0.00
4" Painted Double Solid Stripes			L.F.	\$	0.10	_	0.00
6" Painted Bike Lane Stripes			L.F.	\$	0.65	_	0.00
8" Painted Channelizing Line			L.F.	\$	0.82	_	0.00
12" Painted Crosswalk & Limit Line			L.F.	\$	1.30	_	0.00
Painted One-Way, No Passing			L.F.	\$	0.36	_	0.00
Painted Two-Way Left Turn Lane			L.F.	\$	0.82	_	0.00
Painted Pavement Markings			S.F	\$	2.70	_	0.00
Remove Thermoplastic Trafffic Stripes and	l Markings		S.F	\$	2.50	_	0.00
4" Thermoplastic Solid Stripes	riviaritings		L.F.	\$	0.52	_	0.00
4" Thermoplastic Broken Stripes			L.F.	\$	0.47	_	0.00
4" Thermoplastic Double Solid Stripes			L.F.	\$	0.83	_	0.00
6" Thermoplastic Bike Lane Stripes			L.F.	\$	0.63	_	0.00
8" Thermoplastic Channelizing Line			L.F.	\$	0.78	_	0.00
12" Thermoplastic Crosswalk & Limit Line		116	L.F.	\$	0.97	_	112.52
Thermoplastic One-Way, No Passing			L.F.	\$	1.13	_	0.00
Thermoplastic Two-Way Left Turn Lane			L.F.	\$	2.83	_	0.00
Thermoplastic Pavement Markings			S.F	\$	3.61	_	0.00
Marking			S.F.	\$	2.25	_	0.00
Thermoplastic Cross Walk and Pavement	Marking		S.F.	\$	3.00	_	0.00
Remove, Sign, Salvage			EA.	\$	50.00	_	0.00
Relocate Roadside Sign			EA.	\$	100.00	_	0.00
Street Name Sign		19	EA.	\$	275.00	-	5,225.00
Install Sign (Strap and Saddle Bracket Me	thod)		EA.	\$	150.00	-	0.00
Install Sign (Mast Arm Hanger Method)			EA.	\$	425.00	-	0.00
Stop Sign & Post		7	EA.	\$	250.00	_	1,750.00
Road Sign on existing pole / post (One Pos	st)		EA.	\$	150.00	_	0.00
Road Sign on existing pole / post (Two Pos			EA.	\$	300.00	\$	0.00
Object Marker - Modified Type "F" Delinear			EA.	\$	60.00	\$	0.00
Delineator (Class 1 Type F)			EA.	\$	40.00	-	0.00
Delineator (Class 2)			EA.	\$	45.00	\$	0.00
Pavement Marker, Reflective			EA.	\$	3.75	_	0.00
·							
New Traffic Signal & Lighting (Major Interse	ection)		LS	\$	250,000.00	\$	0.00
New Traffic Signal & Lighting (Minor Interse	ection)		LS	\$	150,000.00	\$	0.00
Retrofit of Ex. Traffic Signal & Lighting			LS	\$	100,000.00	\$	0.00
6' Round Signal Loops			EA	\$	450.00	\$	0.00
Install Pull Box (#3-1/2)		62	EA	\$	300.00	\$	18,600.00
Install Pull Box (#5e)		2	EA	\$	400.00	\$	800.00
2" PVC Interconnect Conduit & Cable			L.F.	\$	25.00	\$	0.00
3" PVC Interconnect Conduit & Cable			L.F.	\$	30.00	\$	0.00
Service Pedestal		2	E.A.	\$	5,000.00	\$	10,000.00
39W LED Street Light (Ameron 1C223)		37	E.A.	\$	10,000.00	\$	370,000.00
Survey			LS	\$	8,000.00	\$	0.00
Design/submittals/review			LS	\$	40,000.00	\$	0.00
Mobilization			LS	\$	30,000.00	\$	0.00
Traffic Control			LS	\$	15,000.00	\$	0.00
	A.	Subtotal				\$	2,388,012.52
	B.	Administrative Contin	gency (20	% x A)		\$	477,602.50
	C.	CM - Inspection - LC	(8%)	· <u></u>		\$	191,041.00

	Streets/Drainage Total (A + B)	le	3,056,656.03
U	(Streets/Drainage Total (A + D)	Ф	J.U30,030.U3

DOMESTIC WATER IMPROVEMENTS

ITEM		QUANTITY	UNIT		UNIT COST	AMOUNT
4" Waterline PVC C-900 DR-18			L.F.	\$	25.00	\$ 0.00
6" Waterline PVC C-900 DR-18			L.F.	\$	30.00	0.00
8" Waterline PVC C-900 DR-18		6,055	L.F.	\$	35.00	\$ 211,925.00
12" Waterline PVC C-900 DR-18			L.F.	\$	55.00	\$ 0.00
16" Waterline PVC C-905 DR-18			L.F.	\$	90.00	\$ 0.00
18" Waterline PVC C-905 DR-18			L.F.	\$	135.00	\$ 0.00
20" Waterline PVC C-905 DR-18			L.F.	\$	180.00	\$ 0.00
4" Gate Valve RS			EA.	\$	715.00	\$ 0.00
6" Gate Valve RS			EA.	\$	830.00	\$ 0.00
8" Gate Valve RS		19	EA.	\$	1,340.00	\$ 25,460.00
12" Gate Valve RS			EA.	\$	2,300.00	\$ 0.00
16" Gate Valve RS			EA.	\$	6,270.00	\$ 0.00
18" Gate Valve RS			EA.	\$	14,300.00	\$ 0.00
6" Fire Hydrant (Standard)		15	EA.	\$	4,000.00	\$ 60,000.00
6" Fire Hydrant (Super)			EA.	\$	4,500.00	\$ 0.00
4" Blowoff			EA.	\$	3,500.00	\$ 0.00
6" Blowoff			EA.	\$	4,000.00	\$ 0.00
1" Air and Vacuum Valve.		3	EA.	\$	2,400.00	\$ 7,200.00
2" Air and Vacuum Valve.			EA.	\$	4,000.00	\$ 0.00
1" Service Connection (No Meter)		116	EA.	\$	800.00	\$ 92,800.00
1-1/2" Service Connection (No Meter)		4	EA.	\$	2,480.00	\$ 9,920.00
2" Service Connection (No Meter)			EA.	\$	2,780.00	\$ 0.00
4" Service Connection (No Meter)			EA.	\$	4,500.00	\$ 0.00
Adjust Water Valve to Grade			EA.	\$	200.00	\$ 0.00
Removal of Blowoff			EA.	\$	500.00	\$ 0.00
Join at existing end of 8" pipe		2	EA.	\$	2,000.00	\$ 4,000.00
1" Hot Tap			EA.	\$	1,000.00	\$ 0.00
4" Hot Tap			EA.	\$	1,430.00	\$ 0.00
6" Hot Tap			EA.	\$	1,750.00	\$ 0.00
8" Hot Tap			EA.	\$	2,200.00	\$ 0.00
12" Hot Tap			EA.	\$	3,150.00	0.00
8" Miscellaneous Fittings		27	EA.	\$	250.00	6,750.00
12" Miscellaneous Fittings			EA.	\$	320.00	\$ 0.00
				\$		\$ 0.00
				\$		\$ 0.00
				\$		\$ 0.00
				\$		\$ 0.00
				\$		\$ 0.00
				\$		\$ 0.00
	A.	Subtotal				\$ 418,055.00
	B.	Administrative Cor		20% >	(A)	\$ 83,611.00
	C. Water Total (A + B)					\$ 501,666.00
		TO HAVING SIGN	IED PLANS	3		
	D.	20% x C				\$ 100,333.20
	E.	Water Total (C +	D)			\$ 601,999.20

