Date: **July 3, 2025**

To: **All Proposers**

Subject: **Addendum No. 1**
Consisting of Forty Seven (47) Pages

RFP No.: **Bid 25-05-3688LE**

Project Name: **N55(1-2)4**

Owner: **Navajo Division of Transportation**

Proposer shall make note of and/or incorporate all changes listed below into the requested Request for Proposal (RFP):

1. Mandatory Pre-Proposal Meeting Minutes and Sign-In Sheet from June 24, 2025 meeting that was held via Microsoft Teams. Meeting minutes include responses to questions asked by attendees.

2. Plans: The Plans were updated, and a complete/new Plan pdf is included in this addendum.

    a. Sheets 3 and 4 of 23 have been revised to add the bid item 604300 Geogrid Reinforcement to the tables: Summary of Quantities by Location; Summary of Quantities; and Surfacing Schedule. See Sheet 3 and 4 of 23 of revised Plan Set.

    b. Sheets 3 thru 22 have been revised to address the concerns discussed in the preproposal meeting regarding the likelihood of premature cracking on the 2" HMA overlay. The pavement rehab project now has two (2) types of corrective measures, not three (3). The two new measures are: 1) Full-Reconstruction and 2) CCRAC and Chip Seal.

    c. Proposed Typical Section A: Full-Reconstruction is essentially the same except there is no 2-inch HMA overlay. See Sheet 5 of Plans.

    d. Proposed Typical Section B&C: CCRAC and Chip Seal replaces Typical Section B and Typical Section C. See Sheet 5 of Plans.

    e. Typical Section B - Surface Milling and Overlay was removed. Corrective milling, the 2-inch HMA SP IV overlay, and crack sealing operations will NOT be performed in the scope of this project.

    f. Typical Section C - Minor Overlay was removed. The 2-inch HMA SP IV overlay, and crack sealing operations will NOT be performed in the scope of this project.

g. The Addendum removes five (5) bid items:
   - 407000, Asphalt material for Tack Coat
   - 411000, Hot Poured Crack Sealing
   - 414001, Cold Milling (Asphalt)
   - 423283, HMA SP IV Complete (2" Overlay)
   - 407001, Fog Seal

h. The Addendum adds two (2) new bid items. See Summary of Quantities, Sheet 3 of 23:
   - 31002-1100, 3-inch Continuous Cold in Place Recycled Asphalt Base Course (CCRAC), Type A
   - 41901-0000, Asphalt Rubber Surface Treatment, Chip Seal

3. RFP: Attachments, Bid Schedule, page 1 of 1. The Bid Schedule has been revised and is attached. The updated Contractor Use excel file is posted to the website.

4. Contract Book Exhibit F.

   a. Delete Section 411 - Hot Poured Crack Sealant

   b. Add the following sections:
      - Section 419 - Asphalt Rubber Surface Treatment, Chip Seal
      - Section 702 - Asphalt Material
      - Section 703- Aggregate

   c. Replace Exhibit F, Cover Page (page 135) with attached new Cover Page.

   d. Reference Section 310 - Cold In-Place Recycled Asphalt Base Course (CCRAC) from the FP-14 Specs for Bid Item 31002-1100.

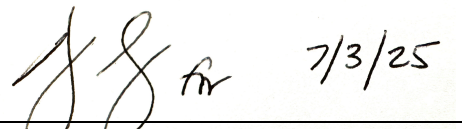
5. The Geotech report was requested and will be posted to the Navajo DOT RFP website for additional bidding information. Since the recommendations in the 2016 N55 Geotech Report were directed toward a pavement reconstruction project, it was not initially considered applicable to this pavement maintenance project.

6. Pre-Proposal Meeting Agenda, Item 9: The agenda contained a tax statement regarding taxes. The tax statement is revised as follows: All work performed on this project is subject to the tax rate of the unincorporated areas of Socorro County at a rate of 6.25%. Since the project area lies within multiple land statuses, the final taxing authority/rate needs to be coordinated between the Navajo Nation and the State of New Mexico.

7. The Navajo Division of Transportation did not receive any follow-up questions regarding this RFP.

END OF ADDENDUM NO. 1

Thank you for your interest!



Ardaniel Begay, Principal Contract Analyst
Project Contact Person

Navajo Division of Transportation
Bid No. 25-05-3688LE
N55(1-2)4 Pavement Rehab Project in Alamo, NM
MANDATORY PRE-PROPOSAL MEETING MINUTES
June 24, 2025, 10:00 am MDST

The purpose of this Mandatory Pre-Proposal Meeting is to receive presentations on the Project Scope of Work and the necessary items required to be submitted as part of the Request for Proposal (RFP).

1. **Introductions & Sign-In Sheet**

   a. **Sign-In Sheet** – All meeting participants should submit their contact information to Ardaniel Begay via email at abegay@navajodot.org

2. **Welcome – Darryl Bradley, Principal Civil Engineer, Navajo DOT**

3. **General Announcements**

   a. Information is available on the Navajo DOT website: https://navajodot.org/rfp%2Frfq

   b. Inquiries on this RFP must be submitted in writing via fax or email to Ardaniel Begay, Principal Contract Analyst. The contact information is on page 2 of the RFP.

   c. Contractors are encouraged to conduct a field review of the project site on their own. There is no formal field review scheduled.

4. **Schedule of Activities**

   a. The Schedule of Activities is shown on page 3 of the RFP.

   b. Pre-Proposal Meeting was scheduled for June 24, 2025.

   c. Inquiry Timeline – All inquiries must be submitted in writing by 3:00 pm MDST on June 27, 2025. Written responses to inquiries will be distributed through an Addendum by 10:00 am MDST on July 3, 2025.

   d. Proposal due by 4:00 pm MDST on July 17, 2025.

   e. Opening Proposals and Evaluation – between July 21 and 25, 2025.

   f. Selection of Contractor – Week of July 28, 2025.

   g. Estimated Notice to Proceed Date – TBD

5. **Project Description & Scope of Work**

   a. Project Plans, Contract Book, ROW map, and Electronic Bid Schedule are available for download from the Navajo DOT website. https://navajodot.org/rfp%2Frfq

   b. Funding Source is Federal Highway Administration (FHWA) Tribal Transportation Program. Small % of Navajo Nation General Funds.

   c. **Scope of Work consists of:** Project N55(1-2)4 includes: roadway excavation; milling, crack cleaning/sealing of existing pavement surface; placement of aggregate base course, geogrid and asphalt pavement; striping, and other miscellaneous work as called for in the design plans and specifications for this 8.265 mile roadway project located on N55 from MP 17.230 to MP 25.495, Socorro County, NM, Navajo Nation. The contractor is encouraged to review the Pavement Construction Phasing Notes as shown on sheet 5 of the Plans. Winder reviewed the three types of rehab methods in this project, the typical sections and the order of the construction phases:

i. Step 1. A- Full Reconstruction: 3 sections and 1,734 LF; Full-recon sections should be installed first, but the 2-inch overlay should be installed as Step 4.
ii. Step 2. B- Corrective Milling/ Crack-Sealing: 13 sections and 16,441 LF; May be installed at the same time as Step 1; Lightly milled ¾"; Collected millings should be stored near section A-1 for reuse; clean and crack-seal; apply the 2-inch overlay as Step 4.
iii. Step 3. C- Crack-Sealing: the remaining 41,905 LF; when cleaning and crack-sealing, limit length to 2-mile sections at a time; the quantity of HOT POURED CRACK SEALANT is measured in "miles" because contractors need to go to the project area and look at the N55 road cracks to get a quantity for the Polyflex Type 2/ mastic materials; the 2-inch overlay should be done as Step 4.
iv. Step 4. Overlay: clean, tack coat, and apply the 2-inch HMA SP IV over sections A, B and C.
v. Step 5. Complete Striping Operations: use a mobile traffic control operation

d. Completion Time – Per Article 4.3 of the NDOT Contract - Agreement.

The Work will be substantially completed within 140 working days after the date when the Contract Times commence (Notice to Proceed) to run as provided in Paragraph 2.3 of the General Conditions and completed and ready for final acceptance in accordance with Paragraph 14.7 of the General Conditions within 160 working days after the date when the Contract Time commence to run.

Please note that the above durations do not take into consideration non-working days for weather conditions, shutdowns during winter suspension(s) and holidays. See Article 12.3 of Standard General Conditions, Exhibit A for requirements related to Delay claims.

e. Bid Schedule – The Bid Schedule excel file has been provided as part of the bid documents.

- Geogrid Reinforcement – the plan quantities and bid schedule are missing a Geogrid Reinforcement bid item. This will be corrected in the Addendum. The approximate quantity for this item is 3000 SY.

- Contractor Quality Control - the normal "Contractor Quality Control" bid item has been removed from the bid schedule. Contractor will be responsible for developing a Quality Control Plan (QCP), determining the cost to complete his own quality control and then basing his bids on this effort. No separate measurement or payment of contractor quality control will be made. See Article 6.3.B – Services, Materials, and Equipment and Article 13.3.D – Tests and Inspections from Exhibit A of the Contract Book. See Section 153 – Contractor Quality Control of Exhibit F of the Contract Book.

    - The Government (NDOT) will be responsible for completing Independent Quality Assurance testing. See Section 153.01 of Exhibit F of the Contract Book.

- A Contractor Furnished Field Testing Laboratory WILL NOT be required as part of this project.

f. Fuel Cost Adjustment – The contract language has been revised to include Fuel Cost Adjustment provisions. No adjustments will be made for fluctuations in the price of fuels other than diesel. See Section 109.06 of Exhibit F of the Contract Book.

g. Project Specifications – This project uses FP-14 for contract language including Supplemental Specifications, Section 101-Terms, Format and Definitions. The Link to the FP-14 Specifications is provided in Exhibit F on page 135 of the contract book. In addition, this project uses NMDOT specifications and NMDOT bid items for the work. The Link to the NMDOT 2019 Standard Specifications is provided in Exhibit F on page 135 of the contract book; see contract book.

~~Please note that SECTION 411: HOT-POURED CRACK SEALANT requires:~~
~~Cracks 1/4" to 1.5" in size = CRAFCO POLYFLEX TYPE 3 (PART #34521)~~
~~Cracks > 1.5" in size = CRAFCO MASTIC ONE (PART #33339)~~

6. Coordination with BIA Navajo Region Branch of Transportation (NRBOT)

a. Project was designed by Wilson & Company who will maintain the Engineer of Record responsibilities.

b. BIA permits will be required to obtain access to the N55 construction areas via BIA road ROW.

c. All coordination with the BIA NRBOT will be conducted by NDOT and/or the designated project Construction Manager (CM).

d. ~~Milling Pile Location – Wilson & Company has coordinated with the BIA regarding the millings that will be generated on the project. BIA maintenance has reviewed the project area and determined that the millings may be placed within the N55 ROW and outside the clear zone. The location for the milling pile is 5 miles north of the end of NM State Maintenance Line on the right side of the road and adjacent to the proposed full reconstruction location A-1 (STA 1004+62 to 1005+62 RT).~~

7. Utility Coordination – See the following from the NDOT Contract Book; Article 7.1 of Exhibit A - Standard General Conditions, Subsection F of Article 10 of Exhibit C – Special Contract Requirements and Section 107.02 of the FP-14 Specifications.

a. NTUA water – No conflicts with NTUA waterlines are expected.

b. NTUA power – No conflicts with NTUA powerlines are expected.

c. Frontier communication – No conflicts with Frontier communication lines are expected.

d. **Socorro Electric Coop (SEC)** – The pavement rehabilitation construction requires that several SEC overhead/underground lines and junction boxes be protected in place. This work will be completed by the contractor in coordination with SEC and will need to take place during construction.

e. **Western New Mexico Communications (WNMC)** – The pavement rehabilitation construction requires that several WNMC overhead/underground lines and junction boxes be protected in place. This work will be completed by the contractor in coordination with WNMC and will need to take place during construction.

8. **Navajo Nation Business Regulatory Department**
   a. **Navajo Business Opportunity Act & Source List**

      https://navajoeconomy.org/business-regulatory/

      https://navajoeconomy.org/business-regulatory/nboa-source-listing/

      https://navajoeconomy.org/wp-content/uploads/2025/02/NBOA-Source-List-2025.02.4.pdf

   b. **Subcontracting Plan**

9. **Review of Request for Proposal**

   a. Page 2 - proposals must be submitted to Navajo DOT at the address shown. Electronic proposals will not be accepted.

   b. Page 5 - all work performed on this project is subject to the tax rate of the unincorporated areas of Socorro County of 6.25%. Since the project area lies within multiple land statuses the taxing authority is to be determined.

   c. Page 5 – evaluation procedure and criteria, including the scoring criteria.

   d. Page 6 – the proposals will be opened and evaluated in accordance with the Navajo Nation Business Opportunity Act.

   e. Pages 7 to 11 – Outline of Request for Proposal

   f. Proposal must be submitted in a sealed envelope.

   g. Bid Schedule must be submitted in a separate sealed envelope clearly marked as "Bid Schedule – RFP #25-05-3688LE Project N55(1-2)4" and with Respondent's information.

      An excel spreadsheet version of the Bid Schedule is included on the website.

   h. Prime Contractor requirements – Self-Perform 50% of the work. See Special Contract Requirement, Clause NN-236-1.

   i. Davis Bacon Wage Rates (Exhibit H of the Contract Book) apply for this Project. Make sure that you follow the appropriate wages for the county in which the project is located.

10. **Addendum(s)**

   a. Addendum(s) will be available for download from the Navajo DOT website. It is important that respondents check the Navajo DOT website for addendum(s).

   b. Addendum Acknowledgement Form

11. Questions

Q: What if the cracks show through the overlay before the end of 1-year warranty? Regarding the 2-inch overlay, a contractor commented that he was concerned that the cracks would likely show through the 2-inch overlay before the 1-year warranty. There were concerns with the cracks reflecting up within months of project completion.

Q: Clarify the unit of quantity for the HOT POURED CRACK SEALANT. Why is it in miles? Regarding the UNIT of measurement for Crack Sealing bid item, the quantity of HOT POURED CRACK SEALANT is measured in “miles” because contractors need to go to the project area and look at the N55 road cracks to get a quantity for the materials needed.

Q: Where will the construction water be accessed? Water permits for construction water are the responsibility of the Contractor. The Contractors should contact the Compliance officer at Navajo Nation Water Code. Contractors are directed to provide the location of the project and quantity of water needed for the project to the Navajo Department of Water Resources. Water Resources can provide the locations of closest NN water resources. Contractors will also need to complete and obtain a Water Use Permit. The Alamo School Board Water Department number is provided for reference. Rhoda will contact the Alamo School Board to make sure the chapter is aware of the upcoming work.

Contact information and online information is as follows:

- Monte Chee, Water Code Compliance Officer; 505-406-6425 Cell, 505-786-2395 Ofc., mchee_71@yahoo.com
- Joseph Paez, Alamo School Board Water Dept.; 575-854-2543, jpaez@ansbi.org
- https://watercode.navajo-nsn.gov/Gov_water_use_related_fees.html

N55(1-2)4 Alamo, NM Road Project
Pre-Proposal Mtg. for RFP #25-05-3688LE
June 24, 2025 10:00 am Sign-In Sheet

NAME / TITLE	COMPANY NAME	PHONE NUMBER / EMAIL
Darryl Bradley, Principal Civil Engineer	Navajo Division of Transportation	505-371-8397 / dbradley@navajodot.org
Ardaniel Begay, Principal Contract Analyst	Navajo Division of Transportation	505-371-8351 / abegay@navajodot.org
Derek Meier, Sr Project Manager	Wilson & Company	505-400-4618 / derek.meier@wilsonco.com
Raymond M. Salazar, Construction Manager	Wilson & Company	505-504-4597 / raymond.salazar@wilsonco.com
Rhoda Winder, Project Manager	Wilson & Company	505-348-4165 / rhoda.winder@wilsonco.com
Marcus Salazar, Construction Inspector	Wilson & Company	505-348-4115 / marcus.salazar@wilsonco.com
Jon Romero, Construction Inspector	Wilson & Company	505-348-4185 / jon.romero@wilsonco.com
Steph Begaye, Construction Inspector	Wilson & Company	505-348-4164 / stephannie.begaye@wilsonco.com
Rob Gross, Estimator	Mountain States Constructors, Inc.	505-292-0108 / rob@msconstructors.com
Stanley Charley, Senior Estimator	Navajo Eng. and Construction Authority	505-210-7026 / stanley.charlie@navajo.net
Nathan Meyer, Construction Estimator	Mesa Verde Inc.	575-554-1062 / Nathanmeyer@mesaverdeinc.com
Joseph Sedillo	Totsoh Corporation	505-527-3234 / Totsohcorporation@yahoo.com
Jason Harvey, Project Manager/Estimator	Meridian Contracting, Inc.	505-872-2841 / J.Harvey@meridiancon.net
Michael Gurule, Estimator	814 Solutions	505-977-9557 / michaelg@814solutions.com
Kolby Rowser	Mooweep, LLC	801-430-6424 / sales@mooweep.com
Derrick Joe	DJOE Construction, LLC	928-429-1779 / djoe@djoeconstruction.com

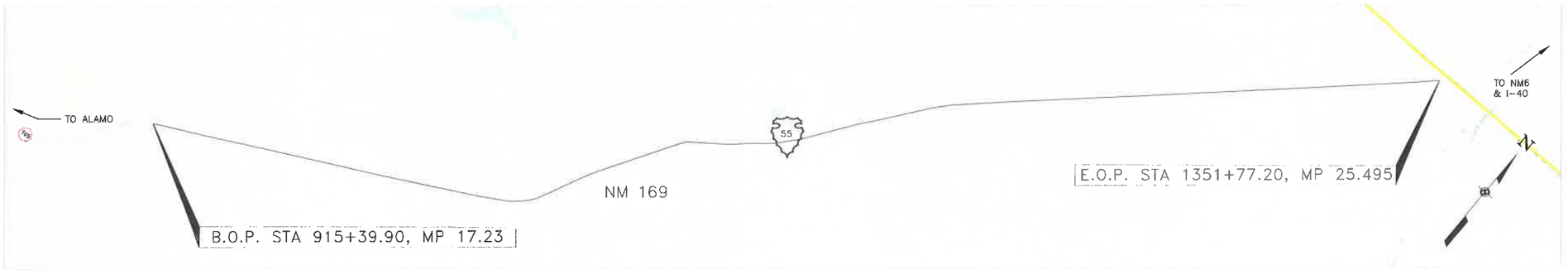
NAVAJO DIVISION OF TRANSPORTATION

PLANS FOR PROPOSED

N55(1-2) PAVEMENT REHAB PROJECT

I.D. N55
SOCORRO COUNTY
LENGTH 8.265 miles

INDEX OF SHEETS		
SHEET NUMBER	DESCRIPTION	
1	COVER SHEET	
2	GENERAL NOTES & UTILITIES	
3	SUMMARY OF QUANTITIES	
4	ESTIMATED QUANTITIES	
5	TYPICAL SECTIONS	
6	LOCATION PLAN LAYOUT	
7	N55 ROADWAY LOCATION B - 1	
8	N55 ROADWAY LOCATION B - 2	
9	N55 ROADWAY LOCATION B - 3 & A -1	
10	N55 ROADWAY LOCATION B - 4	
11	N55 ROADWAY LOCATION B - 5	
12	N55 ROADWAY LOCATION B - 6	
13	N55 ROADWAY LOCATION A - 2	
14	N55 ROADWAY LOCATION B - 7	
15	N55 ROADWAY LOCATION A - 3	
16 THRU 17	N55 ROADWAY LOCATION B - 8	
18	N55 ROADWAY LOCATION B - 9	
19	N55 ROADWAY LOCATION B - 10	
20	N55 ROADWAY LOCATION B - 11	
21	**N55 ROADWAY LOCATION B - 12**	
22	N55 ROADWAY LOCATION B - 13	
23	TRAFFIC CONTROL	
	PROJECT TOTAL =	23



PROJECT LENGTH				
ROADWAY N55			FEET	MILES
LOCATION	STATION TO STATION			
B.O.P.		915+39.90		
B-1	988+23.72 -	990+20.58	196.86	0.037
B-2	992+50.25 -	996+43.97	393.72	0.075
B-3	999+39.26 -	1003+32.98	393.72	0.075
A-1	1004+64.22 -	1005+62.65	98.43	0.019
B-4	1030+89.02 -	1036+13.98	524.96	0.099
B-5	1078+46.47 -	1080+43.33	196.86	0.037
B-6	1094+21.35 -	1096+18.21	196.86	0.037
A-2	1152+28.72 -	1157+53.68	524.96	0.099
B-7	1169+25.00 -	1177+22.28	797.28	0.151
A-3	1180+50.38 -	1181+98.03	147.65	0.028
B-8	1190+34.68 -	1214+62.62	2427.94	0.460
B-9	1223+48.49 -	1233+65.60	1017.11	0.193
B-10	1262+20.07 -	1264+16.93	196.86	0.037
B-11	1267+45.03 -	1269+41.89	196.86	0.037
B-12	1287+46.44 -	1291+40.16	393.72	0.075
B-13	1347+83.48 -	1351+44.39	360.91	0.068
E.O.P.	1351+77.20			
		TOTAL	43637.30	8.265

U.S. CUSTOMARY DIMENSIONS:
SLOPES ARE EXPRESSED AS RUN:RISE

SPECIFICATIONS:
"STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, 2019 EDITION" BY THE NEW MEXICO DEPARTMENT OF TRANSPORTATION.

OWNER

NAVAJO D.O.T

TYPE OF CONSTRUCTION:
PAVEMENT RECONSTRUCTION, BORROW, GEOGRID, AGGREGATE BASE COURSE, HOT MIX ASPHALT (HMA) PAVEMENT, TRAFFIC CONTROL AND STRIPING.

