

DEVELOPMENT AGREEMENT

Trinity at Havasu Foothills Estates

This Development Agreement (this “**Agreement**”) is made and entered into effective as of the day of _____, 2024 (the “**Effective Date**”) by and between Lake Havasu City, an Arizona municipal corporation (“**City**”), MDCAB, LLC, an Arizona limited liability company (“**Developer**”), and the Trinity at Havasu Foothills Estates Homeowners Association (“**HOA**”). City, Developer, and HOA are sometimes referred to in this Agreement collectively as the “**Parties**” or individually as a “**Party**.” This Agreement is a supplement to, and does not supersede, any existing development agreement, City ordinance/resolution, or other determinations or rulemaking by City in connection with the development of the property within City’s boundaries known as “Havasu Foothills Estates” (collectively, the “**Existing Documents**”), and this Agreement should be read and interpreted as such.

RECITALS

A. Developer owns real property located in Lake Havasu City, Arizona, legally described on the attached **Exhibit A** (“**Trinity**”).

B. Trinity is part of Phase 3 of the overall 640-acre Havasu Foothills Planned Development and is currently a part of the Havasu Foothills Estates Specific Plan, which was approved in 2003 through Ordinance No. 03-717 (the “**HFE Plan**”).

C. Developer is legally entitled to construct up to 90 lots on a portion of Trinity, per the HFE Plan, and as depicted in **Exhibit B** (the “**Approved Lots**”).

D. City provided comments to Developer in the form of a Notice of Subdivision Action – RL1 dated March 7, 2023 (the “**Action**”). The Action requires, among other things, a development agreement between City and Developer.

E. A sewer lift station and force main to be located on Tract 2391 (together, the “**Lift Station**”) are required as depicted in **Exhibit C**.

F. The Lift Station will not be maintained by City but will require Developer and HOA access to the public right of way and connection to a City-owned and maintained gravity sewer.

G. City and Developer are entering this Agreement in accordance with Arizona Revised Statutes § 9-500.05 to facilitate the development of the Approved Lots within Trinity.

H. The purpose of this Agreement, for avoidance of doubt, is to facilitate the development of and enforce the City’s, Developer’s and HOA’s responsibilities regarding the Lift Station, Private Roadways, and utility infrastructure on the Approved Lots within Trinity.

AGREEMENT

Now, therefore, in consideration of the foregoing recitals and the mutual promises and agreements

set forth herein, the Parties agree as follows:

1. Private Roadways.

1.1 It is the intention of the Parties that all roadways to, from, and within Trinity shall be private roadways (together, the "**Private Roadways**"). Private Roadways shall include any planned culvert crossing as well as any future constructed access to washes located within Trinity. The Private Roadways shall be owned by the Developer and the HOA.

1.2 The Developer and HOA shall be responsible for the maintenance, upkeep, repairs, future replacements, and associated undertakings for the Private Roadways, subject to Section 1.4 and 1.5 of this Agreement.

1.3 The Developer and HOA shall have the exclusive right to gate the Private Roadways, determine the location of the gates as approved by the City, and establish access protocols and restrictions for the Private Roadways, in accordance with applicable laws and regulations. The Developer and HOA shall provide reasonable access to all property owners within Trinity and emergency services as required by law. The gating and access protocols shall be communicated to all affected parties in a timely manner. The City shall be granted access at all times, under all conditions in order to maintain and repair City water and wastewater infrastructure located within Trinity.

1.4 Upon the completion of any maintenance, repair, or replacement of public infrastructure on a Private Roadway, the City shall be responsible for repairing the Private Roadway to its condition as existed prior to the maintenance, repair or replacement of such public infrastructure. This repair shall consist of asphalt patching of the trench/repair area, as required, and does not include repaving the entire Private Roadway. Pavement markings will be repaired or replaced as required. If the Private Roadway is anything other than asphalt, the Developer and HOA shall be responsible for removing and replacing the required sections of the Private Roadway for the City to perform repair work on the water, wastewater, and sewer infrastructure.

1.5 Developer and HOA agree to grant the City reasonable access to the washes situated within Trinity for maintenance and repair purposes as mandated by applicable laws.

2. Lift Station

2.1 Water and sewer within Trinity will be public infrastructure and Developer and HOA will allow City access to them across a Public Utility Easement ("**PUE**").

2.2 The Lift Station itself will be privately owned and maintained by Developer and HOA. Developer and HOA will be authorized to use the PUE as necessary for the maintenance and operation of the Lift Station.

2.3 No other lift stations for the Trinity Phases will be constructed. Final grading and easements shall be constructed such that all sewer discharge is from the lift station and force main accepted in Phase 1.

2.4 Developer shall install all water, wastewater, and sewer infrastructure in accordance with all City specifications and requirements in force and effect as of the Effective Date. Once completed and upon successful ADEQ integrity testing and engineer review, Developer agrees to dedicate to City said water, wastewater, and sewer infrastructure.

2.5 Developer shall construct the Lift Station in accordance with ADEQ Certifications and other applicable City specifications and requirements in force and effect as of the Effective Date. Once

constructed, the Developer will continue to own, and Developer and HOA will be solely responsible to maintain, the Lift Station. Should the City be required to assume maintenance and operation responsibility, Developer and HOA agree to compensate the City for upgrades or make improvements to the Lift Station as may be required by the City, including amendment to this Agreement.

2.6 A portion of the PUE shall contain certain "dry utilities," which may include electric, phone, cable, internet, and other similar services. The property upon which the PUE lies, including any Private Roadway, shall remain the property of the underlying property owners; provided, however, that the City and any dry utilities shall have an easement for access, ingress and egress to the PUE and the property owners shall maintain their properties to allow for reasonable unrestricted access to the PUE by the City or utility company as needed.

3. Developer and HOA Representations. Developer and HOA represent and warrant to City that:

3.1 Developer and HOA have the full right, power and authorization to enter into this Agreement and to perform its obligations and undertakings under this Agreement, and the execution, delivery and performance of this Agreement by Developer and HOA have been duly authorized and agreed to in compliance with the organizational documents of Developer.

3.2 All consents and approvals necessary to the execution, delivery and performance of this Agreement have been obtained, and no further action needs to be taken in connection with such execution, delivery and performance.

3.3 Developer and HOA will execute and acknowledge when appropriate all documents and instruments and take all actions necessary to implement, evidence and enforce this Agreement.

3.4 As of the Effective Date, Developer and HOA know of no litigation, proceeding or investigation pending or threatened against or affecting Developer or HOA, which could have a material adverse effect on Developer's or HOA's performance under this Agreement that has not been disclosed in writing to City.

3.5 This Agreement (and each undertaking of Developer and HOA contained herein) constitutes a valid, binding and enforceable obligation of Developer and HOA, enforceable according to its terms.

3.6 The execution, delivery and performance of this Agreement by Developer and HOA is not prohibited by, and does not conflict with, any other agreements, instruments, judgments or decrees to which Developer is a party or to which Developer or HOA is otherwise subject.

3.7 Developer and HOA have not paid or given, and will not pay or give, any third party any money or other consideration for obtaining this Agreement other than normal costs of conducting business and costs of professional services such as the services of attorneys.

3.8 Developer and HOA has been assisted by counsel of its own choosing in connection with the preparation and execution of this Agreement.

4. Events of Default; Remedies.

4.1 Events of Default by Developer or HOA. Default or an Event of Default by Developer or HOA under this Agreement shall mean one or more of the following:

4.1.1 Any representation or warranty made in this Agreement by Developer or HOA was materially inaccurate when made or shall prove to be materially inaccurate during the Term; or

4.1.2 Developer or HOA fail to observe or perform the payment obligations required of it under this Agreement.

4.1.3 Determination by the City that the Developer or HOA is failing to properly operate and maintain the Lift Station.

4.2 Events of Default by City. Default or an Event of Default by City under this Agreement shall mean one or more of the following:

4.2.1. Any representation or warranty made in this Agreement by City was materially inaccurate when made or shall prove to be materially inaccurate during the Term; or

4.2.2. City fails to observe or perform any other material covenant, obligation or agreement required of it under this Agreement.

4.3 Grace Periods; Notice and Cure. Upon the occurrence of an Event of Default by any Party, such Party shall, upon written notice from a non-defaulting Party, proceed immediately to cure or remedy such Default and, in any event, such Default shall be cured within thirty (30) days after receipt of such notice, or, if such Default is of a nature that is not capable of being cured within thirty (30) days shall be commenced within such period and diligently pursued to completion.

4.4 Remedies on Default. Whenever any Event of Default occurs and is not cured (or cure undertaken) in accordance with this Agreement, the non-defaulting Party may take any of one or more of the following actions:

4.4.1. Remedies of City. City's remedies shall consist of, and shall be limited to collection of all amounts past due and owing herein and such other rights and remedies allowed pursuant to Arizona law.

4.4.2. Remedies of Developer and HOA. Developer's and HOA's remedies upon Default by City shall consist of seeking special action or other similar relief (whether characterized as mandamus, injunction or otherwise), requiring City to undertake and to fully and timely perform its obligations under this Agreement, and such other rights and remedies allowed pursuant to Arizona law.

5. Miscellaneous Provisions.

5.1 Governing Law; Choice of Forum. This Agreement shall be deemed to be made under, shall be construed in accordance with, and shall be governed by the internal, substantive laws of the State of Arizona (without reference to conflict of law principles). Any action brought to interpret, enforce or construe any provision of this Agreement shall be commenced and maintained in the Superior Court of the State of Arizona in and for the County of Mohave or in the United States District Court for the District of Arizona, if, but only if, the Superior Court lacks or declines jurisdiction over such action. The parties irrevocably consent to jurisdiction and venue in such courts for such purposes and agree not to seek transfer or removal of any action commenced.

5.2 Limited Severability. In the event that any provision of this Agreement is declared void or unenforceable (or is construed as requiring City to do any act in violation of any Applicable Laws, constitutional provision, law, regulation or City code), such provision shall be deemed severed from this Agreement and this Agreement shall otherwise remain in full force and effect.

5.3 Construction. The terms and provisions of this Agreement represent the results of negotiations between the Parties, each of which has been or has had the opportunity to be represented by counsel of its own choosing, and none of which has acted under any duress or compulsion, whether legal, economic or otherwise. Consequently, the terms and provisions of this Agreement shall be interpreted and construed in accordance with their usual and customary meanings, and each Party hereby waives the application of any rule of law which would otherwise be applicable in connection with the interpretation and construction of this Agreement that ambiguous or conflicting terms or provisions contained in this Agreement shall be interpreted or construed against the Party who prepared or whose attorney prepared the executed Agreement or any earlier draft of the same.

5.4 Notices.

5.4.1 Addresses. Except as otherwise required by law, any notice required or permitted under this Agreement shall be in writing and shall be given by personal delivery, or by deposit in the United States mail, certified or registered, return receipt requested, postage prepaid, addressed to the Parties at their respective addresses set forth below, or at such other address as a Party may designate in writing, or by telecopy facsimile machine, or by any nationally recognized express or overnight delivery service (e.g. Federal Express or UPS), delivery charges prepaid:

If to City: City Manager
Lake Havasu City
2330 McCulloch Blvd N.
Lake Havasu City, AZ 86403
Telephone: 928-453-4141

With a copy to: City Attorney
Lake Havasu City
2330 McCulloch Blvd N.
Lake Havasu City, AZ 86403
Telephone: 928-453-4144

If to Developer: MDCAB, LLC
2036 McCulloch Blvd
Lake Havasu City, AZ 86403
Telephone: 928-889-9378

If to HOA: Trinity at Havasu Foothills Estates Homeowner Association
2036 McCulloch Blvd
Lake Havasu City, AZ 86403
Telephone: 928-889-9378

5.4.2 Effective Date of Notices. Any notice sent by United States Postal Service certified or registered mail shall be deemed to be effective the earlier of the actual delivery, or three (3) business days after deposit in a post office operated by the United States Postal Service. Any notice sent by a recognized national overnight delivery service shall be deemed effective one (1) business day after deposit with such service. Any notice personally delivered or delivered through a same-day delivery/courier service shall be deemed effective upon its receipt or refusal to accept receipt by the addressee. Any notice sent by telecopy facsimile machine shall be deemed effective upon confirmation of the successful transmission by the sender's telecopy facsimile machine. Any Party may designate a different person or entity or change the place to which any notice shall be given.

5.5 Time of Essence. Time is of the essence of this Agreement and each of its provisions.

5.6 Section Headings. The Section headings contained in this Agreement are for convenience in reference only and are not intended to define or limit the scope of any provision of this Agreement.

5.7 Attorneys' Fees and Costs. In the event of a breach by any Party and commencement of a subsequent legal action in an appropriate forum, the prevailing Party in any such dispute shall be entitled to reimbursement of its reasonable attorney's fees and court costs, including, but not limited to, its costs of expert witnesses, transportation, lodging and meal costs of the parties and witnesses, costs of transcript preparation and other reasonable and necessary direct and incidental costs of such dispute.

5.8 Waiver. The Parties agree that neither the failure nor the delay of any Party to exercise any right, remedy, power or privilege under this Agreement shall operate as a waiver of such right, remedy, power or privilege, nor shall any single or partial exercise of any right, remedy, power or privilege preclude any other or further exercise of the same or of any other right, remedy, power or privilege, nor shall any waiver of any right, remedy, power or privilege with respect to any occurrence be construed as a waiver of such right, remedy, power or privilege with respect to any other occurrence. No waiver shall be effective unless it is in writing and is signed by the Party asserted to have granted such waiver.

5.9 Third Party Beneficiaries. No person or entity shall be a third party beneficiary to this Agreement, except for permitted transferees, assignees, or Lenders to the extent that they assume or succeed to the rights and/or obligations of Participant under this Agreement, and except that the indemnified persons referred to in the indemnification provisions of this Agreement shall be third party beneficiaries of such indemnification provisions.

5.10 Exhibits. Without limiting the provisions of Section 1, the Parties agree that all references to this Agreement include all Exhibits designated in and attached to this Agreement, such Exhibits being incorporated into and made an integral part of this Agreement for all purposes.

5.11 Integration. Except (a) for the Existing Documents, with respect to which this Agreement is supplemental and not superseding; and (b) as expressly provided herein, this Agreement constitutes the entire agreement between the Parties with respect to the subject matters, hereof and supersedes any prior agreement, understanding, negotiation or representation regarding the subject matters covered by this Agreement, but not the Existing Documents.

5.12 Further Assurances. Each Party agrees to perform such other and further acts and to execute and deliver such additional agreements, documents, affidavits, certifications, acknowledgments and instruments as any other party may reasonably require to consummate, evidence, confirm or carry out the matters contemplated by this Agreement or confirm the status of: (a) this Agreement as in full force and effect; and (b) the performance of the obligations under this Agreement at any time during its Term.

5.13 Business Days. If the last day of any time period stated in this Agreement or the date on which any obligation to be performed under this Agreement shall fall on a Saturday, Sunday or legal holiday, then the duration of such time period or the date of performance, as applicable, shall be extended so that it shall end on the next succeeding day which is not a Saturday, Sunday or legal holiday.

5.14 Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original and all so executed shall constitute one agreement, binding on the Parties.

5.15 Non-liability of City Officials. No City Council member, official, representative, agent, attorney or employee of City shall be personally liable to Developer, or to any successor in interest to Developer, in the event of any Default or breach by City or for any amount which may become due to

Developer or its successors, or with respect to any obligation of City under the terms of this Agreement.

5.16 Conflict of Interest. This Agreement may be cancelled under Arizona Revised Statutes § 38-511.

5.17 Binding Effect. This Agreement is binding upon and inures to the benefit of the successors and assigns of the parties and the rights and obligations hereby created are assignable in whole or in part by the Developer. This Agreement shall run with the land, and any future owner of Trinity shall be bound to the provisions of this Agreement applicable to Developer. Any party taking title to the Trinity shall be deemed to assume the obligations of the Developer hereunder, and the Developer shall be released from all of said obligations at such time the Developer holds no further interest in Trinity.

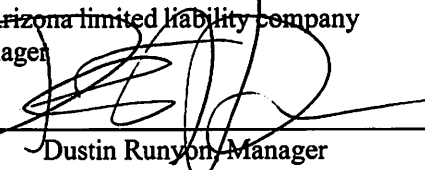
[Signature and Acknowledgment Pages Follow]

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first set forth above.

Developer:

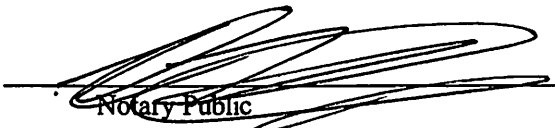
MDCAB, LLC
an Arizona limited liability company

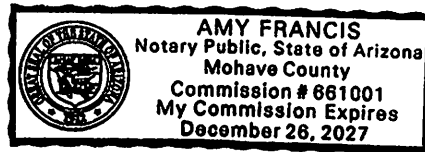
By: APX West Investments, LLC
an Arizona limited liability company
Manager

By: 
Dustin Runyon, Manager

STATE OF ARIZONA)
 :SS
COUNTY OF MOHAVE)

The foregoing instrument was acknowledged before me on this 5th day of August, 2024; by Dustin Runyon, who represented to me that he executed the same in his authorized capacity.


Notary Public



City:

Lake Havasu City
an Arizona municipal corporation

By: _____
Cal Sheehy, Mayor

Attest:

By: _____
City Clerk

Approved as to form:

By: _____
City Attorney

STATE OF ARIZONA)
 :SS
COUNTY OF MOHAVE)

The foregoing instrument was acknowledged before me this _____ day of _____, 2024,
by _____.

Notary Public

HOA:

Trinity at Havasu Foothills Estates Homeowner Association, an Arizona nonprofit corporation

[Handwritten Signature]
By: _____
Dustin Runyon

STATE OF ARIZONA)
 :SS
COUNTY OF MOHAVE)

The foregoing instrument was acknowledged before me on this 5th day of August, 2024, by Dustin Runyon, who represented to me that he executed the same in his authorized capacity.

[Handwritten Signature]

Notary Public

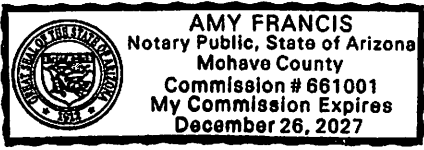
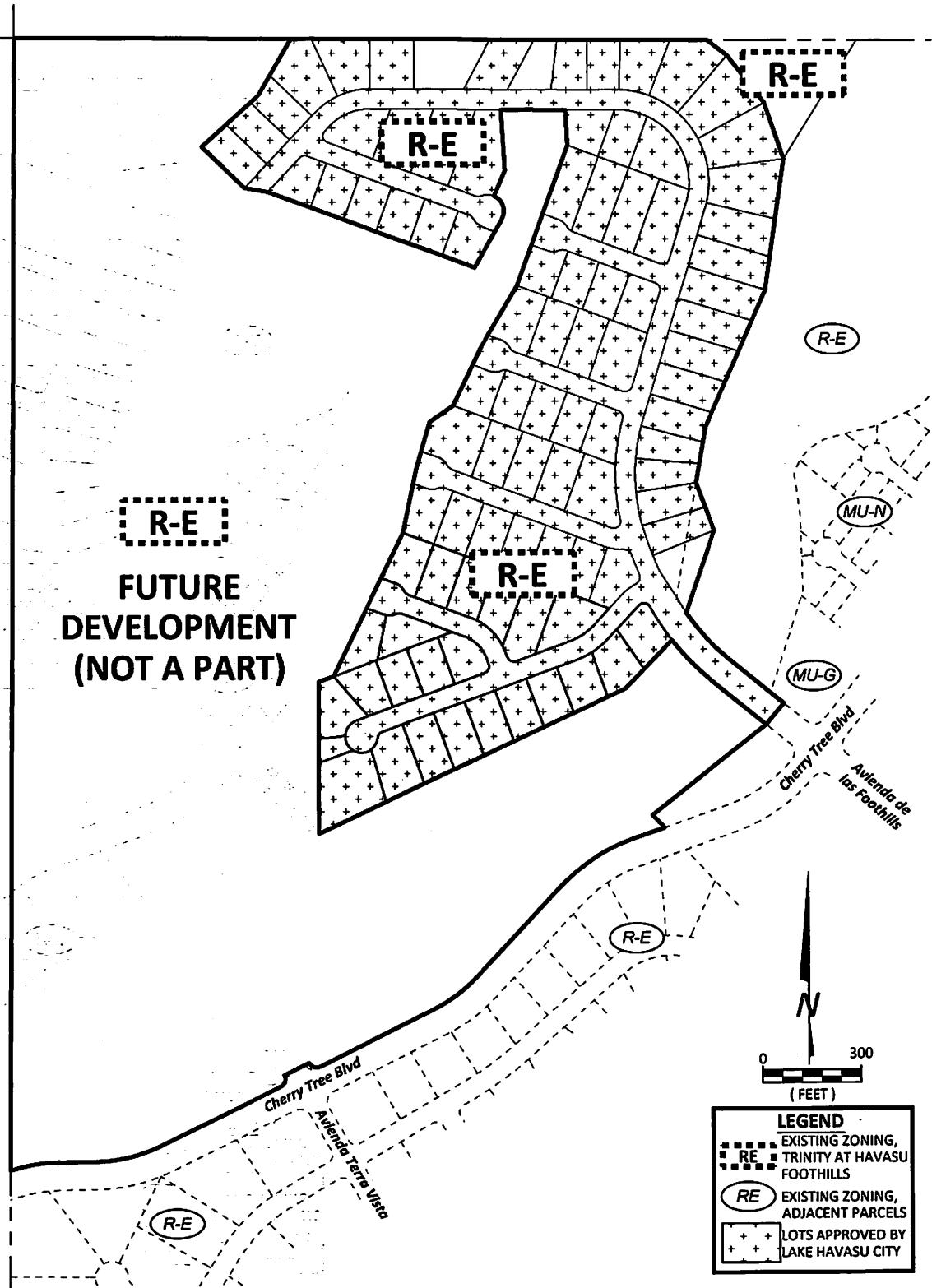


EXHIBIT A
LEGAL DESCRIPTION OF TRINITY

The parcels described in the Warranty Deeds at Rec. No. 2021089026 and Rec. No. 2022058287, Records of Mohave County, in the NE1/4 Section 33, T14N, R19W, G&SRM, Lake Havasu City, Arizona.