RECYCLED WATER IMPROVEMENTS

ITEM		QUANTITY	UNIT		UNIT COST		AMOUNT
4" Waterline PVC C-900 DR-18 Purple			L.F.	\$	25.00	\$	0.00
6" Waterline PVC C-900 DR-18 Purple			L.F.	\$	30.00	\$	0.00
8" Waterline PVC C-900 DR-18 Purple			L.F.	\$	35.00	\$	0.00
12" Waterline PVC C-900 DR-18 Purple			L.F.	\$	55.00	\$	0.00
16" Waterline PVC C-905 DR-18 Purple			L.F.	\$	90.00	\$	0.00
18" Waterline PVC C-905 DR-18 Purple			L.F.	\$	135.00	\$	0.00
20" Waterline PVC C-905 DR-18 Purple			L.F.	\$	180.00	\$	0.00
4" Gate Valve RS			EA.	\$	715.00	\$	0.00
6" Gate Valve RS			EA.	\$	830.00	\$	0.00
8" Gate Valve RS			EA.	\$	1,340.00	\$	0.00
12" Gate Valve RS			EA.	\$	2,300.00	\$	0.00
16" Gate Valve RS			EA.	\$	6,270.00	\$	0.00
18" Gate Valve RS			EA.	\$	14,300.00	\$	0.00
4" Blowoff			EA.	\$	3,500.00	\$	0.00
6" Blowoff			EA.	\$	4,000.00	\$	0.00
1" Air and Vacuum Valve.			EA.	\$	2,400.00	\$	0.00
2" Air and Vacuum Valve.			EA.	\$	4,000.00	\$	0.00
1" Service Connection (No Meter)			EA.	\$	800.00	\$	0.00
1-1/2" Service Connection (No Meter)			EA.	\$	2,480.00	\$	0.00
2" Service Connection (No Meter)			EA.	\$	2,780.00	\$	0.00
4" Service Connection (No Meter)			EA.	\$	4,500.00	\$	0.00
Adjust Water Valve to Grade			EA.	\$	200.00		0.00
Removal of Blowoff			EA.	\$	500.00	\$	0.00
Join at existing end of 8" pipe			EA.	\$	2,000.00	\$	0.00
1" Hot Tap			EA.	\$	1,000.00		0.00
4" Hot Tap			EA.	\$	1,430.00	\$	0.00
6" Hot Tap			EA.	\$	1,750.00	\$	0.00
8" Hot Tap			EA.	\$	2,200.00	\$	0.00
12" Hot Tap			EA.	\$	3,150.00	\$	0.00
·				\$	<u> </u>	\$	0.00
				\$		\$	0.00
				\$		\$	0.00
				\$		\$	0.00
				\$		\$	0.00
				\$		\$	0.00
				\$		\$	0.00
				\$		\$	0.00
				\$		\$	0.00
				\$		\$	0.00
	Α.	Subtotal				\$	0.00
	В.	Administrative Contingency (20% x A)					0.00
	C.	Water Total (A + B				\$ \$	0.00
		TO HAVING SIGNI)			
ļ	D.	20% x C				\$	0.00
	E.	Water Total (C + D	D)			\$	0.00

SANITARY SEWER IMPROVEMENTS

B"PVC SDR 35 Green	ITEM	QUANTITY	UNIT		UNIT	AMOUNT
B"PVC SDR 35 Green					COST	
B" PVC SDR 35 Green	4" PVC SDR 35 (Use it for Residential Laterals)	3608	L.F.	\$	25.00 \$	90,200.00
10" PVC SDR 35 Green	6" PVC SDR 35 Green		L.F.	\$	30.00 \$	0.00
12" PVC SDR 35 Green	8" PVC SDR 35 Green	5816	L.F.	\$	35.00 \$	203,560.00
15" PVC SDR 35 Green	10" PVC SDR 35 Green		L.F.	\$	46.00 \$	0.00
B" VCP	12" PVC SDR 35 Green		L.F.	\$	54.00 \$	0.00
10" VCP	15" PVC SDR 35 Green		L.F.	\$	90.00 \$	0.00
12" VCP	8" VCP		L.F.	\$	55.00 \$	0.00
15" VCP	10" VCP		L.F.	\$	62.00 \$	0.00
18" VCP	12" VCP		L.F.	\$	72.00 \$	0.00
21" VCP	15" VCP		L.F.	\$	81.00 \$	0.00
24" VCP	18" VCP		L.F.	\$	162.00 \$	0.00
CP	21" VCP		L.F.	\$	183.00 \$	0.00
CP	24" VCP		L.F.	\$	195.00 \$	0.00
Solution Column	27" VCP		L.F.	_		
Standard Manhole 48" 30	30" VCP		L.F.			
Standard Manhole 60" EA. \$ 4,500.00 \$ 0.00	Standard Manhole 48"	30		_		
EA. \$ 3,300.0 \$ 0.0	Standard Manhole 60"		_	_		
Clean out EA. \$ 730.00 \$ 0.00				<u> </u>		
Tile EA. \$ 200.00 \$ 23,200.00					· · · · · · · · · · · · · · · · · · ·	
Tie to Existing Manhole 2 EA. \$ 2,100.00 \$ 4,200.00 Rechannel Existing Manhole EA. \$ 1,500.00 \$ 0.00 Join Existing 8" Pipe 1 1 EA. \$ 1,500.00 \$ 1,500.00 Join Existing 12" Pipe EA. \$ 2,000.00 \$ 0.00 Chimney EA. \$ 400.00 \$ 0.00 Chimney EA. \$ 400.00 \$ 0.00 Chimney EA. \$ 500.00 Chimney		116				
Rechannel Existing Manhole						
Join Existing 8" Pipe	,	_	_			
Source S	•	1	_	_		
EA. \$400.00 \$0.00	•					
Adjust M.H. to grade Concrete Encasement B" Backflow Valves 66 EA. \$500.00 \$0.00 \$16,500.00 \$5 \$0.00 \$6 \$6 B. Administrative Contingency (20% x A) \$6,672.00 C. Sewer Total (A + B) \$520,032.00 TO HAVING SIGNED PLAND (ORD.460, SEC.) D. 20% x C \$104,006.4	•		_	_		
L.F. \$35.00 \$0.00	•		_	_	-	
8" Backflow Valves 66 EA. \$ 250.00 \$ 16,500.00 \$ 0.	•					
\$ \$ 0.0 \$ \$ 0.		66				
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\$ \$ 0.00 \$ \$ 433,360.00 B. Administrative Contingency (20% x A) \$ 86,672.00 C. Sewer Total (A + B) \$ 520,032.00 TO HAVING SIGNED PLAND (ORD.460, SEC. D. 20% x C \$ 104,006.40						
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B. Administrative Contingency (20% x A) \$ 86,672.0 C. Sewer Total (A + B) \$ 520,032.0 TO HAVING SIGNED PLAND (ORD.460, SEC. D. 20% x C \$ 104,006.4	Ι Δ	Subtotal				
C. Sewer Total (A + B) \$ 520,032.0 TO HAVING SIGNED PLAND (ORD.460, SEC. D. 20% x C \$ 104,006.4						
TO HAVING SIGNED PLAND (ORD.460, SEC. D. 20% x C \$ 104,006.4		Sewer Total (A + B) TO HAVING SIGNED PLAND (ORD.460, SEC.				
D. 20% x C \$ 104,006.4	0.					020,002.00
	<u> </u>					104 006 40
	<u> </u>					

