

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, www.nnooc.org, (928) 871- 6317; or, D. Jackson, Navajo DOT, Department of Roads, djackson@navajodot.org, (505)371-8364.

The closing date for this project is May 21, 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.

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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 - <https://navajodot.org/rfp%2Frfg>
- Purchasing Department’s website - <http://www.nnooc.org/RFPs-Advertisements.html>

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, djackson@navajodot.org.

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.

<u>Activities:</u>	<u>Due Date:</u>
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, 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 non-responsive.

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
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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. § 1501 et 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 expense, 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 ½” 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 and Bridge Construction. NMDOT, 2019, specifications can be found at: <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), djackson@navajodot.org.

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.

CERTIFIED NAVAJO BUSINESS: 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

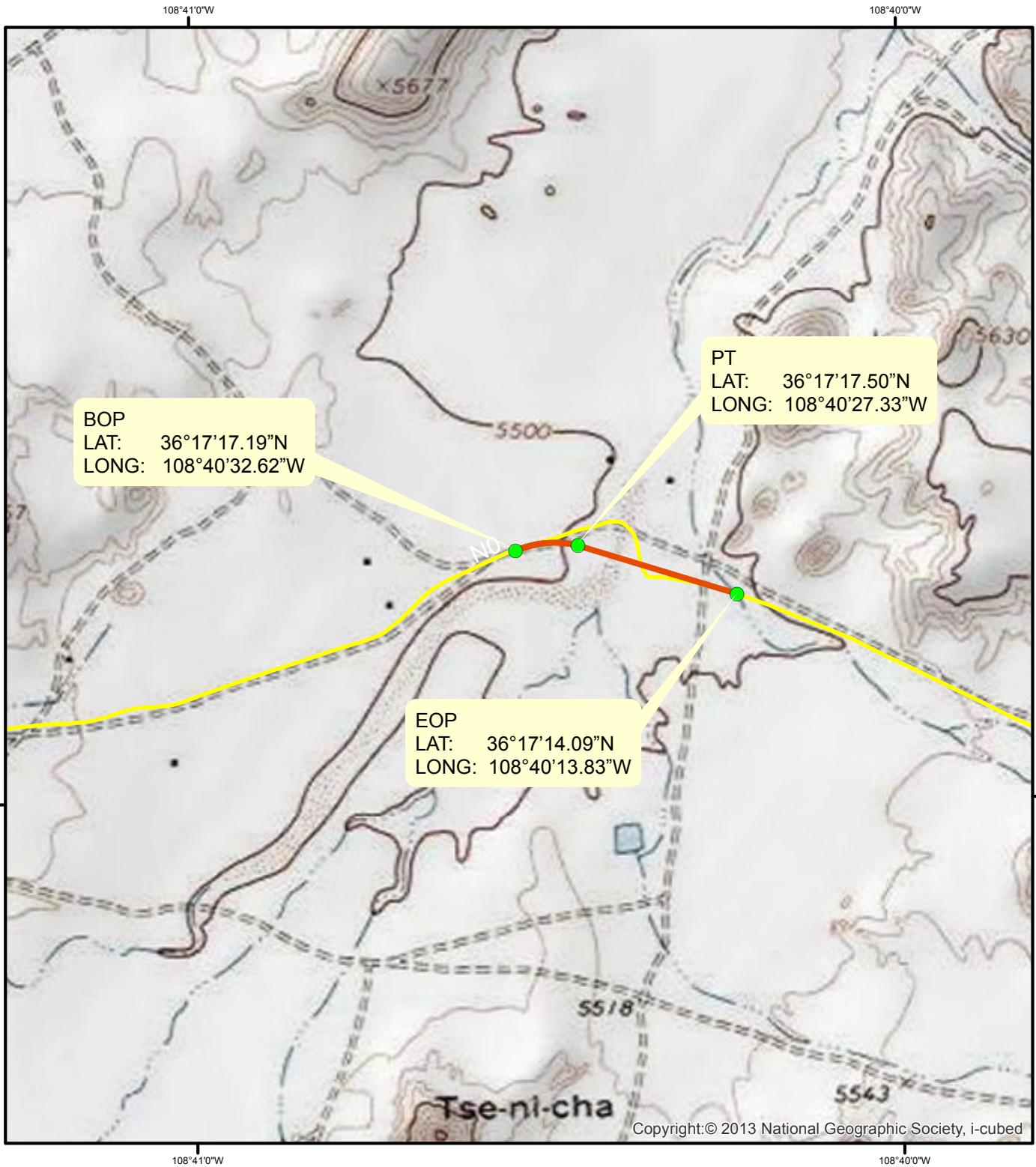
BID SCHEDULE

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		
				CONSTRUCTION SUBTOTAL	
				CONTINGENCY	\$20,000.00
				SUBTOTAL	
				NAVAJO NATION TRIBAL TAX (6%)	
				TOTAL 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.

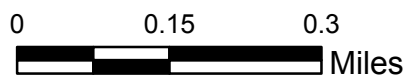


BIA N5007 - Newcomb, NM Northern Agency



Legend

- Re-Alignment N5007 LWC
- Existing N5007 Alignment



Route: N5007
Length: .30 Mile
Date: June 05, 2019
Ownership: BIA



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.

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Appendix A	Potential Locations for Waste Material Redistribution
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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.”
 - <https://dot.state.nm.us/content/nmdot/en/Standards.html>
- 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

201.5 BASIS OF PAYMENT. Add:

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 PREPARATION

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

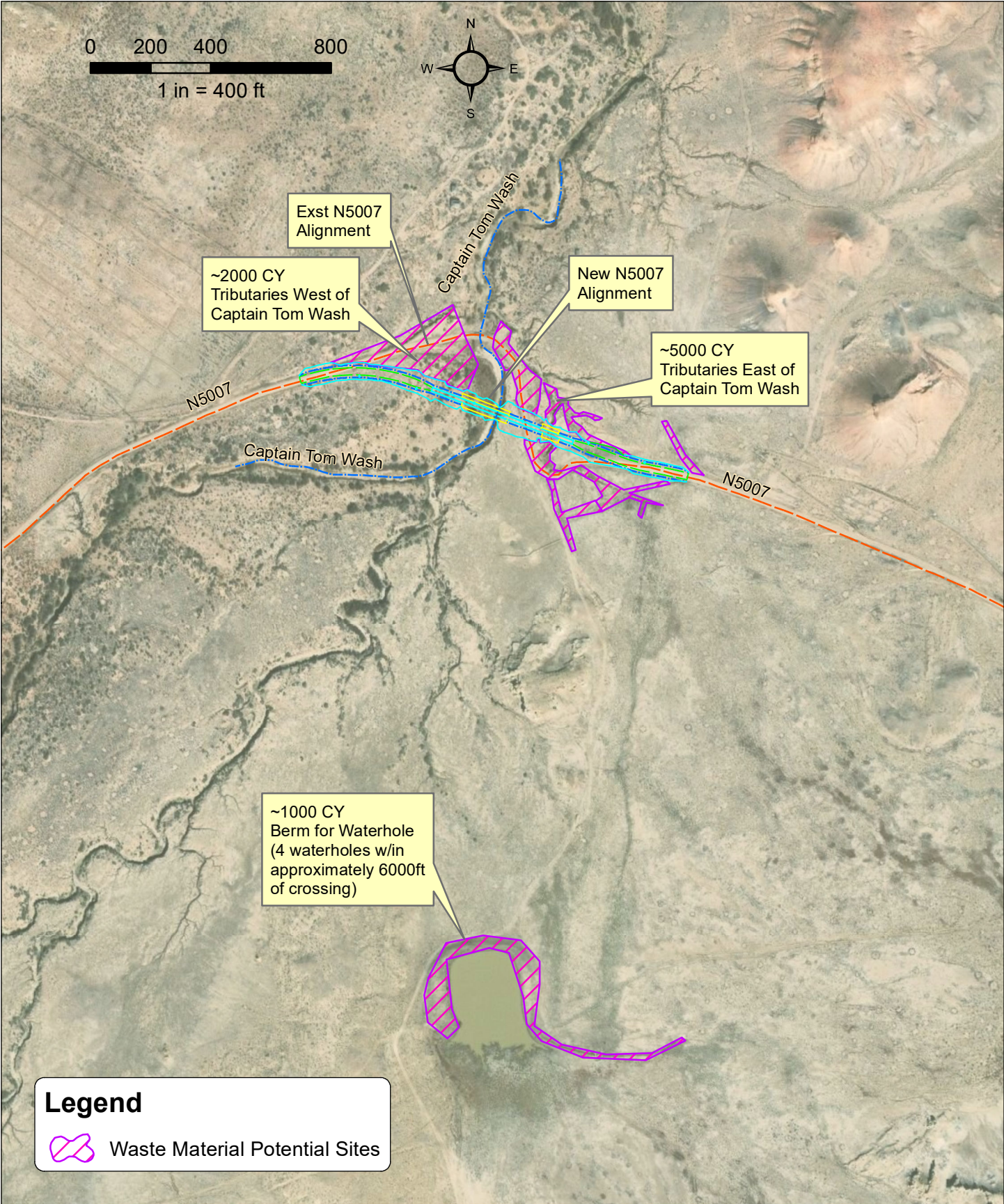
SECTION 902 QUALITY CONTROL

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

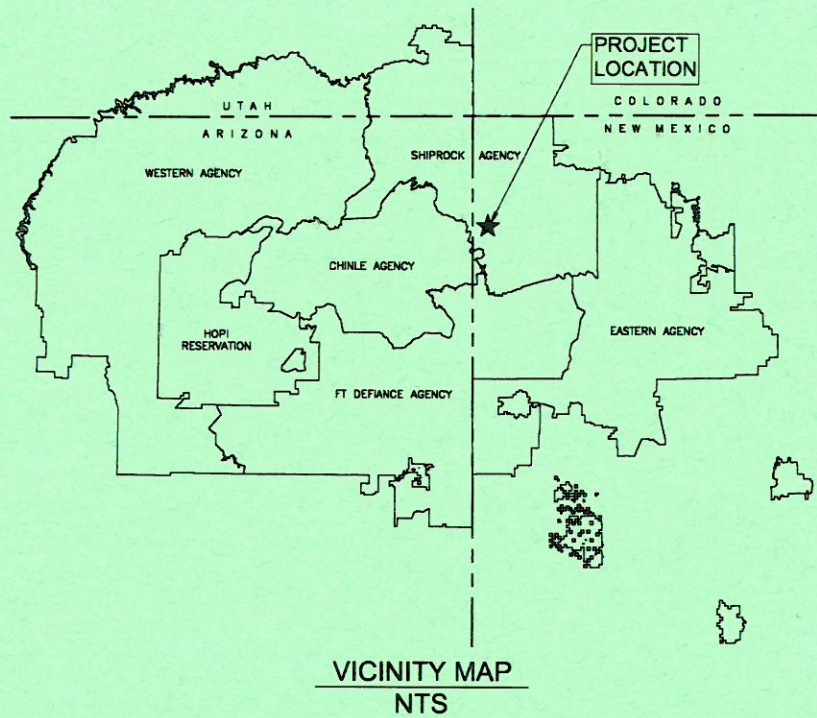
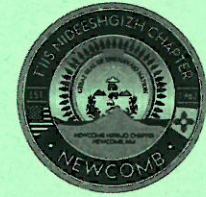
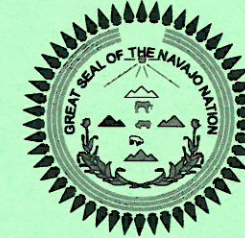
NAVAJO NATION DIVISION OF TRANSPORTATION

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



SHEET INDEX

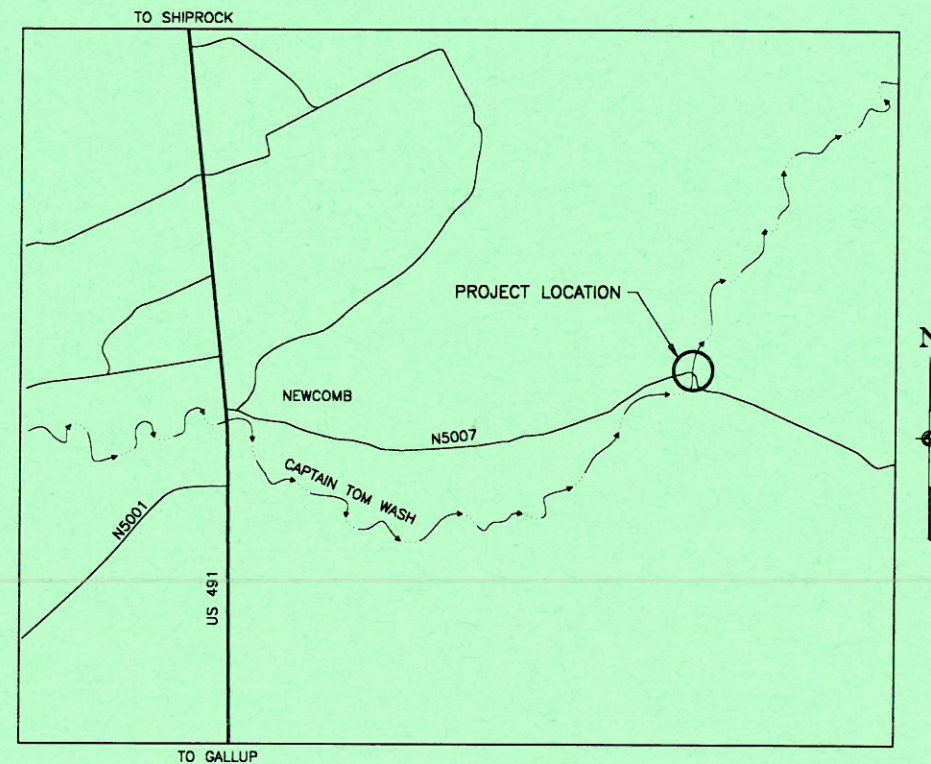
SHEET	DRAWING	DESCRIPTION
1	G1	COVER SHEET
2	G2	STANDARD ABBREVIATIONS, LEGEND, & NOTES
3	G3	SURVEY CONTROL
4	G4	TYPICAL SECTIONS & PAVEMENT SECTIONS
5-8	G5-G8	DETAILS
9-12	PP1-PP4	ROADWAY PLAN & PROFILE

