



US Army Corps
of Engineers
Alaska District

Public Notice of Application for Permit

ANCHORAGE
Regulatory Division (1145)
CEPOA-RD
P.O. BOX 6898
JBER, AK 99506-0898

PUBLIC NOTICE DATE:	May 3, 2023
EXPIRATION DATE:	June 2, 2023
REFERENCE NUMBER:	POA-2014-00503
WATERWAY:	Koyukuk River

Interested parties are hereby notified that a Department of the Army permit application has been received for work in waters of the United States as described below and shown on the enclosed project drawings.

All comments regarding this public notice should be sent to the address noted above. If you desire to submit your comments by email, you should send it to the project manager's email as listed below or to regpagemaster@usace.army.mil. All comments should include the public notice reference number listed above.

All comments should reach this office no later than the expiration date of this public notice to become part of the record and be considered in the decision. Please contact Carolyn Farmer at (561) 785-5634, or by email at Carolyn.h.farmer@usace.army.mil if further information is desired concerning this public notice.

APPLICANT: Hughes Village, Mr. Wilmer Beetus, P.O. Box 45029, Hughes, AK 99745

AGENT: EBSC Engineering, LLC., Mr. Edward Hakala, 11301 Olive Lane, Anchorage, AK 99516

LOCATION: The project site is located at Section 33, T. 8 N., R. 22 E., Kateel River Meridian; USGS Quad Map Cape Flattery; Latitude 66.0537° N, Longitude 154.2308° W; Hughes, Alaska.

PURPOSE: The applicant's stated purpose is to provide all-season access to the community cemetery, future housing sites above the 100-year floodplain, subsistence-use areas, and wood gathering area. Current access to the cemetery is from the steep riverbank and not accessible to the elderly or infirm.

PROPOSED WORK: The project consists of the construction of a 2.4-mile (13,300 linear feet), two-lane, 18-foot-wide road (known as Sunny Lane) that would branch off the existing Landfill Access Road, follow the east shoulder of a hill along an existing winter trail, cross an unnamed creek, and end near the Hughes Cemetery primarily following the alignment of an existing winter trail. The applicant proposes to discharge up to 45,000 cubic yards of borrow and coarse aggregate (40,000 and 5,000 respectively) fill material into a total of 11.1 acres of waters of the United States, including wetlands, in order to construct the road. The road embankment would be constructed with 2H:1V side slopes, creating a toe-to-toe width of an average of 30-feet for a total surface area of the toe-to-toe area is approximately 481,754 square feet. Select borrow material would be sourced from the existing material source known as "Hillside Rock" and surface coarse aggregate would be extracted from the Koyukuk River under FH22-III-0210. The unnamed creek would be crossed by a 40-foot-wide pre-engineered bridge. Wetland hydrology would be maintained by the installation of eighteen (18), 18-inch culverts along the road alignment. The road would be constructed between June and December 2023.

All work would be performed in accordance with the enclosed plan (sheets 1–40), dated October 20, 2022.

ADDITIONAL INFORMATION:

- Fish Habitat Permit FH22-II-0210, Issued September 30, 2022.

APPLICANT PROPOSED MITIGATION: The applicant proposes the following mitigation measures to avoid, minimize, and compensate for impacts to waters of the United States from activities involving discharges of dredged or fill material.

a. Avoidance: Most of the land in the area is wetland, so upland alternatives are not available. Wetland impacts were avoided to the extent practicable during the design process by aligning the proposed road with drier, presumably upland communities enroute to the terminus of the road. The road was routed through forested areas (mesic birch-aspen) where soil conditions are more favorable. Wet areas with tussocks were avoided where possible. Three alternative alignments were considered and the alignment with the fewest acres of wetland impacts (Alternative 2) was selected. The reduction in wetland impacts between the three alternatives has not been quantified due to the absence of National Wetlands Inventory (NWI) coverage or a wetland delineation, but the Alternative 2 alignment maximizes contours and vegetation signatures associated with uplands. The proposed alignment avoids permanently inundated wetlands east of the alignment by jogging to the west and downstream of the permanently inundated wetland/unnamed stream confluence.

b. Minimization: Wetland impacts were minimized during the design by reducing the width of the road surface from 24-feet in the 2014 design to 18-feet in the current design. The change in surface width reduced wetland impacts from 17.5-acres in the 2014 application to 11.1-acres in the current proposal. The road would minimize new impacts by primarily following the alignment of an existing winter trail. The road base would consist of a geotechnical fabric placed directly over the vegetative mat and overlain by select fill, minimizing the impacts to soil and vegetation because overburden disposal would not be required. Existing vegetation will be cut to the ground level and disposed of in off-site uplands. The existing vegetative mat would be preserved to the maximum extent practicable, thereby protecting underlying soils that likely contain permafrost. Additional minimization efforts include:

1. Exposed soil would be stabilized as soon as possible, but always within seven days after final grade is reached. Soils that may not be at final grade but are expected to be exposed for over 45 days would also be stabilized.
2. Erodible stockpiles would be stabilized with sediment trapping measures to prevent soil loss.
3. Permanent vegetative cover would be established on disturbed areas not otherwise stabilized.
4. Adequate subsurface drainage would be provided where water seeps from a slope face.
5. A storm water pollution prevention plan would be developed and implemented to help minimize sedimentation to adjacent wetlands.
6. The construction project limits would be delineated prior to construction and no work would occur outside the project limits.
7. The project would procure the majority of borrow material required from an existing material source.
8. Sixteen culverts would be installed along the road alignment to minimize impacts to hydrology.

c. Compensatory Mitigation: The applicant does not propose compensatory mitigation for the following reasons:

1. Compensatory mitigation is inappropriate and impractical considering the remoteness, minimal scale of historic impacts, and lack of mitigation opportunities.
2. Adequate avoidance and minimization have been incorporated into the design to significantly reduce unavoidable adverse effects.
3. The impacted wetlands are abundant in the watershed and do not support any rare, threatened, or endangered species.

4. Upland alternatives are not available, so the applicant has no choice but to construct in wetlands.
5. The low level of development in the watershed doesn't provide opportunities for restoration or enhancement, and the region is predominantly wetland so establishment would be redundant.

WATER QUALITY CERTIFICATION: A permit for the described work will not be issued until a certification or waiver of certification, as required under Section 401 of the Clean Water Act (Public Law 95-217), has been received from the Alaska Department of Environmental Conservation.

CULTURAL RESOURCES: The latest published version of the Alaska Heritage Resources Survey (AHRS) has been consulted for the presence or absence of historic properties, including those listed in or eligible for inclusion in the National Register of Historic Places. There are cultural resources in the permit area or within the vicinity of the permit area. Consultation of the AHRS constitutes the extent of cultural resource investigations by the U.S. Army Corps of Engineers (Corps) at this time. The Corps has made a No Historic Properties Affected (No Effect) determination for the proposed project. This application is being coordinated with the State Historic Preservation Office (SHPO), Federally recognized Tribes, and other consulting parties. Any comments SHPO, Federally recognized Tribes, and other consulting parties may have concerning presently unknown archeological or historic data that may be lost or destroyed by work under the requested permit will be considered in our final assessment of the described work. The Corps is requesting the SHPO's concurrence with this determination.

ENDANGERED SPECIES: According to a search of the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPAC) database on March 17, 2023, the project area is within the known range of the threatened Wood Bison (*Bison bison athabascae*). However, the 2015 Alaska Department of Fish and Game range data indicates that the proposed project is located well beyond the core range of the existing known herd.

We have determined the described activity would have no effect on the Wood Bison and would have no effect on any designated or proposed critical habitat, under the Endangered Species Act of 1973 (87 Stat. 844). Therefore, no consultation with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service (NMFS) is required. However, any comments they may have concerning endangered or threatened wildlife or plants or their critical habitat will be considered in our final assessment of the described work.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH).

The project area is not within mapped EFH.

TRIBAL CONSULTATION: The Corps fully supports tribal self-governance and government-to-government relations between Federally recognized Tribes and the Federal government. Tribes with protected rights or resources that could be significantly affected by a proposed Federal action (e.g., a permit decision) have the right to consult with the Corps, Alaska District, on a government-to-government basis. Views of each Tribe regarding protected rights and resources will be accorded due consideration in this process. This public notice serves as notification to the Tribes within the area potentially affected by the proposed work and invites their participation in the Federal decision-making process regarding the protected Tribal rights or resources. Consultation may be initiated by the affected Tribe upon written request to the District Commander during the public comment period.

PUBLIC HEARING: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, reasons for holding a public hearing.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts, which the proposed activity may have on the public interest, requires a careful weighing of all the factors that become relevant in each particular case. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. The outcome of the general balancing process would determine whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur. The decision should reflect the national concern for both protection and utilization of important resources. All factors, which may be relevant to the proposal, must be considered including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving 404 discharges, a permit will be denied if the discharge that would be authorized by such permit would not comply with the Environmental Protection Agency's 404(b)(1) guidelines. Subject to the preceding sentence and any other applicable guidelines or criteria (see Sections 320.2 and 320.3), a permit will be granted unless the District Commander determines that it would be contrary to the public interest.

The Corps is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

AUTHORITY: This permit will be issued or denied under the following authorities:

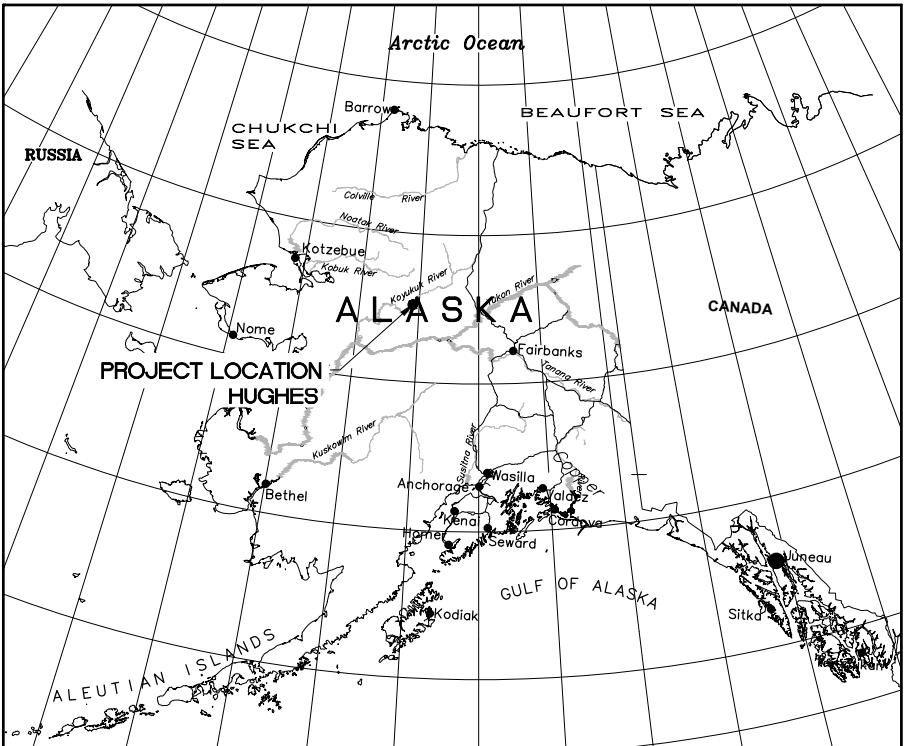
- (X) Perform work in or affecting navigable waters of the United States – Section 10 Rivers and Harbors Act 1899 (33 U.S.C. 403).
- (X) Discharge dredged or fill material into waters of the United States – Section 404 Clean Water Act (33 U.S.C. 1344). Therefore, our public interest review will consider the guidelines set forth under Section 404(b) of the Clean Water Act (40 CFR 230).

Project drawings are enclosed with this public notice.

District Commander
U.S. Army, Corps

Enclosure

BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



SUNNY LANE

HUGHES, ALASKA

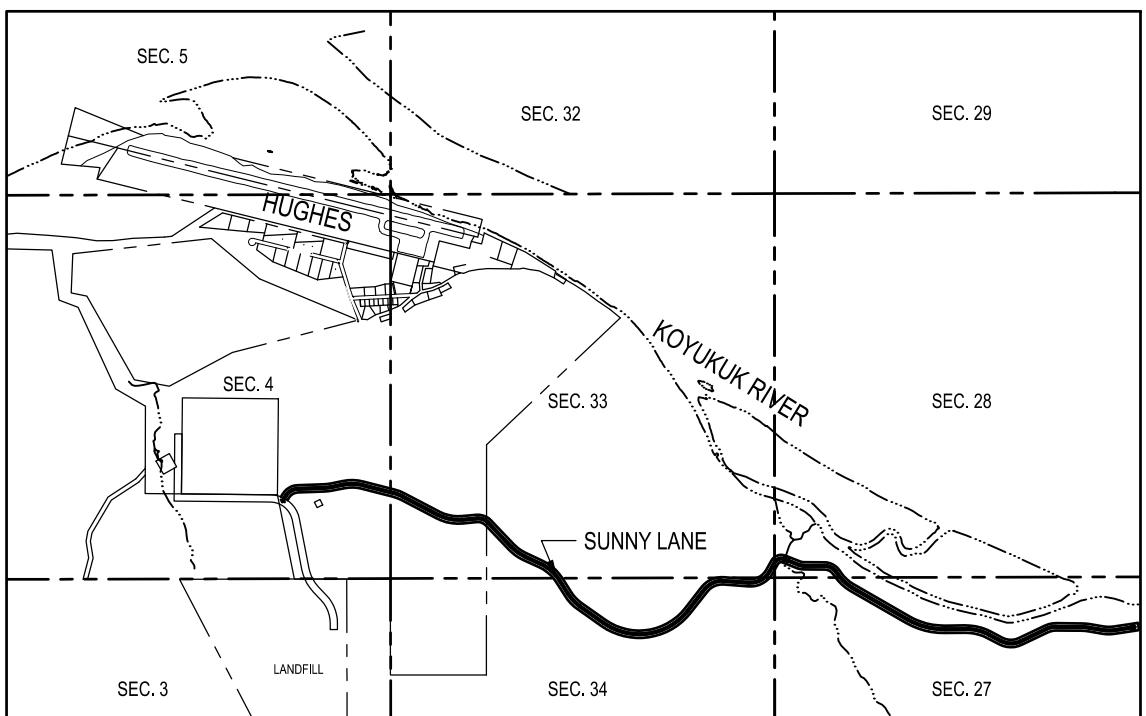
BIA DESIGN PROJECT NO. XXX
BIA CONTRACT NO. XXX

PROJECT SUMMARY		
ROADWAY	SURFACE WIDTH	LENGTH
ACCESS TRAIL	18 FT	13,260 LF
BRIDGE	13'-7"	40 LF

SHEET INDEX	
SHEET NO.	DESCRIPTION
A1	COVER SHEET
A2	NOTES AND LEGEND
A3	SURVEY CONTROL
B1	TYPICAL SECTIONS & DETAILS
B2	ALIGNMENT & CULVERT TABLES
B3	SHEET LAYOUT KEY MAP
C1-C34	PLAN & PROFILE SHEETS

PROJECT DESCRIPTION:
ACCESS TRAIL FROM LANDFILL ROAD TO THE CEMETERY.

LOCATION MAP



VICINITY MAP
Sec. (4,33,34,28,27), T(7N,8N), R22E, KM

TRIBAL PROJECT MANAGER
HUGHES VILLAGE COUNCIL
HUGHES, ALASKA 99576

DATE

ENGINEER OF RECORD
EBSC ENGINEERING LLC.
ANCHORAGE, ALASKA 99515

DATE

REVIEW ENGINEER

DATE

DESIGN DESIGNATION	
FUNCTIONAL CLASS	CLASS XX TRAIL
AADT 2022	0
AADT 2042	<400
DESIGN SPEED	20 MPH
BRIDGE DESIGN LOAD	HL-93
BRIDGE SPAN	36'

95% SUBMITTAL
NOT FOR CONSTRUCTION

REVISIONS

NO.	DATE	BY	DESCRIPTION



DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS
ALASKA REGIONAL OFFICE
BRANCH OF TRANSPORTATION

SUNNY LANE
HUGHES, ALASKA

SUNNY LANE
COVER SHEET

SCALE: AS SHOWN DESIGN: LDM CHECK: ELH DRAWN: LDM 9 SEPT 2022 1 OF 40

A1

LEGEND

EXISTING	PROPOSED	
	1+00	ROAD CENTER LINE
—	— — —	PROPERTY LINE/ROW LINE
—	—	EDGE OF GRAVEL
15	(15)	ELEVATION CONTOUR
—	· · · · ·	FILL LIMIT
— — —	—	PROFILE ELEVATION
Y — — —	—	CULVERT
— O —	—	UTILITY POLE
— — —	—	GUY WIRE
— — —	—	EDGE OF WATER
— — —	—	GRAVEL ROAD

GENERAL NOTES

- ALL CONSTRUCTION SHALL CONFORM TO THE 2014 FEDERAL HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAY PROJECTS (FP-14) ENGLISH AND THE SPECIAL CONTRACT REQUIREMENTS. ALL DIMENSIONS ARE IN ENGLISH UNLESS OTHERWISE SHOWN.
- A GEOTECHNICAL ENGINEERING REPORT HAS BEEN PREPARED FOR THE DESIGN OF THIS PROJECT BY NORTHERN GEOTECHNICAL ENGINEERING. THIS REPORT SHOULD NOT BE CONSIDERED PART OF THE CONTRACT DOCUMENTS. THE OPINIONS EXPRESSED IN THIS REPORT ARE THOSE OF THE GEOTECHNICAL ENGINEER AND REPRESENT HIS INTERPRETATION OF THE SUBSOIL CONDITIONS, TESTS AND THE RESULTS OF ANALYSES, WHICH HE PERFORMED. SHOULD THE DATA CONTAINED IN THIS REPORT NOT BE ADEQUATE FOR THE CONTRACTOR'S PURPOSES, THE CONTRACTOR MAY MAKE HIS OWN INVESTIGATIONS, TEST AND ANALYSES PRIOR TO BIDDING. THIS REPORT IS AVAILABLE TO THE CONTRACTOR FROM THE BUREAU OF INDIAN AFFAIRS UPON REQUEST. THE SOIL LOGS IN THE REPORT REFLECT THE SOIL CONDITIONS AT THOSE LOCATIONS ONLY.
- THIS PROJECT SHALL COMPLY WITH THE ALASKA POLLUTION DISCHARGE ELIMINATION SYSTEM (APDES), SEE SECTION 157 OF THE SPECIAL CONTRACT REQUIREMENTS. A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MUST BE DEVELOPED FOR THIS PROJECT, PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A COPY OF THE NOTICE OF INTENT (NOI) AND A NOTICE OF TERMINATION (NOT) TO BIA, IN COMPLIANCE WITH APDES. REFERENCE EROSION AND SEDIMENT CONTROL NOTES THIS SHEET.
- THE LIMIT OF WORK FOR NEW CONSTRUCTION SHALL BE DESIGNATED AT THE LIMIT OF FILL OR EXCAVATION UNLESS OTHERWISE SHOWN. THE LIMITS OF WORK FOR RESURFACING ARE SHOWN ON THE PLANS AND SHALL BE WITHIN THE EXISTING RIGHT-OF-WAY. THE CONTRACTOR SHALL NOT WORK OUTSIDE THE LIMIT OF WORK WITHOUT PRIOR APPROVAL BY THE CONTRACTING OFFICER. THE CONTRACTOR IS SOLELY LIABLE FOR ALL DAMAGE AND RESTITUTION FOR ANY DISTURBANCE OUTSIDE THE WORK LIMITS. THIS INCLUDES INDEMNIFICATION OF EBSC ENGINEERING LLC, BUREAU OF INDIAN AFFAIRS, AND THE HUGHES VILLAGE FROM LITIGATION ARISING FROM THE CONTRACTORS' ACTIONS.
- EXISTING GROUND CONTOURS ARE BASED ON A SURVEY PERFORMED BY DELTA SURVEYS. CONTRACTOR SHALL VERIFY SITE CONDITIONS PRIOR TO CONSTRUCTION. THE OWNER SHALL BE IMMEDIATELY NOTIFIED OF ANY CONFLICTS.
- THE CONTRACTOR SHALL SUBMIT A MINING PLAN, MATERIAL AGREEMENTS FORM, AND ALL PERMITS TO THE CONTRACTING OFFICER BEFORE STARTING MINING OPERATIONS OR WHENEVER THE CONTRACTOR PROPOSES A CHANGE. THE MINING PLAN IS FOR CONSTRUCTION PURPOSES ONLY, AND ITS SUBMITTAL TO AND REVIEW BY THE CONTRACTING OFFICER SHALL NOT ABSOLVE THE CONTRACTOR OF RESPONSIBILITY FOR FEDERAL, STATE, AND LOCAL REGULATIONS. THE PERMITS AND MATERIAL AGREEMENTS SHALL BE OBTAINED PRIOR TO CONSTRUCTION.
- UTILITY LOCATIONS SHOWN, BOTH HORIZONTAL AND VERTICAL, ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES BY OBTAINING UTILITY LOCATES PRIOR TO CONSTRUCTION IN ACCORDANCE WITH SECTION 107.02. PROTECT ALL EXISTING FACILITIES (I.E., PEDESTALS, ELECTRICAL TRANSFORMERS) FROM DAMAGE DURING EXCAVATING AND BACK FILLING. HANDWORK MAY BE REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR ALL RELATED COSTS TO EXCAVATE AROUND, SUPPORT, AND BACKFILL AROUND EXISTING FACILITIES.
- THE CONTRACTOR SHALL SUBMIT A QUALITY CONTROL PLAN IN ACCORDANCE WITH SECTION 153. TESTING FREQUENCY SHALL MEET SECTION 154 OF THE SPECIAL CONTRACT REQUIREMENTS.

