#### **ADDENDUM #1 for**

## Navajo Division of Transportation

**Bid Number: 21-04-2458LE** 

N5007-CTW/Newcomb: construction of a low water crossing, erosion protection, and 2 road approaches for approximately 0.14 mile.

Addendum#1 is issued to extend the RFP Submittal Deadline from May 21 by 2:00pm, to June 4 by 2:00pm.

END OF ADDENDUM #1

Don Jackson, Engineer

Navajo DOT, Dept of Roads

Email: djackson@navajodot.org

## Request for Proposals Bid Number: 21-04-2458LE

The Navajo Nation Office of the Controller - Purchasing Department, and Navajo Division of Transportation - Department of Roads, are accepting qualifications and sealed bids for route N5007-CTW/Newcomb: construction of a low water crossing, erosion protection, and 2 road approaches for approximately 0.14 mile.

Contacts for a bid packet are L. Etsitty, Navajo Nation Purchasing Department, <a href="www.nnooc.org">www.nnooc.org</a>, (928) 871-6317; or, D. Jackson, Navajo DOT, Department of Roads, <a href="djackson@navajodot.org">djackson@navajodot.org</a>, (505)371-8364.

The closing date for this project is May 21, June 4, 2021, at 2:00pm, Window Rock, AZ, time. Any RFPs received after the closing date will be considered non-responsive and returned to the sender. No facsimile or emailed RFPs will be accepted.

INTENTIONALLY LEFT BLANK

#### **Section 1 - Overview**

1. Request for Proposal (RFP) Packet – The Instructions on the proposal preparation, required documents, eligibility requirements, and evaluation criteria are provided herein.

The RFP package may be obtained by downloading from the Navajo Division of Transportation website and/or the Navajo Nation Purchasing Department's website. **No printouts of the RFP will be given.** The websites to download the RFP are:

- Navajo DOT <a href="https://navajodot.org/rfp%2Frfq">https://navajodot.org/rfp%2Frfq</a>
- Purchasing Department's website <a href="http://www.nnooc.org/RFPs-Advertisements.html">http://www.nnooc.org/RFPs-Advertisements.html</a>

Note: If a firm download's from the websites given above or gets a copy of the RFP from another source other than from Mr. Jackson, please contact Mr. Jackson by email so that if an addendum(s) or questions are issued/answered, your firm will receive the information. Regardless of how a firm receives their copy of the RFP, email Don Jackson at, <a href="mailto:djackson@navajodot.org">djackson@navajodot.org</a>.

2. General Scope of Work (SOW) – This project is construction of a low water crossing through Captain Tom Wash (CTW), with erosion protection, and 2 road approaches for approximately 0.14 mile. Specifications for the project are NMDOT Standard Specifications for Highway & Bridge Construction (2019). Ground disturbance will be intensive and extensive. The Navajo Nation is the lead agency and is using Navajo Nation Road Funds for the project.

In addition to a Firm's bid submission, this project is also qualifications based, per the 'Rating System and Evaluation Criteria' located on page 4 of the RFP.

3. Schedule of Activities: Note, all times Window Rock, AZ, time, 2019.

Activities:		Due Date:
i.	Advertised Period	May 6-15, 2021.
ii.	Deadline to Submit RFP Questions	May 17, by 12:00pm.
iii.	Final Response to Written RFP Questions	May 18, by 5:00pm.
iv.	RFP Submittal Deadline	May 21, June 4, by 2:00pm.
V.	Evaluation of proposals	May 26.
vi.	Final Selection of Firm	May 28.

4. Inquiries – Questions regarding this RFP must be submitted by email to the Project Contact listed below. Written questions as to the intent or clarity of this RFP can be submitted to the Project Contact until 12:00pm (Window Rock, AZ time), May 17. Written responses to written questions and any RFP amendments will be distributed by email to all parties who obtained an RFP package and have notified Lorita Etsitty, NN Purchasing Department, or Don Jackson, Navajo DOT. No further questions, in any form, will be entertained after the May 17 deadline. Project Contact: Don Jackson, Engineer, Navajo Division of Transportation, Telephone: (928)797-1319, and Email: djackson@navajodot.org.

5. Proposal Submittal Deadline – Proposals must be physically submitted to the following address by May 21, no later than 2:00 PM (local Window Rock, AZ time).

Navajo Division of Transportation Attention: Don Jackson Navajo Transportation Complex #16 Old Coal Mine Road Mentmore, NM 87319

Late, facsimiled or e-mailed proposals will not be accepted. These will be returned to the firm un-rated and firms responding in such fashion shall be considered nonresponsive.

- 6. Addendum to the RFP In the event it becomes necessary to revise any part of the RFP, Navajo DOT shall issue a written addendum on the specifics of the change and inform all concerned. **Addendums will also be made available for download from the Navajo DOT website** (www.navajodot.org). The firm shall acknowledge receipt and review of the addendum(s) under the Letter of Interest.
- 7. Rejections of Proposals The Navajo DOT reserves the right to reject any or all proposals and to waive informalities in the proposals received whenever such a rejection or waiver is in the best interest of the Navajo nation.
- 8. Proprietary Information Any restrictions on the use of data contained within any proposals must be clearly stated in the proposal. Each page that contains proprietary information must be stamped or imprinted "Proprietary".
- 9. Ownership of Proposals All materials submitted with the RFP accepted for rating shall become the property of Navajo DOT and not returned to the firm. The Navajo DOT has the right to use any or all information presented in the RFP subject to limitations outlined in Paragraph 8, above. Disqualifications or non-selection of a firm or proposal does not eliminate this right.
- 10. Cost Incurred The Navajo DOT is not liable for any cost incurred by the firm prior to issuance of a signed contract for services.
- 11. Contractual Obligation The contents of the proposal may become part of contractual obligations of the contract award. Failure of the firm to accept these obligations may result in cancellation of the award for services.
- 12. Evaluation Criteria Proposals accepted for rating shall be evaluated based on the criteria and point system set forth in Part 12(a) that follows.

#### Part 12(a) – Rating System and Evaluation Criteria

Each proposal will be evaluated and rated as follows. Descriptions of the components are provided in Section 3 – Proposal Content and Evaluation Criteria

1.	Overall professionalism and conciseness of proposal.	15 points
2.	Qualifications & Experience, of firm & project team.	30 Points
3.	Approach to Scope of Work, including FP-14 Specifications, and to include Project Understanding & Project Scheduling.	40 Points
4.	Listing of Equipment for SOW; and, Product Certifications as Stated in Specifications.	15 Points

Total Points 100 Points

A Short List of qualified candidates will be determined from the 100 points. To get to the Short List, the firms must receive a minimum of 80 points.

Preference Points: If a Priority 1 firm makes the Short List, that firm will receive an additional ten (10) points added to their score ranking. If a Priority 2 firm makes the Short List, that firm will receive an additional five (5) points added to their score ranking. Non-priority firms do not receive additional points. This is a requirement from the Navajo Nation Business Opportunity Act. Firm must provide documentation per the Business Regulatory Department as prioritized under Section 204 (A) (1) and (2) of the revised Navajo Nation Business Opportunity Act, of its Priority 1 or 2 status.

It is intent of Navajo DOT to rank the firms according to the responses submitted. The Navajo DOT reserves the right to conduct detailed interviews in person, of qualified/responsive firms, if warranted.

- 13. Standard Contract The Navajo Nation reserves the right to incorporate contract provisions which are based on applicable requirements, such as, Navajo Nation Laws, State, and local requirements, etc. into the contract documents. This includes provisions of the Navajo Business and Procurement Act, at 12 N. N. C. § 1501et Seq., and the Navajo Business Opportunity Act, at 5 N. N. C. § 201 et Seq.
- 14. Taxes All work performed and services provided within the territorial jurisdiction of the Navajo Nation is subject to the six percent (6 %) Navajo Sales Tax (24 N. N. C. § 601 et Seq.).
- 15. Insurance The Navajo Nation will require the successful firm, at its sole expanse, to procure and maintain adequate and sufficient insurance for all potential liability, such as, commercial general liability, automobile liability, worker's compensation, performance & payment bonds, bid bond, etc. The general contractor shall provide all bonds and insurance prior to the Notice to Proceed with Construction. For the Proposal, provide affidavit from surety indicating Contractor's ability to provide said bonds. Failure to do so will result in a Firm's proposal being Non-Responsive.
- 16. Bonding documentation required. The Navajo Nation's Representative must receive written documentation of all required bonds prior to the issuance of a Notice to Proceed for the Project,

and Contractor shall not commence any work or services under this Contract until such documentation is received by the Navajo Nation.

17. Disclaimer – The Navajo Nation's acceptance or review of any proposal shall not guarantee the execution of any contract, and the proposed contract shall be reviewed by all appropriate departments through the 2 N. N. C. § 164 review process, including the Navajo Nation Department of Justice, for administrative and legal sufficiency, prior to execution by the Navajo Nation. The Navajo Nation reserves the right to reject any proposed contract prior to execution, for improprieties in the procurement process or applicable Navajo Nation or federal laws or regulations, or the failure to submit all requested documents or information.

#### Section 2 – Proposal Requirements and Selection

- 1. Proposal Submission
  - A. Proposal must be submitted in a sealed envelope clearly marked:
    - a. "N5007-CTW/Newcomb: Construction of a low water crossing."
    - b. The name of the firm submitting the proposal shall be legibly written and shown on the outside of the sealed envelope, to include the firms address.
  - B. Proposal Standards: The firm shall submit one (1) original and three (3) identical copies of their RFP packet for the evaluation committee members. Appearance of proposal is important and professionalism in proposal presentation should not be neglected. The proposal standards are as follows:
    - a. This RFP proposal may not exceed 12 single-sided pages (maximum  $8 \frac{1}{2}$ " x 11") with a minimum of 10 pt. type.
    - b. Pages that have photos, charts, and graphs will be counted towards the maximum number of pages.
    - c. The following information is not included in the 12-page limit: proposal front and back cover; cover letter on company letterhead; divider and/or tabs, as long as there is nothing on them; and maximum 1-page resumes of each team member.
    - d. RFP submittals should be plastic or metal spiral-bound only. Please do not submit RFP in loose-leaf 3-ring binders; these will be considered non-responsive and returned to the firm un-rated.
    - e. Submissions exceeding the 12-page limit or any resumes exceeding the 1-page limit will be considered non-responsive and will be returned to the Applicant un-rated.
  - C. In a separate sealed envelope clearly marked as "BID PROPOSAL: N5007-CTW-Newcomb; Bid #21-04-2458LE", the firm shall provide its bid amount to complete the Scope of Work. The sealed envelope will not be opened by the Navajo DOT until after the RFP proposals have been reviewed and ranked.
- 2. Proposal Review Process, Receipt of proposals, will be verified on the due date specified. The Navajo DOT will screen and evaluate proposals received in accordance to the following criteria. Proposals which fail this check will be considered non-responsive and returned to the firm un-rated.
  - a. Proposal is received by the required deadline date and time.

b. Proposal meets the proposal submission requirement set forth above, under Section 2, Part 1, (A), (B), & (C).