RHODA JEAN WINDER
NEW MEXICO
29707
PROFESSIONAL ENGINEER
6-23-25

100% DESIGN
MAY 2025

PLANS PREPARED BY

WILSON & COMPANY
4401 MASTHEAD ST. NE
SUITE 150
ALBUQUERQUE, NM 87109

RECOMMENDED:

PRINCIPAL ENGINEER
NAVAJO DIVISION OF TRANSPORTATION

DATE: 6/13/25

APPROVED:

DIRECTOR
NAVAJO DIVISION OF TRANSPORTATION

DATE: 6/16/2025

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NAVAJO DIVISION OF TRANSPORTATION

PLANS FOR PROPOSED

N55(1-2) PAVEMENT REHAB PROJECT

I.D. N55
SOCORRO COUNTY
LENGTH 8.265 miles

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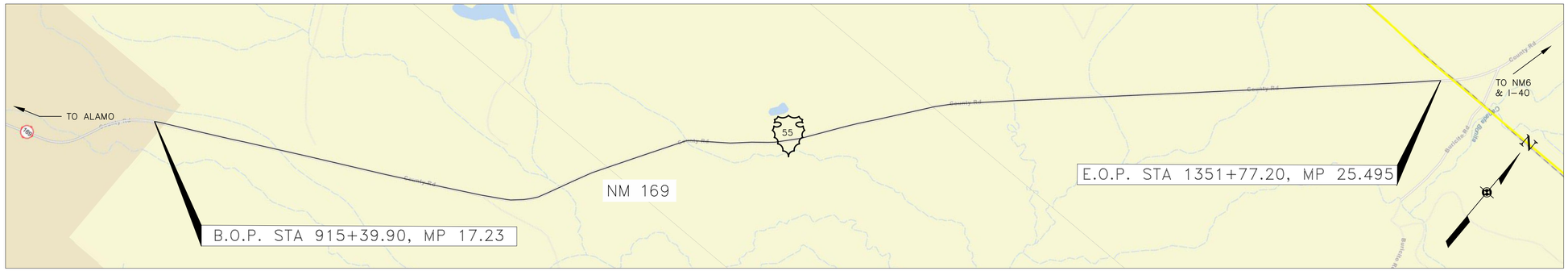

PROJECT LENGTH					
ROADWAY N55				FEET	MILES
LOCATION	STATION	TO	STATION		
B.O.P.			915+39.90		
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OWNER

TYPE OF CONSTRUCTION:
PAVEMENT RECONSTRUCTION, BORROW, GEOGRID, AGGREGATE BASE COURSE, HOT MIX ASPHALT (HMA) PAVEMENT, TRAFFIC CONTROL AND STRIPING.

RHODA JEAN WINDER
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PROFESSIONAL ENGINEER

100% DESIGN
MAY 2025

PLANS PREPARED BY

WILSON & COMPANY
4401 MASTHEAD ST. NE
SUITE 150
ALBUQUERQUE, NM 87109

RECOMMENDED:

_____ DATE: _____
PRINCIPAL ENGINEER
NAVAJO DIVISION OF TRANSPORTATION

APPROVED:

_____ DATE: _____
DIRECTOR
NAVAJO DIVISION OF TRANSPORTATION

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GENERAL NOTES

1. ALL WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE "STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, 2019 EDITION" BY THE NEW MEXICO DEPARTMENT OF TRANSPORTATION
2. ALL PERMANENT AND TEMPORARY ROADSIDE SIGNS, AND PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS (LATEST EDITION) AND IN ACCORDANCE WITH THE DETAILS N THESE PLANS, PLACEMENT OF "STOP" BAR, PERMANENT TRAFFIC SIGNS AND PAVEMENT MARKINGS SHALL BE FIELD ADJUSTED AS DIRECTED BY THE CONSTRUCTION MANAGER (CM), AT NO ADDITIONAL COST TO THE OWNER.
3. THE TEMPORARY TRAFFIC CONTROL DETAILS SHOWN REFLECTS GENERAL REQUIREMENTS FOR THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR PREPARING AND SUBMITTING A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH THESE DETAILS, TAKING INTO ACCOUNT THE CONTRACTOR'S CONSTRUCTION SEQUENCING PLAN, MUTCD, AND THE 618 - TRAFFIC CONTROL MANAGEMENT. THE CONTRACTOR SHALL ALSO SUBMIT A COPY OF THIS TRAFFIC CONTROL PLAN TO THE CM (2) WEEKS PRIOR TO START OF CONSTRUCTION.
4. THE BIDDER SHALL READ AND MAKE CAREFUL EXAMINATION OF THE PLANS, SPECIFICATIONS, QUANTITIES, MATERIAL, AND VISIT THE SITE OF THE PROPOSED CONSTRUCTION TO BECOME FAMILIAR WITH THE SITE CONDITIONS AND LIMITATIONS BEFORE MAKING A PROPOSAL. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY AND ALL ERRORS RESULTING FROM THE FAILURE TO MAKE AN EXAMINATION. ANY INFORMATION DERIVED FROM THE MAPS, PLANS, SPECIFICATIONS, PROFILES, DRAWINGS OR THE ENGINEER, SHALL NOT RELIEVE THE CONTRACTOR FROM ANY RISK OR FROM FULFILLING THE TERMS OF THE CONTRACT.
5. THE QUANTITIES SHOWN ARE FOR ESTIMATING PURPOSES ONLY AND TO COMPARE AND CANVAS BIDS. ACTUAL PAY QUANTITIES WILL BE DETERMINED IN THE FIELD FOR AUTHORIZED CHANGES THAT AFFECT THE QUANTITIES. ANY OVER-RUN OR UNDER-RUN OF QUANTITIES SHALL BE SUBJECT TO SECTION 109 - MEASUREMENT AND PAYMENT.
6. THE LOCATION OF UTILITIES AS SHOWN IN THESE PLANS ARE APPROXIMATE AND ARE ONLY TO ASSIST THE CONTRACTOR IN COMPLETING THE WORK. THE CONTRACTOR SHALL CONTACT ALL UTILITY OWNERS PRIOR TO STARTING ANY CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL CONTACT THE NEW MEXICO ONE-CALL AT (800)-321-2537, WESTERN NEW MEXICO COMMUNICATIONS AT (575)-607-8449, AND SOCORRO ELECTRIC COOPERATIVE AT (575)-835-0560, PRIOR TO STARTING ANY CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITIES AND THEIR LOCATIONS WITH THE UTILITY OWNERS PRIOR TO CONSTRUCTION, ANY UTILITIES DAMAGED DUE TO NEGLIGENCE OF THE CONTRACTOR SHALL BE RESTORED TO THE CODE REQUIREMENTS AT THE CONTRACTORS EXPENSE.
7. THE ROADWAY TYPICAL SECTION SHOWN IS THE BASIC TEMPLATE TO WHICH THE PROJECT IS TO BE STAKED AND BUILT. HOWEVER, THERE WILL BE LOCATIONS WHERE, DUE TO EXISTING GROUND CONDITIONS, TURNOUTS, CULVERTS, OR OTHER STRUCTURES, ETC., THE SHOWN TYPICAL SLOPES CANNOT BE CONSTRUCTED. IN THIS CASE, THE ENGINEER OF RECORD, THROUGH THE CM, SHALL BE CONSULTED FOR CHANGES IN THE TYPICAL SECTION, DESIGN SLOPES, AND/OR OTHER ADJUSTMENTS BEFORE PROCEEDING WITH THE WORK UNLESS NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL STAY WITHIN THE LIMITS OF CONSTRUCTION, UNLESS OTHERWISE APPROVED. IN NO CASE SHALL THE CUT AND FILL BACK SLOPES BE BUILT STEEPER THAN THE MAXIMUM ALLOWED IN THE ROADWAY TYPICAL SECTION SHOWN.

UTILITY CONTACTS

WATER AND SANITARY SEWER
<NONE>

TELECOMMUNICATIONS
WESTERN NEW MEXICO COMMUNICATIONS
CONTACT:
KORY WEBB, ENGINEERING@WNMT.COM
575-607-8449

ELECTRIC POWER
SOCORRO ELECTRIC COOPERATIVE
215 MANZANARES AVE.
SOCORRO, NM 87801
CONTACT:
ANGELICA TRUJILO, ATRUJILLO@SOCORROELECTRIC.COM
575-835-0560

ABBREVIATIONS
BUREAU OF INDIAN AFFAIRS (BIA)
LEFT HAND (LH)
OVER-HEAD (OH)
RIGHT HAND (RH)
RIGHT OF WAY (ROW)
SOCORRO ELECTRIC COOPERATIVE (SEC)
UNDER-GROUND (UG)
WESTERN NEW MEXICO COMMUNICATIONS (WNMC)
CROSSING (X-ING)

UTILITY LOCATIONS/CONFLICTS SUMMARY

DESCRIPTION	Begin Station	End Station	Begin Offset	Begin Location	End Offset	End Location	Owner	Notes
LOCATION B-3 -- MILL AND OVERLAY	999+39.26	1003+32.98						
UG Communication Line			73' LH	1000+65.62	20' LH	1003+32.98	WNMC	Protect in place
MINOR OVERLAY -	1003+32.98	1004+64.22						
UG Communication line			21' LH	1003+32.98	28' LH	1004+64.22	WNMC	Protect in place
LOCATION A-1 -- FULL RECONSTRUCTION	1004+64.22	1005+62.65						
UG Communication Line			28" LH	1004+64.22	65' LH	1005+21.70	WNMC	Protect in place
MINOR OVERLAY	1036+13.98	1078+46.47						
UG Communication Line			80' LH	1046+83.80	14' LH	1078+46.47	WNMC	Protect in place
LOCATION B-5 -- MILL AND OVERLAY	1078+46.47	1080+43.33						
UG Communication line			14' LH	1078+46.47	14' LH	1080+43.33	WNMC	Protect in place
MINOR OVERLAY	1080+43.33	1094+21.35						
UG Communication line			14' LH	1080+43.33	14' LH	1094+21.35	WNMC	Protect in place
LOCATION B-6 -- MILL AND OVERLAY	1094+21.35	1096+18.21						
UG Communication Line			14' LH	1094+21.35	14' LH	1096+18.21	WNMC	Protect in place
UG Communication Line			75' LH	1095+80.06	76' LH	1096+12.86	SEC	No conflict
MINOR OVERLAY	1096+18.21	1152+28.72						
UG Communication Line			15' LH	1096+18.21	80' LH	1114+23.89	WNMC	Protect in place
UG Communication Line X-ing			20' LH	1108+92.392	28' RH	1108+92.39	WNMC	Protect in place
UG Communication Line			30' RH	1108+92.39	30' RH	1129+79.01	WNMC	Protect in place
UG Communication Line X-ing			25' RH	1129+79.01	25' LH	1129+79.01	WNMC	Protect in place
UG Communication Line			25' LH	1129+79.01	25' LH	1132+48.03	WNMC	Protect in place
UG Communication Line X-ing			28' LH	1132+48.03	25' RH	1132+82.68	WNMC	Protect in place
UG Communication Line			25' RH	1132+82.68	28'RH	1136+69.61	WNMC	Protect in place
UG Communication Line			26' RH	1134+14.55	26' RH	1137+69.51	SEC	No conflict.
UG Communication Line			48' LH	1146+19.39	23' LH	1152+28.72	WNMC	Protect in place
OH Powerline from Google Earth Sta: 34+960?				1147+63.78		1147+63.78	SEC	No mitigation. OH Elec Lines are 20+ feet.
OH Powerline from Google Earth				1147+63.78		1153+54.33	SEC	No mitigation. OH Elec Lines are 20+ feet.
LOCATION A-2 -- FULL RECONSTRUCTION	1152+28.72	1157+53.68						
UG Communication Line			23' LH	1152+28.72	23' LH	1157+53.68	WNMC	Protect in place
Powerpole on RH side from Google Earth				1153+54.33			SEC	No mitigation. OH Elec Lines are 20+ feet.
MINOR OVERLAY	1157+53.68	1169+25.00						
UG Communication line			22' LH	1157+53.68	22' LH	1169+25.00	WNMC	Protect in place
LOCATION B-7 -- MILL AND OVERLAY	1169+25.00	1177+22.28						
UG Communication line			22' LH	1169+25.00	22' LH	1177+22.28	WNMC	Protect in place
MINOR OVERLAY-	1177+22.28	1180+50.38						
UG Communication line			22' LH	1177+22.28	22' LH	1180+50.38	WNMC	Protect in place
LOCATION A-3 -- FULL RECONSTRUCTION	1180+50.38	1181+98.03						
UG Communication line			20' LH	1180+50.38	20' LH	1181+98.03	WNMC	Protect in place
MINOR OVERLAY	1181+98.03	1190+34.68						
UG Communication Line			20' LH	1181+98.03	20' LH	1190+34.68	WNMC	Protect in place
UG Communication Line			69' RH	1183+69.32	20' RH	1190+34.68	WNMC	Protect in place
UG Communication Line			16' LH	1184+88.32	16' LH	1187+53.71	SEC	No conflict
LOCATION B-8 -- MILL AND OVERLAY	1190+34.68	1214+62.62						
UG Communication Line 1			22' LH	1190+34.68	22' LH	1214+62.62	WNMC	Protect in place
UGCommunication Line 2			16' RH	1190+34.68	15' RH	1200+04.51	WNMC	Protect in place
UG Communication Line Bends to xing			15' RH	1200+04.51	76' LH	1202+68.74	WNMC	Protect in place
UG Communication Line Follows fenceline			76' LH	1202+68.74	50' LH	1214+62.62	WNMC	Protect in place
MINOR OVERLAY	1214+62.62	1223+48.49						
UG Communication Line			27' LH	1214+62.62	27' LH	1223+48.49	WNMC	Protect in place
UG Communication Line			50' LH	1214+62.62	78' LH	121818..06	WNMC	Protect in place
OH Powerlines from BIA as-built plans				1217+35.56		1217+51.97	SEC	No mitigation. OH Elec Lines are 20+ feet.
LOCATION B-9 -- MILL AND OVERLAY	1223+48.49	1233+65.60						
UG Communication Line			27' LH	1223+48.49	26' LH	1233+65.60	WNMC	Protect in place
MINOR OVERLAY	1233+65.60	1262+20.07						
UG Communication Line			26' LH	1233+65.60	26' LH	1262+20.07	WNMC	Protect in place
LOCATION B-10 -- MILL AND OVERLAY	1262+20.07	1264+16.93					WNMC	Protect in place
UG Communication Line			26' LH	1262+20.07	28' LH	1264+16.93	WNMC	Protect in place
MINOR OVERLAY	1264+16.93	1267+45.03						
UG Communication Line			28' LH	1264+16.93	28' LH	1267+45.03	WNMC	Protect in place
LOCATION B-11 -- MILL AND OVERLAY	1267+45.03	1269+41.89						
UG Communication Line			28' LH	1267+45.03	28' LH	1268+06.58	WNMC	Protect in place
UG Communication Line X-ing			28' LH	1268+06.58	68' RH	1268+16.30	WNMC	Protect in place
UG Communication Line			73' LH	1268+95.02	52' LH	1269+41.89	WNMC	Protect in place
MINOR OVERLAY	1269+41.89	1287+46.44						
UG Communication Line			75' LH	1268+96.32	75' RH	1271+30.98	WNMC	Protect in place
UG Communication Line			75' RH	1271+30.98	None	1287+46.44	WNMC	Protect in place

STATE	PROJECT	SHEET NUMBER
NM	N55	2

REMOVAL NOTES

CONSTRUCTION NOTES

REFERENCE NOTES

RHODA JEAN WINDER
NEW MEXICO
29707
PROFESSIONAL ENGINEER
5/15/25

REVISION	BY	DATE

NAVAJO NATION
DIVISION OF TRANSPORTATION

N55

GENERAL NOTES & UTILITIES

PROJECT MANAGER: RW	DATE: 4/25	DRAWING	SHEET
LEAD DESIGNER: KAN	DATE: 4/25		2 OF 23
AS-BUILT BY:	DATE:		
SCALE: 1"=100' H 1"=20' V			

SUMMARY OF QUANTITIES BY LOCATION

NMDOT ITEM NO.	ITEM DESCRIPTION	UNIT	A-1	A-2	A-3	SECTIONS B & C	PROJECT TOTAL
FP-14: 31002-1100	CONTINUOUS COLD IN PLACE RECYCLED ASPHALT BASE COURSE (CCRAC) 3", TYPE A	SY	285	1517	427	123836	126100
FP-14: 41901-0000	ASPHALT RUBBER SURFACE TREATMENT, CHIP SEAL	SY	285	1517	427	123836	126100
203200	UNSUITABLE MATERIAL EXCAVATION	CY	240	1265	360	-	1900
303000	BASE COURSE	TON	110	585	165	-	875
408100	PRIME COAT MATERIAL	TON	1.0	3.5	1.0	236.5	242
423283	HMA SP IV COMPLETE (3" BOTTOM LIFT)	TON	60	280	80	-	420
704000	RETROFLECTORIZED PAVEMENT MARKINGS 4"	LF	221	1181	332	96466	98200
604300	GEOGRID REINFORCEMENT	SY	403	2148	605	-	3200

SUMMARY OF QUANTITIES

NMDOT ITEM NO.	ITEM DESCRIPTION	UNIT	PROJECT TOTAL
FP-14: 31002-1100	CONTINUOUS COLD IN PLACE RECYCLED ASPHALT BASE COURSE (CCRAC) 3", TYPE A	SY	126100
FP-14: 41901-0000	ASPHALT RUBBER SURFACE TREATMENT, CHIP SEAL	SY	126100
203200	UNSUITABLE MATERIAL EXCAVATION	CY	1900
303000	BASE COURSE	TON	875
408100	PRIME COAT MATERIAL	TON	242
423283	HMA SP IV COMPLETE (3" BOTTOM LIFT)	TON	420
601100	REMOVAL OF SURFACING	LS	1
618000	TRAFFIC CONTROL MANAGEMENT	LS	1
621000	MOBILIZATION	LS	1
702810	TRAFFIC CONTROL DEVICES FOR CONSTRUCTION	LS	1
704000	RETROFLECTORIZED PAVEMENT MARKINGS 4"	LF	98200
801000	CONSTRUCTION STAKING BY THE CONTRACTOR	LS	1
604300	GEOGRID REINFORCEMENT	SY	3200

STATE	PROJECT	SHEET NUMBER
NM	N55	3

REMOVAL NOTES

CONSTRUCTION NOTES

REFERENCE NOTES

1. ITEM 411000 - SEE SUPPLEMENTAL SPECIFICATIONS FOR MEASUREMENT AND PAYMENT DETAILS.
2. ITEM 414004 - SEE SUPPLEMENTAL SPECIFICATIONS FOR MEASUREMENT AND PAYMENT DETAILS.

RHODA JEAN WINDER
NEW MEXICO
29707
PROFESSIONAL ENGINEER
7-3-25

	REVISION	BY	DATE
1	REVISED SHEET PER ADD. NO. 1	RJW	7/3/2025

NAVAJO NATION
DIVISION OF TRANSPORTATION

N55

SUMMARY OF QUANTITIES

PROJECT MANAGER: RW	DATE: 7/25	DRAWING	SHEET
LEAD DESIGNER: KAN	DATE: 7/25		
AS-BUILT BY:	DATE:		3 OF 23
SCALE: 1"=100' H 1"=20' V			

ESTIMATED QUANTITIES

SURFACING SCHEDULE

					203200 UNSUITABLE MATERIAL EXCAVATION			303000 BASE COURSE				408100 PRIME COAT MATERIAL			FP-14: 41901-0000 ASPHALT RUBBER SURFACE TREATMENT, CHIP SEAL		FP-14: 31002-1100 CONTINUOUS COLD IN PLACE RECYCLED ASPHALT BASE COURSE (CCRAC) 3", TYPE A			423283 HMA SP IV COMPLETE (3" BOTTOM LIFT)				604300 GEOGRID REINFORCEMENT	
					WIDTH	DEPTH	C.Y.	WIDTH	DEPTH	S.Y.	TONS	WIDTH	S.Y.	TON	WIDTH	SY	WIDTH	DEPTH	S.Y.	WIDTH	DEPTH	S.Y.	TONS	WIDTH	SY
STATION	TO	STATION	LENGTH (FT)	DESCRIPTION	(FT)	IN		(FT)	(IN)			(FT)			(FT)		(FT)	(IN)		(FT)	(IN)			(FT)	
N55																									
915+39.90		1351+77.20	43637.30	CCRAC AND CHIP SEAL	-	-	-	-	-	-	-	26.00	126,063.31	236.5	26.00	126064.00	26.00	3.00	126064	-	-	-	-	-	-
1004+64.22		1005+62.65	98.43	LOCATION A-1 – FULL RECONSTRUCTION	32.52	24.00	240.0	30.34	6.00	331.82	110.0	28.18	308.20	1.0	-	-	-	-	-	28.18	3.00	308.20	60.0	36.82	403.0
1152+28.72		1157+53.68	524.96	LOCATION A-2 – FULL RECONSTRUCTION	32.52	24.00	1,265.0	30.34	6.00	1,769.70	585.0	28.18	1,643.71	3.5	-	-	-	-	-	28.18	3.00	1643.71	280.0	36.82	2148.0
1180+50.38		1181+98.03	147.65	LOCATION A-3 – FULL RECONSTRUCTION	32.52	24.00	360.0	30.34	6.00	497.73	165.0	28.18	462.29	1.0	-	-	-	-	-	28.18	3.00	462.29	80.0	36.82	605.0
				PROJECT SUBTOTAL			1,865.0				860.0			242.0		126,064.00			126,064				420.0		3156.0
				PROJECT USE			**1,900**				**875**			**242**		**126,100**			**126,100**				**420**		**3,200**

PAVEMENT MARKINGS

STATION	TO	STATION	LOCATION	704000 - RETROFLECTORIZED PAINTED MARKINGS 4"	
				SOLID WHITE	BROKEN YELLOW (10' STRIPE, 30' GAP)
				FT	FT
N55					
915+39.90	-	1351+77.20	REMAINING ROADWAY	87274.6	10909.3
			PROJECT SUBTOTAL	87275	10909
			PROJECT USE	**98200**	

NOTE: QUANTITIES SHOWN INCLUDE TWO APPLICATIONS

ESTIMATED SURFACING FACTORS

ITEMS	* PG 70-22	* HYDRATED LIME	** BITUMINOUS MATERIAL		* UNIT	UNIT
	BY WT OF TOTAL MIX	BY WT OF TOTAL MIX	SPEC 407	SPEC 408	WEIGHT	WEIGHT
			GAL/SY	GAL/SY	LBS/CY	GAL/TON
BASE COURSE					3950	
HMA SP-III	5.3% BY WT. OF TOTAL MIX	1.5% BY WT. OF TOTAL MIX			4000	
HMA SP-IV	5.3% BY WT. OF TOTAL MIX	1.5% BY WT. OF TOTAL MIX			4080	
TACK COAT			0.08 GAL/SY			240.00
PRIME COAT				0.45 GAL/SY		240.00

* FOR ESTIMATING PURPOSES ONLY, ACTUAL WEIGHTS OR PERCENTS SHALL BE DETERMINED BY APPROVED MIX DESIGN.