EXHIBIT B
TRINITY APPROVED LOTS

TRINITY at HAVASU FOOTHILLS ESTATES
PHASING and ZONING



R-E
FUTURE DEVELOPMENT (NOT A PART)

LEGEND

- EXISTING ZONING, TRINITY AT HAVASU FOOTHILLS
- R-E** (dashed box)
- EXISTING ZONING, ADJACENT PARCELS
- R-E** (solid oval)
- LOTS APPROVED BY LAKE HAVASU CITY
- (+)

ABUNDANCE LAND SERVICES, LLC
 41359 W. James Lane, Maricopa, AZ 85138
 riley@abundanceland.net
 406-546-2264



NOTE: ALL LOTS ARE 15,000 SqFt MINIMUM.

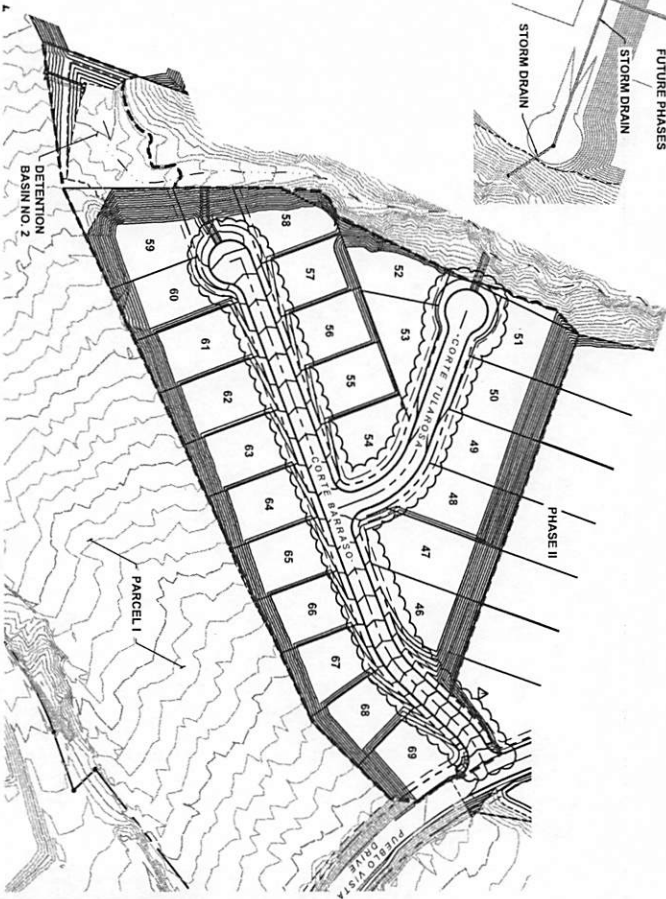
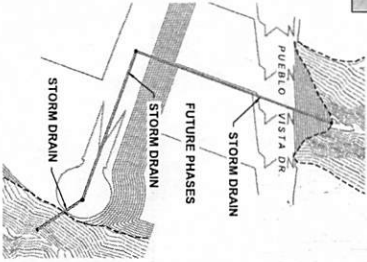
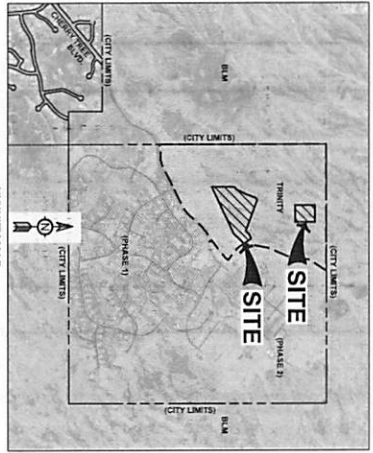
EXHIBIT C
PHASE 1 IMPROVEMENT PLANS

TRINITY at HAVASU FOOTHILLS

PHASE I IMPROVEMENT PLANS

LAKE HAVASU CITY, ARIZONA

A PORTION OF SECTION 33, TOWNSHIP 14 NORTH, RANGE 19 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MOHAVE COUNTY, ARIZONA



LEGEND

- SUBJECT PROPERTY LINE (HATCH GRAY)
- ADJACENT PROPERTY LINE
- STREET CENTERLINE
- EXISTING EASEMENT
- EXISTING INTERLOCK CONTOUR
- PROPOSED INTERLOCK CONTOUR
- EXISTING INTERLOCK CONTOUR
- PROPOSED INTERLOCK CONTOUR
- EXISTING FENCE
- PROPOSED FENCE
- EXISTING RETAINING WALL
- PROPOSED RETAINING WALL
- EXISTING OVERHEAD LINE
- PROPOSED OVERHEAD LINE
- EXISTING WATER LINE
- PROPOSED WATER LINE
- EXISTING SANITARY SEWER LINE
- PROPOSED SANITARY SEWER LINE
- EXISTING EROSION CONTROL
- PROPOSED EROSION CONTROL
- EXISTING MANHOLE
- PROPOSED MANHOLE
- EXISTING WETTER VALVE
- PROPOSED WETTER VALVE
- EXISTING UTILITY POLE W/ GUY
- PROPOSED UTILITY POLE W/ GUY
- EXISTING UTILITY POLE W/ GUY
- PROPOSED UTILITY POLE W/ GUY
- BACKWATER WALL

OWNER/TEAM INFORMATION

OWNER: TRINITY DEVELOPMENT, LLC
 2100 W. WASHINGTON AVENUE, SUITE 200
 LAKE HAVASU CITY, AZ 86403
 CONTACT: SCOTT FLETCHER TO P.E.

GEOTECHNICAL ENGINEER: WESTERN TECHNOLOGIES, INC.
 101 EAST TOWNSHIP WAY, NO. 113
 LAKE HAVASU CITY, AZ 86403
 CONTACT: DON SWANSON

STORM WATER FACILITIES: LAKE HAVASU CITY PUBLIC WORKS
 800 S. CHANDLER AVENUE, SUITE 200
 LAKE HAVASU CITY, AZ 86403
 CONTACT: (928) 955-3177

BOUNDARY SURVEY: KEITH STROUD, INC.
 101 W. WASHINGTON AVENUE, SUITE 200
 LAKE HAVASU CITY, AZ 86403
 PH: (928) 225-8638

UTILITY COMPANIES

SEWER SERVICE: LAKE HAVASU CITY WATER DEPT.
 800 S. CHANDLER AVENUE, SUITE 200
 LAKE HAVASU CITY, AZ 86403
 CONTACT: (928) 955-3177

WATER SERVICE: LAKE HAVASU CITY WATER DEPT.
 800 S. CHANDLER AVENUE, SUITE 200
 LAKE HAVASU CITY, AZ 86403
 CONTACT: (928) 955-3177

ELECTRIC SERVICE: UNIONBOND ELECTRIC
 2140 WASHINGTON AVENUE, SUITE 200
 LAKE HAVASU CITY, AZ 86403
 CONTACT: (928) 955-2134

TELEPHONE SERVICE: TRICO COMMUNICATIONS
 2140 WASHINGTON AVENUE, SUITE 200
 LAKE HAVASU CITY, AZ 86403
 CONTACT: (928) 955-2134

GEOTECHNICAL REPORT: A GEOTECHNICAL EVALUATION REPORT FOR THIS PROJECT WAS PREPARED BY WESTERN TECHNOLOGIES, INC. DATED JUNE 16, 2017.

FLOOD INFORMATION: SUDO DESCRIBED PROPERTY IS LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION OF 1% ANNUAL FLOOD. THE FLOOD ELEVATION IS 5005 WHICH IS THE CORRESPONDING FLOOD ELEVATION FOR THE COMBINATION OF WINDY SUDO AND QUANTITIES.

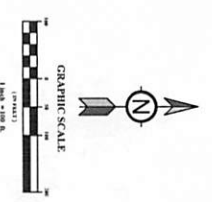
DIRT QUANTITIES

PAVEMENT QUANTITIES

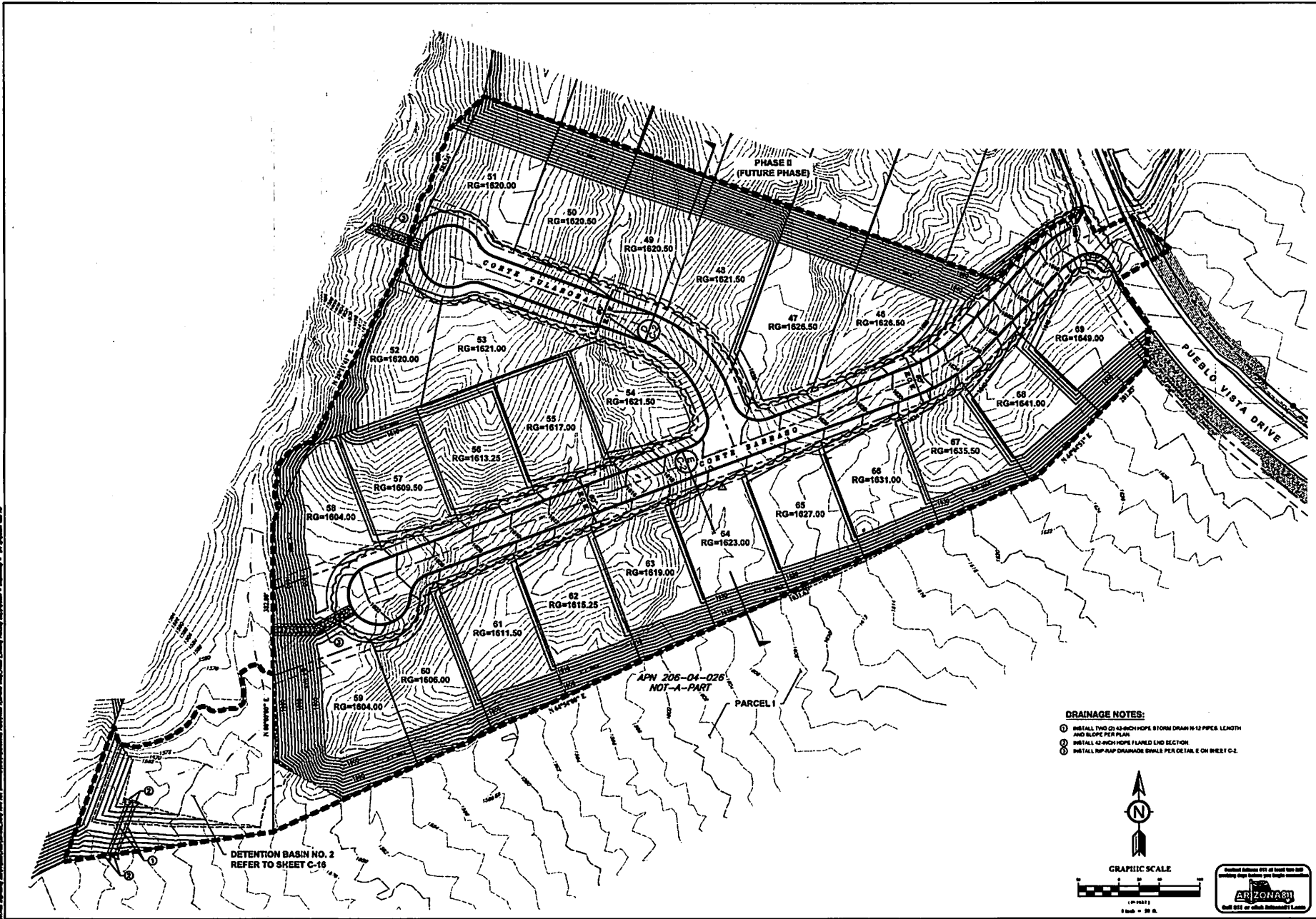
ESTIMATE OF QUANTITIES

PAVEMENT QUANTITIES:

2" ASPHALT CEMENT	2,111 SF
4" ASPHALT CEMENT	1,845 SF
8" ASPHALT CEMENT	1,845 SF
12" ASPHALT CEMENT	1,845 SF
18" ASPHALT CEMENT	1,845 SF
24" ASPHALT CEMENT	1,845 SF
30" ASPHALT CEMENT	1,845 SF
36" ASPHALT CEMENT	1,845 SF
42" ASPHALT CEMENT	1,845 SF
48" ASPHALT CEMENT	1,845 SF
54" ASPHALT CEMENT	1,845 SF
60" ASPHALT CEMENT	1,845 SF
66" ASPHALT CEMENT	1,845 SF
72" ASPHALT CEMENT	1,845 SF
78" ASPHALT CEMENT	1,845 SF
84" ASPHALT CEMENT	1,845 SF
90" ASPHALT CEMENT	1,845 SF
96" ASPHALT CEMENT	1,845 SF
102" ASPHALT CEMENT	1,845 SF
108" ASPHALT CEMENT	1,845 SF
114" ASPHALT CEMENT	1,845 SF
120" ASPHALT CEMENT	1,845 SF
126" ASPHALT CEMENT	1,845 SF
132" ASPHALT CEMENT	1,845 SF
138" ASPHALT CEMENT	1,845 SF
144" ASPHALT CEMENT	1,845 SF
150" ASPHALT CEMENT	1,845 SF
156" ASPHALT CEMENT	1,845 SF
162" ASPHALT CEMENT	1,845 SF
168" ASPHALT CEMENT	1,845 SF
174" ASPHALT CEMENT	1,845 SF
180" ASPHALT CEMENT	1,845 SF
186" ASPHALT CEMENT	1,845 SF
192" ASPHALT CEMENT	1,845 SF
198" ASPHALT CEMENT	1,845 SF
204" ASPHALT CEMENT	1,845 SF
210" ASPHALT CEMENT	1,845 SF
216" ASPHALT CEMENT	1,845 SF
222" ASPHALT CEMENT	1,845 SF
228" ASPHALT CEMENT	1,845 SF
234" ASPHALT CEMENT	1,845 SF
240" ASPHALT CEMENT	1,845 SF
246" ASPHALT CEMENT	1,845 SF
252" ASPHALT CEMENT	1,845 SF
258" ASPHALT CEMENT	1,845 SF
264" ASPHALT CEMENT	1,845 SF
270" ASPHALT CEMENT	1,845 SF
276" ASPHALT CEMENT	1,845 SF
282" ASPHALT CEMENT	1,845 SF
288" ASPHALT CEMENT	1,845 SF
294" ASPHALT CEMENT	1,845 SF
300" ASPHALT CEMENT	1,845 SF
306" ASPHALT CEMENT	1,845 SF
312" ASPHALT CEMENT	1,845 SF
318" ASPHALT CEMENT	1,845 SF
324" ASPHALT CEMENT	1,845 SF
330" ASPHALT CEMENT	1,845 SF
336" ASPHALT CEMENT	1,845 SF
342" ASPHALT CEMENT	1,845 SF
348" ASPHALT CEMENT	1,845 SF
354" ASPHALT CEMENT	1,845 SF
360" ASPHALT CEMENT	1,845 SF
366" ASPHALT CEMENT	1,845 SF
372" ASPHALT CEMENT	1,845 SF
378" ASPHALT CEMENT	1,845 SF
384" ASPHALT CEMENT	1,845 SF
390" ASPHALT CEMENT	1,845 SF
396" ASPHALT CEMENT	1,845 SF
402" ASPHALT CEMENT	1,845 SF
408" ASPHALT CEMENT	1,845 SF
414" ASPHALT CEMENT	1,845 SF
420" ASPHALT CEMENT	1,845 SF
426" ASPHALT CEMENT	1,845 SF
432" ASPHALT CEMENT	1,845 SF
438" ASPHALT CEMENT	1,845 SF
444" ASPHALT CEMENT	1,845 SF
450" ASPHALT CEMENT	1,845 SF
456" ASPHALT CEMENT	1,845 SF
462" ASPHALT CEMENT	1,845 SF
468" ASPHALT CEMENT	1,845 SF
474" ASPHALT CEMENT	1,845 SF
480" ASPHALT CEMENT	1,845 SF
486" ASPHALT CEMENT	1,845 SF
492" ASPHALT CEMENT	1,845 SF
498" ASPHALT CEMENT	1,845 SF
504" ASPHALT CEMENT	1,845 SF
510" ASPHALT CEMENT	1,845 SF
516" ASPHALT CEMENT	1,845 SF
522" ASPHALT CEMENT	1,845 SF
528" ASPHALT CEMENT	1,845 SF
534" ASPHALT CEMENT	1,845 SF
540" ASPHALT CEMENT	1,845 SF
546" ASPHALT CEMENT	1,845 SF
552" ASPHALT CEMENT	1,845 SF
558" ASPHALT CEMENT	1,845 SF
564" ASPHALT CEMENT	1,845 SF
570" ASPHALT CEMENT	1,845 SF
576" ASPHALT CEMENT	1,845 SF
582" ASPHALT CEMENT	1,845 SF
588" ASPHALT CEMENT	1,845 SF
594" ASPHALT CEMENT	1,845 SF
600" ASPHALT CEMENT	1,845 SF
606" ASPHALT CEMENT	1,845 SF
612" ASPHALT CEMENT	1,845 SF
618" ASPHALT CEMENT	1,845 SF
624" ASPHALT CEMENT	1,845 SF
630" ASPHALT CEMENT	1,845 SF
636" ASPHALT CEMENT	1,845 SF
642" ASPHALT CEMENT	1,845 SF
648" ASPHALT CEMENT	1,845 SF
654" ASPHALT CEMENT	1,845 SF
660" ASPHALT CEMENT	1,845 SF
666" ASPHALT CEMENT	1,845 SF
672" ASPHALT CEMENT	1,845 SF
678" ASPHALT CEMENT	1,845 SF
684" ASPHALT CEMENT	1,845 SF
690" ASPHALT CEMENT	1,845 SF
696" ASPHALT CEMENT	1,845 SF
702" ASPHALT CEMENT	1,845 SF
708" ASPHALT CEMENT	1,845 SF
714" ASPHALT CEMENT	1,845 SF
720" ASPHALT CEMENT	1,845 SF
726" ASPHALT CEMENT	1,845 SF
732" ASPHALT CEMENT	1,845 SF
738" ASPHALT CEMENT	1,845 SF
744" ASPHALT CEMENT	1,845 SF
750" ASPHALT CEMENT	1,845 SF
756" ASPHALT CEMENT	1,845 SF
762" ASPHALT CEMENT	1,845 SF
768" ASPHALT CEMENT	1,845 SF
774" ASPHALT CEMENT	1,845 SF
780" ASPHALT CEMENT	1,845 SF
786" ASPHALT CEMENT	1,845 SF
792" ASPHALT CEMENT	1,845 SF
798" ASPHALT CEMENT	1,845 SF
804" ASPHALT CEMENT	1,845 SF
810" ASPHALT CEMENT	1,845 SF
816" ASPHALT CEMENT	1,845 SF
822" ASPHALT CEMENT	1,845 SF
828" ASPHALT CEMENT	1,845 SF
834" ASPHALT CEMENT	1,845 SF
840" ASPHALT CEMENT	1,845 SF
846" ASPHALT CEMENT	1,845 SF
852" ASPHALT CEMENT	1,845 SF
858" ASPHALT CEMENT	1,845 SF
864" ASPHALT CEMENT	1,845 SF
870" ASPHALT CEMENT	1,845 SF
876" ASPHALT CEMENT	1,845 SF
882" ASPHALT CEMENT	1,845 SF
888" ASPHALT CEMENT	1,845 SF
894" ASPHALT CEMENT	1,845 SF
900" ASPHALT CEMENT	1,845 SF



<p>COVER SHEET</p> <p>DATE: NOVEMBER 21, 2022 DRAWN BY: EJP DESIGNED BY: EJP (CHECKED BY): EJP PROJECT NO: 23-08 APPROVED BY: EJP</p>	<p>TRINITY at HAVASU FOOTHILLS PHASE I IMPROVEMENT PLANS LAKE HAVASU CITY, ARIZONA</p>	<p>TRICO ENGINEERING, LLC</p> <p>LAKE HAVASU CITY 211 W. WASHINGTON AVENUE, SUITE 200 LAKE HAVASU CITY, ARIZONA 86403 PHONE: (928) 955-2134 FAX: (928) 955-2135 WWW.TRICOENGINEERING.COM</p>	<p>SCOTT FLETCHER PROFESSIONAL ENGINEER LICENSE NO. 13188 EXPIRES 12-31-2025</p>	<p>REVISION RECORD</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr><th>NO.</th><th>DATE</th><th>DESCRIPTION</th></tr> <tr><td>1</td><td>01/12/2023</td><td>STREET WIDTH MODIFICATION AND NORTH-Axis REMOVAL</td></tr> </table>	NO.	DATE	DESCRIPTION	1	01/12/2023	STREET WIDTH MODIFICATION AND NORTH-Axis REMOVAL
NO.	DATE	DESCRIPTION								
1	01/12/2023	STREET WIDTH MODIFICATION AND NORTH-Axis REMOVAL								

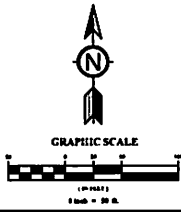


DETENTION BASIN NO. 2
REFER TO SHEET C-16

APN 206-04-026
NOT-A-PART
PARCEL I

DRAINAGE NOTES:

- ① INSTALL TWO (2) 42-INCH HOPE 8 STORM DRAIN 10-12 FEET LENGTH AND SLOPE PER PLAN;
- ② INSTALL 42-INCH HOPE FLARED END SECTION
- ③ INSTALL RUP PUMP DRAINAGE SWALE PER DETAIL E ON SHEET C-2