#### 3. Proposal Evaluation

- a. Proposal shall be evaluated and rated in accordance with the criteria outlined in Part 12(a) Rating System on Evaluation Criteria.
- b. The Navajo DOT will rate the proposal based on total points awarded and all firms with a minimum score of 70 of 100 points will be determined as responsive. The Navajo DOT reserves the right to interview these qualified firms.

#### 4. Award of Contract

a. The Navajo DOT will issue a Notice to Proceed to the firm upon execution of the contract. No work shall be performed by the firm until such notice is given by Navajo DOT. The Navajo DOT is not liable for any cost incurred by the firm prior to issuance of a signed contract award, for "construction of a low water crossing through Captain Tom Wash (CTW), with erosion protection, and 2 road approaches for approximately 0.14 mile".

#### Section 3 – Proposal Content and Evaluation Criteria

- 1. Qualifications and Experience of firm and project team. Proposals must specifically address and affirm the following:
  - a. Letter of Interest that indicates why your firm should be selected for project N5007-CTW-Newcomb, NM. In addition, firm should acknowledge receipt and review of any addendum(s) issued. State that firm is capable to perform all or most aspects of the project.
  - b. Evidence of insurance and statement from bonding company that all bonds will be completed prior to Notice to Proceed with Construction.
  - c. Resume of personnel that will be involved in the task of completing projects, including professional qualifications and experiences of key personnel. Include personnel of sub-consultants which will be utilized by the prime consultant.
  - d. Provide key personnel's availability for the proposed work, and, roles and responsibilities. Include their knowledge of the Navajo Nation and NMDOT Specifications (2019), with respect to construction of a low water crossing through Captain Tom Wash (CTW), with erosion protection, and 2 road approaches for approximately 0.14 mile.
  - e. Organizational Chart outlining the inter-relationship and line of communication between the firm and sub-consultants.
  - f. Recent experiences in providing services comparable to the proposed SOW as listed in Section 4. Interested firms shall provide three (3) references from similar projects within the last five (5) years. List the reference's contact person's name, address, and phone number.
- 3. Approach to Scope of Work with respect to NMDOT Specifications (2019).
  - a. Approach to Scope of Work Describe your understanding of the project and approach to delivering the project SOW with respect to NMDOT Specifications (2019), in addition to the work described in Section 4.

- b. Include how your firm will schedule the work. Include a graphical illustration i.e. a Project Schedule such as a GANTT Chart.
- 4. List of Equipment for SOW and Product Certifications, as Stated in Specifications.
  - a. List equipment to complete the Scope of Work and list Product Certifications, including meeting requirements as stated in NMDOT Specifications.

Section 4 – SCOPE OF WORK for Project: N5007-Captain Tom Wash, located in Newcomb, NM. This work consists of construction of a low water crossing, erosion protection, and 2 road approaches for approximately 0.14 mile. The 2019 edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction (Standard Specifications) shall govern construction of this project unless otherwise noted. The attached Special Provisions shall supplement the 2019 Standard Specifications. Contractor is advised to read attached specifications and to download the NMDOT Standard Specifications for Highway Construction. NMDOT, 2019. specifications found Bridge can be https://dot.state.nm.us/content/nmdot/en/Standards.html.

When construction begins, coordination with Navajo DOT shall be through the Construction Manager (CM), Don Jackson (505-371-8364), <u>djackson@navajodot.org</u>.

#### Additional Scope of Work requirements:

- 1. BOP: 36°17'17.19"N, 108°40'32.62"W. EOP: 36°17'14.09"N, 108°40'13.83"W.
- 2. Note: Road approaches are 4-inches thick; and, each approach is now 100-feet in length. This is NMDOT Item Number 303001.
- 3. The vendor will have to dispose of any rejected material at his own expense off the Government property in approved recycle facilities.
- 4. Provide an estimated timeline bar chart schedule for this project.
- 5. Explain approach for other activities required for acceptable Scope of Work and compliance with specifications.
- 6. State how project communication is intended to keep all parties involved in the project.
- 7. Materials Delivery Contractor(s) shall follow Contractor's approved Temporary Traffic Control and Safety Plan, as well as Navajo DOT's traffic control plan throughout the construction of the project.
- 8. Staging area is a Mobilization item.
- 9. A provisional Notice to Proceed will be given when a contract is fully executed between the General Contractor and the Navajo Nation. This will allow the Contractor to acquire permits and perform geotechnical investigation to facilitate a full Notice to Proceed with Construction in Spring/2022

The 2019 edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction (Standard Specifications) shall govern construction of this project unless otherwise noted. The Special Provisions located in this RFP shall supplement the Standard Specifications.

If selected for this project, submit to Navajo DOT the following:

- PROOF OF CERTIFICATE OF INSURANCE: Provide proof of Certificate of Insurance.
- Taxpayer Identification: Form W-9.
- Affidavit of Non-Collusion.
- Suspension-Debarment.
- Bonding (Surety Letter from bonding company).

#### **Quality Assurance:**

Navajo DOT will provide quality assurance to ensure that work is being performed in accordance with the Scope of Work and project specifications.

Final inspection will include Navajo DOT for acceptance of scope of work.

<u>CERTIFIED NAVAJO BUSINESS</u>: If applicable, provide documentation in proposal that the business is currently certified by the Navajo Nation Business Regulatory Department and prioritized under Navajo Nation Council Resolution CAP-37-02 and, also, under the Section 204 (A) (1) and (2) of the revised Navajo Nation Business Opportunity Act.

#### **Compliance:**

Comply with conditions stated in all compliance reports, cultural & biological. If cultural site is discovered, immediately notify NDOT Project Management & Roads Dept. Note: Navajo DOT will give copies of archeological & environmental reports to selected Contractor. Contractor will notify Navajo DOT – Project Management Department of its selection as the General Contractor. Contractor and his sub-contractors will stay in "footprint" of existing road. Written request by Contractor to Project Management to go out of existing "footprint" is required.

## Captain Tom Wash Low Water Crossing (Route N5007)/Newcomb, NM; Bid #21-04-2458LE

May 6, 2021

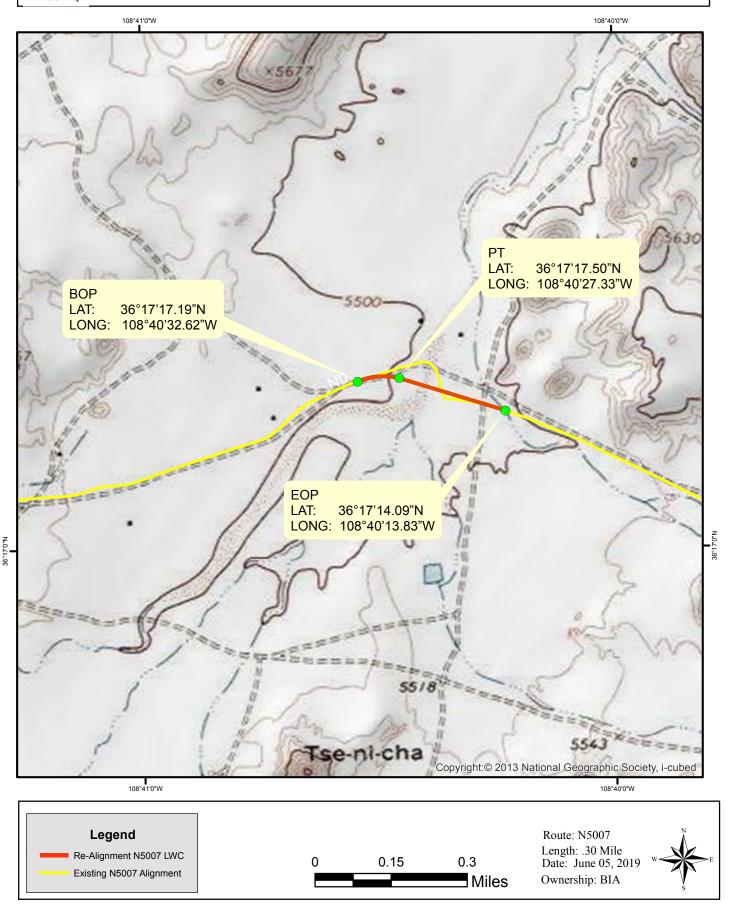
#### **BID SCHEDULE**

	DID 3CHEDOLE					
NMDOT ITEM NO.	Item Description	UNIT	APPROX. QUANTITY	UNIT PRICE	AMOUNT	
Miscellaneous Project Costs						
107000	WATERING FOR DUST CONTROL	LS	1			
201000	CLEARING AND GRUBBING	LS	1			
603000	STORM WATER POLLUTION PREVENTION PLAN	LS	1			
618000	TEMPORARY TRAFFIC CONTROL	LS	1			
621000	MOBILIZATION	LS	1			
801000	CONSTRUCTION SURVEY AND STAKING	LS	1			
902000	CONTRACTOR QUALITY CONTROL	LS	1			
Roadway						
203000	UNCLASSIFIED EXCAVATION	CY	11,000			
203211	UNSTABLE SUBGRADE STABILIZATION	TON	20			
207000	SUBGRADE PREPARATION	SY	2,867			
213000	OBLITERATING OLD ROAD	SY	2,590			
303000	AGGREGATE BASE COURSE	TON	203			
303001	STABILIZED AGGREGATE SURFACE COURSE, IMPORTED AGGREGATE	TON	120			
450060	CONCRETE PAVEMENT, REINFORCED, 6"	SY	667			
540060	REINFORCING BARS, GRADE 60	LB	8,000			
701000	PANEL SIGNS	SF	58			
701001	DEPTH GAUGE (DET G)	EA	2			
701099	STEEL POSTS AND BASE POSTS FOR ALUMINUM PANEL SIGNS	LF	96			
701101	MULTI-DIRECTIONAL SLIP BASE POSTS FOR ALUMINUM PANEL SIGNS	EA	8			
Drainage						
515001	REINFORCED CONCRETE CUT-OFF WALL, 7 FEET	SF	2,500			
515002	REINFORCED CONCRETE CUT-OFF WALL, 8 FEET	SF	3,000			
602001	WIRE ENCLOSED RIPRAP, CLASS A	SY	600			
602200	GABIONS	CY	77			
SWPPP						
603221	CHECK DAM, TYPE 2	EA	40			
603222	SURFACE ROUGHENING	SY	2,250			
			CONSTRUC	TION SUBTOTAL		
				CONTINGENCY	\$20,000.00	
		SUBTOTAL				
			AJO NATION	TRIBAL TAX (6%)		
TOTAL PROJECT CO				PROJECT COST.		