** FOR ESTIMATING PURPOSES ONLY, APPLICATION RATE SHALL BE DETERMINED BY THE PROJECT MANAGER.

STATE	PROJECT	SHEET NUMBER
NM	N55	4

REMOVAL NOTES

CONSTRUCTION NOTES

REFERENCE NOTES

RHODA JEAN WINDER
NEW MEXICO
29707
PROFESSIONAL ENGINEER
7-3-25

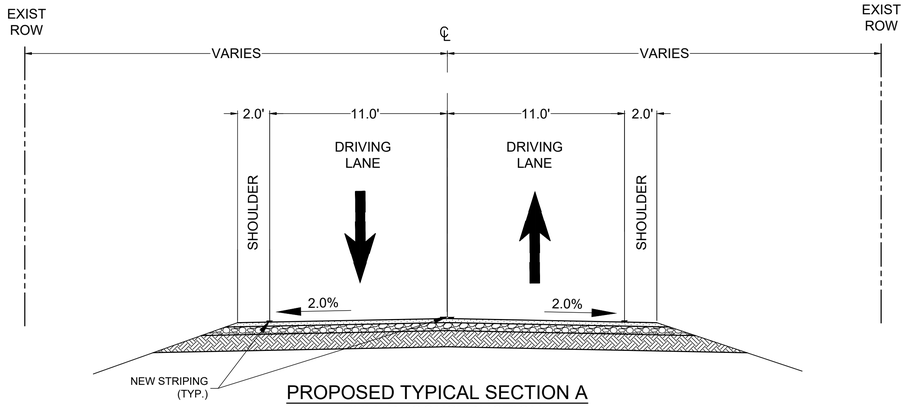
	REVISION	BY	DATE
1	REVISED SHEET PER ADD. NO. 1	RJW	7/3/2025

NAVAJO NATION
DIVISION OF TRANSPORTATION

N55

ESTIMATED QUANTITIES

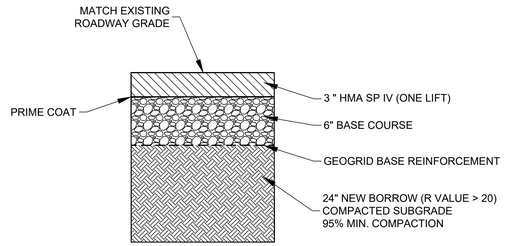
PROJECT MANAGER: RW	DATE: 7/25	DRAWING	SHEET
LEAD DESIGNER: KAN	DATE: 7/25		
AS-BUILT BY:	DATE:		4 OF 23
SCALE: 1"=100' H 1"=20' V			

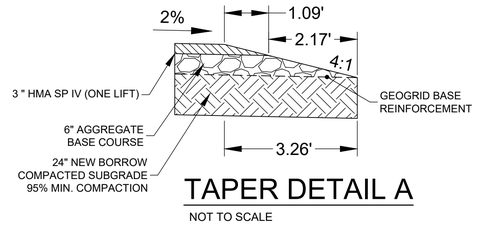


PROPOSED TYPICAL SECTION A

FULL RECONSTRUCTION

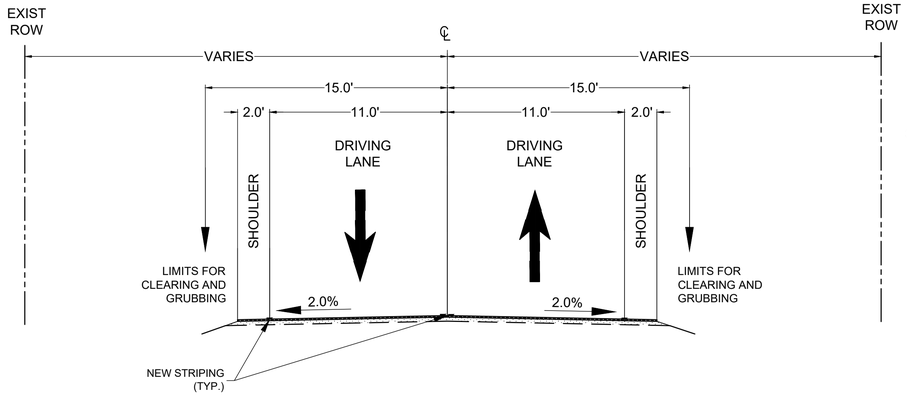
SCALE 1"=5' LOCATIONS A-1, A-2, & A-3





TAPER DETAIL A

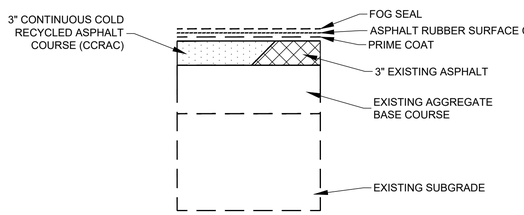
NOT TO SCALE

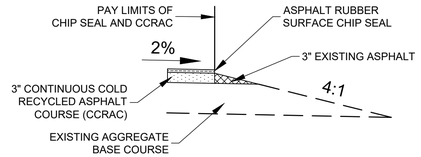


PROPOSED TYPICAL SECTION B & C

CCRAC AND CHIP SEAL

NTS STA 915+39.90 TO 1351+77.20





TAPER DETAIL B & C

NOT TO SCALE

PAVEMENT CONSTRUCTION PHASING NOTES

1. START WITH FULL RECONSTRUCTION LOCATIONS PER PROPOSED TYPICAL SECTION A. LIMIT THE CONSTRUCTION AREA TO 1-MILE LENGTHS.
   - A - REMOVE EXISTING ASPHALT, BASE COURSE AND 2 FEET OF EXISTING SUBGRADE MATERIAL.
   - B - PLACE AND COMPACT 2 FEET OF NEW BORROW MATERIAL (R-VALUE > 20).
   - C - PLACE GEOGRID BASE REINFORCEMENT.
   - D - PLACE AND COMPACT 6 INCHES OF NEW AGGREGATE BASE MATERIAL.
   - E - PLACE PRIME COAT.
   - F - PLACE AND COMPACT 3 INCH HMA SP IV TO MATCH EXISTING ROADWAY GRADE.
2. COMPLETE FINAL OPERATIONS PER TYPICAL SECTIONS B & C. LIMIT THE CONSTRUCTION AREA TO 2-MILE LENGTHS.
   - A - CLEAR AND GRUB 2 FEET PAST ROADWAY EDGE. CLEAN ROADWAY SURFACE OF DEBRIS AND DIRT.
   - B - FILL THE LARGER CRACKS WITH FINE SAND.
   - C - 3" COLD MILL, MIX, PLACE AND COMPACT CCRAC.
   - D - PLACE PRIME COAT.
   - E - PLACE ASPHALT RUBBER SURFACE CHIP SEAL.
   - F - PLACE FOG SEAL.
3. COMPLETE STRIPING OPERATIONS. CONDUCT USING A MOBILE TRAFFIC CONTROL OPERATION.

STATE	PROJECT	SHEET NUMBER
NM	N55	5

REMOVAL NOTES

CONSTRUCTION NOTES

REFERENCE NOTES

1. SEE SHEET 23 FOR TRAFFIC CONTROL DETAILS.

RHODA JEAN WINDER NEW MEXICO 29707 PROFESSIONAL ENGINEER 7-3-25

	REVISION	BY	DATE
1	REVISED SHEET PER ADD. NO. 1	RJW	7/3/2025

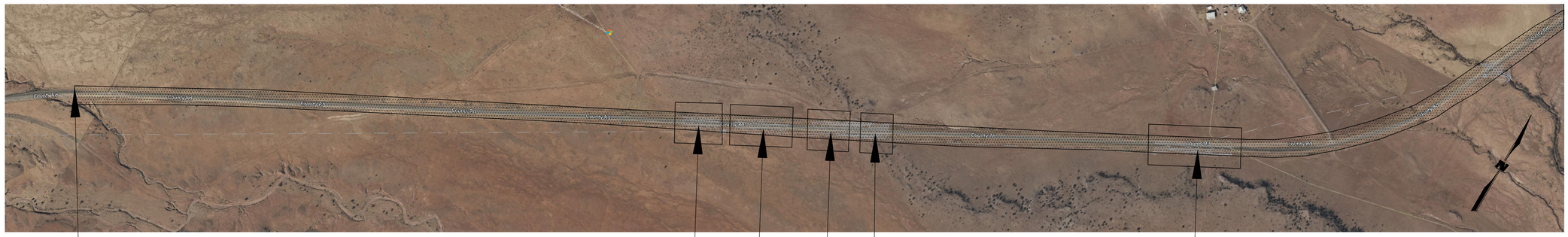
NAVAJO NATION DIVISION OF TRANSPORTATION

NAVAJO D.O.T

N55

TYPICAL SECTIONS

PROJECT MANAGER: RW	DATE: 7/25	DRAWING	SHEET
LEAD DESIGNER: KAN	DATE: 7/25		
AS-BUILT BY:	DATE:		5 OF 23
SCALE: 1"=100' H 1"=20' V			



BOP
STA 915+39.90
MP 17.23AT EXISTING CATTLE-GUARD

LOCATION B-1
SEE SHEET 7

LOCATION B-2
SEE SHEET 8

LOCATION B-3
SEE SHEET 9

LOCATION A-1
SEE SHEET 9

LOCATION B-4
SEE SHEET 10

LOCATION B-5
SEE SHEET 11

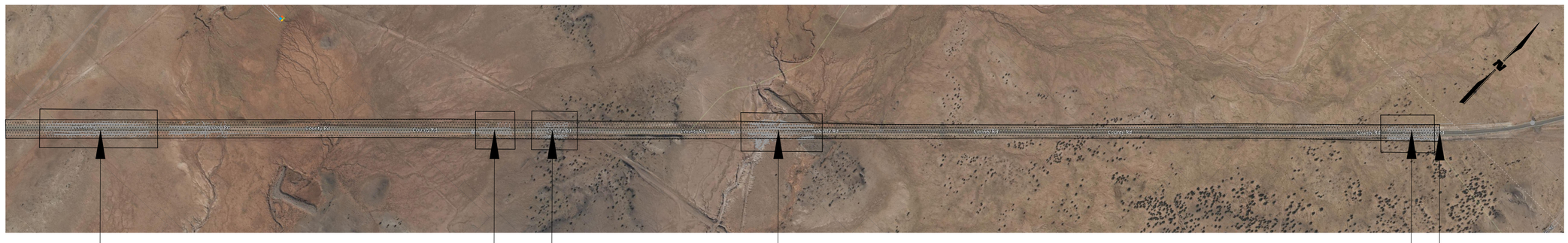
LOCATION B-6
SEE SHEET 12

LOCATION A-2
SEE SHEET 13

LOCATION B-7
SEE SHEET 14

LOCATION A-3
SEE SHEET 15

LOCATION B-8
SEE SHEETS 16 & 17



LOCATION B-9
SEE SHEET 18

LOCATION B-10
SEE SHEET 19

LOCATION B-11
SEE SHEET 20

LOCATION B-12
SEE SHEET 21

LOCATION B-13
SEE SHEET 22

EOP
STA 1351+77.20
MP 25.495
AT TRANSITION TO HIGHWAY 54

STATE	PROJECT	SHEET NUMBER
NM	N55	6

REMOVAL NOTES

CONSTRUCTION NOTES

REFERENCE NOTES

RHODA JEAN WINDER
NEW MEXICO
29707
7-3-25
PROFESSIONAL ENGINEER

	REVISION	BY	DATE
1	REVISED SHEET PER ADD. NO. 1	RJW	7/3/2025

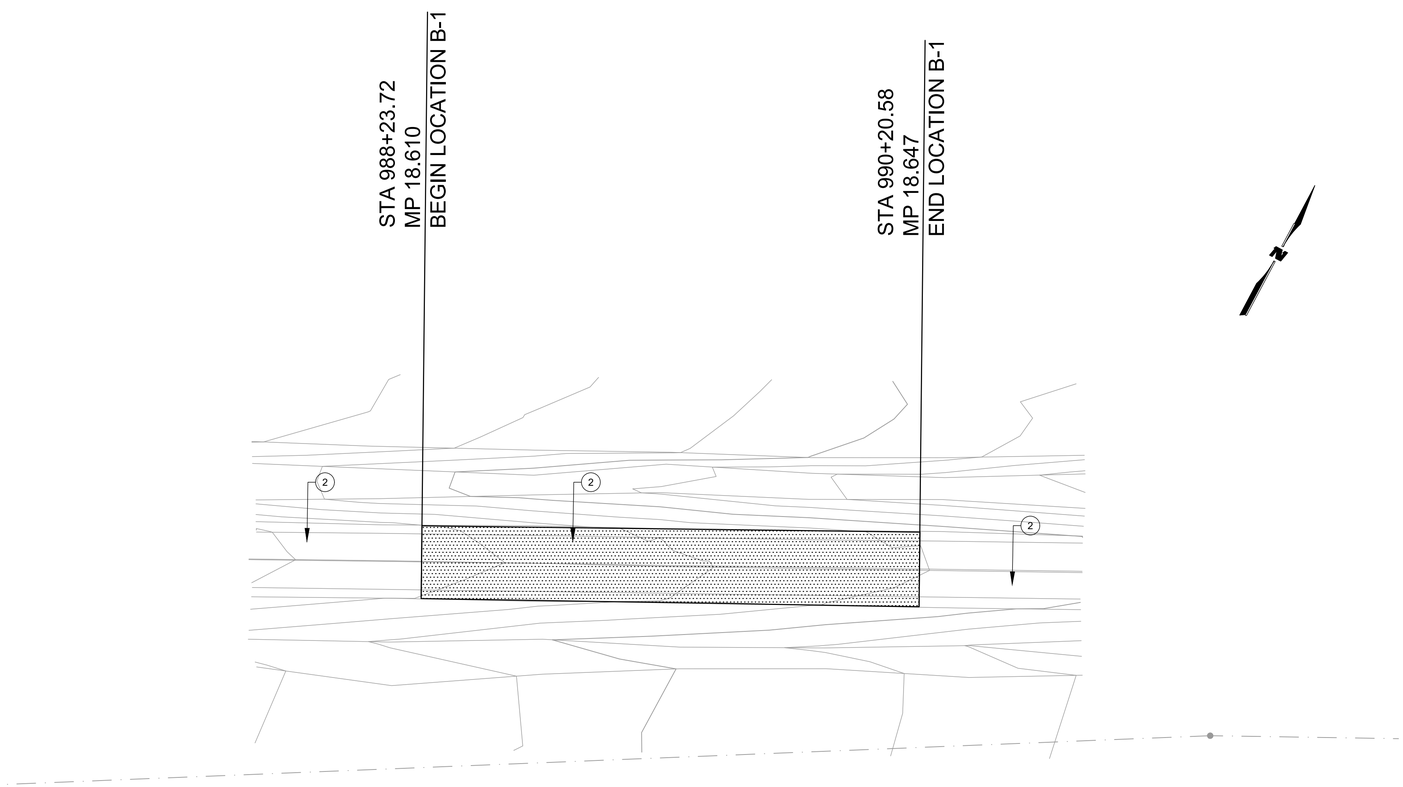
NAVAJO NATION
DIVISION OF TRANSPORTATION

NAVAJO D.O.T

N55

LOCATION PLAN LAYOUT

PROJECT MANAGER: RW	DATE: 7/25	DRAWING	SHEET
LEAD DESIGNER: KAN	DATE: 7/25		6 OF 23
AS-BUILT BY:	DATE:		
SCALE: 1"=100' H 1"=20' V			



N55 ROADWAY LOCATION B-1

SCALE: 1" = 30'

0 15' 30'

STATE	PROJECT	SHEET NUMBER
NM	N55	7

REMOVAL NOTES

CONSTRUCTION NOTES

1. RECON LOCATIONS
   REMOVE EXISTING ASPHALT, BASE COURSE & 2 FT OF EXISTING SUBGRADE. REPLACE SUBGRADE WITH NEW BORROW MATERIAL. MATCH EXISTING ROADWAY GRADE. SEE SHEET 5 TYPICAL SECTION AND RECONSTRUCTION NOTES.
2. CCRAC AND CHIP SEAL APPLIES TO ALL REMAINING ROADWAY. CLEAR AND GRUB. CLEAN ROADWAY OF DEBRIS AND DIRT. FILL LARGE CRACKS WITH FINE SAND. 3-INCH COLD MILL. MIX, PLACE, COMPACT CCRAC. APPLY PRIME COAT. PLACE CHIP SEAL. APPLY FOG SEAL. SEE SHEET 5 TYPICAL SECTION B&C.
3. SEE SHEET 2 FOR UTILITY CONFLICTS AND MITIGATION NOTES

REFERENCE NOTES

1. SEE SHEET 3, 4, & 5 FOR QUANTITIES AND PROPOSED TYPICAL SECTION IMPROVEMENTS
2. PER THE ADDENDUM, TYPICAL SECTION B - SURFACE MILL AND OVERLAY WAS REMOVED. TYPICAL SECTION C -MINOR OVERLAY WAS REMOVED. TYPICAL SECTION B&C- CCRAC AND CHIP SEAL REPLACES TYPICAL SECTION B AND TYPICAL SECTION C.

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NEW MEXICO
29707
7-3-25
PROFESSIONAL ENGINEER

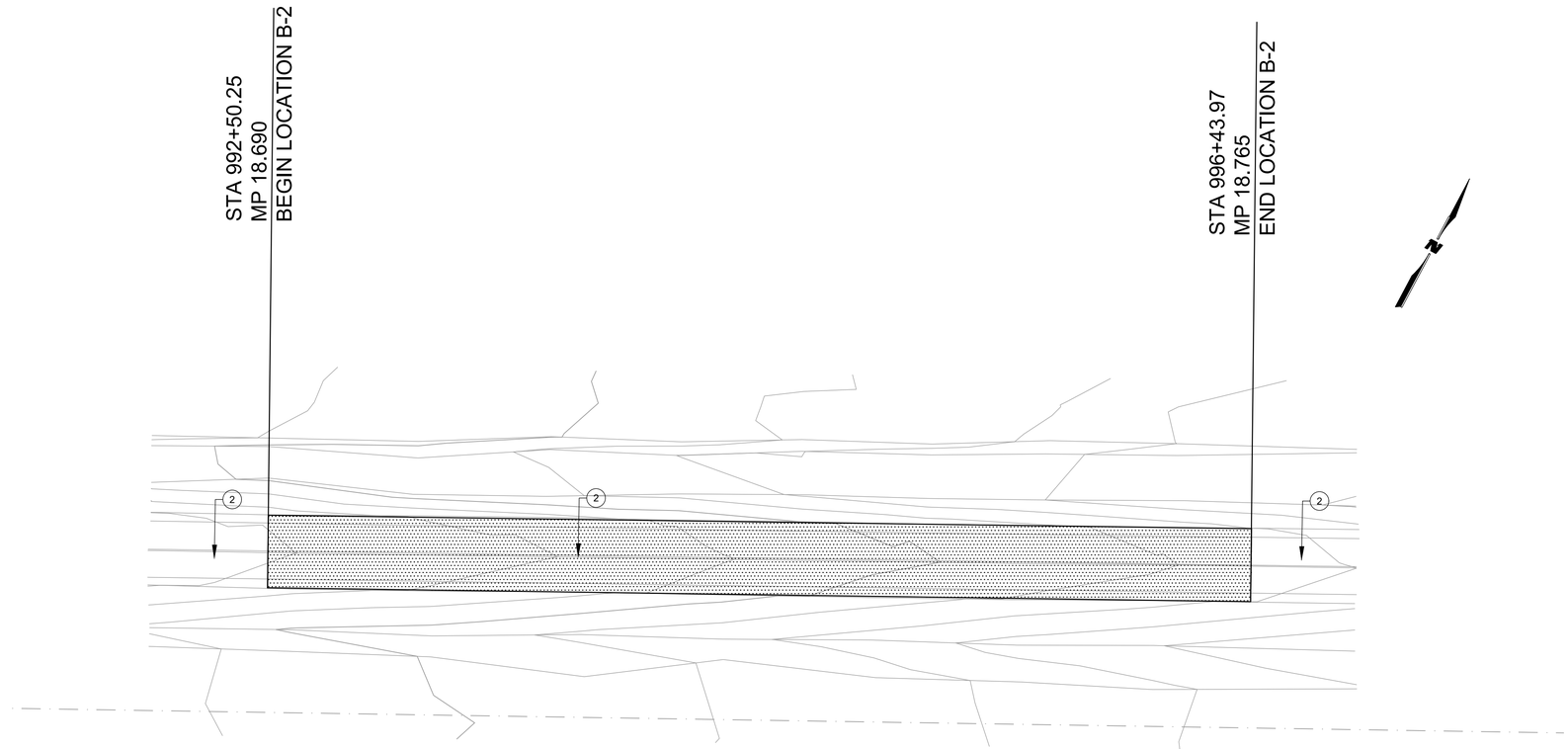
	REVISION	BY	DATE
1	REVISED SHEET PER ADD. NO. 1	RJW	7/3/2025

NAVAJO NATION
DIVISION OF TRANSPORTATION

N55

N55 ROADWAY LOCATION B-1

PROJECT MANAGER: RW	DATE: 7/25	DRAWING	SHEET
LEAD DESIGNER: KAN	DATE: 7/25		7 OF 23
AS-BUILT BY:	DATE:		
SCALE: 1"=100' H 1"=20' V			



N55 ROADWAY LOCATION B-2

SCALE: 1" = 30'

0 15' 30'

STATE	PROJECT	SHEET NUMBER
NM	N55	8

REMOVAL NOTES

CONSTRUCTION NOTES

1. RECON LOCATIONS
REMOVE EXISTING ASPHALT, BASE COURSE & 2 FT OF EXISTING SUBGRADE. REPLACE SUBGRADE WITH NEW BORROW MATERIAL. MATCH EXISTING ROADWAY GRADE. SEE SHEET 5 TYPICAL SECTION AND RECONSTRUCTION NOTES.