REVISION RECORD	
NO.	DESCRIPTION



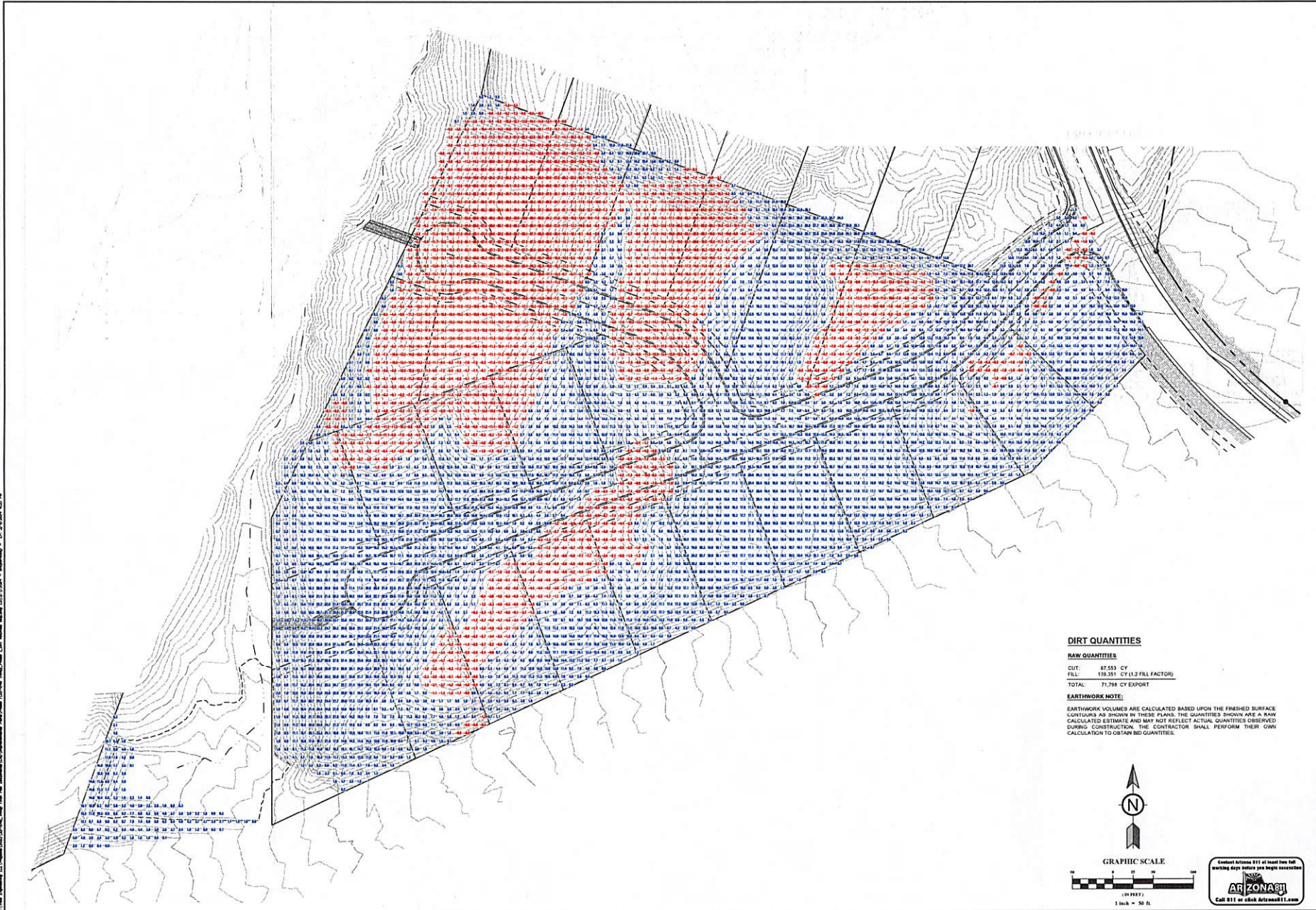
TRICO
ENGINEERING, LLC
1000 N. CENTRAL AVENUE, SUITE 100
LAKE HAVASU CITY, ARIZONA 86403
PH: 908.222.1234
FAX: 908.222.1235
WWW.TRICOENGINEERING.COM

TRINITY at
HAVASU FOOTHILLS
PHASE I IMPROVEMENT PLANS
LAKE HAVASU CITY, ARIZONA

OVERALL GRADING PLAN	
NO.	DATE

PROJECT NO. 2023-001
SHEET 5 OF 15

C-3



NO.	DATE	REVISION RECORD	DESCRIPTION



TRICO
ENGINEERING, LLC

1400 AVENUE OF THE SUNS
SUITE 100
LAKE HAVASU CITY, ARIZONA 86403

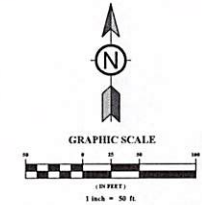
PHONE: 908.426.0000
FAX: 908.426.0001
WWW.TRICOENGINEERING.COM

**TRINITY at
HAVASU FOOTHILLS
PHASE I IMPROVEMENT PLANS
LAKE HAVASU CITY, ARIZONA**

DIRT QUANTITIES

RAW QUANTITIES	
CUT:	67,553 CY
FILL:	139,351 CY (1.2 FILL FACTOR)
TOTAL:	206,904 CY EXPORT

EARTHWORK NOTE:
EARTHWORK VOLUMES ARE CALCULATED BASED UPON THE FINISHED SURFACE CONTOURS AS SHOWN IN THESE PLANS. THE QUANTITIES SHOWN ARE A RAW CALCULATED ESTIMATE AND MAY NOT REFLECT ACTUAL QUANTITIES OBSERVED DURING CONSTRUCTION. THE CONTRACTOR SHALL PERFORM THEIR OWN CALCULATION TO OBTAIN BID QUANTITIES.



Consult Arizona #11 at least five (5) working days before you begin construction.

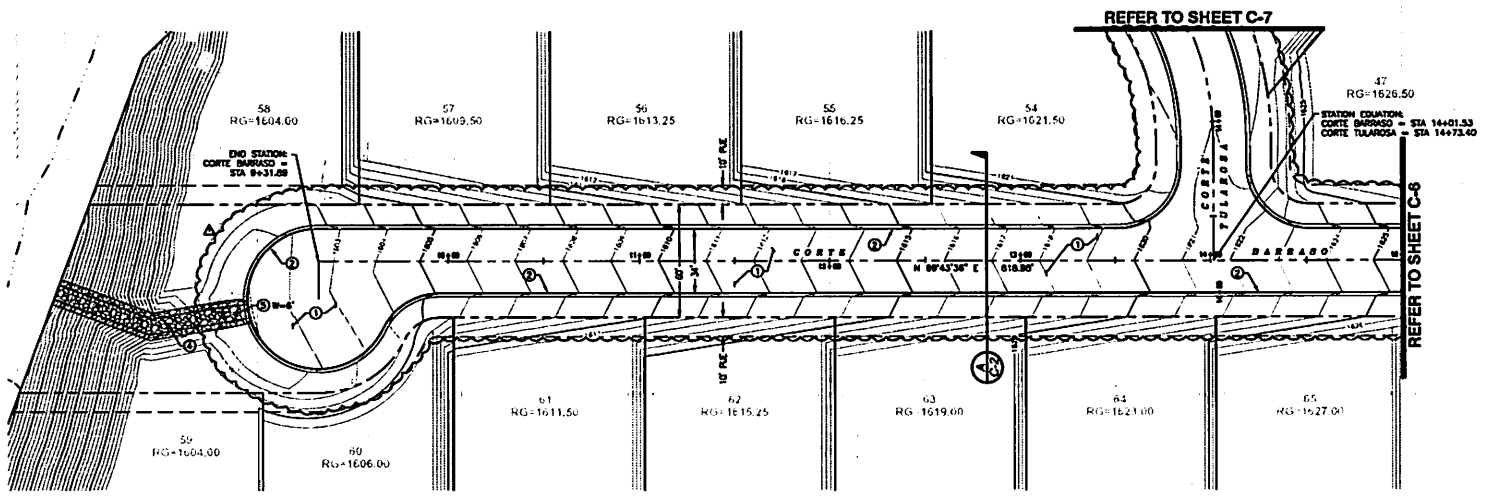
ARIZONA
CALL 811 or click Arizona11.com

EARTHWORK VOLUME MAP

DRAWING NO. **C-4**

SHEET 4 OF 15

DATE: NOVEMBER 2, 2023
DRAWN BY: [Signature]
CHECKED BY: [Signature]
PROJECT NO.: [Number]
CITY: LAKE HAVASU CITY, AZ

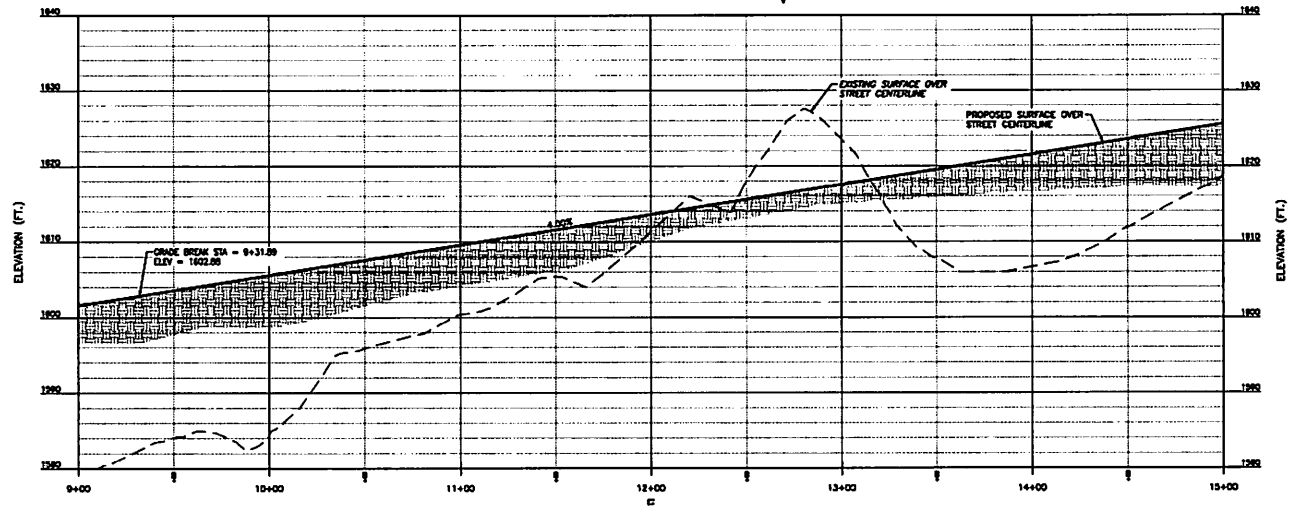


REFER TO SHEET C-7

REFER TO SHEET C-8

STATION ELEVATION:
CORTE BARRASO = STA 14+01.33
CORTE TULAROSA = STA 14+72.40

CORTE BARRASO - PLAN VIEW
SCALE 1"=30'

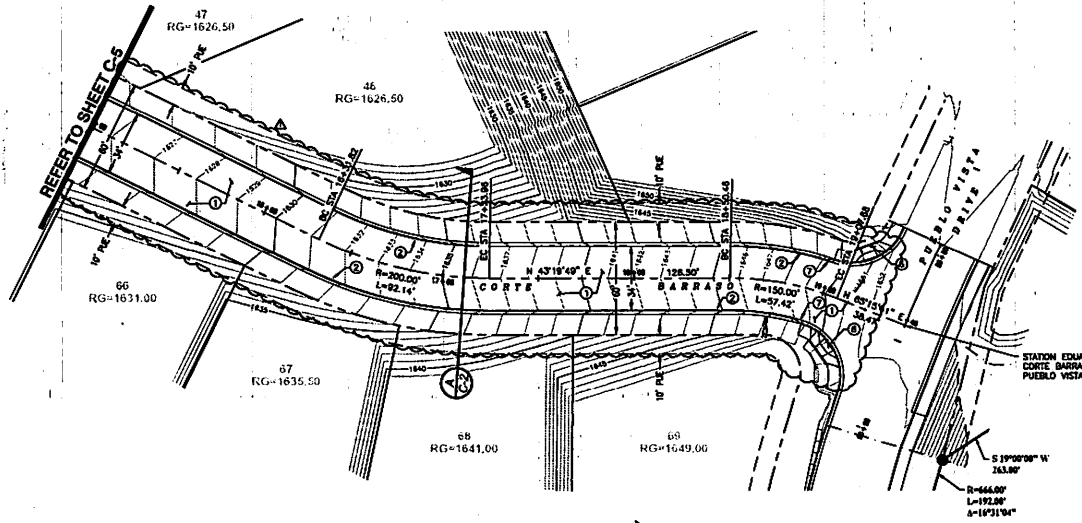


CORTE BARRASO - PROFILE VIEW
SCALE H:1"=30' V:1"=6'

- PAVING NOTES:**
- 1. INSTALL 4\"/>

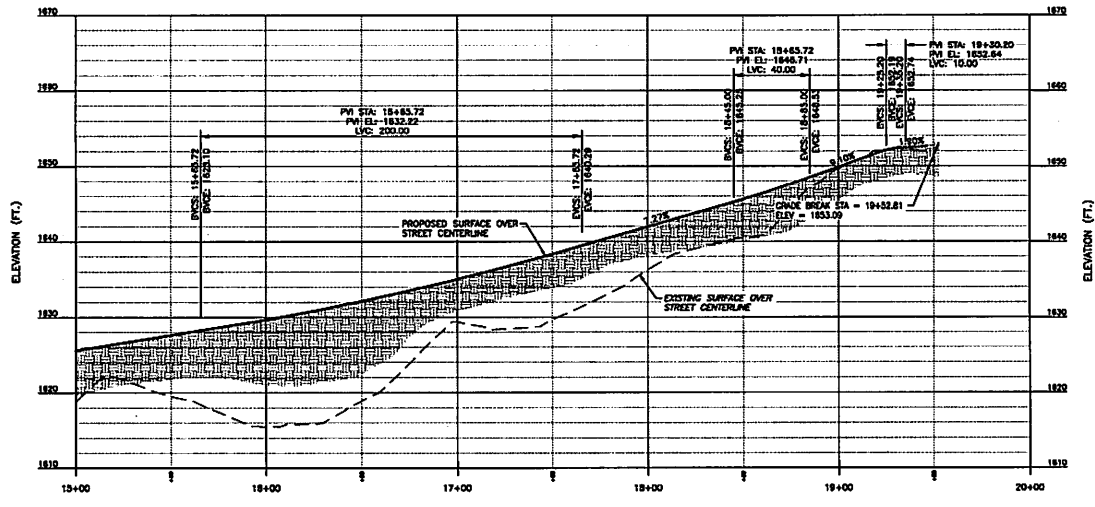


REVISION RECORD	
NO.	DATE
1	11/11/2011
2	11/11/2011
3	11/11/2011
4	11/11/2011
5	11/11/2011
6	11/11/2011
7	11/11/2011
8	11/11/2011
9	11/11/2011
10	11/11/2011
<p>TRICO ENGINEERING, LLC</p> <p>1400 W. AVENUE 10 LAKE HAVASU CITY, ARIZONA 86403</p>	
<p>TRINITY at HAVASU FOOTHILLS PHASE I IMPROVEMENT PLANS LAKE HAVASU CITY, ARIZONA</p>	
<p>CORTE BARRASO STREET PLAN & PROFILE 1</p>	<p>DATE: 11/11/2011 PROJECT NO.: 11-001 DRAWN BY: JLM CHECKED BY: JLM DATE: 11/11/2011 SCALE: 1"=30' PROJECT: TRINITY AT HAVASU FOOTHILLS PHASE I IMPROVEMENT PLANS DRAWING NO.: C-5 SHEET 8 OF 18</p>



CORTE BARRASO - PLAN VIEW
SCALE 1"=30'

- PAVING NOTES:**
- ① INSTALL 2" ASPHALT CONCRETE CURB & MODERATE RAMP
 - ② CONSTRUCT ROLLED CURB & OUTER PER LAC DETAIL NO. 215
 - ③ CONSTRUCT 6" FIBER REINFORCED CONCRETE CURB & OUTER PER LAC DETAIL NO. 215
 - ④ INSTALL 8" RAMP 1/4" x 1" THICK PER DETAIL E ON SHEET O-2. SLOPE BRIDGE AT MIN. 1.5%.
 - ⑤ CONSTRUCT EXPRESSED CURB AND EDGELINE PER DETAIL F ON SHEET O-2. WIDTH PER PLAN.
 - ⑥ CONSTRUCT ACCESSIBLE RAMP STREET/STREET INTERSECTION PER LAC DETAIL NO. 215
 - ⑦ CONSTRUCT CURB & OUTER TO ROLLED CURB TRANSITION PER LAC DETAIL NO. 215



CORTE BARRASO - PROFILE VIEW
SCALE H:1"=30'; V:1"=6'



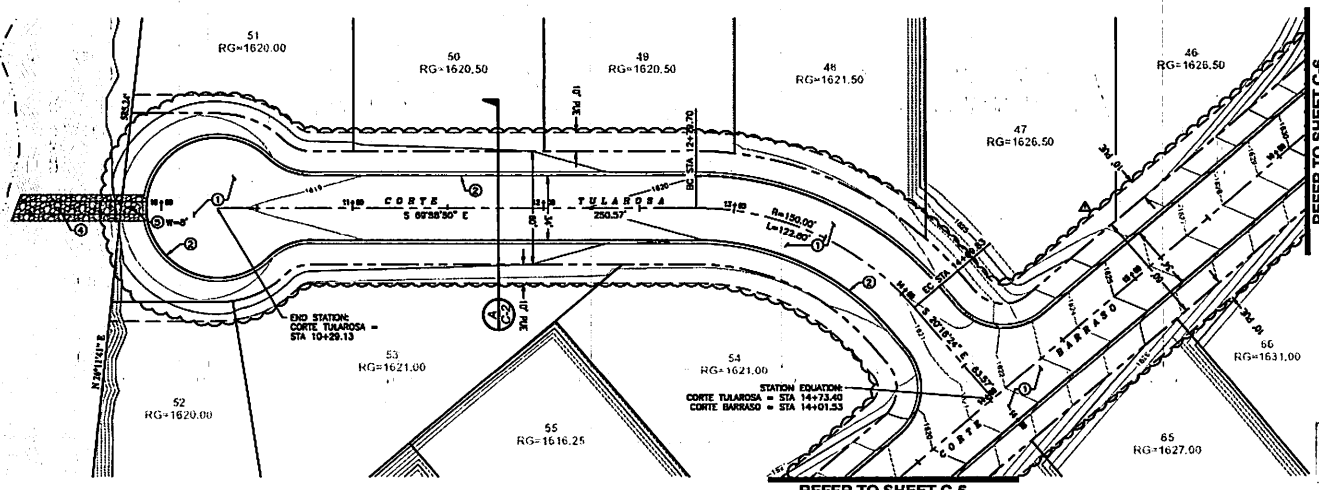
NO.	DATE	REVISION RECORD



TRICO ENGINEERING, LLC
 PROJECT: CORTE BARRASO STREET PHASE I IMPROVEMENT PLANS
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 DATE: [Date]

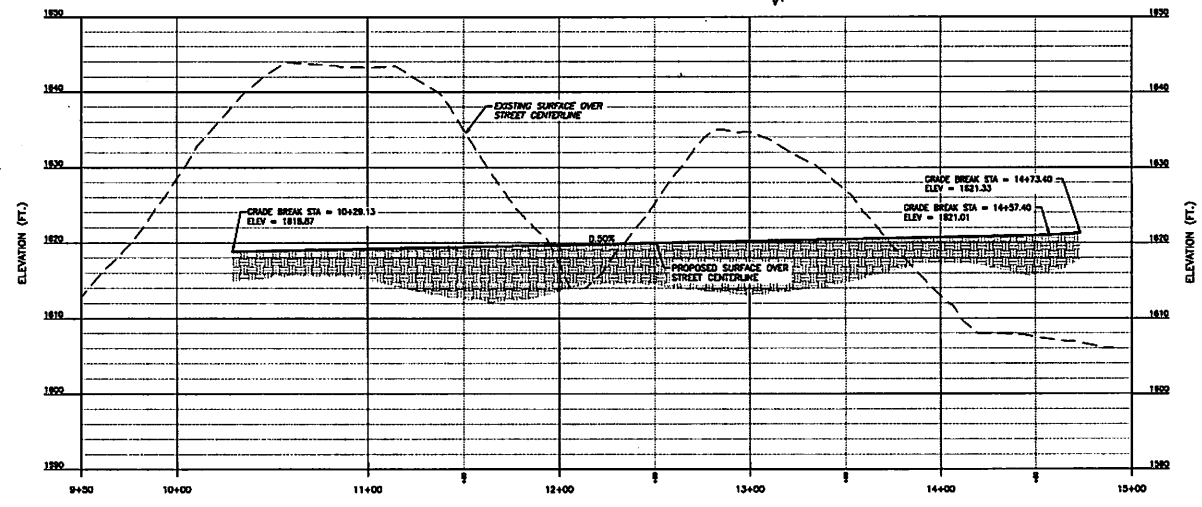
TRINITY at HAVASU FOOTHILLS
HAVASU IMPROVEMENT PLANS
PHASE I IMPROVEMENT PLANS
 LAKE HAVASU CITY, ARIZONA

CORTE BARRASO STREET PLAN & PROFILE II
 SHEET 6 OF 15
 DATE: [Date]
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 PROJECT NO.: [Number]
 DRAWN BY: [Name]

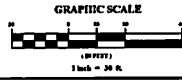


CORTE TULAROSA - PLAN VIEW
SCALE 1"=30'

- PAVING NOTES:**
- 1. INSTALL 4" ACRYLIC CONCRETE CURB & GUTTER
 - 2. CONSTRUCT ROLLED CURB & GUTTER PER UAC DET. NO. 213
 - 3. CONSTRUCT ROLLED CURB & GUTTER PER UAC DET. NO. 213
 - 4. INSTALL REINFORCING 12" THICK PER DETAIL F ON SHEET C-2. SLOPE INVALE AT MIN. 1.2%
 - 5. CONSTRUCT EXPRESSED CURBS AND SIDEWALK PER DETAIL F ON SHEET C-2. WIDTH PER PLAN.
 - 6. CONSTRUCT ACCESSIBLE RAMP STREET/STREET INTERSECTION
 - 7. CONSTRUCT CURB & GUTTER TO ROLLED CURB TRANSITION PER UAC DET. NO. 221



CORTE TULAROSA - PROFILE VIEW
SCALE H:1"=30'; V:1"=8'