Note: Payment will be made per NMDOT Specifications (2019) and/or Special Provisions, and will be made for the actual quantities of work performed and accepted or material furnished according to the contract. No payment will be made for work performed in excess of that staked, ordered, or otherwise authorized.



## BIA N5007 - Newcomb, NM Northern Agency



#### **SPECIAL PROVISIONS**

## **FOR**

## **NAVAJO NATION DIVISION OF TRANSPORTATION**

PROJECT NO SP-6-17-(178)

## CAPTAIN TOM WASH LOW WATER CROSSING ROUTE N5007









November, 2019

Prepared By: Dibble Engineering
Dibble Project No. 1017064.08

#### **PROFESSIONAL ENGINEER'S SEALS**

A representative of Dibble Engineering has affixed his/her professional seal below, which attests that those portions of these specifications which relate to the plans were prepared under his/her direction.



Dibble Engineering (Roadway and Drainage)

The 2019 edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction (Standard Specifications) shall govern construction of this project unless otherwise noted. The following Special Provisions shall supplement the above Standard Specifications.

## **Table of Contents**

DIVISION 100 - GENERAL PROVISIONS	
DIVISION 200 - EARTHWORK	
Section 203 Excavation, Borrow, and Embankment	8
Section 203-A Unstable Subgrade Stabilization	8
Section 207 Subgrade Prepartaion	8
Section 213 Obliterating Old Road	9
DIVISION 300 - BASESSection 303 Base Course	
DIVISION 400 – SURFACE TREATMENTS AND PAVEMENTS	
DIVISION 500 - STRUCTURESSEction 509 Portland Cement Concrete Mix Designs	
Section 510 Portland Cement Concrete	12
Section 511 Concrete Structures	12
Section 515 Reinforced Concrete for Minor Structures	12
Section 540 Steel Reinforcement	12
DIVISION 600 - MISCELLANEOUS CONSTRUCTION	
Section 603 Temporary Erosion and Sediment Control	13
Section 618 Traffic Control Management	13
Section 621 Mobilization	13
DIVISION 700 - TRAFFIC CONTROL DEVICES	
DIVISION 800 - CONSTRUCTION STAKING, POST CONSTRUCTION PLANS, AND SCHEDULE	
DIVISION 900 - QUALITY CRITERIA	

## **List of Appendices**

#### **LOCATION OF WORK:**

The proposed work is located along Route N5007 near Newcomb, NM, within San Juan County, about 1.8 miles east of US 491 at the crossing of Captain Tom Wash.

#### PROPOSED WORK:

The proposed improvements realign Route N5007 to be a more perpendicular low water crossing of Captain Tom Wash. The crossing includes a paved surface and erosion protection to improve safety and operational efficiency of the route for tribal members and the general public.

#### **WORK WITHIN THE CONTRACT DOCUMENTS:**

All work mentioned or indicated within the Contract Documents shall be performed by the Contractor as part of this Contract unless it is specifically indicated in the Contract Documents that such construction is to be performed by others.

#### **TECHNICAL SPECIFICATIONS AND PLANS:**

The Scope of Work shall be done in accordance with the Technical Specifications, plans and the latest edition of the following Standard Specifications, Standard Drawings, and the manuals. The project shall be constructed in conformance with the following standard details and specifications:

- Standard Specifications for Highway and Bridge Construction, New Mexico Department of Transportation,
   2019 edition, hereinafter referred to as "Standard Specifications."
  - https://dot.state.nm.us/content/nmdot/en/Standards.html
- Standard Drawings for Highway and Bridge Construction, New Mexico Department of Transportation, 2019 edition, hereinafter referred to as "Standard Drawings."
  - o <a href="https://dot.state.nm.us/content/nmdot/en/Standards.html">https://dot.state.nm.us/content/nmdot/en/Standards.html</a>
- U.S. Department of Transportation, Federal Highway Administration Manual on Uniform Traffic Control Devices for Street and Highways, Latest Edition, hereinafter referred to as "MUTCD."

#### **ENGINEER:**

Wherever the term "Engineer" is used herein or on the plan sheets it shall be understood to mean "NDOT Engineer" or "NDOT Representative."

#### **INSPECTOR:**

Wherever the term "Inspector" is used herein or on the plan sheets it shall be understood to mean the "NDOT Inspector."

#### **CONTRACT TIME:**

The Contractor shall complete all project work within 90 calendar days beginning with the start date specified in the Notice to Proceed.

#### **AVAILABLE INFORMATIONAL MATERIAL:**

A Geotechnical Evaluation dated August 14, 2019 and a Pavement Design Report dated October 31, 2019, prepared by Western Technologies, Inc., will be made available during project advertisement for review by the Navajo Division of Transportation.

A Drainage Report dated November 12, 2019, prepared by Dibble Engineering, will be made available during project advertisement for review by the Navajo Division of Transportation.

#### **RELATIONS WITH THE NAVAJO NATION:**

The project is located on lands controlled by the Navajo Nation which subject the contractor to the laws and regulations of the Navajo Nation. Contractors shall make themselves aware of any labor requirements, taxes, fees, licenses, permits or conditions that may be imposed by the Navajo Nation on work performed in the area. Questions regarding Navajo imposed taxes on construction work conducted on the Reservation should be addressed to the Office of Navajo Taxation.

On other projects in this area, the utilization of Native Americans has developed a reservoir of capable, trained workers. The contractor shall contact the Office of Navajo Labor Relations for assistance in hiring such workers. The contractor shall give preference in hiring to as many workers indigenous to the area as can be properly utilized in the processing of the work. The contractor shall provide a manpower projection identifying the type of crafts and trades that it expects to utilize, the approximate date that it expects to start work, and the name of one of its employees to be its contact.

The Navajo Nation has developed a centralized procedure for handling construction staging sites, pits, permits and environmental clearances. Contractors are advised to contact the Division of Natural Resources of the Navajo Nation for assistance in these matters.

Contractors interested in acquiring water for construction use are advised to contact the Navajo Water Code Section for assistance.

The Navajo Nation contact offices are identified as follows:

Labor: Office of Navajo Labor Relations

Phone: (928) 871-6800

Permits: Division of Natural Resources

Phone: (928) 871-6593

Taxes: Office of Navajo Taxation

Phone: (928) 871-6681

Water: Navajo Water Code Section

Phone (928) 729-4132

#### **MATERIAL WASTE SITE:**

The project is expected to generate excess excavated material which will not be able to be wasted within the proposed roadway footprint. That material can be distributed near the project improvements or to a nearby site once approved by the Division, Newcomb Chapter, and the property owner/lessee. Material waste sites shall be reseeded to the limits of disturbance with native seeding mix at no additional cost to the Division.

Some potential locations for waste material redistribution are shown in **Appendix A**. The project is expected to generate approximately 11,000 CY of excess excavated material. Approximately 8,000 CY of material can be placed in the potential locations for redistribution shown in **Appendix A**. The locations shown shall not be used for redistribution without the express approval of the Division, Newcomb Chapter, and the property owner/lessee. The potential locations shown are not currently approved or cleared environmentally. The contractor is responsible for complying with all laws, environmental requirements, and responsibilities to the public as well as obtaining all required permits related to the redistribution of waste material prior to redistribution at no additional cost to the Division.

Redistributed waste material shall be placed in lifts not to exceed 8 inches and compacted to no less than 95% of maximum density.

Waste material placed within incised areas shall not overtop the plane between each top of slope. The finish grade of waste material placed within incised areas shall maintain historic flow patterns, avoiding any damming or redirecting of sheet flows.

Waste material placed on existing embankments or berms shall not negatively impact the function of the existing embankment or berm and shall have no impacts on any existing upstream or downstream facilities or improvements. The increased height of embankment or berm must be approved by the Division, the Newcomb Chapter, and the property owner/lessee prior to redistribution of waste material.

All costs associated with hauling, offloading, securing, restoring, seeding, and maintaining the material waste sites are considered included in the cost of the earthwork items. No additional measurement or payment will be made for these efforts.

#### RIPRAP:

The rock for rock mulch and riprap shall be angular in shape, and the color shall match the surrounding rock outcrops and adjacent materials. If an outside source is used, it shall be as approved by the Engineer prior to use.

#### **PROPOSAL GUARANTY:**

Each bidder is advised to satisfy itself as to the character and the amount of the proposal guaranty required in the Advertisement for Bids.

#### **CONTRACTOR USE SITES:**

Potential contractor use sites are not shown on the project plans. The contractor is responsible for complying with all laws, environmental requirements, and responsibilities to the public as well as obtaining all required permits related to delineating a contractor use site.

The contractor shall submit a Contractor Use Site Plan for review and approval by the Engineer prior to utilization of the contractor use site(s). The Contractor Use Site Plan shall include but not be limited to showing the locations, size, listing the types of equipment and materials to be stored on site, and contour and revegetation plans at each specific contractor use site.

A walkthrough inspection with the Engineer shall be required to review the proposed clearing limits for the contractor use site(s). It shall be the contractor's responsibility to coordinate with the Engineer to obtain authorization, prior to grading or using the potential contractor use site(s).

The contractor shall be responsible for maintenance, dust and erosion control within the potential contractor use site(s). Existing plant materials requested to remain within the potential contractor use sites shall be protected in place or transplanted as approved by the Engineer at no additional cost to the Division.

At the completion of the project, the contractor, at the direction of the Engineer, shall recontour the contractor use site(s) similarly to the pre-construction condition, revegetate, and seed the site(s) in accordance with the approved contour and revegetation plan and any other conditions of the permit(s). All revegetation shall conform to Section 632 herein, except the costs of the work shall be considered as included in the price of contract items.

No separate measurement or payment will be made for any work associated with contractor use site(s).

#### PROTECTION OF EXISTING FEATURES:

The contractor shall preserve and protect all existing vegetation (i.e., trees, shrubs, cacti and native grasses), topography, and rock formations on or adjacent to the site, unless other requirements have been agreed to by the Engineer. The contractor shall replace damaged vegetation on a one-for-one basis for all unauthorized cutting, removing or altering of existing vegetation, topography, and rock formations including damage due to careless operation of equipment, stockpiling of materials or tracking of terrain by equipment in accordance with Section 201 - CLEARING AND GRUBBING herein at no additional cost to the Division.