TYPE OF CONSTRUCTION:
Road Reconstruction

DESIGN DESIGNATIONS:
AADT..... 46
e(max)..... 4%
S(MPH)..... 25

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

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



LOCATION MAP
NTS

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



January 31, 2020

PROJECT MANAGER	LEAD DESIGNER
PJB	JRH

STANDARD ABBREVIATIONS & LEGEND & NOTES

STATE	PROJECT	SHEET NUMBER
NM	SP-6-17(178)	2

<p>AASHTO AMERICAN ASSOCIATION OF STATE HIGHWAY & TRANSPORTATION OFFICIALS</p> <p>ABAND ABANDONED</p> <p>ABC AGGREGATE BASE COURSE</p> <p>AC ACRES</p> <p>AC ASPHALT CONCRETE</p> <p>ACFC ASPHALT CONCRETE FRICTION COURSE</p> <p>ACI AMERICAN CONCRETE INSTITUTE</p> <p>ACP ASBESTOS CEMENT PIPE</p> <p>ACSC ASPHALT CONCRETE SURFACE COURSE</p> <p>ADA AMERICANS WITH DISABILITIES ACT</p> <p>ADOT ARIZONA DEPARTMENT OF TRANSPORTATION</p> <p>AHD AHEAD</p> <p>AISC AMERICAN INSTITUTE OF STEEL CONSTRUCTION</p> <p>APS ARIZONA PUBLIC SERVICE</p> <p>ASLD ARIZONA STATE LAND DEPARTMENT</p> <p>ASTM AMERICAN SOCIETY FOR TESTING MATERIALS</p> <p>AVE AVENUE</p> <p>B/C BACK OF CURB</p> <p>BC BRASS CAP</p> <p>BCF BRASS CAP FLUSH</p> <p>BCHH BRASS CAP IN HANDHOLE</p> <p>BCR BEGIN CURB RETURN</p> <p>BK BACK</p> <p>BKFL BACKFILL</p> <p>BLDG BUILDING</p> <p>BLVD BOULEVARD</p> <p>BM BENCHMARK</p> <p>BOT BOTTOM</p> <p>C CONCRETE ELEVATION</p> <p>C CONDUIT</p> <p>C&G CURB & GUTTER</p> <p>CAP CORRUGATED ALUMINUM PIPE</p> <p>CATV CABLE TELEVISION</p> <p>CB CATCH BASIN</p> <p>CIP CAST IRON PIPE</p> <p>CIP CAST IN PLACE</p> <p>CIPP CURED IN PLACE PIPE</p> <p>CK CHECKED</p> <p>CL CENTERLINE</p> <p>CLR CLEAR</p> <p>CMP CORRUGATED METAL PIPE</p> <p>CO CLEAN OUT</p> <p>COMM COMMUNICATION</p> <p>CONC CONCRETE</p> <p>CONST CONSTRUCTION</p> <p>COR CORNER</p> <p>CORR CORRECTION</p> <p>CSP CORRUGATED STEEL PIPE</p> <p>CTB CEMENT TREATED BASE</p> <p>D/W DRIVEWAY</p> <p>DB DUCT BANK</p> <p>DES DESIGN</p> <p>DET DETAIL</p> <p>DG DECOMPOSED GRANITE</p> <p>DIP DUCTILE IRON PIPE</p> <p>DR DRIVE</p> <p>DRN DRAWN</p> <p>DRNG DRAINAGE</p> <p>DWG DRAWING</p> <p>E EAST, EASTING</p> <p>E/R EDGE OF ROAD</p> <p>E/P EDGE OF PAVEMENT</p> <p>EA EACH</p> <p>EB ELECTRIC PULLBOX</p> <p>ECR END CURB RETURN</p> <p>EGL ENERGY GRADE LINE</p> <p>EL ELEVATION</p> <p>ELEC ELECTRIC</p> <p>ESMT EASEMENT</p> <p>EVAC EAST VALLEY ASPHALT COMMITTEE</p> <p>EXST EXISTING</p> <p>F FAX NUMBER</p> <p>F/C FACE OF CURB</p> <p>FCDMC FLOOD CONTROL DISTRICT OF MARICOPA COUNTY</p> <p>FF FINISH FLOOR ELEVATION</p> <p>FG FINISH GRADE ELEVATION</p> <p>FH FIRE HYDRANT</p> <p>FHWA FEDERAL HIGHWAY ADMINISTRATION</p> <p>FL FIRE LINE</p> <p>FL FLOWLINE</p> <p>FL FLANGE</p> <p>FND FOUND</p> <p>FO FIBER OPTIC</p> <p>FT FOOT OR FEET</p> <p>G GUTTER ELEVATION</p> <p>G GAS</p> <p>GAF GRID ADJUSTMENT FACTOR</p> <p>GB GRADE BREAK</p> <p>GM GAS METER</p> <p>GND GROUND</p> <p>GV GAS VALVE</p> <p>H HORIZONTAL</p> <p>HDPE HIGH DENSITY POLYETHYLENE</p> <p>HDWL HEADWALL</p> <p>HGL HYDRAULIC GRADE LINE</p> <p>HP HIGH PRESSURE</p> <p>HW HIGH WATER</p> <p>HWY HIGHWAY</p> <p>ID INSIDE DIAMETER</p> <p>INV INVERT</p> <p>IRR IRRIGATION</p> <p>IV IRRIGATION VALVE</p> <p>L LENGTH OF CURVE</p> <p>LF LINEAR FEET</p> <p>LS LUMP SUM</p> <p>LT LEFT</p>	<p>MAG MARICOPA ASSOCIATION OF GOVERNMENTS</p> <p>MAX MAXIMUM</p> <p>MB MAILBOX</p> <p>MCDOT MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION</p> <p>MCESD MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT</p> <p>ME MATCH EXISTING</p> <p>MH MANHOLE</p> <p>MI MILES</p> <p>MIN MINIMUM</p> <p>MJ MECHANICAL JOINT</p> <p>M MONUMENT LINE</p> <p>MOD MODIFIED</p> <p>N NORTH, NORTHING</p> <p>NC NORMAL CROWN</p> <p>NE NORTHEAST</p> <p>NMDOT NEW MEXICO DEPARTMENT OF TRANSPORTATION</p> <p>NO NUMBER</p> <p>NPDES NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM</p> <p>NPI NON-PAY ITEM</p> <p>NSF NATIONAL SANITATION FOUNDATION</p> <p>NTS NOT TO SCALE</p> <p>NW NORTHWEST</p> <p>OC ON CENTER</p> <p>OD OUTSIDE DIAMETER</p> <p>OHE OVERHEAD ELECTRIC</p> <p>OHT OVERHEAD TELEPHONE</p> <p>P PAVEMENT ELEVATION</p> <p>P PHONE NUMBER</p> <p>PB PULLBOX</p> <p>PC POINT OF CURVATURE</p> <p>PCC POINT OF COMPOUND CURVATURE</p> <p>PCCP PORTLAND CEMENT CONCRETE PAVEMENT</p> <p>PE POLYETHYLENE PIPE</p> <p>PED TELEPHONE PEDESTAL</p> <p>PGL PROFILE GRADE LINE</p> <p>PH# POT HOLE NUMBER</p> <p>PI POINT OF INTERSECTION</p> <p>PIP PROTECT IN PLACE</p> <p>PL PROPERTY LINE</p> <p>PLSS PUBLIC LAND SURVEY SYSTEM</p> <p>POC POINT ON CURVE</p> <p>POT POINT ON TANGENT</p> <p>PP POWER POLE</p> <p>PRC POINT OF REVERSE CURVATURE</p> <p>PROP PROPOSED</p> <p>PSI POUNDS PER SQUARE INCH</p> <p>PT POINT OF TANGENCY</p> <p>PT POINT</p> <p>PUE PUBLIC UTILITY EASEMENT</p> <p>PVC POLY VINYL CHLORIDE</p> <p>PVI POINT OF VERTICAL INTERSECTION</p> <p>PVMT PAVEMENT</p> <p>PVRC POINT OF VERTICAL REVERSE CURVATURE</p> <p>PVT POINT OF VERTICAL TANGENCY</p> <p>R RADIUS</p> <p>R RANGE</p> <p>R/W RIGHT-OF-WAY</p> <p>RCBC REINFORCED CONCRETE BOX CULVERT</p> <p>RCP REINFORCED CONCRETE PIPE</p> <p>RD ROAD</p> <p>RDWY ROADWAY</p> <p>RELOC RELOCATE</p> <p>RGRCP RUBBER GASKET REINFORCED CONCRETE PIPE</p> <p>RR RAILROAD</p> <p>RT RIGHT</p> <p>S SLOPE</p> <p>S SOUTH</p> <p>S/W SIDEWALK</p> <p>SD STORM DRAIN</p> <p>SE SOUTHEAST</p> <p>SEC SECTION</p> <p>SF SQUARE FOOT</p> <p>SG SUBGRADE ELEVATION</p> <p>SHLDR SHOULDER</p> <p>SHT SHEET</p> <p>SPEC SPECIFICATIONS</p> <p>SRP SALT RIVER PROJECT</p> <p>SS SANITARY SEWER</p> <p>SSD STOPPING SIGHT DISTANCE</p> <p>ST STREET</p> <p>STA STATION</p> <p>STD STANDARD</p> <p>STL STEEL</p> <p>SW SOUTHWEST</p> <p>SWG SOUTHWEST GAS COMPANY</p> <p>SY SQUARE YARD</p> <p>T TOWNSHIP</p> <p>T TANGENT LENGTH</p> <p>T/W TOP OF WALL</p> <p>TBM TEMPORARY BENCHMARK</p> <p>TC TOP OF CURB</p> <p>TCE TEMPORARY CONSTRUCTION EASEMENT</p> <p>TEL TELEPHONE</p> <p>TEMP TEMPORARY</p> <p>TN TOP OF NUT</p> <p>TOE TOE OF EMBANKMENT</p> <p>TOP TOP</p> <p>TRAN TRANSITE PIPE</p> <p>TS TRAFFIC SIGNAL</p> <p>TYP TYPICAL</p>	<p>UNK UNKNOWN</p> <p>UPRR UNION PACIFIC RAILROAD</p> <p>V VERTICAL</p> <p>VAR VARIES</p> <p>VC VERTICAL CURVE</p> <p>VCP VITRIFIED CLAY PIPE</p> <p>VG VALLEY GUTTER</p> <p>VNAE VEHICULAR NON ACCESS EASEMENT</p> <p>W WEST</p> <p>W WATER</p> <p>W/W WITH</p> <p>W/O WITHOUT</p> <p>WM WATER METER</p> <p>WSE WATER SURFACE ELEVATION</p> <p>WV WATER VALVE</p> <p>XFMR TRANSFORMER</p>
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	EXISTING	NEW
	BENCHMARK	BENCHMARK
	BRASS CAP FLUSH	BRASS CAP FLUSH
	BRASS CAP IN HANDHOLE	BRASS CAP IN HANDHOLE
	BACKFLOW PREVENTER	BACKFLOW PREVENTER
	CACTUS	CACTUS
	DRYWELL	DRYWELL
	FIRE HYDRANT	FIRE HYDRANT
	FIRE DEPT CONNECTION	FIRE DEPT CONNECTION
	FLAG POLE	FLAG POLE
	GATE	GATE
	GRATE	GRATE
	GUY WIRE	GUY WIRE
	HEADWALL	HEADWALL
	MAILBOX	MAILBOX
	MANHOLE (TYPE NOTED)	MANHOLE
	METER (TYPE NOTED)	METER
	PEDESTAL (TYPE NOTED)	PIPE PLUG
	PULLBOX (TYPE NOTED)	PULLBOX
	RIPRAP	RIPRAP
	ROCK	ROCK
	SHRUB	SHRUB
	SIGN	SIGN
	STREET LIGHT	STREET LIGHT
	TREE	TREE
	UTILITY POLE	UTILITY POLE
	VALVE (TYPE NOTED)	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	
	CHANNEL	CHANNEL
	CURB & GUTTER	CURB & GUTTER
	EDGE OF PAVEMENT	DAYLIGHT LINE, CUT
	FENCE WOOD	DAYLIGHT LINE, FILL
	FENCE WIRE	EDGE OF PAVEMENT
	FENCE CHAINLINK	EDGE OF UNPAVED ROADWAY
	FLOWLINE	FENCE WOOD
	GUARDRAIL	FENCE WIRE
	MASONRY WALL/RETAINING WALL	FENCE CHAINLINK
	MAJOR CONTOUR	FLOWLINE
	MINOR CONTOUR	GUARDRAIL
	RAILROAD	MASONRY WALL/RETAINING WALL
	SINGLE CURB	MAJOR CONTOUR
	SIDEWALK	MINOR CONTOUR
		SIDEWALK
		SINGLE CURB
		PCCP
		ABC
		GABION MATTRESS
		GABION BASKET
		SURFACE ROUGHENING
		STONE CHECK DAM

	EXISTING	NEW
	CABLE TV	STORM DRAIN
	COMMUNICATION	UTILITY LINE
	ELECTRIC (UNDERGROUND)	
	ELECTRIC (OVERHEAD)	
	FIBER OPTIC	
	FIRE LINE	
	GAS	
	IRRIGATION LINE 18" OR SMALLER	
	IRRIGATION LINE 21" OR LARGER	
	RECLAIMED WATER 18" OR SMALLER	
	RECLAIMED WATER 21" OR LARGER	
	TELEPHONE	
	SEWER LINE 18" OR SMALLER	
	SEWER LINE 21" OR LARGER	
	STORM DRAIN 18" OR SMALLER	
	STORM DRAIN 21" OR LARGER	
	WATER LINE 18" OR SMALLER	
	WATER LINE 21" OR LARGER	

- ### GENERAL NOTES
- THIS PROJECT HAS BEEN DESIGNED USING: NMDOT STANDARD SPECIFICATIONS FOR HIGHWAY & BRIDGE CONSTRUCTION (2019)
 - 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 TO NDOT.
 - 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 LOCATE THE EXISTING GAS LINE PRIOR TO COMMENCEMENT OF ANY WORK AROUND THE NTUA NATURAL GAS FACILITIES. CONTRACTOR SHALL LOCATE NTUA NATURAL GAS FACILITIES, 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.
 - 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.
 - THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION SURVEY & STAKING.
 - QUANTITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ALL QUANTITIES.

Dibble Engineering

REVISION	By	DATE

NAVAJO NATION
DIVISION OF TRANSPORTATION

CAPTAIN TOM WASH

STANDARD ABBREVIATIONS, LEGEND, & NOTES

PROJECT MANAGER: PJB	DATE: 01/20	DRAWING	SHEET
LEAD DESIGNER: JRH	DATE: 01/20		
ASBUILT BY:	DATE:	G2	2 OF 12
SCALE: N/A			

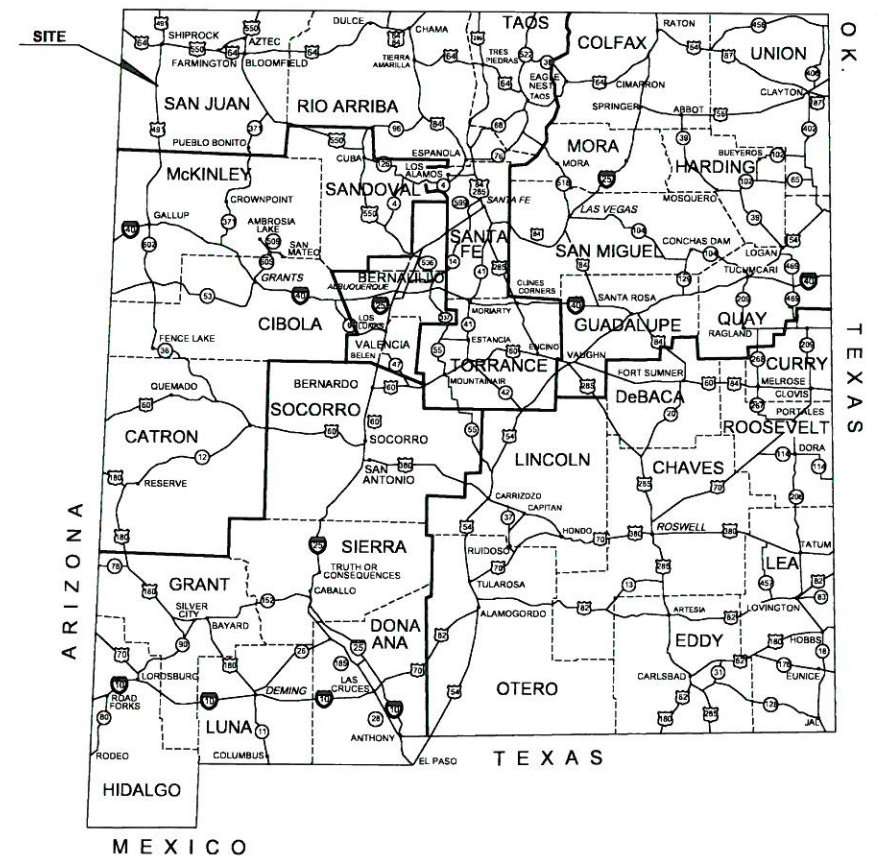
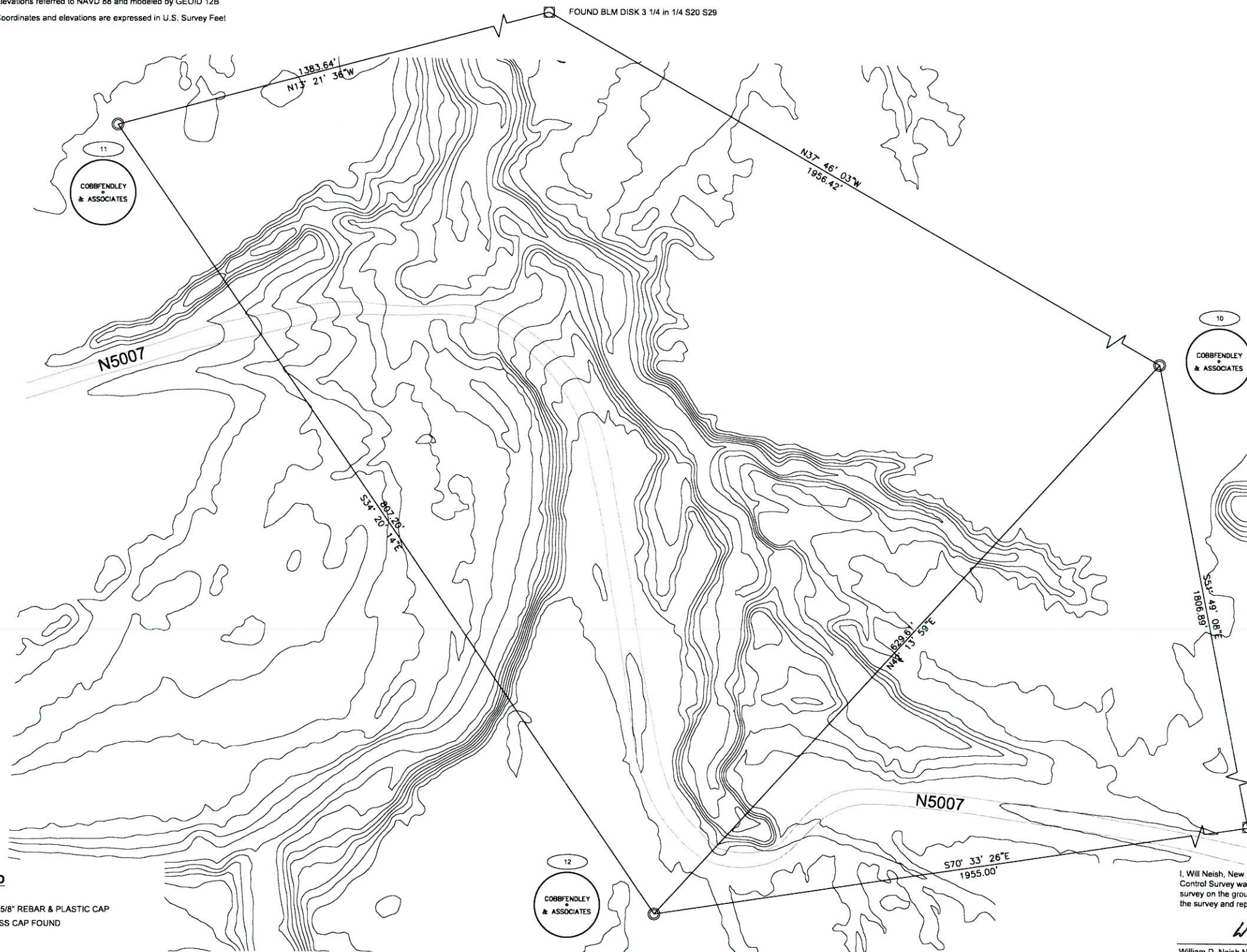
GENERAL NOTES:

- Horizontal Datum and Vertical Datums are NAD 83(2011)(EPOCH:2010.0000), NAVD 88, respectively.
- GEOID 12B was used to model the vertical plane.
- Coordinates are GROUND MODIFIED based on the New Mexico State Plane West Zone projection, modified about 0.00' North, 0.00' East using a project combined GRID TO GROUND scale factor of 1.00027351.
- Bearings are New Mexico State Plane West Zone NAD 83 GRID bearings.
- Units are in US Survey Feet.
- NGS OPUS was used as the coordinate basis of the control. For points "CP-10, CP-11, and CP-12", an NGS OPUS solution was used as the basis of geospatial positioning. Two OPUS Observations were used to determine the values for Points "CP-10, CP-11, and CP-12". RTK GPS procedures were used to verify the geospatial relationships between the points. Trimble R8 GPS receivers were used in the survey.
- The control monuments were set, observed, and adjusted in July, 2019.
- The data is delivered in the following format:
 - Modified Ground New Mexico State Plane Coordinates (NAD 83-West Zone)
 - Elevations referred to NAVD 88 and modeled by GEOID 12B
 - Coordinates and elevations are expressed in U.S. Survey Feet

STATE	PROJECT	SHEET NUMBER
NM	SP-6-17(178)	3

LOCAL PROJECT GROUND COORDINATES

STATION	NORTHING (U.S. FEET)	EASTING (U.S. FEET)	ELEVATION (U.S. FEET)	DESCRIPTION	LOCATION
CP-10	1925914.913	2476811.588	5503.010	SET 5/8" REBAR & PLASTIC CAP	2.01 MILES E. OF US 491 APPROX. 392' NE OF N5007.
CP-11	1926115.269	2475933.487	5503.290	SET 5/8" REBAR & PLASTIC CAP	1.8 MILES E. OF US 491 APPROX. 192' NW OF N5007.
CP-12	1925448.738	2476388.797	5504.610	SET 5/8" REBAR & PLASTIC CAP	1.94 MILES E. OF US 491 APPROX. 68' SW OF N5007.



VICINITY MAP
(NOT TO SCALE)

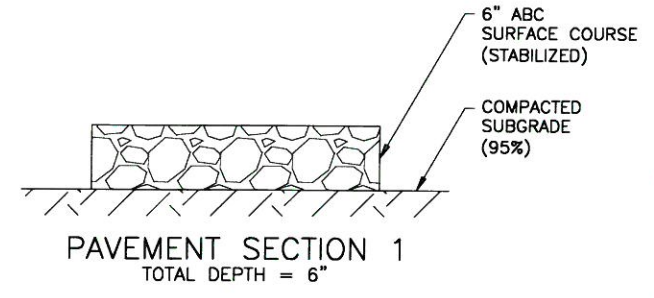
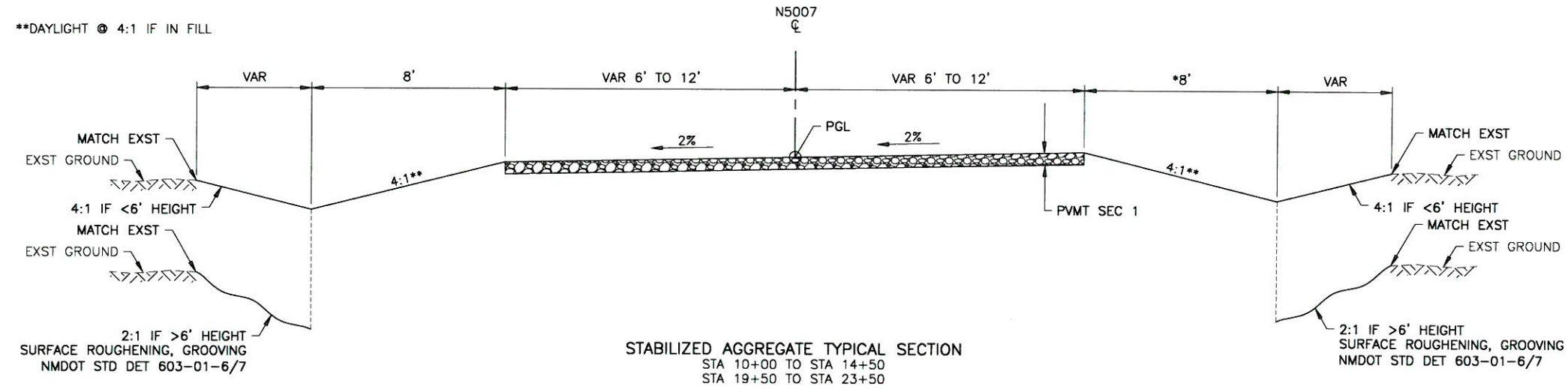
- LEGEND**
- SET 5/8" REBAR & PLASTIC CAP
 - BRASS CAP FOUND

I, Will Neish, New Mexico Professional Surveyor No. 21081, do hereby certify that this Control Survey was prepared by me or under my direct supervision based on an actual survey on the ground as described herein; that I am responsible for this survey, and that the survey and report meet the minimum standards for surveying in New Mexico.