NO.	DATE	REVISION	DESCRIPTION
1			ISSUE FOR PERMIT
2			ISSUE FOR PERMIT

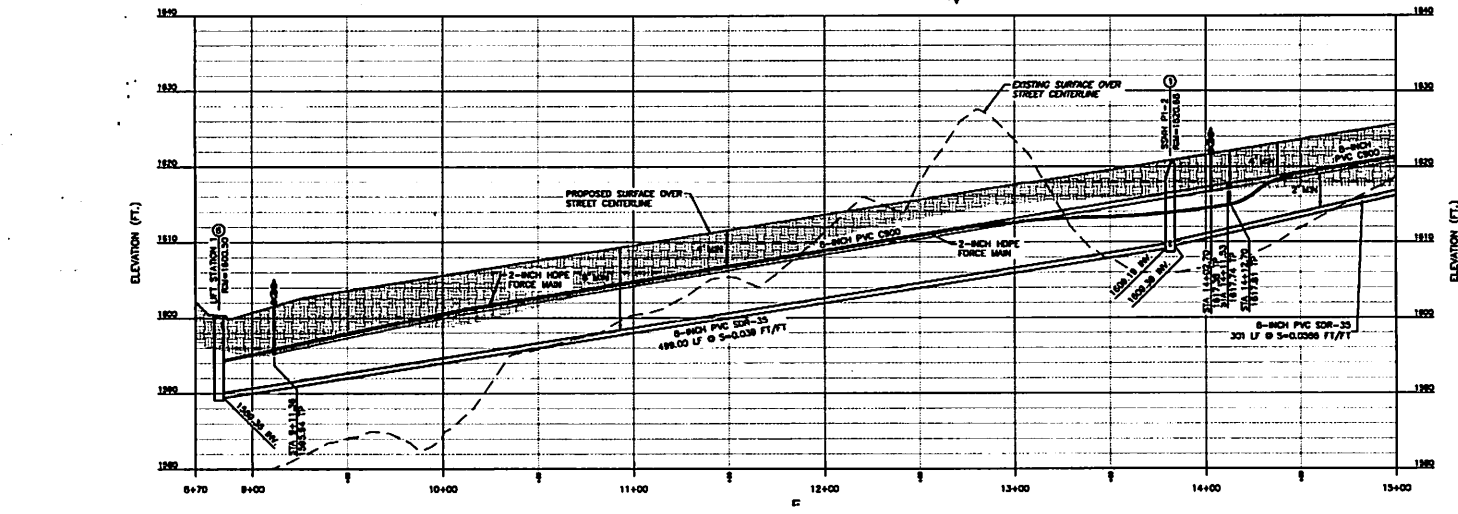
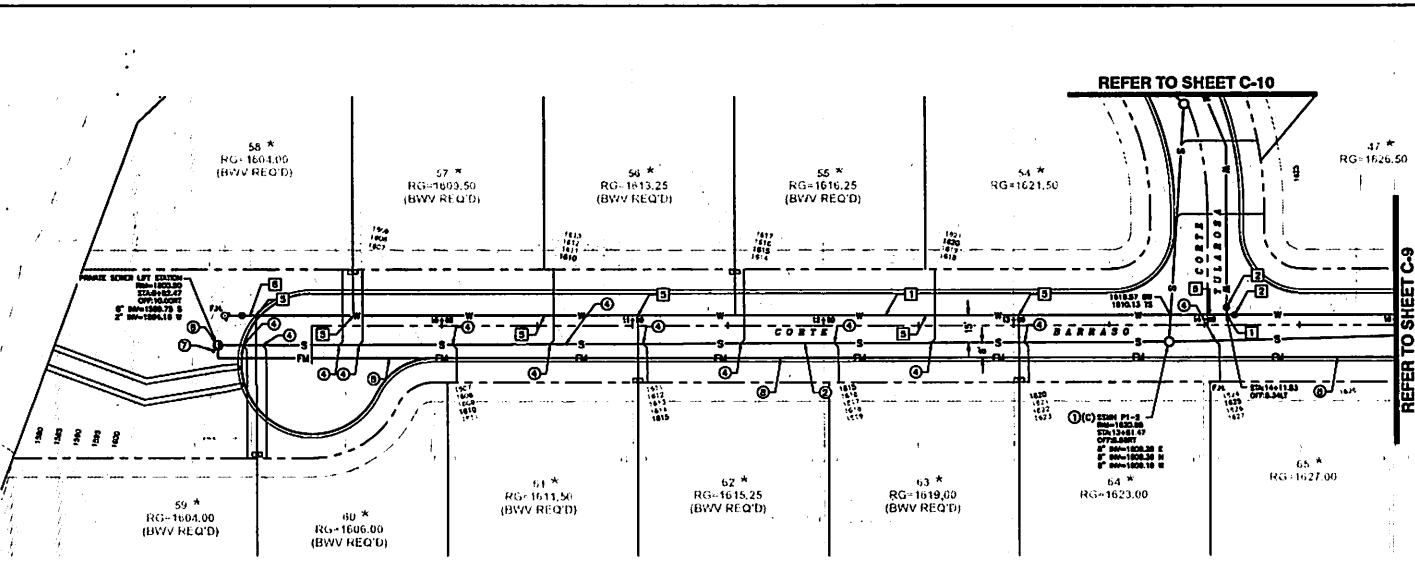


TRICO
ENGINEERING, LLC
14588 N. AVENUE
SUITE 100
PHOENIX, ARIZONA 85024
TEL: 602.998.1111
WWW.TRICOENGINEERING.COM

TRINITY at
HAVASU FOOTHILLS
PHASE I IMPROVEMENT PLANS
LAKE HAVASU CITY, ARIZONA

DATE	BY	CHECKED BY	APPROVED BY

DRAWING NO. **C-7**
SHEET 7 OF 15



WATER KEY NOTES:

1. INSTALL 1/2" DIA. TIE WITH FLEX COUPLINGS FOR CONNECTION TO EXISTING M&P PER LNC SPECIFICATION. CONTRACTOR TO PORTHOLE EXISTING WATER LINE TO VERIFY CONNECTION. ELEVATION REFER TO JOINT RESTRAINT TABLE ON SHEET C-11.
2. INSTALL 1" GATE VALVE PER LNC STD. DET. NO. 208. REFER TO JOINT RESTRAINT TABLE ON SHEET C-11.
3. INSTALL 1" PVC CORR. DRN. PIPE PER LNC STD. DET. NO. 208. SPURRAL COVER IS 4 FEET. REFER TO JOINT RESTRAINT TABLE ON SHEET C-11.
4. INSTALL 1" DI FITTING PER LNC SPECIFICATION. ANGLE PER PLAN. REFER TO JOINT RESTRAINT TABLE ON SHEET C-11.
5. INSTALL 3/4" BENCH SERVICE CONNECTION PER LNC STD. DET. NO. 208 AND SPECIFICATION. BRANCH OR DUAL AS SHOWN ON PLAN.
6. INSTALL FINE STRUTTED ASSEMBLY PER LNC STD. DET. NO. 208. REFER TO JOINT RESTRAINT TABLE ON SHEET C-11.
7. CONNECT TO EXISTING 8" PVC STUB. REFER TO JOINT RESTRAINT TABLE ON SHEET C-11.

SEWER KEY NOTES:

1. INSTALL 48" DIAMETER PRECAST CONCRETE MANHOLE PER LNC STD. DET. NO. 463. ON APPROVED EQUIPMENT. THE MANHOLES WITH A JOINT RESTRAINT SHALL BE CASTED PER LNC STD. SPECIFICATION DET. NO. 463.
2. INSTALL 8" BENCH PVC BENCH PIPE PER LNC STD. DET. NO. 208.
3. INSTALL 8" BENCH PVC BENCH PIPE PER LNC STD. DET. NO. 208.
4. INSTALL 8" BENCH PVC 8000S SEWER LATERAL PER LNC STD. DET. NO. 463.
5. INSTALL 8" BENCH TERMINAL CLEANOUT PER LNC STD. DET. NO. 463.
6. INSTALL PRIVATE SEWER LIFT STATION MODEL CP23045 PER DETAILS AND SPEC. SHOWN ON SHEET C-11.
7. INSTALL WARNING SIGN THAT INCLUDES 24-HOUR EMERGENCY PHONE NUMBER OF THE OWNER OR OPERATOR.
8. INSTALL 3" BENCH PRIVATE FORCE MAIN PIPE.

CONSTRUCTION NOTES:

1. CHECKER THIS LOT REQUIRING INSTALLATION OF A PRESSURE REDUCING VALVE PRIOR TO OPENING OF VALVE ON PRIVATE SIDE OF WATER METER. THIS PERTAINS TO ALL LOTS WITHIN TRACT 2291.

NO.	DATE	REVISION

TRICO ENGINEERING, LLC
 1100 N. GAVELIN AVE., SUITE 100
 TUCSON, ARIZONA 85718
 PHONE: (520) 883-1100
 FAX: (520) 883-1101
 WWW: WWW.TRICOENGINEERING.COM

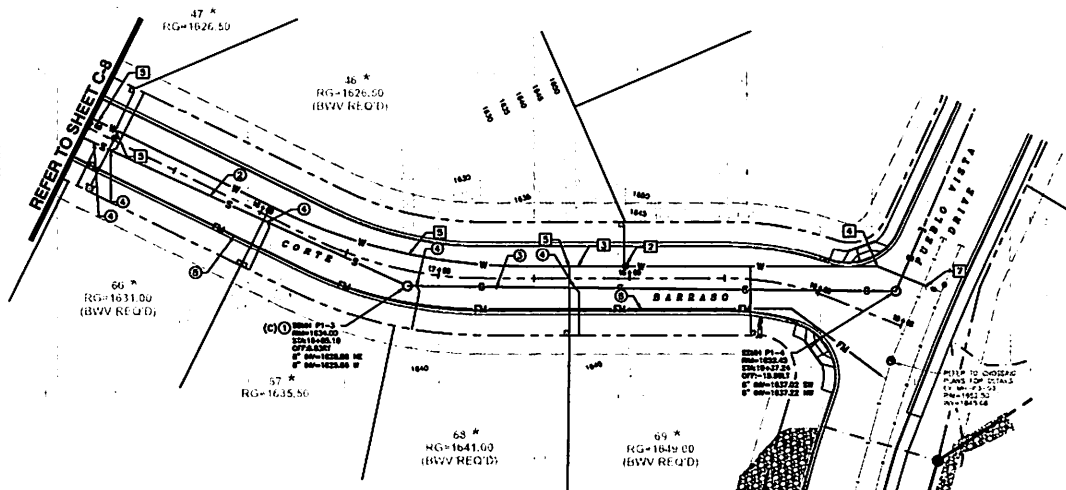
TRINITY at
HAVASU FOOTHILLS
PHASE I IMPROVEMENT PLANS
LAKE HAVASU CITY, ARIZONA

PROJECT NO.	
DATE	
SCALE	
DESIGNED BY	
CHECKED BY	
DATE	
PROJECT NO.	
DATE	

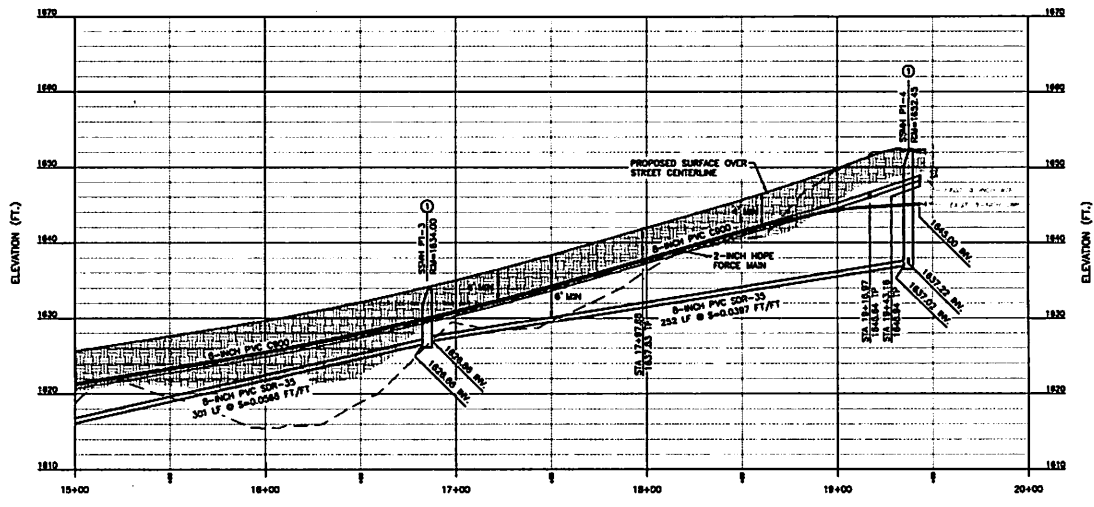
C-8
 SHEET 8 OF 18

GRAPHIC SCALE

 1" = 30'



CORTE BARRASO - PLAN VIEW
SCALE 1"=30'



CORTE BARRASO - PROFILE VIEW
SCALE H:1"=30'; V:1"=5'

WATER KEY NOTES:

1. INSTALL 1/2" OR 1/4" WITH FLEX COUPLERS FOR CONNECTION TO EXISTING ACP FOR LHC SPECIFICATION 8236. CONTRACTOR TO POT-HOLE EXISTING WATER LINE TO VERIFY CONNECTION. ELEVATION REFER TO JOINT RESTRAINT TABLE ON SHEET C-11.
2. INSTALL 1" GATE VALVE PER LHC STD. DTL. NO. 308. REFER TO JOINT RESTRAINT TABLE ON SHEET C-11.
3. INSTALL 1" PVC DR19 DR19 PIPE PER LHC STD. DTL. NO. 308. MINIMUM COVER IS 4 FEET. REFER TO JOINT RESTRAINT TABLE ON SHEET C-11.
4. INSTALL 1" OF FITTING PER LHC SPECIFICATION 8236. ANGLE PER PLAN. REFER TO JOINT RESTRAINT TABLE ON SHEET C-11.
5. INSTALL 1/2" SERVICE CONNECTION PER LHC STD. DTL. NO. 308 AND SPECIFICATION 8236. BRUSH OR DUAL AS SHOWN ON PLAN.
6. INSTALL FINE WETLAND ARRESTRY PER LHC STD. DTL. NO. 308. REFER TO JOINT RESTRAINT TABLE ON SHEET C-11.
7. CONNECT TO EXISTING 8-INCH PVC STUB. REFER TO JOINT RESTRAINT TABLE ON SHEET C-11.

SEWER KEY NOTES:

1. INSTALL 48" DIAMETER PRECAST CONCRETE MANHOLE PER LHC STD. DTL. NO. 483, OR APPROVED EQUIVALENT. THE MANHOLES WITH A (C) DESIGNATION SHALL BE COATED PER LHC STD. SPECIFICATION 8236.
2. INSTALL 8-INCH PVC 8033 PIPE PER LHC STD. DTL. NO. 308.
3. INSTALL 8-INCH PVC 8033 PIPE PER LHC STD. DTL. NO. 308.
4. INSTALL 8-INCH PVC 8236 SEWER LATERAL PER LHC STD. DTL. NO. 498.
5. INSTALL 8-INCH TERMINAL CLEANOUT PER LHC STD. DTL. NO. 498.
6. INSTALL PRIVATE RENCER LIFT STATION MODEL OPT2384 PER DETAILS AND SPEC SHOWN ON SHEET C-11.
7. INSTALL WARNING SIGN THAT INCLUDES 24-HOUR EMERGENCY PHONE NUMBER OF THE OWNER OR OPERATOR.
8. INSTALL 2-INCH HDPE PRIVATE FORCE MAIN PIPE.

CONSTRUCTION NOTES:

- * CHECKER THIS LOT REQUIRING INSTALLATION OF A PRESSURE REDUCING VALVE PRIOR TO OPENING OF VALVE ON PRIVATE SIDE OF WATER METER. THIS PORTABLE TO ALL LOTS WITHIN TRACT 2291.

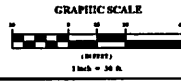
NO.	DATE	REVISION	DESCRIPTION

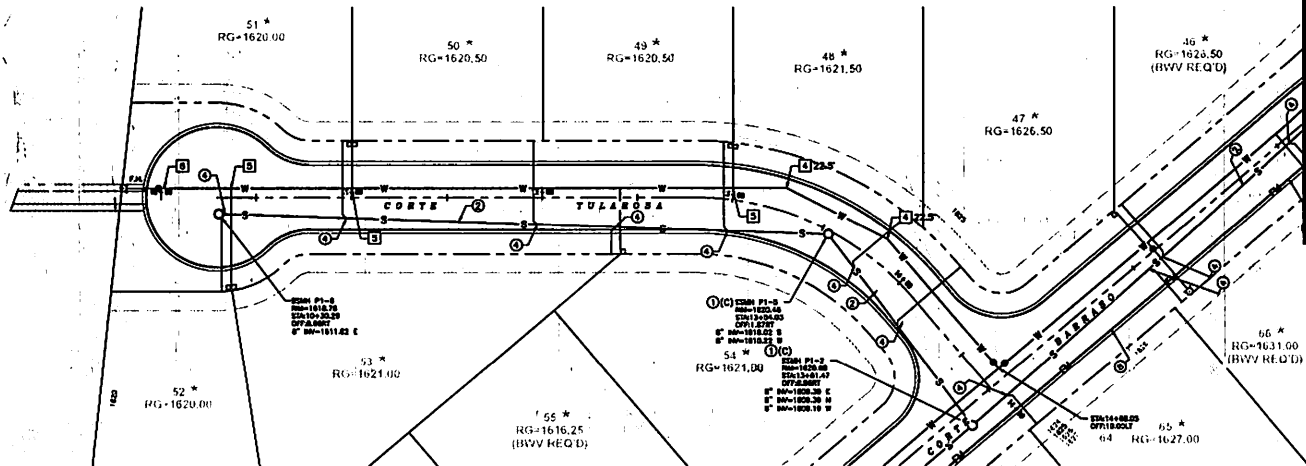
TRICO ENGINEERING, LLC

REGISTERED PROFESSIONAL ENGINEER
STATE OF ARIZONA
1410 W. WASHINGTON STREET
SUITE 100
TUCSON, ARIZONA 85717
PHONE: 520.798.1111
FAX: 520.798.1112
WWW.TRICOENGINEERING.COM

**TRINITY at HAVASU FOOTHILLS
PHASE I IMPROVEMENT PLANS
LAKE HAVASU CITY, ARIZONA**

DATE:	10/20/2023	BY:	
DESIGNED BY:		CHECKED BY:	
PROJECT NO.:		DATE:	
APPROVED BY:			





CORTE TULAROSA - PLAN VIEW
SCALE 1"=30'

WATER KEY NOTES:

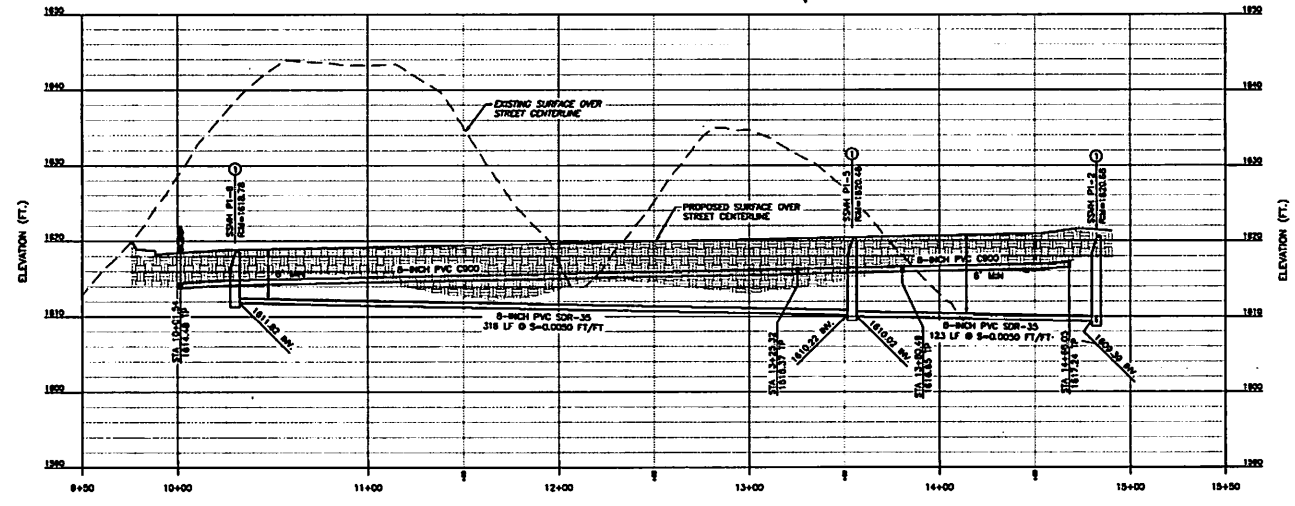
1. INSTALL 4" DIA. TEE WITH FLEX COUPLERS FOR CONNECTION TO EXISTING 4" CP FOR LINC SPECIFICATION 6296. CONTRACTOR TO PORTABLE EXISTING WATER LINE TO VERIFY CONNECTION. ELEVATION REFER TO JOINT RESTRAINT TABLE ON SHEET C-11.
2. INSTALL 4" GATE VALVE PER LINC STD. DET. NO. 303. REFER TO JOINT RESTRAINT TABLE ON SHEET C-11.
3. INSTALL 4" PVC C900 DR14 PIPE PER LINC STD. DET. NO. 303. MINIMUM COVER IS 4 FEET. REFER TO JOINT RESTRAINT TABLE ON SHEET C-11.
4. INSTALL 4" DI FITTING PER LINC SPECIFICATION 6296. ANGLE FOR PUMP. REFER TO JOINT RESTRAINT TABLE ON SHEET C-11.
5. INSTALL 1/2" DIA. SERVICE CONNECTION PER LINC STD. DET. NO. 301 AND SPECIFICATION 6296. ANGLE OR DUAL AS SHOWN ON PLAN.
6. INSTALL FRIE HYDRANT ASSEMBLY PER LINC STD. DET. NO. 302. REFER TO JOINT RESTRAINT TABLE ON SHEET C-11.
7. CONNECT TO EXISTING 4" PVC 6" DIA. REFER TO JOINT RESTRAINT TABLE ON SHEET C-11.

SEWER KEY NOTES:

1. INSTALL 4" DI PRECAST CONCRETE MANHOLE PER LINC STD. DET. NO. 301 OR APPROVED EQUIVALENT. THE MANHOLE WITH A/C DESIGNATION SHALL BE COATED PER LINC STD. SPECIFICATION 6296.
2. INSTALL 8" INCH PVC 8033 PIPE PER LINC STD. DET. NO. 303.
3. INSTALL 8" INCH PVC 8033 PIPE PER LINC STD. DET. NO. 303.
4. INSTALL 4" INCH PVC 8033 SEWER LATERAL PER LINC STD. DET. NO. 303.
5. INSTALL 8" INCH TERMINAL CLEANOUT PER LINC STD. DET. NO. 303.
6. INSTALL PRIVATE REVEAL LIFT STATION MODEL 0P20943 PER DETAILS AND SPEC SHOWN ON SHEET C-11.
7. INSTALL WARNING SIGN THAT INCLUDES 24-HOUR EMERGENCY PHONE NUMBER OF THE OWNER OR OPERATOR.
8. INSTALL 2" INCH HOPE PRIVATE FORCE MAIN PIPE.