2. CCRAC AND CHIP SEAL APPLIES TO ALL REMAINING ROADWAY. CLEAR AND GRUB. CLEAN ROADWAY OF DEBRIS AND DIRT. FILL LARGE CRACKS WITH FINE SAND. 3-INCH COLD MILL. MIX, PLACE, COMPACT CCRAC. APPLY PRIME COAT. PLACE CHIP SEAL. APPLY FOG SEAL. SEE SHEET 5 TYPICAL SECTION B&C.

3. SEE SHEET 2 FOR UTILITY CONFLICTS AND MITIGATION NOTES

REFERENCE NOTES

1. SEE SHEET 3, 4, & 5 FOR QUANTITIES AND PROPOSED TYPICAL SECTION IMPROVEMENTS
2. PER THE ADDENDUM, TYPICAL SECTION B - SURFACE MILL AND OVERLAY WAS REMOVED. TYPICAL SECTION C -MINOR OVERLAY WAS REMOVED. TYPICAL SECTION B&C- CCRAC AND CHIP SEAL REPLACES TYPICAL SECTION B AND TYPICAL SECTION C.

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7-3-25
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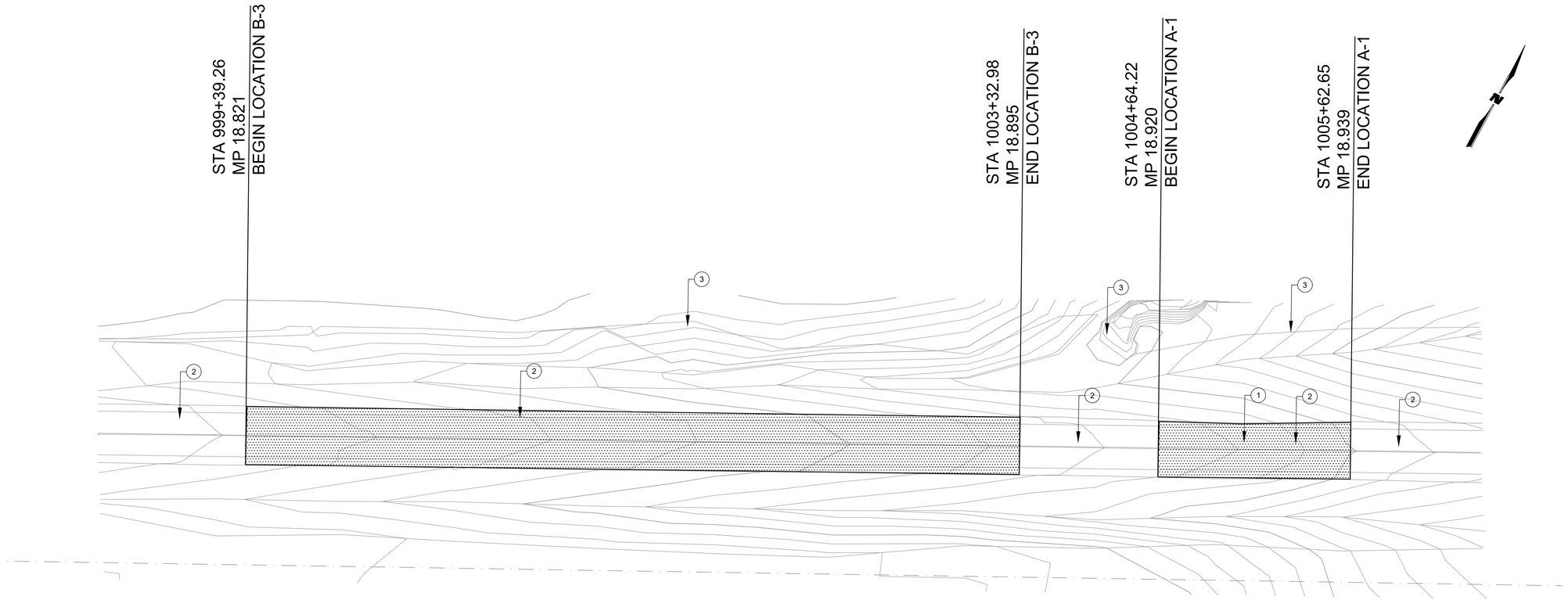
1	REVISED SHEET PER ADD. NO. 1	RJW	7/3/2025
	REVISION	BY	DATE

NAVAJO NATION
DIVISION OF TRANSPORTATION

N55

N55 ROADWAY LOCATION B-2

PROJECT MANAGER: RW	DATE: 7/25	DRAWING	SHEET
LEAD DESIGNER: KAN	DATE: 7/25		
AS-BUILT BY:	DATE:		8 OF 23
SCALE: 1"=100' H 1"=20' V			



N55 ROADWAY LOCATION B-3 & A-1

SCALE: 1" = 30'

0 15' 30'

STATE	PROJECT	SHEET NUMBER
NM	N55	9

REMOVAL NOTES

CONSTRUCTION NOTES

1. RECON LOCATIONS
REMOVE EXISTING ASPHALT, BASE COURSE & 2 FT OF EXISTING SUBGRADE. REPLACE SUBGRADE WITH NEW BORROW MATERIAL. MATCH EXISTING ROADWAY GRADE. SEE SHEET 5 TYPICAL SECTION AND RECONSTRUCTION NOTES.

2. CCRAC AND CHIP SEAL APPLIES TO ALL REMAINING ROADWAY. CLEAR AND GRUB. CLEAN ROADWAY OF DEBRIS AND DIRT. FILL LARGE CRACKS WITH FINE SAND. 3-INCH COLD MILL. MIX, PLACE, COMPACT CCRAC. APPLY PRIME COAT. PLACE CHIP SEAL. APPLY FOG SEAL. SEE SHEET 5 TYPICAL SECTION B&C.

3. SEE SHEET 2 FOR UTILITY CONFLICTS AND MITIGATION NOTES

REFERENCE NOTES

1. SEE SHEET 3, 4, & 5 FOR QUANTITIES AND PROPOSED TYPICAL SECTION IMPROVEMENTS
2. PER THE ADDENDUM, TYPICAL SECTION B - SURFACE MILL AND OVERLAY WAS REMOVED. TYPICAL SECTION C -MINOR OVERLAY WAS REMOVED. TYPICAL SECTION B&C- CCRAC AND CHIP SEAL REPLACES TYPICAL SECTION B AND TYPICAL SECTION C.

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29707
7-3-25
PROFESSIONAL ENGINEER

	REVISION	BY	DATE
1	REVISED SHEET PER ADD. NO. 1	RJW	7/3/2025

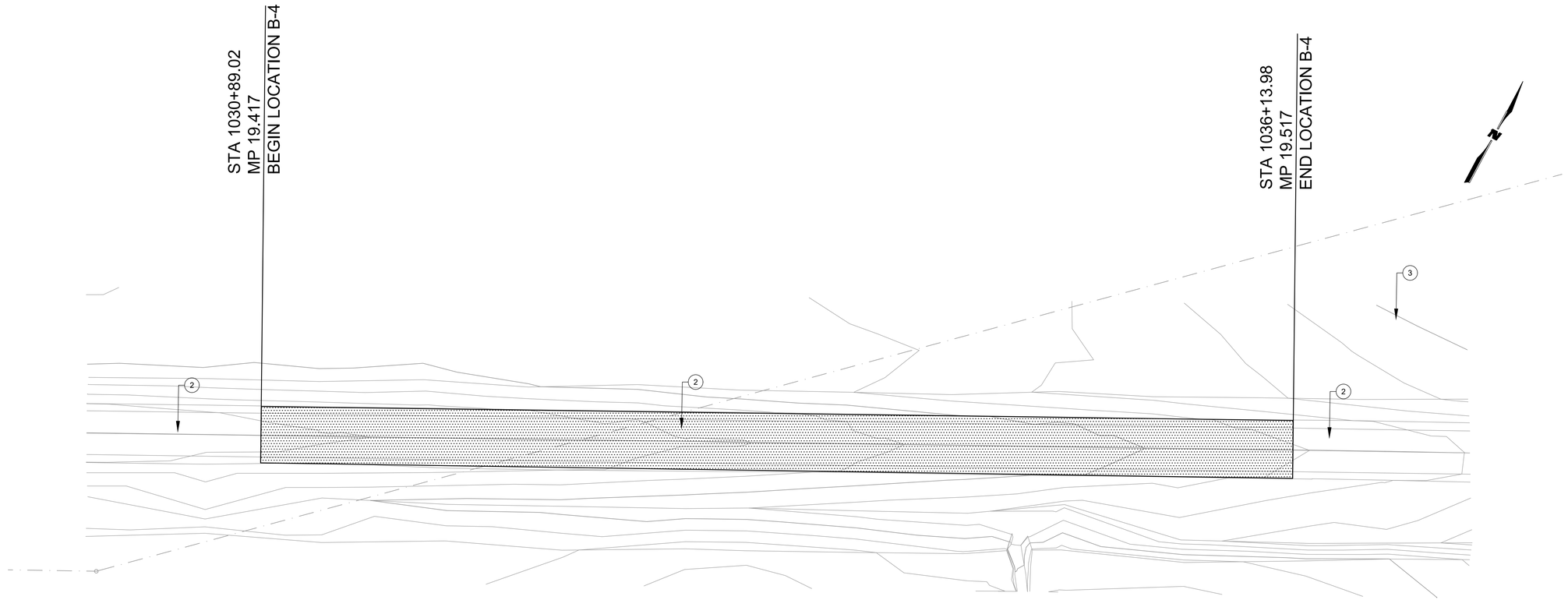
NAVAJO NATION
DIVISION OF TRANSPORTATION

NAVAJO D.O.T

N55

N55 ROADWAY LOCATION B-3 & A-1

PROJECT MANAGER: RW	DATE: 7/25	DRAWING	SHEET
LEAD DESIGNER: KAN	DATE: 7/25		
AS-BUILT BY:	DATE:		9 OF 23
SCALE: 1"=100' H 1"=20' V			



N55 ROADWAY LOCATION B-4

SCALE: 1" = 30'

0 15' 30'

STATE	PROJECT	SHEET NUMBER
NM	N55	10

REMOVAL NOTES

CONSTRUCTION NOTES

1. RECON LOCATIONS
REMOVE EXISTING ASPHALT, BASE COURSE & 2 FT OF EXISTING SUBGRADE. REPLACE SUBGRADE WITH NEW BORROW MATERIAL. MATCH EXISTING ROADWAY GRADE. SEE SHEET 5 TYPICAL SECTION AND RECONSTRUCTION NOTES.

2. CCRAC AND CHIP SEAL APPLIES TO ALL REMAINING ROADWAY. CLEAR AND GRUB. CLEAN ROADWAY OF DEBRIS AND DIRT. FILL LARGE CRACKS WITH FINE SAND. 3-INCH COLD MILL. MIX, PLACE, COMPACT CCRAC. APPLY PRIME COAT. PLACE CHIP SEAL. APPLY FOG SEAL. SEE SHEET 5 TYPICAL SECTION B&C.

3. SEE SHEET 2 FOR UTILITY CONFLICTS AND MITIGATION NOTES

REFERENCE NOTES

1. SEE SHEET 3, 4, & 5 FOR QUANTITIES AND PROPOSED TYPICAL SECTION IMPROVEMENTS
2. PER THE ADDENDUM, TYPICAL SECTION B - SURFACE MILL AND OVERLAY WAS REMOVED. TYPICAL SECTION C -MINOR OVERLAY WAS REMOVED. TYPICAL SECTION B&C- CCRAC AND CHIP SEAL REPLACES TYPICAL SECTION B AND TYPICAL SECTION C.

RHODA JEAN WINDER
NEW MEXICO
29707
PROFESSIONAL ENGINEER
7-3-25

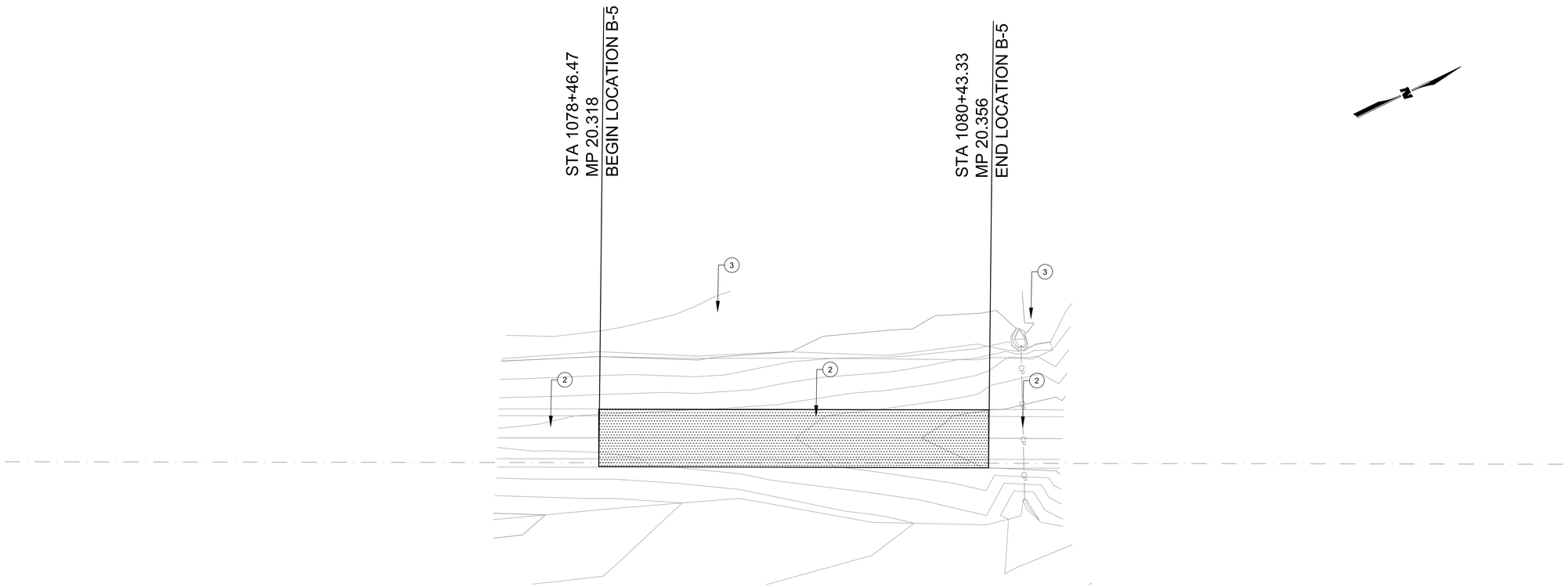
	REVISION	BY	DATE
1	REVISED SHEET PER ADD. NO. 1	RJW	7/3/2025

NAVAJO NATION
DIVISION OF TRANSPORTATION

N55

N55 ROADWAY LOCATION B-4

PROJECT MANAGER: RW	DATE: 7/25	DRAWING	SHEET
LEAD DESIGNER: KAN	DATE: 7/25		
AS-BUILT BY:	DATE:		10 OF 23
SCALE: 1"=100' H 1"=20' V			



N55 ROADWAY LOCATION B-5

SCALE: 1" = 30'

0 15' 30'

STATE	PROJECT	SHEET NUMBER
NM	N55	11

REMOVAL NOTES

CONSTRUCTION NOTES

1. RECON LOCATIONS
REMOVE EXISTING ASPHALT, BASE COURSE & 2 FT OF EXISTING SUBGRADE. REPLACE SUBGRADE WITH NEW BORROW MATERIAL. MATCH EXISTING ROADWAY GRADE. SEE SHEET 5 TYPICAL SECTION AND RECONSTRUCTION NOTES.

2. CCRAC AND CHIP SEAL APPLIES TO ALL REMAINING ROADWAY. CLEAR AND GRUB. CLEAN ROADWAY OF DEBRIS AND DIRT. FILL LARGE CRACKS WITH FINE SAND. 3-INCH COLD MILL. MIX, PLACE, COMPACT CCRAC. APPLY PRIME COAT. PLACE CHIP SEAL. APPLY FOG SEAL. SEE SHEET 5 TYPICAL SECTION B&C.

3. SEE SHEET 2 FOR UTILITY CONFLICTS AND MITIGATION NOTES

REFERENCE NOTES

1. SEE SHEET 3, 4, & 5 FOR QUANTITIES AND PROPOSED TYPICAL SECTION IMPROVEMENTS
2. PER THE ADDENDUM, TYPICAL SECTION B - SURFACE MILL AND OVERLAY WAS REMOVED. TYPICAL SECTION C -MINOR OVERLAY WAS REMOVED. TYPICAL SECTION B&C- CCRAC AND CHIP SEAL REPLACES TYPICAL SECTION B AND TYPICAL SECTION C.

RHODA JEAN WINDER
NEW MEXICO
29707
7-3-25
PROFESSIONAL ENGINEER

	REVISION	BY	DATE
1	REVISED SHEET PER ADD. NO. 1	RJW	7/3/2025

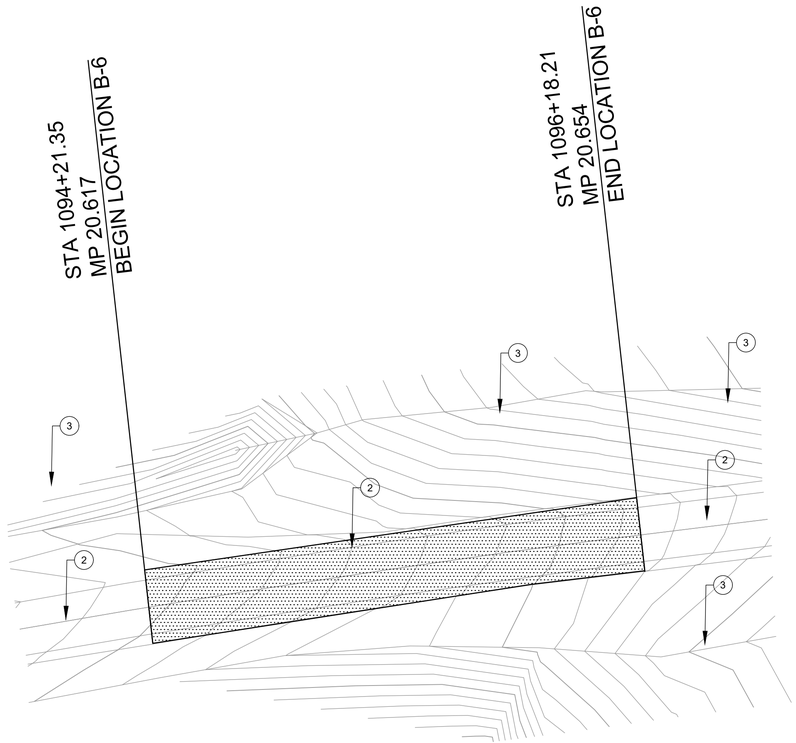
NAVAJO NATION
DIVISION OF TRANSPORTATION

NAVAJO D.O.T

N55

N55 ROADWAY LOCATION B-5

PROJECT MANAGER: RW	DATE: 7/25	DRAWING	SHEET
LEAD DESIGNER: KAN	DATE: 7/25		
AS-BUILT BY:	DATE:		11 OF 23
SCALE: 1"=100' H 1"=20' V			



N55 ROADWAY LOCATION B-6

SCALE: 1" = 30'

0 15' 30'

STATE	PROJECT	SHEET NUMBER
NM	N55	12

REMOVAL NOTES

CONSTRUCTION NOTES

1. RECON LOCATIONS
REMOVE EXISTING ASPHALT, BASE COURSE & 2 FT OF EXISTING SUBGRADE. REPLACE SUBGRADE WITH NEW BORROW MATERIAL. MATCH EXISTING ROADWAY GRADE. SEE SHEET 5 TYPICAL SECTION AND RECONSTRUCTION NOTES.

2. CCRAC AND CHIP SEAL APPLIES TO ALL REMAINING ROADWAY. CLEAR AND GRUB. CLEAN ROADWAY OF DEBRIS AND DIRT. FILL LARGE CRACKS WITH FINE SAND. 3-INCH COLD MILL. MIX, PLACE, COMPACT CCRAC. APPLY PRIME COAT. PLACE CHIP SEAL. APPLY FOG SEAL. SEE SHEET 5 TYPICAL SECTION B&C.

3. SEE SHEET 2 FOR UTILITY CONFLICTS AND MITIGATION NOTES

REFERENCE NOTES

1. SEE SHEET 3, 4, & 5 FOR QUANTITIES AND PROPOSED TYPICAL SECTION IMPROVEMENTS
2. PER THE ADDENDUM, TYPICAL SECTION B - SURFACE MILL AND OVERLAY WAS REMOVED. TYPICAL SECTION C -MINOR OVERLAY WAS REMOVED. TYPICAL SECTION B&C- CCRAC AND CHIP SEAL REPLACES TYPICAL SECTION B AND TYPICAL SECTION C.