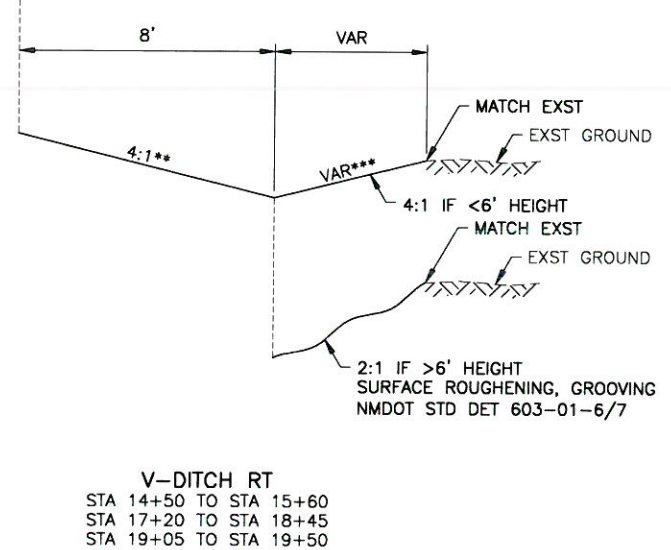
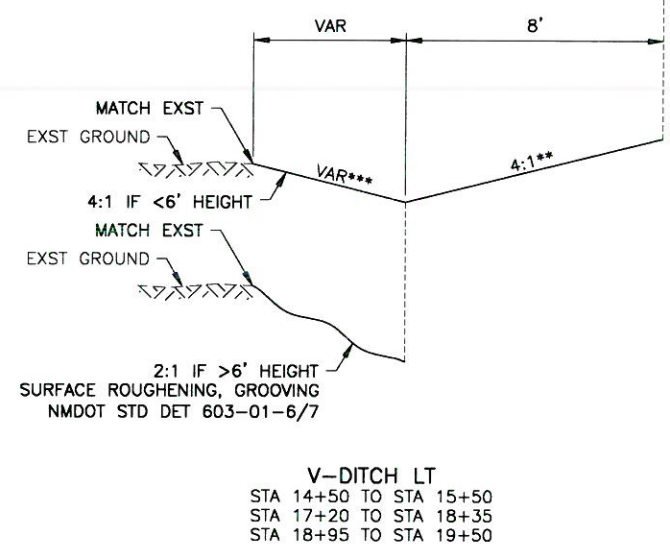
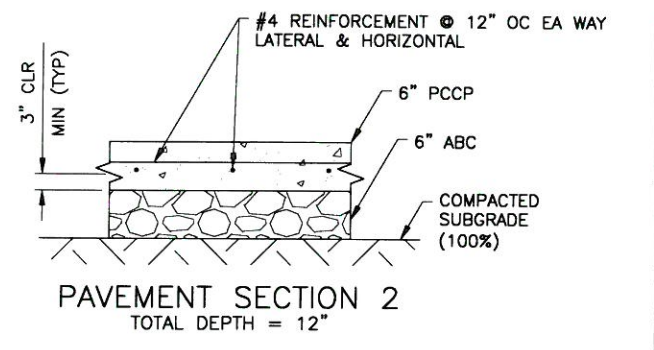
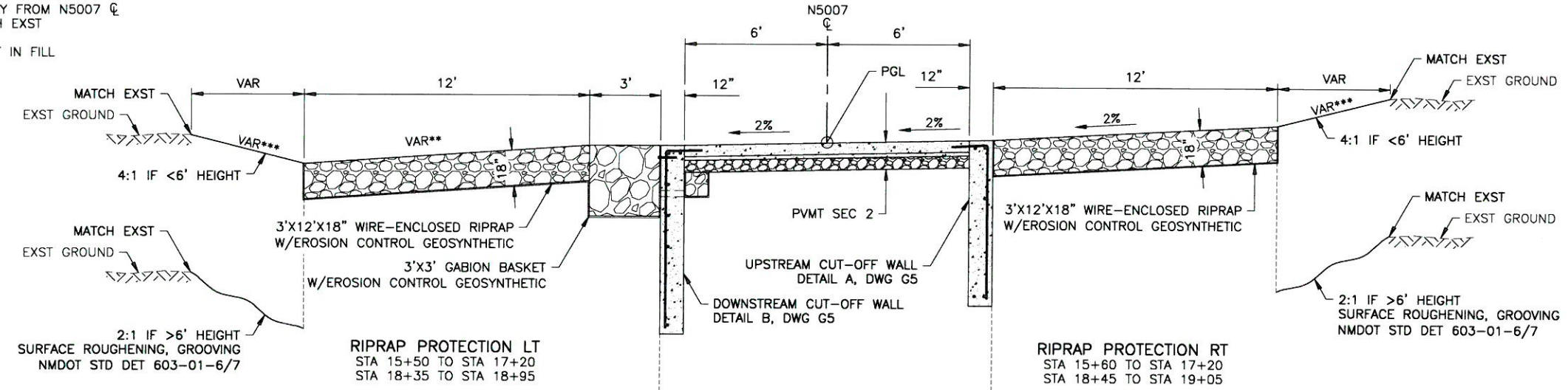
William D. Neish NMPS#21081
COBB, FENDLEY & ASSOCIATES, INC.
3820 ACADEMY PARKWAY NORTH N.E.
ALBUQUERQUE, N.M. 87109
PH. (505) 508-0786

November 20, 2019
DATE

<p>3820 Academy Parkway North N.E. Albuquerque, New Mexico 87109 PH. (505) 508-0786</p>			
<p>NAVAJO NATION DIVISION OF TRANSPORTATION</p> <p>CAPTAIN TOM WASH</p>			
<p>SURVEY CONTROL</p>			
PROJECT MANAGER: WDN	DATE: 11/19	DRAWING	SHEET
LEAD DESIGNER: WDN	DATE: 11/19	G3	3 OF 12
ASBUILT BY:	DATE: 11/19	SCALE: 1" = 50'	



**MIN SLOPE 2% AWAY FROM N5007 CL
 IN FILL AREAS, MATCH EXST
 2:1 MAX
 ***DAYLIGHT @ 4:1 IF IN FILL



Dibble Engineering

PAUL J. BALCH
 NEW MEXICO
 24288
 PROFESSIONAL ENGINEER
 Paul J. Balch
 January 31, 2020

REVISION	By	DATE

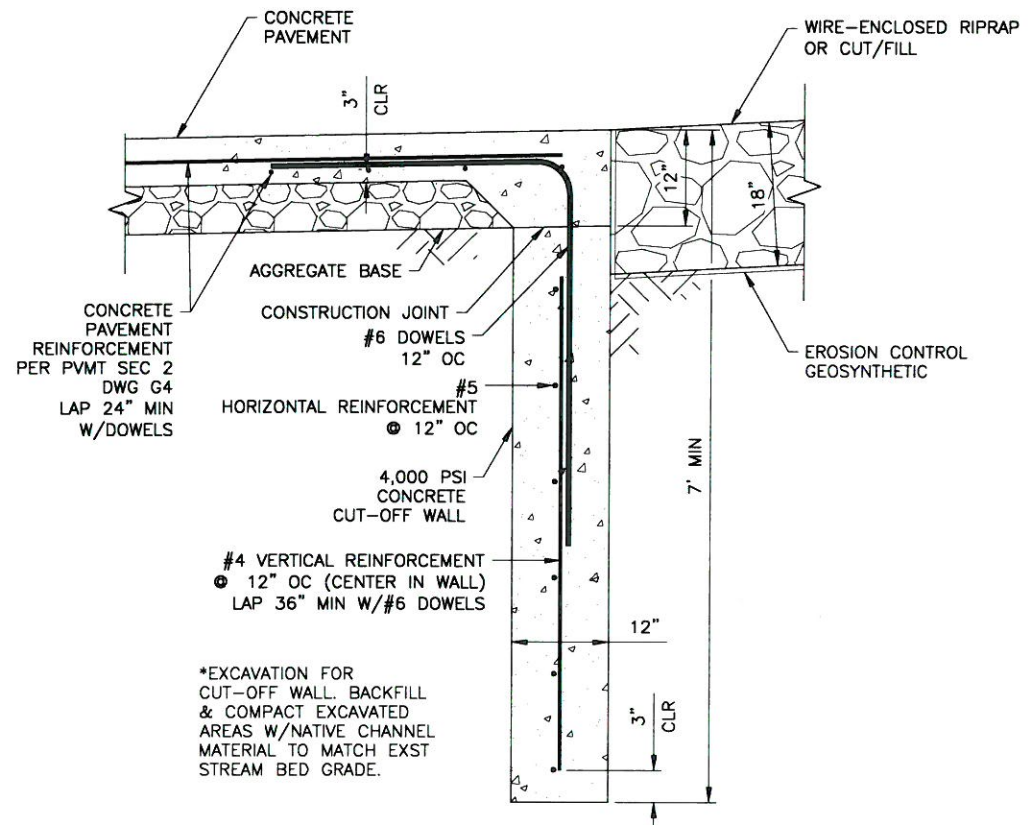
NAVAJO NATION
 DIVISION OF TRANSPORTATION

NAVAJO D.Q.T.

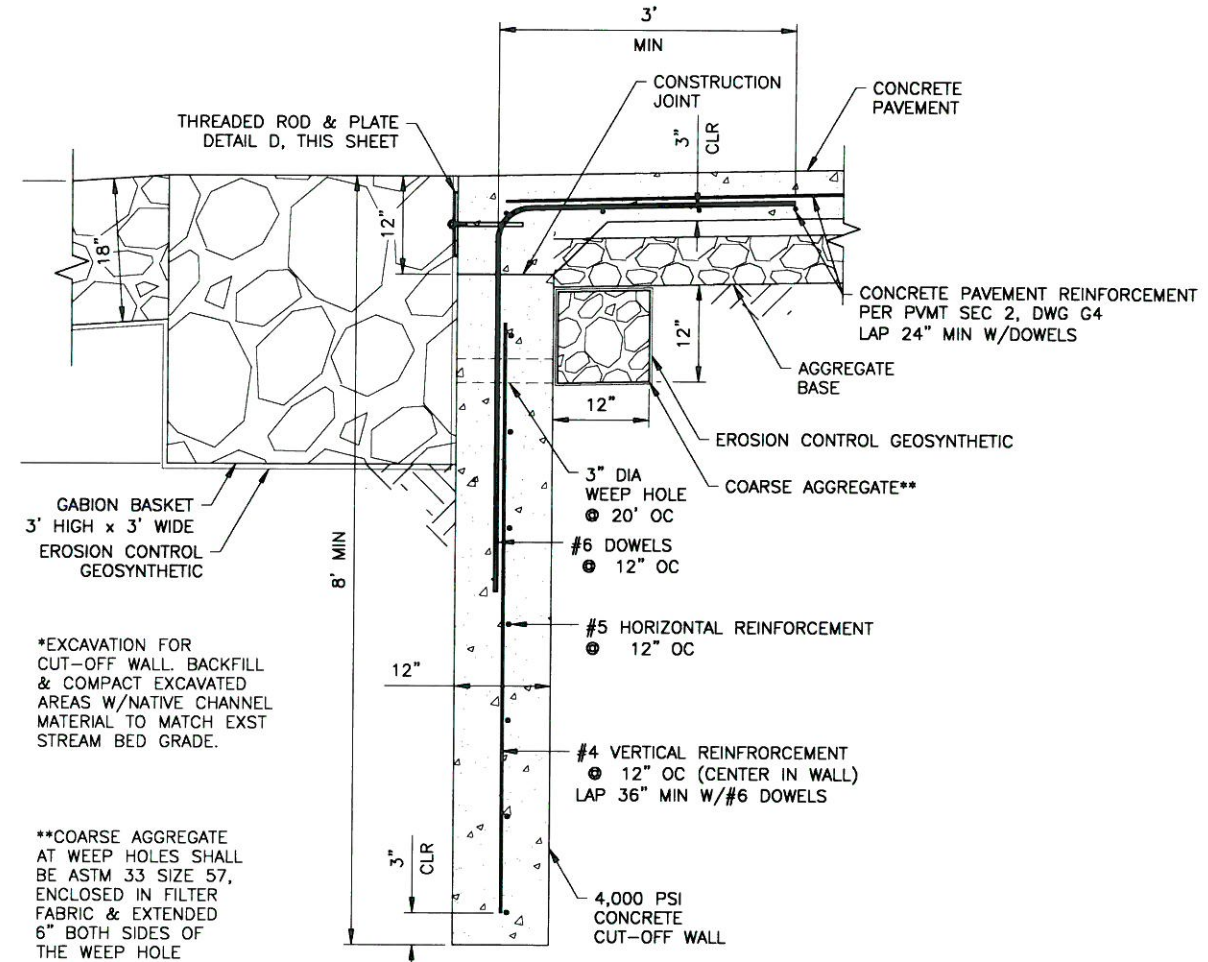
CAPTAIN TOM WASH

TYPICAL SECTIONS & PAVEMENT SECTIONS

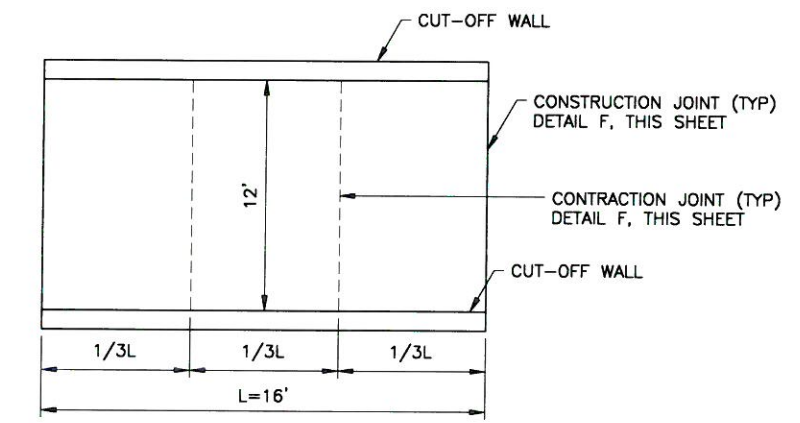
PROJECT MANAGER: PJB	DATE: 01/20	DRAWING	SHEET
LEAD DESIGNER: JRH	DATE: 01/20	G4	4 OF 12
ASBUILT BY:	DATE:		
SCALE: N/A			



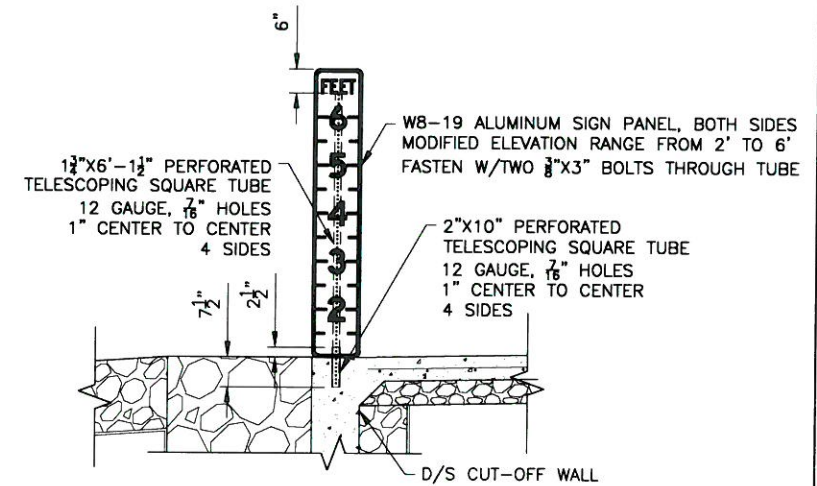
(A) UPSTREAM CUT-OFF WALL
NTS



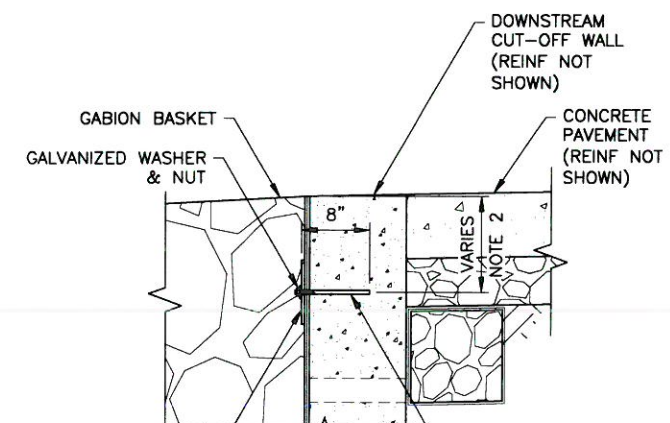
(B) DOWNSTREAM CUT-OFF WALL
NTS



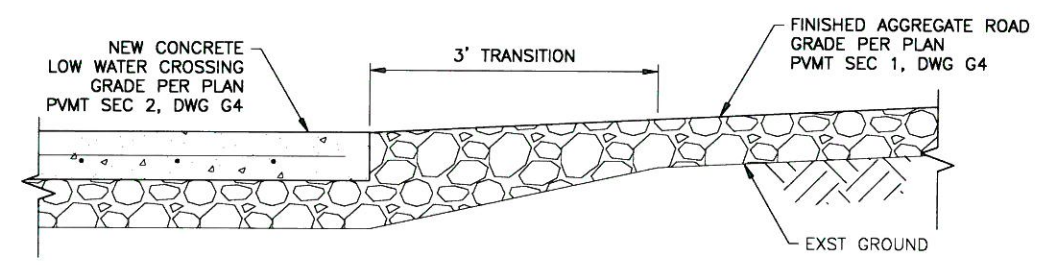
(C) JOINT LOCATIONS
NTS



(G) DEPTH GAUGE
NTS



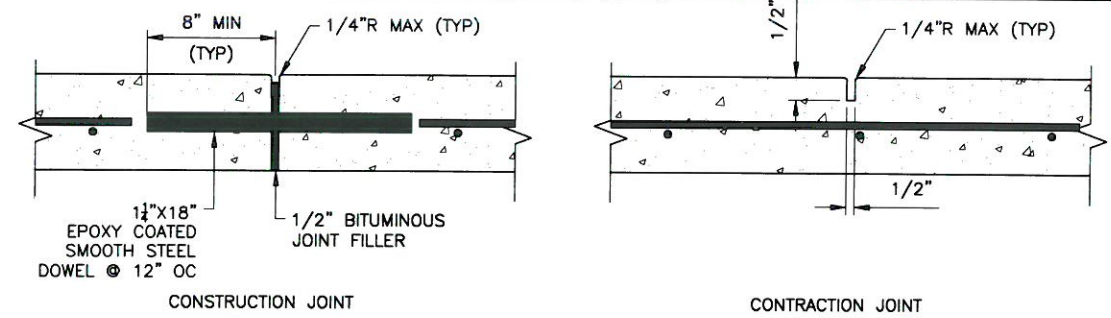
(D) THREADED ROD & PLATE
NTS



(E) PCCP/ABC TRANSITION
NTS

NOTES:
1. DRILL 1" DIAMETER HOLE 8" DEEP IN THE CONCRETE CUT-OFF WALL @ 3' OC FOR 3/4" THREADED ROD. THE 8" DEPTH BEGINS FROM THE EDGE OF CONCRETE, NOT INCLUDING ANY CONCRETE OVERBURDEN BEYOND THE EDGE OF LOW WATER CROSSING. THE STEEL PLATE SHALL BE FLUSH AGAINST A CONTINUOUSLY SMOOTH CONCRETE SURFACE, WHETHER THAT IS AGAINST THE CONCRETE OVERBURDEN OR EDGE OF CONCRETE LOW WATER CROSSING. THE 3' OC SPACING SHALL BE LOCATED TO INCLUDE ONE DOWEL INSIDE OF EACH 3' WIDE GABION BASKET. EPOXY DOWEL IN HOLE W/AN APPROVED EPOXY ADHESIVE. EPOXY ANCHORAGE SHALL DEVELOP A TENSILE PULLOUT STRENGTH OF 13 KIPS. DETAILS OF THE ANCHORAGE SYSTEM SHALL BE SUBMITTED TO THE CONTRACTING OFFICER FOR APPROVAL PRIOR TO INSTALLATION.
2. THE VERTICAL LOCATION OF THE THREADED ROD SHOULD ALTERNATE AT 1' & 2' BELOW THE TOP OF CONCRETE LOW WATER CROSSING EVERY OTHER LOCATION @ 3' OC.