CONSTRUCTION NOTES:

- * CHECKER SHALL NOT REQUIRE INSTALLATION OF A PRESSURE REDUCING VALVE PRIOR TO OPENING OF VALVE ON PRIVATE SIDE OF WATER METER. THIS PERTAINS TO ALL LOTS WITHIN TRACT 2291.



CORTE TULAROSA - PROFILE VIEW
SCALE H:1"=30'; V:1"=8'



NO.	DATE	REVISION REQUIRED

TRICO ENGINEERING, LLC
 1400 AVENUE 101, SUITE 100
 LAKE HAVASU CITY, ARIZONA 86403
 PHONE: 908.448.1111
 FAX: 908.448.1112
 WWW.TRICOENGINEERING.COM

TRINITY at
 HAVASU FOOTHILLS
 PHASE I IMPROVEMENT PLANS
 LAKE HAVASU CITY, ARIZONA

PROJECT NO.	
DATE	
DESIGNED BY	
CHECKED BY	
DATE CHECKED	
SCALE	
PROJECT NO.	
DATE	

Grinder Pumps



HKGP SERIES

3HP - 7.5HP Grinder Pump



- 2" NPT Vertical Discharge
- Double Mechanical Seals
- Durable Cast Iron Construction
- Manual Models

Rep: Sigma Services, Inc
949-546-1125
Ref: OP230045

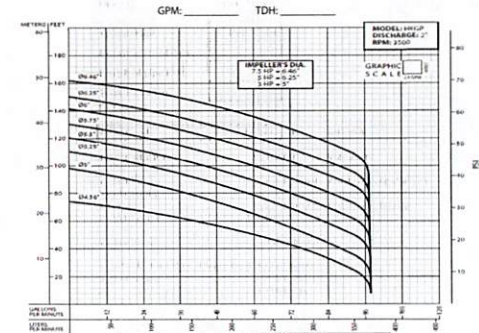


Rep: Sigma Services, Inc
949-546-1125
Ref: OP230045

Section
Date

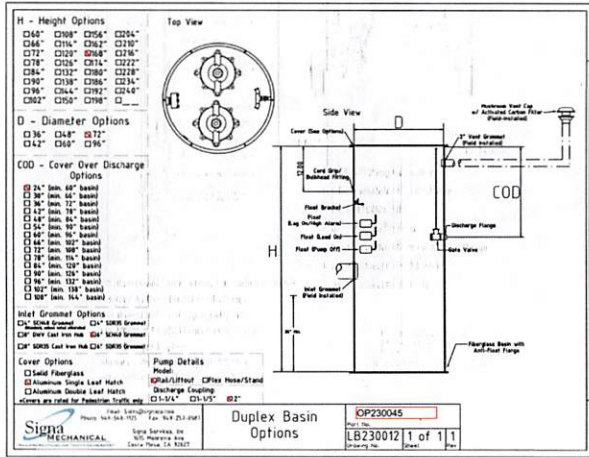
GRINDER
Sept. 2022

Pump Series	HKGP	3HP - 7.5HP RECESSED IMPELLER	
Speed	3500 RPM	Discharge	2" FULL IMPELLER



MODEL	HAZ. NO.	HP	VOLTS	PHASE	LINE	AMPS	MAX. HORSEPOWER	NEMA CODE	COLOR	CODE	WEIGHT (LBS.)
HKGP-3HP	230045	3	230	1	1	15.0	5.0	35	3	001	120
HKGP-3HP	230046	3	230	1	1	15.0	5.0	35	3	002	120
HKGP-3HP	230047	3	230	1	1	15.0	5.0	35	3	003	120
HKGP-4HP	230048	4	230	1	1	18.0	6.0	40	3	004	140
HKGP-4HP	230049	4	230	1	1	18.0	6.0	40	3	005	140
HKGP-4HP	230050	4	230	1	1	18.0	6.0	40	3	006	140
HKGP-5HP	230051	5	230	1	1	21.0	7.0	45	3	007	160
HKGP-5HP	230052	5	230	1	1	21.0	7.0	45	3	008	160
HKGP-5HP	230053	5	230	1	1	21.0	7.0	45	3	009	160
HKGP-7.5HP	230054	7.5	230	1	1	28.0	9.5	55	3	010	200
HKGP-7.5HP	230055	7.5	230	1	1	28.0	9.5	55	3	011	200
HKGP-7.5HP	230056	7.5	230	1	1	28.0	9.5	55	3	012	200

1. Use use the pump for handling average liquids.
2. This pump is not designed for use in handling acids, corrosive materials or any application where further contact may be required.
3. Pump flow rate is based on 1.5% discharge pipe friction without discharge to main under static.
4. Testing is performed with water specific gravity of 1.0 @ 60°F. Other fluids may vary significantly.

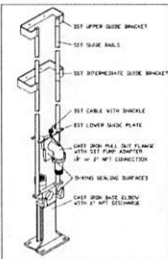


Rail Systems



KL1 & KL1CV

KEEN 2hp Grinder Liftout

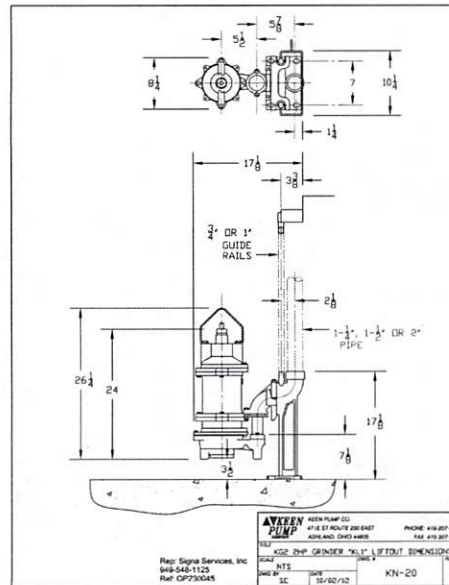


- 1-1/4" NPT Pump Connection
- 2" NPT Female Vertical Discharge
- 3/4" or 1" Guide Rails
- Stress-Free Rail System
- Durable Cast Iron Base and Lift-Out Flange
- Stainless Steel Pump Adapter
- Stainless Steel Guide Plate

- Base elbow provides quick and easy installation and removal of vertical discharge 1 or 2HP Grinder Pumps
- Quick-connect stainless steel pump adapters
- Taper base arms support liftout elbow and pump
- Positive O-ring sealing face
- Automatic sealing pulls mating faces together
- Carries 100% pump load - no stress on rails

Rep: Sigma Services, Inc
949-546-1125
Ref: OP230045

REV 09/2022



Rep: Sigma Services, Inc
949-546-1125
Ref: OP230045

KEEN PUMP
4751 17th ROUTE 220 EAST
AVONDALE, CALIF. 92618
PHONE: 949 546 1125
FAX: 949 546 1125
WWW.KEENPUMP.COM
3HP GRINDER 'KL1' LIFTOUT DIMENSIONS
REV: NTS
DATE: 08/22/12
DWG NO: KN-20

Hazen Williams Formula for Pressure Loss in Pipe

$H_f = 6.765 \text{ Ft per } 100'$ of pipe
 $SG = 1$ Specific Gravity
 $Q =$ flow in GPM
 $D = 1.315$ ID of pipe in inches
 $C = 150$ Coefficient of Friction for pipe used
 $A = 2.874 \text{ Sq Inches}$ Area of Pipe
 $V = 6.027 \text{ Ft/Sec}$ Velocity
 Pressure Rating

Type of Pipe	PVC-SCH80
Nominal Size of Pipe	2"
Length of pipe in Ft	1075
Static Elevation	50
Friction Loss	72.725 FT

Total Head	122.725 FT	Final Result
Total Head in PSI	53.140 PSI	Final Result
Water HP	1.674	Does not account for pump efficiency
Specific Gravity	1	
Efficiency	0.24	If known, to get pump efficiency
Pump Efficiency	69.30%	
Volume in line	21.457	Cubic Feet
Time for this length/size of line at the flow rate listed to empty the line:		
Retention Time	2.972	Minutes
or	0.050	Hours

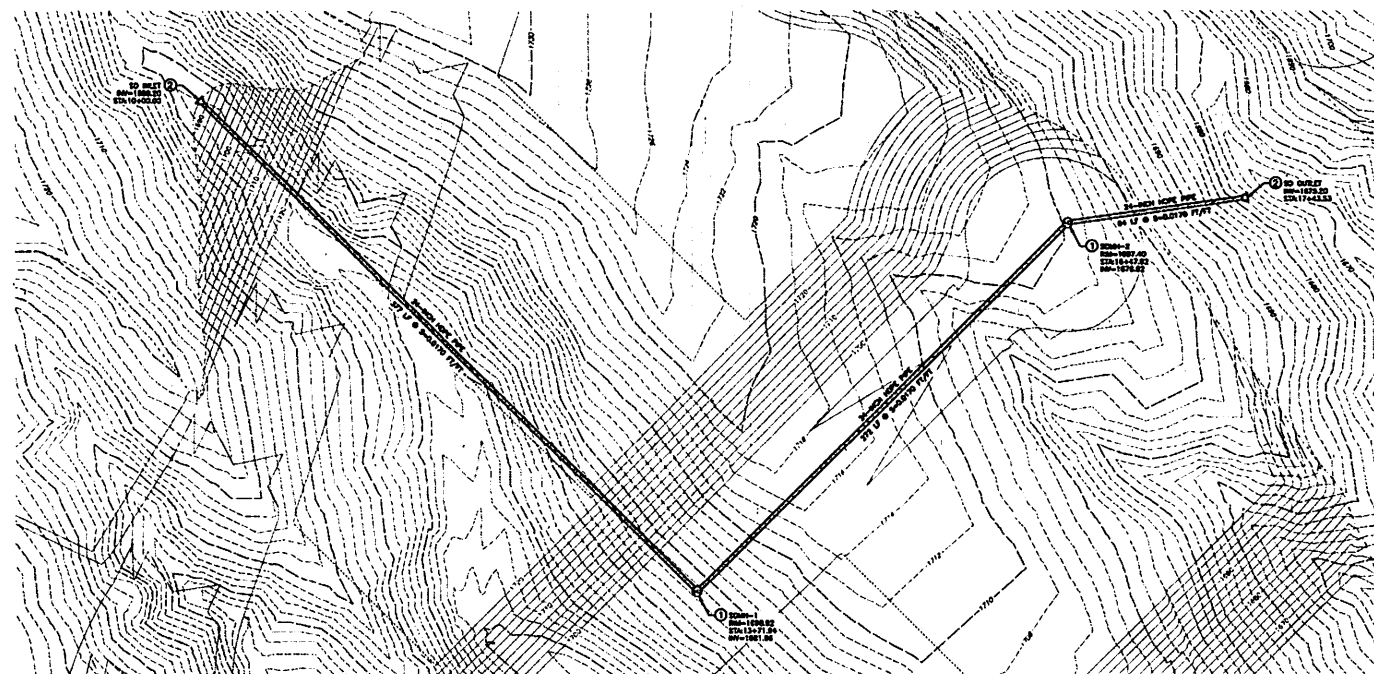
REVISION RECORD
NO. DATE



TRICO
ENGINEERING, LLC
1405 AVAHO CITY, ARIZONA 85914
602.675.7600

TRINITY at
HAVASU FOOTHILLS
PHASE I IMPROVEMENT PLANS
LAKE HAVASU CITY, ARIZONA

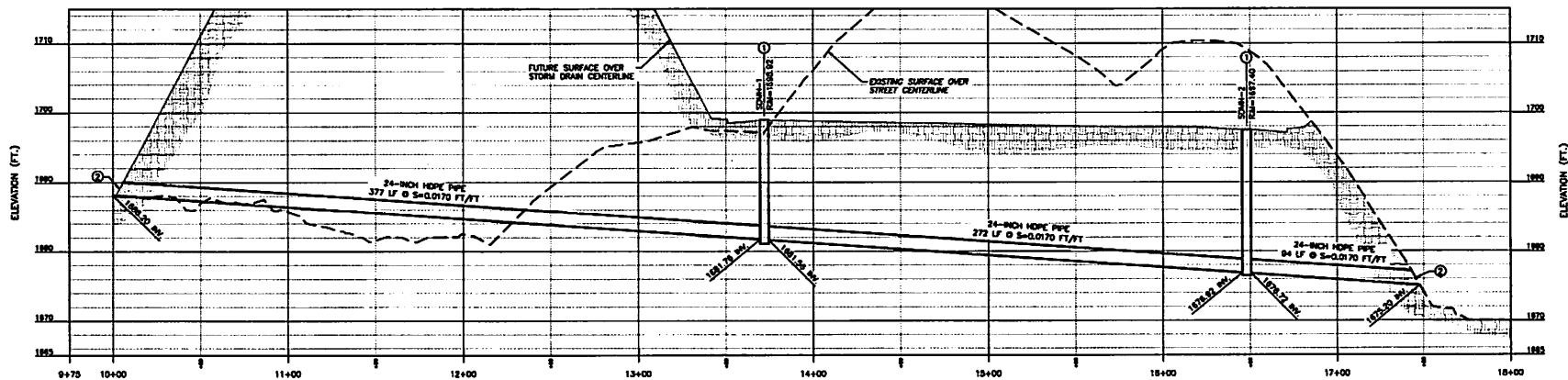
SEWER LIFT STATION DETAILS
 DATE: _____ DRAWN BY: _____
 DWG NO: _____ DESIGNED BY: _____
 PROJECT NO: _____ CHECKED BY: _____
 APPROVED BY: _____



STORM DRAIN - PLAN VIEW
SCALE 1"=30'

CONSTRUCTION NOTES:

- ① CONSTRUCT STORM DRAIN MANHOLE BARE PER MACH STD. 071, 12" & 24" FOR 18" STD. 071, 12"
- ② INSTALL 24-INCH HOPE FLARED END SECTION.



STORM DRAIN - PROFILE VIEW
SCALE H:1"=30'; V:1"=6'



REV	DATE	DESCRIPTION



TRICO
ENGINEERING, LLC
LAKE HAVASU CITY, ARIZONA
1100 W. WASHINGTON ST. SUITE 100
LAKE HAVASU CITY, AZ 86403
PH: 908.443.1111
WWW.TRICOENGINEERING.COM

TRINITY at HAVASU FOOTHILLS
PHASE I IMPROVEMENT PLANS
LAKE HAVASU CITY, ARIZONA

NO.	DATE	BY	CHKD.

STORM DRAIN PLAN & PROFILE
DESIGNED BY: [Name]
CHECKED BY: [Name]
DATE: [Date]
PROJECT NO.: [Number]
DRAWING NO.: [Number]

MINIMUM TRENCH WIDTH TABLE

PIPE SIZE	MINIMUM WIDTH	MINIMUM DEPTH	MINIMUM COVER	CONCRETE FINISH
4" DIA	12"	12"	12"	CONCRETE
6" DIA	18"	18"	18"	CONCRETE
8" DIA	24"	24"	24"	CONCRETE
10" DIA	30"	30"	30"	CONCRETE
12" DIA	36"	36"	36"	CONCRETE
15" DIA	42"	42"	42"	CONCRETE
18" DIA	48"	48"	48"	CONCRETE
24" DIA	60"	60"	60"	CONCRETE
30" DIA	72"	72"	72"	CONCRETE
36" DIA	84"	84"	84"	CONCRETE
42" DIA	96"	96"	96"	CONCRETE
48" DIA	108"	108"	108"	CONCRETE

NOTES:

- ALL BARCUTS TO BE FULL DEPTH OF PAVEMENT.
- PATCHES SHALL MATCH THE EXISTING PAVEMENT MATERIAL. (a) CONCRETE PAVEMENT SHALL BE PATCHED WITH CONCRETE AND EXISTING ASPHALT PAVEMENT WITH ASPHALT.
- FOR ASPHALT PATCHES, BASE COURSE & ASPHALT CONCRETE THICKNESS IS TO MATCH EXISTING BUT IN NO CASE LESS THAN 2" ASPHALT CONCRETE.
- ALL EXISTING VERTICAL ASPHALT JOINTS SHALL BE TACK COATED.
- FINAL CONCRETE PAVEMENT REMOVALS SHALL BE TO THE NEAREST EXISTING JOINT (a) FULL PANEL REMOVAL AND REINSTATEMENT.
- TRAFFIC ARE SHOWN TO INDICATE PATCHING REQUIREMENTS. TRENCHES SHALL BE CONSTRUCTED TO MEET GRADE REQUIREMENTS.
- PAVEMENT REMOVAL BETWEEN FIRST AND SECOND BAR CUT SHALL BE REMOVED AT THE END OF HOT MIX PATCHING. DENSITY TESTING SHALL BE AT THE EXTREME OF THE CONTRACTOR AREA AND A COPY OF RESULTS MUST BE PROVIDED TO THE CITY.
- MONITOR & MAINTAIN SURFACE CONDITION AND PERFORM ASPHALT REPAIRS UNDER 1-YEAR WARRANTY PROVIDED THROUGH PERMIT.
- ALL PATCH JOINTS SHALL BE HEAVY ASPHALT RESURFACER, SEALED OR APPROVED EQUAL.

LAKE HAVASU CITY Standard Details Utility Trench Patch 200

VALVE / VALVE RISER

NOTES:

- VALVE BOX & COLLAR TO BE SET FLUSH WITH FINISHED SURFACE AND FINISHED GRADE IN SILL.
- VALVE ADJUSTABLE SCREW TYPE RISER ASSEMBLY OR APPROVED EQUAL COVER MARKED "VALVE".
- OPERATING MIT.
- VALVE NOT EXTENSION.
- VALVE BOX ADAPTOR #.
- VALVE SIZE, STYLE AND TYPE PER PLANS & SPECIFICATIONS.
- PIPE SIZE AND TYPE PER PLANS & SPECIFICATIONS.
- FULL TRENCH WIDTH 12" DEEP MIN. LONG AND MIN. FULL 4" DEEP 4" FOR 12" TRENCH AND 2" DEEP 4" FOR 18" TRENCH.
- PROVIDE FLANGE ADAPTOR & FITTING AS REQUIRED.

LAKE HAVASU CITY Standard Details Water Improvements Valve / Valve Riser 300

SERVICE TAP

SERVICE TAP DETAIL TABLE

ITEM NO.	SIZE AND DESCRIPTION	MATERIAL SPECIFICATIONS	REMARKS
1	1" COP TOP	FORMED METAL	OR EQUAL
2	1" COP TOP	TYPE "A" COP COPPER	OR EQUAL
3	1" COP TOP	FORMED METAL	OR EQUAL
4	1" COP TOP	FORMED METAL	OR EQUAL

NOTE:

- ALL PARTS ARE FROM FORD WATER BOX COMPANY, EXCEPT THE COPPER PIPING.
- ALL COPPER PIPE SHALL BE FINISHED WITH A COPPER FINISHING TOOL AND SHALL BE FINISHED WITH A COVER FINISHING TOOL.
- ALL COPPER SHALL BE SLEAVED WITH MINIMUM 8 MIL. POLY WRASTAP.
- ALL ASSEMBLIES TO BE LOCATED WITHIN CITY RIGHT-OF-WAY.

LAKE HAVASU CITY Standard Details Water Improvements 1" Service Tap 303

BLOW-OFF ASSEMBLY DETAIL TABLE

ITEM NO.	SIZE AND DESCRIPTION	MATERIAL SPECIFICATIONS	REMARKS
1	2" VALVE BOX BRASS COLLAR	FORMED METAL	OR EQUAL
2	2" COP TOP	FORMED METAL	OR EQUAL
3	2" POLY WRASTAP	POLYETHYLENE TEREPHTHALATE (PET) WITH 10% FIBER REINFORCEMENT	OR EQUAL
4	2" POLY WRASTAP	POLYETHYLENE TEREPHTHALATE (PET) WITH 10% FIBER REINFORCEMENT	OR EQUAL
5	2" POLY WRASTAP	POLYETHYLENE TEREPHTHALATE (PET) WITH 10% FIBER REINFORCEMENT	OR EQUAL
6	2" POLY WRASTAP	POLYETHYLENE TEREPHTHALATE (PET) WITH 10% FIBER REINFORCEMENT	OR EQUAL
7	2" POLY WRASTAP	POLYETHYLENE TEREPHTHALATE (PET) WITH 10% FIBER REINFORCEMENT	OR EQUAL
8	2" POLY WRASTAP	POLYETHYLENE TEREPHTHALATE (PET) WITH 10% FIBER REINFORCEMENT	OR EQUAL

LAKE HAVASU CITY Standard Details Water Improvements 2" Blow-Off Assembly In Line 313

BLOW-OFF ASSEMBLY DETAIL TABLE

ITEM NO.	SIZE AND DESCRIPTION	MATERIAL SPECIFICATIONS	REMARKS
1	2" VALVE BOX BRASS COLLAR	FORMED METAL	OR EQUAL
2	2" COP TOP	FORMED METAL	OR EQUAL
3	2" POLY WRASTAP	POLYETHYLENE TEREPHTHALATE (PET) WITH 10% FIBER REINFORCEMENT	OR EQUAL
4	2" POLY WRASTAP	POLYETHYLENE TEREPHTHALATE (PET) WITH 10% FIBER REINFORCEMENT	OR EQUAL
5	2" POLY WRASTAP	POLYETHYLENE TEREPHTHALATE (PET) WITH 10% FIBER REINFORCEMENT	OR EQUAL
6	2" POLY WRASTAP	POLYETHYLENE TEREPHTHALATE (PET) WITH 10% FIBER REINFORCEMENT	OR EQUAL
7	2" POLY WRASTAP	POLYETHYLENE TEREPHTHALATE (PET) WITH 10% FIBER REINFORCEMENT	OR EQUAL
8	2" POLY WRASTAP	POLYETHYLENE TEREPHTHALATE (PET) WITH 10% FIBER REINFORCEMENT	OR EQUAL

LAKE HAVASU CITY Standard Details Water Improvements 2" Blow-Off Assembly End of Line 314

TYPICAL LOCATIONS OF THRUST BLOCKS

MINIMUM THRUST BLOCK AREA REQUIRED (SQ. FT.)