RHODA JEAN WINGER
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7-3-25

1	REVISED SHEET PER ADD. NO. 1	RJW	7/3/2025
	REVISION	BY	DATE

NAVAJO NATION
DIVISION OF TRANSPORTATION

NAVAJO D.O.T

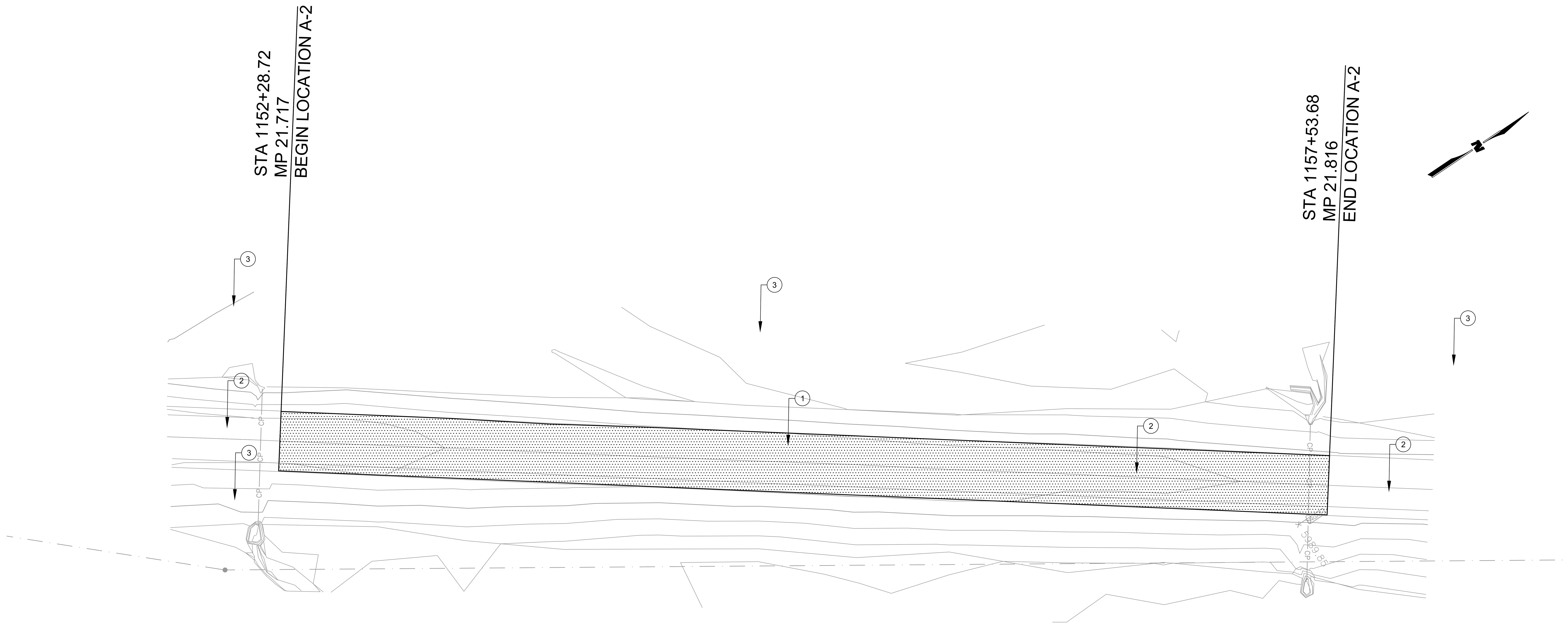
N55

N55 ROADWAY LOCATION B-6

PROJECT MANAGER: RW	DATE: 7/25	DRAWING	SHEET
LEAD DESIGNER: KAN	DATE: 7/25		
AS-BUILT BY:	DATE:		12 OF 23
SCALE: 1"=100' H 1"=20' V			

STATE	PROJECT	SHEET NUMBER
NM	N55	13

REMOVAL NOTES



N55 ROADWAY LOCATION A-2

SCALE: 1" = 30'

0 15' 30'

CONSTRUCTION NOTES

1. RECON LOCATIONS
REMOVE EXISTING ASPHALT, BASE COURSE & 2 FT OF EXISTING SUBGRADE. REPLACE SUBGRADE WITH NEW BORROW MATERIAL. MATCH EXISTING ROADWAY GRADE. SEE SHEET 5 TYPICAL SECTION AND RECONSTRUCTION NOTES.

2. CCRAC AND CHIP SEAL APPLIES TO ALL REMAINING ROADWAY. CLEAR AND GRUB. CLEAN ROADWAY OF DEBRIS AND DIRT. FILL LARGE CRACKS WITH FINE SAND. 3-INCH COLD MILL. MIX, PLACE, COMPACT CCRAC. APPLY PRIME COAT. PLACE CHIP SEAL. APPLY FOG SEAL. SEE SHEET 5 TYPICAL SECTION B&C.

3. SEE SHEET 2 FOR UTILITY CONFLICTS AND MITIGATION NOTES

REFERENCE NOTES

1. SEE SHEET 3, 4, & 5 FOR QUANTITIES AND PROPOSED TYPICAL SECTION IMPROVEMENTS
2. PER THE ADDENDUM, TYPICAL SECTION B - SURFACE MILL AND OVERLAY WAS REMOVED. TYPICAL SECTION C -MINOR OVERLAY WAS REMOVED. TYPICAL SECTION B&C- CCRAC AND CHIP SEAL REPLACES TYPICAL SECTION B AND TYPICAL SECTION C.

RHODA JEAN WINDER
NEW MEXICO
29707
PROFESSIONAL ENGINEER
7-3-25

	REVISION	BY	DATE
1	REVISED SHEET PER ADD. NO. 1	RJW	7/3/2025

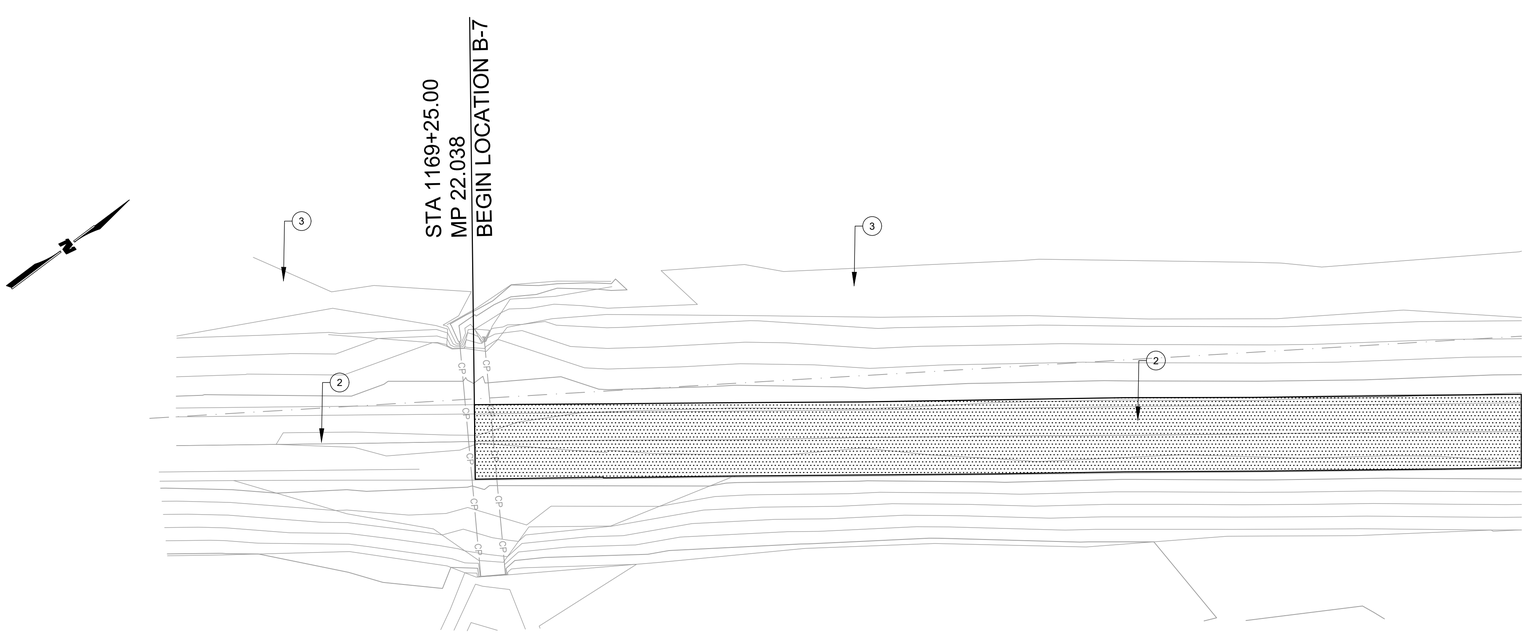
NAVAJO D.O.T

NAVAJO NATION
DIVISION OF TRANSPORTATION

N55

N55 ROADWAY LOCATION A-2

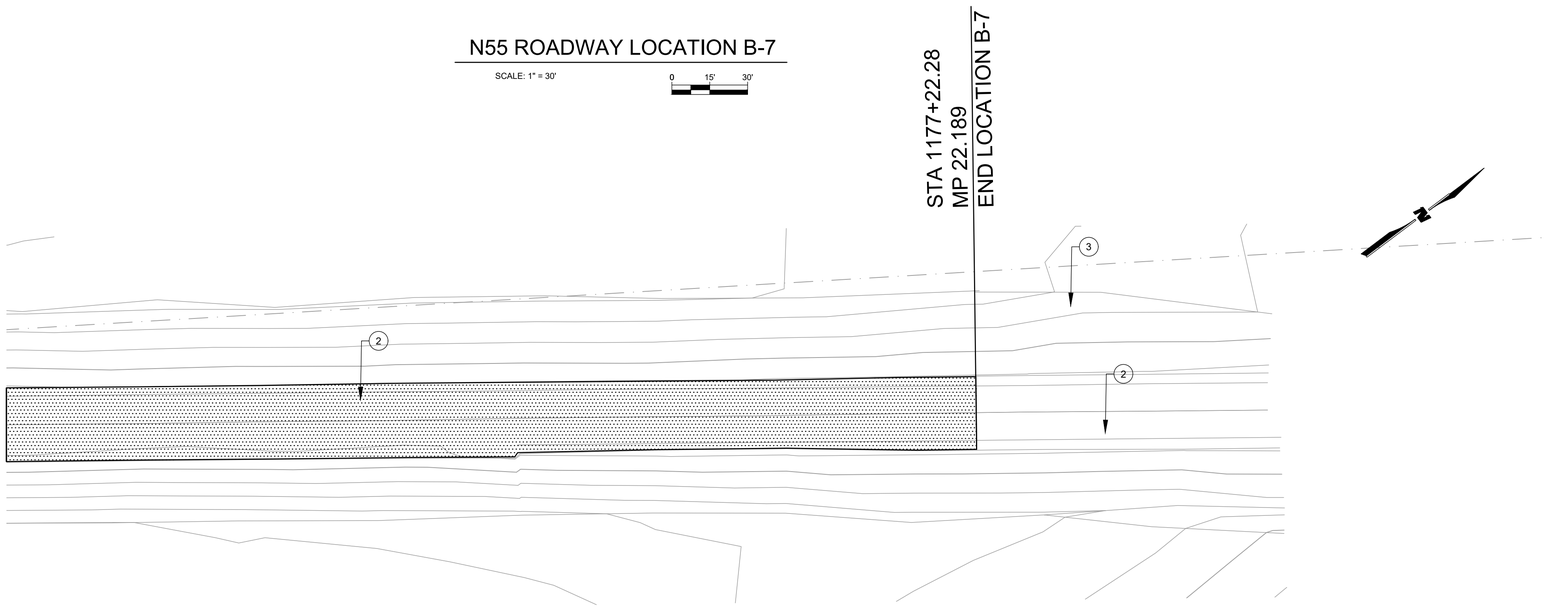
		DRAWING	SHEET
PROJECT MANAGER: RW	DATE: 7/25		
LEAD DESIGNER: KAN	DATE: 7/25		
AS-BUILT BY:	DATE:		13 OF 23
SCALE: 1"=100' H 1"=20' V			



N55 ROADWAY LOCATION B-7

SCALE: 1" = 30'

0 15' 30'



N55 ROADWAY LOCATION B-7

SCALE: 1" = 30'

0 15' 30'

STATE	PROJECT	SHEET NUMBER
NM	N55	14

REMOVAL NOTES

CONSTRUCTION NOTES

1. RECON LOCATIONS
REMOVE EXISTING ASPHALT, BASE COURSE & 2 FT OF EXISTING SUBGRADE. REPLACE SUBGRADE WITH NEW BORROW MATERIAL. MATCH EXISTING ROADWAY GRADE. SEE SHEET 5 TYPICAL SECTION AND RECONSTRUCTION NOTES.

2. CCRAC AND CHIP SEAL APPLIES TO ALL REMAINING ROADWAY. CLEAR AND GRUB. CLEAN ROADWAY OF DEBRIS AND DIRT. FILL LARGE CRACKS WITH FINE SAND. 3-INCH COLD MILL. MIX, PLACE, COMPACT CCRAC. APPLY PRIME COAT. PLACE CHIP SEAL. APPLY FOG SEAL. SEE SHEET 5 TYPICAL SECTION B&C.

3. SEE SHEET 2 FOR UTILITY CONFLICTS AND MITIGATION NOTES

REFERENCE NOTES

1. SEE SHEET 3, 4, & 5 FOR QUANTITIES AND PROPOSED TYPICAL SECTION IMPROVEMENTS
2. PER THE ADDENDUM, TYPICAL SECTION B - SURFACE MILL AND OVERLAY WAS REMOVED. TYPICAL SECTION C -MINOR OVERLAY WAS REMOVED. TYPICAL SECTION B&C- CCRAC AND CHIP SEAL REPLACES TYPICAL SECTION B AND TYPICAL SECTION C.

RHODA JEAN WINGER
NEW MEXICO
29707
7-3-25
PROFESSIONAL ENGINEER

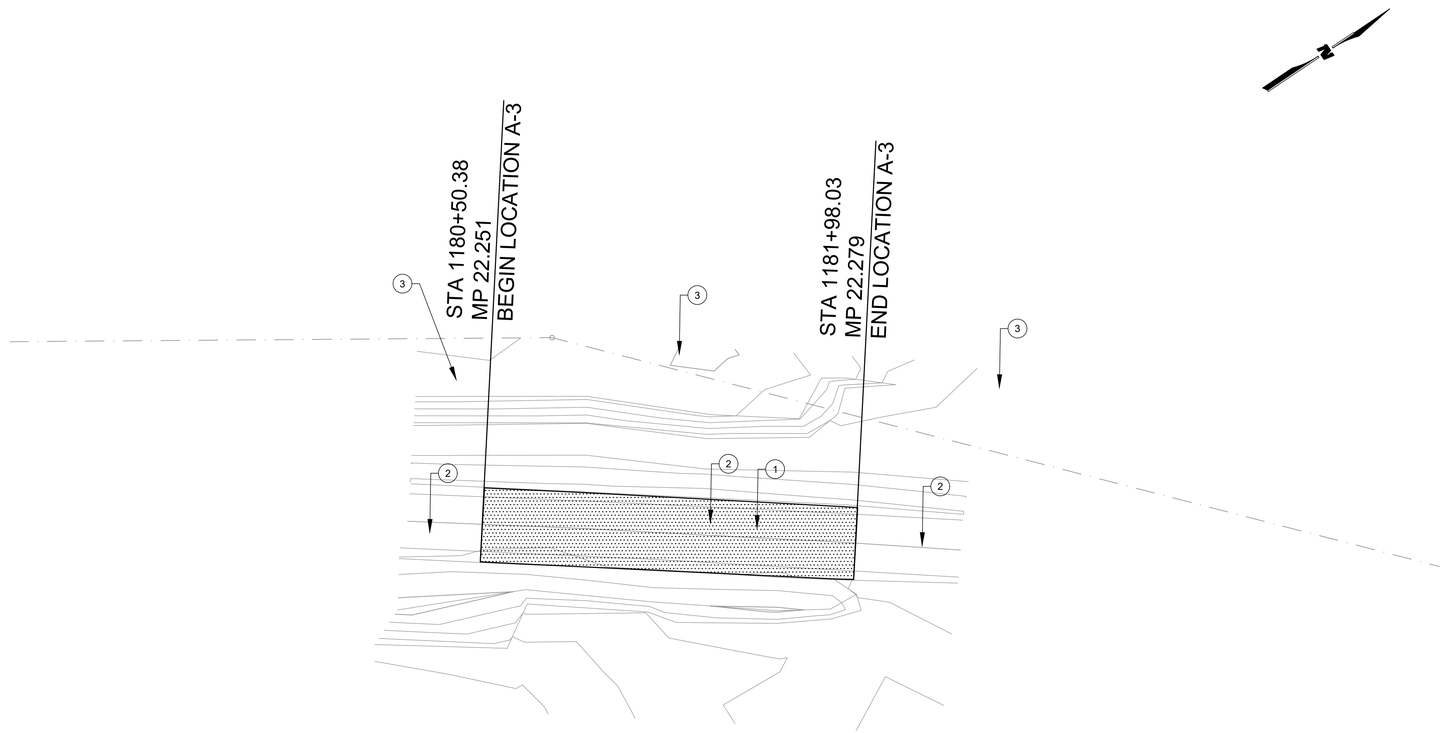
	REVISION	BY	DATE
1	REVISED SHEET PER ADD. NO. 1	RJW	7/3/2025

NAVAJO NATION
DIVISION OF TRANSPORTATION

N55

N55 ROADWAY LOCATION B-7

PROJECT MANAGER: RW	DATE: 7/25	DRAWING	SHEET
LEAD DESIGNER: KAN	DATE: 7/25		
AS-BUILT BY:	DATE:		14 OF 23
SCALE: 1"=100' H 1"=20' V			



N55 ROADWAY LOCATION A-3

SCALE: 1" = 30'

0 15' 30'

STATE	PROJECT	SHEET NUMBER
NM	N55	15

REMOVAL NOTES

CONSTRUCTION NOTES

1. RECON LOCATIONS
REMOVE EXISTING ASPHALT, BASE COURSE & 2 FT OF EXISTING SUBGRADE. REPLACE SUBGRADE WITH NEW BORROW MATERIAL. MATCH EXISTING ROADWAY GRADE. SEE SHEET 5 TYPICAL SECTION AND RECONSTRUCTION NOTES.

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3. SEE SHEET 2 FOR UTILITY CONFLICTS AND MITIGATION NOTES

REFERENCE NOTES

1. SEE SHEET 3, 4, & 5 FOR QUANTITIES AND PROPOSED TYPICAL SECTION IMPROVEMENTS
2. PER THE ADDENDUM, TYPICAL SECTION B - SURFACE MILL AND OVERLAY WAS REMOVED. TYPICAL SECTION C -MINOR OVERLAY WAS REMOVED. TYPICAL SECTION B&C- CCRAC AND CHIP SEAL REPLACES TYPICAL SECTION B AND TYPICAL SECTION C.

RHODA JEAN WINGER
NEW MEXICO
29707
7-3-25
PROFESSIONAL ENGINEER

1	REVISED SHEET PER ADD. NO. 1	RJW	7/3/2025
	REVISION	BY	DATE

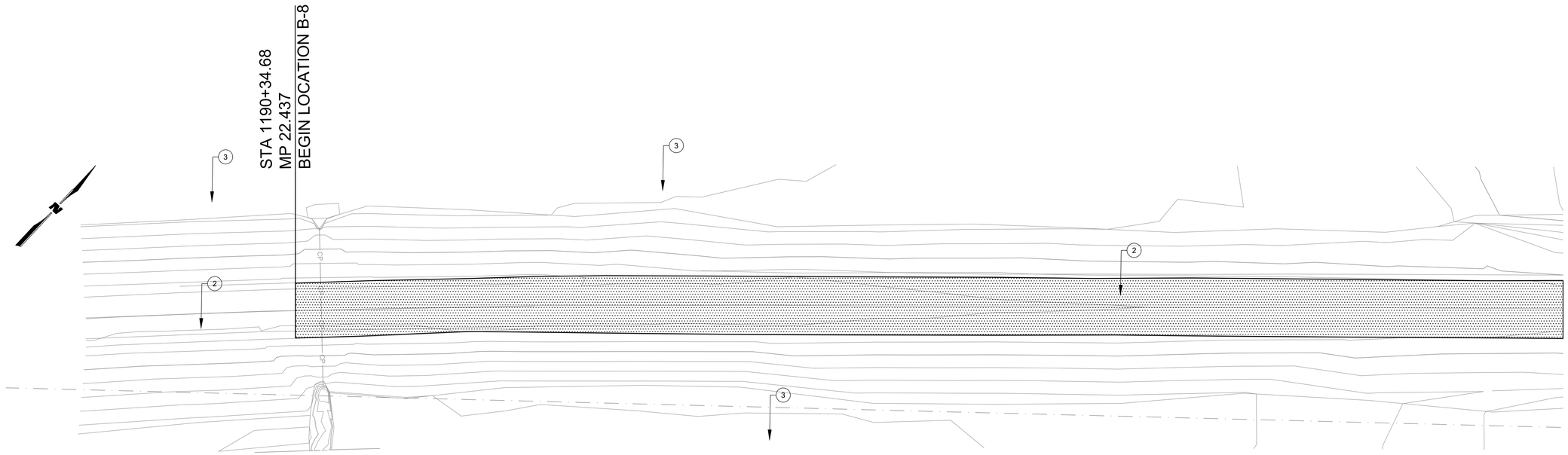
NAVAJO NATION
DIVISION OF TRANSPORTATION

NAVAJO D.O.T

N55

N55 ROADWAY LOCATION A-3

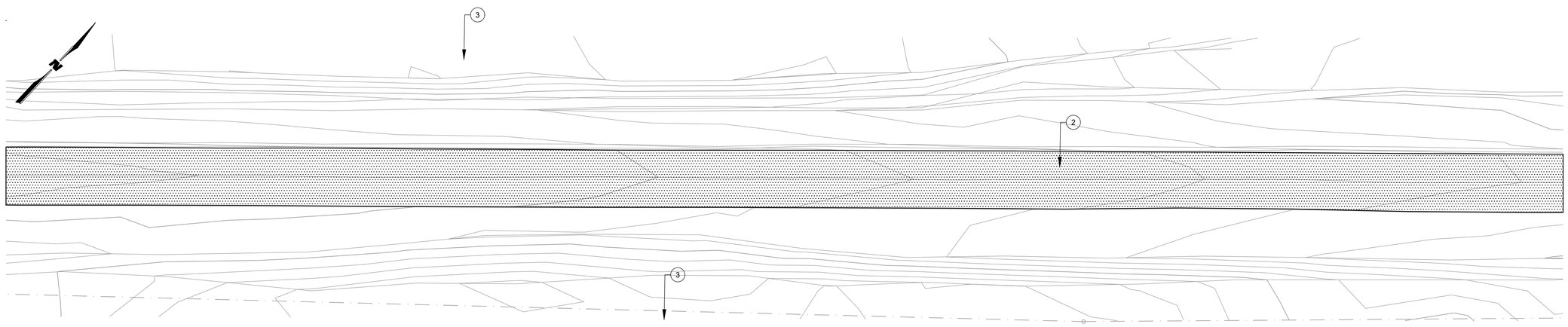
PROJECT MANAGER: RW	DATE: 7/25	DRAWING	SHEET
LEAD DESIGNER: KAN	DATE: 7/25		
AS-BUILT BY:	DATE:		15 OF 23
SCALE: 1"=100' H 1"=20' V			



N55 ROADWAY LOCATION B-8

SCALE: 1" = 30'

0 15' 30'



N55 ROADWAY LOCATION B-8

SCALE: 1" = 30'

0 15' 30'

STATE	PROJECT	SHEET NUMBER
NM	N55	16

REMOVAL NOTES

CONSTRUCTION NOTES

1. RECON LOCATIONS
REMOVE EXISTING ASPHALT, BASE COURSE & 2 FT OF EXISTING SUBGRADE. REPLACE SUBGRADE WITH NEW BORROW MATERIAL. MATCH EXISTING ROADWAY GRADE. SEE SHEET 5 TYPICAL SECTION AND RECONSTRUCTION NOTES.