CITY OF MENIFEE ENGINEERING DEPARTMENT COST ESTIMATE CALCULATION SHEET

PARCEL MAP OR TRACT NO.	TR 36658-2	SCH:	DATE:	2/3/2023	
PP, CU, PU, MS OR VL NO.					

IMPROVEMENT COSTS (Including Contingencies)	
I. Streets/Drainage (Line C from Street Improvement Calculations)	\$ 3,056,656.03
II. Domestic Water (Line C from Domestic Water Improvement Calculations)	\$ 501,666.00
III. Recycled Water (Line C from Recycled Water Improvement Calculations)	\$
IV. Sewer (Line C from Sewer Improvement Calculations)	\$ 520,032.00
Total	\$ 4,078,354.03
INSPECTION DEPOSIT CALCULATION	
Street/Drainage	
NOTE: Use 3% for Inspection	\$ 91,699.68

CITY OF MENIFEE ENGINEERING DEPARTMENT CONSTRUCTION COST WORKSHEET

PARCEL MAP OR TRACT MAP NO. TR 36658 BACKBONE PHASE 1 DATE: 7/15/2021 17-044 IP: **FAITHFUL PERFORMANCE** MATERIAL & LABOR **SECURITY SECURITY** (100% of Estimated (**50% of Estimated **IMPROVEMENTS** Construction Costs) Construction Costs) 11,829,117.98 11,829,000.00 \$ 5,914,500.00 Street/Drainage *Flood Control 2.613.785.00 2,614,000.00 \$ 2,614,000.00 3,032,500.00 \$ 1,516,250.00 Dom Wtr EMWD 3,032,416.80 Rec Wtr **EMWD** 0.00 0.00 \$ 0.00 852,500.00 426,250.00 Sewer **EMWD** 852,343.20 Total 18,327,662,98 18,328,000.00 10,471,000.00

DESIGN ENGINEER'S CALCULATION OF IMPROVEMENT BONDING COSTS

1,832,800.00

Construction items and their quantities, as shown on the attached sheets, are accurate for the improvements required to construct the above project and the mathmatical extensions, using City's unit costs, are accurate for determining bonding costs

Above amounts do G do not G include additional 20% for recordation prior to having signed plans (Ordinance460, Section 10.3E).

Warranty Retention (10%)

 Michael Brendecke
 83363
 3/31/2023

 Name Typed or printed
 RCE#
 Exp. Date



Civil Engineer's Stamp

*Flood Control Construction Cost Estimate to be provided by Flood Control District. Provide a copy of Flood Control District letter stating cost estmate.

*** PLEASE READ INSTRUCTIONS BELOW ***

- 1. Quantities are to be taken from the Improvement Plans. Unit cost are to be as provided on "City of Menifee Improvement Requirement Worksheet."
- Show Performance Bond Amounts to the nearest \$500.00. Material and Labor Bond Amounts are 50% of Performance Bond Amountss. **100% for Flood Control items.
- 3. For Construction items not covered by "The City of Menifee Improvement Requirements Worksheet", Design Engineer is to provide his opinion of construction cost and use that cost. If City of Menifee Unit Costs are determined to be too low, in the opinion of the design engineer, the higher costs as provided by the Design Engineer should be used.

STREET AND DRAINAGE IMPROVEMENTS

ITEM	QUANTITY	UNIT	UNIT	AMOUNT
			COST	
ROADWAY SECTION 1A Area =		S.F.		
Excavation				
Projects with Grading Plan for Roadway				
Area x 0.50' (hinge point to hinge point)		C.Y.	\$ 25.00	0.00
2. Projects without a Grading Plan Cut (c) =		C.Y.		
Road area and side slopes to daylight Fill (f) =	:	C.Y.	_	
If balance, provide (a.) only, either cut or fill If export, provide (a.)&(b.) a = fill, b = cut - fill If import, provide (a)&(c), a = cut, c = fill - cut (Unit costs for (a),(b), & (c) are 20% of actual costs to assure that work will be corrected to eliminate hazardous conditions.)				
(a.) Excavate and Fill	-	C.Y.	\$ 0.40	\$ 0.00
(b.) Excavate and Export	-	C.Y.	\$ 1.10	\$ 0.00
(c.) Import and Fill	-	C.Y.	\$ 2.80	0.00
Asphalt Concrete (144 lbs/cu.ft)	1,339	TON	\$ 90.00	\$ 120,510.00
Thickness in Feet (4" min.) =				
Agg Base Class II Thickness in Feet (6" min) =	1,043	C.Y.	\$ 50.00	\$ 52,150.00
Asphalt Emulsion (Fog Seal/Paint Binder)	0.3	Ton	\$ 600.00	0.00
ROADWAY SECTION 1B Area =		S.F.	Ψ 000.00	ψ 0.00
Excavation		0.1 .		
Projects with Grading Plan for Roadway				
Area x 0.50' (hinge point to hinge point)		C.Y.	\$ 25.00	0.00
2. Projects without a Grading Plan: Cut (c) =		C.Y.	φ 25.00	υ.ου
Road area and side slopes to daylight Fill (f) =		C.Y.		
(a.) Excavate and Fill	_	C.Y.	\$ 0.40	0.00
(b.) Excavate and Export	_	C.Y.	\$ 1.10	
(c.) Import and Fill	-	C.Y.	\$ 2.80	<u> </u>
Asphalt Concrete (144 lbs/cu.ft)	4,872	TON	\$ 90.00	
Thickness in Feet (5" min.) =	-	1011	Ψ 30.00	450,400.00
Agg Base Class II	5,221	C.Y.	\$ 50.00	\$ 261,050.00
Thickness in Feet (10.5" min) =		0.1.	Ψ 30.00	Σ01,000.00
Asphalt Emulsion (Fog Seal/Paint Binder)	-	Ton	\$ 600.00	0.00
ROADWAY SECTION 1C Area =		S.F.	7	7 3133
Excavation		0.1 .		
Projects with Grading Plan for Roadway				
Area x 0.50' (hinge point to hinge point)		C.Y.	\$ 25.00	0.00
2. Projects without a Grading Plan: Cut (c) =		C.Y.	7	7 2.00
Fill (f) =		C.Y.		
(a.) Excavate and Fill	_	C.Y.	\$ 0.40	0.00
(b.) Excavate and Export	-	C.Y.	\$ 1.10	
(c.) Import and Fill	-	C.Y.	\$ 2.80	
Asphalt Concrete (144 lbs/cu.ft)	18,642	TON	\$ 90.00	
Thickness in Feet (0.6" min.) = 0.5				
Agg Base Class II	21,671	C.Y.	\$ 50.00	\$ 1,083,550.00
Thickness in Feet (13.5" min) = 1.13				
Asphalt Emulsion (Fog Seal/Paint Binder)	-	Ton	\$ 600.00	0.00
Agg Base Class II (compacted)	5	C.Y.	\$ 50.00	\$ 250.00