PIPE SIZE	12" DEEP	18" DEEP	24" DEEP
4"	1.0	1.5	2.0
6"	1.5	2.0	2.5
8"	2.0	2.5	3.0
10"	2.5	3.0	3.5
12"	3.0	3.5	4.0
15"	3.5	4.0	4.5
18"	4.0	4.5	5.0
24"	5.0	5.5	6.0

LAKE HAVASU CITY Standard Details Water Improvements Thrust Blocks For Water Lines 317

ACCESSIBLE RAMP STREET/STREET INTERSECTIONS

NOTES:

- REFERENCE MAG DETAIL 201 UNMODIFIED.
- RAMP SHALL BE 3" SLOPE TO THE CURB. SLOPE TO BE PERPENDICULAR TO DIRECTION OF TRAVEL.
- CURB OF ACCESSIBLE RAMP TO BE ORIENTED 45° TO THE CENTRELINE OF STREET.
- CONCRETE STRUCTURES IN RIGHT OF WAY SHALL BE 6" BACK FROM CURB AND MAX WITH A 4" MAX SLOPE AND BE ABLE TO PASS A 300 PSI COMPRESSIVE STRENGTH TEST AT 28 DAYS.
- ALL DIMENSIONS TO BE 4" UNLESS OTHERWISE SPECIFIED.
- ACCESSIBLE RAMP SHALL BE 30" MIN TO 36" MAX UNLESS OTHERWISE RECOMMENDED BY A TRAFFIC REPORT APPROVED BY THE CITY.
- NO COLORED CONCRETE IN RIGHT OF WAY UNLESS APPROVED BY LAKE HAVASU CITY.
- NO SIGNAGE OR MARKINGS IN RIGHT OF WAY.
- ELECTRICAL ELEVATIONS SHOWN ARE IN RELATION TO TOP OF CURB AT 0' OR 6" FOR 6" AND ARE LOCATED RADIALLY.
- SEWER/NA CROSS SLOPE (BACK OF SIDEWALK TO CURB) TO BE 1% MIN 1/2" MAX.

LAKE HAVASU CITY Standard Details Roadway Improvements Accessible Ramp Street/Street Intersections 207

6" Fire Hydrant

NOTES:

- THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO SUBMITTAL. APPROVAL SHALL BE OBTAINED PRIOR TO ORDERING OF PARTS. CONTRACTOR IS RESPONSIBLE FOR APPROPRIATE SLOPE LENGTH TO ACCOMMODATE ANY CHANGE IN GRADE OR PIPE ELEVATION.
- POWER CONNECTIONS TO FACE BUILDING OR STREET.
- 8 1/4" MIN SIZE.

LAKE HAVASU CITY Standard Details Water Improvements 6" Fire Hydrant 320

REVISION RECORD

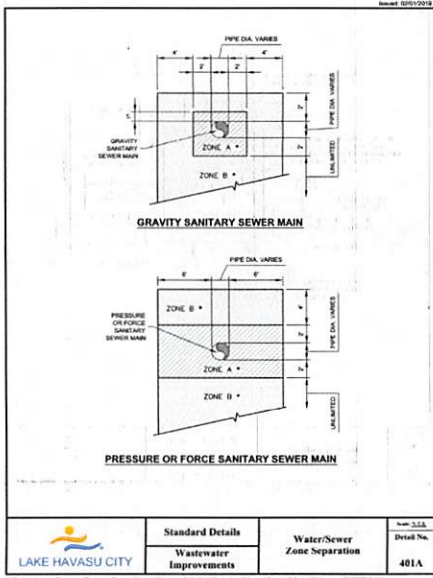
NO.	DATE	DESCRIPTION

TRICO ENGINEERING, LLC

LAKE HAVASU CITY, ARIZONA

GENERAL DETAILS I

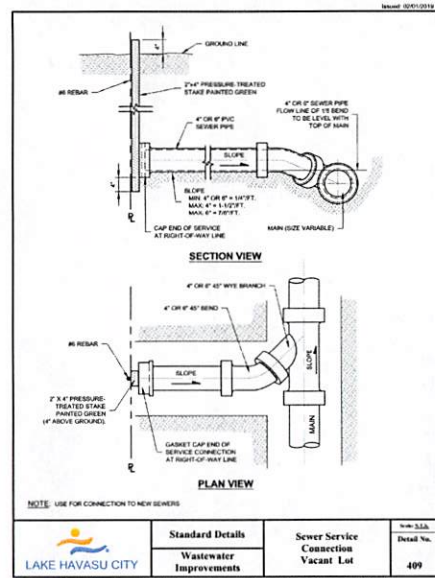
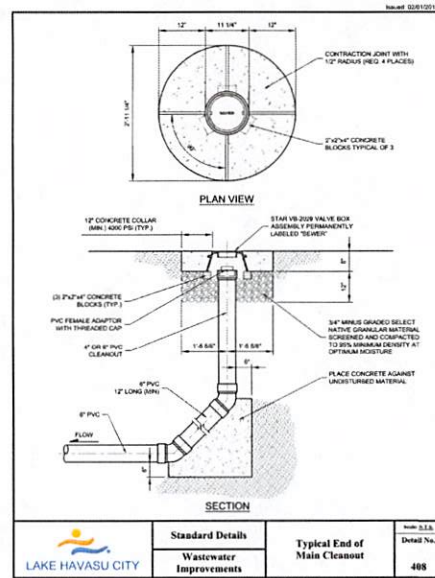
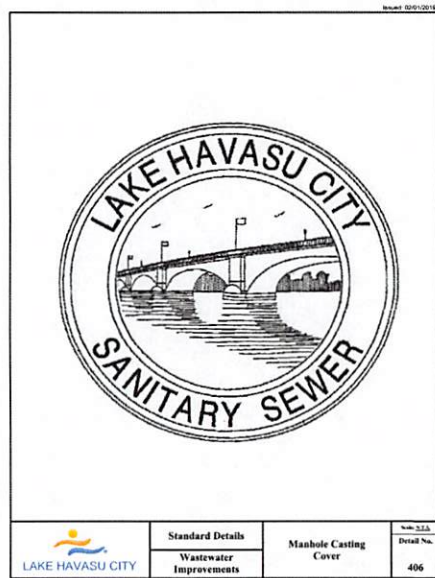
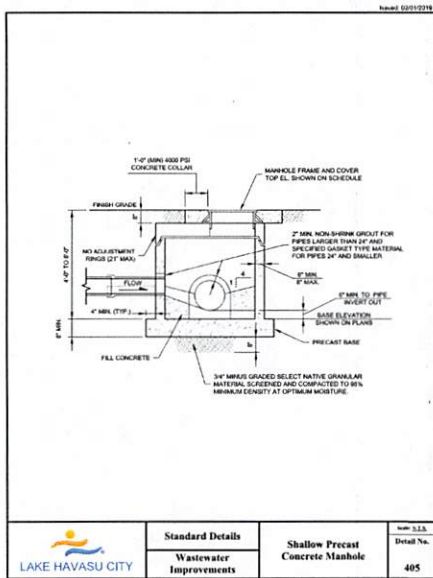
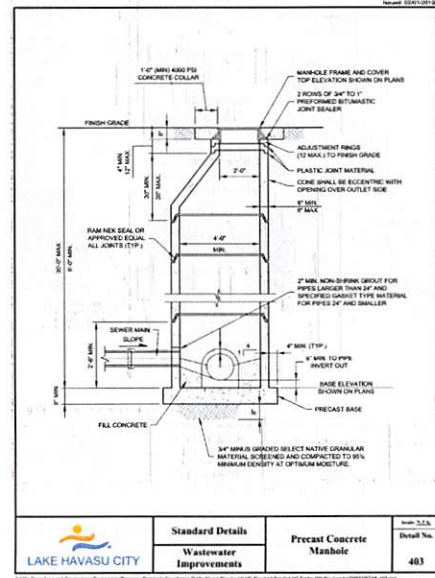
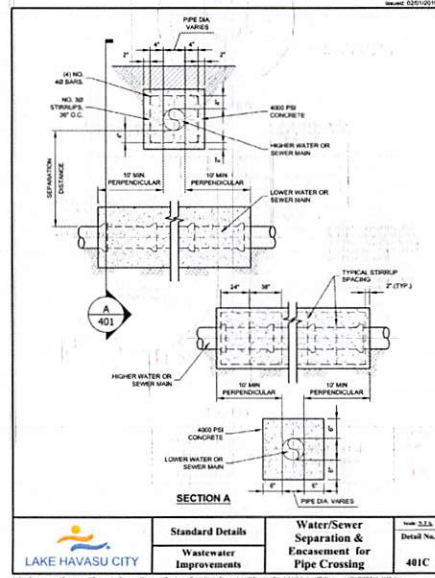
DATE: NOVEMBER 27, 2023
 PROJECT NO: 23-001
 SHEET NO: 13 OF 15



NOTES:

- CONTRACTOR SHALL MAINTAIN SEPARATION DISTANCES OR PROVIDE OTHER EXTRA PROTECTION TO PROJECT WATER MAINS FROM CONTAMINATION BY SANITARY SEWER MAINS.
- CRITERIA FOR SEPARATION AND/OR EXTRA PROTECTION APPLIES TO PARALLEL MAINS AS WELL AS CROSSINGS WITHIN ZONE B. (SEE DETAIL 401A).
- SEE CROSS SECTION STANDARD DETAIL 401A FOR LIMITS OF SEPARATION/EXTRA PROTECTION. ALL DISTANCES ARE MEASURED PERPENDICULARLY FROM THE OUTSIDE OF THE PIPES.
 - NO WATER MAINS SHALL FALL WITHIN ZONE A. (SEE DETAIL 401A).
 - EXTRA PROTECTION WILL BE REQUIRED WHEN THE WATER MAIN FALLS WITHIN ZONE B. EXTRA PROTECTION SHALL CONSIST OF CONSTRUCTING THE SANITARY SEWER MAIN WITH MECHANICAL JOINT OR RESTRAINED JOINT DUCTILE IRON PIPE FOR A DISTANCE OF TEN FEET EITHER SIDE OF THE WATER MAIN. THE DUCTILE IRON PIPE SHALL COMPLY WITH THE AGENCY'S REQUIREMENTS FOR SEWER INSTALLATION. IN THE CASE OF A CROSSING, THE NUMBER OF JOINTS SHALL BE HELD TO A MINIMUM WITH ONE FULL JOINT OF PIPE CENTERED OVER/UNDER THE OTHER. AN ALTERNATE PROTECTION MAY CONSIST OF ENCASESING BOTH PIPES IN CONCRETE AS SHOWN IN STANDARD DETAIL 401A.
 - NO ADDITIONAL PROTECTION WILL BE REQUIRED OUTSIDE ZONES A AND B. (SEE DETAIL 401A).
- SEPARATION REQUIREMENTS FOR 4" OR 6" INDIVIDUAL SERVICE CONNECTIONS SHALL COMPLY WITH THE UNIFORM PLUMBING CODE.
- RECLAIMED WATER SHALL BE CONSIDERED AS POTABLE WATER WHEN PLACED NEXT TO A SANITARY SEWER AND CONSIDERED A SANITARY SEWER WHEN PLACED NEXT TO A POTABLE WATER MAIN UNLESS APPROVED IN WRITING BY THE CITY ENGINEER.

Standard Details
Wastewater Improvements
Water/Sewer Zone Separation Notes
401B



REVISION RECORD

NO.	DATE	DESCRIPTION

DATE: NOVEMBER 17, 2023
DRAWN BY: J.P.S.
CHECKED BY: J.P.S.
PROJECT NO.: 23-04
APPROVED BY:

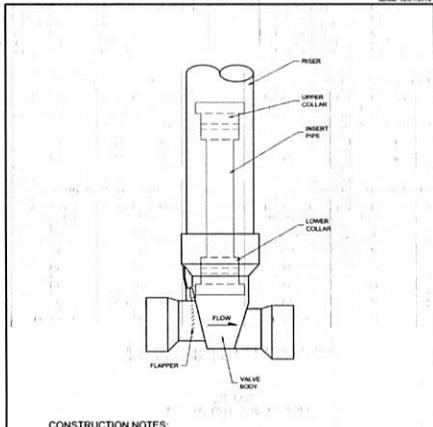
TRICO ENGINEERING, LLC

LAKE HAVASU CITY, ARIZONA

TRINITY at HAVASU FOOTHILLS
PHASE I IMPROVEMENT PLANS
LAKE HAVASU CITY, ARIZONA

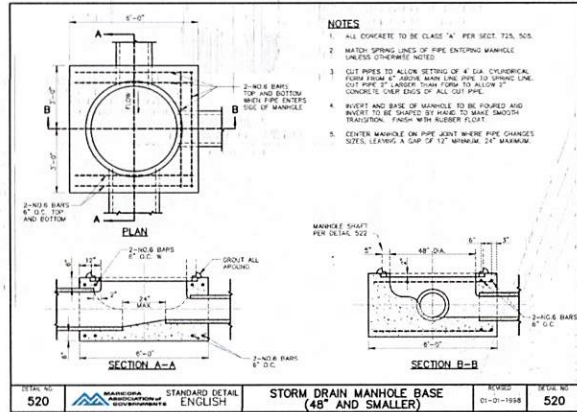
GENERAL DETAILS II

DRAWING NO.: C-14
SHEET 14 OF 15

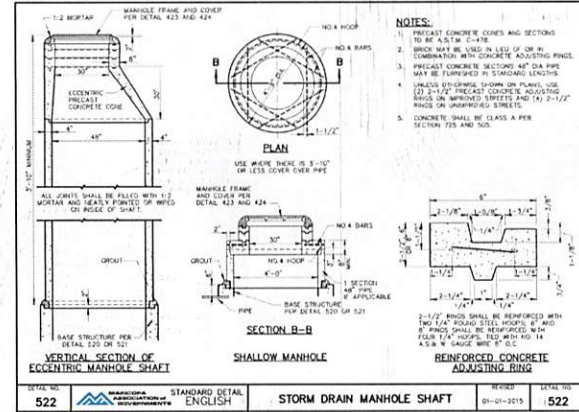


- CONSTRUCTION NOTES:**
- CONTRACTOR SHALL INSTALL NEW PVC BACKWATER VALVE PER DETAIL AT A MAXIMUM SLOPE OF 1/4" PER FOOT. THE BACKWATER VALVE LOCATION MAY BE ADJUSTED TO ENSURE MAXIMUM SLOPE IS NOT EXCEEDED.
 - CONTRACTOR SHALL INSTALL 4" PVC CLEAN CHECK EXTENDABLE BACKWATER VALVE OR EQUAL.

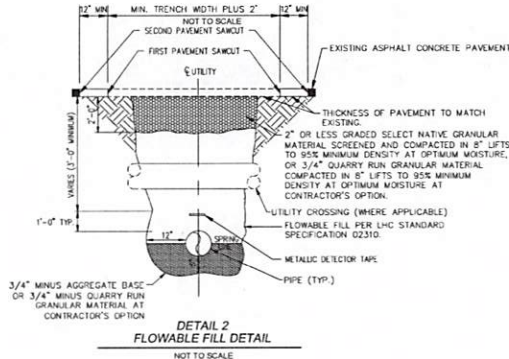
LAKE HAVASU CITY	Standard Details	Backwater Valve	REV. 03/15/2015
	Wastewater Improvements		Detail No. 412



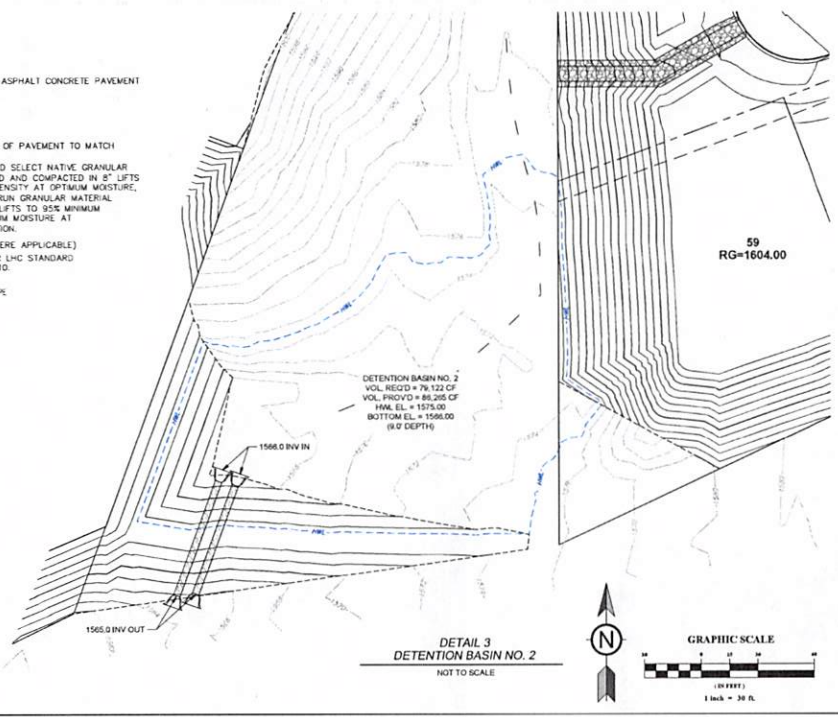
DETAIL NO. 520	STANDARD DETAIL ENGLISH	STORM DRAIN MANHOLE BASE (48" AND SMALLER)	REVISED 01-01-2015	DETAIL NO. 520
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DETAIL NO. 522	STANDARD DETAIL ENGLISH	STORM DRAIN MANHOLE SHAFT	REVISED 01-01-2015	DETAIL NO. 522
----------------	-------------------------	---------------------------	--------------------	----------------



DETAIL 2 FLOWABLE FILL DETAIL
NOT TO SCALE



DETAIL 3 DETENTION BASIN NO. 2
NOT TO SCALE

CRITERIA	
PIPE MATERIAL	PVC/D.I.(POLY-WRAPPED)
SOIL TYPE	CM
SAFETY FACTOR	1.5
TRENCH TYPE	5
DEPTH OF BURIAL	3 FT
TEST PRESSURE	200 PSI

CRITERIA			
PIPE MATERIAL	PVC/D.I.(POLY-WRAPPED)		
SOIL TYPE	CM		
SAFETY FACTOR	1.5		
TRENCH TYPE	5		
DEPTH OF BURIAL	4 FT		
TEST PRESSURE	200 PSI		

VERTICAL RESTRAINT LENGTH		
BEND ANGLE (DEGREES)	12-INCH PVC PIPE (FEET)	
	UPPER	LOWER
22.5	27	6
45	57	12

VERTICAL RESTRAINT LENGTH				
BEND ANGLE (DEGREES)	8-INCH PVC PIPE (FEET)	12-INCH PVC PIPE (FEET)		
	UPPER	LOWER	UPPER LOWER	
22.5	15	4	21	6
45	31	9	43	12

HORIZONTAL RESTRAINT LENGTH	
BEND ANGLE (DEGREES)	12-INCH PVC PIPE (FEET)
11.25	5
22.5	9
45	18
90	44
TEE	(8" NOMINAL) 1
DEAD-END	136

HORIZONTAL RESTRAINT LENGTH			
BEND ANGLE (DEGREES)	8-INCH PVC PIPE (FEET)	12-INCH PVC PIPE (FEET)	
11.25	3	4	
22.5	5	7	
45	10	14	
90	24	34	
TEE	22	(18" NOMINAL) 1	
DEAD-END	73	104	

NOTE: CONTRACTOR SHALL REFER TO SPECIFICATION 02500 FOR RESTRAINT TYPE.

DETAIL 1 RESTRAINT JOINT TABLE

REVISION RECORD

NO.	DATE	DESCRIPTION

TRICO ENGINEERING, LLC
 1500 AVENUE 190, SUITE 100, PHOENIX, AZ 85004
 PHONE: 602.998.8888 FAX: 602.998.8889
 WWW.TRICOCORPORATION.COM

GENERAL DETAILS III
 HAVASU FOOTHILLS
 PHASE I IMPROVEMENT PLANS
 LAKE HAVASU CITY, ARIZONA

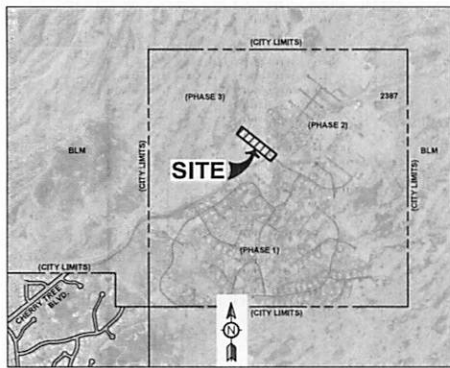
DATE: NOVEMBER 27, 2011
 DRAWN BY: JLB
 CHECKED BY: JLB
 PROJECT NO.: 10-000000-0000
 SHEET: 15 OF 15

DRAWING NO. C-15

TRINITY ROAD CROSSING AT HAVASU FOOTHILLS TRINITY IMPROVEMENT PLANS

HAVASU FOOTHILLS ESTATES
LAKE HAVASU CITY, ARIZONA

A PORTION OF THE W1/2 SECTION 33, TOWNSHIP 14 NORTH, RANGE 19 WEST OF THE GILA
AND SALT RIVER BASE AND MERIDIAN, LAKE HAVASU CITY, MOHAVE COUNTY, ARIZONA.