NOTE: DISCONTINUE REINFORCING @ CONST JOINT



(F) CONCRETE JOINTS
NTS

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NAVAJO NATION DIVISION OF TRANSPORTATION			
CAPTAIN TOM WASH			
DETAILS			
PROJECT MANAGER: PJB	DATE: 01/20	DRAWING	SHEET
LEAD DESIGNER: JRH	DATE: 01/20	G5	5 OF 12
ASBUILT BY:	DATE:		
SCALE: N/A			

QUANTITIES PER LINEAR FOOT

SLOPE	RIPRAP (CU. YDS.)
1.5 : 1	$\frac{1}{27} (B + 1.803 V + 0.303 T)$
1.75 : 1	$\frac{1}{27} (B + 2.016 V + 0.266 T)$
2 : 1	$\frac{1}{27} (B + 2.236 V + 0.236 T)$
3 : 1	$\frac{1}{27} (B + 3.162 V + 0.162 T)$
4 : 1	$\frac{1}{27} (B + 4.123 V + 0.123 T)$

QUANTITIES PER LINEAR FOOT

SLOPE	RIPRAP (CU. YDS.)
1 : 1	$\frac{1}{27} (A + B + 1.414V)$
1.5 : 1	$\frac{1}{27} (A + B + 1.803V)$
1.75 : 1	$\frac{1}{27} (A + B + 2.016V)$
2 : 1	$\frac{1}{27} (A + B + 2.236V)$
3 : 1	$\frac{1}{27} (A + B + 3.162V)$
4 : 1	$\frac{1}{27} (A + B + 4.123V)$

GENERAL NOTES

- WIRE FABRIC FOR RIP RAP SHALL BE "W" OR HEXAGONAL MESH AND MEET THE REQUIREMENTS LISTED IN SECTION 602 OF THE NMDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, CURRENT EDITION.
- STEEL STAKES MAY BE RAILROAD RAILS WEIGHING NOT LESS THAN 30 LBS PER YARD, 4" NOMINAL DIAMETER STANDARD STRENGTH GALVANIZED STEEL PIPE, OR 1 1/4" x 4" x 3/8" STEEL ANGLE. STEEL STAKES SHALL PROJECT 6" ABOVE TOP OF RIPRAP. STEEL STAKES ARE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE WORK AND NO DIRECT MEASUREMENT OR PAYMENT WILL BE MADE THEREFORE.
- IF LENGTH OF SLOPE IS 15 FEET OR LESS, ONLY ONE ROW OF STEEL STAKES 2 FEET FROM THE TOP EDGE OF RIPRAP WILL BE REQUIRED UNLESS OTHERWISE NOTED ON PLANS.
- FOR DIMENSIONS A, B, V, & T, SEE BRIDGE OR ROADWAY PLANS.
- T=12' UNLESS OTHERWISE SHOWN ON PLANS, T=18' AT BRIDGES.
- FASTENERS FOR SPLICES AND/OR SELVEDGE END CONNECTORS MAY BE WIRE TIES, INTERLOCKING WIRE CLIPS, HOG RINGS, OR LACING WIRE. ONLY FASTENERS WHICH APPEAR ON THE DEPARTMENT'S "APPROVED PRODUCTS LIST" MAY BE USED.
- LACING SHALL BE CONTINUOUS AS FAR AS IS PRACTICAL AND SHALL PASS THROUGH EACH MESH OPENING.
- WHERE SPACING IS NECESSARY, AN OVERLAP OF LACING OF AT LEAST 1 FOOT SHALL BE PROVIDED.

"W" MESH

TYPICAL SECTION

TRANSVERSE SPLICE

HEXAGONAL MESH

NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING
602-01-1/1 Sheet 602-01

SECTION A-A

SECTION B-B

GENERAL NOTES

- WIRE FABRIC FOR RIP RAP SHALL BE "W" OR HEXAGONAL MESH AND MEET THE REQUIREMENTS LISTED IN SECTION 602 OF THE NMDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, CURRENT EDITION.
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- LACING SHALL BE CONTINUOUS AS FAR AS IS PRACTICAL AND SHALL PASS THROUGH EACH MESH OPENING.
- WHERE SPACING IS NECESSARY, AN OVERLAP OF LACING OF AT LEAST 1 FOOT SHALL BE PROVIDED.

TYPE I SILT FENCE

TYPE II STONE DAM

NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING
603-01-2/7 Sheet 2 of 7

FRONT VIEW

STANDARD JOINT CONNECTION DETAIL

DETAILS OF 9 GAGE INTERNAL CONNECTING WIRES

STANDARD REVEALMENT MATTRESS SIZES				STANDARD GABION SIZES			
LENGTH FEET	WIDTH FEET	HEIGHT FEET	VOLUME CUBIC YARDS	LENGTH FEET	WIDTH FEET	HEIGHT FEET	VOLUME CUBIC YARDS
9'-0"	6'-0"	0'-8"	1.00	6'-0"	3'-0"	3'-0"	2.00
12'-0"	6'-0"	0'-8"	1.33	9'-0"	3'-0"	3'-0"	3.00
9'-0"	6'-0"	0'-9"	1.50	12'-0"	3'-0"	3'-0"	4.00
12'-0"	6'-0"	0'-9"	2.00	6'-0"	3'-0"	1'-6"	1.00
				9'-0"	3'-0"	1'-6"	1.50
				12'-0"	3'-0"	1'-6"	2.00
				6'-0"	3'-0"	1'-0"	0.66
				9'-0"	3'-0"	1'-0"	1.00
				12'-0"	3'-0"	1'-0"	1.33

TYPICAL FLAT LAYOUT OF GABION BASKET

TYPICAL ASSEMBLED GABION BASKET

TYPICAL ACCEPTABLE MESH STYLES

GENERAL NOTES

- INTERNAL CONNECTING WIRES ARE TO BE INSTALLED ACROSS WIDTH OF INTERIOR GABIONS AND ACROSS WIDTH AND LENGTH OF END GABIONS.
- INTERNAL CONNECTING WIRE, CONTINUOUS TIE WIRE AND GABION MESH SHALL BE GALVANIZED.
- INTERNAL CONNECTING WIRES ARE REQUIRED ON ALL GABIONS 3'-0" HIGH AND ON ALL GABIONS 1'-6" HIGH WHEN USED TO BUILD VERTICAL STRUCTURES.
- PREFORMED STIFFENERS (11 GAGE OR 9 GAGE) ARE AN ACCEPTABLE ALTERNATIVE TO INTERNAL CONNECTING WIRES. INSTALL THEM AS RECOMMENDED BY THE MANUFACTURER OR AS DIRECTED BY THE PROJECT MANAGER AT ONE THIRD POINTS.
- PLACE ROCK IN THE END GABION CELL FIRST, AND CONTINUE BY FILLING INTERIOR GABION CELLS.
- FOR GABION DIMENSIONS, REFER TO THE TABLE "STANDARD GABION SIZES."
- A JOINT CONNECTION MUST BE MADE WHERE ANY PANEL EDGE MEETS ANOTHER PANEL. THIS INCLUDES ADJACENT GABION BASKETS, INDIVIDUAL PANELS WITHIN A BASKET, DIAPHRAGM EDGES, ETC. ALL JOINT CONNECTIONS SHALL BE MADE USING 14 GAGE CONTINUOUS TIE WIRE.
- ALTERNATE JOINT CONNECTION PROCEDURES MAY BE USED PROVIDED THAT THE COMPLETED JOINT WILL DEVELOP A TENSILE STRENGTH OF NOT LESS THAN 1400 POUNDS PER FOOT. IF ALTERNATE JOINT CONNECTION PROCEDURES ARE USED, THE CONTRACTOR SHALL SUBMIT TO THE PROJECT MANAGER CERTIFIED TEST REPORTS DEMONSTRATING THE ALTERNATE JOINT CONNECTIONS WILL MEET THE MINIMUM TENSILE STRENGTH REQUIREMENTS.

NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING
602-05-2/2 Sheet 2 of 2
602-05-1/2 Sheet 602-05

Dibble Engineering

NAVAJO NATION DIVISION OF TRANSPORTATION

NAVAJO D.O.T.

CAPTAIN TOM WASH

DETAILS

PROJECT MANAGER: PJB	DATE: 01/20	DRAWING	SHEET
LEAD DESIGNER: JRH	DATE: 01/20	G6	6 OF 12
ASBUILT BY:	DATE:		
SCALE: N/A			

GROOVING SLOPES
GROOVING IS CUTTING FURROWS ALONG THE CONTOUR OF A SLOPE. IRREGULARITIES IN THE SOIL SURFACE CATCH RAINWATER AND PROVIDE SOME RETENTION OF LIME, FERTILIZER AND SEED.

STAIR STEPPING CUT SLOPE
DEBRIS FROM SLOPE ABOVE IS CAUGHT BY STEPS.

SURFACE ROUGHENING

SLOPE DRAIN
SECTION F-F
22 1/2" PIPE ELBOW
WATER TIGHT CONNECTING BAND
FLEXIBLE PIPE
LENGTH AS NECESSARY TO GO THRU DKE.
H=0+12"
SLOPE 3% OR STEEPER
LESS THAN 1% SLOPE
4" MIN.
60"
CURB WALL
D=INCHES
30"
RIPRAP APRON PLAN
12" MIN ROCK PLATING THICKNESS
3:1 OR FLATTER

NOTES: PIPE SLOPE DRAIN

1. THE FLEXIBLE PIPE SHALL BE THE SAME DIAMETER AS THE INLET PIPE AND SHALL BE CONSTRUCTED OF A DURABLE MATERIAL WITH HOLD-DOWN GROMMETS SPACED AT 10 FT. ON CENTER.
2. THE FLEXIBLE PIPE SHALL BE SECURELY FASTENED TO THE CORRUGATED METAL OR HIGH DENSITY POLYETHYLENE PIPE WITH METAL STRAPPING OR WATER TIGHT CONNECTING COLLARS.
3. THE FLEXIBLE PIPE SHALL BE STAKED AT 10 FT. CENTERS ALONG THE SLOPE USING MINIMUM 4 INCH SQUARE WOOD POSTS OR STANDARD STEEL POSTS DRIVEN 2 FT. MINIMUM INTO THE GROUND.
4. RIGID PIPE SHALL BE ANCHORED AT BENDS. ANCHORAGE SHALL CONSIST OF A MINIMUM 4 INCH SQUARE WOOD POSTS OR STANDARD STEEL POSTS DRIVEN 2 FT. MINIMUM INTO GROUND, OR EARTHEN THRUST BLOCK.
5. PAYMENT OF BASIN ITEMS ARE INCIDENTAL TO THE COST OF FLEXIBLE STORM DRAIN PIPE.
6. FOR PIPE DIAMETER ON TEMPORARY SLOPE DRAIN SEE TABLE BELOW.

Runoff Flow Rate (cfs)	Pipe Diameter Required (inches)
0 - 6.0	18
6.0 - 9.0	21
9.0 - 12.0	24
12.0 - 20.0	30

DESIGNED BY: _____ DRAWN BY: _____ CHECKED BY: _____
803-01-6/7 SHEET 6 OF 7

Sheet 603-06

HORIZONTAL AND VERTICAL CLEARANCES
(SEE NOTE 9)
FREEWAYS/EXPRESSWAYS & RURAL AREAS

URBAN (BUSINESS, COMMERCIAL, & RESIDENTIAL AREAS) CONSTRUCTION ZONES IN URBAN AREAS

CONSTRUCTION ZONES IN FREEWAYS/EXPRESSWAYS AND RURAL AREAS

GENERAL NOTES:

1. ALL SQUARE TUBING SIGN POST REQUIREMENTS ARE BASED ON A 16 OR 12 GAUGE THICKNESS. POSTS AS 78 GAUGE 58 STEEL, A MINIMUM YIELD STRENGTH OF 68,000 PSI AND A 78 MPH WIND LOAD. ALL U-CHANNEL SIGN POSTS REQUIREMENTS ARE BASED ON A MINIMUM YIELD STRENGTH OF 68,000 PSI AND 85 MPH WIND LOAD. SEE THE MUTCO & STANDARD HIGHWAY SIGNS MANUAL (CURRENT EDITION) FOR FURTHER GUIDANCE.
2. FOR CONSTRUCTION SIGNING & PERMANENT SINGLE AND TRIPLE POST INSTALLATIONS, SMALLER POST CROSS SECTIONS MAY BE USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND THE RECOMMENDATIONS DETAILED IN NOTE 1.
3. TOP EDGE OF POSTS SHALL NOT EXTEND PAST TOP EDGE OF SIGN.
4. STEEL POSTS, BASE POSTS, AND SLIP BASES FOR ALUMINUM PANEL SIGNS SHALL BE SELECTED FROM THE DEPARTMENT'S APPROVED PRODUCT LIST. ALL SIGNS MOUNTED WITHIN THE CLEAR ZONE SHALL BE MOUNTED ON A MOHP REPORT 208 APPROVED SIGN POST/BASE POST BREAKAWAY SYSTEM UNLESS INSTALLATION IS LOCATED BEHIND A NON-GATING LONGITUDINAL BARRIER. OTHER INSTALLATIONS, CONFIGURATIONS OR SYSTEMS NOT SHOWN MAY BE USED AS RECOMMENDED BY THE MANUFACTURER WITH APPROVAL OF THE DISTRICT TRAFFIC ENGINEER.
5. FOR INSTALLATIONS ON WEAK (SOFT) SOIL, SOIL PLATES SHALL BE USED AS RECOMMENDED BY THE MANUFACTURER. PAYMENT FOR SOIL PLATES SHALL BE INCIDENTAL TO THE SIGN INSTALLATION.
6. BASE POSTS SHALL NOT EXTEND MORE THAN 4" ABOVE GROUND LEVEL AND SHALL BE OF THE SAME WEIGHT/GAUGE AND TYPE AS THE SIGN POST.
7. INTERMIXING OF U-CHANNEL AND SQUARE TUBING POSTS, POSTS OF DIFFERENT WEIGHTS/GAUGES OR PRODUCT BRANDS IS NOT ALLOWED EXCEPT WHERE RECOMMENDED BY THE MANUFACTURER.
8. HORIZONTAL CLEARANCES APPLY TO INSTALLATIONS ON LEFT AND RIGHT SIDE OF ROADWAY.
9. SUPPLEMENTAL SIGNS SHALL NOT BE ATTACHED DIRECTLY TO PRIMARY PANELS OR EITHER PERMANENT OR CONSTRUCTION SIGNING INSTALLATIONS.
10. SPACING BETWEEN SUPPLEMENTAL PANELS AND PRIMARY PANELS SHALL NOT EXCEED 6".
11. SIGN PANELS PLACED PARALLEL TO TRAFFIC SHALL BE MOUNTED ON A MULTI-DIRECTIONAL BREAKAWAY SYSTEM. (SEE SERIAL 701-82-3/3)

DESIGNED BY: _____ DRAWN BY: _____ CHECKED BY: _____
781-82-2/3 SHEET 2 OF 3

SINGLE POST INSTALLATION
(TOTAL SIGN AREA NOT TO EXCEED 10.5 SQ. FT.)

DOUBLE POST INSTALLATION
(TOTAL SIGN AREA NOT TO EXCEED 30 SQ. FT.)
(EXCEPT FOR SLIP BASE SYSTEMS.)

TRIPLE POST INSTALLATION
(TOTAL SIGN AREA NOT TO EXCEED 50 SQ. FT.)

BASE POST INSTALLATION DETAILS FOR SQUARE TUBING AND U-CHANNEL SYSTEMS
(SEE SERIAL 701-02-3/3 FOR MULTI-DIRECTIONAL SLIP BASE SYSTEMS)

SIGN POST REQUIREMENTS
(SEE NOTES 1 & 3, SERIAL 701-02-2/3)

POST TYPE	POST SIZE	MAX. CLEAR HEIGHT, H (FT.)	MAX. SIGN AREA (SQ. FT.)
U-CHANNEL	2" x 2" (10 GA.)	10	10.5
SQUARE TUBING	2.5" x 2.5" (10 GA.)	10	10.5
SQUARE TUBING	2.5" x 2.5" (12 GA.)	10	10.5

SIGN POST REQUIREMENTS
(SEE NOTES 1 & 2, SERIAL 701-02-2/3)

POST TYPE	POST SIZE	MAX. CLEAR HEIGHT, H (FT.)	MAX. SIGN AREA (SQ. FT.)
U-CHANNEL	2" x 2" (10 GA.)	10	10.5
SQUARE TUBING	2.5" x 2.5" (10 GA.)	10	10.5
SQUARE TUBING	2.5" x 2.5" (12 GA.)	10	10.5

SIGN POST REQUIREMENTS
(SEE NOTES 1 & 2, SERIAL 701-02-2/3)

POST TYPE	POST SIZE	MAX. CLEAR HEIGHT, H (FT.)	MAX. SIGN AREA (SQ. FT.)
U-CHANNEL	2" x 2" (10 GA.)	10	10.5
SQUARE TUBING	2.5" x 2.5" (10 GA.)	10	10.5
SQUARE TUBING	2.5" x 2.5" (12 GA.)	10	10.5

SIGN POST REQUIREMENTS
(SEE NOTES 1 & 2, SERIAL 701-02-2/3)

POST TYPE	POST SIZE	MAX. CLEAR HEIGHT, H (FT.)	MAX. SIGN AREA (SQ. FT.)
U-CHANNEL	2" x 2" (10 GA.)	10	10.5
SQUARE TUBING	2.5" x 2.5" (10 GA.)	10	10.5
SQUARE TUBING	2.5" x 2.5" (12 GA.)	10	10.5

BASE POST INSTALLATION DETAILS FOR SQUARE TUBING AND U-CHANNEL SYSTEMS
(SEE SERIAL 701-02-3/3 FOR MULTI-DIRECTIONAL SLIP BASE SYSTEMS)

SIGN POST REQUIREMENTS
(SEE NOTES 1 & 2, SERIAL 701-02-2/3)

POST TYPE	POST SIZE	MAX. CLEAR HEIGHT, H (FT.)	MAX. SIGN AREA (SQ. FT.)
U-CHANNEL	2" x 2" (10 GA.)	10	10.5
SQUARE TUBING	2.5" x 2.5" (10 GA.)	10	10.5
SQUARE TUBING	2.5" x 2.5" (12 GA.)	10	10.5

BASE POST FOR SQUARE TUBING TO BE NEXT SIZE LARGER THAN TOP SIGN POST.