Sawcut Exist. A.C. Pavement	1211	L.F.	\$ 1.00	¢	1,211.00
Cold Plane A.C. Pavement	1211	S.F.	\$ 0.50	_	0.00
Grinding A.C. , in place	1,211	S.Y.	\$ 0.60	_	726.60
Remove A.C. Pavement	1,211	S.Y.	\$ 8.00		0.00
Remove Curb and Gutter		L.F.	\$ 18.00	_	0.00
Remove A.C. Dike		L.F.	\$ 3.00	-	0.00
Remove Chain Link Fence		L.F.	\$ 7.50	<u> </u>	0.00
Remove Barricade		L.F.	\$ 10.00	_	0.00
Relocate Mailbox		EA.	\$ 250.00	_	0.00
AC overlay (min. 0.10')		S.F.	\$ 0.90		0.00
Curb and Gutter (Type A-6)	11634	L.F.	\$ 14.00	_	162,876.00
Curb and Gutter (Type A-8)	9964	L.F.	\$ 16.00	_	159.424.00
Type "C" Curb	3304	L.F.	\$ 12.00	_	0.00
Type "D-1" Curb		L.F.	\$ 10.00		0.00
Type "D" (6")	943	L.F.	\$ 13.00	_	12,259.00
Type "D" Curb (8")	3904	L.F.	\$ 15.00	_	58,560.00
A.C. Dike (6")(incl. material & labor)	3904	L.F.	\$ 8.00		0.00
A.C. Dike (8")(incl. material & labor) A.C. Dike (8")(incl. material & labor)	2418	L.F.	\$ 10.00		24,180.00
P.C.C. Cross Gutter and Spandrels	21718	S.F.	\$ 10.00		
P.C.C. Sidewalk					217,180.00
	133607	S.F.	\$ 6.00	_	801,642.00
P.C.C. Driveway Approach (20 EA.)	5394	S.F.	\$ 8.00		43,152.00
P.C.C. Dip Section Std. 307		S.F.	\$ 6.00		0.00
ADA Access Ramp (w/ new construction)	55	EA.	\$ 1,500.00		82,500.00
ADA Access Ramp (in existing improvements)		EA.	\$ 2,500.00	_	0.00
Barricades		L.F.	\$ 100.00	-	0.00
Metal Beam Guard Railing	40	L.F.	\$ 35.00	\$	1,400.00
Utility Trench, one side (Edison, Telephone, Cable)					
(total length of Streets)	15,434	L.F.	\$ 10.00	_	154,340.00
Chain Link Fence (6')		L.F.	\$ 15.00	_	0.00
Relocate Fence		L.F.	\$ 12.00	_	0.00
Pipe Gate		EA.	\$ 1,000.00		0.00
Relocate Power Pole	13	EA.	\$ 10,000.00		130,000.00
Street Lights (including conduit)	102	EA.	\$ 5,000.00		510,000.00
Adjust Water Valve to Grade (if no water plan)		EA.	\$ 150.00		0.00
Adjust MH to Grade (if no sewer plan)		EA.	\$ 400.00		0.00
Modified P.C.C. Cross Gutter and Spandrels	4437	S.F.	\$ 10.00		44,370.00
P.C.C. Commercial Driveway Approach (4 EA.)	2812	S.F.	\$ 8.00	\$	22,496.00
			\$	\$	0.00
			\$	\$	0.00
			\$	\$	0.00
			\$	\$	0.00
			\$	\$	0.00
			\$	\$	0.00
			\$	\$	0.00
			\$	\$	0.00
			\$	\$	0.00
			\$	\$	0.00
LANDSCAPING					
Maintenance Walk STD 113		S.F.	\$ 4.00	\$	0.00
Colored Stamped Concrete		S.F.	\$ 10.00	\$	0.00
Street Trees (15 Gallon)		EA	\$ 100.00	\$	0.00
Landscape and Irrigation		S.F.	\$ 3.50		0.00
Landscape Fill Material		C.Y.	\$ 27.00		0.00
Water Meter		EA	\$ 7,000.00	_	0.00
Electric Meter		S.F.	\$ 10,000.00		0.00
Remove trees		EA	\$ 3,000.00		0.00