EROSION AND SEDIMENT CONTROL NOTES (MINIMUM STANDARDS)

- APPLY PERMANENT AND TEMPORARY SOIL STABILIZATION TO DISTURBED AREAS AS SOON AS POSSIBLE, BUT ALWAYS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE FINAL GRADE, BUT WILL REMAIN DORMANT OR UNDISTURBED FOR LONGER THAN 45 DAYS.
- STABILIZE OR PROTECT ERODIBLE SOIL STOCKPILES, INCLUDING BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE SITE, WITH SEDIMENT TRAPPING MEASURES TO PREVENT SOIL LOSS.
- A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DISTURBED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL UNIFORM GROUND COVER IS ACHIEVED, AND MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.
- PROVIDE ADEQUATE SUBSURFACE DRAINAGE OR OTHER PROTECTION WHERE WATER SEEPS FROM A SLOPE FACE.
- BEFORE NEWLY CONSTRUCTED STORM WATER CONVEYANCE CHANNELS OR PIPES ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION, OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE CONTRACTING OFFICER. TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS RESULTING FROM THE DEPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
- WHEN WORK IN A LIVE STREAM IS PERFORMED, PRECAUTION SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT, AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN A SIXTH MONTH PERIOD, TEMPORARY VEHICLE STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL SHALL BE PROVIDED.

PUBLIC UTILITY COMPANIES

WATER: VILLAGE COUNCIL
SEWER: VILLAGE COUNCIL
ELECTRIC: XXXXX
TELEPHONE: UNITED UTILITIES INC.



Know what's below.
Call before you dig.
ALASKA DIGLINE

95% SUBMITTAL
NOT FOR CONSTRUCTION

REVISIONS

NO.	DATE	BY	DESCRIPTION



DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS
ALASKA REGIONAL OFFICE
BRANCH OF TRANSPORTATION

SUNNY LANE
HUGHES, ALASKA

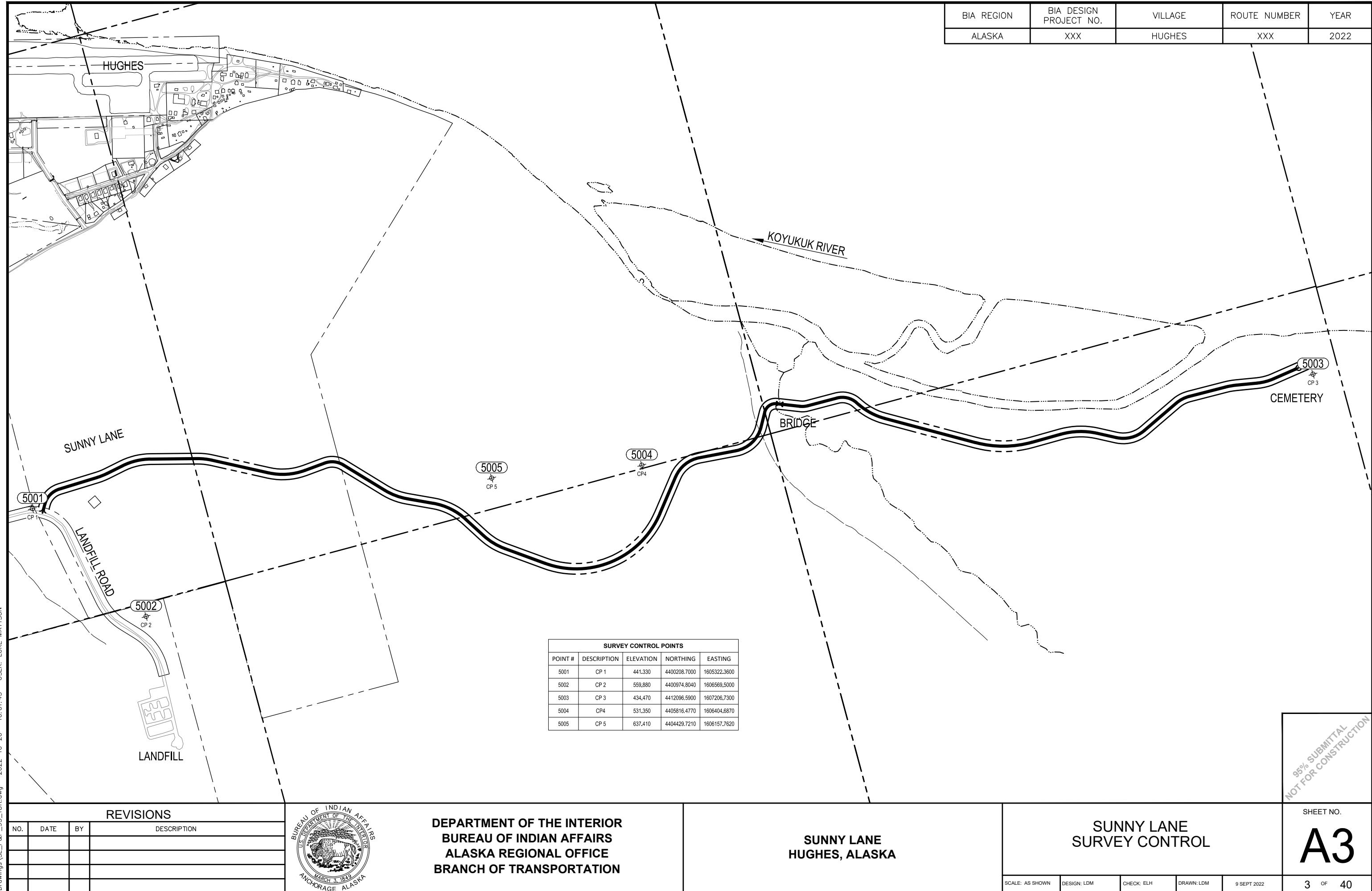
SUNNY LANE
TYPICAL SECTIONS

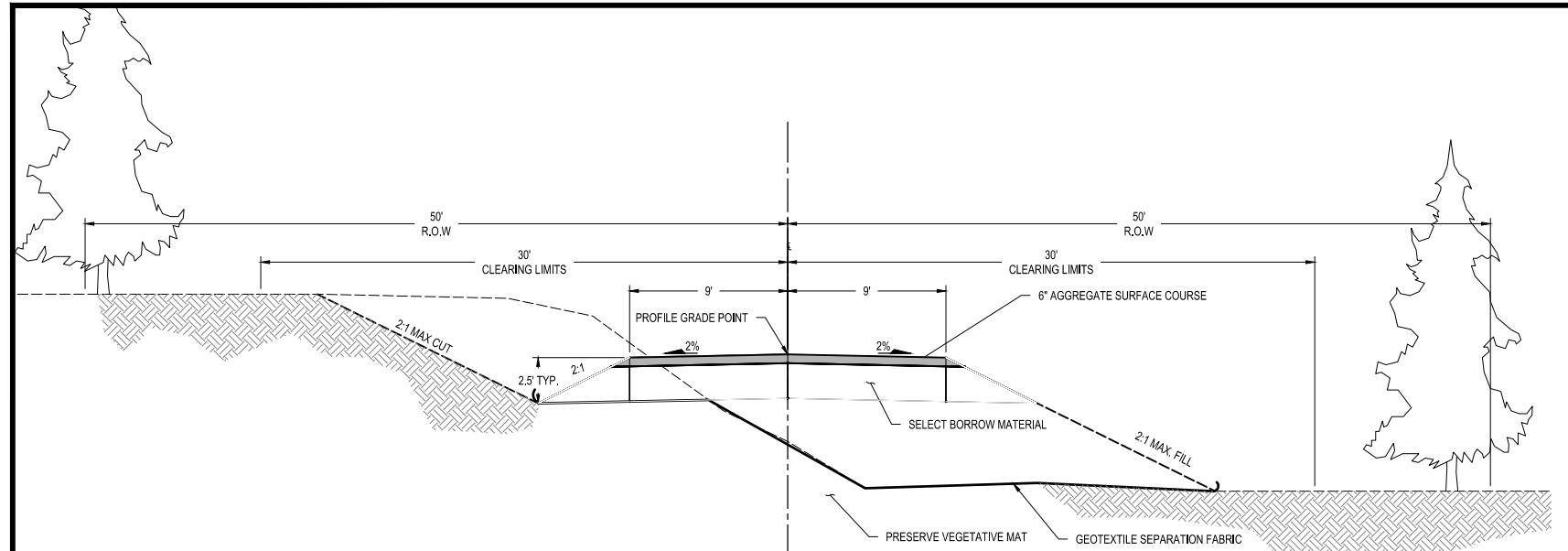
SCALE: AS SHOWN DESIGN: LDM CHECK: ELH DRAWN: LDM 9 SEPT 2022

SHEET NO.
A2

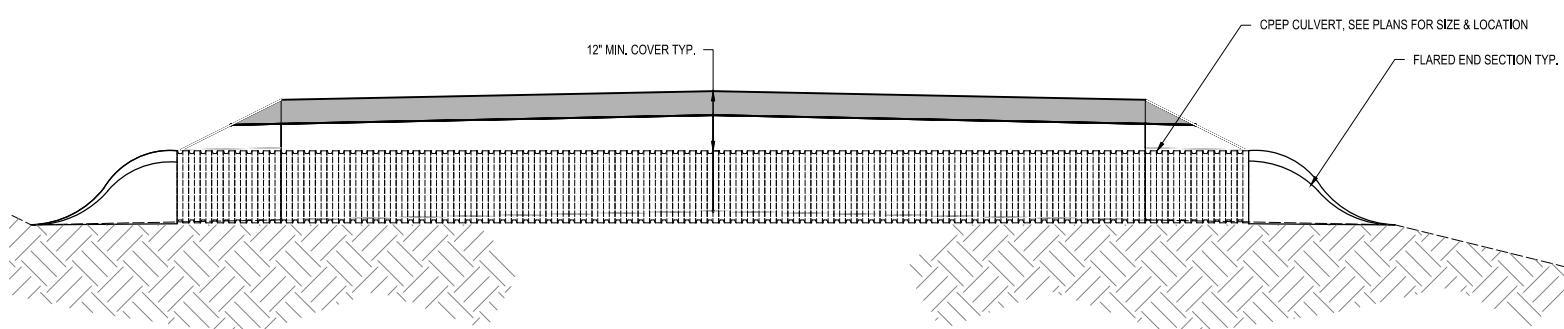
2 OF 40

BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022

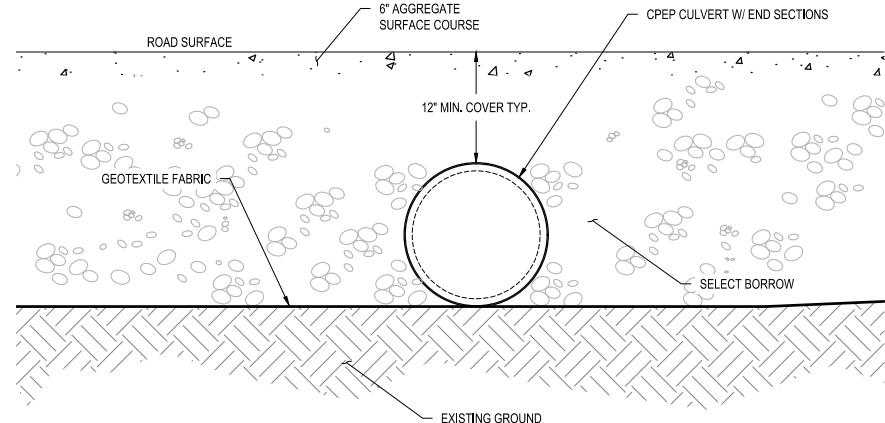




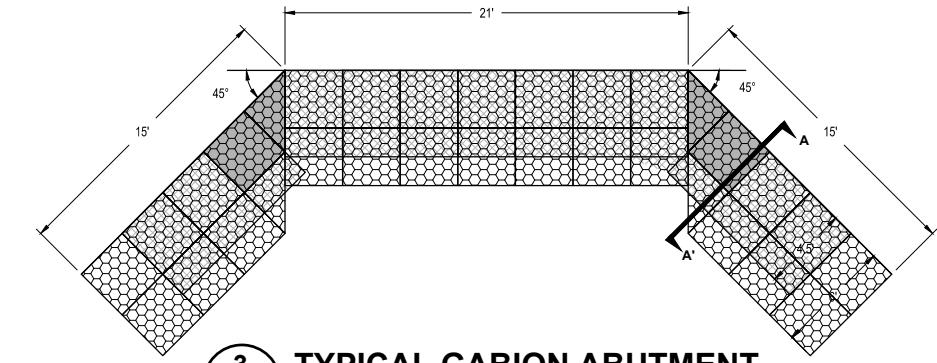
1
TYPICAL SECTION (18' WIDTH)



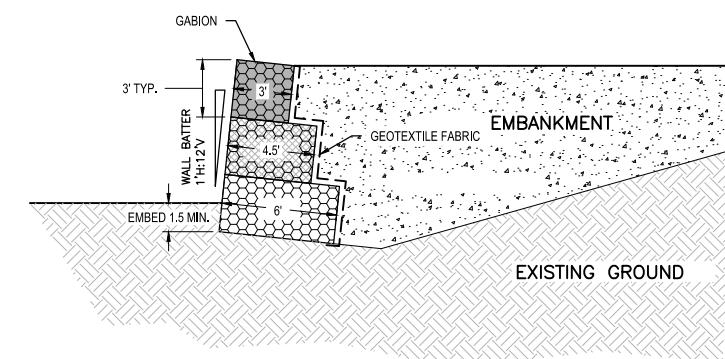
2
TYPICAL CULVERT DETAIL



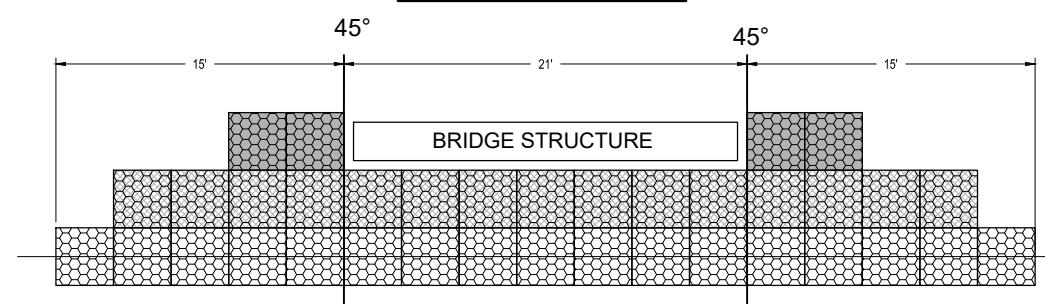
BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



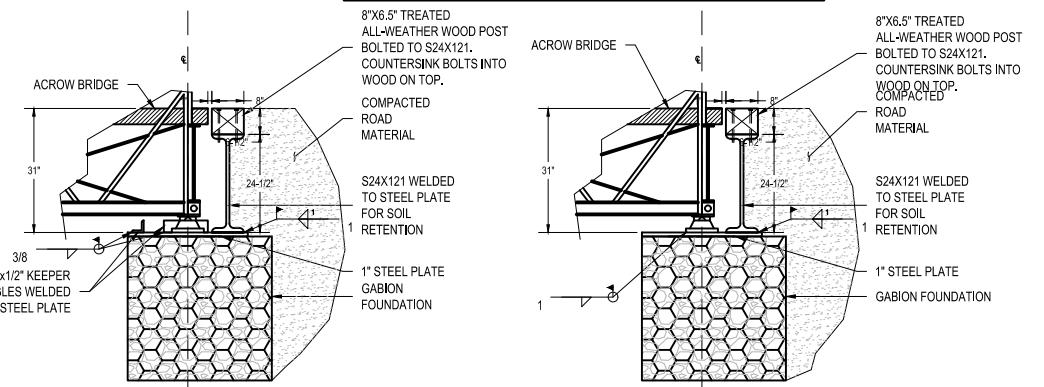
3
TYPICAL GABION ABUTMENT



SECTION A-A'



ABUTMENT PROFILE



4
B1
BRIDGE CONNECTION DETAILS

NOT FOR CONSTRUCTION
95% SUBMITTAL

REVISIONS			
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ALASKA REGIONAL OFFICE
BRANCH OF TRANSPORTATION

SUNNY LANE
HUGHES, ALASKA

SUNNY LANE
TYPICAL SECTIONS & DETAILS

SHEET NO.
B1

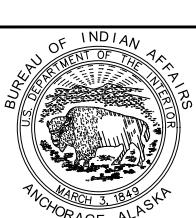
BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022

CURVE TABLE						
CURVE #	PC	CURVE & TANGENT LENGTH	RADIUS	DELTA ANGLE	PT	
C1	STA: 1+87.79 N: 4400333.9144 E: 1605310.0498	LENGTH=201.32' TANGENT=110.12'	200.00'	Δ=57°40'30"	STA: 3+89.12 N: 4400499.4442 E: 1605210.9427	
C2	STA: 7+59.81 N: 4400869.8897 E: 1605197.5365	LENGTH=97.83' TANGENT=49.02'	600.00'	Δ=9°20'32"	STA: 8+57.64 N: 4400966.9355 E: 1605186.0613	
C3	STA: 10+21.23 N: 4401127.2983 E: 1605153.6837	LENGTH=270.49' TANGENT=137.59'	600.00'	Δ=25°49'49"	STA: 12+91.73 N: 4401395.4156 E: 1605160.7067	
C4	STA: 17+26.75 N: 4401816.7381 E: 1605269.0062	LENGTH=137.80' TANGENT=69.21'	600.00'	Δ=13°09'33"	STA: 18+64.55 N: 4401945.1085 E: 1605318.2705	
C5	STA: 24+09.99 N: 4402428.5959 E: 1605570.7594	LENGTH=344.05' TANGENT=176.90'	600.00'	Δ=32°51'17"	STA: 27+54.05 N: 4402761.5522 E: 1605636.3685	
C6	STA: 29+51.53 N: 4402958.1952 E: 1605618.1957	LENGTH=180.52' TANGENT=96.93'	200.00'	Δ=51°42'53"	STA: 31+32.05 N: 4403121.5179 E: 1605679.5112	
C7	STA: 35+87 N: 4403435.0613 E: 1606009.1647	LENGTH=225.45' TANGENT=114.07'	600.00'	Δ=21°31'43"	STA: 38+12.45 N: 4403617.1359 E: 1606139.8563	
C8	STA: 40+60.76 N: 4403842.3560 E: 1606244.4293	LENGTH=341.20' TANGENT=175.35'	600.00'	Δ=32°34'56"	STA: 44+01.96 N: 4404095.6454 E: 1606466.1457	
C9	STA: 46+28.72 N: 4404217.5241 E: 1606657.3709	LENGTH=234.20' TANGENT=118.61'	600.00'	Δ=22°21'51"	STA: 48+62.92 N: 4404378.2840 E: 1606825.6328	
C10	STA: 52+62.20 N: 4404704.8594 E: 1607055.3587	LENGTH=1289.79' TANGENT=805.78'	850.00'	Δ=86°56'27"	STA: 65+51.99 N: 4405862.0371 E: 1606885.5892	
C11	STA: 69+28.23 N: 4406094.6176 E: 1606589.8549	LENGTH=293.40' TANGENT=159.63'	300.00'	Δ=56°02'04"	STA: 72+21.62 N: 4406352.4936 E: 1606476.1213	
C12	STA: 75+71.13 N: 4406701.0560 E: 1606501.8276	LENGTH=341.49' TANGENT=191.93'	300.00'	Δ=65°13'10"	STA: 79+12.62 N: 4406985.5108 E: 1606348.0757	
C13	STA: 80+55.41 N: 4407054.7305 E: 1606223.1919	LENGTH=151.11' TANGENT=92.01'	105.00'	Δ=82°27'28"	STA: 82+06.52 N: 4407184.9750 E: 1606176.3712	
C14	STA: 84+22.58 N: 4407386.0671 E: 1606255.4064	LENGTH=74.00' TANGENT=37.43'	200.00'	Δ=21°12'01"	STA: 84+96.59 N: 4407458.3322 E: 1606269.2650	
C15	STA: 87+78.63 N: 4407740.3733 E: 1606270.5247	LENGTH=193.57' TANGENT=105.12'	200.00'	Δ=55°27'14"	STA: 89+72.20 N: 4407904.7192 E: 1606357.8461	
C16	STA: 90+07.62 N: 4407924.6699 E: 1606387.1036	LENGTH=270.15' TANGENT=137.40'	600.00'	Δ=25°47'50"	STA: 92+77.76 N: 4408121.1808 E: 1606569.1462	
C17	STA: 101+59 N: 4408885.0271 E: 1607008.5998	LENGTH=533.16' TANGENT=273.08'	1000.00'	Δ=30°32'51"	STA: 106+92.16 N: 4409394.7872 E: 1607141.7507	
C18	STA: 109+70.83 N: 4409673.4422 E: 1607138.6623	LENGTH=345.69' TANGENT=176.45'	700.00'	Δ=28°17'43"	STA: 113+16.52 N: 4410006.1592 E: 1607218.6181	
C19	STA: 114+98.30 N: 4410167.1611 E: 1607303.0034	LENGTH=278.80' TANGENT=150.38'	300.00'	Δ=53°14'52"	STA: 117+77.10 N: 4410435.9957 E: 1607307.8668	
C20	STA: 121+71.98 N: 4410792.1463 E: 1607137.3240	LENGTH=136.88' TANGENT=69.65'	300.00'	Δ=26°08'32"	STA: 123+08.86 N: 4410924.6176 E: 1607107.9162	
C21	STA: 126+56.34 N: 4411272.0806 E: 1607111.2808	LENGTH=108.09' TANGENT=54.15'	700.00'	Δ=8°50'51"	STA: 127+64.43 N: 4411379.6573 E: 1607120.6518	
C22	STA: 129+58.03 N: 4411570.6593 E: 1607152.2795	LENGTH=158.13' TANGENT=79.73'	500.00'	Δ=18°07'13"	STA: 131+16.16 N: 4411728.1272 E: 1607153.2197	
C23	STA: 52+62.20 N: 4404704.8594 E: 1607055.3587	LENGTH=1289.79' TANGENT=805.78'	850.00'	Δ=86°56'27"	STA: 65+51.99 N: 4405862.0371 E: 1606885.5892	