#### STORMWATER MANAGEMENT FOR CONSTRUCTION ACTIVITIES:

Controlling runoff and sedimentation from the project site is a high priority for the Division and other agencies having jurisdiction over natural resources downstream of the project area. Stormwater management of construction activities on the project are subject to pollution prevention requirements. These Special Provisions are not intended to establish or affect the contractor's legal rights or obligations under the law. The contractor shall take special care in regard to understanding the regulations and shall be solely responsible for conducting his/her operations in a manner that is compliant with the terms and conditions of the law.

Navajo Nation Environmental Protection Agency has the authority to issue administrative, civil, and criminal penalties for noncompliance. Penalties for noncompliance will be borne solely by the contractor.

#### **BONDING AND PERMIT:**

The Contractor shall provide to the Navajo Nation a Performance Bond underwritten and executed by Surety Company that guarantees the Contractor's complete and satisfactory performance under Contract. The Performance Bond shall be equal to one-hundred percent (100%) of the Original Contract Amount, unless otherwise provided in the Lesser Bond Amounts.

Other bonds as stated in the Request for Proposal are also required.

#### **INTERNAL TRAFFIC CONTROL:**

Internal traffic control (ITC) is a process used by construction project managers and contractor staff to coordinate and control the flow of construction vehicles, equipment, and workers operating in close proximity within the work space to ensure the safety of workers and inspectors. The American Road and Transportation Builders Association (ARTBA) guidelines 'Internal Traffic Control Planning for Work Zone Safety' shall be used to help define work zone safety practices.

The Traffic Control Plan must be submitted to the Engineer, accepted, and implemented before any other work can commence at the project site. Prior to the commencement of work and on a weekly basis, the Contractor shall inform the Division of the traffic restrictions.

#### PREVENTION OF PROLIFERATION OF NOXIOUS WEEDS:

Heavy equipment shall be steam cleaned or pressure washed to remove noxious weeds before it is brought onto the project site and steam cleaned/pressure washed again prior to release from the construction site. The contractor shall not locate the wash-down area near any wash and shall properly protect the wash-down site to prevent any discharge into downstream washes. The contractor shall sufficiently contain the equipment wash-down area so that all materials washed or connected with the washed materials can be either hauled off the project site and properly disposed of, or satisfactorily treated as approved by the Engineer. The contractor shall provide certifications to the Engineer that the equipment has been cleaned or washed as described herein.

There will be no direct measurement or payment for the work described above. The cost is considered as included in the price of contract items.

#### **NAVAJO NATION SALES TAX:**

The project is located on the Navajo Nation and is subject to the laws and regulations of the Navajo Nation. Contractors shall make themselves aware of any labor requirements, taxes, fees, licenses, permits or conditions that may be imposed by the Navajo Nation on work performed in the area.

A 6% Sales tax will be required on all payments to the contractor. The Navajo Tribal Financial Office will pay on the approved monthly Contractor Invoice. The Contractor will then be invoiced 6% tax on the payments made and will be required to pay that amount to the Navajo Division of Transportation Office.

Acceptance shall be based on an invoice from the Navajo Division of Transportation Office and an invoice from the appropriate Tribal Administration Office on the tax.

#### PRE-CONSTRUCTION PHOTOGRAPHS:

The Contractor shall provide pre-construction photographs of the entire work area and adjacent areas in digital format. The pictures shall be taken at an appropriate size and in sufficient detail for comparison with as-built conditions.

The Contractor shall submit the pre-construction photographs to the Division prior to the start of construction.

There shall be no separate payment for pre-construction photographs. All labor, materials and equipment necessary for completion of this item shall be included in the various Unit Prices bid. Any work or materials necessary but not specifically referred to in these items are considered incidental to the item and are include in the Unit Prices.

#### **MATERIAL SUBMITTAL PACKAGE:**

Contractor shall submit Material Submittal Packages containing copies of all samples, shop drawings, catalog cuts, concrete design mix, materials, etc. for review and approval.

Submittals must show completely all the work to be done, and any error or omission in the construction work because of incomplete submittals will be corrected by the Contractor at its own expense. Unless specifically requested as an exception by the Contractor, and approved by the Engineer in writing, the approval by the Engineer of any shop drawings, catalogs, schedule, sample, and related material is limited to compliance with the contract drawings and contract specifications, and such approval by the Engineer will not relieve the Contractor of the responsibility for errors or failure properly to coordinate all elements of the project affected by the submitted material. All submittals shall be clearly identified.

It is the responsibility of the Contractor to present all such submittals to the Engineer at least two (2) weeks in advance of the need for such approval, and in any event the Division will entertain no request for a time extension to the Contract resulting from a delay by the Engineer in processing such submitted material unless the material is submitted in sufficient time to permit adequate review by the Engineer commensurate with the complexity of the specific submittal. Submittals transmitted by anyone other than the Contractor will be returned to the Contractor without action of any kind. Submittals will not be returned to subcontractors.

When specified or requested by the Engineer, the Contractor shall submit a certificate provided by the manufacturer certifying that the materials or equipment to be incorporated in the work comply with the requirements of these specifications.

#### **FINAL CLEANING UP:**

The contractor, at its own cost, shall restore the site to pre-construction conditions. Before final acceptance, all private and public property and grounds occupied by the contractor in connection with the work shall be cleaned of all rubbish excess materials, temporary structures and equipment, and all parts of the work area shall be left in a condition acceptable to the Engineer. Costs for this item are considered to be included in the overall bid price and no separate payment shall be made.

## **DIVISION 100 - GENERAL PROVISIONS**

### SECTION 107 LEGAL RELATIONS, ENVIRONMENTAL REQUIREMENTS, AND RESPONSIBILITY TO THE PUBLIC

#### Add 107.32 BASIS OF PAYMENT:

Payment will be made under:

Pay Item Pay Unit

107000 Watering for Dust Control LS

#### **DIVISION 200 - EARTHWORK**

#### **SECTION 201 CLEARING AND GRUBBING**

Payment will be made under:

Pay Item Pay Unit 201000 Clearing and Grubbing LS

#### **SECTION 203 EXCAVATION, BORROW, AND EMBANKMENT**

#### 203.5 BASIS OF PAYMENT. Add:

Payment will be made under:

Pay Item Pay Unit 203000 Unclassified Excavation CY

#### **SECTION 203-A UNSTABLE SUBGRADE STABILIZATION**

#### 203-A.2 MATERIALS is revised to read:

Contractor shall use RoadLoc or approved equal. Contractor shall coordinate product selection with NDOT.

#### 203-A.5 BASIS OF PAYMENT is revised to read:

The Division will only pay for Accepted quantities of Unstable Subgrade Stabilization in accordance with Section 203-A.3.2, "Acceptance"

Payment will be made under:

Pay Item Pay Unit 203211 Unstable Subgrade Stabilization TON

#### **SECTION 207 SUBGRADE PREPARTAION**

#### 207.5 BASIS OF PAYMENT. Add:

Payment will be made under:

Pay Item Pay Unit 207000 Subgrade Preparation SY

#### **SECTION 213 OBLITERATING OLD ROAD**

#### 213.4 METHOD OF MEASUREMENT is revised to read:

The Division will measure obliterating old road as a square yardage from the daylight line to daylight line of the existing roadside ditch from project beginning point to project end point.

#### 213.5 BASIS OF PAYMENT. Add:

Payment will be made under:

Pay Item Pay Unit 213000 Obliterating Old Road SY

## **DIVISION 300 - BASES**

## **SECTION 303 BASE COURSE**

#### **303.5 BASIS OF PAYMENT. Add:**

Payment will be made under:

Pay Item		Pay Unit
303000	Aggregate Base Course	TON
303001	Stabilized Aggregate Surface Course, Imported Aggregate	TON

## **DIVISION 400 – SURFACE TREATMENTS AND PAVEMENTS**

### SECTION 450 PORTLAND CEMENT CONCRETE PAVEMENT (PCCP) (QLA)

450.5 BASIS OF PAYMENT. Add:

Payment will be made under:

Pay Item Pay Unit 450060 Concrete Pavement, Reinforced, 6" SY

#### **DIVISION 500 - STRUCTURES**

#### **SECTION 509 PORTLAND CEMENT CONCRETE MIX DESIGNS**

No modifications.

#### **SECTION 510 PORTLAND CEMENT CONCRETE**

No modifications

#### **SECTION 511 CONCRETE STRUCTURES**

#### 511.5 BASIS OF PAYMENT is revised to read:

Concrete will be paid for in accordance with the section of these special provisions and the NMDOT standard specifications for which the concrete is used.

#### **SECTION 515 REINFORCED CONCRETE FOR MINOR STRUCTURES**

#### **515.5 BASIS OF PAYMENT. Add:**

Pay Item		Pay Unit
515001	Reinforced Concrete Cut-Off Wall, 7 Feet	SF
515002	Reinforced Concrete Cut-Off Wall, 8 Feet	SF

#### **SECTION 540 STEEL REINFORCEMENT**

#### 540.5 BASIS OF PAYMENT. Add:

Pay Item Pay Unit 540060 Reinforcing Bars, Grade 60 LB

#### **DIVISION 600 - MISCELLANEOUS CONSTRUCTION**

#### **SECTION 602 SLOPE AND EROSION PROTECTION STRUCTURES**

#### 602.5 BASIS OF PAYMENT. Add:

Payment to be made under:

Pay Item Pay Unit 602001 Wire Enclosed Riprap, Class A SY 602200 Gabions CY

#### 602.5.1 Work Included in Payment. Add:

4. Geotextile Fabric, Class 1

#### **SECTION 603 TEMPORARY EROSION AND SEDIMENT CONTROL**

#### 603.5 BASIS OF PAYMENT. Add:

Pay Item		Pay Unit
603000	Storm Water Pollution Prevention Plan	LS
603221	Check Dam, Type 2	EA
603222	Surface Roughening	SY

#### **SECTION 618 TRAFFIC CONTROL MANAGEMENT**

#### **618.5 BASIS OF PAYMENT. Add:**

Pay Item Pay Unit 618000 Temporary Traffic Control LS

#### **SECTION 621 MOBILIZATION**

#### **621.5 BASIS OF PAYMENT. Add:**

Pay Item Pay Unit 621000 Mobilization LS

## **DIVISION 700 - TRAFFIC CONTROL DEVICES**

### **SECTION 701 TRAFFIC SIGNS AND STRUCTURES**

#### **701.5 BASIS OF PAYMENT. Add:**

Pay Item		Pay Unit
701000	Panel Signs	SF
701001	Depth Gauge (Det G)	Each
701099	Steel Posts and Base Posts for Aluminum Panel Signs	LF
701101	Multi-Directional Slip Base Posts for Aluminum Panel Signs	Each