DESIGNED BY: _____ DRAWN BY: _____ CHECKED BY: _____
701-02-1/3 SHEET 1 OF 3

Sheet 701-13

Sheet 701-14

Dibble Engineering

PAUL J. BALCH
NEW MEXICO PROFESSIONAL ENGINEER
24289
January 31, 2020

NAVAJO NATION
DIVISION OF TRANSPORTATION
NAVAJO D.O.T.

CAPTAIN TOM WASH

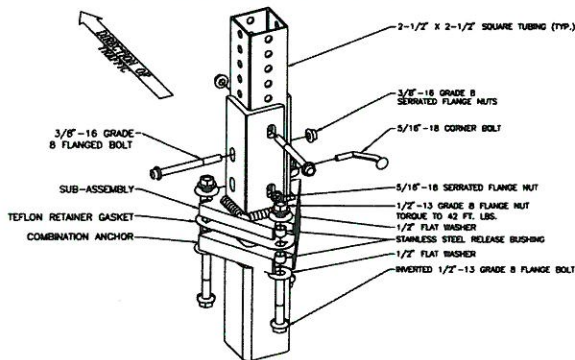
DETAILS

PROJECT MANAGER: PUB	DATE: 01/20	DRAWING	SHEET
LEAD DESIGNER: JRH	DATE: 01/20		
ASBUILT BY:	DATE:	G7	7 OF 12
SCALE: N/A			

MULTI-DIRECTIONAL SLIP BASE DETAILS

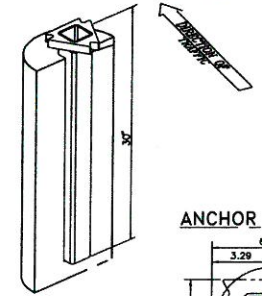
SEE APPROVED PRODUCT LIST FOR APPROVED EQUALS.

SQUARE TUBING SLIP BASE



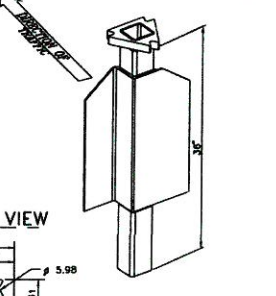
DETAIL "A" - CONCRETE ANCHOR

(NOT TO EXCEED 4" ABOVE GROUND LEVEL)

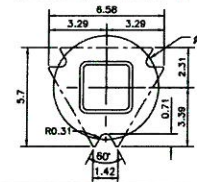


DETAIL "B" - SOIL ANCHOR

(NOT TO EXCEED 4" ABOVE GROUND LEVEL)

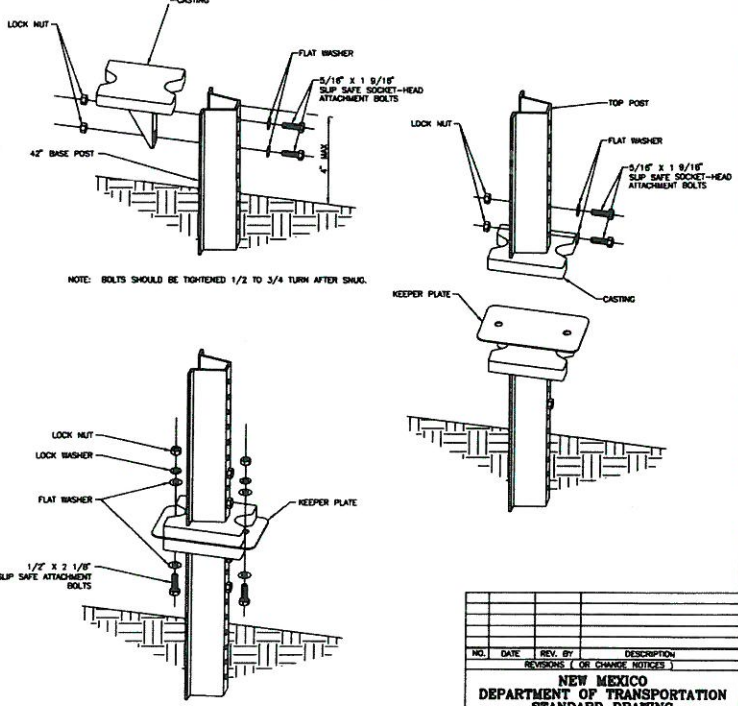


ANCHOR TOP VIEW



- NOTES:
- CONCRETE SHOULD BE A MINIMUM OF 12" IN DIAMETER AND 30" DEEP.
 - CLASS "A" CONCRETE SHALL BE USED. THE COST SHALL BE INCIDENTAL TO THE PRICE OF STEEL POSTS & BASE POSTS FOR ALUMINUM PANEL SIGNS.

U-CHANNEL SLIP BASE



NOTE: BOLTS SHOULD BE TIGHTENED 1/2 TO 3/4 TURN AFTER SHAG.

NOTE: TIGHTEN NUT 1/3 TO 1/2 TURN AFTER SHAG.

NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

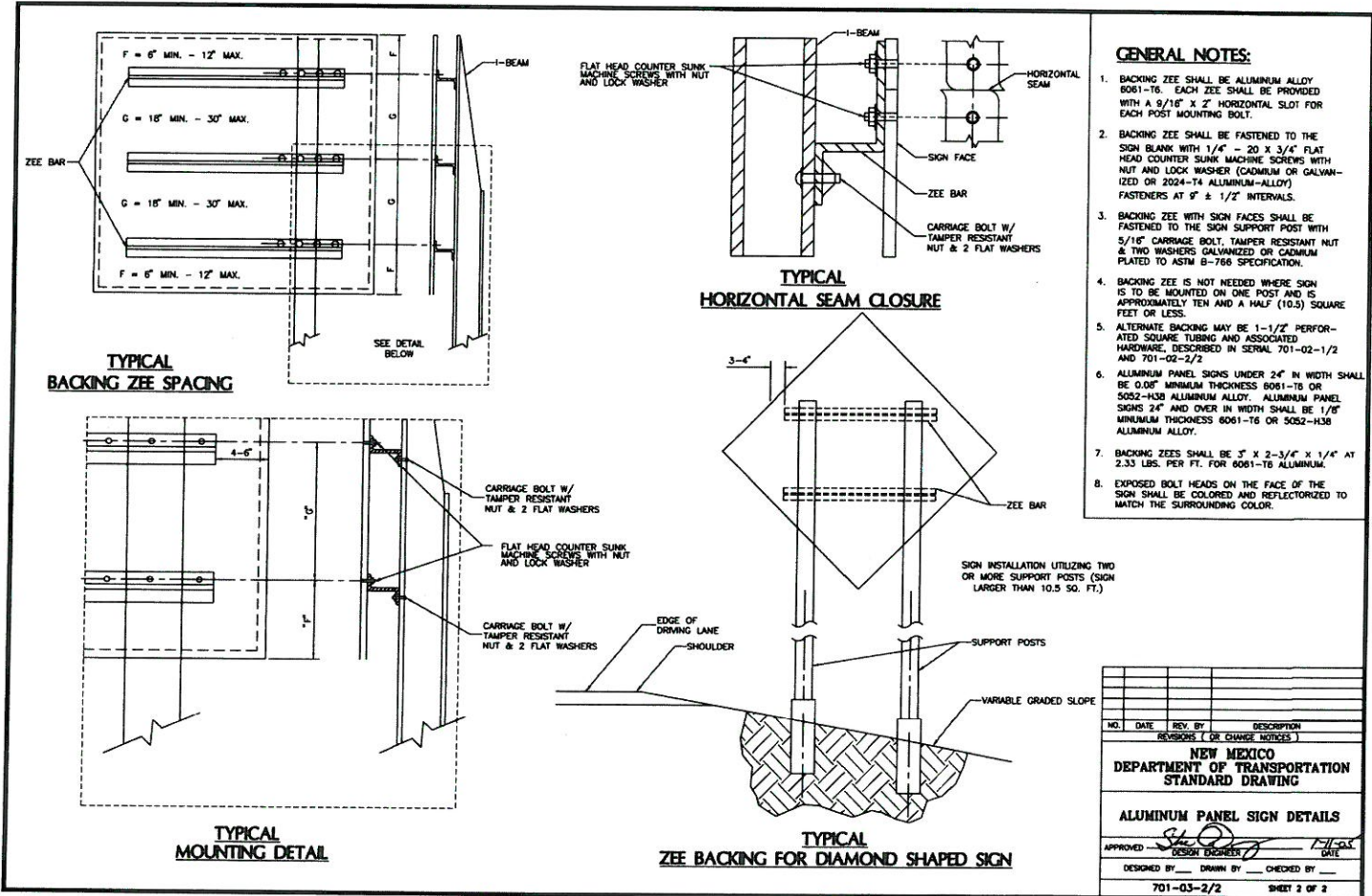
MULTI-DIRECTIONAL SLIP BASE POST DETAILS

APPROVED: [Signature] DATE: [Blank]

DESIGNED BY: [Blank] DRAWN BY: [Blank] CHECKED BY: [Blank]

701-02-3/3 SHEET 3 OF 3

Sheet 701-15



GENERAL NOTES:

- BACKING ZEE SHALL BE ALUMINUM ALLOY 6061-T6. EACH ZEE SHALL BE PROVIDED WITH A 9/16" X 2" HORIZONTAL SLOT FOR EACH POST MOUNTING BOLT.
- BACKING ZEE SHALL BE FASTENED TO THE SIGN BLANK WITH 1/4" - 20 X 3/4" FLAT HEAD COUNTER SUNK MACHINE SCREWS WITH NUT AND LOCK WASHER (CADMIUM OR GALVANIZED OR 2024-T4 ALUMINUM-ALLOY) FASTENERS AT 9" ± 1/2" INTERVALS.
- BACKING ZEE WITH SIGN FACES SHALL BE FASTENED TO THE SIGN SUPPORT POST WITH 5/16" CARRIAGE BOLT, TAMPER RESISTANT NUT & 2 FLAT WASHERS GALVANIZED OR CADMIUM PLATED TO ASTM B-766 SPECIFICATION.
- BACKING ZEE IS NOT NEEDED WHERE SIGN IS TO BE MOUNTED ON ONE POST AND IS APPROXIMATELY TEN AND A HALF (10.5) SQUARE FEET OR LESS.
- ALTERNATE BACKING MAY BE 1-1/2" PERFORATED SQUARE TUBING AND ASSOCIATED HARDWARE, DESCRIBED IN SERIAL 701-02-1/2 AND 701-02-2/2.
- ALUMINUM PANEL SIGNS UNDER 24" IN WIDTH SHALL BE 0.06" MINIMUM THICKNESS 6061-T6 OR 5052-H38 ALUMINUM ALLOY. ALUMINUM PANEL SIGNS 24" AND OVER IN WIDTH SHALL BE 1/8" MINIMUM THICKNESS 6061-T6 OR 5052-H38 ALUMINUM ALLOY.
- BACKING ZEES SHALL BE 3" X 2-3/4" X 1/4" AT 2.33 LBS. PER FT. FOR 6061-T6 ALUMINUM.
- EXPOSED BOLT HEADS ON THE FACE OF THE SIGN SHALL BE COLORED AND REFLECTORIZED TO MATCH THE SURROUNDING COLOR.

NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

ALUMINUM PANEL SIGN DETAILS

APPROVED: [Signature] DATE: [Blank]

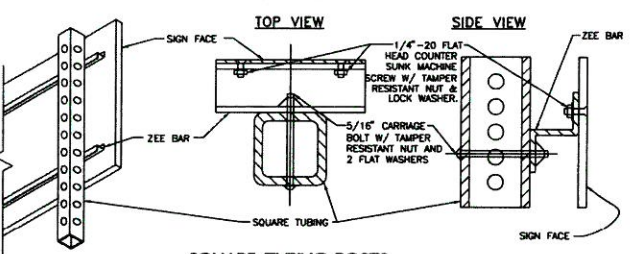
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701-03-2/2 SHEET 2 OF 2

Sheet 701-17

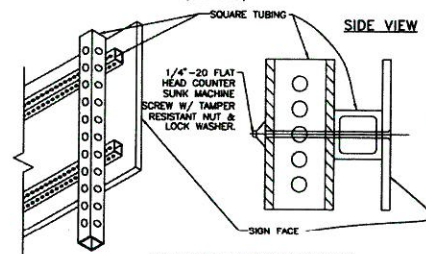
TYPICAL

(SEE NOTES)



ALTERNATE

(SEE NOTES)



GENERAL NOTES:

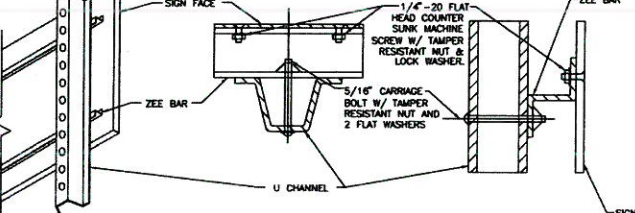
- BACKING ZEE SHALL BE ALUMINUM ALLOY 6061-T6. EACH ZEE SHALL BE PROVIDED WITH A 9/16" X 2" HORIZONTAL SLOT FOR EACH POST MOUNTING BOLT.
- BACKING ZEE SHALL BE FASTENED TO THE SIGN BLANK WITH 1/4" - 20 X 3/4" FLAT HEAD COUNTER SUNK MACHINE SCREWS WITH NUT AND LOCK WASHER (CADMIUM OR GALVANIZED OR 2024-T4 ALUMINUM-ALLOY) FASTENERS AT 9" ± 1/2" INTERVALS.
- BACKING ZEE WITH SIGN FACES SHALL BE FASTENED TO THE SIGN SUPPORT POST WITH 5/16" CARRIAGE BOLT, TAMPER RESISTANT NUT & TWO WASHERS GALVANIZED OR CADMIUM PLATED TO ASTM B-766 SPECIFICATION.
- BACKING ZEE IS NOT NEEDED WHERE SIGN IS TO BE MOUNTED ON ONE POST AND IS APPROXIMATELY TEN AND A HALF (10.5) SQUARE FEET OR LESS.
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- ALUMINUM PANEL SIGNS UNDER 24" IN WIDTH SHALL BE 0.06" MINIMUM THICKNESS 6061-T6 OR 5052-H38 ALUMINUM ALLOY. ALUMINUM PANEL SIGNS 24" AND OVER IN WIDTH SHALL BE SINGLE SHEET 6061-T6 OR 5052-H38 ALUMINUM ALLOY 1/8" MINIMUM THICKNESS.
- BACKING ZEES SHALL BE 3" X 2-3/4" X 1/4" AT 2.33 LBS. PER FT. FOR 6061-T6 ALUMINUM.
- EXPOSED BOLT HEADS ON THE FACE OF THE SIGN SHALL BE COLORED AND REFLECTORIZED TO MATCH THE SURROUNDING COLOR.

SQUARE TUBING POSTS

SQUARE TUBING POSTS

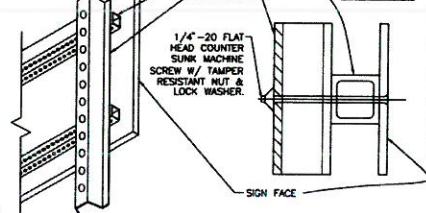
TYPICAL

(SEE NOTES)



ALTERNATE

(SEE NOTES)

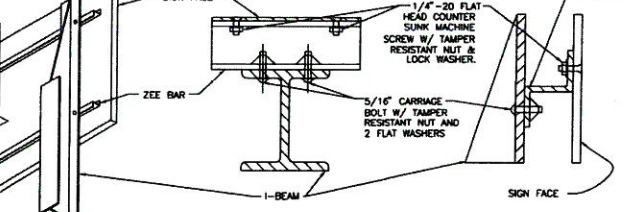


U CHANNEL SUPPORT POSTS

U CHANNEL SUPPORT POSTS

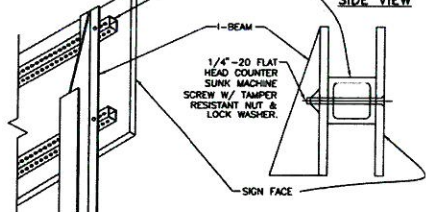
TYPICAL

(SEE NOTES)



ALTERNATE

(SEE NOTES)



I-BEAM SUPPORT POSTS

I-BEAM SUPPORT POSTS

NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

ALUMINUM SIGN PANEL DETAILS

APPROVED: [Signature] DATE: [Blank]

DESIGNED BY: [Blank] DRAWN BY: [Blank] CHECKED BY: [Blank]

701-03-1/2 SHEET 1 OF 2

Sheet 701-16

Dibble Engineering

PAUL J. BALCH
NEW MEXICO
PROFESSIONAL ENGINEER
24289
Paul J. Balch
January 31, 2020

REVISION	BY	DATE

NAVAJO NATION
DIVISION OF TRANSPORTATION
NAVAJO D.Q.T.