CULVERT TABLE										
PIPE ID	SIZE (in)	TYPE	LENGTH (ft)	Slope	UPSTREAM STA.	UPSTREAM OFFSET	UPSTREAM INV.	DOWNTREAM STA.	DOWNTREAM OFFSET	DOWNTREAM INV.
P-1	18	CPEP	39	1.15%	1+20	18.84	448.60	1+20	-20.44	448.15
P-2	18	CPEP	32	-2.21%	27+50	-17.36	620.00	27+50	14.36	620.70
P-3	18	CPEP	31	-4.18%	39+00	-16.82	637.10	39+00	14.28	638.40
P-4	18	CPEP	38	12.93%	44+50	-14.20	615.80	44+50	23.70	610.90
P-5	18	CPEP	62	9.36%	50+00	-25.31	571.00	50+00	36.65	565.20
P-6	18	CPEP	38	12.81%	55+50	-14.21	521.70	55+50	24.03	516.80
P-7	18	CPEP	34	8.77%	57+50	-14.20	504.00	57+50	20.00	501.00
P-8	18	CPEP	35	8.90%	61+50	-14.21	472.60	61+50	20.61	469.50
P-9	18	CPEP	35	9.89%	65+50	-14.22	456.20	65+50	21.16	452.70
P-10	18	CPEP	33	1.21%	99+50	-16.06	397.90	99+50	16.94	397.50
P-11	18	CPEP	28	-0.70%	106+00	-14.21	408.50	106+00	14.21	408.70
P-12	18	CPEP	34	-8.33%	112+50	-19.40	407.90	112+50	14.21	410.70
P-13	18	CPEP	33	-8.65%	116+00	-19.29	407.10	116+00	14.21	410.00
P-15	18	CPEP	32	-6.52%	119+50	-18.00	413.20	119+50	14.21	415.30
P-17	18	CPEP	33	-4.18%	125+00	-18.15	434.00	125+00	15.35	435.40
P-18	18	CPEP	32	-6.76%	132+50	-17.76	408.34	132+50	14.21	410.50
P-14	18	CPEP	32	-7.50%	117+00	-17.79	406.90	117+00	14.21	409.30
P-16	18	CPEP	30	-2.97%	122+00	-15.96	419.90	122+00	14.33	420.80

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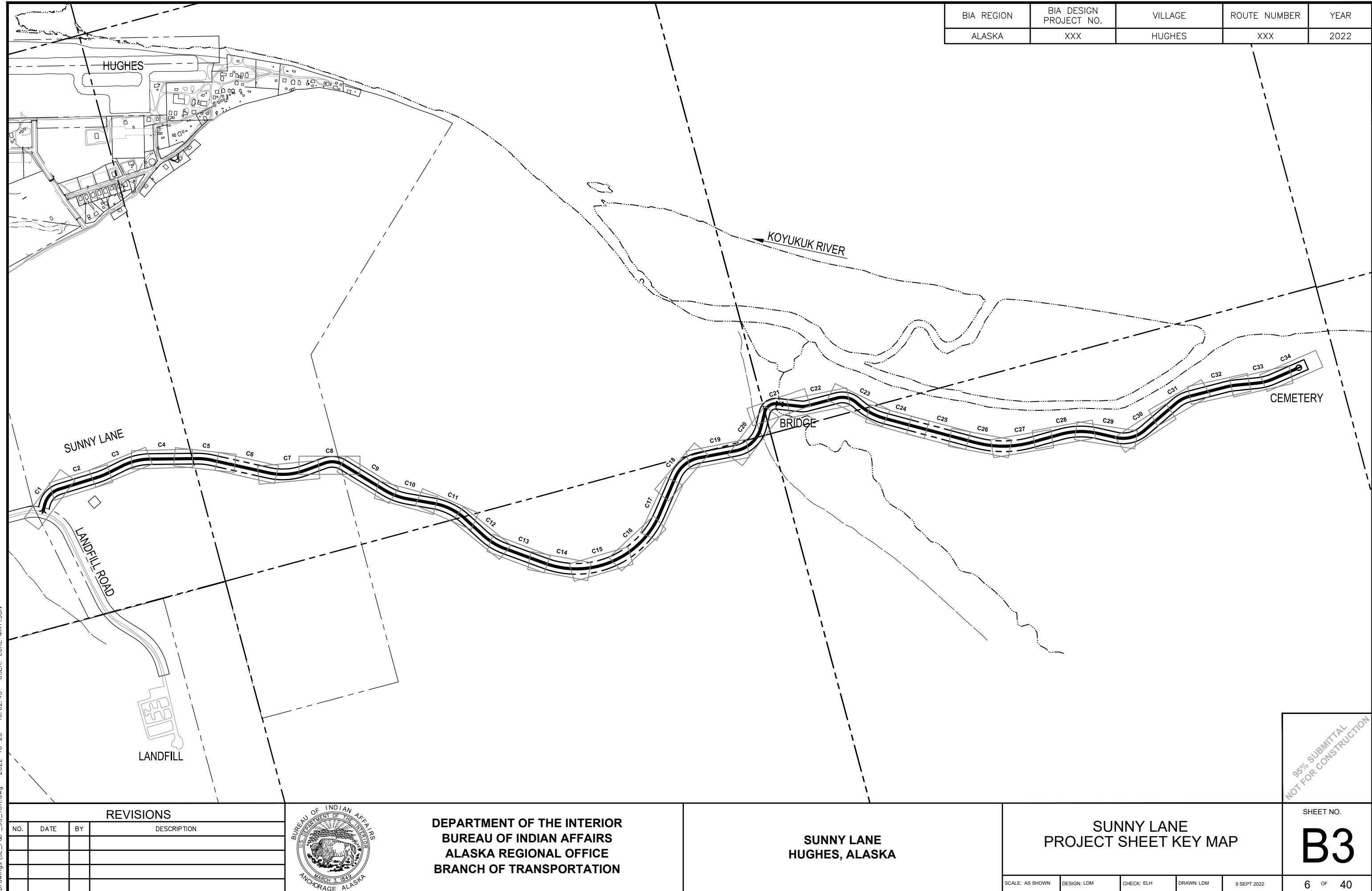
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ALASKA REGIONAL OFFICE
BRANCH OF TRANSPORTATION

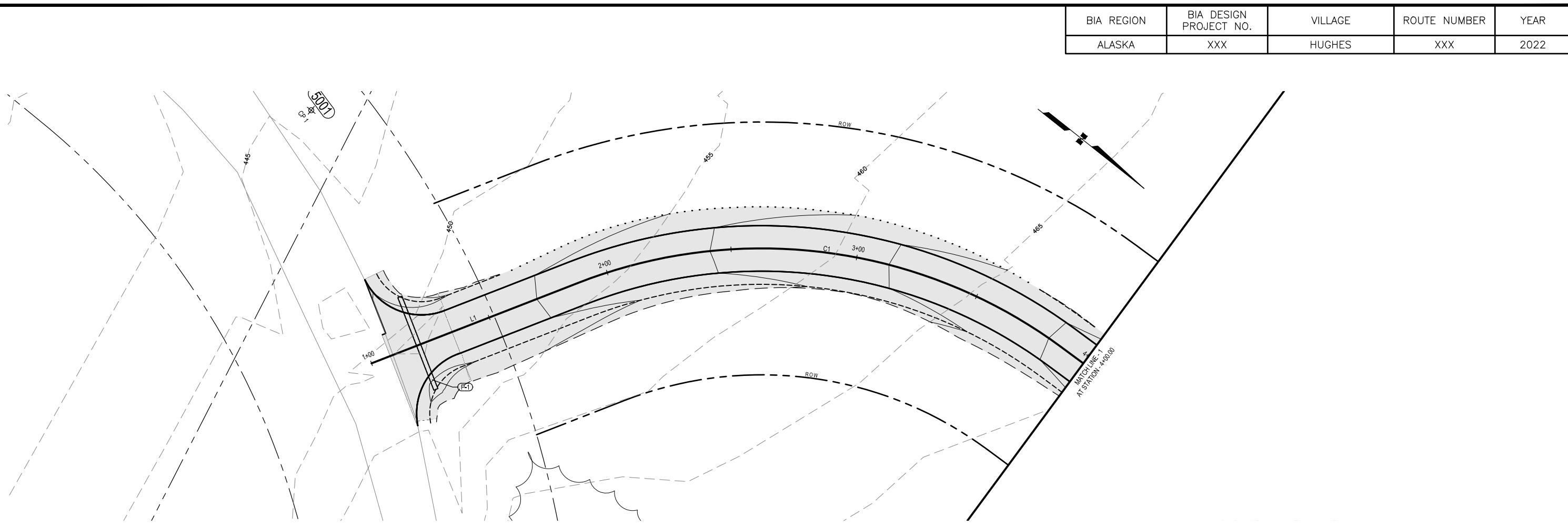
SUNNY LANE
HUGHES, ALASKA

SUNNY LANE
ALIGNMENT & CULVERT TABLES

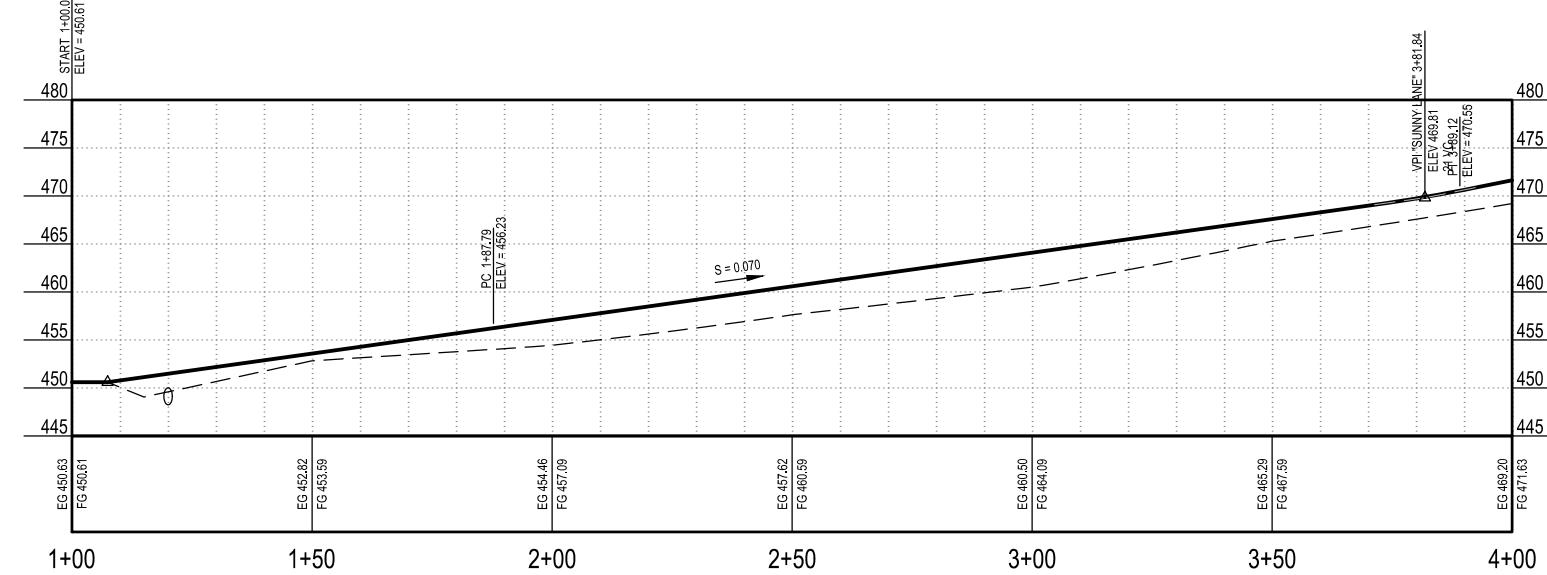
SHEET NO.
B2

BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



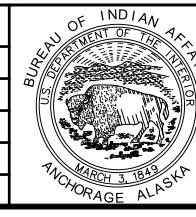


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P-1	18	CPEP	39	1.15%	1+20	18.84	448.60	1+20	-20.44	448.15



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REVISIONS			
NO.	DATE	BY	DESCRIPTION



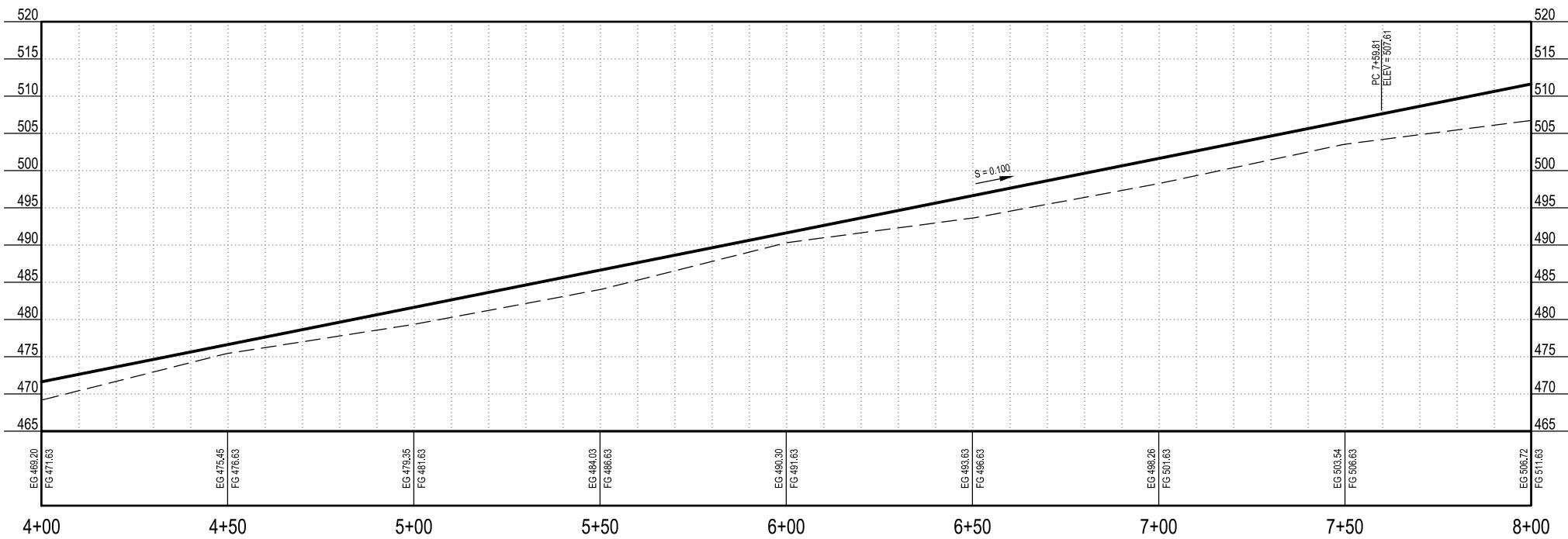
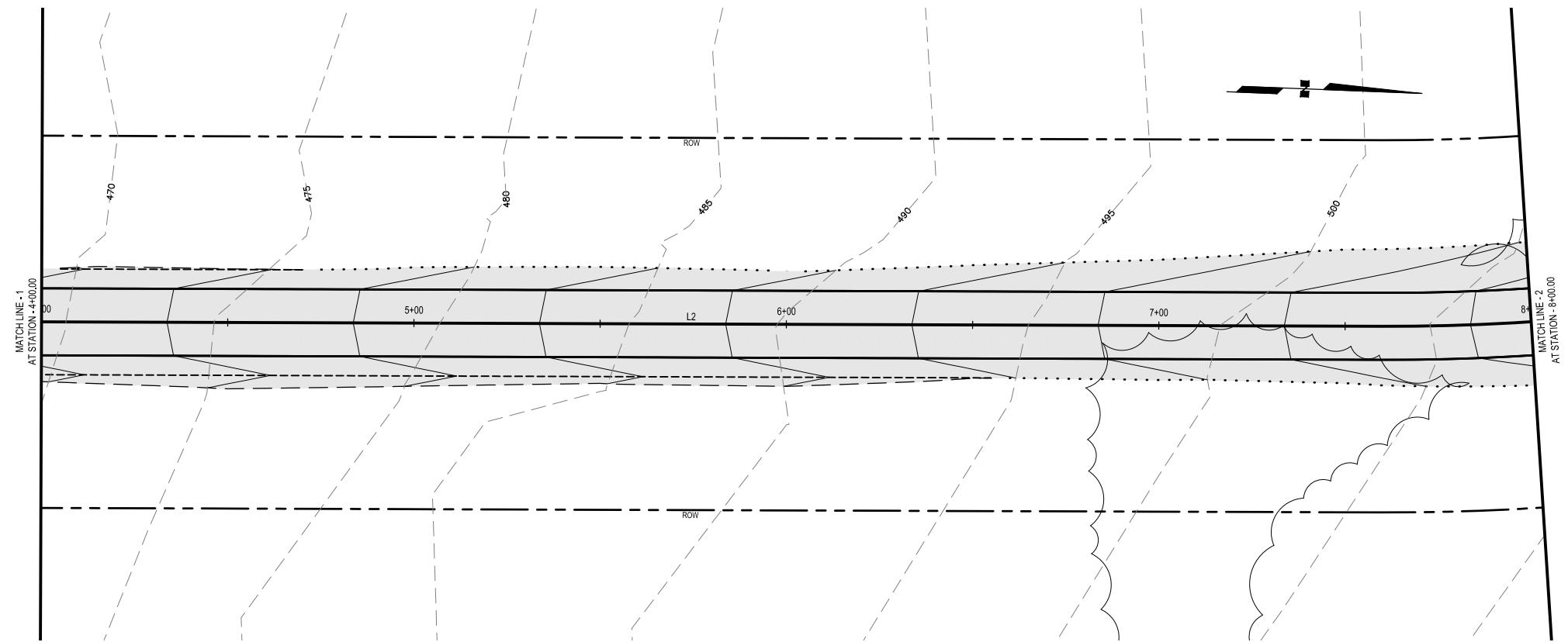
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ALASKA REGIONAL OFFICE
BRANCH OF TRANSPORTATION

SUNNY LANE
HUGHES, ALASKA

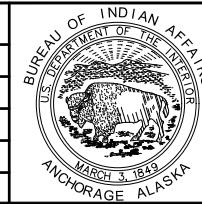
SUNNY LANE
PLAN & PROFILE

SHEET NO.
C1

BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



REVISIONS			
NO.	DATE	BY	DESCRIPTION



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BRANCH OF TRANSPORTATION

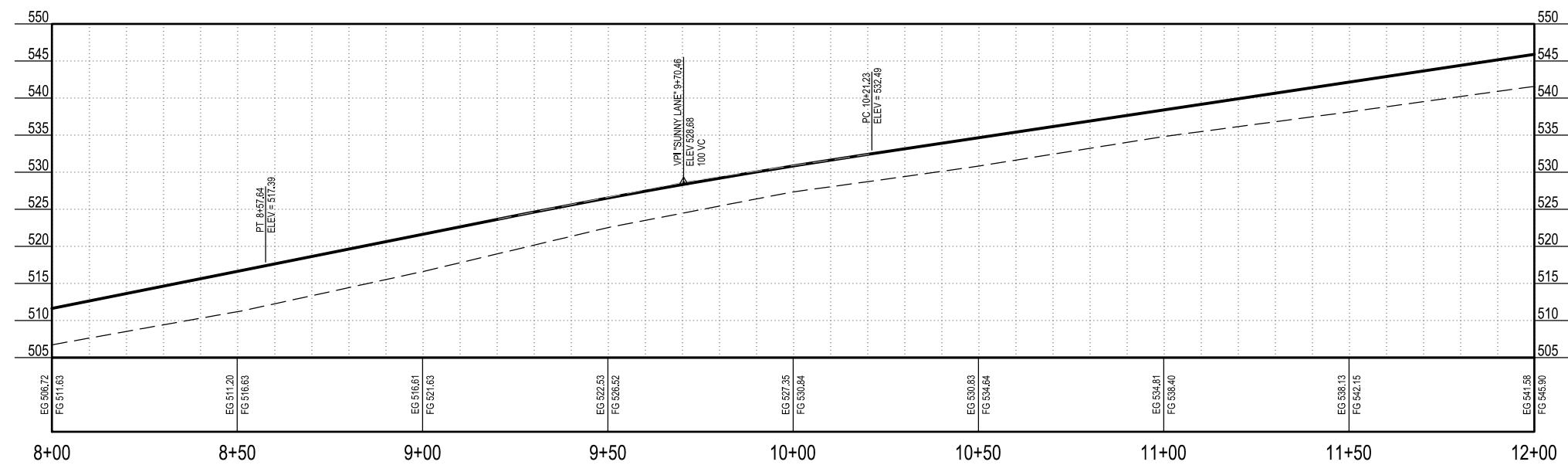
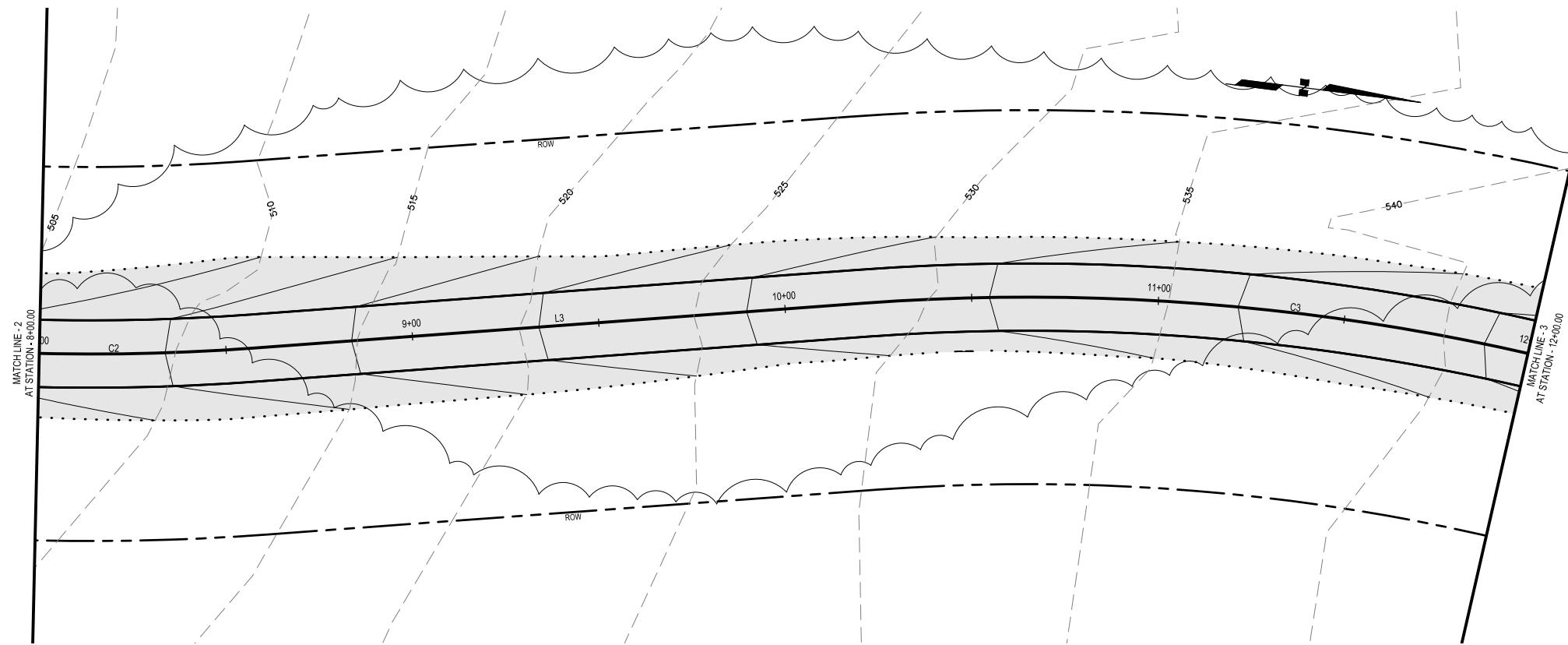
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HUGHES, ALASKA