## DIVISION 800 - CONSTRUCTION STAKING, POST CONSTRUCTION PLANS, AND SCHEDULE

#### **SECTION 801 CONSTRUCTION STAKING BY THE CONTRACTOR**

#### **801.5 BASIS OF PAYMENT. Add:**

Pay Item Pay Unit 801000 Construction Survey and Staking LS

## **DIVISION 900 - QUALITY CRITERIA**

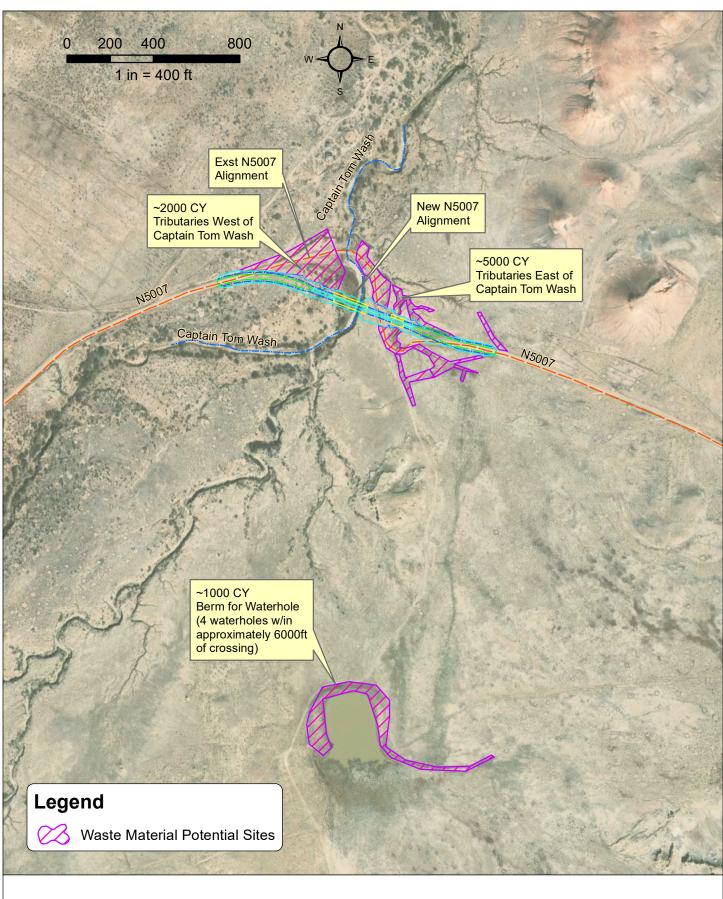
## **SECTION 902 QUALITY CONTROL**

#### 902.10 BASIS OF PAYMENT. Add:

Pay Item Pay Unit 902000 Contractor Quality Control LS

# Appendix A

Potential Locations for Waste Material Redistribution



Note: Volumes shown for each potential waste material site are approximate and shown for information only.

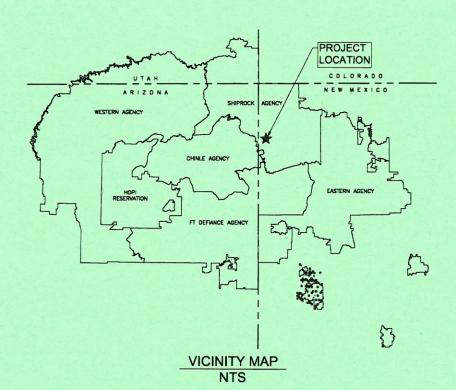
Contractor shall field verify.

Appendix A
Potential Sites for Waste Material Redistribution

# NAVAJO NATION DIVISION OF TRANSPORTATION

 STATE
 PROJECT
 SHEET NUMBER

 NM
 SP-6-17(178)
 1

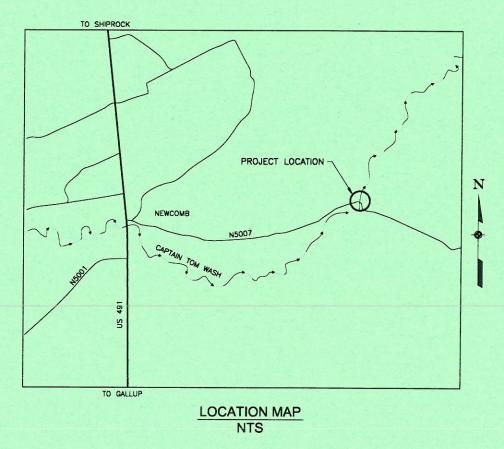


PLANS FOR PROPOSED

PROJECT NO SP-6-17(178)

CAPTAIN TOM WASH LOW WATER CROSSING

ROUTE N5007 SAN JUAN COUNTY, NEW MEXICO LENGTH 0.26 MILES











NMDOT

#### SHEET INDEX

SHEET	DRAWING	DESCRIPTION
1	G1	COVER SHEET
2	G2	STANDARD ABBREVIATIONS, LEGEND, & NOTES
3	G3	SURVEY CONTROL
4	G4	TYPICAL SECTIONS & PAVEMENT SECTIONS
5-8	G5-G8	DETAILS
9-12	PP1-PP4	ROADWAY PLAN & PROFILE

PLANS PREPARED BY

Dibble Engineering

7878 North 16th Street Suite 300 Phoenix, AZ 85020 P 602.957.1155 F 602.957.2838 www.dibblecorp.com



DESIGN DESIGNATIONS:

TYPE OF CONSTRUCTION: Road Reconstruction

U.S. CUSTOMARY DIMENSIONS: Slopes are expressed as RUN:RISE

SPECIFICATIONS: NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY & BRIDGE CONSTRUCTION (2019)

ROJECT MANAGER LEAD DESIGNER
PJB JRH

## STANDARD ABBREVIATIONS & LEGEND & NOTES

**EXISTING** 

UNKNO	DWN PACIFIC RAILROAD
VERTIC	
VARIES	
	CAL CURVE
	IED CLAY PIPE
	Y GUTTER
VEHIC	ULAR NON ACCESS EASEMENT
WEST	
WATER	!
WITH	
WITHO	UT
WATER	METER
WATER	SURFACE ELEVATION
WATER	VALVE
TRANS	FORMER

VAR VC VCP VG VNAE

NEW

SURFACE ROUGHENING

STONE CHECK DAM

STATE NM

NEW

PROJECT

SP-6-17(178)

NUMBER

2

STORM DRAIN UTILITY LINE

**EXISTING** -- CAPLE TV -- COMMUNICATION -- E -- ELECTRIC (UNDERGROUND) -- OHE -- ELECTRIC (OVERHEAD) -- FO -- FIBER OPTIC -- R -- FIRE LINE -- 2\* 0 -- GAS - -- 12" MR- - IRRIGATION LINE 18" OR SMALLER 24 RR | IRRIGATION LINE 21" OR LARGER - - 12" RW- - RECLAIMED WATER 18" OR SMALLER RECLAIMED WATER 21" OR LARGER -- TELEPHONE -- 12" S-- SEWER LINE 18" OR SMALLER SEWER LINE 21" OR LARGER -- 12" SO-- STORM DRAIN 18" OR SMALLER \_\_\_\_\_\_ STORM DRAIN 21" OR LARGER -- 12" W-- WATER LINE 18" OR SMALLER WATER LINE 21" OR LARGER **GENERAL NOTES** 

- 1. THIS PROJECT HAS BEEN DESIGNED USING:
- NMDOT STANDARD SPECIFICATIONS FOR HIGHWAY & BRIDGE CONSTRUCTION (2019)
- 2. EXISTING UTILITIES DEPICTED ON THE PLANS ARE SHOWN AT THEIR APPROXIMATE LOCATION & ARE DERIVED FROM THE BEST INFORMATION AVAILABLE. THERE MAY BE UNKNOWN UTILITIES LOCATED W/IN THE PROJECT CORRIDOR WHERE NO INFORMATION EXISTS. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATIONS OF ALL EXISTING UTILITIES BY WHATEVER MEANS DEEMED NECESSARY IN ORDER TO COMPLETE THE WORK & AVOID ALL DAMAGE TO THE EXISTING UTILITIES. UTILITY OWNERS SHALL BE CONTACTED & ALL UTILITY LINES SHALL BE MARKED/STAKED PRIOR TO COMMENCEMENT OF CONSTRUCTION. WHERE DUE TO CONTRACTOR NEGLIGENCE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES & THE REPAIR/RESTORATION THEREOF AT NO ADDITIONAL COST
- 3. NTUA NATURAL GAS DEPARTMENT SHALL BE CONTACTED AT (928)729-6275 REGARDING SCHEDULING, ENGINEERING, CONSTRUCTION, & PROJECT MANAGEMENT A MINIMUM OF 72 HOURS BEFORE COMMENCEMENT OF CONSTRUCTION, CONTRACTOR SHALL POTHOLE THE EXISTING GAS LINE PRIOR TO COMMENCEMENT OF ANY WORK AROUND THE NTUA NATURAL GAS FACILITIES. CONTRACTOR SHALL LOCATE NTUA NATURAL GAS FACILITY, CALL 811 & NTUA DISTRICT OFFICE A MINIMUM OF 72 HOURS BEFORE DIGGING. DIGGING IN VICINITY OF NTUA NATURAL GAS FACILITIES SHALL BE MONITORED BY NTUA.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING PAVEMENT & SHALL REPAIR OR REPLACE ANY DAMAGED PAVEMENT TO EQUAL OR BETTER CONDITION AT NO ADDITIONAL COST TO NDOT.
- 5. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION SURVEY & STAKING.
- 6. QUANTITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ALL QUANTITIES.