CAPTAIN TOM WASH

DETAILS






PROJECT MANAGER: PJB	DATE: 01/20	DRAWING	SHEET
LEAD DESIGNER: JRH	DATE: 01/20		
ASBUILT BY:	DATE:	GB	8 OF 12
SCALE: N/A			


STATE	PROJECT	SHEET NUMBER
NM	SP-6-17(178)	9

REMOVAL NOTES		
1	ROADWAY OBLITERATION	510 SY

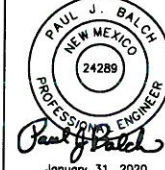
CONSTRUCTION NOTES		
1	SUBGRADE PREPARATION	800 SY
2	PVMT SEC 1, DWG G4 6" STABILIZED ABC	243 TON
10	STONE CHECK DAM (CD) NMDOT STD DET 603-01-2/7	4 EA
12	DOUBLE POST SIGN W/SLIP BASE & FOUNDATION NMDOT STD DET 701-02	1 EA
13	ALUMINUM SIGN PANEL NMDOT STD DET 701-03	8 SF

HATCH LEGEND

-  PVMT SEC 1
STABILIZED ABC
-  PVMT SEC 2
PCCP
-  WIRE-ENCLOSED RIPRAP MATTRESS
-  GABION BASKET
-  SURFACE ROUGHENING




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Engineering**



PAUL J. BALCH
NEW MEXICO
24289
PROFESSIONAL ENGINEER
January 31, 2020

REVISION	BY	DATE



NAVAJO NATION
DIVISION OF TRANSPORTATION

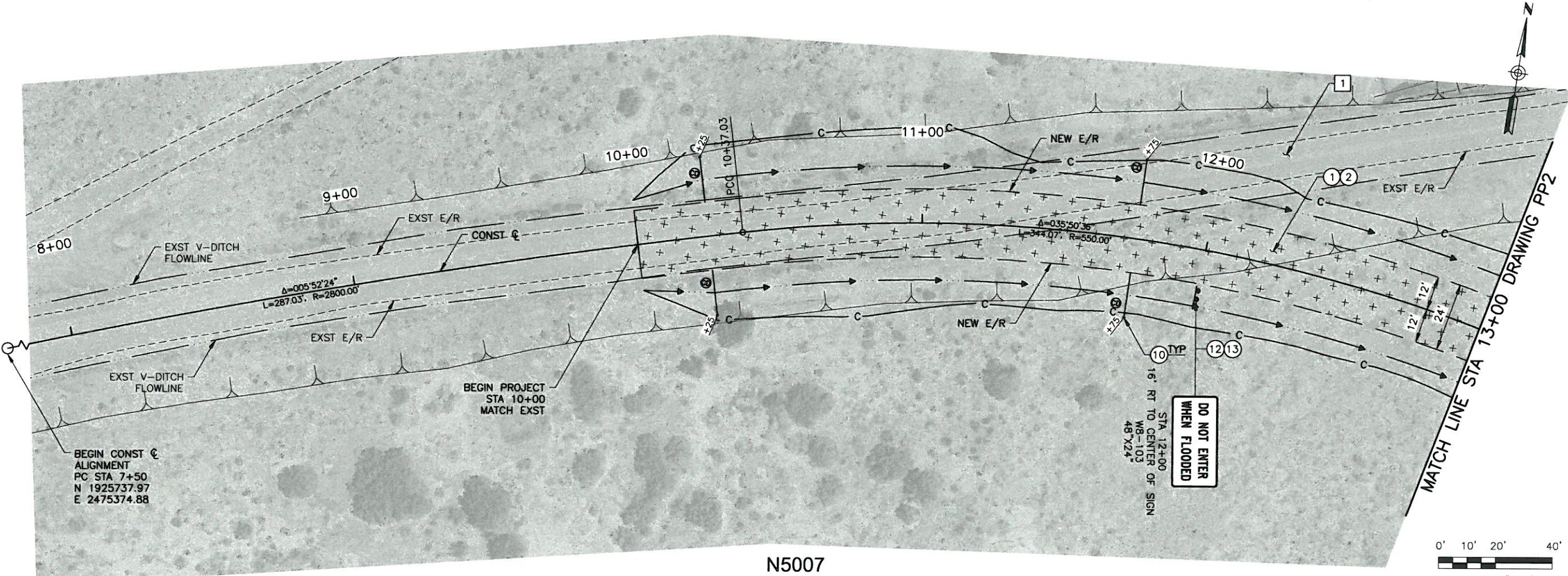
NAVAJO D.O.T.

CAPTAIN TOM WASH

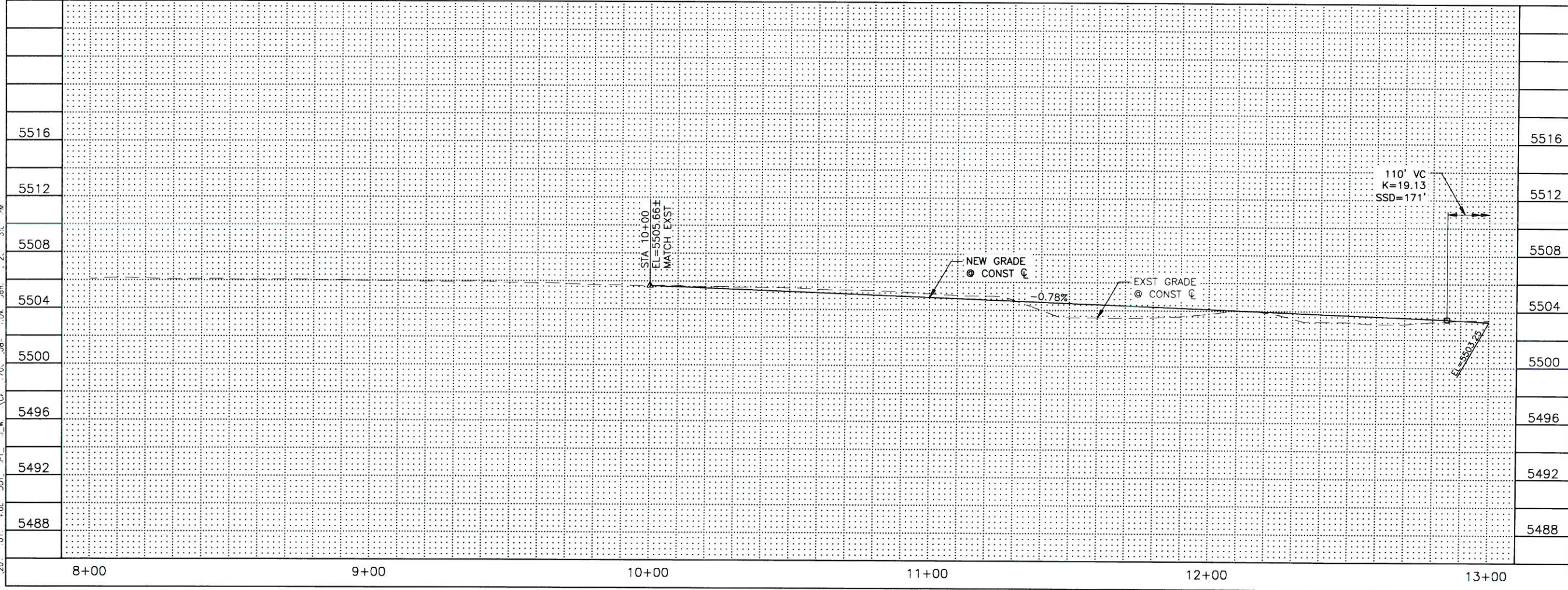
**ROADWAY PLAN & PROFILE
STA 8+00 TO STA 13+00**

PROJECT MANAGER: PJB	DATE: 01/20	DRAWING	SHEET
LEAD DESIGNER: JRH	DATE: 01/20		
ASBUILT BY:	DATE:	PP1	9 OF 12

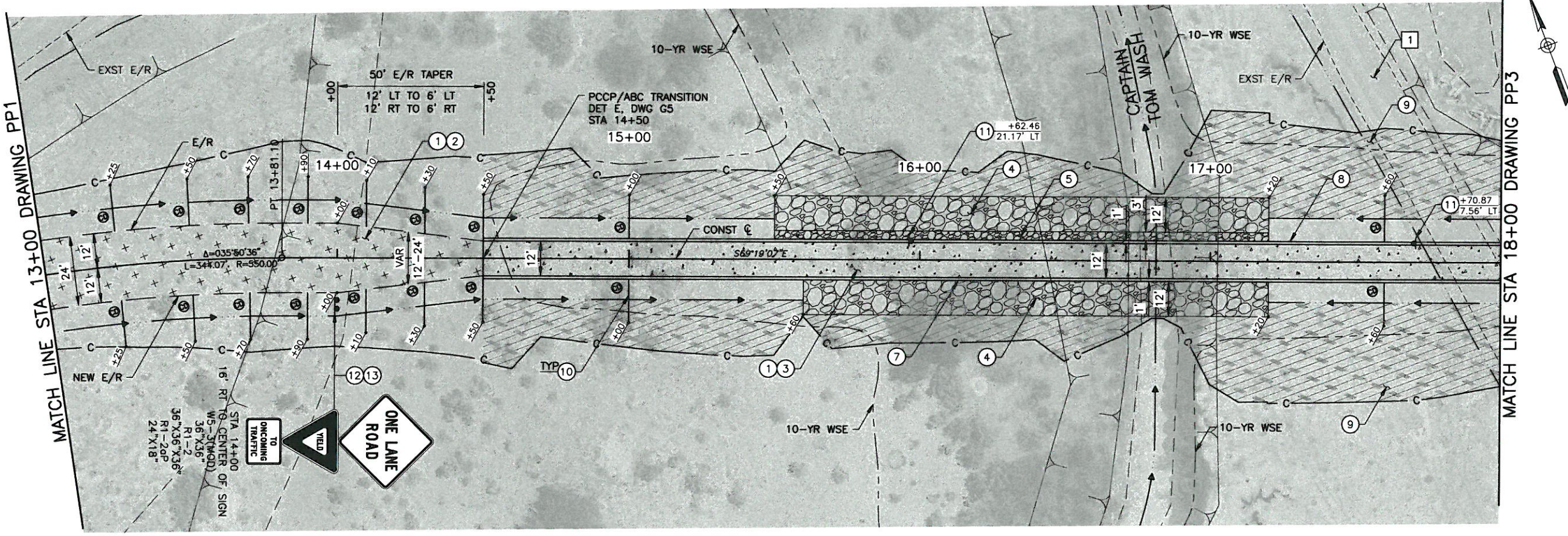
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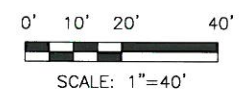
N5007



REMOVAL NOTES	
1	ROADWAY OBLITERATION 1040 SY
CONSTRUCTION NOTES	
1	SUBGRADE PREPARATION 834 SY
2	PVMT SEC 1, DWG G4 6" STABILIZED ABC 111 TON
3	PVMT SEC 2, DWG G4 8" PCCP 467 SY 6" ABC 142 TON
4	WIRE ENCLOSED RIPRAP, CLASS A NMDOT STD DET 602-01-1/1 DET B, DWG G5 440 SY
5	GABION BASKET NMDOT STD DET 602-05-1/2 DET B & D, DWG G5 57 CY
7	UPSTREAM CUT-OFF WALL DET A, DWG G5 1750 SF
8	DOWNSTREAM CUT-OFF WALL DET B, DWG G5 2100 SF
9	SURFACE ROUGHENING NMDOT STD DET 603-01-6/7 1460 SY
10	STONE CHECK DAM (CD) NMDOT STD DET 603-01-2/7 18 EA
11	DEPTH GAUGE DET G, DWG G5 2 EA
12	DOUBLE POST SIGN W/SLIP BASE & FOUNDATION NMDOT STD DET 701-02 1 EA
13	ALUMINUM SIGN PANEL NMDOT STD DET 701-03 21 SF

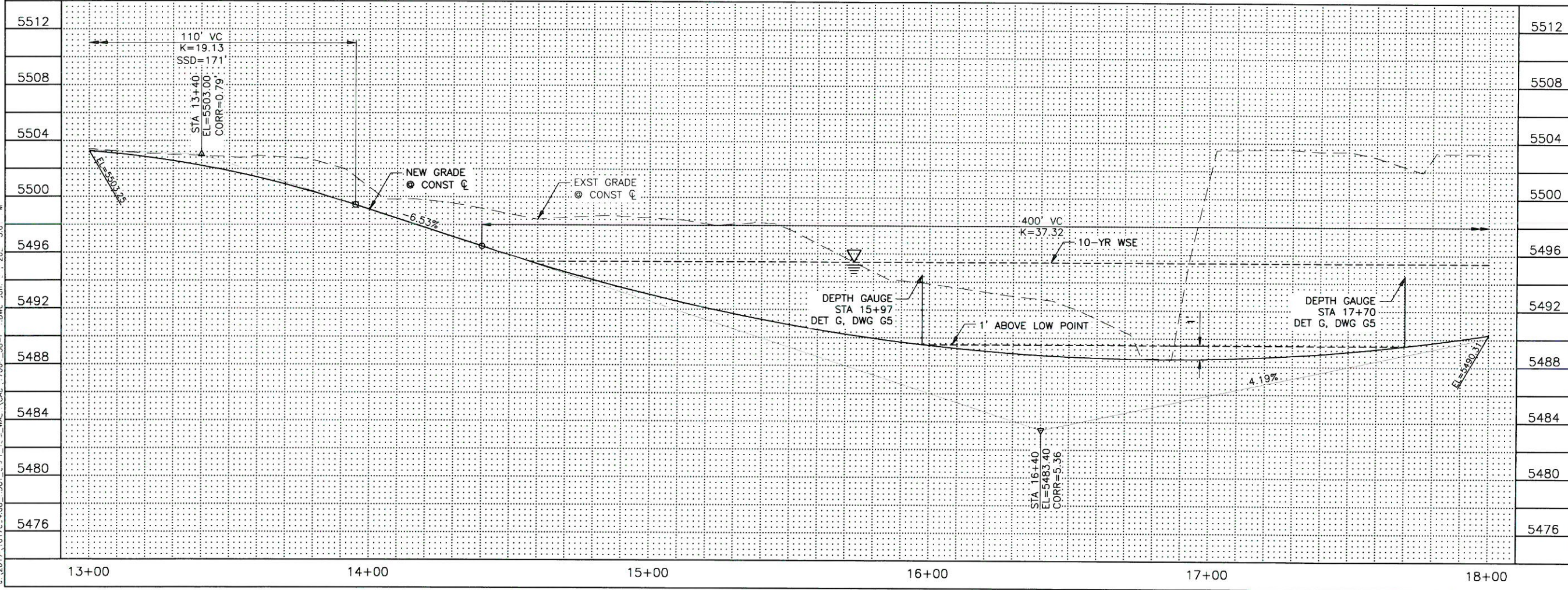


N5007



HATCH LEGEND

	PVMT SEC 1 STABILIZED ABC
	PVMT SEC 2 PCCP
	WIRE-ENCLOSED RIPRAP MATTRESS
	GABION BASKET
	SURFACE ROUGHENING



Dibble Engineering

PAUL J. BALCH
NEW MEXICO
24289
PROFESSIONAL ENGINEER
January 31, 2020

REVISION	BY	DATE

NAVAJO NATION
DIVISION OF TRANSPORTATION
NAVAJO D.O.T.

CAPTAIN TOM WASH

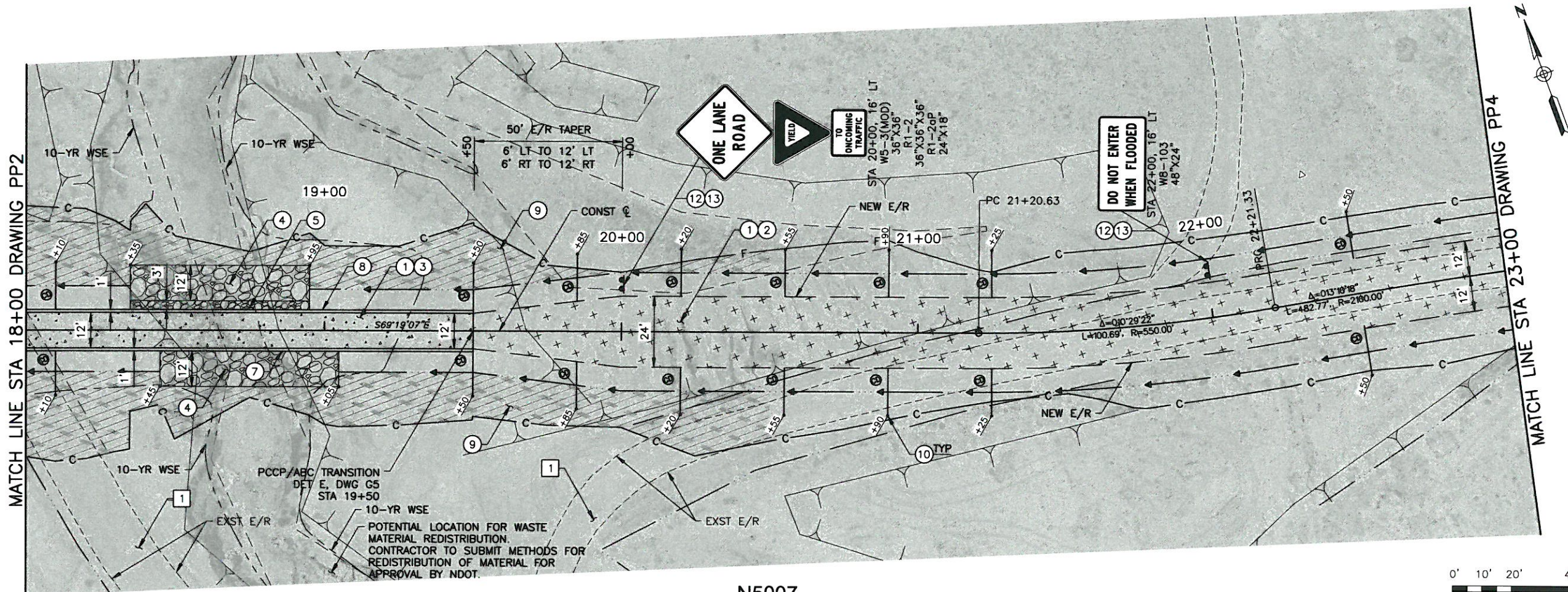
ROADWAY PLAN & PROFILE
STA 13+00 TO STA 18+00

PROJECT MANAGER: PJB	DATE: 01/20	DRAWING	SHEET
LEAD DESIGNER: JRH	DATE: 01/20	PP2	10 OF 12
ASBUILT BY:	DATE:		

SCALE: 1"=40' H - 1"=8' V

STATE	PROJECT	SHEET NUMBER
NM	SP-6-17(178)	11

REMOVAL NOTES		
1	ROADWAY OBLITERATION	960 SY
CONSTRUCTION NOTES		
1	SUBGRADE PREPARATION	1100 SY
2	PVMT SEC 1, DWG G4 6" STABILIZED ABC	273 TON
3	PVMT SEC 2, DWG G4 8" PCCP 6" ABC	200 SY 61 TON
4	WIRE ENCLOSED RIPRAP, CLASS A NMDOT STD DET 602-01-1/1 DET B, DWG G5	160 SY
5	GABION BASKET NMDOT STD DET 602-05-1/2 DET B & D, DWG G5	20 CY
7	UPSTREAM CUT-OFF WALL DET A, DWG G5	750 SF
8	DOWNSTREAM CUT-OFF WALL DET B, DWG G5	900 SF
9	SURFACE ROUGHENING NMDOT STD DET 603-01-6/7	790 SY
10	STONE CHECK DAM (CD) NMDOT STD DET 603-01-2/7	18 EA
12	DOUBLE POST SIGN W/SLIP BASE & FOUNDATION NMDOT STD DET 701-02	2 EA
13	ALUMINUM SIGN PANEL NMDOT STD DET 701-03	29 SF