2. CCRAC AND CHIP SEAL APPLIES TO ALL REMAINING ROADWAY. CLEAR AND GRUB. CLEAN ROADWAY OF DEBRIS AND DIRT. FILL LARGE CRACKS WITH FINE SAND. 3-INCH COLD MILL. MIX, PLACE, COMPACT CCRAC. APPLY PRIME COAT. PLACE CHIP SEAL. APPLY FOG SEAL. SEE SHEET 5 TYPICAL SECTION B&C.

3. SEE SHEET 2 FOR UTILITY CONFLICTS AND MITIGATION NOTES

REFERENCE NOTES

1. SEE SHEET 3, 4, & 5 FOR QUANTITIES AND PROPOSED TYPICAL SECTION IMPROVEMENTS
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RHODA JEAN WINDER
NEW MEXICO
29707
7-3-25
PROFESSIONAL ENGINEER

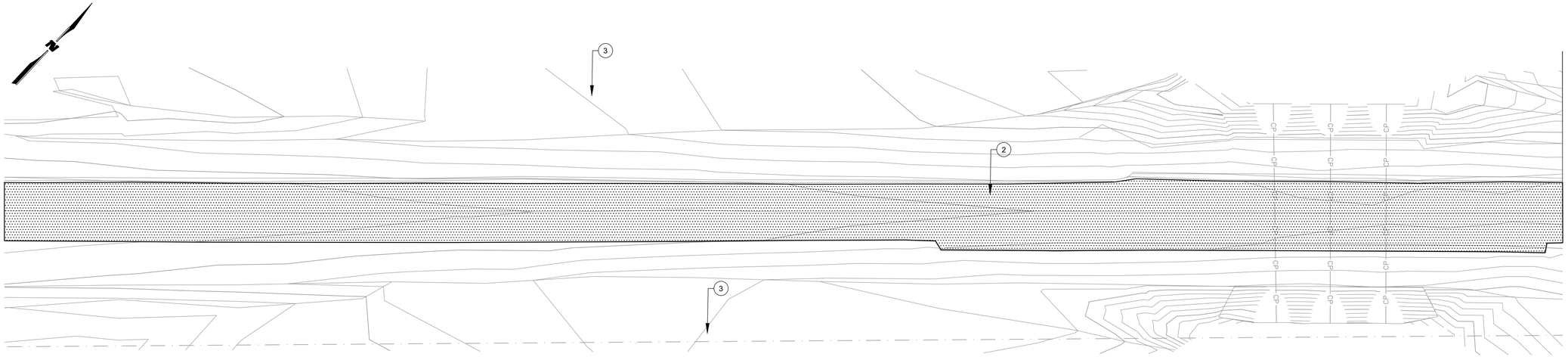
1	REVISED SHEET PER ADD. NO. 1	RJW	7/3/2025
	REVISION	BY	DATE

NAVAJO NATION
DIVISION OF TRANSPORTATION

N55

N55 ROADWAY LOCATION B-8

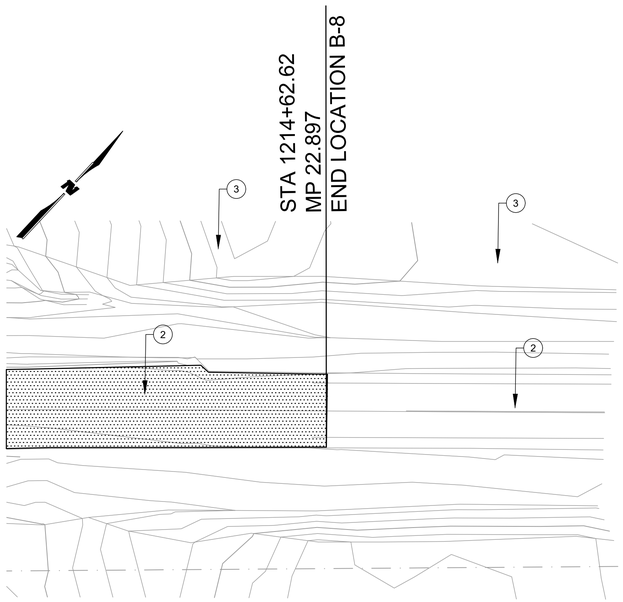
PROJECT MANAGER: RW	DATE: 7/25	DRAWING	SHEET
LEAD DESIGNER: KAN	DATE: 7/25		
AS-BUILT BY:	DATE:		16 OF 23
SCALE: 1"=100' H 1"=20' V			



N55 ROADWAY LOCATION B-8

SCALE: 1" = 30'

0 15' 30'



N55 ROADWAY LOCATION B-8

SCALE: 1" = 30'

0 15' 30'

STATE	PROJECT	SHEET NUMBER
NM	N55	17

REMOVAL NOTES

CONSTRUCTION NOTES

1. RECON LOCATIONS
REMOVE EXISTING ASPHALT, BASE COURSE & 2 FT OF EXISTING SUBGRADE. REPLACE SUBGRADE WITH NEW BORROW MATERIAL. MATCH EXISTING ROADWAY GRADE. SEE SHEET 5 TYPICAL SECTION AND RECONSTRUCTION NOTES.

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3. SEE SHEET 2 FOR UTILITY CONFLICTS AND MITIGATION NOTES

REFERENCE NOTES

1. SEE SHEET 3, 4, & 5 FOR QUANTITIES AND PROPOSED TYPICAL SECTION IMPROVEMENTS
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RHODA JEAN WINDER
NEW MEXICO
29707
PROFESSIONAL ENGINEER
7-3-25

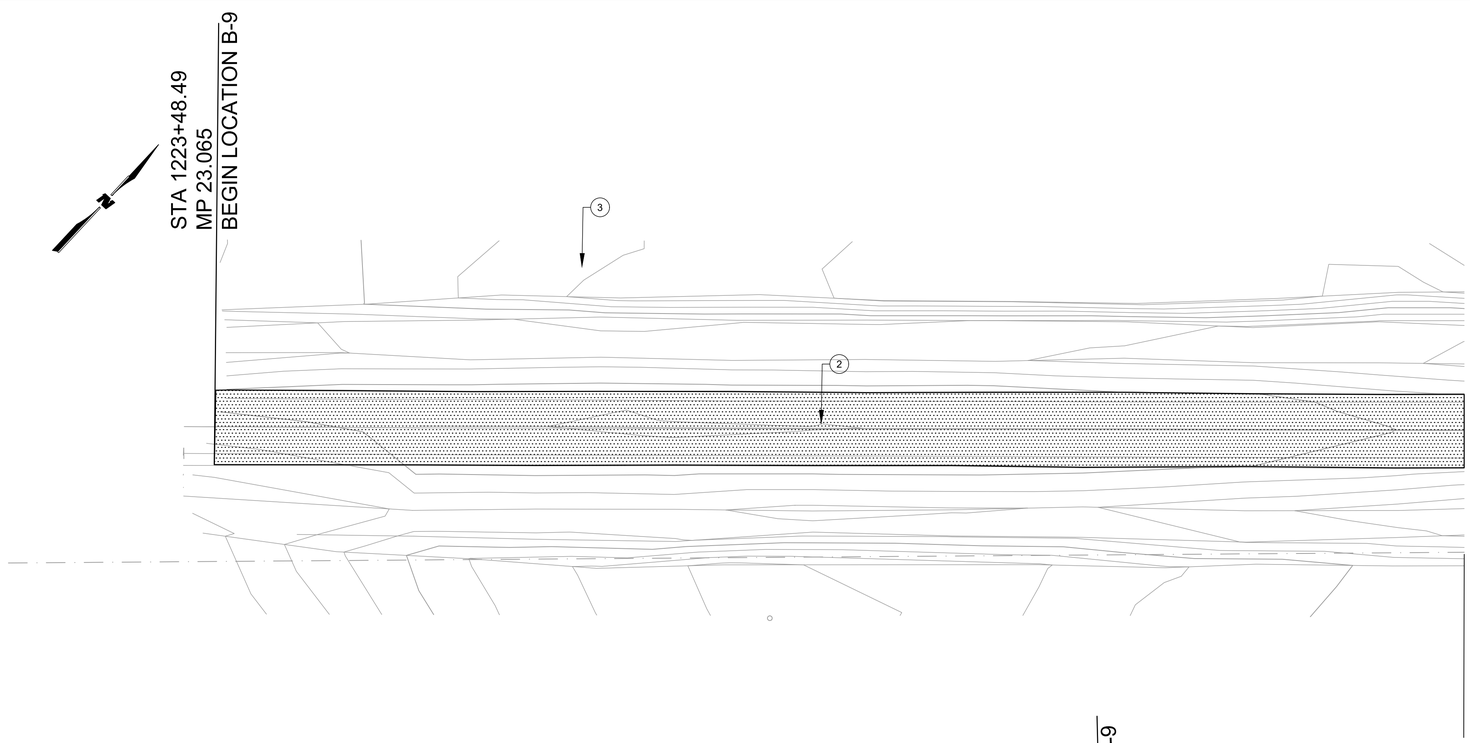
	REVISION	BY	DATE
1	REVISED SHEET PER ADD. NO. 1	RJW	7/3/2025

NAVAJO NATION
DIVISION OF TRANSPORTATION

N55

N55 ROADWAY LOCATION B-8

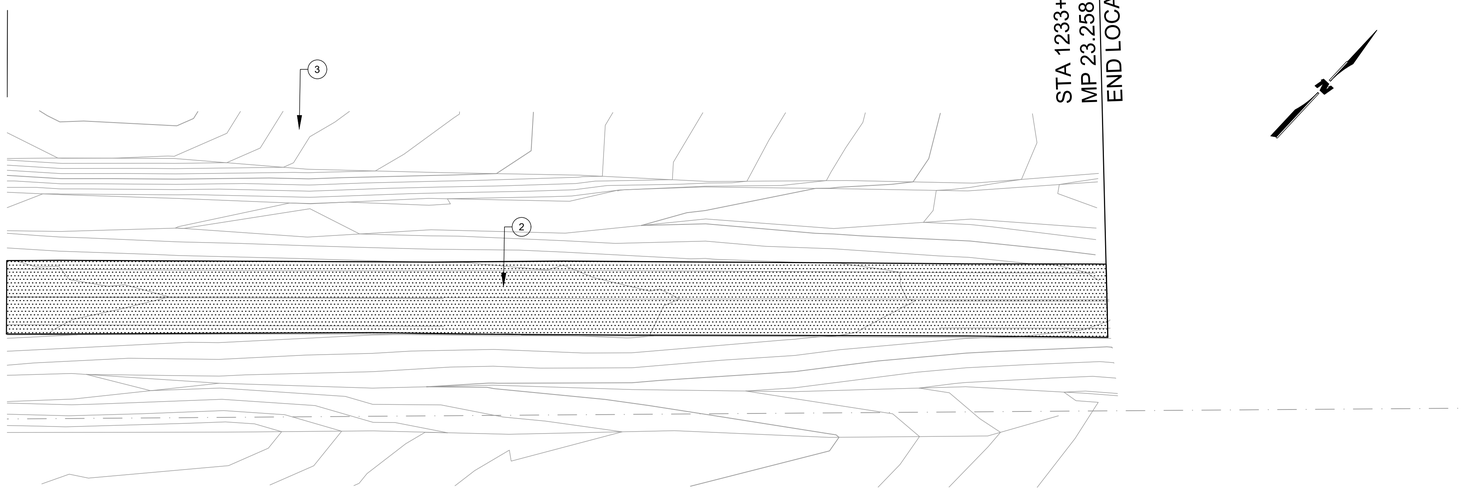
PROJECT MANAGER: RW	DATE: 7/25	DRAWING	SHEET
LEAD DESIGNER: KAN	DATE: 7/25		17 OF 23
AS-BUILT BY:	DATE:		
SCALE: 1"=100' H 1"=20' V			



N55 ROADWAY LOCATION B-9

SCALE: 1" = 30'

0 15' 30'



N55 ROADWAY LOCATION B-9

SCALE: 1" = 30'

0 15' 30'

STATE	PROJECT	SHEET NUMBER
NM	N55	18

REMOVAL NOTES

CONSTRUCTION NOTES

1. RECON LOCATIONS
REMOVE EXISTING ASPHALT, BASE COURSE & 2 FT OF EXISTING SUBGRADE. REPLACE SUBGRADE WITH NEW BORROW MATERIAL. MATCH EXISTING ROADWAY GRADE. SEE SHEET 5 TYPICAL SECTION AND RECONSTRUCTION NOTES.

2. CCRAC AND CHIP SEAL APPLIES TO ALL REMAINING ROADWAY. CLEAR AND GRUB. CLEAN ROADWAY OF DEBRIS AND DIRT. FILL LARGE CRACKS WITH FINE SAND. 3-INCH COLD MILL. MIX, PLACE, COMPACT CCRAC. APPLY PRIME COAT. PLACE CHIP SEAL. APPLY FOG SEAL. SEE SHEET 5 TYPICAL SECTION B&C.

3. SEE SHEET 2 FOR UTILITY CONFLICTS AND MITIGATION NOTES

REFERENCE NOTES

1. SEE SHEET 3, 4, & 5 FOR QUANTITIES AND PROPOSED TYPICAL SECTION IMPROVEMENTS
2. PER THE ADDENDUM, TYPICAL SECTION B - SURFACE MILL AND OVERLAY WAS REMOVED. TYPICAL SECTION C -MINOR OVERLAY WAS REMOVED. TYPICAL SECTION B&C- CCRAC AND CHIP SEAL REPLACES TYPICAL SECTION B AND TYPICAL SECTION C.

RHODA JEAN WINGER
NEW MEXICO
29707
7-3-25
PROFESSIONAL ENGINEER

1	REVISED SHEET PER ADD. NO. 1	RJW	7/3/2025
	REVISION	BY	DATE

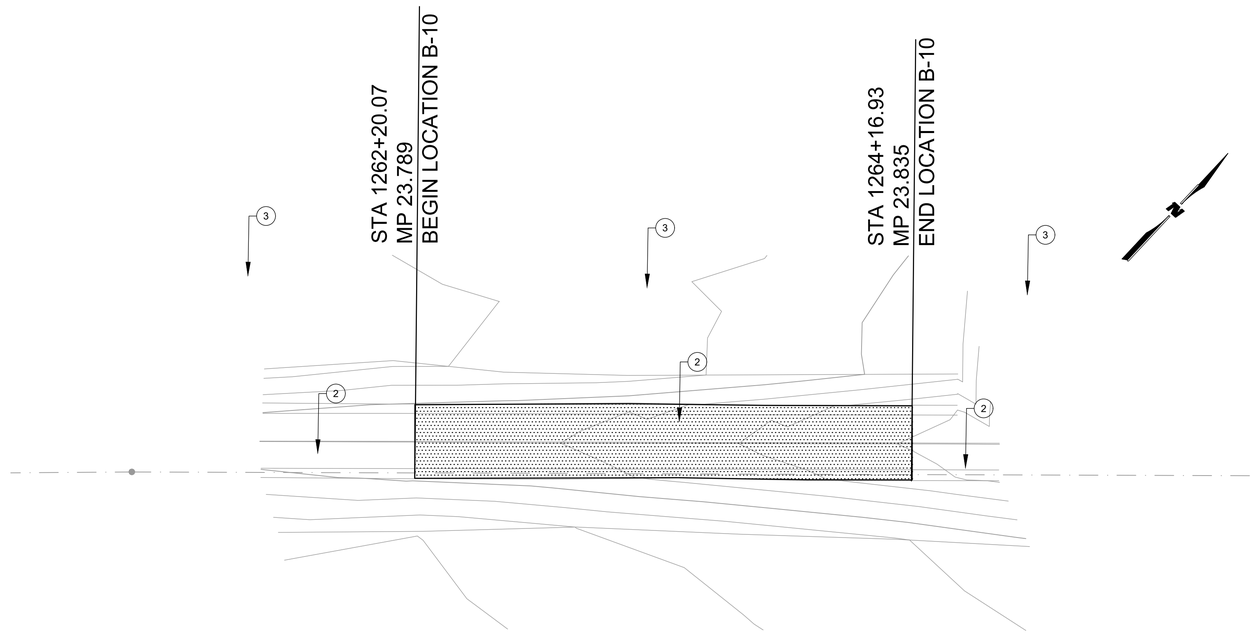
NAVAJO NATION
DIVISION OF TRANSPORTATION

NAVAJO D.O.T

N55

N55 ROADWAY LOCATION B-9

PROJECT MANAGER: RW	DATE: 7/25	DRAWING	SHEET
LEAD DESIGNER: KAN	DATE: 7/25		
AS-BUILT BY:	DATE:		18 OF 23
SCALE: 1"=100' H 1"=20' V			



N55 ROADWAY LOCATION B-10

SCALE: 1" = 30'

0 15' 30'

STATE	PROJECT	SHEET NUMBER
NM	N55	19

REMOVAL NOTES

CONSTRUCTION NOTES

1. RECON LOCATIONS
REMOVE EXISTING ASPHALT, BASE COURSE & 2 FT OF EXISTING SUBGRADE. REPLACE SUBGRADE WITH NEW BORROW MATERIAL. MATCH EXISTING ROADWAY GRADE. SEE SHEET 5 TYPICAL SECTION AND RECONSTRUCTION NOTES.

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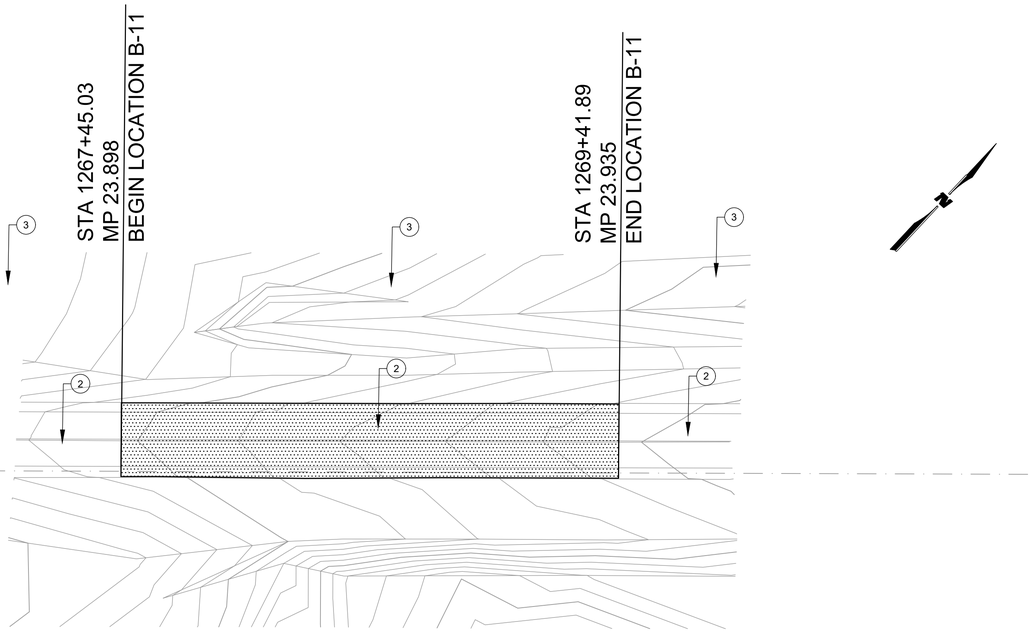
DIVISION OF TRANSPORTATION

NAVAJO D.O.T

N55

N55 ROADWAY LOCATION B-10

PROJECT MANAGER: RW	DATE: 7/25	DRAWING	SHEET
LEAD DESIGNER: KAN	DATE: 7/25		
AS-BUILT BY:	DATE:		19 OF 23
SCALE: 1"=100' H 1"=20' V			



N55 ROADWAY LOCATION B-11

SCALE: 1" = 30'

0 15' 30'

STATE	PROJECT	SHEET NUMBER
NM	N55	20

REMOVAL NOTES

CONSTRUCTION NOTES

1. RECON LOCATIONS
REMOVE EXISTING ASPHALT, BASE COURSE & 2 FT OF EXISTING SUBGRADE. REPLACE SUBGRADE WITH NEW BORROW MATERIAL. MATCH EXISTING ROADWAY GRADE. SEE SHEET 5 TYPICAL SECTION AND RECONSTRUCTION NOTES.