	BENCHMARK		BENCHMARK
•	BRASS CAP FLUSH	•	BRASS CAP FLUSH
	BRASS CAP IN HANDHOLE		BRASS CAP IN HANDHOLE
0330	BACKFLOW PREVENTER	0000	BACKFLOW PREVENTER
\$ 0 ₺	CACTUS		BORING LOCATION
	DRYWELL	* · ·	CACTUS
	FIRE HYDRANT		DRYWELL
8	FIRE DEPT CONNECTION	ĕ	FIRE HYDRANT
P	FLAG POLE	*	FIRE DEPT CONNECTION
	GATE	ř	FLAG POLE
	GRATE		GATE
←	GUY WIRE	$\overline{}$	HEADWALL
	HEADWALL	/m	MAILBOX
MB	MAILBOX	Ó	MANHOLE
(COM)	MANHOLE (TYPE NOTED)	WM	METER
EM	METER (TYPE NOTED)		PIPE PLUG
□TV	PEDESTAL (TYPE NOTED)	<b>+</b>	POTHOLE LOCATION
[EB]	PULLBOX (TYPE NOTED)	$\boxtimes$	PULLBOX
	RIPRAP		RIPRAP
9	ROCK	B	ROCK
0	SHRUB	e	SHRUB
þ	SIGN	4 1	SIGN
×	STREET LIGHT	ו	STREET LIGHT
部外员	TREE	命》的	TREE
-0-	UTILITY POLE	-0-	UTILITY POLE
8m	VALVE (TYPE NOTED)	8	VALVE
	BUILDING SETBACK		BUILDING SETBACK
	DISTRICT BOUNDARY OR CITY LIMITS		CENTERLINE
	EASEMENT		EASEMENT
	FOREST BOUNDARY LINE		LIMITS OF CONSTRUCTION
	MID-SECTION		RIGHT-OF-WAY
	PROPERTY LINE		
	RIGHT-OF-WAY		
	SECTION		
			BASE FLOOD ELEVATION
1 11	CHANNEL		CHANNEL
	CURB & GUTTER		CURB & GUTTER
	EDGE OF PAVEMENT	—с—	DAYLIGHT LINE, CUT
0	FENCE WOOD	—F—	DAYLIGHT LINE, FILL
×	FENCE WIRE		EDGE OF PAVEMENT
	FENCE CHAINLINK		EDGE OF UNPAVED ROADWAY
			FENCE WOOD
n_n_n_			FENCE WIRE
	MASONRY WALL/RETAINING WALL		FENCE CHAINLINK
	MAJOR CONTOUR		FLOWLINE
	MINOR CONTOUR		
			MASONRY WALL/RETAINING WALL
	SINGLE CURB		
	SIDEWALK		MINOR CONTOUR
			SIDEWALK
		Fatter Samuel	SINGLE CURB PCCP
			ABC
			GABION MATTRESS
		2000	GABION BASKET

Dibble **Engineering** 



REVISION NAVAJO B.Q.T.

NAVAJO NATION DIVISION OF TRANSPORTATION

CAPTAIN TOM WASH

STANDARD ABBREVIATIONS, LEGEND, & NOTES

DRAWING SHEET G2 2 OF 12

AVE	AVENUE	NO	NUMBER	***	WATER VALVE
B/C	BACK OF CURB	NPDES NPI	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM NON-PAY ITEM	XFMR	TRANSFORMER
BC	BRASS CAP	NSF	NATIONAL SANITATION FOUNDATION		
BCF BCHH	BRASS CAP FLUSH BRASS CAP IN HANDHOLE	NTS	NOT TO SCALE		
BCR	BEGIN CURB RETURN	NW	NORTHWEST		
BK	BACK	OC	ON CENTER		
BKFL BLDG	BACKFILL BUILDING	OD OHE	OUTSIDE DIAMETER		
BLVD	BOULEVARD	OHT	OVERHEAD ELECTRIC OVERHEAD TELEPHONE		
BM	BENCHMARK				
BOT	воттом	P P	PAVEMENT ELEVATION PHONE NUMBER		
С	CONCRETE ELEVATION	PB	PULLBOX		
C	CONDUIT CURB & GUTTER	PC	POINT OF CURVATURE		
C&G CAP	CORRUGATED ALUMINUM PIPE	PCC PCCP	POINT OF COMPOUND CURVATURE PORTLAND CEMENT CONCRETE PAVEMENT		
CATV	CABLE TELEVISION	PE	POLYETHYLENE PIPE		
CB	CATCH BASIN CAST IRON PIPE	PED	TELEPHONE PEDESTAL		
CIP	CAST IN PLACE	PGL PH#	PROFILE GRADE LINE POTHOLE NUMBER		
CIPP	CURED IN PLACE PIPE	Pl	POINT OF INTERSECTION		
CK ©	CHECKED CENTERLINE	PIP P	PROTECT IN PLACE PROPERTY LINE		
CLR	CLEAR	PLSS	PUBLIC LAND SURVEY SYSTEM		
CMP CO	CORRUGATED METAL PIPE CLEAN OUT	POC	POINT ON CURVE		
СОММ	COMMUNICATION	POT PP	POINT ON TANGENT POWER POLE		
CONC	CONCRETE	PRC	POINT OF REVERSE CURVATURE		
CONST	CONSTRUCTION CORNER	PROP PSI	PROPOSED POUNDS PER SQUARE INCH		
CORR	CORRECTION	PT	POINT OF TANGENCY		
CSP CTB	CORRUGATED STEEL PIPE CEMENT TREATED BASE	PT	POINT		
CIB	CEMENT TREATED BASE	PUE PVC	PUBLIC UTILITY EASEMENT POLY VINYL CHLORIDE		
D/W	DRIVEWAY	PVI	POINT OF VERTICAL INTERSECTION		
DB DES	DUCT BANK DESIGN	PVMT PVRC	PAVEMENT POINT OF VERTICAL REVERSE CURVATURE		
DET	DETAIL	PVT	POINT OF VERTICAL TANGENCY		
DG	DECOMPOSED GRANITE				
DIP DR	DUCTILE IRON PIPE DRIVE	R R	RADIUS RANGE		
DRN	DRAWN	R/W	RIGHT-OF-WAY		
DRNG DWG	DRAINAGE DRAWING	RCBC RCP	REINFORCED CONCRETE BOX CULVERT REINFORCED CONCRETE PIPE		
		RD	ROAD		
E E/R	EAST, EASTING EDGE OF ROAD	RDWY	ROADWAY		
E/P	EDGE OF PAVEMENT	RELOC RGRCP	RELOCATE RUBBER GASKET REINFORCED CONCRETE PIPE		
EA	EACH ELECTRIC PULL DOV	RR	RAILROAD		
EB ECR	ELECTRIC PULLBOX END CURB RETURN	RT	RIGHT		
EGL	ENERGY GRADE LINE	S	SLOPE		
EL ELEC	ELEVATION ELECTRIC	S	SOUTH		
ESMT	EASEMENT	S/W SD	SIDEWALK STORM DRAIN		
EVAC	EAST VALLEY ASPHALT COMMITTEE	SE	SOUTHEAST		
EXST	EXISTING	SEC SF	SECTION SQUARE FOOT		
Ē,	FAX_NUMBER_	SG	SUBGRADE ELEVATION		
F/C FCDMC	FACE OF CURB FLOOD CONTROL DISTRICT OF MARICOPA COUNT	SHLDR SHT	SHOULDER SHEET		
FF	FINISH FLOOR ELEVATION	SPEC	SPECIFICATIONS		
FG FH	FINISH GRADE ELEVATION	SRP	SALT RIVER PROJECT		
FHWA	FIRE HYDRANT FEDERAL HIGHWAY ADMINISTRATION	SS SSD	SANITARY SEWER STOPPING SIGHT DISTANCE		
FL	FIRE LINE FLOWLINE	ST	STREET		
FL FL	FLANGE	STA STD	STATION STANDARD		
FND	FOUND	STL	STEEL		
FO FT	FIBER OPTIC FOOT OR FEET	SW SWG	SOUTHWEST GAS COMPANY		
		SY	SQUARE YARD		
G G	GUTTER ELEVATION GAS	Т	TOWNSHIP		
GAF	GRID ADJUSTMENT FACTOR	Ť	TANGENT LENGTH		
GB GM	GRADE BREAK GAS METER	T/W	TOP OF WALL		
GND	GROUND	TBM TC	TEMPORARY BENCHMARK TOP OF CURB		
GV	GAS VALVE	TCE	TEMPORARY CONSTRUCTION EASEMENT		
Н	HORIZONTAL	TEL TEMP	TELEPHONE TEMPORARY		
HDPE	HIGH DENSITY POLYETHYLENE	TN	TOP OF NUT		
HDWL HGL	HEADWALL HYDRAULIC GRADE LINE	TOE TOP	TOE OF EMBANKMENT		
HP	HIGH PRESSURE	TRAN	TRANSITE PIPE		
H <b>W</b> Y	HIGH WATER	TS	TRAFFIC SIGNAL		
	HIGHWAY	TYP	TYPICAL		
ID INV	INSIDE DIAMETER INVERT				
IRR	IRRIGATION				
IV	IRRIGATION VALVE				