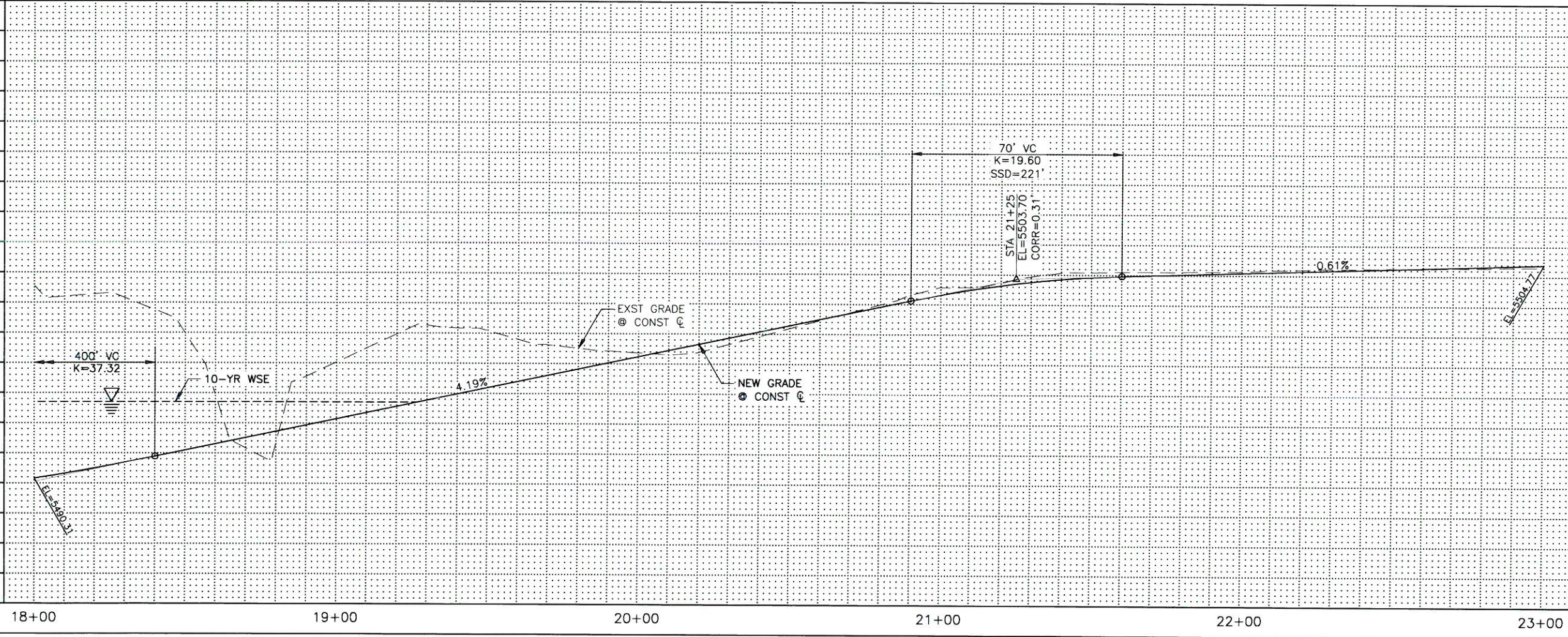


N5007



HATCH LEGEND

	PVMT SEC 1 STABILIZED ABC
	PVMT SEC 2 PCCP
	WIRE-ENCLOSED RIPRAP MATTRESS
	GABION BASKET
	SURFACE ROUGHENING



Dibble Engineering

REVISION	BY	DATE

NAVAJO NATION
DIVISION OF TRANSPORTATION

CAPTAIN TOM WASH

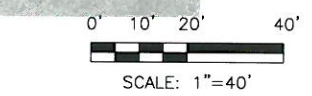
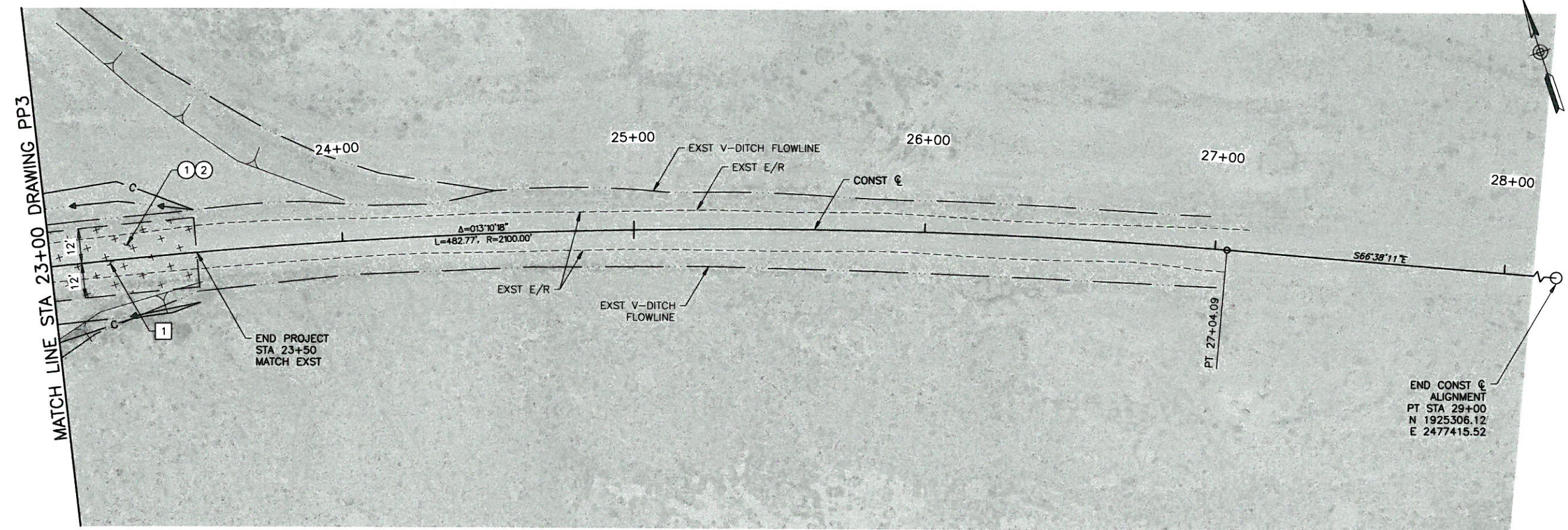
ROADWAY PLAN & PROFILE
STA 18+00 TO STA 23+00

PROJECT MANAGER: PJB	DATE: 01/20	DRAWING	SHEET
LEAD DESIGNER: JRH	DATE: 01/20		
ASBUILT BY:	DATE:	PP3	11 OF 12
SCALE: 1"=40' H - 1"=8' V			

STATE	PROJECT	SHEET NUMBER
NM	SP-6-17(178)	12

REMOVAL NOTES		
1	ROADWAY OBLITERATION	80 SY

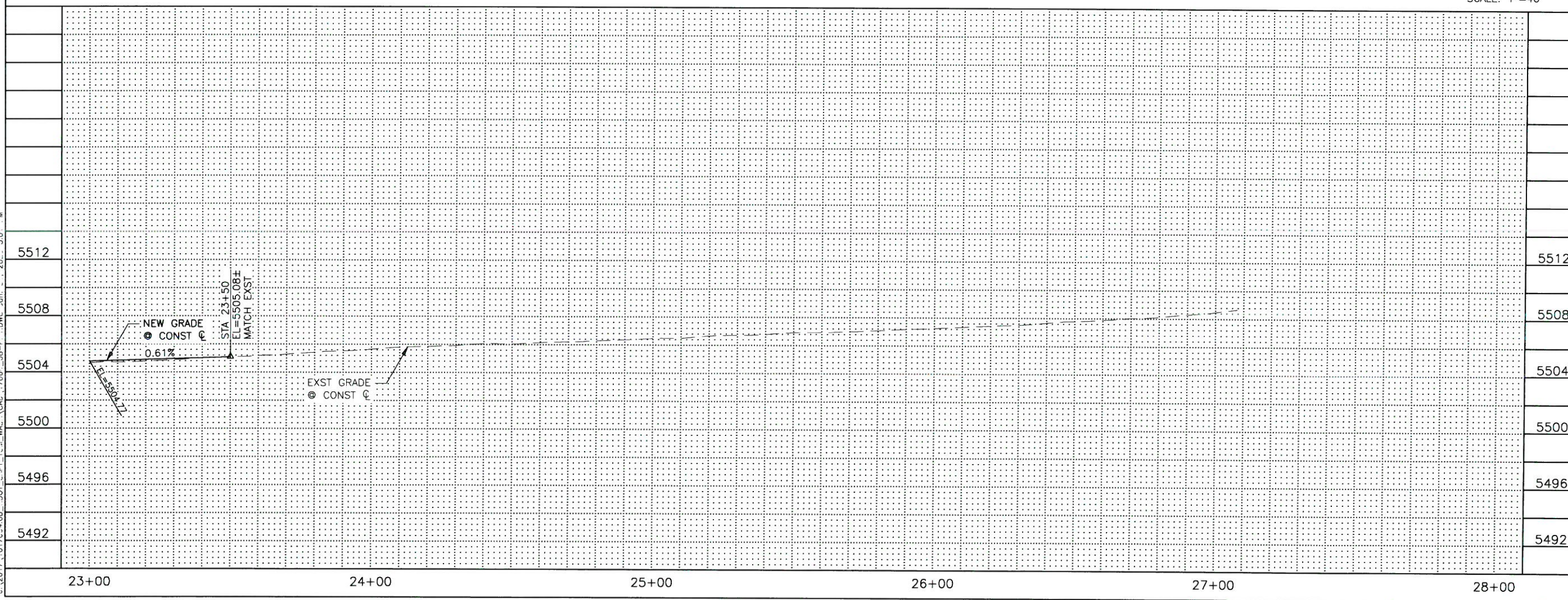
CONSTRUCTION NOTES		
1	SUBGRADE PREPARATION	133 SY
2	PVMT SEC 1, DWG G4 6" STABILIZED ABC	41 TON



N5007

HATCH LEGEND

- PVMT SEC 1
STABILIZED ABC
- PVMT SEC 2
PCCP
- WIRE-ENCLOSED RIPRAP MATTRESS
- GABION BASKET
- SURFACE ROUGHENING



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NAVAJO NATION
DIVISION OF TRANSPORTATION

NAVAJO D.O.T.

CAPTAIN TOM WASH

ROADWAY PLAN & PROFILE
STA 23+00 TO STA 28+00

PROJECT MANAGER: PJB	DATE: 01/20	DRAWING	SHEET
LEAD DESIGNER: JRH	DATE: 01/20	PP4	12 OF 12
ASBUILT BY:	DATE:		
SCALE: 1"=40' H - 1"=8' V			

STATE	PROJECT	SHEET NUMBER
NM	SP-6-17(178)	9

REMOVAL NOTES	
1 ROADWAY OBLITERATION	510 SY

CONSTRUCTION NOTES	
1 SUBGRADE PREPARATION	800 SY
2 PVMT SEC 1, DWG G4 6" STABILIZED ABC	243 TON
10 STONE CHECK DAM (CD) NMDOT STD DET 603-01-2/7	4 EA
12 DOUBLE POST SIGN W/SLIP BASE & FOUNDATION NMDOT STD DET 701-02	1 EA
13 ALUMINUM SIGN PANEL NMDOT STD DET 701-03	8 SF

HATCH LEGEND	
	PVMT SEC 1 STABILIZED ABC
	PVMT SEC 2 PCCP
	WIRE-ENCLOSED RIPRAP MATTRESS
	GABION BASKET
	SURFACE ROUGHENING

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PAUL J. BALCH
NEW MEXICO
PROFESSIONAL ENGINEER
24289
January 31, 2020

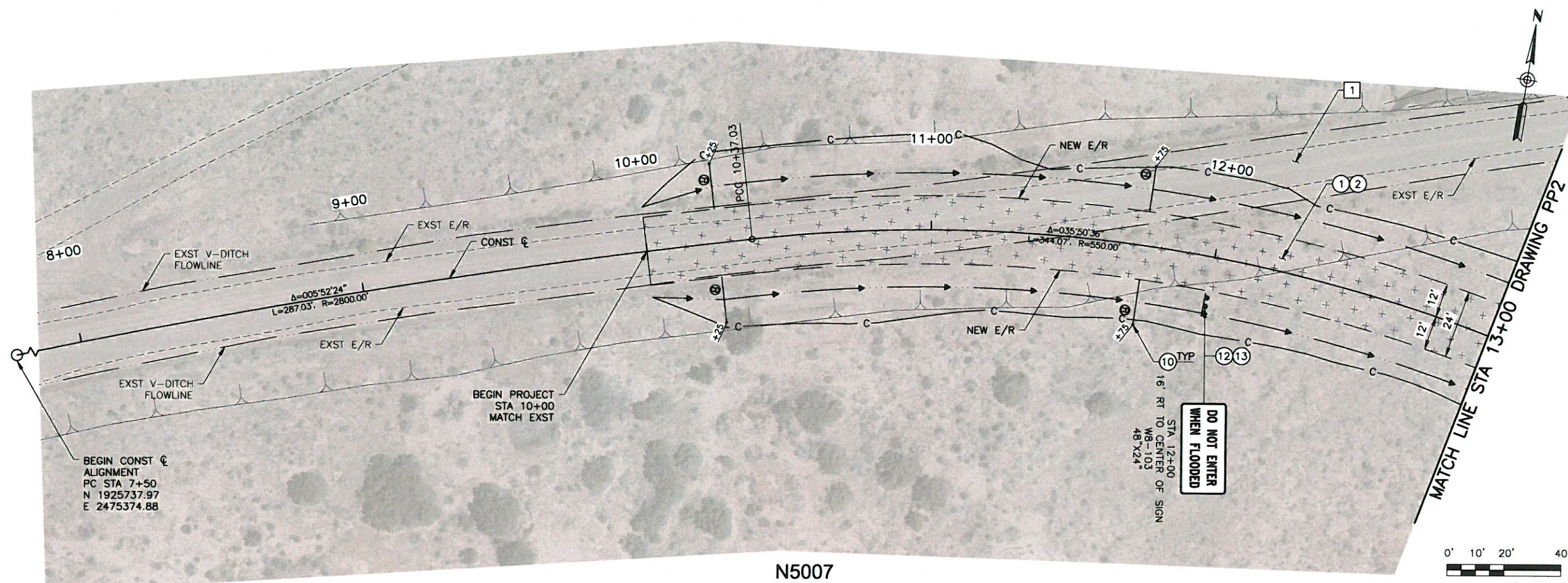
REVISION BY DATE

NAVAJO NATION
DIVISION OF TRANSPORTATION

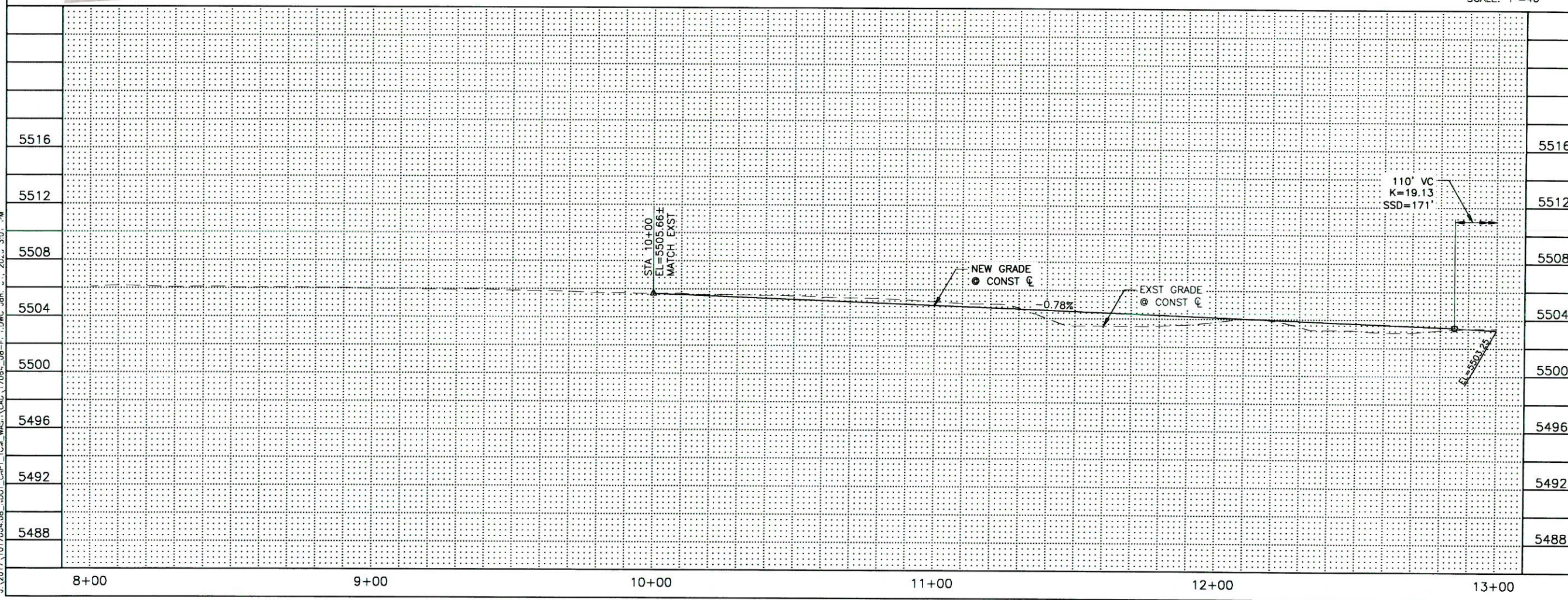
CAPTAIN TOM WASH

ROADWAY PLAN & PROFILE
STA 8+00 TO STA 13+00

PROJECT MANAGER: PJB	DATE: 01/20	DRAWING	SHEET
LEAD DESIGNER: JRH	DATE: 01/20	PP1	9 OF 12
ASBUILT BY:	DATE:		
SCALE: 1"=40' H - 1"=8' V			



N5007



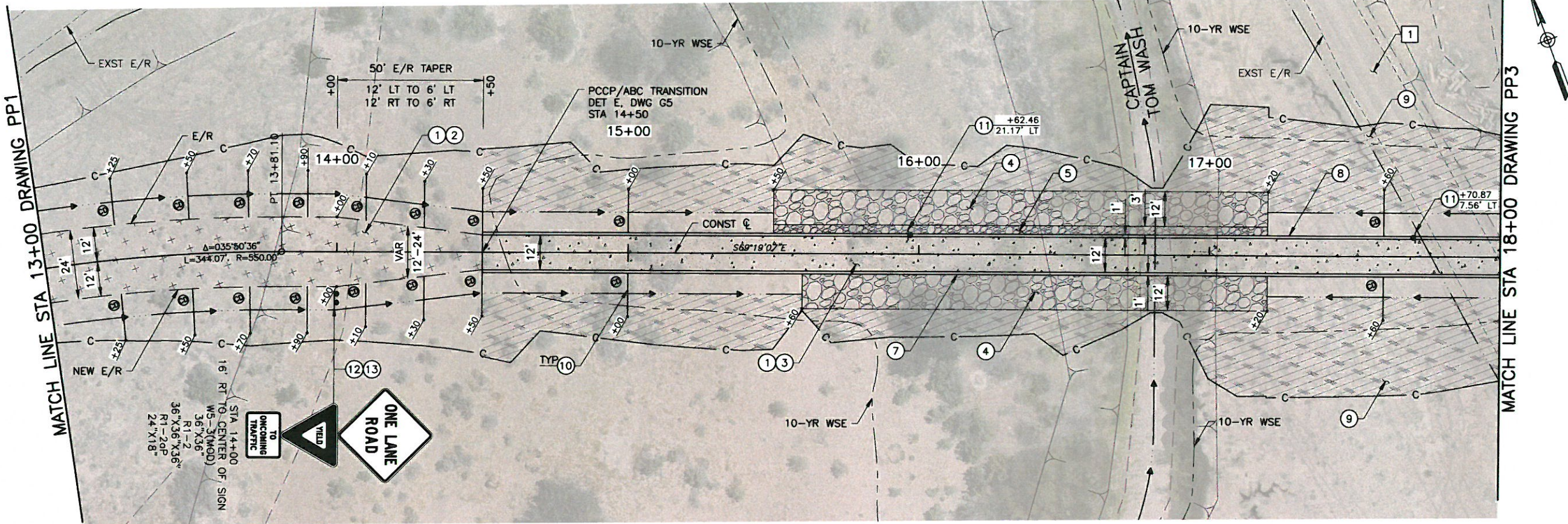
2017...017...08...DOT...SET...WASH...CAL...705...UB...DWG...20...310...AM

REMOVAL NOTES

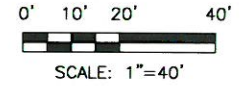
1	ROADWAY OBLITERATION	1040 SY
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CONSTRUCTION NOTES