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NEW MEXICO
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7-3-25
PROFESSIONAL ENGINEER

	REVISION	BY	DATE
1	REVISED SHEET PER ADD. NO. 1	RJW	7/3/2025

NAVAJO NATION
DIVISION OF TRANSPORTATION

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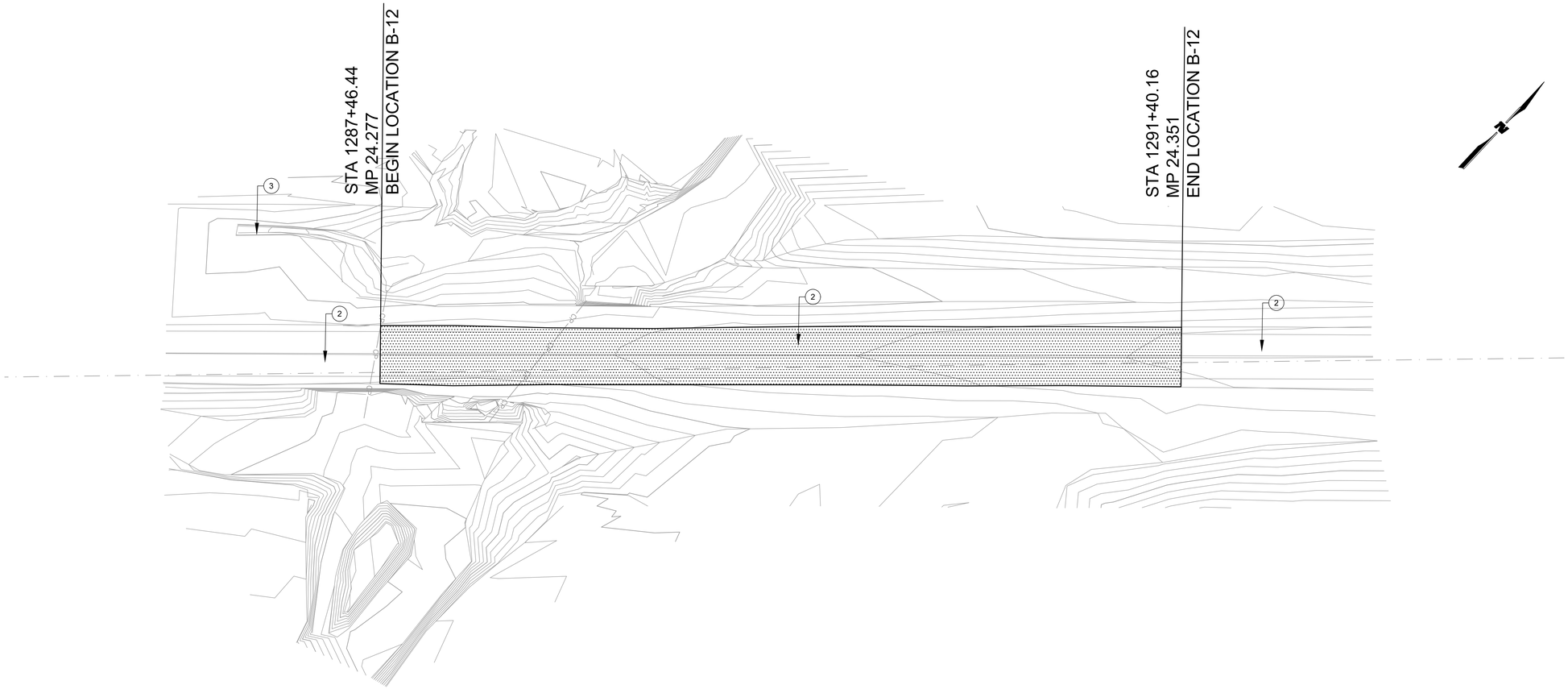
N55

N55 ROADWAY LOCATION B-11

PROJECT MANAGER: RW	DATE: 7/25	DRAWING	SHEET
LEAD DESIGNER: KAN	DATE: 7/25		20 OF 23
AS-BUILT BY:	DATE:		
SCALE: 1"=100' H 1"=20' V			



N55 ROADWAY LOCATION B-12

SCALE: 1" = 30'

0 15' 30'

STATE	PROJECT	SHEET NUMBER
NM	N55	21

REMOVAL NOTES

CONSTRUCTION NOTES

1. RECON LOCATIONS
   REMOVE EXISTING ASPHALT, BASE COURSE & 2 FT OF EXISTING SUBGRADE. REPLACE SUBGRADE WITH NEW BORROW MATERIAL. MATCH EXISTING ROADWAY GRADE. SEE SHEET 5 TYPICAL SECTION AND RECONSTRUCTION NOTES.
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3. SEE SHEET 2 FOR UTILITY CONFLICTS AND MITIGATION NOTES

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NEW MEXICO
29707
PROFESSIONAL ENGINEER
7-3-25

	REVISION	BY	DATE
1	REVISED SHEET PER ADD. NO. 1	RJW	7/3/2025

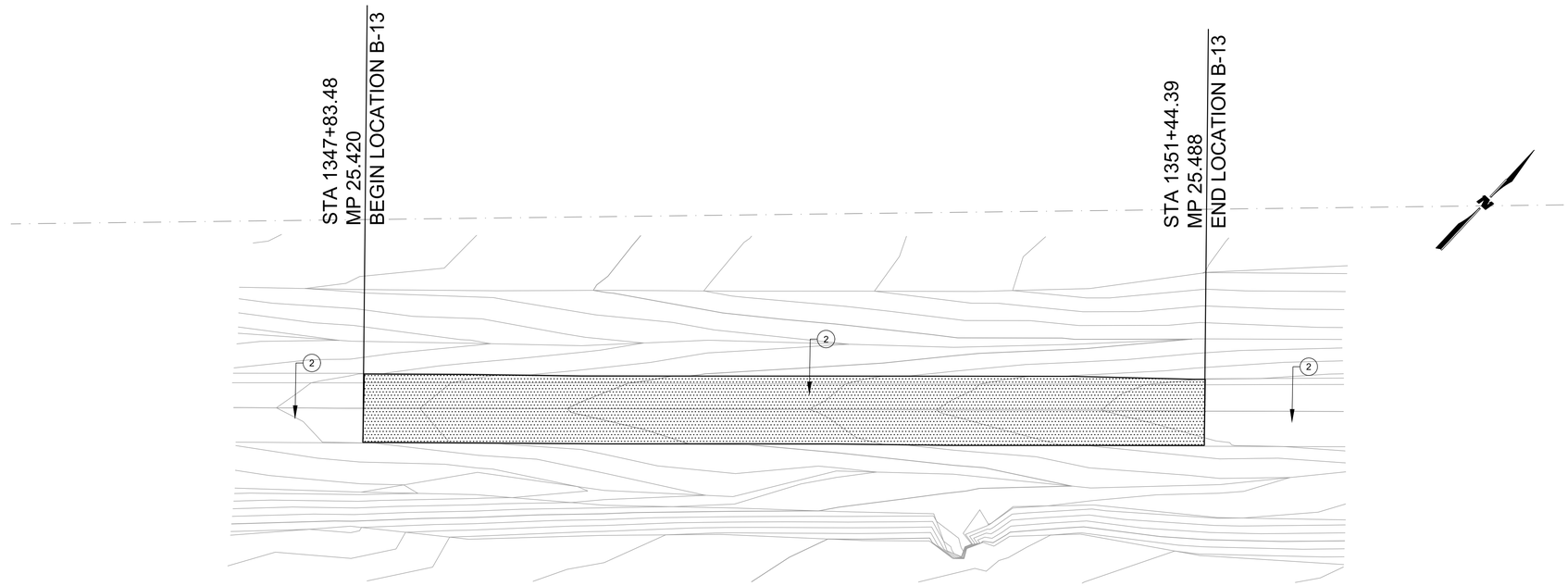
NAVAJO NATION
DIVISION OF TRANSPORTATION

NAVAJO D.O.T

N55

N55 ROADWAY LOCATION B-12

PROJECT MANAGER: RW	DATE: 7/25	DRAWING	SHEET
LEAD DESIGNER: KAN	DATE: 7/25		
AS-BUILT BY:	DATE:		21 OF 23
SCALE: 1"=100' H 1"=20' V			



N55 ROADWAY LOCATION B-13

SCALE: 1" = 30'

0 15' 30'

STATE	PROJECT	SHEET NUMBER
NM	N55	22

REMOVAL NOTES

CONSTRUCTION NOTES

1. RECON LOCATIONS
REMOVE EXISTING ASPHALT, BASE COURSE & 2 FT OF EXISTING SUBGRADE. REPLACE SUBGRADE WITH NEW BORROW MATERIAL. MATCH EXISTING ROADWAY GRADE. SEE SHEET 5 TYPICAL SECTION AND RECONSTRUCTION NOTES.

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3. SEE SHEET 2 FOR UTILITY CONFLICTS AND MITIGATION NOTES

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PROFESSIONAL ENGINEER

	REVISION	BY	DATE
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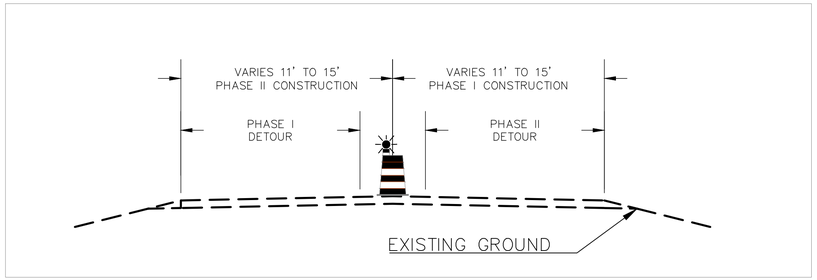
NAVAJO NATION
DIVISION OF TRANSPORTATION

N55

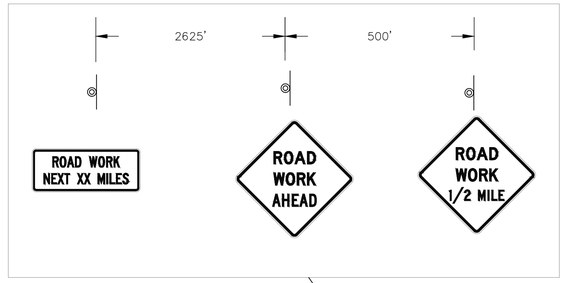
N55 ROADWAY LOCATION B-13

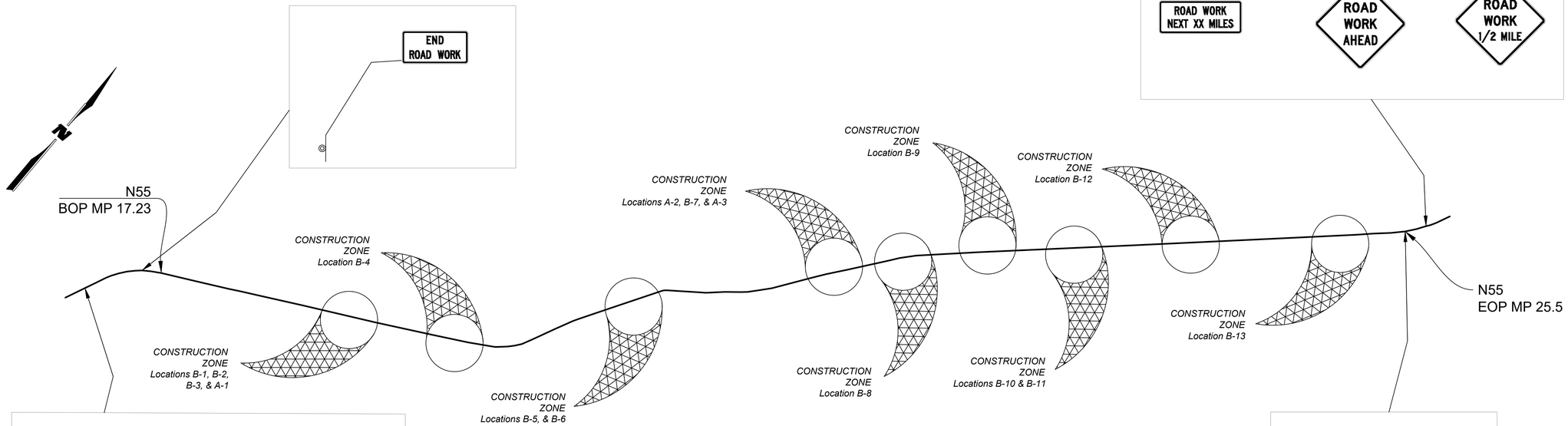
PROJECT MANAGER: RW	DATE: 7/25	DRAWING	SHEET
LEAD DESIGNER: KAN	DATE: 7/25		
AS-BUILT BY:	DATE:		22 OF 23
SCALE: 1"=100' H 1"=20' V			

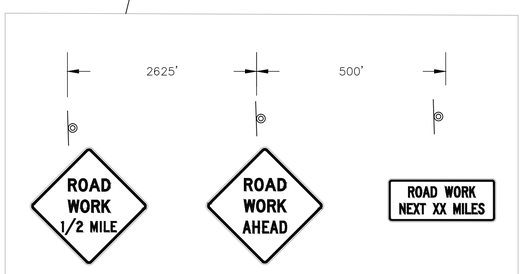


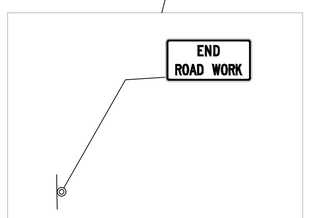
PHASED CONSTRUCTION

1. THE CONTRACTOR MAY ELECT TO CONSTRUCT ONE HALF OF THE NEW ROADWAY (UNDER PHASED CONSTRUCTION PLAN SHOWN) WHILE DETOURING TWO-WAY TRAFFIC ON THE OTHER (EXISTING) HALF.
2. ONCE THE FIRST HALF OF THE ROADWAY IS BUILT TO THE NEW GRADES, THEN TRAFFIC SHALL BE DIRECTED TO THE NEW HALF OF THE ROADWAY WHILE THE OTHER (EXISTING) HALF IS CONSTRUCTED.
3. THE CONTRACTOR'S CONSTRUCTION SCHEDULE SEQUENCING PLAN AND STORM WATER POLLUTION PREVENTION PLAN SHALL REFLECT THIS PHASED CONSTRUCTION.



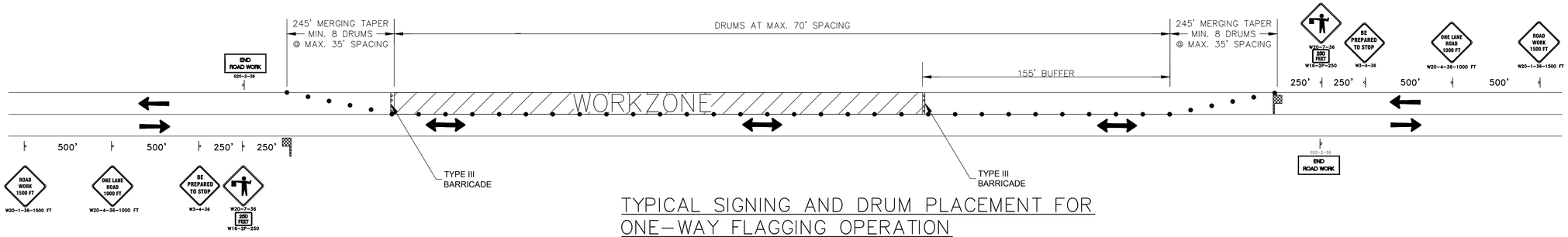






N55 SAFETY PROJECT TEMPORARY TRAFFIC CONTROL PLAN

SCALE: NONE



TYPICAL SIGNING AND DRUM PLACEMENT FOR ONE-WAY FLAGGING OPERATION

SCALE: NONE

STATE	PROJECT	SHEET NUMBER
NM	N55	23

REMOVAL NOTES

CONSTRUCTION NOTES

REFERENCE NOTES

LEGEND

- TRAFFIC CONTROL SIGN
- DRUMS
- TYPE III BARRICADE
- WORK ZONE AREA

1. SEE GENERAL NOTES 2 & 3 ON SHEET 2 FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS

RHODA JEAN WINDER
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29707
7-3-25
PROFESSIONAL ENGINEER

1	REVISED SHEET PER ADD. NO. 1	RJW 7/3/2025
	REVISION	BY DATE

NAVAJO NATION
DIVISION OF TRANSPORTATION
NAVAJO D.O.T

N55

TRAFFIC CONTROL

PROJECT MANAGER: RW	DATE: 7/25	DRAWING	SHEET
LEAD DESIGNER: KAN	DATE: 7/25		
AS-BUILT BY:	DATE:		23 OF 23
SCALE: 1"=100' H 1"=20' V			

BID SCHEDULE
NAVAJO NATION DIVISION OF TRANSPORTATION

PROJECT: N55(1-2)4 **Date: July 3, 2025**

LENGTH: 8.26 miles

ITEM	DESCRIPTION	Quantity	Units	Unit Bid Price	Total Price
10901-0000	Extra & Miscellaneous Work - Authorized under Suppl. Spec. 109.02(s) of Exhibit F	All Required	Lump Sum	$ 300,000.00	$ 300,000.00
FP-14: 31002-1100	CONTINUOUS COLD IN PLACE RECYCLED ASPHALT BASE COURSE (CCRAC) 3", TYPE A	126,100	SY	$	$
FP-14: 41901-0000	ASPHALT RUBBER SURFACE TREATMENT, CHIP SEAL	126,100	SY	$	$
203200	UNSUITABLE MATERIAL EXCAVATION	1,900	CY	$	$
303000	BASE COURSE	875	TON	$	$
~~407600~~	~~ASPHALT MATERIAL FOR TACK COAT~~	~~0~~	~~TON~~	$	$
408100	PRIME COAT MATERIAL	242	TON	$	$
~~414000~~	~~HOT POURED CRACK SEALING~~	~~0~~	~~MI~~	$	$
~~414001~~	~~COLD MILLING (ASPHALT)~~	~~0~~	~~SY~~	$	$
~~423283~~	~~HMA SP IV COMPLETE (2" OVERLAY)~~	~~0~~	~~TON~~	$	$
423283	HMA SP IV COMPLETE (3" LIFT)	420	TON	$	$
~~407601~~	~~FOG SEAL~~	~~0~~	~~TON~~	$	$
601100	REMOVAL OF SURFACING	1	LS	$	$
604300	GEOGRID REINFORCEMENT	3,200	SY	$	$
618000	TRAFFIC CONTROL MANAGEMENT	1	LS	$	$
621000	MOBILIZATION	1	LS	$	$
702810	TRAFFIC CONTROL DEVICES FOR CONSTRUCTION	1	LS	$	$
704000	RETROFLECTORIZED PAVEMENT MARKINGS 4"	98,200	LF	$	$
801000	CONSTRUCTION STAKING BY THE CONTRACTOR	1	LS	$	$
			Subtotal:	$	
			Tax (6.25%):	$	
	Contractor Name		**Total Bid Price:**	$	

SCOPE-OF-WORK

The proposed work consists of furnishing all labor, material, equipment and incidentals necessary for construction of 8.26 miles of roadway excavation; placement of aggregate base course, geogrid and asphalt pavement; continuous cold recycled asphalt course pavement of the existing pavement surface; asphalt surface treatment/chip seal, striping, and other miscellaneous construction in accordance with the specification and design drawings for this Project. The quantities listed for each item is estimated and the Unit Price is applicable to each as given in the Bid Schedule above. The final pay quantity measurements shall be rounded to the significant figures given in this bid schedule for the final pay estimate. Payment for work performed on Items furnished will be made in accordance with Sub-Section 109.05, Scope of Payment of FP-14. **The Unit Bid Price must include all overhead, profit, and bonding.**

EXHIBIT F

STANDARD SPECIFICATION FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAY PROJECTS, FP-14

& SUPPLEMENTAL SPECIFICATIONS

The following bid items for N55 shall be constructed following the FP-14 standard specifications, special provisions and Supplemental Specifications contained herein.

10901-0000, 31002-1100, 41901-0000

The FP-14 book is available in electronic format at https://flh.fhwa.dot.gov/resources/specs/fp-14/fp14.pdf

The following bid items for N55 shall be constructed following the NMDOT 2019 standard specifications, special provisions and Supplemental Specifications contained herein.

203200, 303000, 408100, 423283, 601100, 604300, 618000, 621000, 702810, 704000, 801000

The NMDOT 2019 STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION is available in electronic format at

https://www.dot.nm.gov/infrastructure/plans-specifications-estimates-pse-bureau/standards/

Section 419. − ASPHALT RUBBER SURFACE TREATMENT

Description

419.01 This work consists of a single application of asphalt rubber binder, pre-coated cover aggregate and a fog seal coat.

Material

419.02 Conform to the following Subsections:

Aggregate	703.10
Asphalt binder	702.01
Blotter	703.13
Emulsified asphalt	702.03
Antistrip	702.08

The asphalt binder shall be **PG 64-22**. Material Certificate of Compliance shall be provided with each tanker load.

Crumb rubber modifier (CRM) shall be produced primarily from the processing of automobile and truck tires by ambient temperature grinding methods.

The gradation of the CRM shall meet the following when tested in accordance with ASTM C-136 (dry sieve only) and using a 50 gram sample:

Table 419-1

Sieve Size	Percent Passing
2.36 mm (No.8)	100
2.00 mm (No.10)	95 – 100
1.18 mm (No.16)	40 – 100
600 µm (No.30)	0 – 60
300 µm (No.50)	0 – 20
75 µm (No.200)	0 – 5

The use of rubber from multiple sources is acceptable, except the overall blend of rubber shall meet the above gradation requirements.

The individual CRM particles, irrespective of diameter, shall not be greater in length than 5 mm ($^{3}/_{16}$-inch).

CRM shall have a specific gravity of 1.15 ± 0.05 (ASTM D 297) and shall be substantially free of contaminants, including loose fabric, metal, mineral and other non-rubber substances.

No more than four (4) percent (by weight of rubber) calcium carbonate or talc may be added to prevent rubber particles from sticking together. The rubber shall be sufficiently dry, free flowing and non-foaming when added to hot asphalt cement.