10' Wide Decomposed Granite Trail	74033	S.F.	\$ 4.00		296,132.00
			\$	\$	0.00
			\$	\$	0.00
			\$	\$	0.00
			\$	\$	0.00
DRAINAGE					
Concrete Bulkhead	4	EA.	\$ 200.00	\$	800.00
Slope Anchors for Pipes		EA.	\$ 300.00	\$	0.00
Cut Off Wall (Std 2')	16	C.Y.	\$ 400.00	\$	6,400.00
A. C. Overside Drain		EA.	\$ 500.00	\$	0.00
Under Sidewalk Drain Std 309		EA	\$ 2,000.00	\$	0.00
Flat Outlet Drainage Structure Std 303		EA	\$ 2,000.00	\$	0.00
Curb Outlet Drainage Structure Std 308		EA	\$ 2,000.00		0.00
Terrace Drain & Down Drain		S.F.	\$ 6.50	\$	0.00
Interceptor Drain		S.F.	\$ 6.50		0.00
R.C. Box Culvert (2 - 3'X5')		C.Y.	\$ 400.00		0.00
Concrete Channel		C.Y.	\$ 200.00		0.00
Rip Rap (1/4 Ton) Methob B (1.9 tons /CY)	30	C.Y.	\$ 80.00		2,400.00
Rip Rap (1/2 Ton) Method B	30	C.Y.	\$ 90.00		0.00
Rip Rap (172 Ton) Method B		C.Y.	\$ 100.00		0.00
Rip Rap (2 Ton) Method B		C.Y.	\$ 110.00	-	0.00
Grouted Rip Rap (1/4 Ton) Method B		C.Y.	\$ 100.00		0.00
Grouted Rip Rap (1/2 Ton) Method B		C.Y.	\$ 120.00		0.00
Grouted Rip Rap (1 Ton) Method B		C.Y.	\$ 130.00		0.00
Grouted Rip Rap (2 Ton) Method B		C.Y.	\$ 140.00		0.00
18" R.C.P. round, arch or elliptical	1990	L.F.	\$ 113.00		224,870.00
24" R.C.P. round, arch or elliptical	775	L.F.	\$ 132.00	\$	102,300.00
30" R.C.P. round, arch or elliptical	323	L.F.	\$ 153.00	\$	49,419.00
36" R.C.P. round, arch or elliptical	1185	L.F.	\$ 178.00	\$	210,930.00
42" C.M.P.	87	L.F.	\$ 204.00	\$	17,748.00
48" R.C.P. round, arch or elliptical		L.F.	\$ 235.00	\$	0.00
18" C.S.P. or HDPE N12		L.F.	\$ 40.00	\$	0.00
24" C.S.P. or HDPE N12	331	L.F.	\$ 50.00	\$	16,550.00
30" C.S.P. or HDPE N12		L.F.	\$ 60.00	\$	0.00
36" C.S.P. or HDPE N12		L.F.	\$ 70.00	\$	0.00
42" C.S.P. or HDPE N12	415	L.F.	\$ 80.00	-	33,200.00
60" C.S.P. or HDPE N12	5	L.F.	\$ 140.00	\$	700.00
Catch Basin W=4'		EA.	\$ 2,500.00		0.00
Catch Basin W=7'		EA.	\$ 4,000.00		0.00
Catch Basin W=14'	4	EA.	\$ 7,500.00		30,000.00
Catch Basin W=21'	4	EA.	\$ 11,000.00		44,000.00
Catch Basin W=28'		EA.	\$ 14,500.00		0.00
Inlet Type IX or X	3	EA.	\$ 2,500.00		7,500.00
	3		\$ 3,500.00	-	0.00
Junction Structure No. 1	0	EA.			
Junction Structure No. 2	6	EA.	\$ 4,500.00		27,000.00
Junction Structure No. 6		EA.	\$ 5,000.00	-	0.00
Transition Structure No. 1		EA.	\$ 12,500.00		0.00
Transition Structure No. 2		EA.	\$ 12,500.00		0.00
Transition Structure No. 3	_	EA.	\$ 4,500.00		0.00
Manhole No. 1	9	EA.	\$ 5,000.00		45,000.00
Manhole No. 2	3	EA.	\$ 6,500.00		19,500.00
Manhole No. 3		EA.	\$ 2,700.00		0.00
Manhole No. 4	2	EA.	\$ 6,500.00	\$	13,000.00
Structural Reinforcement Concrete	11	C.Y.	\$ 400.00	\$	4,400.00
Headwall for 36" or smaller storm drain	6	EA.	\$ 3,500.00	\$	21,000.00
Concrete Drop Inlet CB110	2	EA.	\$ 2,500.00	\$	5,000.00