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C2

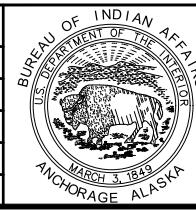
BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



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SUNNY LANE HUGHES, ALASKA

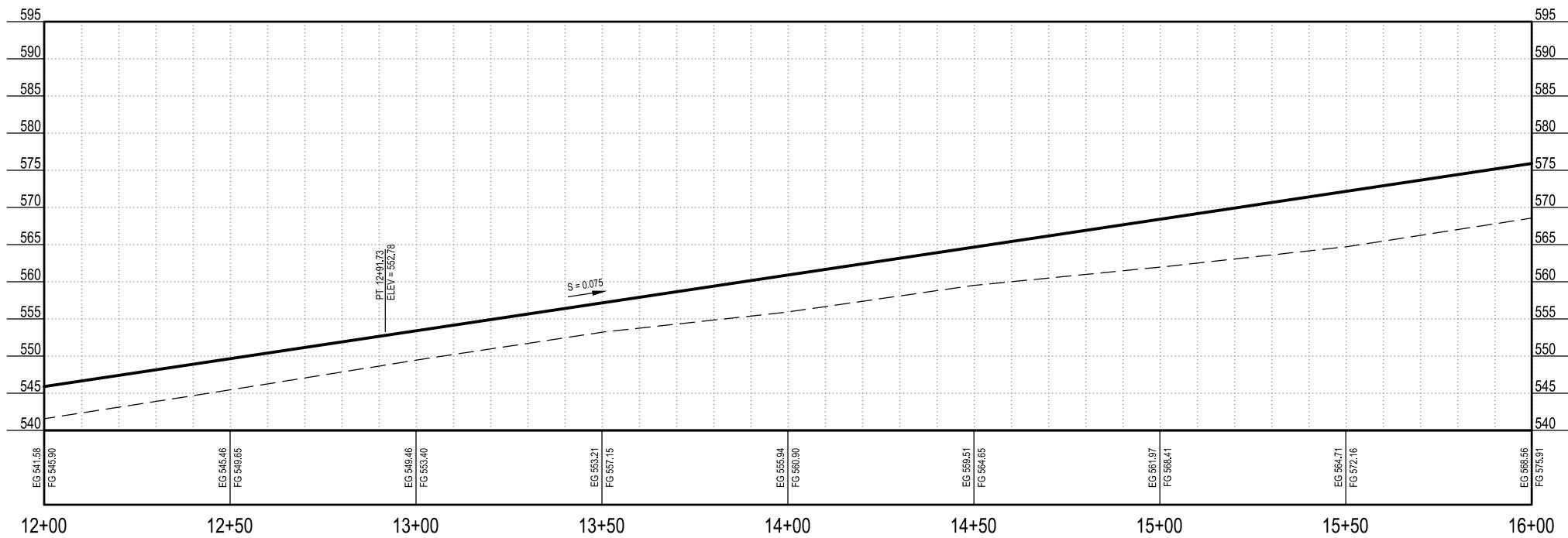
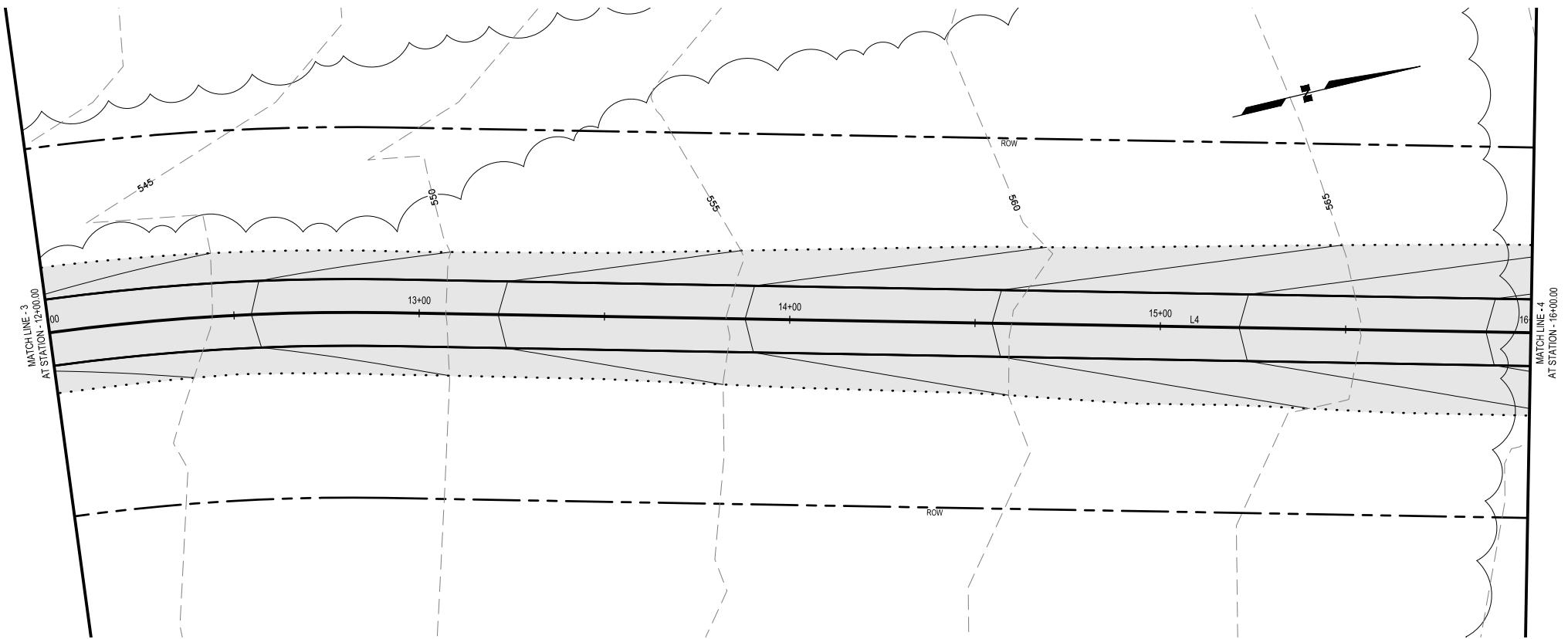
SUNNY LANE PLAN & PROFILE

HEET NO.

C3

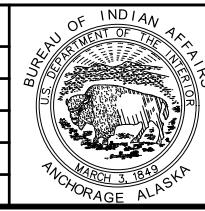
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BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



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NO.	DATE	BY	DESCRIPTION

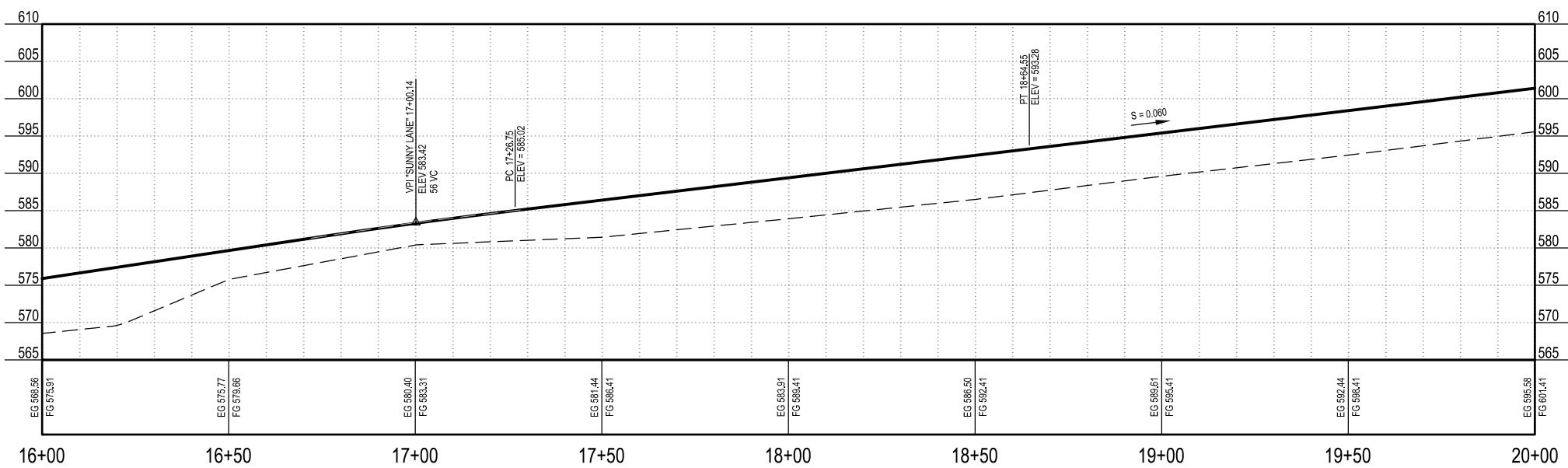
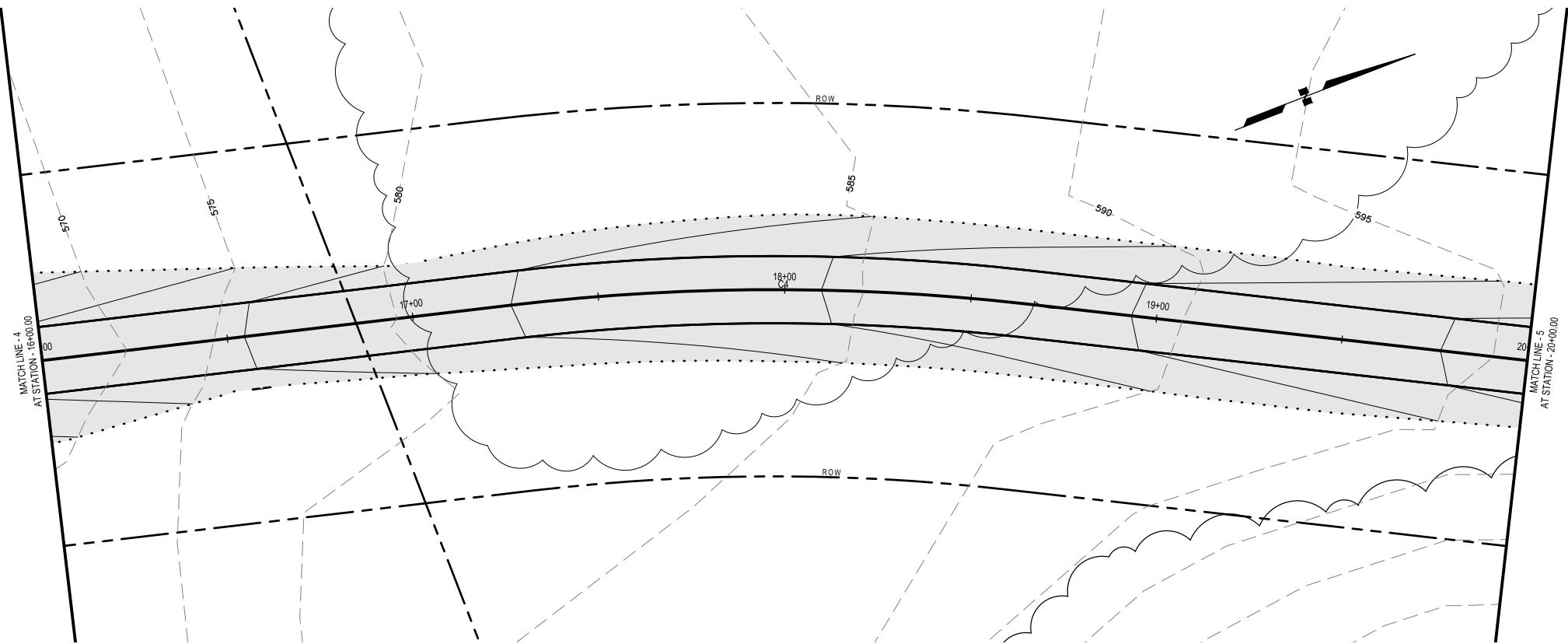


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ALASKA REGIONAL OFFICE
BRANCH OF TRANSPORTATION

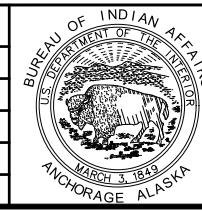
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SUNNY LANE
PLAN & PROFILE

BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



REVISIONS			
NO.	DATE	BY	DESCRIPTION

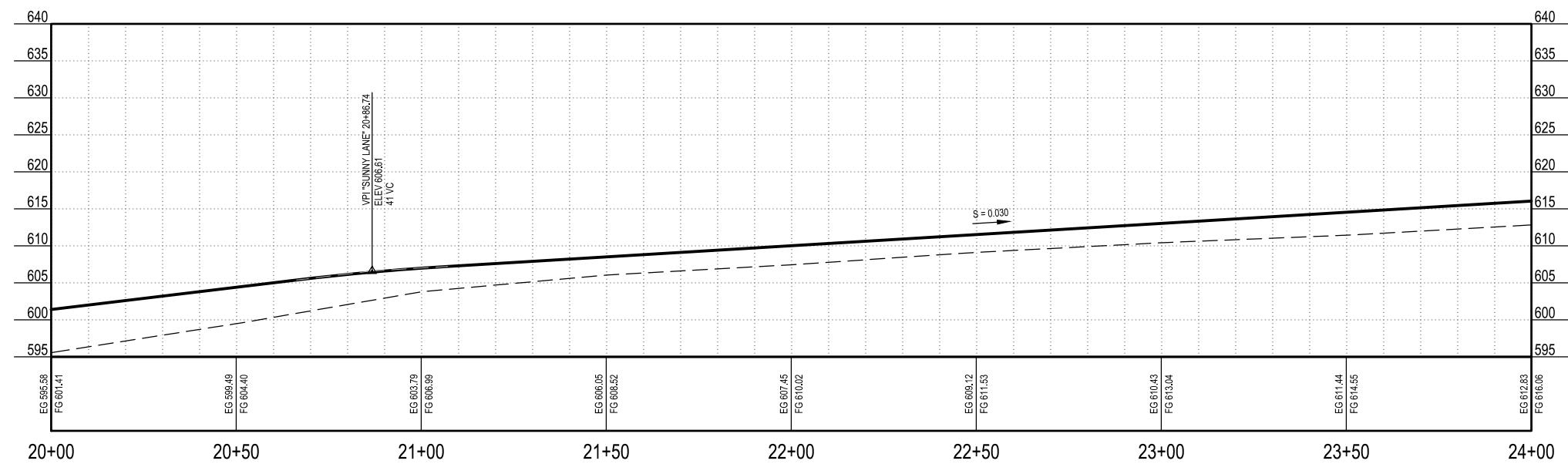
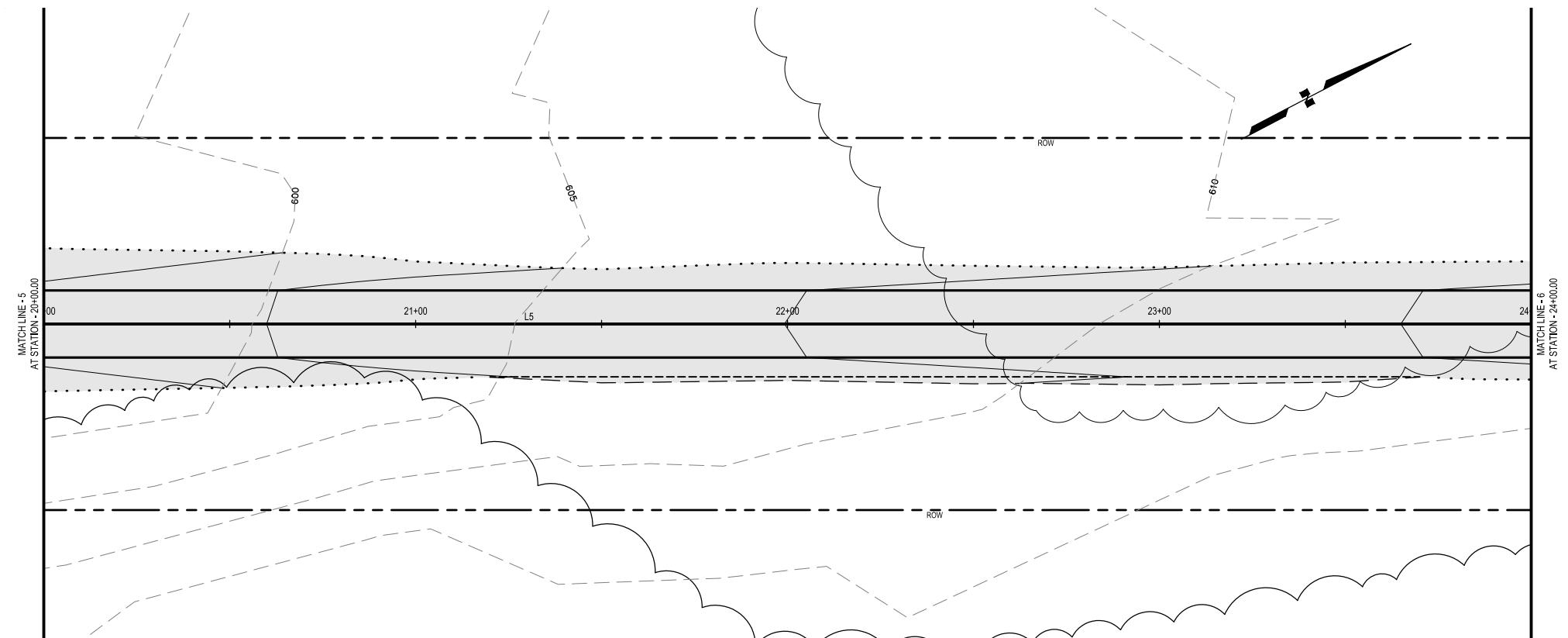


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ALASKA REGIONAL OFFICE
BRANCH OF TRANSPORTATION

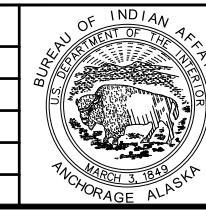
SUNNY LANE
HUGHES, ALASKA

SUNNY LANE
PLAN & PROFILE

BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



REVISIONS			
NO.	DATE	BY	DESCRIPTION



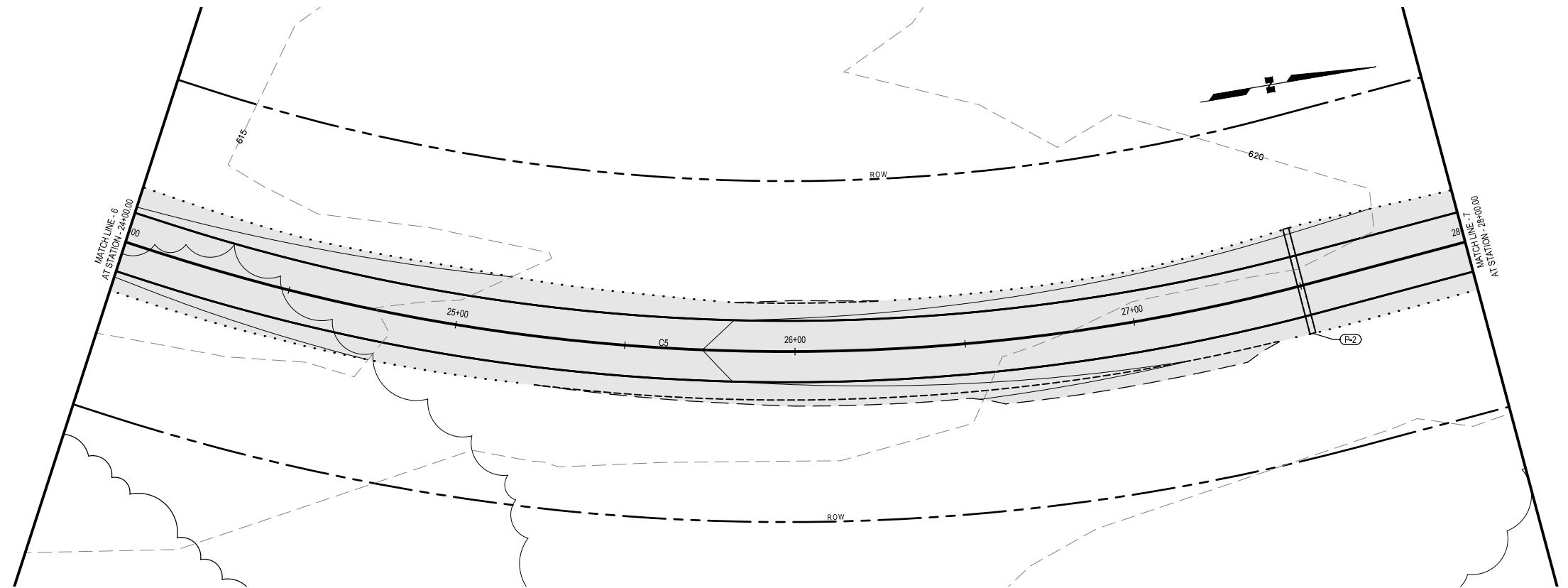
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BRANCH OF TRANSPORTATION