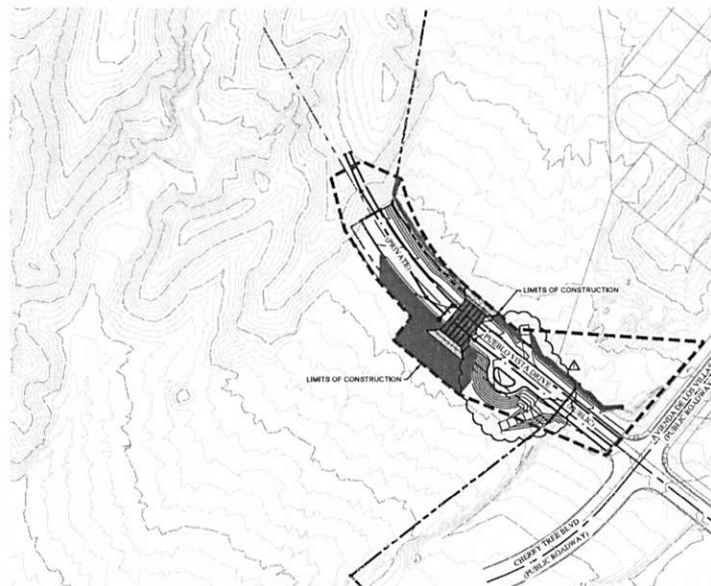


DRAWING INDEX

NO.	TITLE
C-1	COVER SHEET
C-2	GENERAL NOTES & SECTIONS
C-3	PUEBLO VISTA DRIVE STREET PLAN & PROFILE
C-4	PUEBLO VISTA DRIVE UTILITY PLAN & PROFILE
C-5	BOX CULVERT PLAN & PROFILE
C-6	EARTHWORK VOLUME MAP
C-7	GENERAL DETAILS I
C-8	GENERAL DETAILS II
C-9	EROSION CONTROL PLAN
C-10	EROSION CONTROL DETAILS

LEGEND

---	SUBJECT PROPERTY LINE / RIGHT-OF-WAY
---	ADJACENT PROPERTY LINE
---	STREET CENTERLINE
---	EXISTING EASEMENT
---	EXISTING INDEX CONTOUR
---	EXISTING INTERMEDIATE CONTOUR
---	PROPOSED INDEX CONTOUR
---	PROPOSED INTERMEDIATE CONTOUR
---	EXISTING PAVED ROADWAY
---	EXISTING FENCE
---	EXISTING RETAINING WALL
---	PROPOSED RETAINING WALL
---	PROPOSED SCREEN WALL
---	EXISTING OVERHEAD LINE
---	EXISTING MISC. UTILITIES
---	EXISTING WATER LINE
---	EXISTING SANITARY SEWER LINE
---	EXISTING UNDERGROUND CABLE
---	EXISTING UNDERGROUND TELEPHONE
---	PROPOSED WATER LINE
---	PROPOSED SANITARY SEWER LINE
---	EXISTING STORM INLET/CATCH BASIN
---	EXISTING MANHOLE
---	EXISTING WATER VALVE
---	EXISTING FIRE HYDRANT
---	EXISTING SIGN
---	EXISTING UTILITY POLE W/ GUY
---	POLE & GUY WIRE
---	EXISTING ELECTRIC BOX
---	BACK WATER VALVE



OWNER/TEAM INFORMATION

OWNER APX WEST INVESTMENTS 2038 MCCULLOCH BLVD N. LAKE HAVASU CITY, AZ 86423 CONTACT: BRITT WOLFF	CIVIL ENGINEER TRICO ENGINEERING, LLC 231 SWANSON AVENUE, STE. 204 LAKE HAVASU CITY, AZ 86403 PH: (928) 230-4963 CONTACT: SEAN FERROTTO, P.E.	TOPOG SURVEY AEC2 ENGINEERING 103 14 AVENUE, STE. 300 DICKINSON, NORTH DAKOTA, 58017 PH: (701) 225-8626 (SURVEY PERFORMED BY OTHERS)
GEOTECHNICAL ENGINEER WESTERN TECHNOLOGIES, INC. 1534 EAST GERRICA WAY, NO. 113 FORT MOHAVE, AZ 86426 CONTACT: DON SPADOLA	BOUNDARY SURVEY AEC2 ENGINEERING 103 14 AVENUE, STE. 300 DICKINSON, NORTH DAKOTA, 58017 PH: (701) 225-8626	
UTILITY COMPANIES	WATER SERVICE LAKE HAVASU CITY, WATER DEPT 900 LONGSON BRIDGE ROAD LAKE HAVASU CITY, AZ 86404 (928) 855-2618	STORM WATER FACILITIES PRIVATELY MAINTAINED BY HOA
SANITARY SEWER SERVICE LAKE HAVASU CITY, SEWER DEPT 900 LONGSON BRIDGE ROAD LAKE HAVASU CITY, AZ 86404 (928) 855-3999	ELECTRIC SERVICE UNRESOURCE ELECTRIC 2748 MARICOPA AVENUE LAKE HAVASU CITY, AZ 86406 (928) 855-2138	COMMUNICATIONS SUDOCEN, INC. 725 N. ACCIMA BOULEVARD LAKE HAVASU CITY, AZ 86403 (928) 855-7815
GAS SERVICE UNRESOURCE GAS 2748 MARICOPA AVENUE LAKE HAVASU CITY, AZ 86406 (928) 855-2138		

GEOTECHNICAL REPORT:

A GEOTECHNICAL EVALUATION REPORT FOR THIS PROJECT WAS PREPARED BY WESTERN TECHNOLOGIES, INC., DATED JUNE 14, 2017.

FLOOD INFORMATION:

SAD DESCRIBED PROPERTY IS LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION "ZONE #7" AS SHOWN ON FLOOD INSURANCE RATE MAP NO. 94010C0340G, WITH A DATE OF IDENTIFICATION OF NOVEMBER 18, 2019, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PROPERTY IS SITUATED.

DIRT QUANTITIES

RAW QUANTITIES

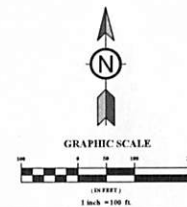
CUT	218 CY
FILL	14,488 CY
TOTAL	14,706 CY IMPORT

EARTHWORK NOTE:

EARTHWORK VOLUMES ARE CALCULATED BASED UPON THE FINISHED SURFACE CONTOURS AS SHOWN IN THESE PLANS. THE QUANTITIES SHOWN ARE A RAW CALCULATED ESTIMATE AND MAY NOT REFLECT ACTUAL QUANTITIES OBSERVED DURING CONSTRUCTION. THE CONTRACTOR SHALL PERFORM THEIR OWN CALCULATION TO OBTAIN BID QUANTITIES.

ESTIMATE OF QUANTITIES

12" CONC. CURB & GUTTER	1,483 LF
12" CONC. CURB & GUTTER	1,130 LF
SAFETY WALL	100 LF
W/BEAM QUADRANT	470 LF
12" W/BEAM	2,220 SF
DRAINAGE IMPROVEMENTS	QUANTITY
8" X 4" REINFORCED BOX CULVERT	360 LF
INLET AND OUTLET APPROACH	1,080 SF
4' DEEP CUTOFF WALL	80 LF
6' DEEP CUTOFF WALL	192 LF
WING WALL	1 EA
WATER IMPROVEMENTS	QUANTITY
12-INCH C900 DRAIN PIPE	708 LF
12-INCH GATE VALVE	2 EA
2-INCH BLOW-OFF VALVE	1 EA
FIRE HYDRANT ASSEMBLY	1 EA
SEWER IMPROVEMENTS	QUANTITY
8-INCH 20'35' SEWER PIPE	470 LF
8-INCH SEWER MANHOLE	2 EA
4-INCH SEWER LATERAL	1 EA



Contract Arizona 811 at least two full working days before you begin excavation
Call 811 or click ARZONAGU11.com

NO.	DATE	REVISION	BY	DESCRIPTION

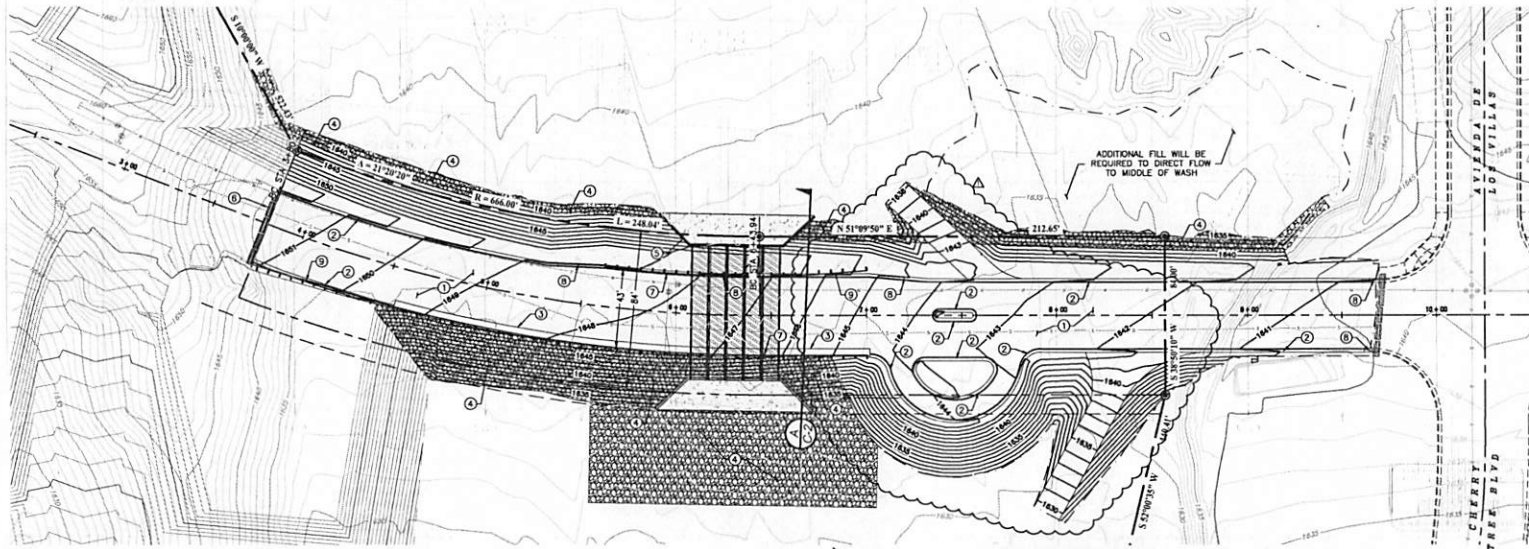


TRICO ENGINEERING, LLC
103 14 AVENUE, STE. 300
DICKINSON, NORTH DAKOTA, 58017
PH: (701) 225-8626
LAKE HAVASU CITY, AZ 86403
LAKE HAVASU CITY, ARIZONA

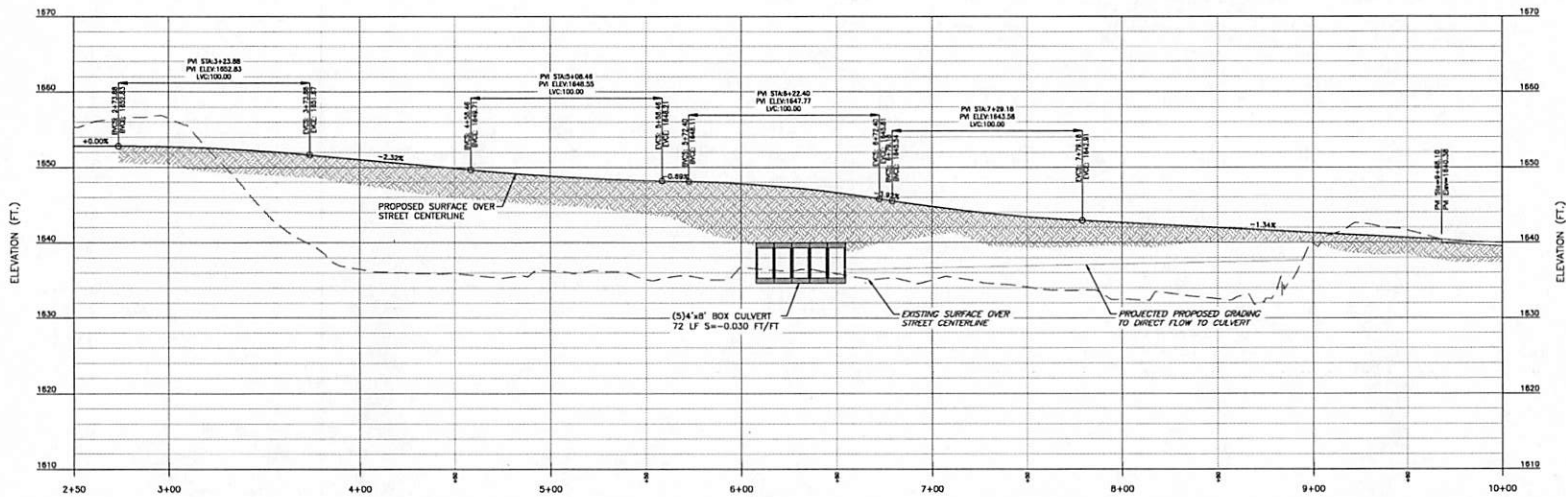
TRINITY ROAD CROSSING
AT HAVASU FOOTHILLS TRINITY
LAKE HAVASU CITY
MOHAVE COUNTY, ARIZONA

DATE	BY	APP'D BY

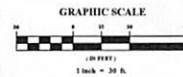
COVER SHEET
DRAWING NO. C-1
SHEET 1 OF 10



PUEBLO VISTA DRIVE
PLAN VIEW
SCALE 1"=30'



PUEBLO VISTA DRIVE
PROFILE VIEW
SCALE H:1"=30'; V:1"=8'



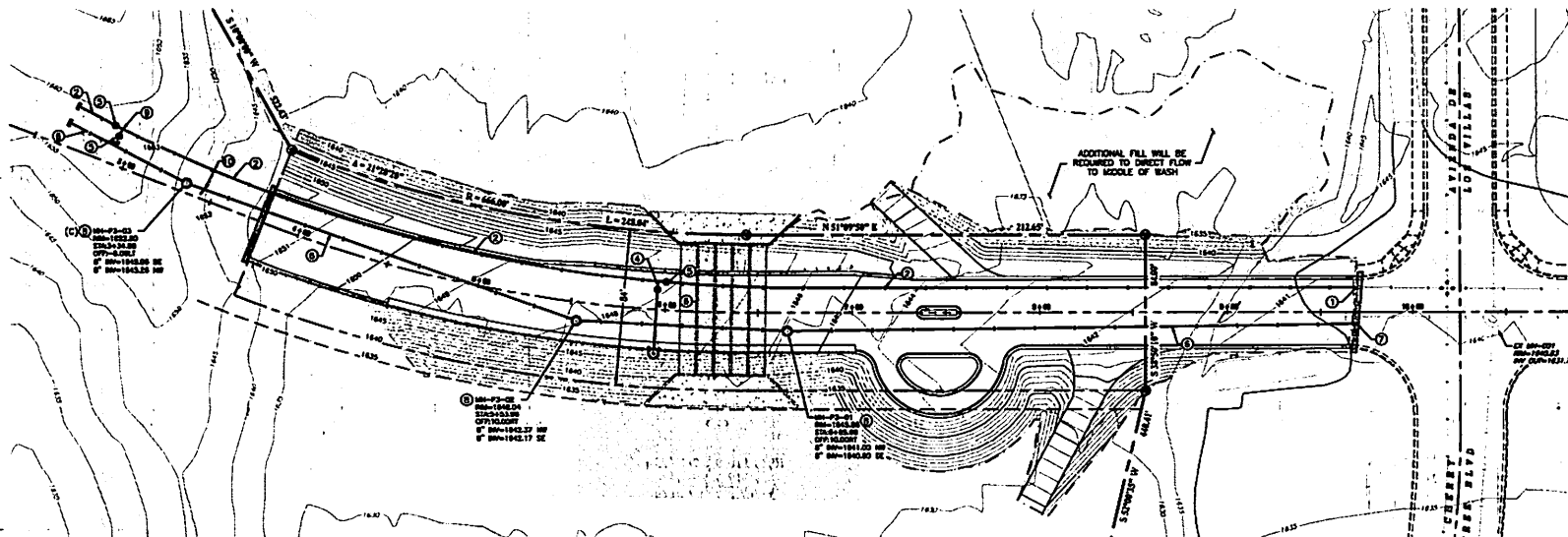
NO.	DATE	REVISION RECORD



TRICO
ENGINEERING, LLC
PHOENIX, ARIZONA
1145 W. WASHINGTON AVENUE
SUITE 100
PHOENIX, AZ 85007
TEL: 602.998.1111
WWW.TRICOE.COM

TRINITY ROAD CROSSING
AT HAVASU FOOTHILLS TRINITY
LAKE HAVASU CITY
MOHAVE COUNTY, ARIZONA

PUEBLO VISTA DRIVE
STREET PLAN & PROFILE
DATE: JUNE 20, 2013
DRAWN BY: J. HARRIS
CHECKED BY: J. HARRIS
PROJECT NO.: 13-001
SHEET 3 OF 10

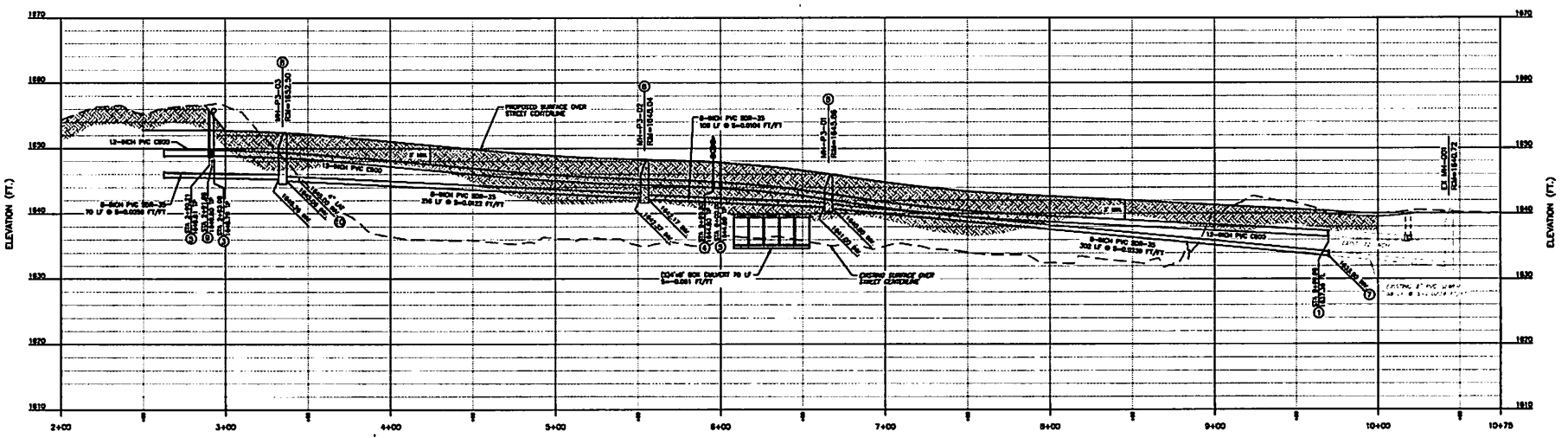


**PUEBLO VISTA DRIVE
PLAN VIEW
SCALE 1"=30'**

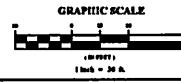
CONSTRUCTION NOTES:

- 1 REMOVE CAP AND CONNECT TO EXISTING WATER MAIN.
- 2 INSTALL 12-INCH PVC CROSS WATER PIPE PER LNC STD. NO. 206.
- 3 INSTALL 3-INCH BLOWOFF PER LNC DTL. NO. 114.
- 4 INSTALL FIVE HYDRANT ASSEMBLY PER LNC DTL. NO. 328.
- 5 INSTALL 12-INCH RW GATE VALVE PER LNC DTL. NO. 308.
- 6 INSTALL 8-INCH PVC 8028S SEWER PIPE PER LNC STD. DTL. NO. 206.
- 7 REMOVE CAP AND CONNECT TO EXISTING SEWER MAIN. CONTRACTOR TO POTHOLE EXISTING SEWER LINE TO VERIFY CONNECTION ELEVATION.
- 8 INSTALL 48-INCH DIAMETER PRECAST CONCRETE MANHOLE PER LNC STD. DET. NO. 482 OR APPROVED EQUIVALENT. THE MANHOLE WITH A CO. INCORPORATION SHALL BE COATED PER LNC STD. SPECIFICATION 0278.
- 9 INSTALL 12-INCH X 8-INCH 90 TEE WITH THURMET BLOCK PER LNC STD. DTL. NO. 311.
- 10 INSTALL 8-INCH GIBBER LATERAL STUB OR FUTURE 8-INCH FORCE MAIN CONNECTION PER LNC STD. DTL. NO. 406.

ADDITIONAL FILL WILL BE REQUIRED TO DIRECT FLOW TO SCOPE OF BASH



**PUEBLO VISTA DRIVE
PROFILE VIEW
SCALE H1"=30' V1"=4'**



NO. DATE	REVISION RECORD

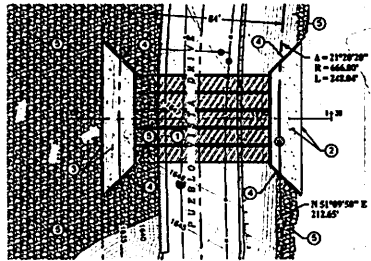


**TRICO
ENGINEERING, LLC**
 1100 N. GAVELIN AVENUE
 SUITE 100
 TUCSON, ARIZONA 85711
 PHONE: (520) 791-1111
 FAX: (520) 791-1112
 WWW.TRICOENGINEERING.COM

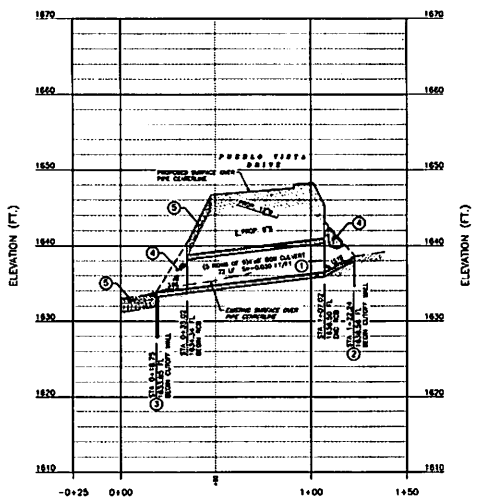
**TRINITY ROAD CROSSING
AT HAVASU FOOTHILLS TRINITY
LAKE HAVASU CITY
MOHAVE COUNTY, ARIZONA**

PUEBLO VISTA DRIVE UTILITY PLAN & PROFILE	
DATE: 08/11/2011	SCALE: 1"=30'
DRAWN BY: J. HARRIS	CHECKED BY: J. HARRIS
PROJECT NO.: 1100000001	DATE: 08/11/2011
PROJECT NAME: TRINITY ROAD CROSSING	PROJECT LOCATION: LAKE HAVASU CITY, AZ

PROJECT NO. **C-4**



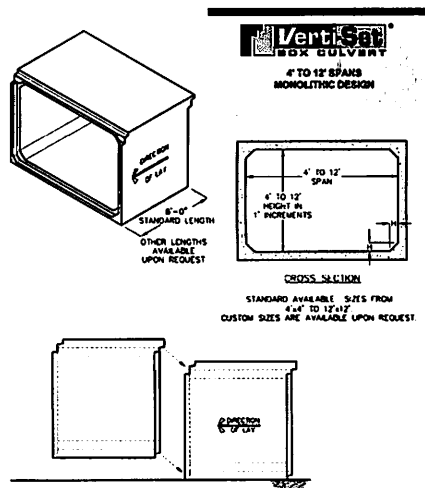
PLAN VIEW
SCALE 1"=30'



PROFILE VIEW
SCALE H:1"=30', V:1"=8'

CONSTRUCTION NOTES:

1. INSTALL JENSEN PRECAST STAFF REINFORCED CONCRETE BOX CULVERT, OR ENGINEER APPROVED EQUAL CONSTRUCTION METHOD PER ADOT DWG NO. 80 & 11. SEE ENGINEER APPROVED EQUAL.
2. CONSTRUCT RETAINMENT APRON AND CUTOFF WALL PER ADOT DWG NO. 80 & 11.
3. CONSTRUCT OUTLET APRON AND CUTOFF WALL, DMT 6" L.P. PER ADOT DWG NO. 80 & 11.
4. CONSTRUCT WING WALL PER ADOT DWG NO. 80 & 11.
5. CONSTRUCT FINISH PAVEMENT 12" THICK.