B P W C Drain Pipe	Concrete Collar	3	EA.	\$	200.00	\$	600.00
16* Brooks Box wiSteel Grate							16,500.00
Remove Concrete Bulkhead						-	3,400.00
Agr C.M.P. Riser W/Debris Screen 3						-	600.00
SIGNING, STRIPING AND SIGNALS S S S S S S S S S							6.000.00
SIGNING, STRIPING AND SIGNALS S	42 C.W.1 . NIGGI W/DEBIIS OCICCII	3	L/\.		2,000.00		0.00
SIGNING, STRIPHIC AND SIGNALS S.F. \$ 2.50 \$ (4" Painted Solid Stripes and Markings S.F. \$ 0.21 \$ (4" Painted Solid Stripes (2 Coats) 7,603						•	0.00
Remove Painted Traffic Stripes and Markings	SIGNING, STRIPING AND SIGNALS			Ψ		Ψ	0.00
4 Painted Solid Stripes	·		S.F	\$	2.50	\$	0.00
# Painted Solid Stripes (2 Coats) 7,603							0.00
# Painted Broken Stripes L.F. \$ 0.16 \$	•	7.603		_ ·		-	2,280.90
Painted Double Solid Stripes	, , , ,	1,000				-	0.00
6" Painted Solid Line, Broken Line & Bilke Lane Line 33,461 L.F. \$ 0.65 \$ 21,745 8" Painted Solid Line/Broken Line 2,339 L.F. \$ 0.82 \$ 1,917 12" Painted Crosswalk & Limit Line L.F. \$ 0.36 \$ 0.62 Painted One-Way, No Passing L.F. \$ 0.36 \$ 0.62 Painted Two-Way Left Turn Lane L.F. \$ 0.82 \$ 0.62 Painted Parement Markings S.F. \$ 2.70 \$ 0.62 Remove Thermoplastic Traffic Stripes and Markings S.F. \$ 2.50 \$ 0.62 4" Thermoplastic Broken Stripes L.F. \$ 0.62 \$ 0.62 4" Thermoplastic Broken Stripes L.F. \$ 0.47 \$ 0.62 4" Thermoplastic Double Solid Stripes of Painted Double Solid Stripes of L.F. \$ 0.63 6.62 8" Thermoplastic Channelizing Line L.F. \$ 0.63 6.62 12" Thermoplastic Channelizing Line L.F. \$ 0.78 5.62 12" Thermoplastic Two-Way Left Turn Lane L.F. \$ 0.97 \$ 1.522 Thermoplastic T	'					-	0.00
Painted Solid Line/Broken Line	·	33.461		*		-	21,749.65
12" Painted Crosswalk & Limit Line						-	1,917.98
Painted One-Way, No Passing	1	2,339				-	0.00
Painted Two-Way Left Turn Lane						-	0.00
Painted Pavement Markings	-						0.00
Remove Thermoplastic Tafffic Stripes and Markings	-						
4" Thermoplastic Solid Stripes L.F. \$ 0.52 \$ 0.64 4" Thermoplastic Broken Stripes L.F. \$ 0.47 \$ 0.65 6" Painted Double Solid Stripes L.F. \$ 0.83 \$ 0.65 6" Painted Double Solid Stripes L.F. \$ 0.83 \$ 0.65 6" Painted Double Solid Stripes (2 Coats) 995 L.F. \$ 0.63 \$ 0.65 8" Thermoplastic Channelizing Line L.F. \$ 0.78 \$ 0.62 8" Thermoplastic Channelizing Line L.F. \$ 0.78 \$ 0.63 8" Thermoplastic Channelizing Line L.F. \$ 0.97 \$ 1.528 12" Thermoplastic Channelizing Line L.F. \$ 0.97 \$ 1.528 12" Thermoplastic Two-Way No Passing L.F. \$ 1.13 \$ 0.61 12" Thermoplastic Two-Way Left Turn Lane L.F. \$ 1.13 \$ 0.61 12" Thermoplastic Two-Way Left Turn Lane L.F. \$ 2.83 \$ 0.61 12" Thermoplastic Two-Way Left Turn Lane L.F. \$ 2.83 \$ 0.61 13" Thermoplastic Cross Walk and Pavement Marking S.F. \$ 2.25 \$ 0.61 14" Thermoplastic Cross Walk and Pavement Marking S.F. \$ 2.25 \$ 0.61 15" Thermoplastic Cross Walk and Pavement Marking S.F. \$ 2.25 \$ 0.61 15" Thermoplastic Cross Walk and Pavement Marking S.F. \$ 3.00 \$ 0.61 15" Thermoplastic Cross Walk and Pavement Marking S.F. \$ 3.00 \$ 0.61 15" Thermoplastic Cross Walk and Pavement Marking S.F. \$ 3.00 \$ 0.61 15" Thermoplastic Cross Walk and Pavement Marking S.F. \$ 3.00 \$ 0.61 15" Thermoplastic Cross Walk and Pavement Marking S.F. \$ 3.00 \$ 0.61 15" Thermoplastic Cross Walk and Pavement Marking S.F. \$ 3.00 \$ 0.61 15" Thermoplastic Cross Walk and Pavement Marking S.F. \$ 3.00 \$ 0.61 15" Thermoplastic Cross Walk and Pavement Marking S.F. \$ 3.00 \$ 0.61 15" Thermoplastic Cross Walk and Pavement Marking S.F. \$ 3.00 \$ 0.61 15" Thermoplastic Cross Walk and Pavement Marking S.F. \$ 3.00 \$ 0.61 15" Thermoplastic Cross Walk and Pavement Marking S.F. \$ 3.00 \$ 0.61 15" Thermoplastic Cross Walk and Pavement Marking S.F. \$ 3.00 \$ 0.61 15" Thermoplastic Cross Walk and Pavement Marking S.F. \$ 3.00 \$ 0.61 15" Thermoplastic Cross Walk and Pavement Marking S.F. \$ 3.00 \$ 0.61 15" Thermoplastic Cross Walk and Pavement Marking S.F. \$ 3.00 \$ 0.61 15" Thermoplastic Cross	5					-	0.00
4" Thermoplastic Broken Stripes							0.00
4" Thermoplastic Double Solid Stripes L.F. \$ 0.83 \$ 0.6° Painted Double Solid Stripes (2 Coats) 995 L.F. \$ 0.63 \$ 62° E8 8" Thermoplastic Channelizing Line L.F. \$ 0.78 \$ 0.78 \$ 0.63 \$ 62° E8 12" Thermoplastic Channelizing Line 1,576 L.F. \$ 0.97 \$ 1,526 Thermoplastic Che-Way, No Passing L.F. \$ 0.97 \$ 1,526 Thermoplastic Two-Way Left Turn Lane L.F. \$ 2.83 \$ 0 Thermoplastic Pavement Markings 2,152 S.F. \$ 3.61 \$ 7,766 Pavement Marking S.F. \$ 2.25 \$ 0.00 \$ 8.466 Remove, Sign, Salvage EA. \$ 50.00 \$ 6.60 Relocate Roadside Sign EA. \$ 100.00 \$ 0 Street Name Sign EA. \$ 100.00 \$ 0 Install Sign (Strap and Saddle Bracket Method) 118 EA. \$ 150.00 \$ 17.700 Install Sign (Mast Arm Hanger Method) EA. \$ 425.00 \$ 0 \$ 0 Stop Sign & Post 7 EA. \$ 250.00<							0.00
6" Painted Double Solid Stripes (2 Coats)						-	0.00
B" Thermoplastic Channelizing Line						-	0.00
12" Thermoplastic Line	` ` ` `	995				-	626.85
Thermoplastic One-Way, No Passing	,						0.00
Thermoplastic Two-Way Left Turn Lane	-	1,576			0.97	\$	1,528.72
Thermoplastic Pavement Markings	Thermoplastic One-Way, No Passing		L.F.	\$	1.13	\$	0.00
Pavement Marking	Thermoplastic Two-Way Left Turn Lane		L.F.	\$	2.83	\$	0.00