1	SUBGRADE PREPARATION	834 SY
2	PVMT SEC 1, DWG G4 6" STABILIZED ABC	111 TON
3	PVMT SEC 2, DWG G4 8" PCCP 6" ABC	467 SY 142 TON
4	WIRE ENCLOSED RIPRAP, CLASS A NMDOT STD DET 602-01-1/1 DET B, DWG G5	440 SY
5	GABION BASKET NMDOT STD DET 602-05-1/2 DET B & D, DWG G5	57 CY
7	UPSTREAM CUT-OFF WALL DET A, DWG G5	1750 SF
8	DOWNSTREAM CUT-OFF WALL DET B, DWG G5	2100 SF
9	SURFACE ROUGHENING NMDOT STD DET 603-01-6/7	1460 SY
10	STONE CHECK DAM (CD) NMDOT STD DET 603-01-2/7	18 EA
11	DEPTH GAUGE DET G, DWG G5	2 EA
12	DOUBLE POST SIGN W/SLIP BASE & FOUNDATION NMDOT STD DET 701-02	1 EA
13	ALUMINUM SIGN PANEL NMDOT STD DET 701-03	21 SF

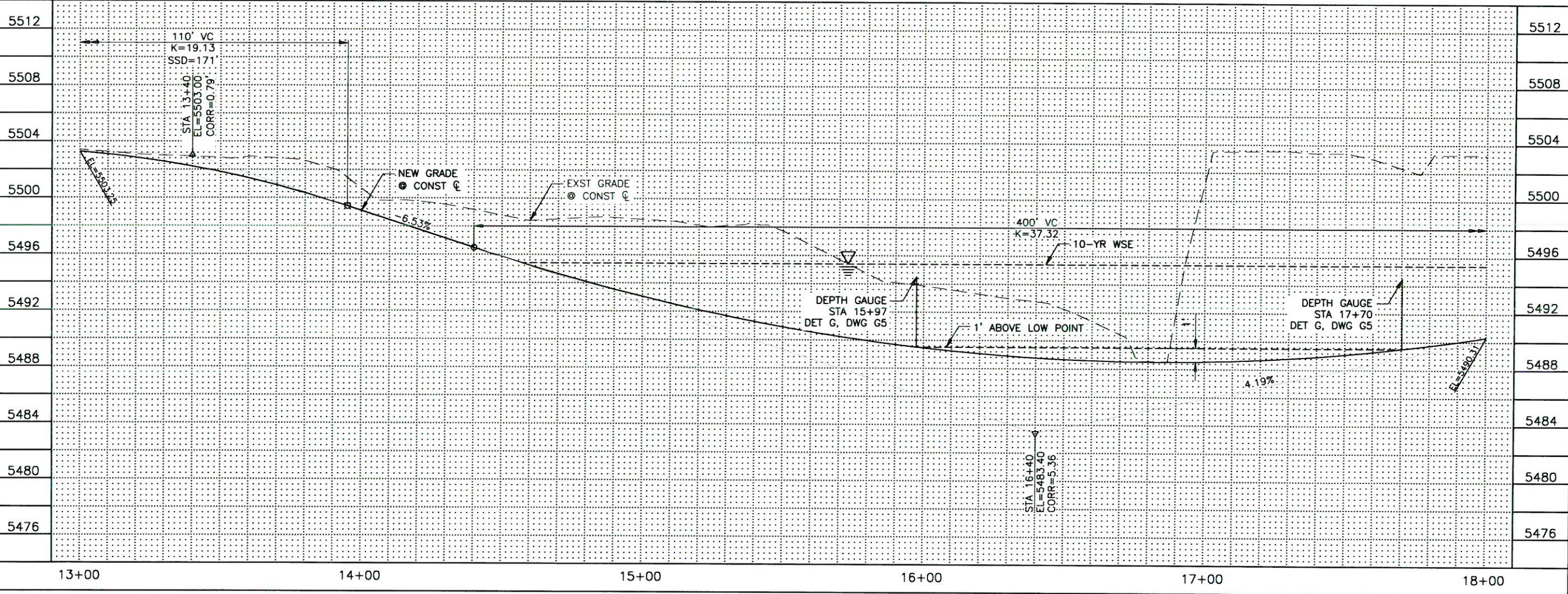


N5007



HATCH LEGEND

	PVMT SEC 1 STABILIZED ABC
	PVMT SEC 2 PCCP
	WIRE-ENCLOSED RIPRAP MATTRESS
	GABION BASKET
	SURFACE ROUGHENING



Dibble Engineering

PAUL J. BALCH
NEW MEXICO
PROFESSIONAL ENGINEER
24289
January 31, 2020

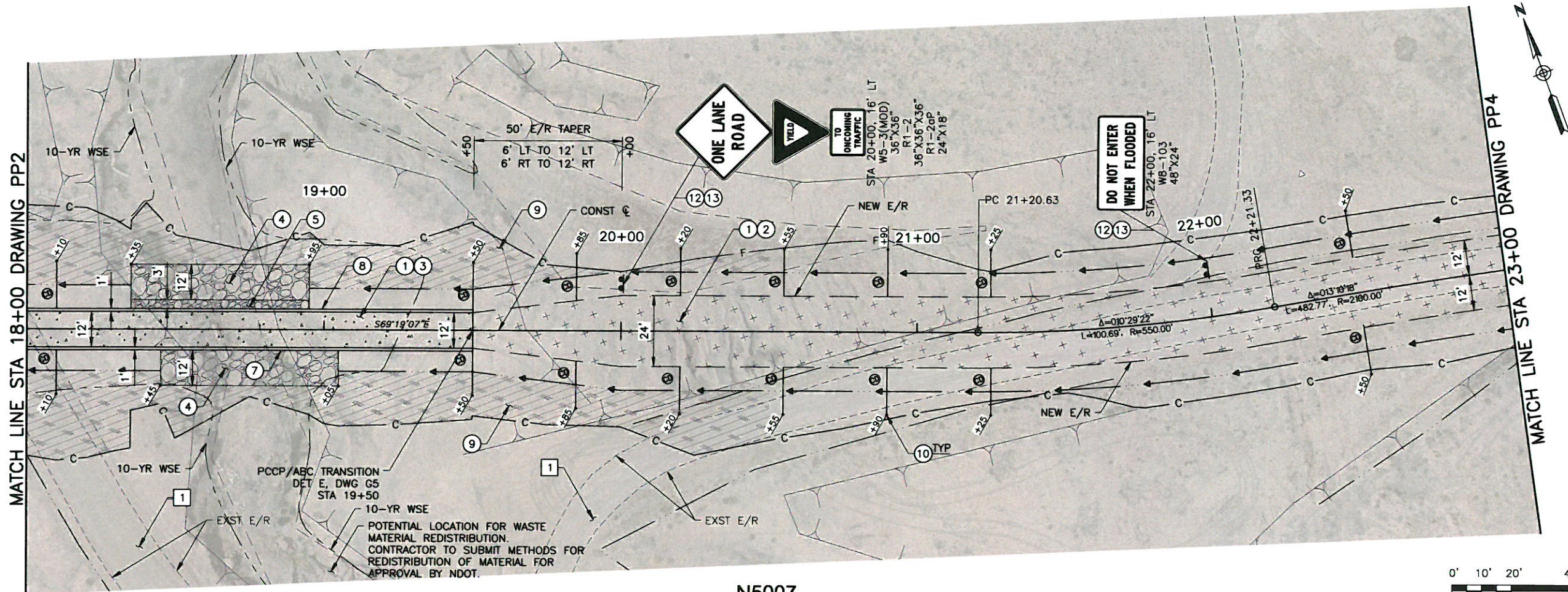
REVISION BY DATE

NAVAJO NATION
DIVISION OF TRANSPORTATION
NAVAJO D.O.T.

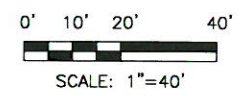
CAPTAIN TOM WASH

ROADWAY PLAN & PROFILE
STA 13+00 TO STA 18+00

REMOVAL NOTES	
1	ROADWAY OBLITERATION 960 SY
CONSTRUCTION NOTES	
1	SUBGRADE PREPARATION 1100 SY
2	PVMT SEC 1, DWG G4 6" STABILIZED ABC 273 TON
3	PVMT SEC 2, DWG G4 8" PCCP 6" ABC 200 SY 61 TON
4	WIRE ENCLOSED RIPRAP, CLASS A NMDOT STD DET 602-01-1/1 DET B, DWG G5 160 SY
5	GABION BASKET NMDOT STD DET 602-05-1/2 DET B & D, DWG G5 20 CY
7	UPSTREAM CUT-OFF WALL DET A, DWG G5 750 SF
8	DOWNSTREAM CUT-OFF WALL DET B, DWG G5 900 SF
9	SURFACE ROUGHENING NMDOT STD DET 603-01-6/7 790 SY
10	STONE CHECK DAM (CD) NMDOT STD DET 603-01-2/7 18 EA
12	DOUBLE POST SIGN W/SLIP BASE & FOUNDATION NMDOT STD DET 701-02 2 EA
13	ALUMINUM SIGN PANEL NMDOT STD DET 701-03 29 SF

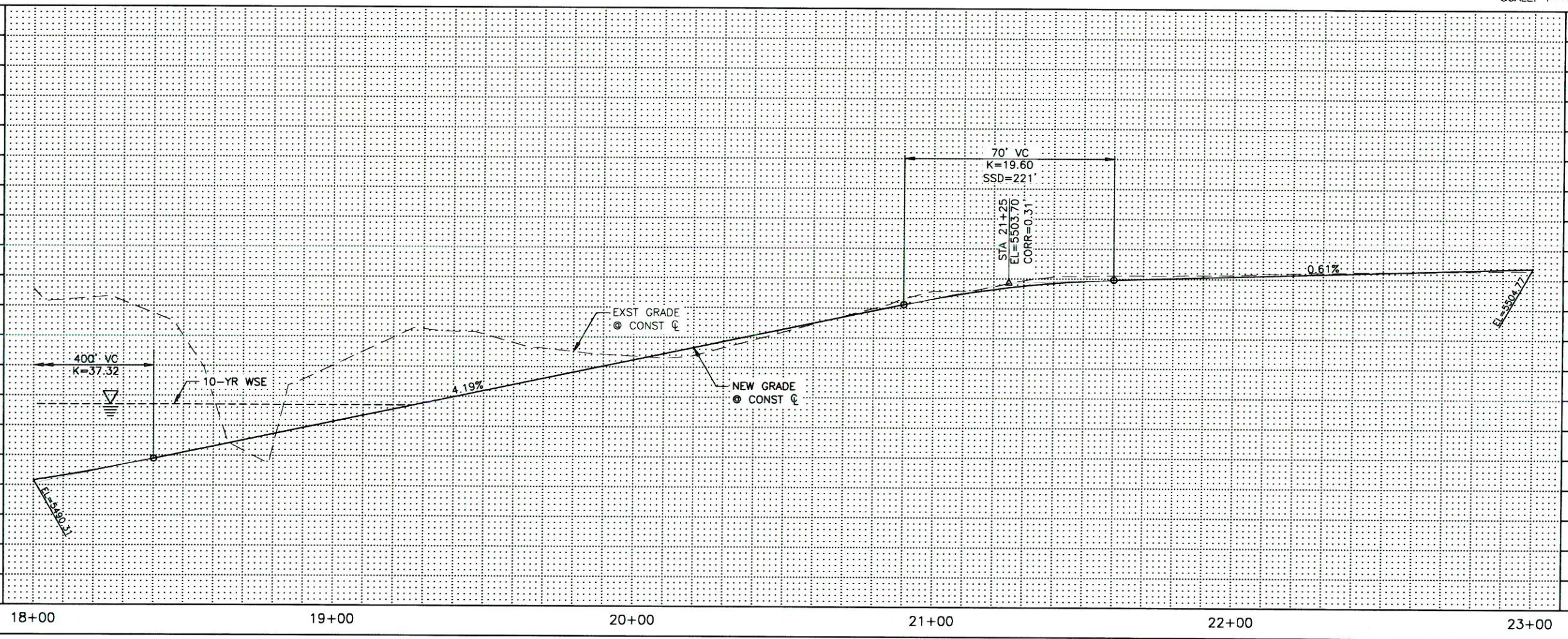


N5007



HATCH LEGEND

- PVMT SEC 1 STABILIZED ABC
- PVMT SEC 2 PCCP
- WIRE-ENCLOSED RIPRAP MATTRESS
- GABION BASKET
- SURFACE ROUGHENING



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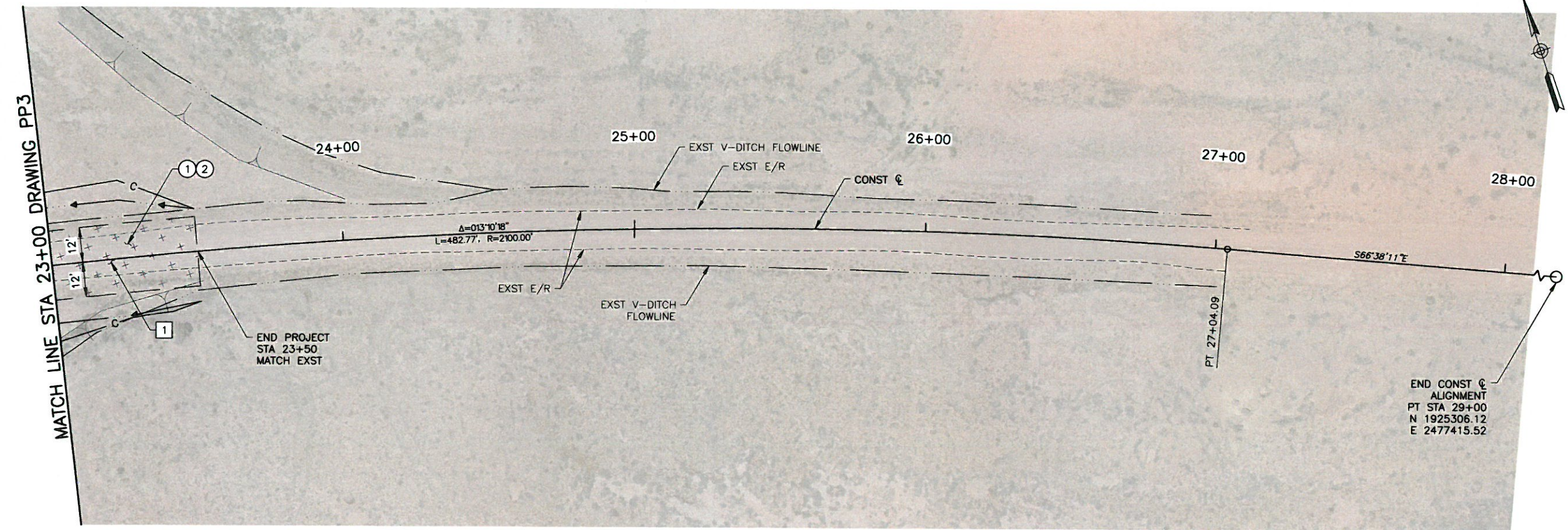
REVISION	BY	DATE

NAVAJO NATION
DIVISION OF TRANSPORTATION

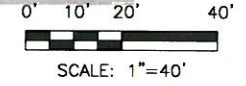
CAPTAIN TOM WASH

ROADWAY PLAN & PROFILE
STA 18+00 TO STA 23+00

PROJECT MANAGER: PJB	DATE: 01/20	DRAWING	SHEET
LEAD DESIGNER: JRH	DATE: 01/20		
ASBUILT BY:	DATE:	PP3	11 OF 12
SCALE: 1"=40' H - 1"=8' V			



N5007








REMOVAL NOTES

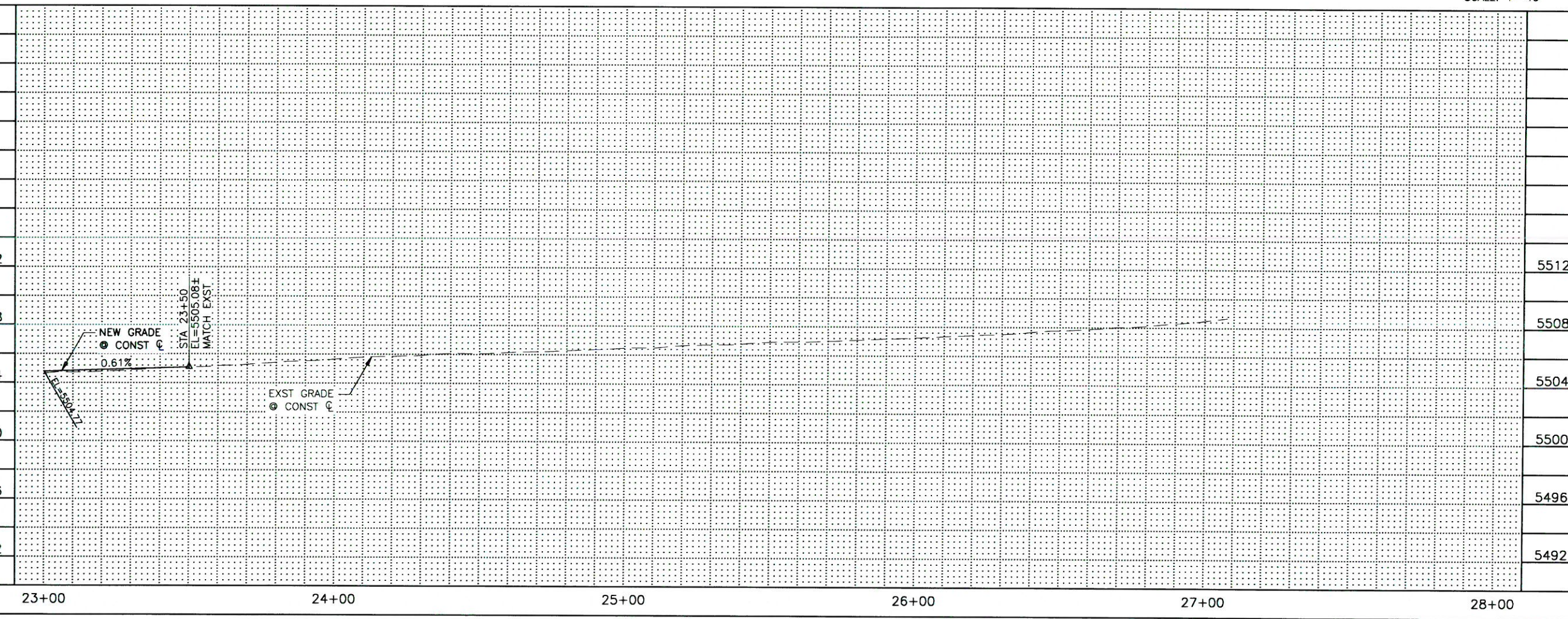
1	ROADWAY OBLITERATION	80 SY
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CONSTRUCTION NOTES

1	SUBGRADE PREPARATION	133 SY
2	PVMT SEC 1, DWG G4 6" STABILIZED ABC	41 TON

HATCH LEGEND

-  PVMT SEC 1 STABILIZED ABC
-  PVMT SEC 2 PCCP
-  WIRE-ENCLOSED RIPRAP MATTRESS
-  GABION BASKET
-  SURFACE ROUGHENING



Dibble Engineering

REVISION	BY	DATE

NAVAJO NATION
DIVISION OF TRANSPORTATION
NAVAJO D.O.T.
CAPTAIN TOM WASH

ROADWAY PLAN & PROFILE
STA 23+00 TO STA 28+00

PROJECT MANAGER: PJB	DATE: 01/20	DRAWING	SHEET
LEAD DESIGNER: JRH	DATE: 01/20	PP4	12 OF 12
ASBUILT BY:	DATE:		
SCALE: 1"=40' H - 1"=8' V			