MARICOPA ASSOCIATION OF GOVERNMENTS

MATCH EXISTING MANHOLE

MONUMENT LINE MODIFIED

NORTH, NORTHING

NORMAL CROWN

NORTHEAST

MILES

MINIMUM

MCESD

MOD MJ

NMDOT

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION

NEW MEXICO DEPARTMENT OF TRANSPORTATION

MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT

AMERICAN ASSOCIATION OF STATE HIGHWAY

ASPHALT CONCRETE FRICTION COURSE AMERICAN CONCRETE INSTITUTE ASBESTOS CEMENT PIPE

ARIZONA PUBLIC SERVICE ARIZONA STATE LAND DEPARTMENT

ASPHALT CONCRETE SURFACE COURSE AMERICANS WITH DISABILITIES ACT ARIZONA DEPARTMENT OF TRANSPORTATION

AMERICAN INSTITUTE OF STEEL CONSTRUCTION

AMERICAN SOCIETY FOR TESTING MATERIALS

& TRANSPORTATION OFFICIALS

AGGREGATE BASE COURSE

ASPHALT CONCRETE

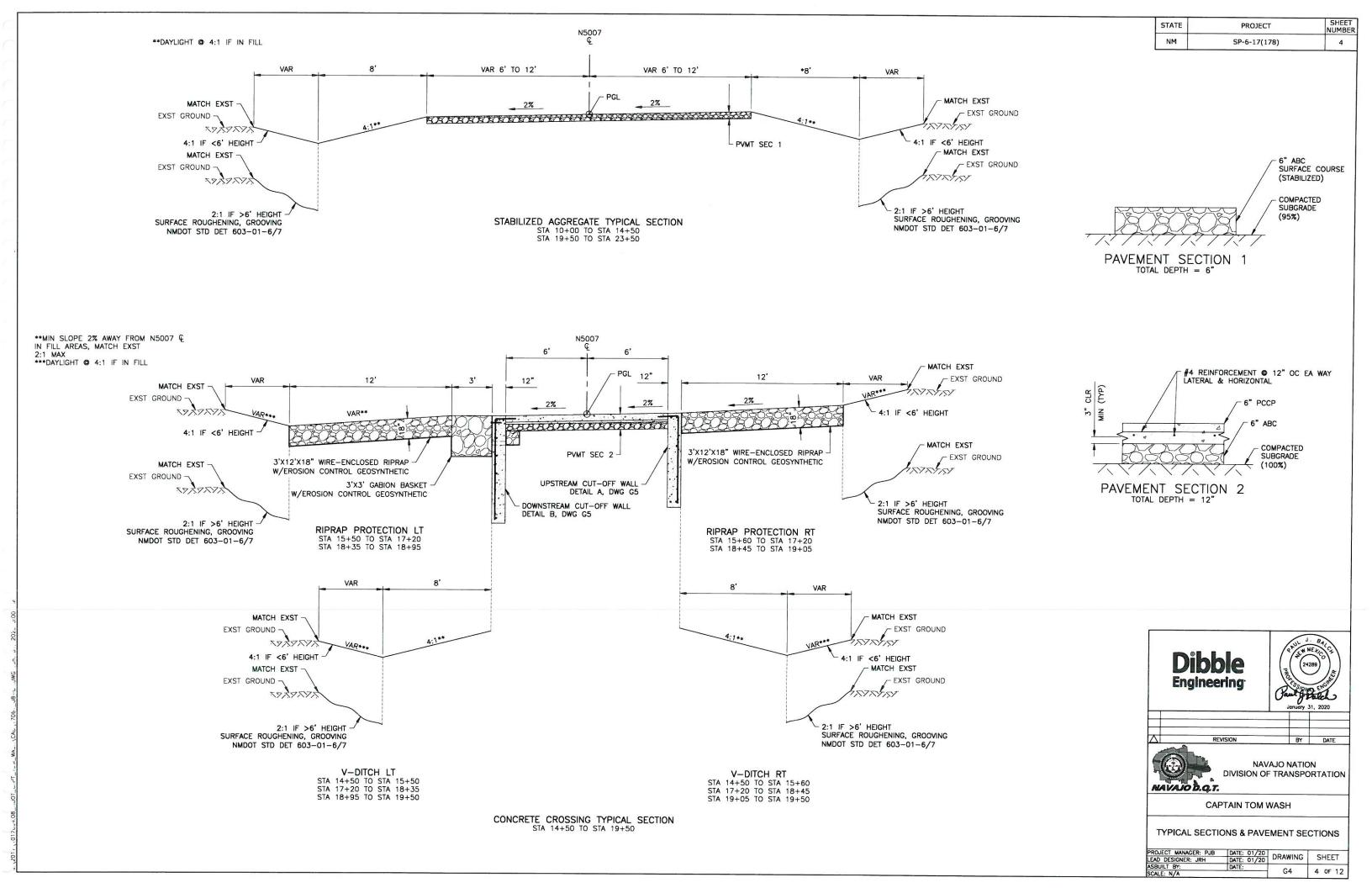
LENGTH OF CURVE LINEAR FEET LUMP SUM LEFT

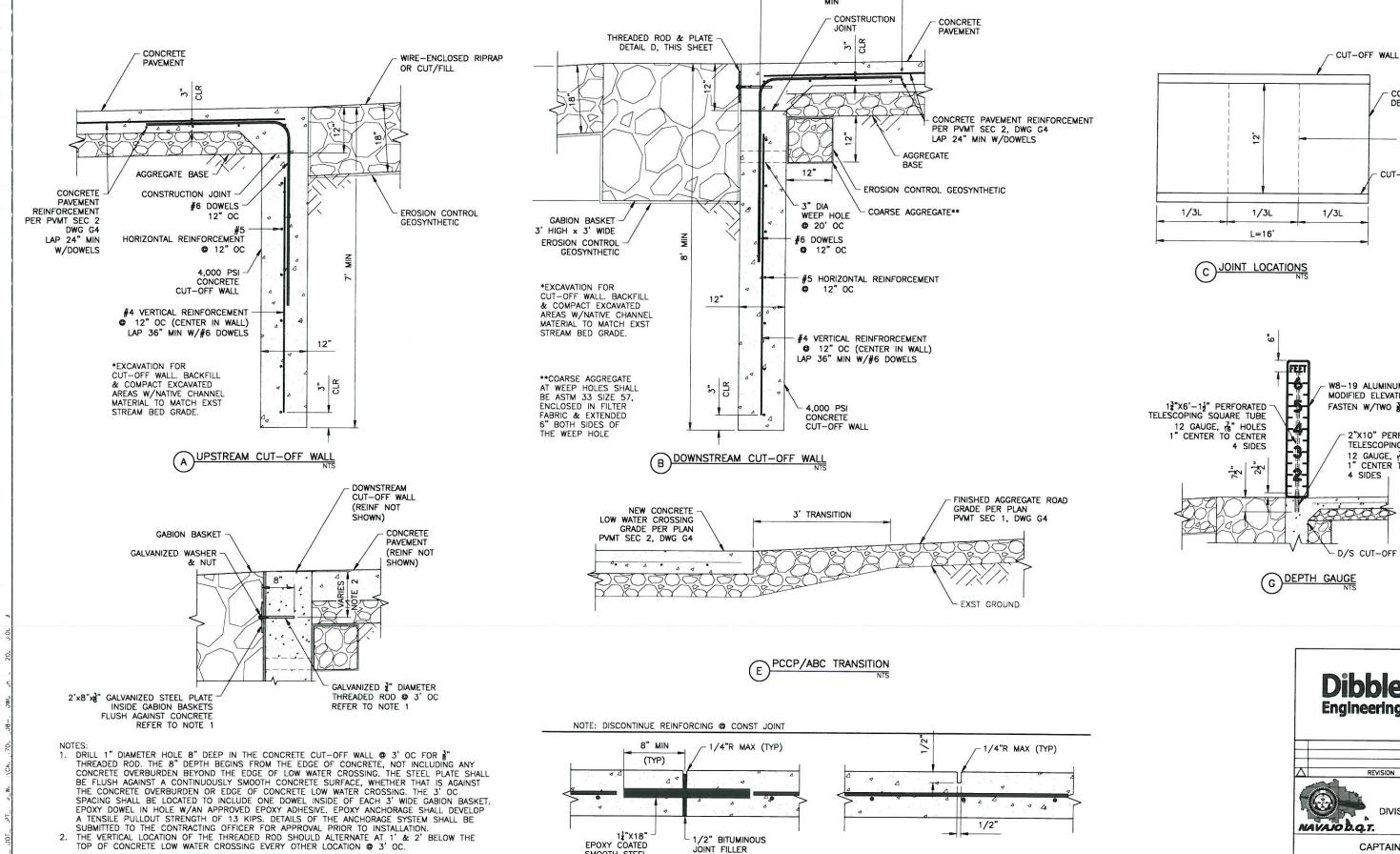
ARANDONED

**AASHTO** 

ARAND

ACFC ACI ACP ACSC ADA ADOT AHD AISC APS ASLD ASTM





SMOOTH STEEL

CONSTRUCTION JOINT

F CONCRETE JOINTS

CONTRACTION JOINT

DOWEL @ 12" OC

D THREADED ROD & PLATE

3'

CONTRACTION JOINT (TYP) DETAIL F, THIS SHEET CUT-OFF WALL 1/3L - W8-19 ALUMINUM SIGN PANEL, BOTH SIDES MODIFIED ELEVATION RANGE FROM 2' TO 6' FASTEN W/TWO 3"X3" BOLTS THROUGH TUBE 2"X10" PERFORATED TELESCOPING SQUARE TUBE 12 GAUGE, 78" HOLES 1" CENTER TO CENTER D/S CUT-OFF WALL G DEPTH GAUGE Dibble **Engineering** REVISION BY DATE NAVAJO NATION DIVISION OF TRANSPORTATION

CAPTAIN TOM WASH

**DETAILS** 

DATE: 01/20 DRAWING

SHEET 5 OF 12

PROJECT MANAGER: PJB LEAD DESIGNER: JRH ASBUILT BY:

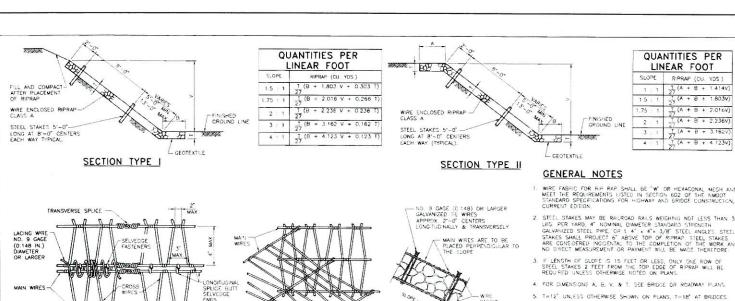
STATE

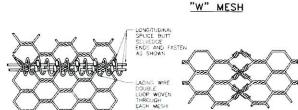
NM

**PROJECT** 

SP-6-17(178)

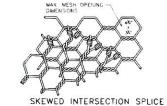
CONSTRUCTION JOINT (TYP) DETAIL F, THIS SHEET





NORMAL INTERSECTION SPLICES

NORMAL INTERSECTION SPLICE TRANSVERSE SPLICE HEXAGONAL MESH



SKEWED INTERSECTION SPLICE

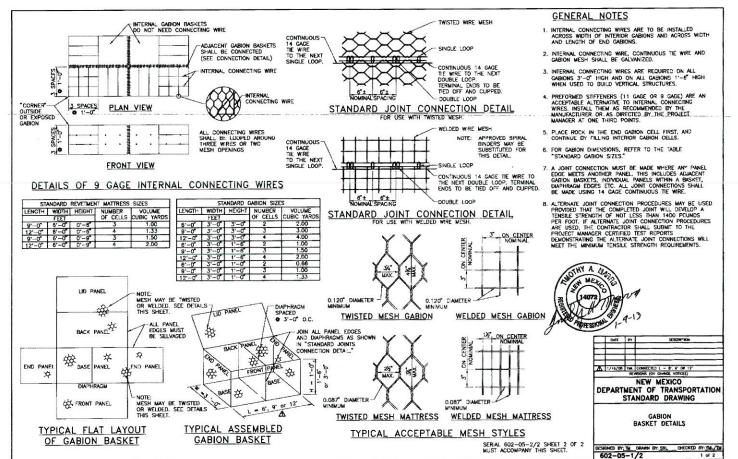
TYPICAL SECTION

- FASTEMERS FOR SPLICES AND/OR SELVEDGE END CONNECTORS MAN BE WIFE THES, INTERLOCKING WIRE CLUPS, HOG RINGS, OR LACING WIFE COMLY PASTEMERS WHICH APPEAR ON THE DEPARTMENT'S "APPROVED PRODUCTS LIST" MAY BE USED.
- LACING SHALL BE CONTINUOUS AS FAR AS IS PRACTICAL AND SHAL PASS THROUGH EACH MESH OPENING.