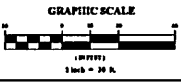


DESIGNED TO BE SET VERTICALLY, VERTI-SET® BOX CULVERT SPEEDS INSTALLATION AND ELIMINATES THE NEED TO "TUCK" THE JOINT RIGHT.

MANUFACTURED TO ASTM C1453 OR C1577. DESIGNS BASED ON SPECIAL LOADING CONDITIONS ARE AVAILABLE UPON REQUEST.

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JENSEN PRECAST



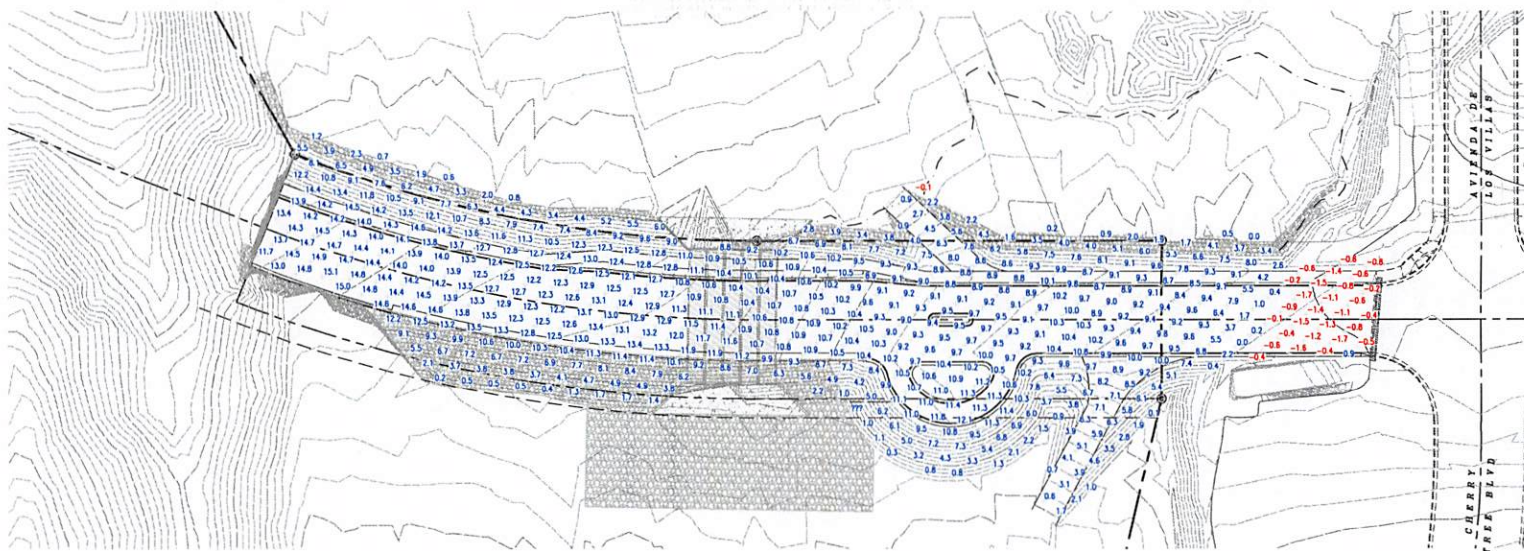
NO.	DATE	REVISION RECORD



TRICO
ENGINEERING, LLC
STATE OF ARIZONA
LICENSE NO. 11000
DATE 11/11/2009

TRINITY ROAD CROSSING
AT HAVASU FOOTHILLS TRINITY
LAKE HAVASU CITY,
MOHAVE COUNTY, ARIZONA

CULVERT PLAN & PROFILE	
DATE:	JUNE 20, 2011
DESIGNED BY:	LAUREN
CHECKED BY:	LAUREN
PROJECT NO.:	
DATE PLOTTED:	

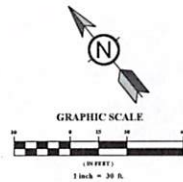


DIRT QUANTITIES

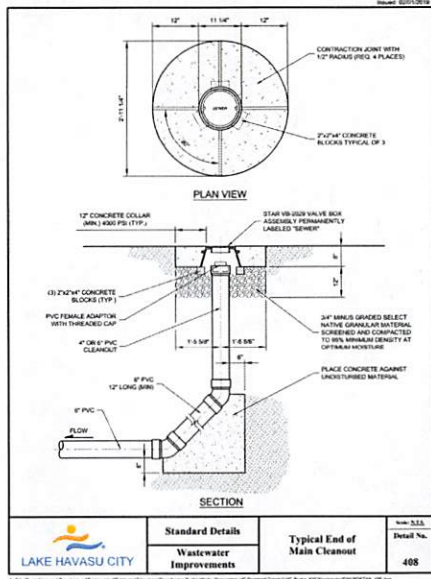
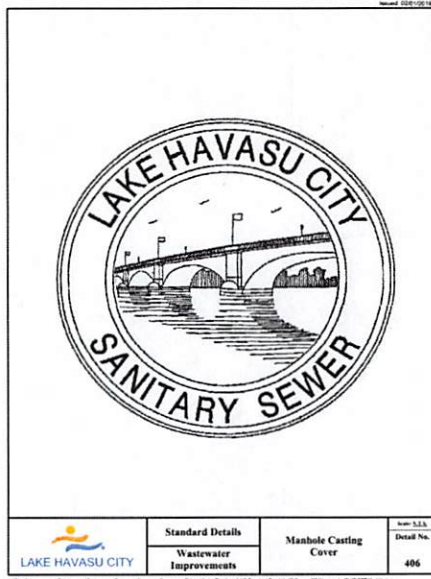
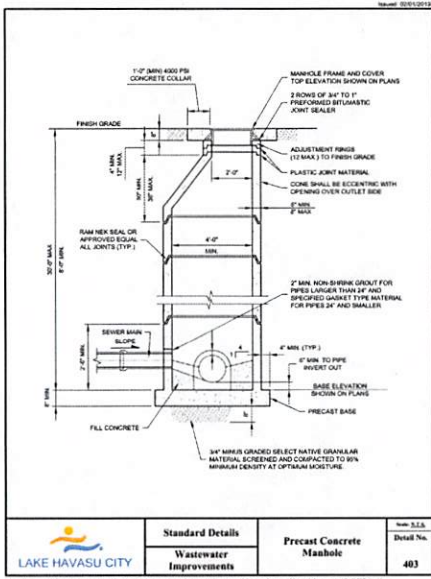
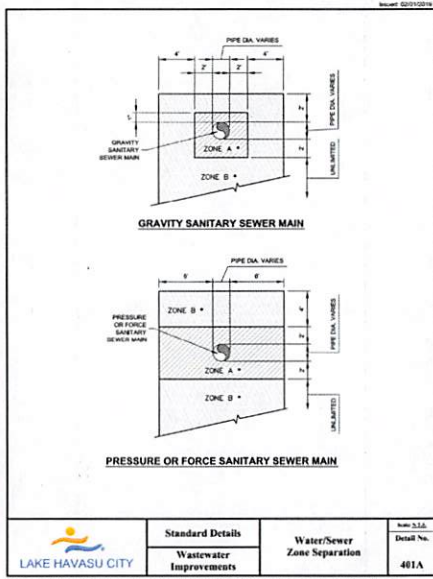
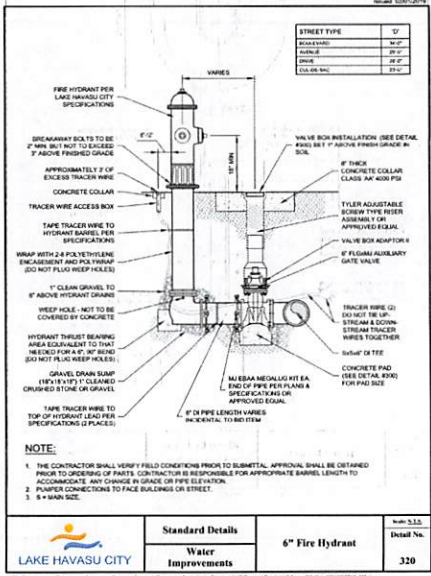
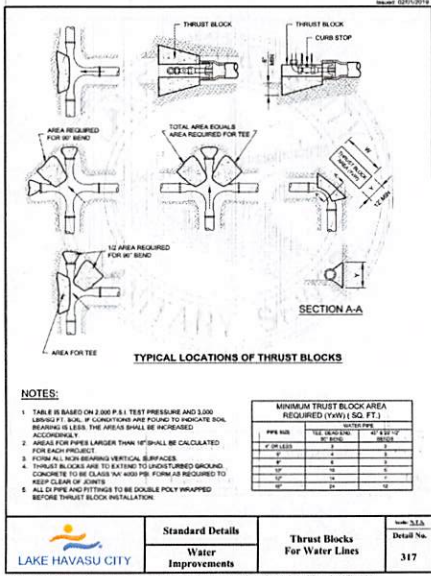
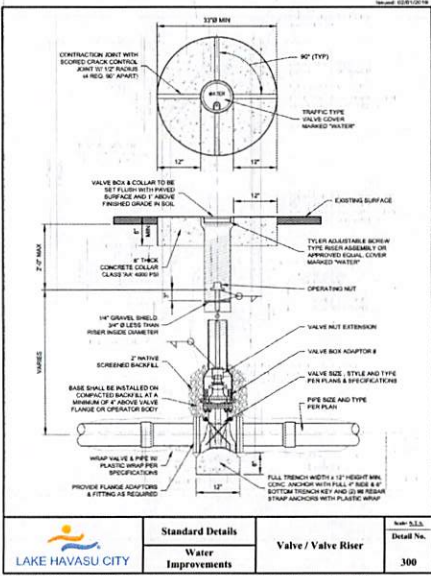
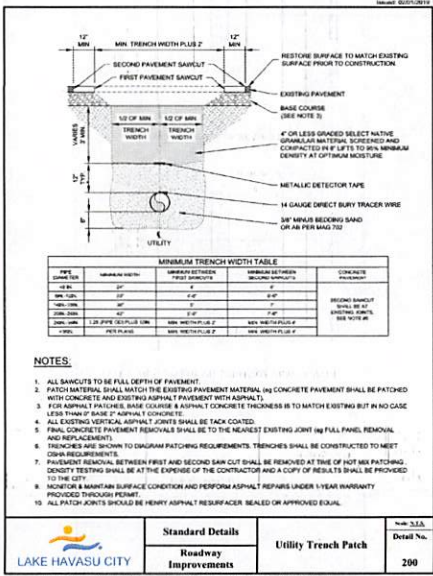
RAW QUANTITIES
 CUT 218 CY
 FILL 16,489 CY
 TOTAL 16,711 CY IMPORT

EARTHWORK NOTE:

EARTHWORK VOLUMES ARE CALCULATED BASED UPON THE FINISHED SURFACE CONTOURS AS SHOWN BY THESE PLANS. THE QUANTITIES SHOWN ARE A RISK CALCULATED ESTIMATE AND MAY NOT REFLECT ACTUAL QUANTITIES OBSERVED DURING CONSTRUCTION. THE CONTRACTOR SHALL PERFORM THEIR OWN CALCULATION TO OBTAIN BID QUANTITIES.



<p>TRINITY ROAD CROSSING AT HAVASU FOOTHILLS TRINITY LAKE HAVASU CITY MOHAVE COUNTY, ARIZONA</p> <p>EARTHWORK VOLUME MAP</p> <p>DATE: JUN 28, 2023 DRAWN BY: LRP SHEET SCALE: 1" = 40' CHECKED BY: JRP PROJECT NO: 23-001 EXPIRES BY:</p>	<p>TRICO ENGINEERING, LLC 1000 N. WILSON BLVD. SUITE 100 LAS VEGAS, NV 89115 PHONE: (702) 735-1100 FAX: (702) 735-1101 WWW.TRICOENGINEERING.COM</p> <p>REVISION RECORD</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> <p>PROJ. NO. 23-001 SHEET 4 OF 10</p>	NO.	DATE	DESCRIPTION																																				
NO.	DATE	DESCRIPTION																																						



REVISION RECORD

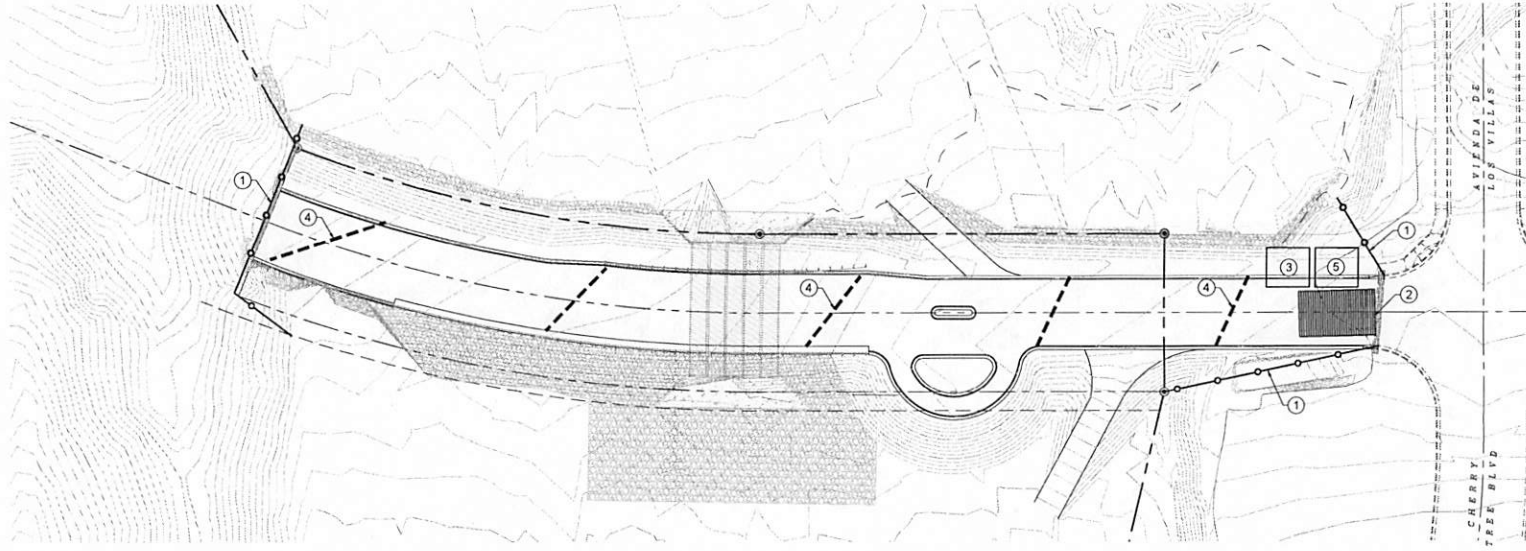
NO.	DATE	DESCRIPTION
1		
2		

TRICO ENGINEERING, LLC
1100 N. AVENUE 101, SUITE 100
PHOENIX, ARIZONA 85024
TEL: 602.998.8888
WWW.TRICOENGINEERING.COM

GENERAL DETAILS II
DATE: JUNE 20, 2023
DRAWN BY: J.L.S.
CHECKED BY: J.L.S.
PROJECT NO.: 23-01-00000-01
SHEET 8 OF 10

TRINITY ROAD CROSSING AT HAVASU FOOTHILLS TRINITY LAKE HAVASU CITY MOHAVE COUNTY, ARIZONA

C-8



CONSTRUCTION NOTES:

1. INSTALL SILT FENCE PER LHC STANDARD DETAIL NO. 508. A CHAIN LINK FENCE MAY BE CONSTRUCTED IN LIEU OF SILT FENCE IF CONSTRUCTED PRIOR TO START OF GRADING ACTIVITIES.
2. INSTALL COMMERCIAL STABILIZED CONSTRUCTION ENTRANCE PER LHC STANDARD DETAIL NO. 502A.
3. INSTALL 20'X10' MATERIAL STORAGE AREA.
4. INSTALL STRAW WATTLES PER LHC STANDARD DETAIL NO. 504.
5. INSTALL CONCRETE WASHOUT PER LHC STANDARD DETAIL NO. 506.

LEGEND

- PROPOSED SILT FENCE
- PROPOSED STRAW WATTLES

EROSION CONTROL PLAN	
DATE:	2024.11.19
DRAWN BY:	JW
CHECKED BY:	
PROJECT NO.:	
APPROVED BY:	

C-9
SHEET 9 OF 19

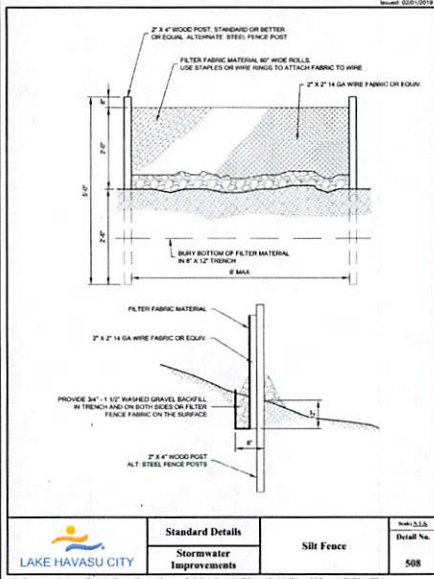
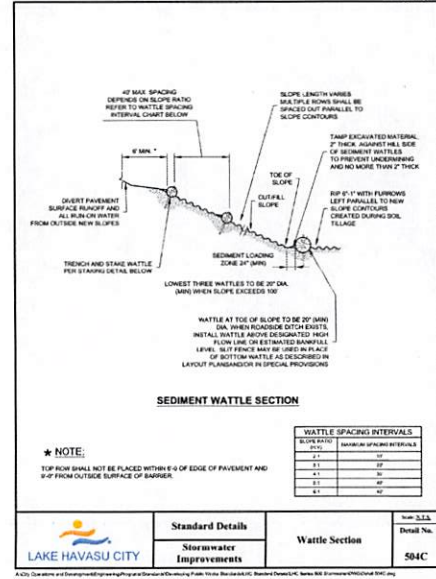
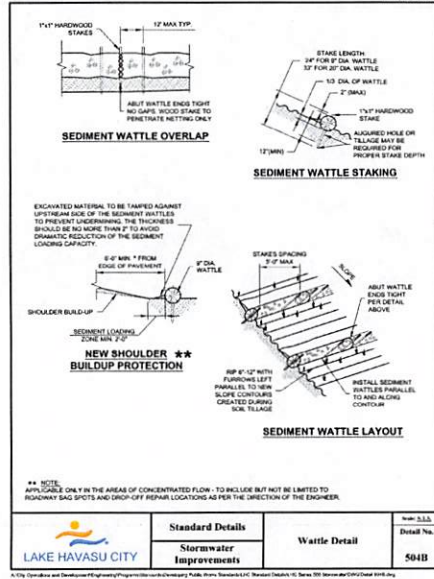
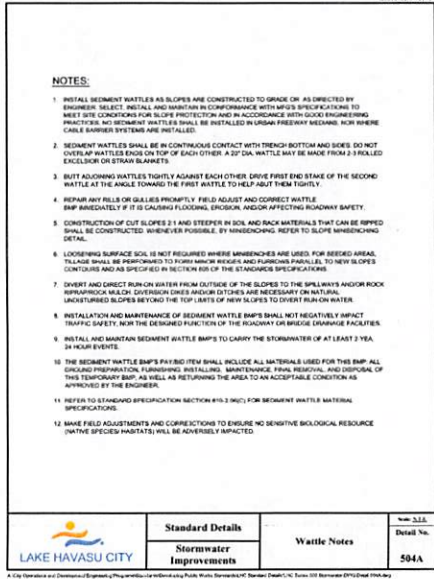
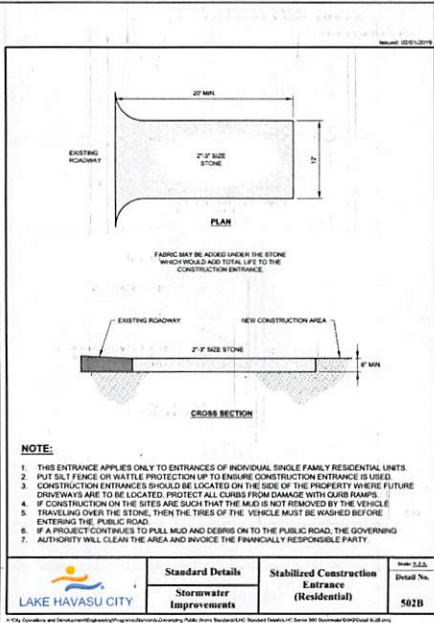
**TRINITY ROAD CROSSING
AT HAVASU FOOTHILLS TRINITY
LAKE HAVASU CITY
MOHAVE COUNTY, ARIZONA**

TRICO
ENGINEERING, LLC
ARIZONA
1125 AVENUE G
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TEL: 908.683.2222
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NO.	DATE	REVISIONS

REVISION RECORD



REVISION RECORD

NO.	DATE	DESCRIPTION

TRICO ENGINEERING, LLC
 1000 W. WILSON AVENUE, SUITE 100
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 PHONE: (702) 735-1111
 FAX: (702) 735-1112
 WWW.TRICOENGINEERING.COM

TRINITY ROAD CROSSING AT HAVASU FOOTHILLS TRINITY LAKE HAVASU CITY MOHAVE COUNTY, ARIZONA

EROSION CONTROL DETAILS

DATE:	DATE OF THIS DRAWING BY:	DATE
DRAWN BY:	DATE CHECKED BY:	DATE
PROJECT NO.:	SCALE:	DATE
APPROVED BY:		DATE

C-10
 SHEET 10 OF 19