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HUGHES, ALASKA

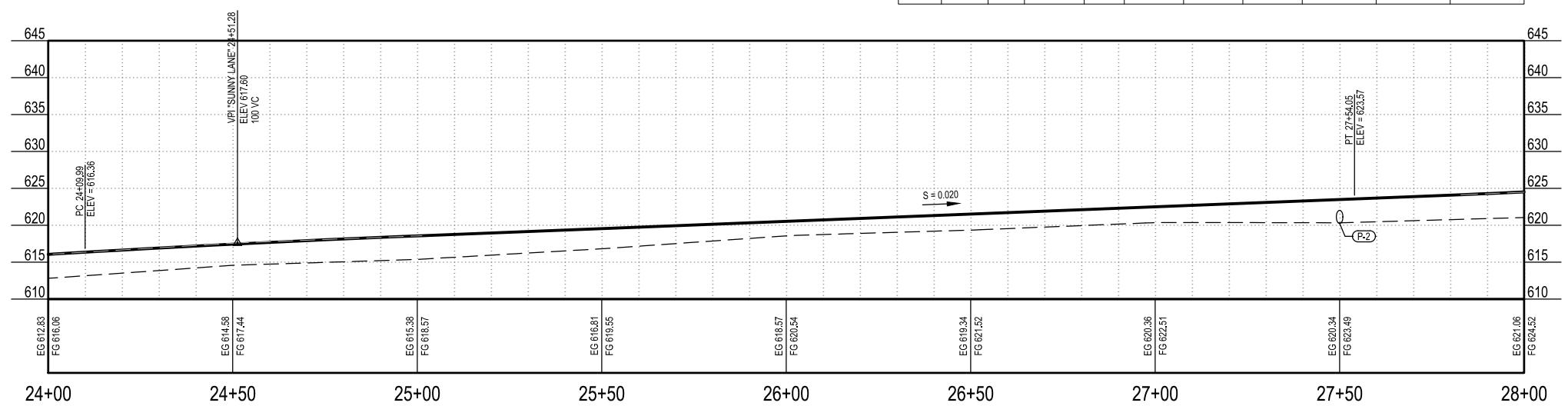
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PLAN & PROFILE

SHEET NO.
C6
SCALE: AS SHOWN DESIGN: LDM CHECK: ELH DRAWN: LDM 9 SEPT 2022 12 OF 40

BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022

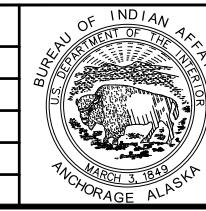


CULVERT TABLE										
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P-2	18	CPEP	32	-2.21%	27+50	-17.36	620.00	27+50	14.36	620.70



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NO.	DATE	BY	DESCRIPTION

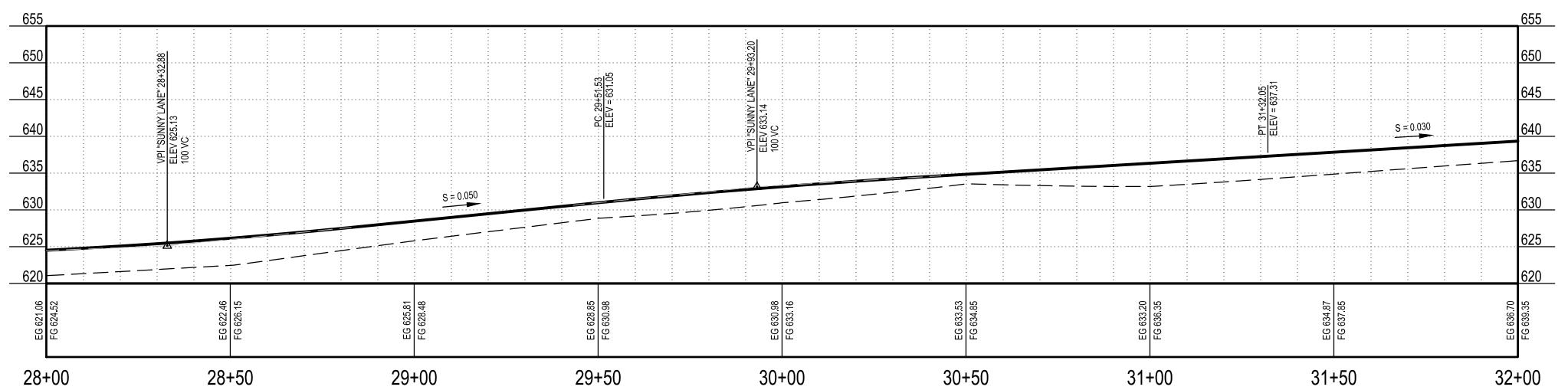
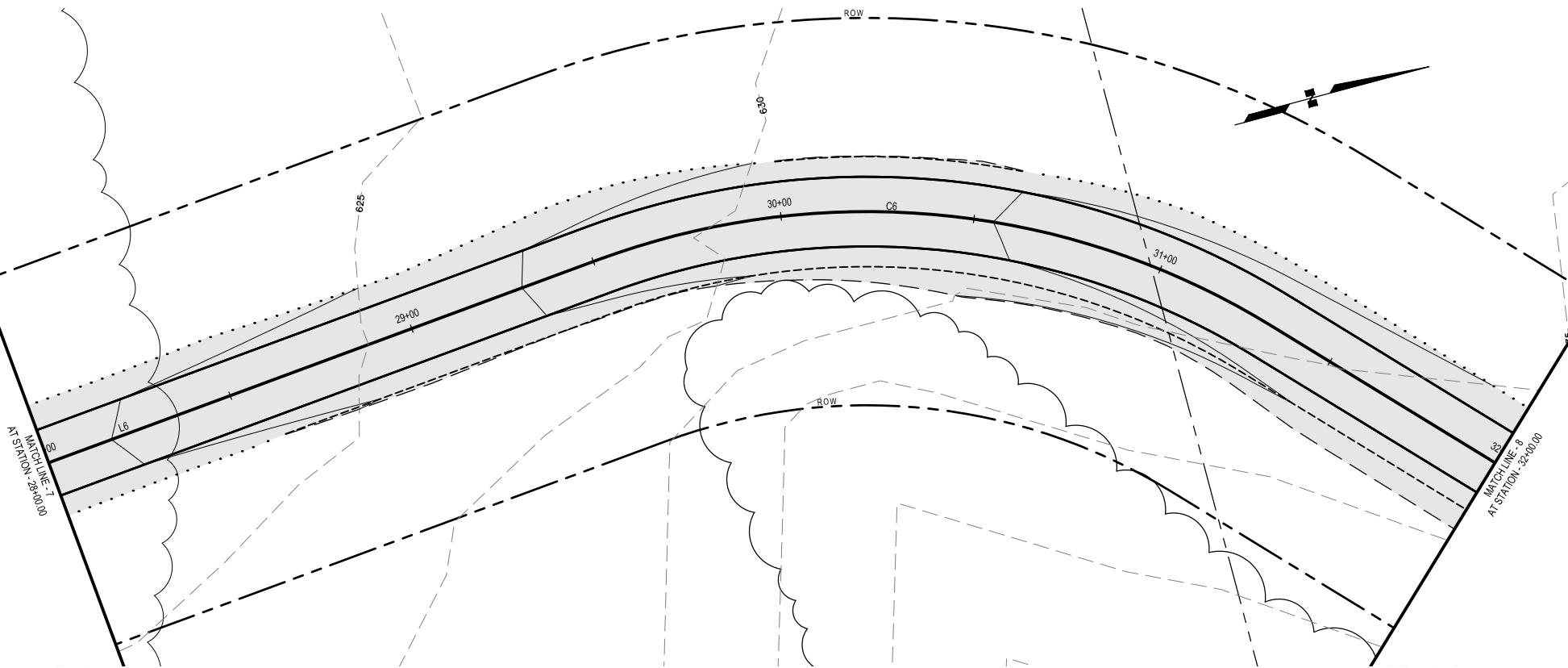


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ALASKA REGIONAL OFFICE
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HUGHES, ALASKA

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BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



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NO.	DATE	BY	DESCRIPTION



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HUGHES, ALASKA

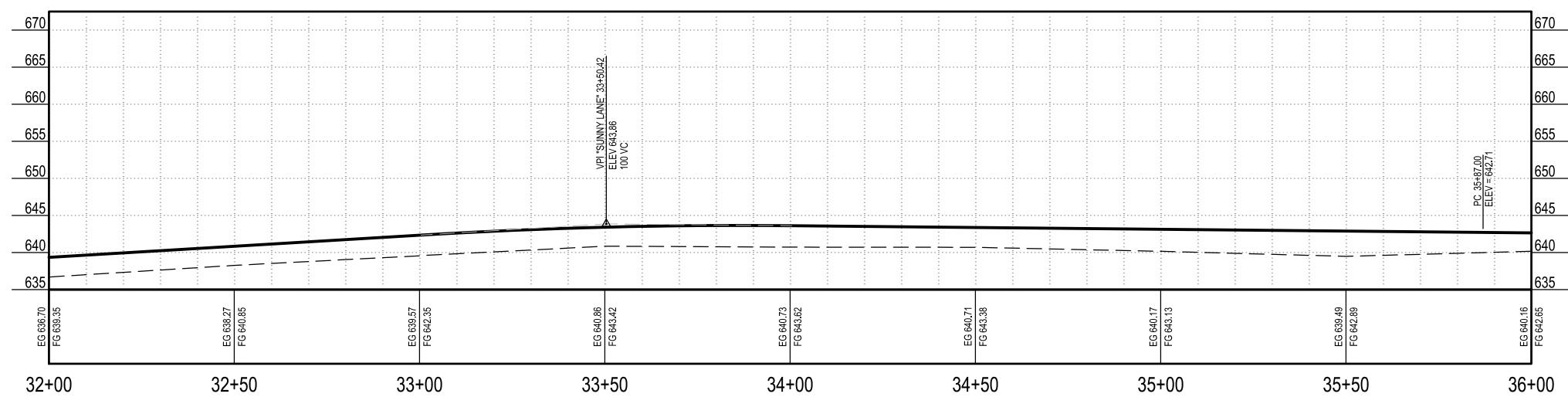
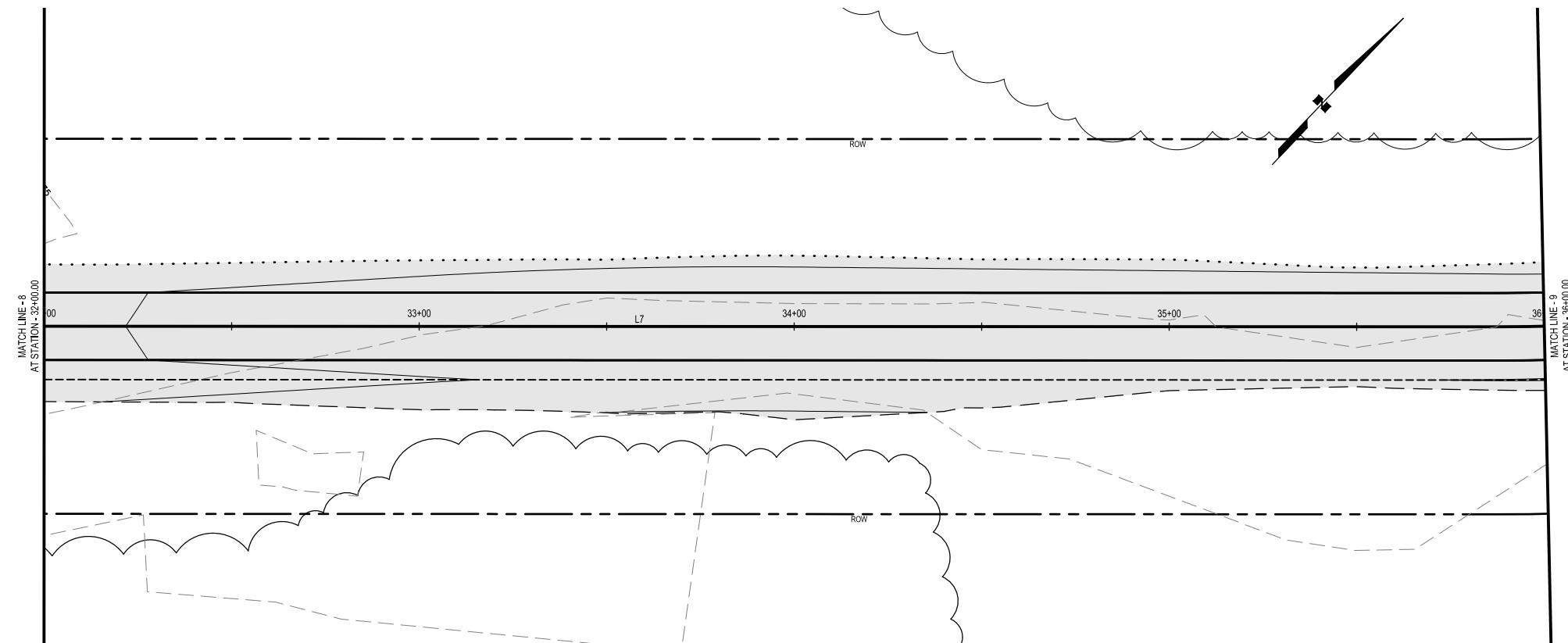
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SHEET NO.

C8

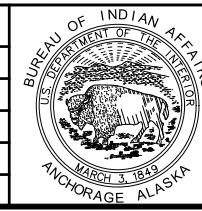
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BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



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REVISIONS			
NO.	DATE	BY	DESCRIPTION

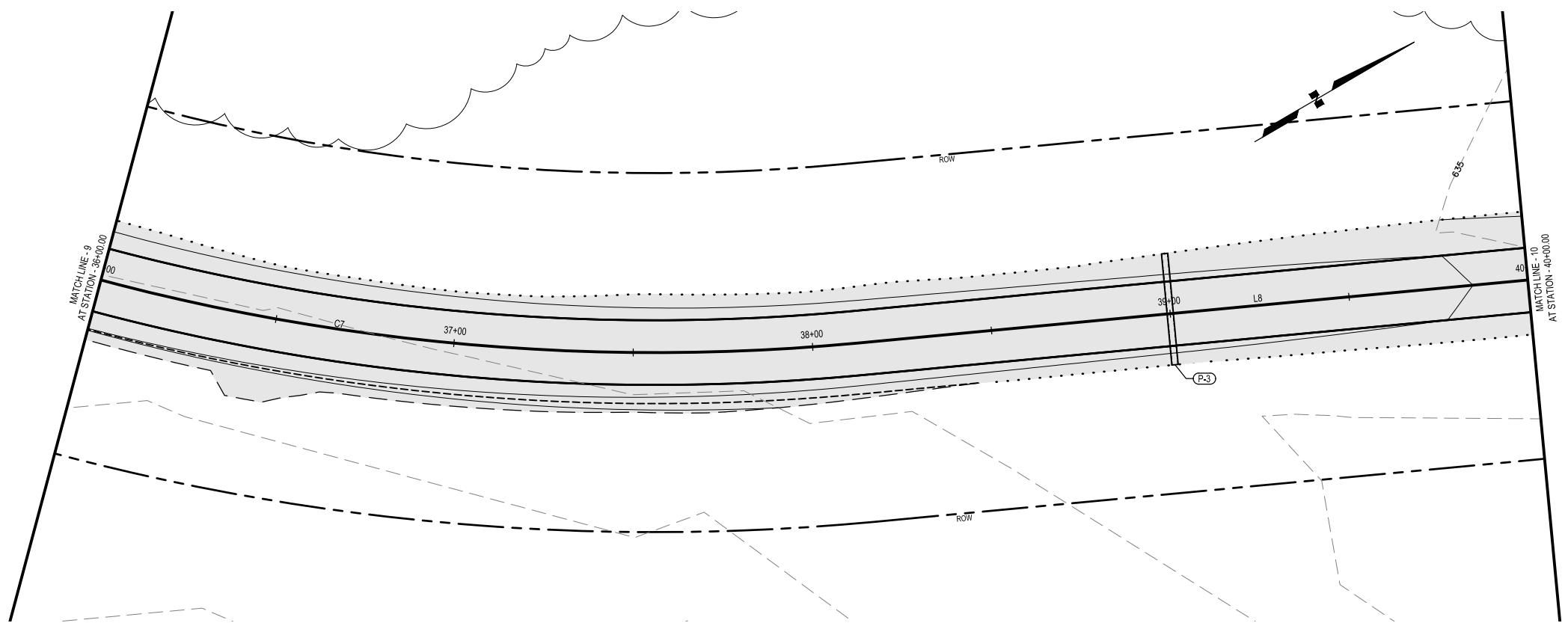


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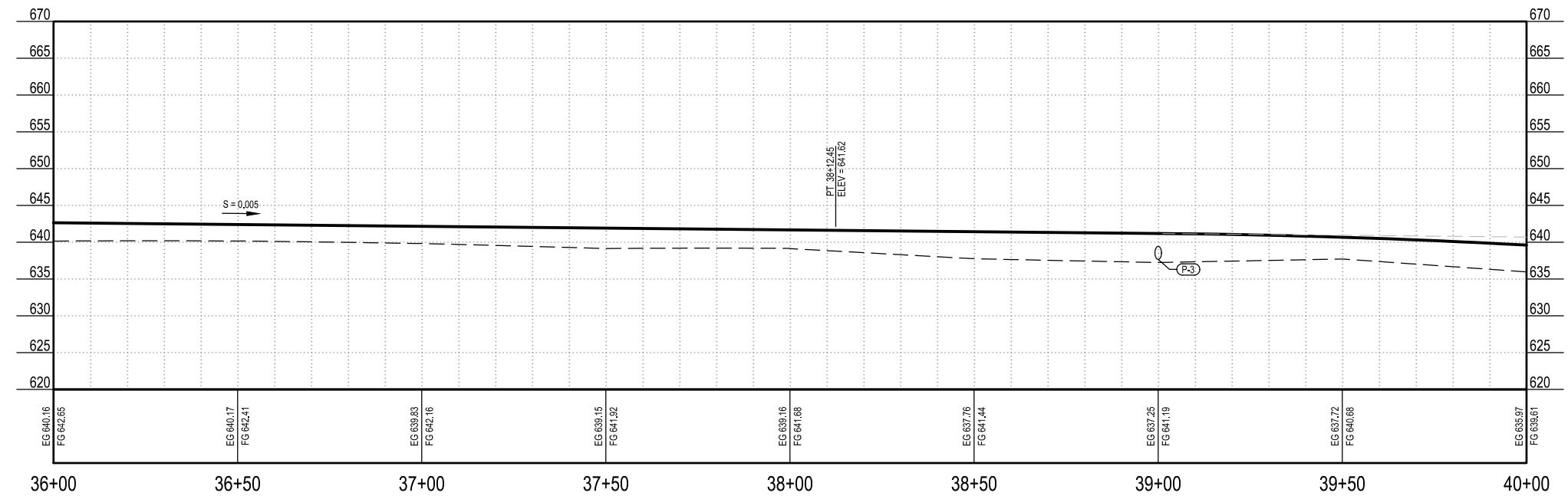
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HUGHES, ALASKA

SUNNY LANE
PLAN & PROFILE

BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



CULVERT TABLE									
PIPE ID	SIZE (in)	TYPE	LENGTH (ft)	Slope	UPSTREAM STA.	UPSTREAM OFFSET	UPSTREAM INV.	DOWNTREAM STA.	DOWNTREAM OFFSET
P-3	18	CPEP	31	-4.18%	39+00	-16.82	637.10	39+00	14.28



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NO.	DATE	BY	DESCRIPTION



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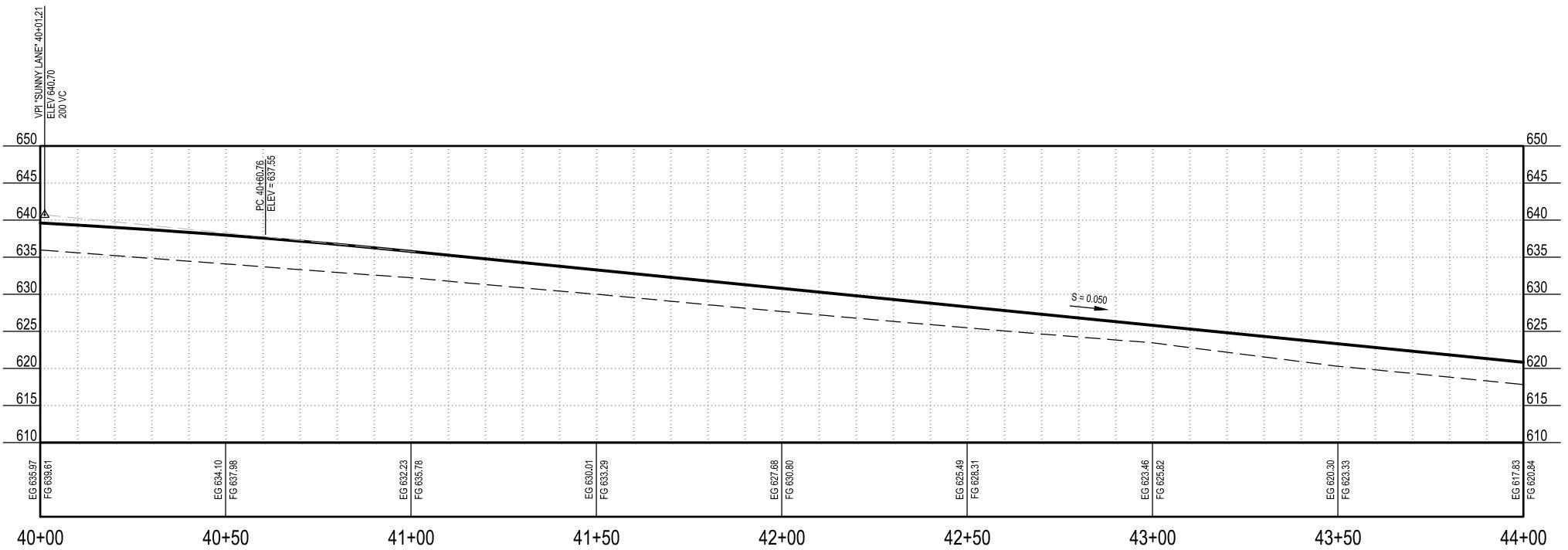
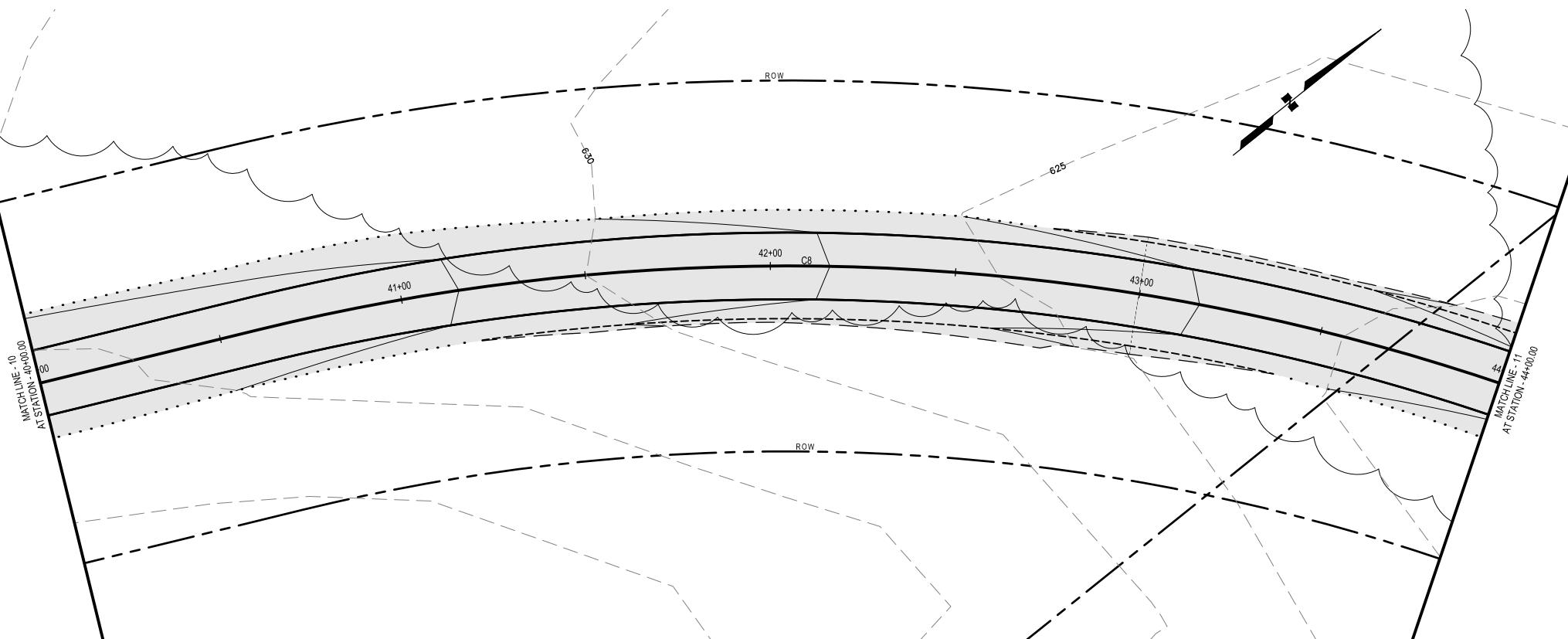
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C10

BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



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NO.	DATE	BY	DESCRIPTION

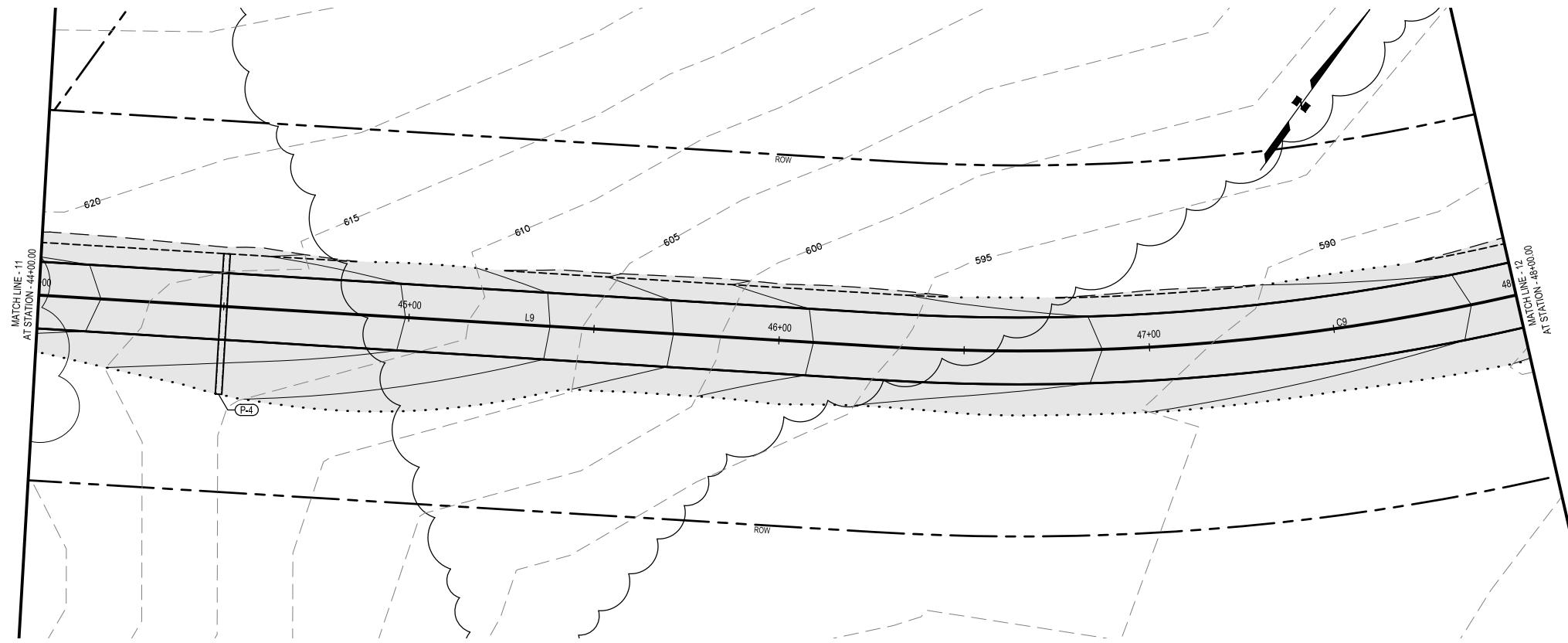


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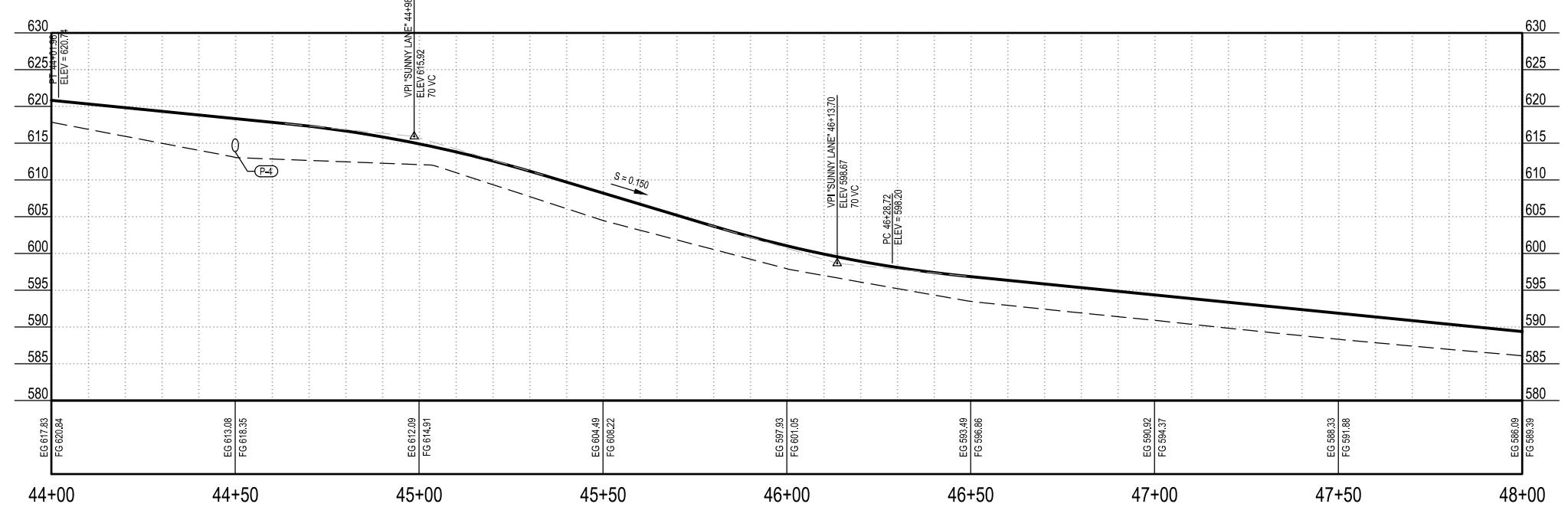
SUNNY LANE
HUGHES, ALASKA

SUNNY LANE
PLAN & PROFILE

BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



CULVERT TABLE									
PIPE ID	SIZE (in)	TYPE	LENGTH (ft)	Slope	UPSTREAM STA.	UPSTREAM OFFSET	UPSTREAM INV.	DOWNSTREAM STA.	DOWNSTREAM OFFSET
P-4	18	CPEP	38	12.93%	44+50	-14.20	615.80	44+50	23.70



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NO.	DATE	BY	DESCRIPTION



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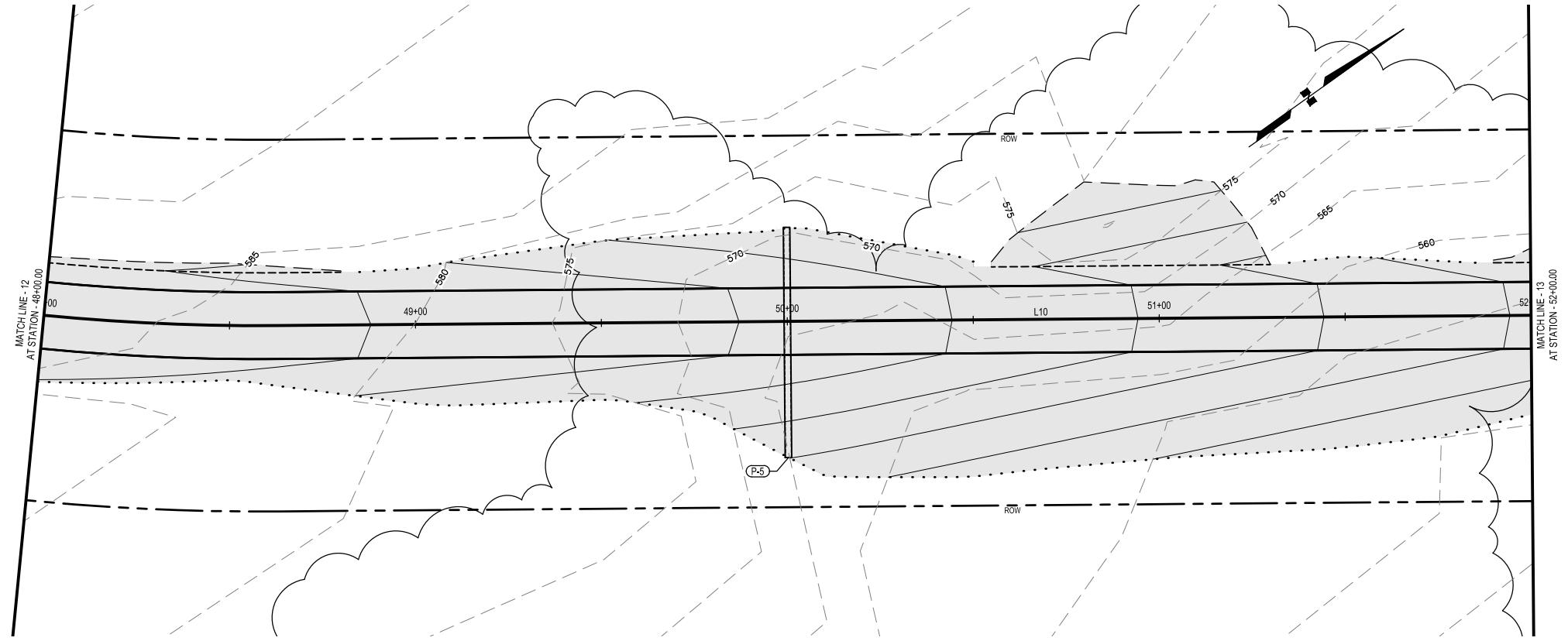
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HUGHES, ALASKA

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PLAN & PROFILE

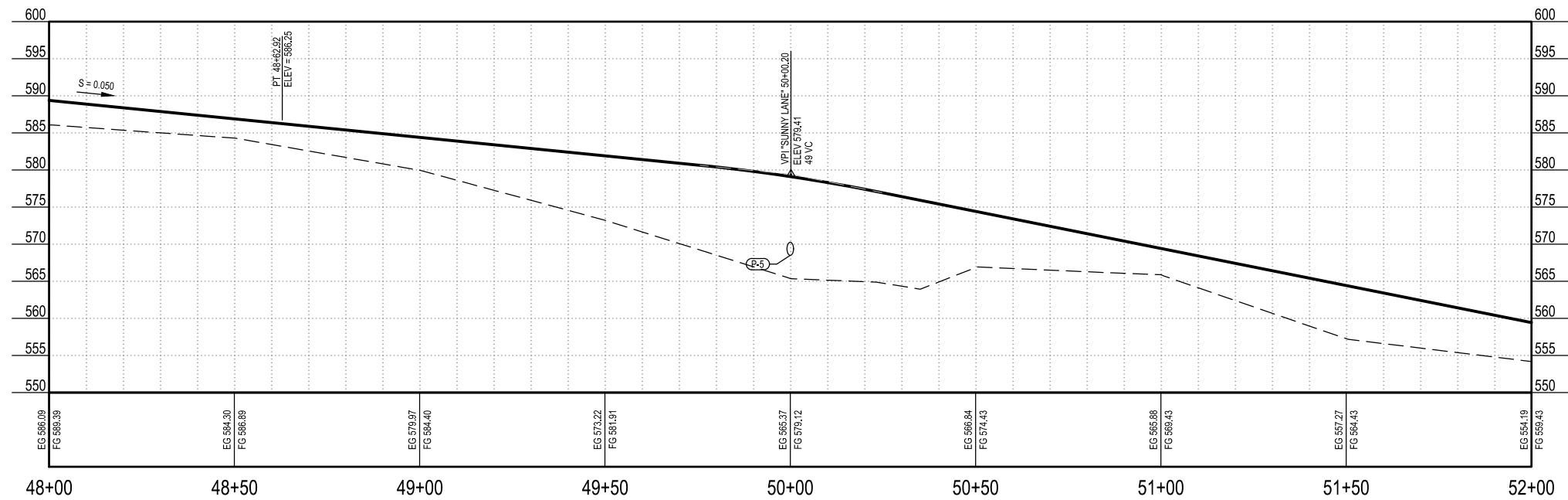
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C12

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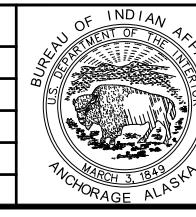


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REVISIONS			
NO.	DATE	BY	DESCRIPTION



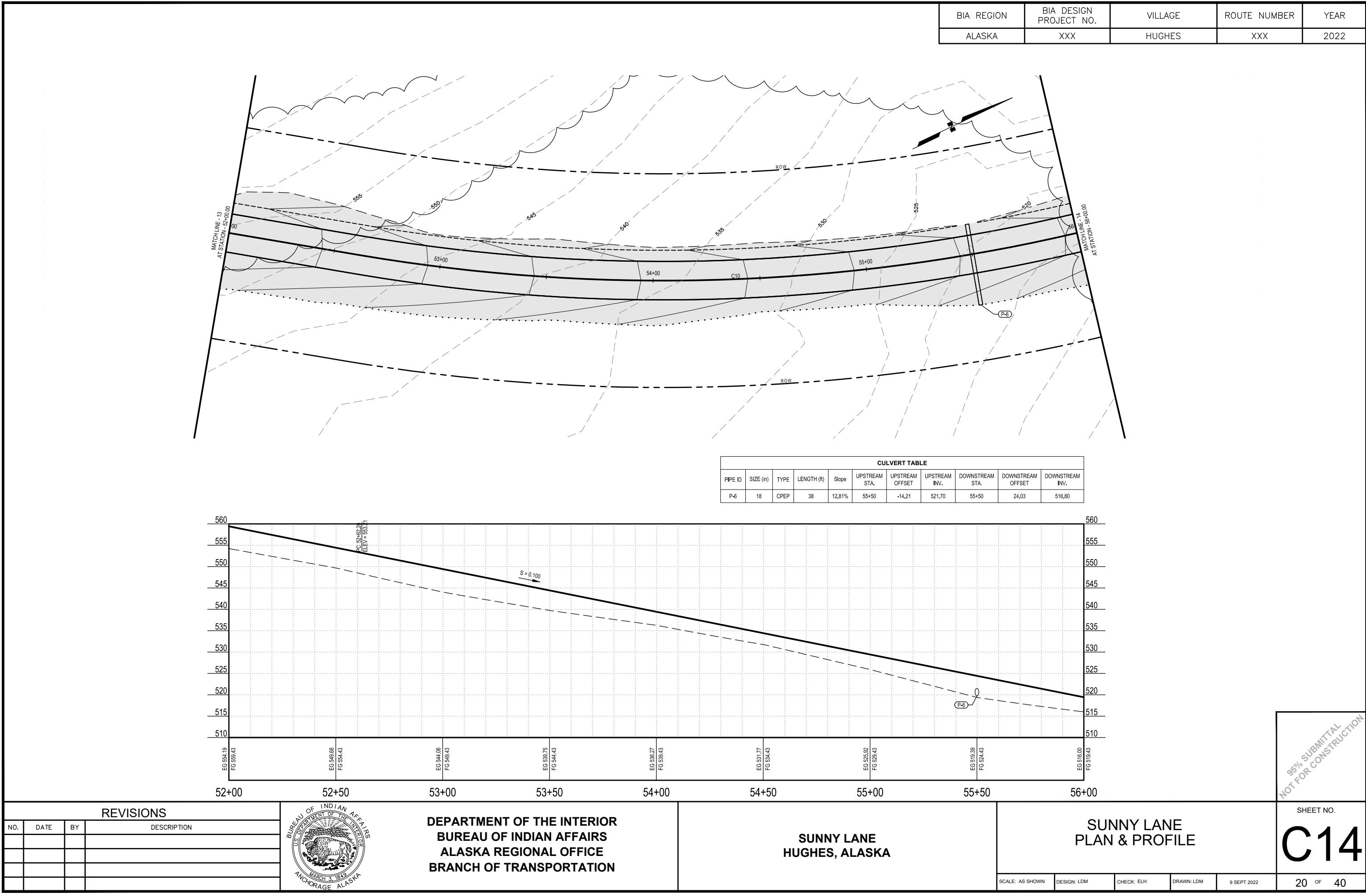
DEPARTMENT OF THE INTERIOR
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ALASKA REGIONAL OFFICE
BRANCH OF TRANSPORTATION