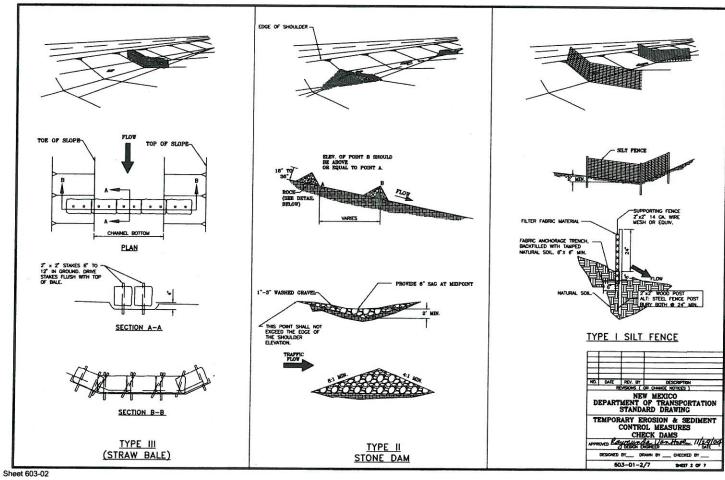
Sheet 602-01

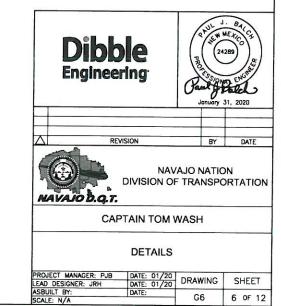
DRAWN BY SKL CHECKED BY YML

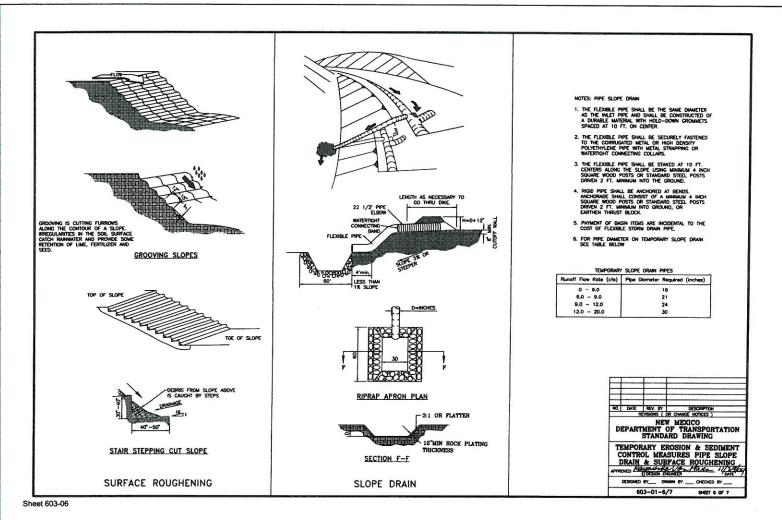


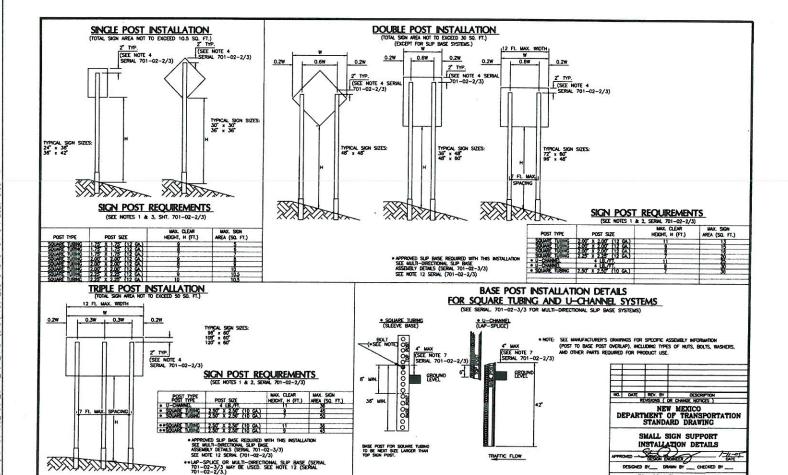
Sheet 602-03

STATE **PROJECT** NUMBER NM SP-6-17(178)

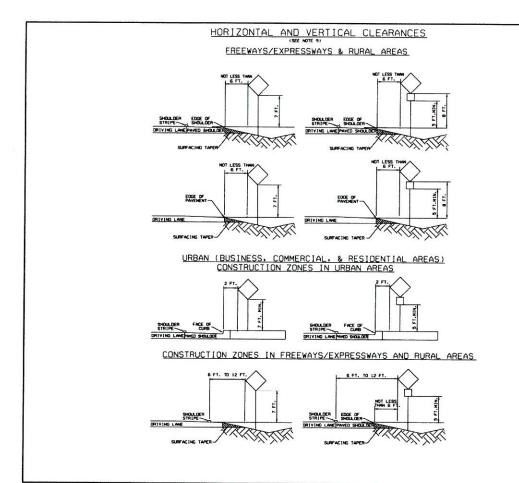






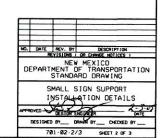


STATE PROJECT NM SP-6-17(178)



GENERAL NOTES:

1. ALL SQUARE TUBING STON POS
18 OR 12 GAUGE THICKNESS.
HININGM YIELD STRENGTH OF





NAVAJO D.Q.T.



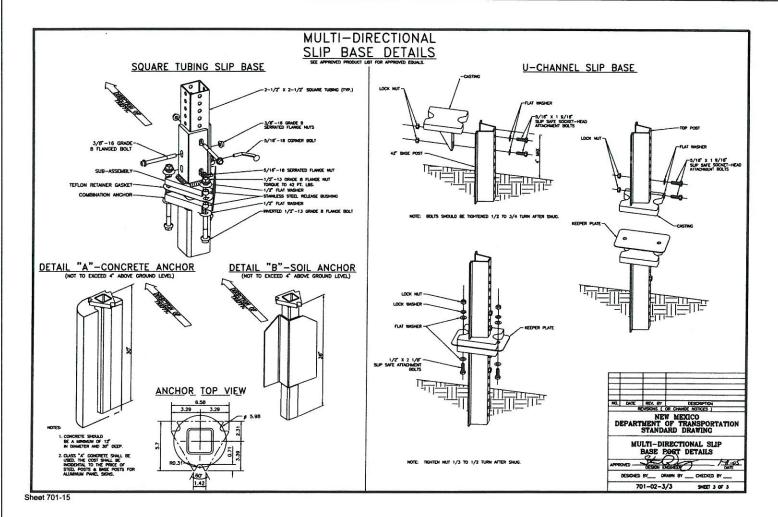
REVISION BY DATE

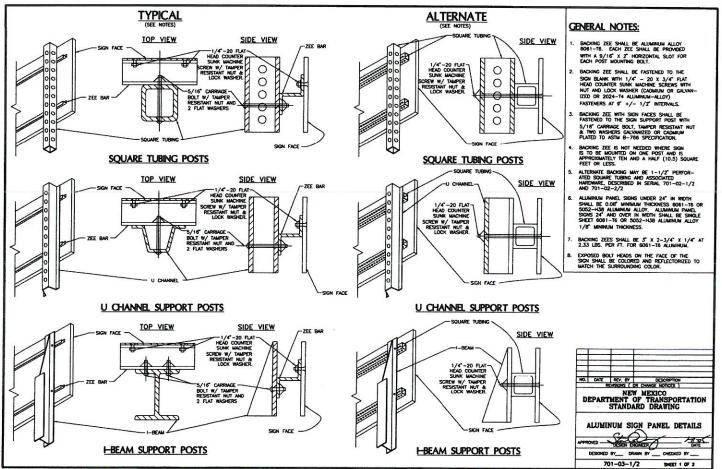
NAVAJO NATION DIVISION OF TRANSPORTATION

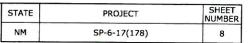
CAPTAIN TOM WASH

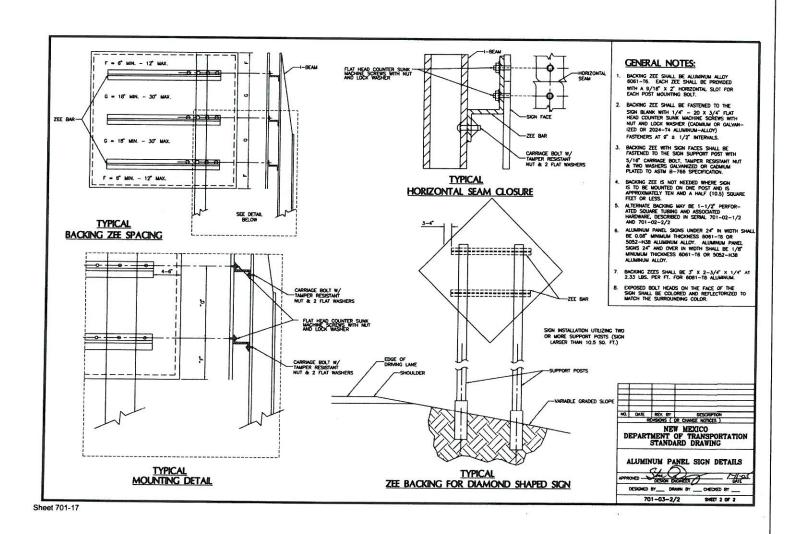
**DETAILS** 

PROJECT MANAGER: PJB DATE: 01/20 LEAD DESIGNER: JRH DATE: 01/20 ASBUILT BY: DATE: SHEET 7 OF 12

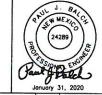












BY DATE

REVISION

NAVAJO D.Q.T.

NAVAJO NATION DIVISION OF TRANSPORTATION

CAPTAIN TOM WASH

**DETAILS** 

PROJECT MANAGER: PJB	DATE: 01/20	DDAWNIO	CUEET
EAD DESIGNER: JRH	DATE: 01/20	DRAWING	(100)
ASBUILT BY:	DATE:		
SCALE: N/A		G8	8 OF 12