Thermoplastic Cross Walk and Pavement Marking 2,820 S.F. \$ 3.00 \$ 8,460 Remove, Sign, Salvage EA. \$ 50.00 \$ (Content of the Sign of	Thermoplastic Pavement Markings	2,152	S.F	\$	3.61	\$	7,768.72
Remove, Sign, Salvage	Pavement Marking		S.F.	\$	2.25	\$	0.00
Relocate Roadside Sign	Thermoplastic Cross Walk and Pavement Marking	2,820	S.F.	\$	3.00	\$	8,460.00
Street Name Sign	Remove, Sign, Salvage		EA.	\$	50.00	\$	0.00
Install Sign (Strap and Saddle Bracket Method)	Relocate Roadside Sign		EA.	\$	100.00	\$	0.00
Install Sign (Mast Arm Hanger Method)	Street Name Sign	8	EA.	\$	275.00	\$	2,200.00
Install Sign (Mast Arm Hanger Method)	Install Sign (Strap and Saddle Bracket Method)	118	EA.	\$	150.00	\$	17,700.00
Stop Sign & Post 7							0.00
Road Sign on existing pole / post (One Post)	, , , , , , , , , , , , , , , , , , ,	7					1,750.00
Road Sign on existing pole / post (Two Post) EA. \$ 300.00 \$ Color Object Marker - Modified Type "F" Delineator EA. \$ 60.00 \$ Color Delineator (Class 1 Type F) 12 EA. \$ 40.00 \$ 480 Delineator (Class 2) EA. \$ 45.00 \$ Color Pavement Marker, Reflective EA. \$ 3.75 \$ Color New Traffic Signal & Lighting 1 LS \$ 450,000.00 \$ 450,000 Retrofit of Ex. Traffic Signal & Lighting LS \$ 100,000.00 \$ Color 6' Round Signal Loops EA \$ 300.00 \$ Color Install Pull Box (#3-1/2) EA \$ 300.00 \$ Color Install Pull Box (#5e) EA \$ 400.00 \$ Color 2" PVC Interconnect Conduit & Cable L.F. \$ 25.00 \$ Color 39W LED Street Light (Ameron 1C123) 34 E.A. \$ 10,000.00 \$ 1,080,000 Service Pedestal 8 E.A. \$ 5,000.00 \$ 40,000							0.00
Object Marker - Modified Type "F" Delineator EA. \$ 60.00 \$ C Delineator (Class 1 Type F) 12 EA. \$ 40.00 \$ 480 Delineator (Class 2) EA. \$ 45.00 \$ C Pavement Marker, Reflective EA. \$ 3.75 \$ C New Traffic Signal & Lighting 1 LS \$ 450,000.00 \$ 450,000 Retrofit of Ex. Traffic Signal & Lighting LS \$ 100,000.00 \$ C 6' Round Signal Loops EA \$ 450.00 \$ C Install Pull Box (#3-1/2) EA \$ 300.00 \$ C Install Pull Box (#5e) EA \$ 400.00 \$ C 2" PVC Interconnect Conduit & Cable L.F. \$ 25.00 \$ C 39W LED Street Light (Ameron 1C123) 34 E.A. \$ 10,000.00 \$ 340,000 96W LED Street Light (Ameron 1C128) 72 E.A. \$ 15,000.00 \$ 1,080,000 Service Pedestal 8 E.A. \$ 5,000.00 \$ 40,000							0.00
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Delineator (Class 2) EA. \$ 45.00 \$ Pavement Marker, Reflective EA. \$ 3.75 \$ New Traffic Signal & Lighting 1 LS \$ 450,000.00 \$ Retrofit of Ex. Traffic Signal & Lighting LS \$ 100,000.00 \$ 6' Round Signal Loops EA \$ 450.00 \$ Install Pull Box (#3-1/2) EA \$ 300.00 \$ Install Pull Box (#5e) EA \$ 400.00 \$ 2" PVC Interconnect Conduit & Cable L.F. \$ 25.00 \$ 39W LED Street Light (Ameron 1C123) 34 E.A. \$ 10,000.00 \$ 340,000 96W LED Street Light (Ameron 1C128) 72 E.A. \$ 15,000.00 \$ 1,080,000 Service Pedestal 8 E.A. \$ 5,000.00 \$ 40,000		12					480.00
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Retrofit of Ex. Traffic Signal & Lighting LS \$ 100,000.00 \$ (6) 6' Round Signal Loops EA \$ 450.00 \$ (7) Install Pull Box (#3-1/2) EA \$ 300.00 \$ (7) Install Pull Box (#5e) EA \$ 400.00 \$ (7) 2" PVC Interconnect Conduit & Cable L.F. \$ 25.00 \$ (7) 39W LED Street Light (Ameron 1C123) 34 E.A. \$ 10,000.00 \$ 340,000 96W LED Street Light (Ameron 1C128) 72 E.A. \$ 15,000.00 \$ 1,080,000 Service Pedestal 8 E.A. \$ 5,000.00 \$ 40,000	r avernerit iviaiker, ixenective		LA.	Ψ	3.73	Ψ	0.00
6' Round Signal Loops EA \$ 450.00 \$ Install Pull Box (#3-1/2) EA \$ 300.00 \$ Install Pull Box (#5e) EA \$ 400.00 \$ 2" PVC Interconnect Conduit & Cable L.F. \$ 25.00 \$ C 39W LED Street Light (Ameron 1C123) 34 E.A. \$ 10,000.00 \$ 340,000 96W LED Street Light (Ameron 1C128) 72 E.A. \$ 15,000.00 \$ 1,080,000 Service Pedestal 8 E.A. \$ 5,000.00 \$ 40,000	New Traffic Signal & Lighting	1	LS	\$	450,000.00	\$	450,000.00
6' Round Signal Loops EA \$ 450.00 \$ Install Pull Box (#3-1/2) EA \$ 300.00 \$ Install Pull Box (#5e) EA \$ 400.00 \$ 2" PVC Interconnect Conduit & Cable L.F. \$ 25.00 \$ C 39W LED Street Light (Ameron 1C123) 34 E.A. \$ 10,000.00 \$ 340,000 96W LED Street Light (Ameron 1C128) 72 E.A. \$ 15,000.00 \$ 1,080,000 Service Pedestal 8 E.A. \$ 5,000.00 \$ 40,000	Retrofit of Ex. Traffic Signal & Lighting		LS	\$	100,000.00	\$	0.00
Install Pull Box (#3-1/2) EA \$ 300.00 \$ C Install Pull Box (#5e) EA \$ 400.00 \$ C 2" PVC Interconnect Conduit & Cable L.F. \$ 25.00 \$ C 39W LED Street Light (Ameron 1C123) 34 E.A. \$ 10,000.00 \$ 340,000 96W LED Street Light (Ameron 1C128) 72 E.A. \$ 15,000.00 \$ 1,080,000 Service Pedestal 8 E.A. \$ 5,000.00 \$ 40,000							0.00
Install Pull Box (#5e)	•						0.00
2" PVC Interconnect Conduit & Cable L.F. \$ 25.00 \$ C 39W LED Street Light (Ameron 1C123) 34 E.A. \$ 10,000.00 \$ 340,000 96W LED Street Light (Ameron 1C128) 72 E.A. \$ 15,000.00 \$ 1,080,000 Service Pedestal 8 E.A. \$ 5,000.00 \$ 40,000	, , ,						0.00
39W LED Street Light (Ameron 1C123) 34 E.A. \$ 10,000.00 \$ 340,000 96W LED Street Light (Ameron 1C128) 72 E.A. \$ 15,000.00 \$ 1,080,000 Service Pedestal 8 E.A. \$ 5,000.00 \$ 40,000							0.00
96W LED Street Light (Ameron 1C128) 72 E.A. \$ 15,000.00 \$ 1,080,000 Service Pedestal 8 E.A. \$ 5,000.00 \$ 40,000		21					340,000.00
Service Pedestal 8 E.A. \$ 5,000.00 \$ 40,000		-					
	j , , , , , , , , , , , , , , , , , , ,						
Survey		8					40,000.00
							0.00