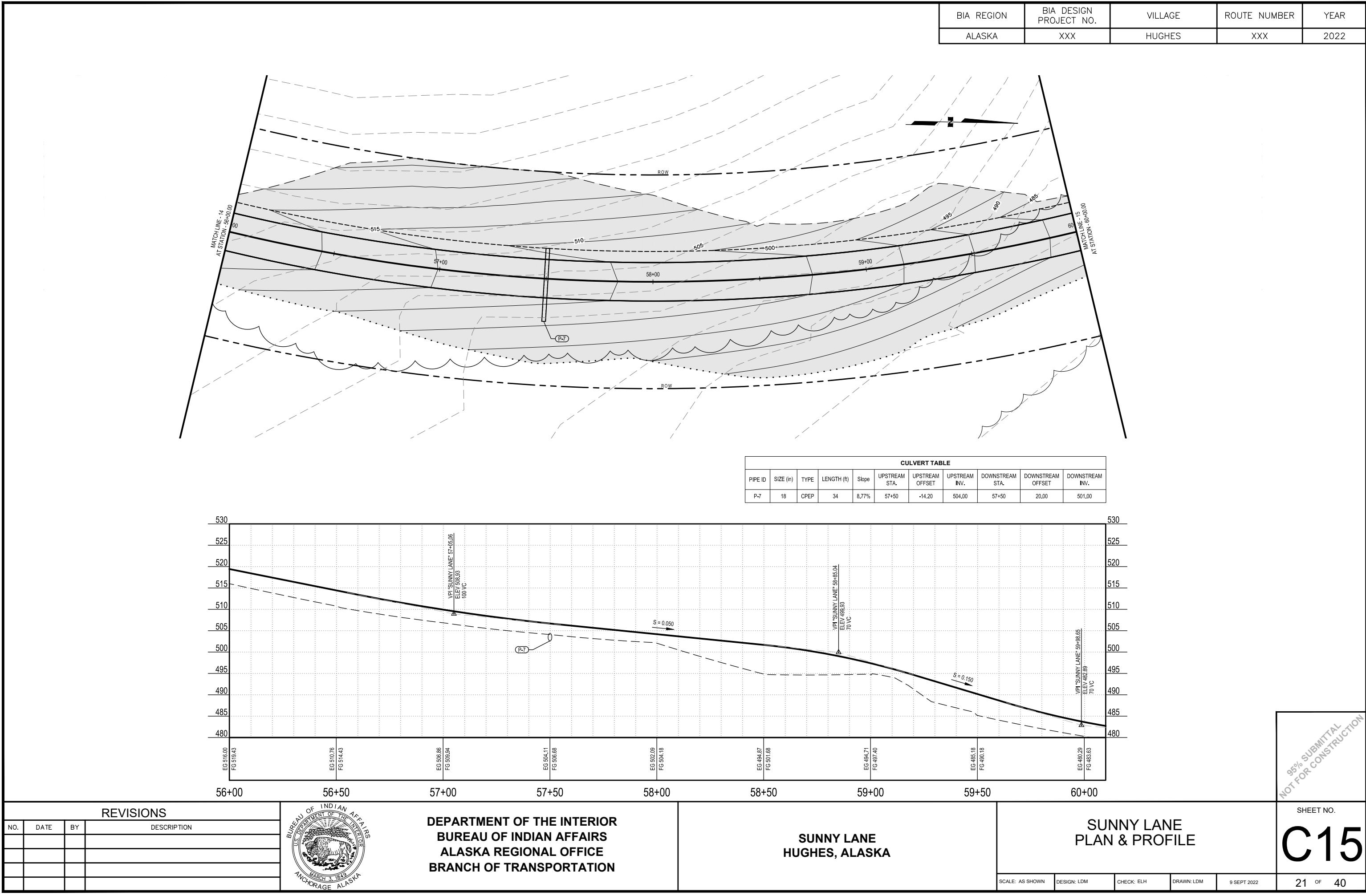
SUNNY LANE
HUGHES, ALASKA

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PLAN & PROFILE

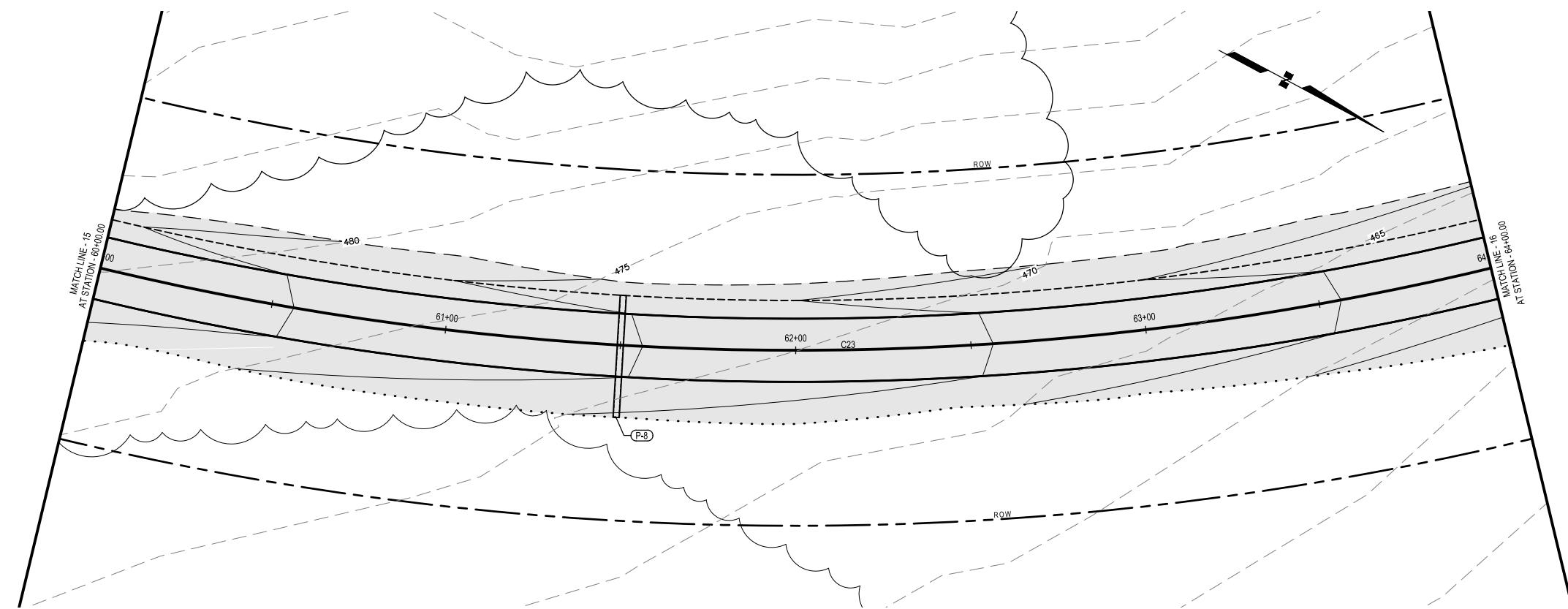
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C13



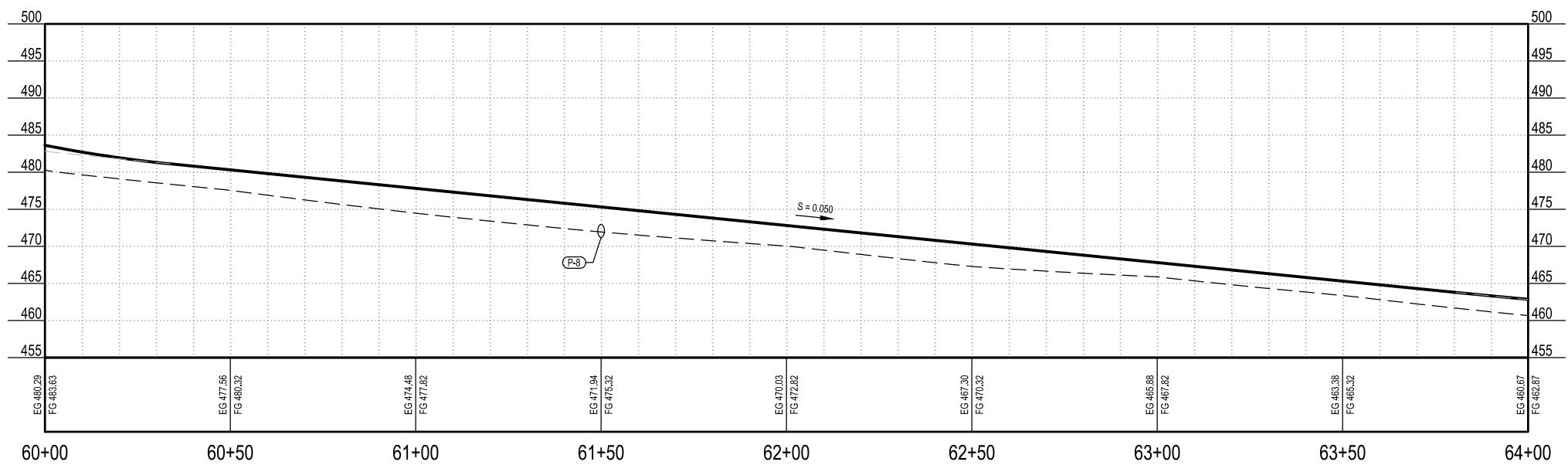


BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



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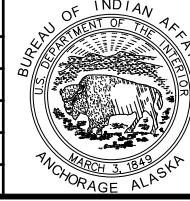
CULVERT TABLE										
PIPE ID	SIZE (in)	TYPE	LENGTH (ft)	Slope	UPSTREAM STA.	UPSTREAM OFFSET	UPSTREAM INV.	DOWNTSTREAM STA.	DOWNTSTREAM OFFSET	DOWNTSTREAM INV.
P-8	18	CPEP	35	8.90%	61+50	-14.21	472.60	61+50	20.61	469.50



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NO.	DATE	BY	DESCRIPTION



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BUREAU OF INDIAN AFFAIRS
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BRANCH OF TRANSPORTATION**

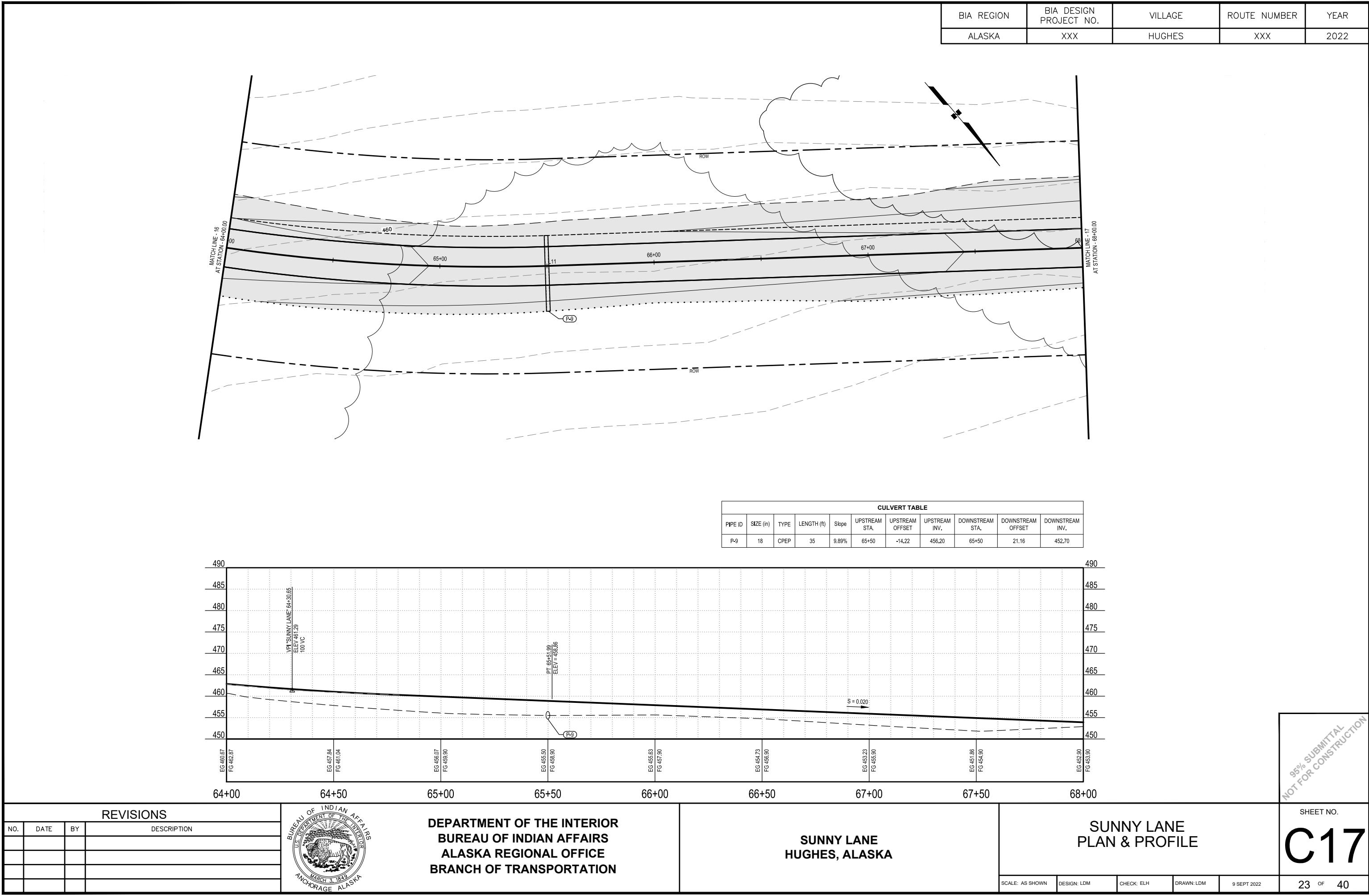
SUNNY LANE HUGHES, ALASKA

SUNNY LANE PLAN & PROFILE

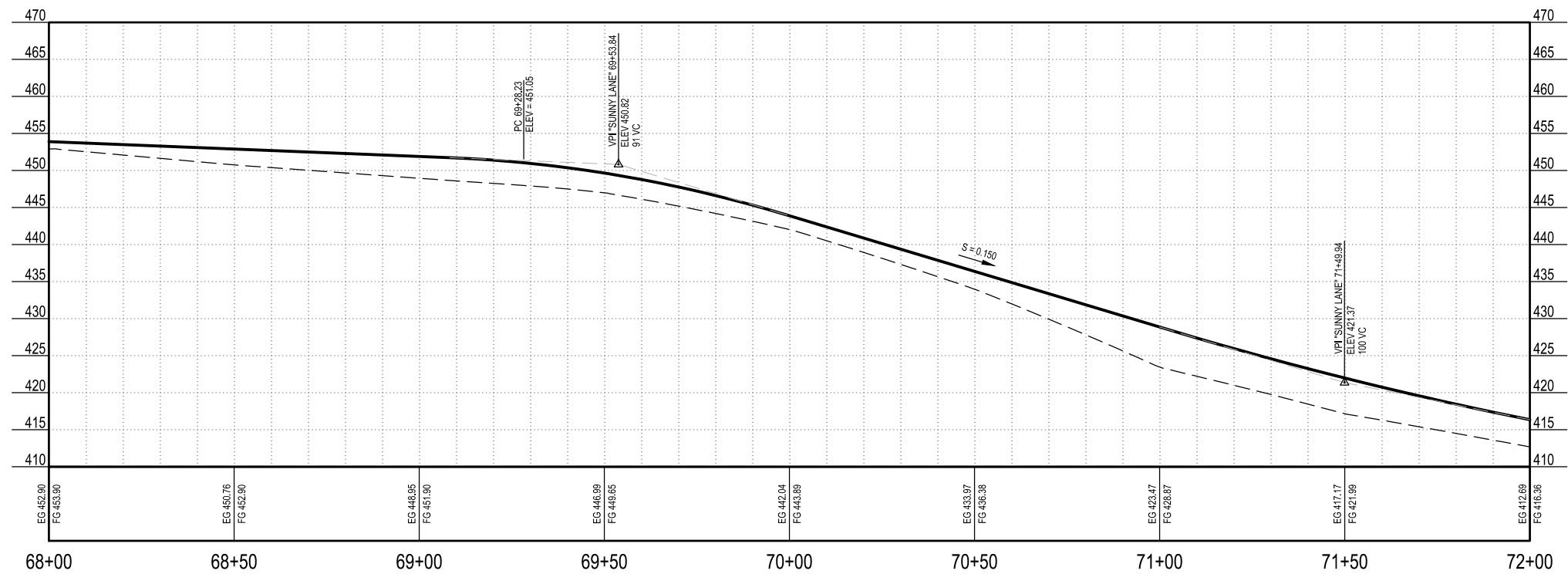
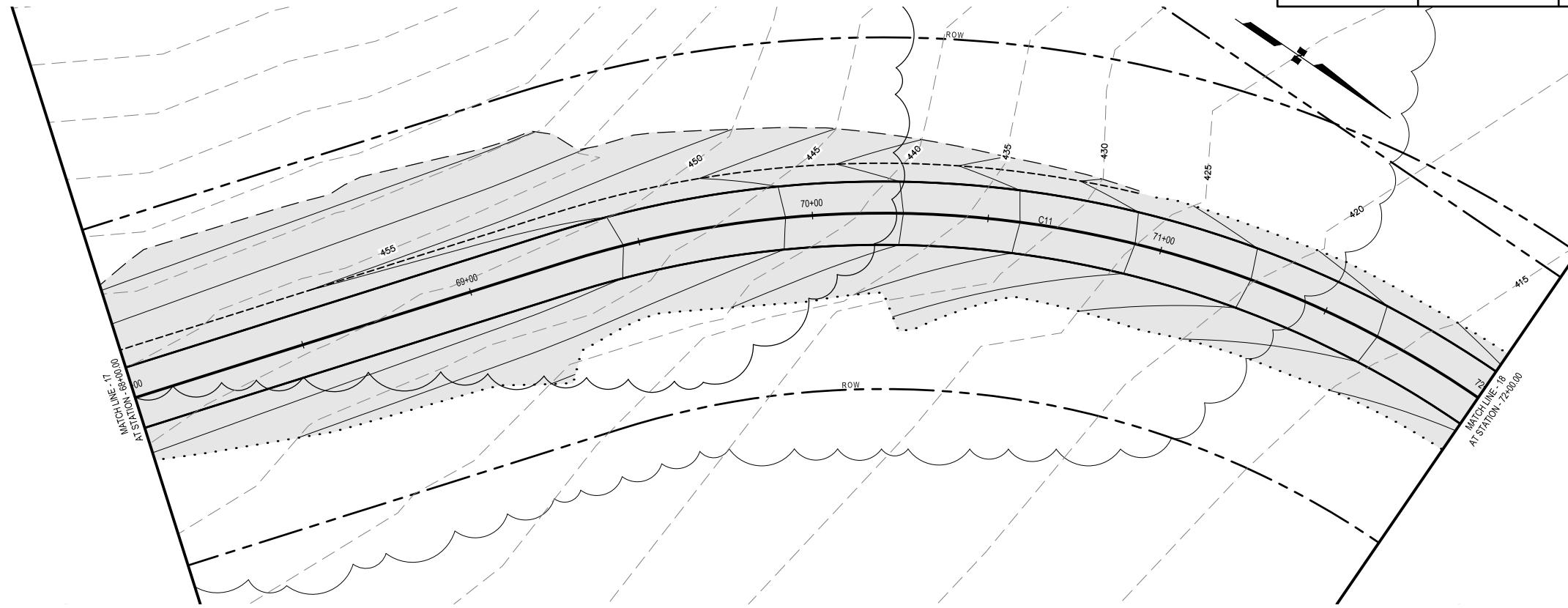
HEET NO.

C16

SCALE: AS SHOWN DESIGN: LDM CHECK: ELH DRAWN: LDM 9 SEPT 2022 22 OF 40



BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



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NO.	DATE	BY	DESCRIPTION



**DEPARTMENT OF THE INTERIOR
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BRANCH OF TRANSPORTATION**

SUNNY LANE HUGHES, ALASKA

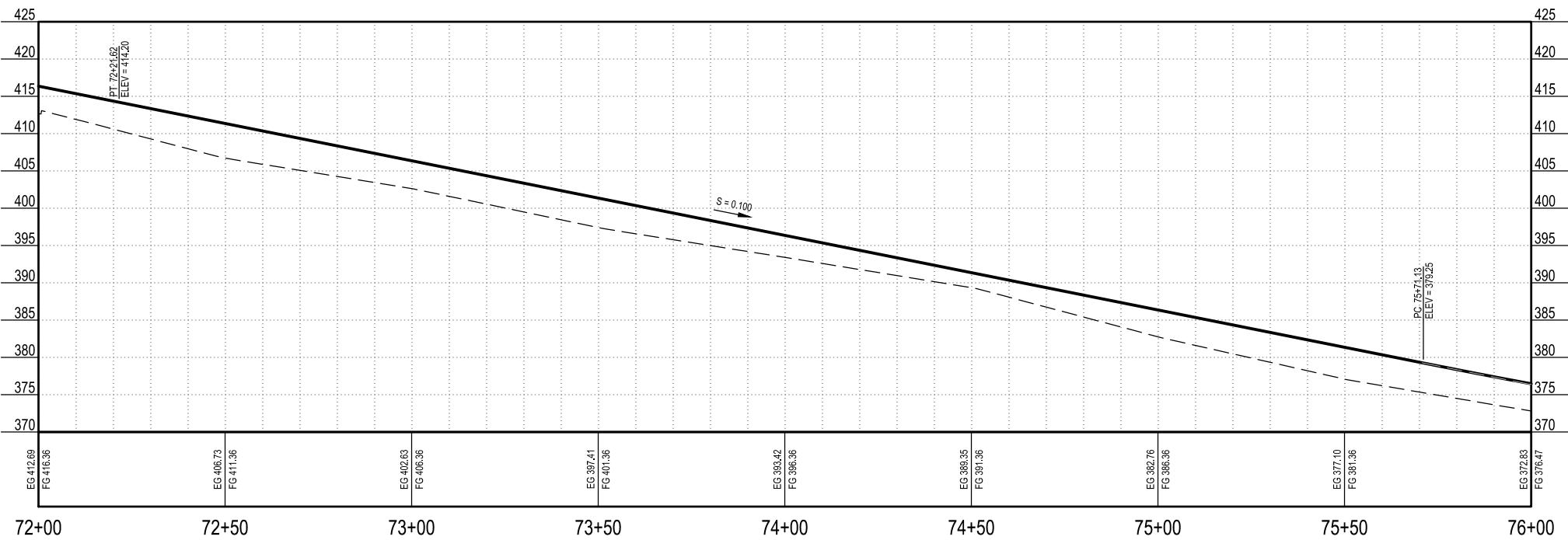
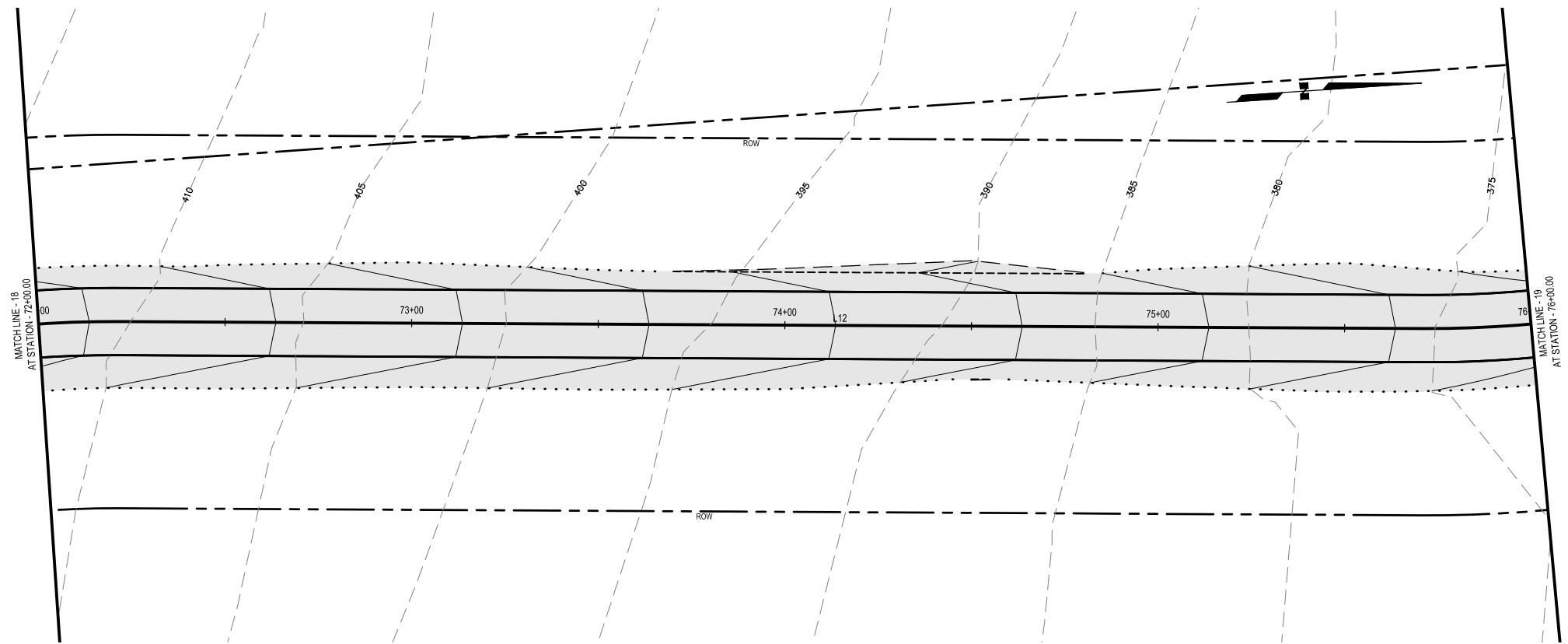
SUNNY LANE PLAN & PROFILE

HEET NO.