Fiber content in the rubber shall be less than 0.1% by weight. The moisture content in the rubber shall be less than 0.75% by weight. Mineral contaminant in the rubber shall not be

greater than 0.25% by weight, as determined after water separating a 50 gram rubber sample in a one (1) liter glass beaker filled with water. The rubber shall contain no visible metal particles, as indicated by thoroughly stirring of a 50 gram sample with a magnet.

The Contractor shall provide material Certificates of Compliance for the rubber which certifies that all requirements of this specification are complied with for each production lot number or shipment.

Construction Requirements

419.03 Composition of Asphalt Rubber Binder.

The asphalt rubber binder shall consist of a properly proportioned mixture of paving grade asphalt cement, crumb rubber modifier (CRM) and other additives, if required. The percentage of CRM shall be between 18 to 22 percent by weight of the asphalt rubber mixture. The exact percentages for the asphalt cement, CRM, and anti-strip additive (if required) will be determined by the CM based upon the Contractor's mix design as submitted by the Contractor. The asphalt rubber binder shall meet the following physical parameters when reacted at 177 ºC (350 ºF) for 60 minutes:

Table 419-2
Asphalt-Rubber Properties

[(1)] Rotational Viscosity, 177 ºC (350 ºF), Pascal seconds	1.5 – 4.0
Penetration, 4 ºC (39 ºF), 200 g, 60 sec (ASTM D 5); 1/10 mm	10 min.
Penetration, 25 ºC (77 ºF), 100 g, 5 sec (ASTM D 5); 1/10 mm	25 – 75
Resilience, 25 ºC (77 ºF) (ASTM D 3407); %	20 min.
Softening Point, (ASTM D 36); ºC (ºF)	55 (131) min.
Ductility, 4 ºC (39 ºF), (ASTM D 113); 1 CPM	5 min.

[(1)] The viscometer used must be correlated to the Rion Viscometer (formerly Haake), Model VT-04, Rotor No.1.

419.04 Asphalt-Rubber Binder Mix Design. Submit three (3) copies of the asphalt rubber binder mix design to the CM for review and approval at least **21 days before production**. The mix design shall be prepared by the Contractor's independent testing laboratory. The mix design shall include the following:

(a) The design parameters listed in **Table 419-2** for the interaction periods of 60, 90, 135, 360 and 1440 minutes.

(b) Aggregate.

(1) Target values for percent passing each sieve size. Designate target values within the gradation band in the specified grading.

(2) Source of aggregate.

(3) Results of aggregate quality tests.

(4) Coating and stripping of bitumen-aggregate mixtures, AASHTO T 182

(c) Asphalt Binder.

(1) Source of asphalt binder.

(2) Grade of asphalt binder.

(3) Percentage of asphalt binder (by total weight of the asphalt rubber mixture).

(4) Material safety data sheets.

(d) Crumb Rubber Modifier.

(1) Source of CRM.

(2) Gradation of CRM.

(3) Percentage of CRM (by total weight of the asphalt rubber mixture).

(4) If CRM from more than one source is to be used, the above information shall be required for each source.

The CM will evaluate the proposed mix design. If approved, the CM will issue **Job-Mix Formula No.1 (with an effective date)** which will include target values for the cover aggregate application rate, asphalt rubber binder application rate and percent passing each sieve size for the cover aggregate.

Changes to an approved job-mix formula or target value(s) require approval before production. Up to **5 working days** will be required to evaluate a change.

Approved changes in the target value(s) or job-mix formula will result in the issuance of a new **Job-Mix Formula Number with an effective date.** The maximum number of changes in target value(s) or job-mix formula is **3**. Any requested changes above 3 shall require submittal of a complete new mix design as described under **Subsection 419.03**.

If the proposed mix design is disapproved, submit a new mix design.

419.05 Qualification of Asphalt-Rubber Applicator. The Contractor shall be required to pre-qualify with the CM the asphalt-rubber applicator process and/or subcontractor and supplier. The data required to be submitted for qualification approval shall include experience records and equipment list indicating the ability to comply with the specification. The asphalt-rubber applicator must have constructed a minimum of three asphalt-rubber surface treatments over existing pavements that have been in place at least three years under traffic.

419.06 Equipment. Furnish equipment as follows:

(a) Asphalt distributor.

(1) Heating unit and an internal mixing device capable of maintaining a uniform mixture of the asphalt rubber binder.

(2) Adjustable full circulating spray bar to 4.6 m (15 ft) width. Bar extensions shall be full circulating. Test spray bar height at various heights. The spray bar shall maintain the set height 20 mm (13/16 in.) during each spray run.

(3) Apply uniform unbroken spread of asphalt rubber binder and positive acting control valves that quickly open and close in one operation. Uniformly apply asphalt rubber binder over the full width within 0.09 L/m² (0.02 gal/yd²) of the target spread rate.

The distributor shall be equipped with hand hose and nozzle attachment to be used for inaccessible spotting areas.

(4) Thermometer for measuring the asphalt rubber binder temperature in the tank.

(5) Bitumeter that registers rate of travel in feet per minute, trip and total distance in feet.

(6) Pump for circulating the asphalt rubber material in the spray bar, tank and for pumping the material through the spray bar or hand spray.

(7) Pressure gage, pump, tachometer or other approved device for controlling the application rate of asphalt rubber material.

(8) Gage or other approved means of accurately determining the quantity of asphalt rubber material in the tank.

(9) Boot board on the rear of the vehicle for a boot man to accompany the distributor. The boot man shall ride in a position so that all spray bar tips are in full view and readily accessible for unplugging if a plugged tip should occur.

(10) Maintenance of distributor and booster tanks such that no dripping of asphalt rubber material shall occur from any part of the equipment.

The CM will order the use of any distributor truck discontinued that does not comply with the above requirements or that fails to produce a satisfactory application of asphalt rubber material as specified herein.

(b) Rotary power broom or mobile pickup broom.

(1) Self-propelled.

(2) For pavement cleaning and excess cover material removal.

(c) Pneumatic-tire rollers.

(1) Minimum 3 pneumatic-tire rollers.

(2) Self-propelled.

(3) Minimum of 3 pneumatic tires on front axle; minimum of 4 pneumatic tires on rear axle. Means of increasing or decreasing the air pressure in the tires while the rollers are in operation. Tires staggered to produce a slight overlap of the tire tracks. Adequate scraping device or cleaning device to prevent the accumulation of material on the tires.

(4) Copy of roller manufacturer's chart or tables showing the contact areas and average ground contact pressure for the full range of wheel loadings for each roller.

(5) Copy of calibration table or chart for the ballast box that indicates the volume of the ballast box in cubic yards, each 150 mm (6 in.) increase in the depth of ballast and the empty or tare weight of the roller.

(6) Minimum ground contact pressure ---- 550 kPa (80 psi).

(7) Minimum compacting width ---- 1.5 m (5 ft).

(d) Aggregate spreader.

(1) Self-propelled.

(2) Minimum of 4 pneumatic tires on 2 axles.

(3) Positive controls to uniformly deposit the aggregate over the full width of asphalt within 10% by mass of the required rates.

(4) Good mechanical condition.

(5) Adjustable aggregate spreader up to a minimum of 3.5 m (11.5 ft) width.

(e) Hauling units.

(1) Trucks with tailgate discharge and equipped with a device to lock onto the hitch at the rear of the aggregate spreader.

(2) Trucks compatible with the aggregate spreader such that the dump bed shall not push down on the aggregate spreader when fully raised nor have a short bed that would result in aggregate spillage while dumping into the receiving hopper.

(f) Asphalt-rubber equipment. Equipment used in the production and application of the asphalt-rubber shall be described as follows:

(1) **Heat tank.** An asphalt heating tank with a hot oil heat transfer system or retort heating system capable of heating asphalt cement to the necessary temperature for blending with CRM. This unit shall be capable of heating a minimum of 9,500 liters (2,500 gallons) of asphalt cement.

(2) **Blender.** The asphalt-rubber mechanical blender shall have a two-stage continuous mixing process capable of producing a homogenous mixture of asphalt cement and granulated rubber at the specified mix design ratios. This unit shall be equipped with a granulated rubber feed system capable of supplying the asphalt cement without interruption to the continuous blending process. The maximum capacity of the primary blending vessel shall be 2,000 liters (500 gallons). The blending unit shall be capable of fully blending the individual rubber particles with the asphalt cement. A separate asphalt cement feed pump and finished product pump are required. This unit shall have an asphalt cement totalizing meter in liters and a flow rate meter in liters per minute.

(g) Other equipment. Provide two-way communication between the asphalt-rubber distributor and the aggregate spreader if the roadway alignment does not permit visual contact.

419.07 Asphalt Rubber Mixing and Reaction. The percentage of CRM shall be as approved in the mix design and the issuance of Job-Mix Formula No. 1. The temperature of the asphalt cement shall be between 190 ºC (375 ºF) to 232 ºC (450 ºF) at the addition of the CRM. The asphalt and rubber shall be combined and mixed together in the asphalt rubber blending unit and reacted in the distributor for a minimum period of 30 minutes from the time the CRM is added to the asphalt cement. The temperature of the asphalt rubber mixture shall be above 177 ºC (350 ºF) during the reaction period but shall not exceed 232 ºC (450 ºF) at any time. Exceeding the 232 ºC (450 ºF) temperature limit shall be grounds for rejection.

When a job delay occurs after full reaction, the asphalt rubber mixture may be allowed to cool. The mixture shall be reheated slowly (just before application) to a temperature between 177 ºC (350 ºF) and 204 ºC (400 ºF). Additional quantity of asphalt cement and/or CRM may be

added (as required) to produce a mixture that meets the specification viscosity requirement.

419.08 Surface Preparation. Clean the existing pavement surface of all loose material, vegetation, dirt, or other foreign material by approved methods. The material removed from the pavement surface shall not be windrowed along the roadway shoulder or fore slope in such a manner to impede drainage nor be unsightly. The existing road surface shall be approved by the CM before application of the asphalt rubber binder or any other work can begin.

419.09 Weather Limitations. Place hot asphalt rubber surface treatment **only** when the air temperature in the shade and the pavement surface temperature are at least 24ºC (75ºF) or higher. Place fog seal when the air temperature in the shade is at least 4ºC (40ºF). The wind condition shall not exceed 16 km/h (10 mph) nor shall rain be imminent. The pavement surface shall be clean and dry.

419.10 Traffic Control. Do not begin work without an approved and accepted Temporary Traffic Control Plan (TCP). Use a pilot car according to **Section 635** to limit traffic speeds.

419.11 Production Start-Up Procedures. Provide **7 days' advance notice** before constructing a control strip. Also use these start-up procedures when resuming production after termination due to nonconforming work.

On the first day of production, construct a 305 m (1,000 ft) control strip that is one-lane wide. Locate the control strip on the project as designated. Construct the control strip using the hot coated aggregate/asphalt material, aggregate spreader, asphalt rubber binder distributor and all pneumatic rollers that shall be used during production. Cease production after construction of the control strip.

(a) Aggregate Gradation. The Contractor's testing laboratory shall take **3 acceptance samples**, test and evaluate the test results according to **Subsection 106.04**. The aggregate gradation upper and lower specification limits are the approved job-mix formula target values plus or minus the allowable deviations shown in **Table 703-7a**.

(b) Aggregate Application Rate. The **3** aggregate acceptance samples taken for the gradation test shall be evaluated for application rate compliance according to **Subsection 106.04**. The application rate upper and lower specification limits are the approved job-mix formula target value plus or minus 0.54 kg/m² (1 lb/yd²).

(c) Asphalt Rubber Binder Application Rate. The asphalt rubber binder application rate is based upon the distributor's automatic read-out unit inside the cab. The application rate upper and lower specification limits are the approved job-mix formula target value plus or minus 0.09 L/m² (0.02 gal/yd²).

(d) Acceptance of Control Strip. The control strip is accepted at a pay factor of 1.00 if the average of the 3 tests for the aggregate gradation and aggregate application rate are within the above specification limits and the asphalt rubber binder application rate is within its specification limit.

Repeat the control strip process until an acceptable control strip is produced. A maximum of **3 control strips** are permitted. If 3 control strips have been constructed and have not been accepted, cease operation. Submit a corrective plan for review and approval. Repeat the control strip process again after approval of corrective plan.

The Contractor shall follow the procedures under **Subsection 106.01** for control strip(s) that

have not been accepted.

419.12 Asphalt Rubber Binder Application. Protect the surfaces of nearby objects to prevent spattering or marring. Spread building paper on the surface for a sufficient distance from the beginning and end of each application so the flow through the distributor nozzles may be started and stopped on the paper.

The asphalt rubber binder shall be applied between 2.26 kg/m² (0.55 gal/yd²) to 3.16 kg/m² (0.70 gal/yd²) at a temperature between 163 ºC (325 ºF) to 204 ºC (400 ºF). The CM will determine the exact application rate, temperature and area to be sealed before application. Apply the asphalt rubber uniformly with the distributor. Move the distributor forward at the proper application speed at the time the spray bar is opened. Use care not to apply excess material at the junction of spreads. All longitudinal joints shall be overlapped but the overlaps shall not exceed 150 mm (6 in).

Correct skipped areas or deficiencies. Remove and dispose of paper and unused asphalt rubber material at an approved landfill site. Furnish copies of receipts for the disposal to CM.

Traffic shall not be allowed on the asphalt rubber material until the cover aggregate has been applied and rolled in accordance with these specifications.

419.13 Aggregate Application. The cover aggregate shall be **hot pre-coated** with 0.50%±0.25% paving asphalt cement by dry weight of aggregate. The pre-coated cover aggregate should have a "salt and pepper" appearance. At the time of application, the hot pre-coated cover aggregate shall be at a temperature between 110 ºC (250 ºF) to 163 ºC (325 ºF). The cover aggregate shall be applied between 14 kg/m² (25 lbs/yd²) to 19 kg/m² (35 lbs/yd²). The CM will set the exact application rate and approve area to be sealed before application. Immediately apply the hot pre-coated aggregate uniformly with an aggregate spreader after the asphalt rubber binder is applied. Maintain a constant speed of the aggregate spreader within a distance of 30 m (100 ft) of the distributor. In no case shall the aggregate spreader lag more than 45 m (150 ft) behind the distributor.

Immediately correct excesses and deficiencies by careful means to insure no permanent ridges, bumps or depressions in the completed surface and that a uniform texture is achieved. Use hand methods in areas not accessible to power equipment.

Make first roller pass immediately to seat the aggregate after the aggregate is applied. Operate rollers at a maximum speed of 8 km/h (5 mph). If directed by the CM, a steel tandem roller shall also be used at speeds not to exceed 4.8 km/h (3 mph). Furnish sufficient rollers to cover the entire width of the treated surface in one pass.

If the aggregate spreader is stopped for any reason, the spreader shall be moved ahead so all aggregate spread shall be rolled immediately. Rolling shall be continuous until a minimum of 4 complete coverage rolls have been made while the asphalt rubber binder is still tacky enough for the aggregate to adhere. Final rolling shall be completed within one (1) hour after the application of the pre-coated aggregate.

Hauling units shall not exceed 16 km/h (10 mph) when traveling over the sections of roadway where rolling has not been completed.

419.14 Brooming and Maintenance. Lightly broom the aggregate surface in not less than 3 hours nor more than 48 hours after application; however, if the CM determines that conditions are not conducive to obtaining the best results by brooming during this period he will designate

another time period. Maintain the final surface by distributing blotter or cover aggregate according to **Section 411** to absorb any free asphalt rubber and by repairing areas deficient in aggregate. Sweep excess material from the final surface using a rotary power broom. Do not displace embedded material.

419.15 **Fog Seal.** When necessary, the Contractor shall furnish a separate temporary traffic control before the fog seal operations begin. NO WORK shall be allowed until the temporary traffic control is in place and accepted by the CM. A fog seal consists of applying emulsified asphalt diluted with water onto the finished asphalt-rubber chip seal surface. The emulsified asphalt is diluted 1:1 with water. The diluted emulsified asphalt shall be applied to the completed asphalt-rubber sealed areas in accordance with Subsection 409.10, Fog Seal at a rate of 0.45 to 0.68 L/m² (0.10 to 0.15 gal/yd²) for both the first and second application. The fog seal can be cured for a minimum of 5 days and a maximum period of 14 days. After this curing period, the permanent pavement markings must be applied to the completed asphalt rubber sealed areas.

419.16 **Acceptance.** Asphalt binder and emulsified asphalt will be evaluated and accepted under **Subsections 106.04, 702.01, 702.03** and **702.09**. Pre-coated aggregate will be evaluated and accepted under **Subsection 106.02 Visual Inspection**. Asphalt-rubber binder mixture will be evaluated and accepted under **Subsection 106.04**.

Construction of asphalt rubber surface treatment will be evaluated and accepted under **Subsections 106.02, 106.04,** and **106.05**. The cover aggregate application rate allowable deviation is plus or minus 0.54 kg/m² (1 lb/yd²) from the approved target value. The asphalt rubber binder application rate allowable deviation is plus or minus 0.09 L/m² (0.02 gal/yd²) from the approved target value.

Aggregate gradation will be evaluated and accepted under **Subsection 106.05**. See **Table 419-3** for minimum sampling and testing requirements.

(a) Aggregate gradation. The upper and lower specification limits are the approved job-mix formula target value plus or minus the allowable deviations shown in **Table 703-7**. See **Table 419-3** for the acceptance quality characteristic categories.

Measurement

419.17 Measure asphalt rubber surface treatment by the square yard (square meter) which excludes any overlaps of longitudinal or transverse joints. Asphalt binder, blotter material, crumb rubber modifier (CRM), hot coated cover aggregate and fog seal applications shall not be measured for payment separately but is included in the asphalt rubber surface treatment item.

Payment

419.18 The accepted quantities, measured as provided above, will be paid at the contract price per unit of measurement for the **Section 419** pay items listed in the bid schedule, except the asphalt rubber surface treatment contract unit bid price will be adjusted according to **Subsection 106.05**. Payment will be full compensation for the work prescribed in this Section. See **Subsection 109.05**.

Payment for asphalt rubber surface treatment will be made at a price determined by multiplying the contract unit bid price by the material pay factor. The material pay factor is the lowest single pay factor determined for cover aggregate gradation only.

Table 419-3
Sampling and Testing Requirements

Material or Product	Type of Acceptance (Subsection)	Characteristic	Category	Test Methods Specifications	Sampling Frequency	Point of Sampling	Split Sample	Reporting Time
Aggregate surface treatment source quality (703.10)	Measured and tested for conformance (106.04 & 106.05)	LA abrasion	---	AASHTO T 96	1 per type & source of material	Source of material	Yes, when requested	Before using in work
		Sodium sulfate soundness loss (course & fine)	---	AASHTO T 104	"	"	"	"
		Fractured faces	---	ASTM D 5821	"	"	"	"
		Flat & elongated particles		ASTM D 4791	"	"	"	"
		Durability index (course & fine)	---	AASHTO T 210	"	"	"	"
		Clay lumps & friable particles	---	AASHTO T 112	"	"	"	"
Aggregate surface treatment aggregate	Statistical (106.05)	Gradation. See Table 703-7 for applicable sieves	**II**	AASHTO T 27 & T 11	1 per 680 t	**See Note 3**	Yes, when requested	24 hours
	Measured and tested for conformance (106.04)	Fractured faces	__	ASTM D 5821	1 per 680 t	**See Note 3**	Yes, when requested	24 hours
		Application rate	__	____	3 per day	Spreader discharge	___	Upon completing test
		Liquid limit [1]	__	AASHTO T 89	1 per 680 t	Spreader discharge	Yes, when requested	24 hours

Table 419-3
Sampling and Testing Requirements

Material or Product	Type of Acceptance (Subsection)	Characteristic	Category	Test Methods Specifications	Sampling Frequency	Point of Sampling	Split Sample	Reporting Time
Asphalt-rubber binder	Measured and tested for conformance (106.04)	Application rate	___	____	3 per day	Distributor	___	Upon completing test
Asphalt-rubber binder	Measured and tested for conformance (106.04)	Quality	----	**Table 419-2**	All trucks sampled each day; test 1 sample each day	Distributor	-----	Upon completing test
Asphalt binder [2] (702.01) or emulsified asphalt [2] (702.03)	Measured and tested for conformance (106.04)	Quality	___	Subsection 419.16	1 per tanker truck including trailer	Point of shipment delivery	2 – 1 liter samples	Upon completing test

1. For blotter material only.

2. Applies to each asphalt material furnished.

3. The aggregate samples shall be taken at the hot plant cold-feed belt before coated with asphalt.

702.09 Evaluation Procedures for Asphalt.

(c) Sampling procedures.

Delete paragraph **(2)** and insert the following:

(2) Asphalt initially discharged into storage tanks on the project.

Take one 4-liter sample from the line between shipping container (tanker) and the storage tank to be tested under **(d)** below only.

Add the following items **(d)** and **(e)**:

(d) Testing. The testing of performance grade asphalt binder shall be under AASHTO M320.

(1) The first **four (4) delivery loads** and for **each 25th load thereafter** shall be tested for **all of the properties** and reported to the CM within 14 days after the sample date.

(e) Acceptance. Acceptance of the asphalt binder is when all the specified properties for the asphalt binder in AASHTO M 320 are met.

703.10 Asphalt Surface Treatment Aggregate.

Delete **Table 703-7** and insert the following new **Table 703-7a**:

Table 703-7a
Target Value Ranges for
Single and Multiple Course Surface Treatment Aggregate Gradation

Sieve Size	Percent by Mass Passing Designated Sieve (AASHTO T 27 & T 11)
	Grading Special
½ inch	100(1)
⅜ inch	70 – 85(3)
No. 4	0 – 15(5)
No. 8	0 – 5(3)
No. 200	0 – 1(1)

(1) Statistical procedures do not apply.
( ) The value in the parentheses is the allowable deviation (±) from the target values.

703.13 Blotter.

Delete item **(b)** and insert the following new item **(b)**:

(b) Plastic limit, AASHTO T 90 Non-plastic