Mobilization			LS	\$	30,000.00	\$ 0.00
Traffic Control			LS	\$	15,000.00	\$ 0.00
	A.	Subtotal				\$ 9,241,498.42
	B.	Administrative Continger	ncy (20)% x A)		\$ 1,848,299.68
	C.	CM - Inspection - LC (8%	6)			\$ 739,319.87
	D	Streets/Drainage Total	(A + B	3)		\$ 11,829,117.98

DOMESTIC WATER IMPROVEMENTS

ITEM	QUANTITY	UNIT		UNIT	AMOUNT
4" Waterline PVC C-900 DR-18		L.F.	¢	25.00 \$	0.00
6" Waterline PVC C-900 DR-18		L.F.	\$		
8" Waterline PVC C-900 DR-18	11,477	L.F.	\$	30.00 \$ 35.00 \$	
8" Waterline PVC C-900 DR-16	2,819	L.F.	\$	35.00 \$	
8" Fusable PVC	36	L.F.	\$	35.00 \$,
8" Dia. DIP, CL-50	54	L.F.	\$	35.00 \$	
12" Waterline PVC C-900 DR-14	20	L.F.	\$	55.00 \$	
12" Waterline PVC C-900 DR-18	551	L.F.	\$	55.00 \$	•
18" Fusable PVC	25	L.F.	\$	135.00 \$	
18" Waterline PVC C-905 DR-14	20	L.F.	\$	135.00 \$	
18" Waterline PVC C-905 DR-18	6,855	L.F.	\$	135.00 \$,
18" Dia. CML&C Water Main	59	L.F.	\$	135.00 \$	
20" Waterline PVC C-905 DR-18	39	L.F.	\$	180.00 \$,
4" Gate Valve RS	4	EA.	\$	715.00 \$	
6" Gate Valve RS	4	EA.	\$	830.00 \$	
8" Gate Valve RS	67	EA.	\$		
	67		+	1,340.00 \$	
12" Gate Valve RS	3	EA.	\$	2,300.00 \$	
16" Gate Valve RS	0	EA.	\$	6,270.00 \$	
18" Gate Valve RS	8	EA.	\$	14,300.00 \$	
6" Fire Hydrant (Standard)	37	EA.	\$	4,000.00 \$	
6" Fire Hydrant (Super)		EA.	\$	4,500.00 \$	
4" Blowoff	40	EA.	\$	3,500.00 \$	
6" Blowoff/Temp Blowoff	18	EA.	\$	4,000.00 \$	
1" Air and Vacuum Valve.	7	EA.	\$	2,400.00 \$,
2" Air and Vacuum Valve.	2	EA.	\$	4,000.00 \$	
8" pressure regulator	2	EA.	\$	5,000.00 \$	
1" Service Connection (With Meter)	44	EA.	\$	800.00 \$,
1" Service Connection (No Meter)	1	EA.	\$	2,180.00 \$	
1-1/2" Service Connection (No Meter)	1	EA.	\$	2,480.00 \$	· · · · · · · · · · · · · · · · · · ·
2" Service Connection (No Meter)	4	EA.	\$	2,780.00 \$	
4" Service Connection (No Meter)	4	EA.	\$	4,500.00 \$	
Adjust Water Valve to Grade		EA.	\$	200.00 \$	
Removal of Blowoff		EA.	\$	500.00 \$	
Join at existing end of 8" pipe		EA.	\$	2,000.00 \$	
1" Hot Tap		EA.	\$	1,000.00 \$	
4" Hot Tap		EA.	\$	1,430.00 \$	
6" Hot Tap		EA.	\$	1,750.00 \$	
8" Hot Tap		EA.	\$	2,200.00 \$	
12" Hot Tap		EA.	\$	3,150.00 \$	
8" Miscellaneous Fittings	102	EA.	\$	250.00 \$	
12" Miscellaneous Fittings	21	EA.	\$	320.00 \$	
18" Miscellaneous Fittings	17	EA.	\$	425.00 \$	
Blue Retroreflective FH Marker	28	1	\$	\$	
Remove Existing 12" Water Main	905	L.F.	\$	25.00 \$	
Remove Existing 16" Water Main	589	L.F.	\$	25.00 \$	
Remove & Replace Existing 12" Water Main	323	L.F.	\$	50.00 \$,
Remove Existing Fittings Air Valve and Blowoff	8	E.A.	\$	100.00 \$	
A	Subtotal			\$	2,105,845.00

A.	Subtotal	\$ 2,105,845.00
B.	Administrative Contingency (20% x A)	\$ 421,169.00
C.	Water Total (A + B)	\$ 2,527,014.00
	PRIOR TO HAVING SIGNED PLANS	
D.	20% x C	\$ 505,402.80
E.	Water Total (C + D)	\$ 3,032,416.80

SANITARY SEWER IMPROVEMENTS

ITEM	QUANTITY	UNIT		UNIT	AMOUNT
4" PVC SDR 35 (Use it for Residential Laterals)	4022	L.F.	r.	25.00 S	100 550 00
6" PVC SDR 35 (Use it for Residential Laterals)	4022	L.F.	\$	30.00	. ,
8" PVC SDR 35 Green	9007	L.F.	\$	35.00	•
8" Fusible PVC C-900 Sewer	36	L.F.	\$	35.00	•
10" PVC SDR 35 Green	30	L.F.	\$	46.00	
12" PVC SDR 35 Green		L.F.	\$	54.00	
15" PVC SDR 35 Green	37	L.F.	\$	90.00	•
8" VCP	31	L.F.	\$	55.00	
10" VCP					
		L.F.	\$	62.00	
12" VCP		L.F.	\$	72.00	•
15" VCP		L.F.	\$	81.00	
18" VCP		L.F.	\$	162.00	
21" VCP		L.F.	\$	183.00	
24" VCP		L.F.	\$	195.00	
27" VCP		L.F.	\$	215.00	•
30" VCP		L.F.	\$	236.00	•
Standard Manhole 48"	49	EA.	\$	3,140.00	
Standard Manhole 48" W/ Sauereisen Coating	3	EA.	\$	4,000.00	
Standard Manhole 60"		EA.	\$	4,500.00	
Shallow Manhole (5' or less)		EA.	\$	3,300.00	
Clean out	2	EA.	\$	730.00	
Clean out Lateral		EA.	\$	200.00	
Tie to Existing Manhole		EA.	\$	2,100.00	\$ 0.00
Rechannel Existing Manhole	1	EA.	\$	1,500.00	\$ 1,500.00
Join Existing 8" Pipe	1	EA.	\$	1,500.00	\$ 1,500.00
Join Existing 12" Pipe		EA.	\$	2,000.00	\$ 0.00
Chimney		EA.	\$	400.00	\$ 0.00
Adjust M.H. to grade		EA.	\$	500.00	\$ 0.00
Concrete Encasement		L.F.	\$	35.00	\$ 0.00
Plug Sewer	6	EA.	\$	200.00	\$ 1,200.00
8" Backflow Valves		EA.	\$	250.00	\$ 0.00
			\$		\$ 0.00
			\$	9	\$ 0.00
			\$	5	\$ 0.00
			\$	Ç	\$ 0.00
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			\$		\$ 0.00
			\$		\$ 0.00
			\$		\$ 0.00
			\$		\$ 0.00
			\$		\$ 0.00
l A	Subtotal		*		\$ 591,905.00
		ntingency (2	20% >		\$ 118,381.00
C		• • •	,	,	\$ 710,286.00
<u> </u>	Total (A)	-,			,,200.00

20% x C

Sewer Total (C + D)

D. E. TO HAVING SIGNED PLAND (ORD.460, SEC.

142,057.20

852,343.20

CITY OF MENIFEE ENGINEERING DEPARTMENT COST ESTIMATE CALCULATION SHEET

PARCEL MAP OR TRACT NO.	TR 36658 BACKBONE PH 1	SCH:	DATE:	7/15/2021
PP, CU, PU, MS OR VL NO.			_	

IMPROVEMENT COSTS (Including Contingencies)	
I. Streets/Drainage (Line C from Street Improvement Calculations)	\$ 11,829,117.98
II. Domestic Water (Line C from Domestic Water Improvement Calculations)	\$ 2,527,014.00
III. Recycled Water (Line C from Recycled Water Improvement Calculations)	\$
IV. Sewer (Line C from Sewer Improvement Calculations)	\$ 710,286.00
Total	\$ 15,066,417.98
INSPECTION DEPOSIT CALCULATION	
Street/Drainage	
NOTE: Use 3% for Inspection	\$ 354,873.54