C18

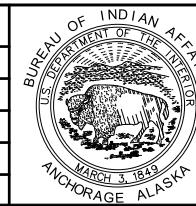
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BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



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REVISIONS			
NO.	DATE	BY	DESCRIPTION

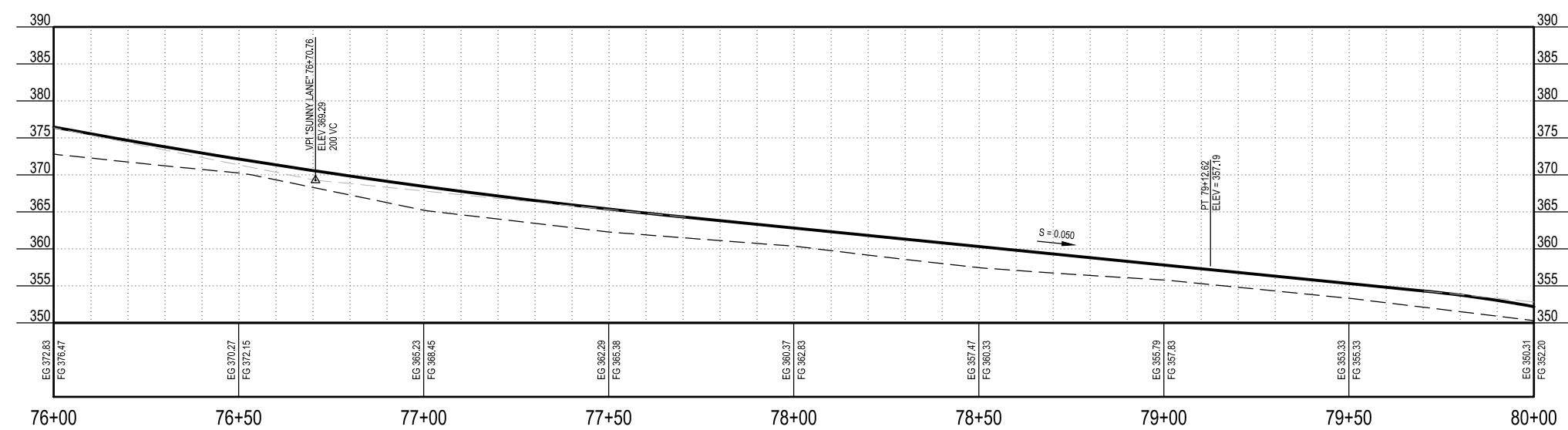
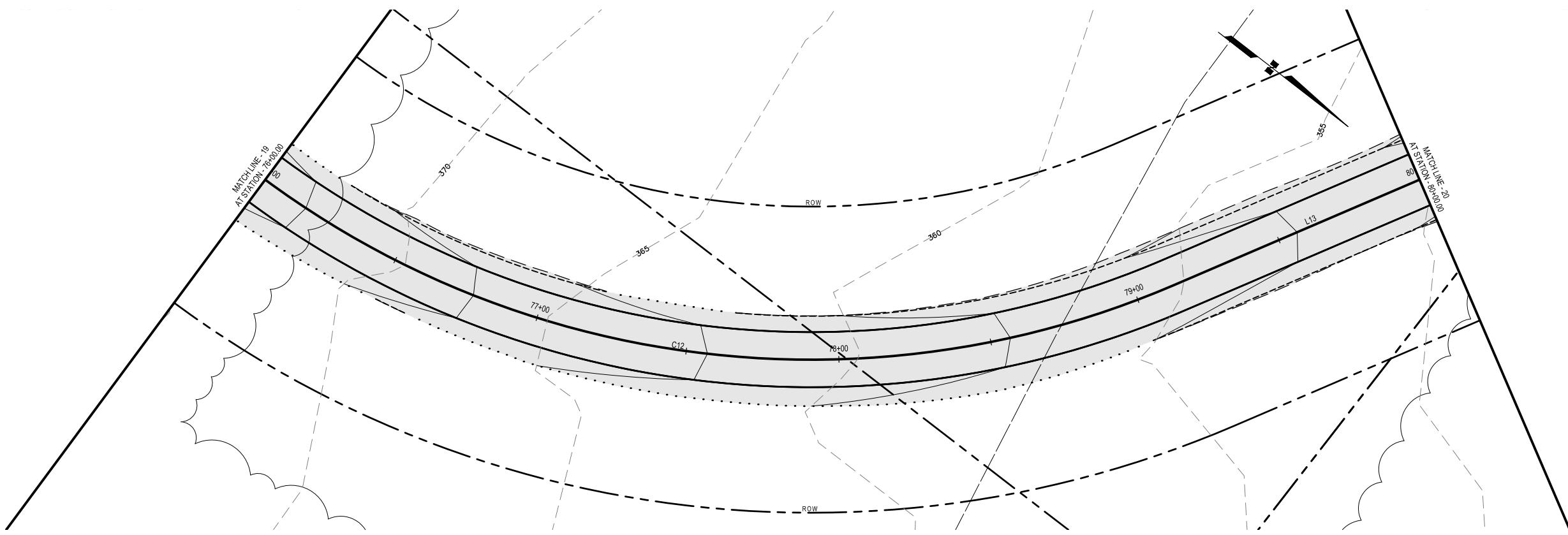


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ALASKA REGIONAL OFFICE
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HUGHES, ALASKA

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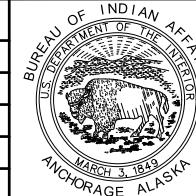
BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



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NO.	DATE	BY	DESCRIPTION



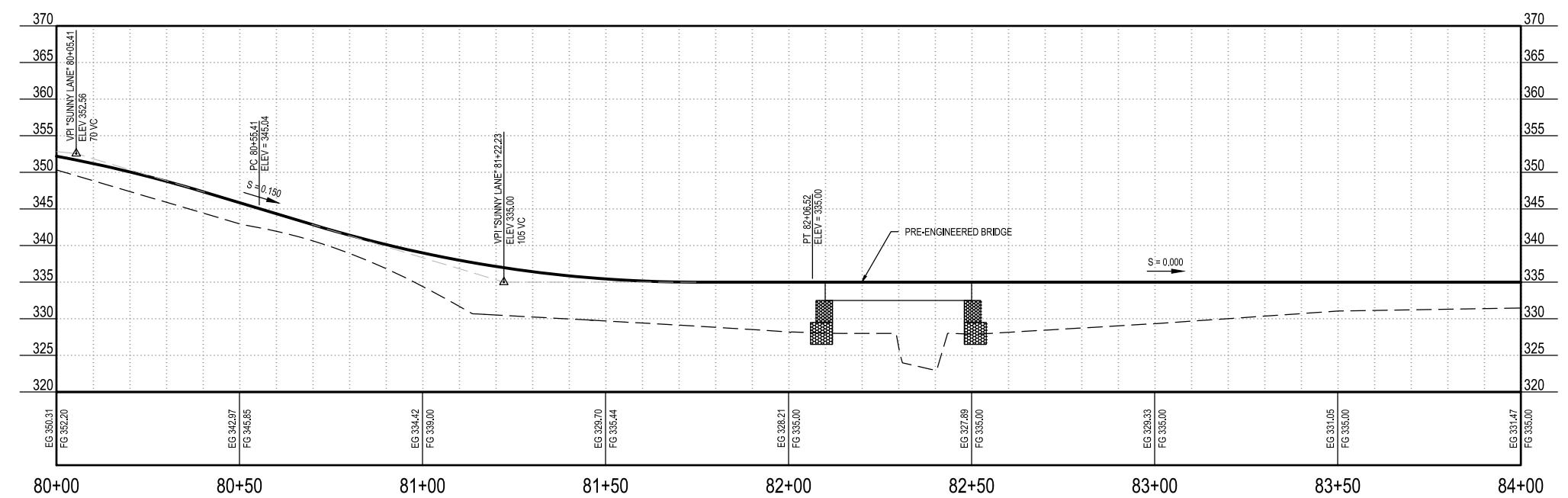
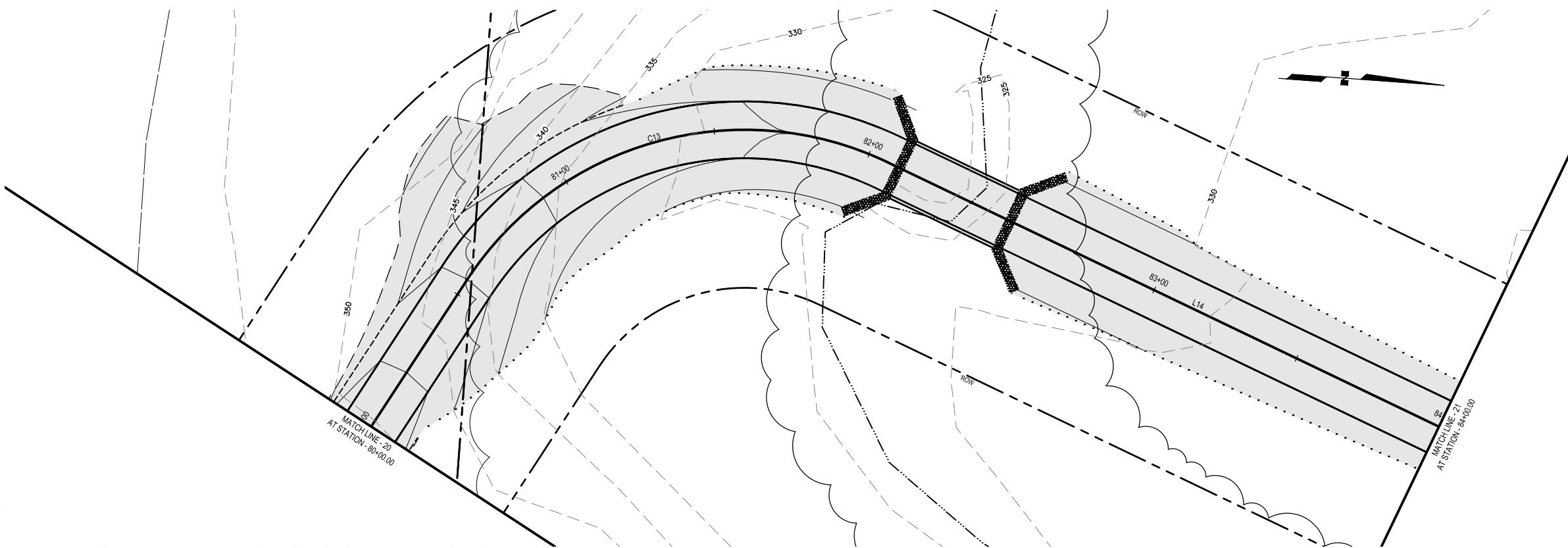
DEPARTMENT OF THE INTERIOR
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SUNNY LANE
HUGHES, ALASKA

SUNNY LANE
PLAN & PROFILE

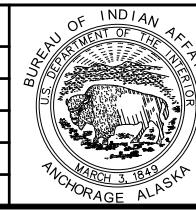
SHEET NO.
C20

BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



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NO.	DATE	BY	DESCRIPTION

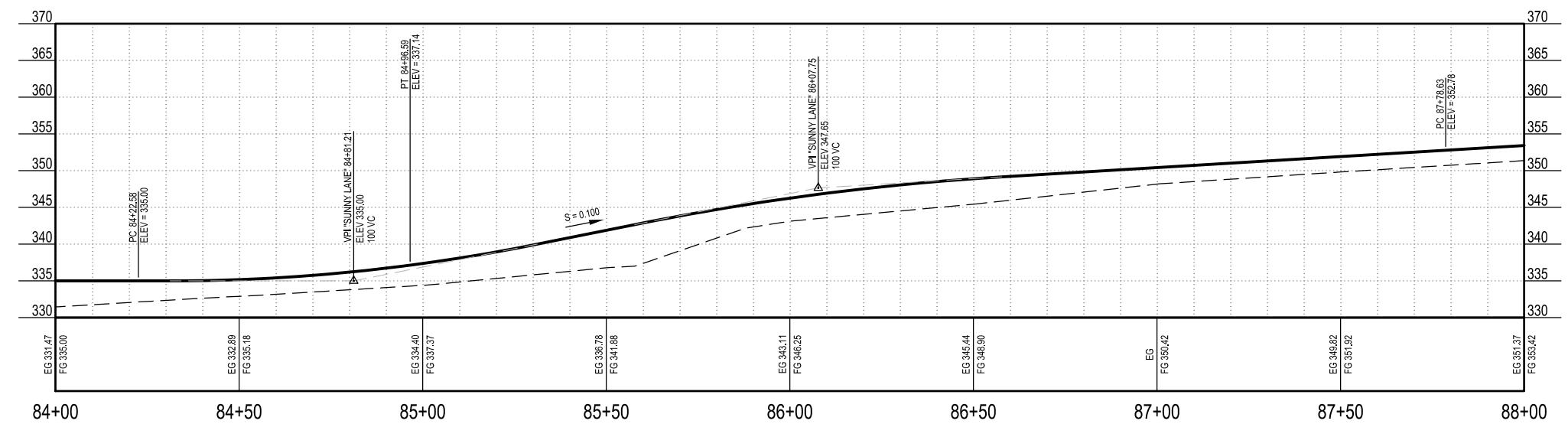
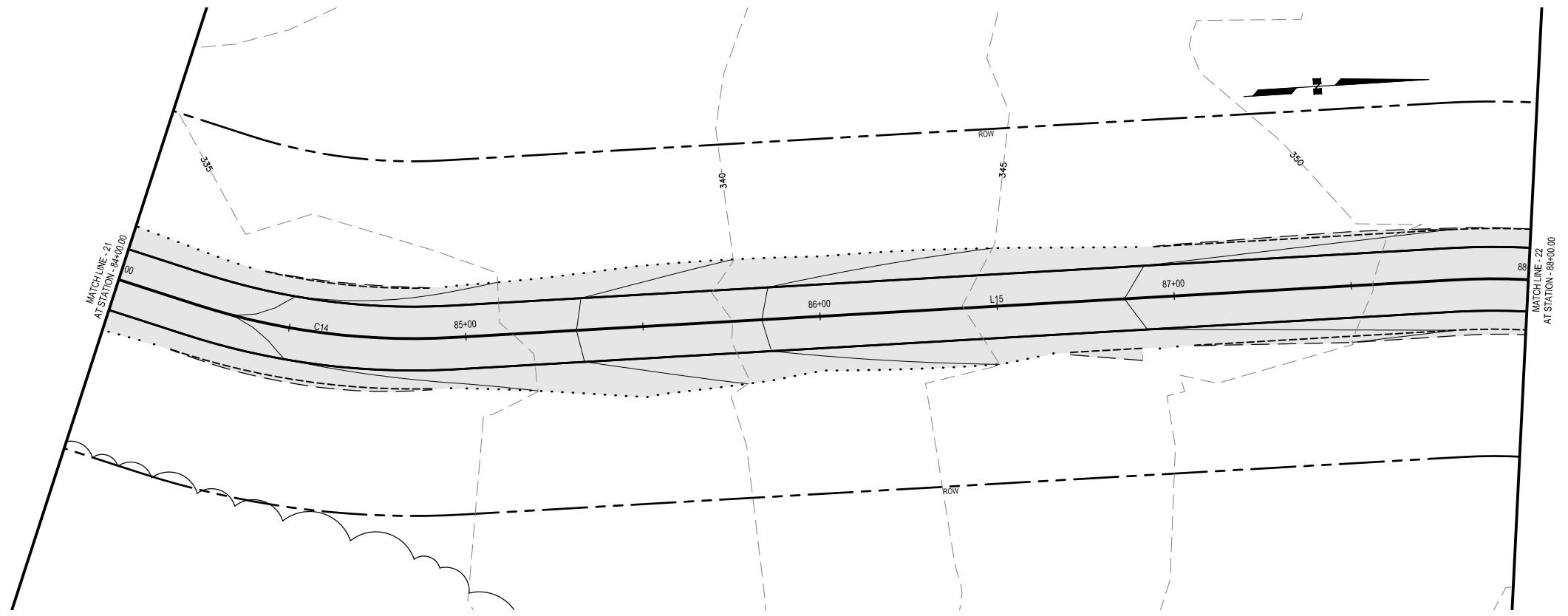


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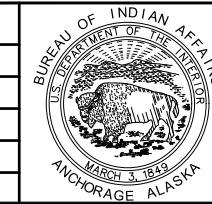
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HUGHES, ALASKA

SUNNY LANE
PLAN & PROFILE

BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



REVISIONS			
NO.	DATE	BY	DESCRIPTION

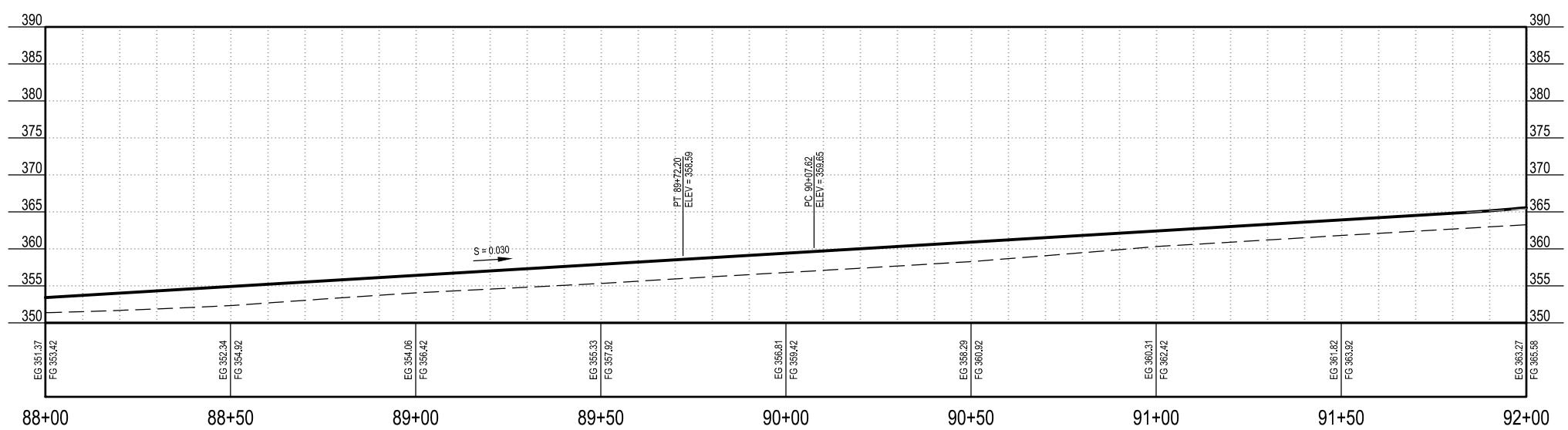
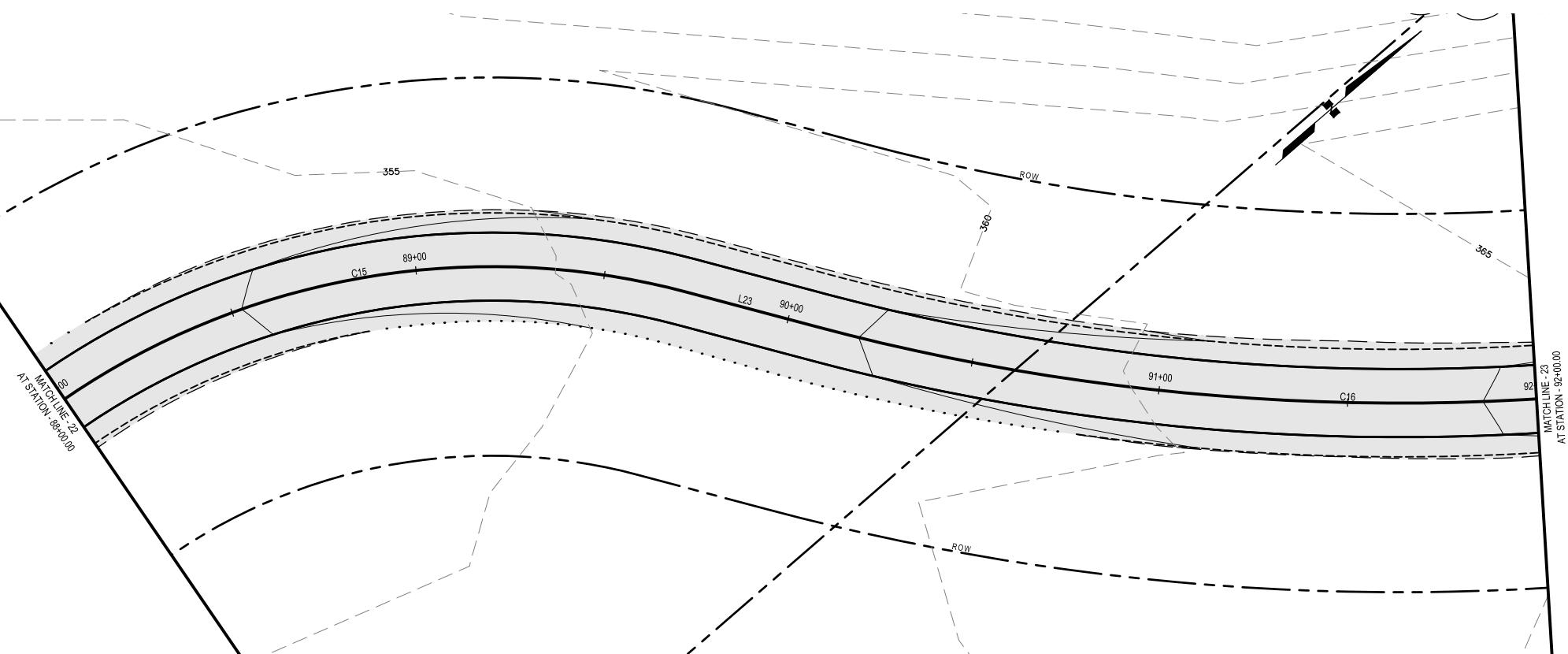


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SUNNY LANE
HUGHES, ALASKA

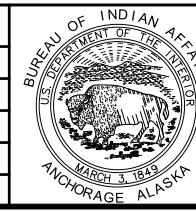
SUNNY LANE
PLAN & PROFILE

BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



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REVISIONS			
NO.	DATE	BY	DESCRIPTION

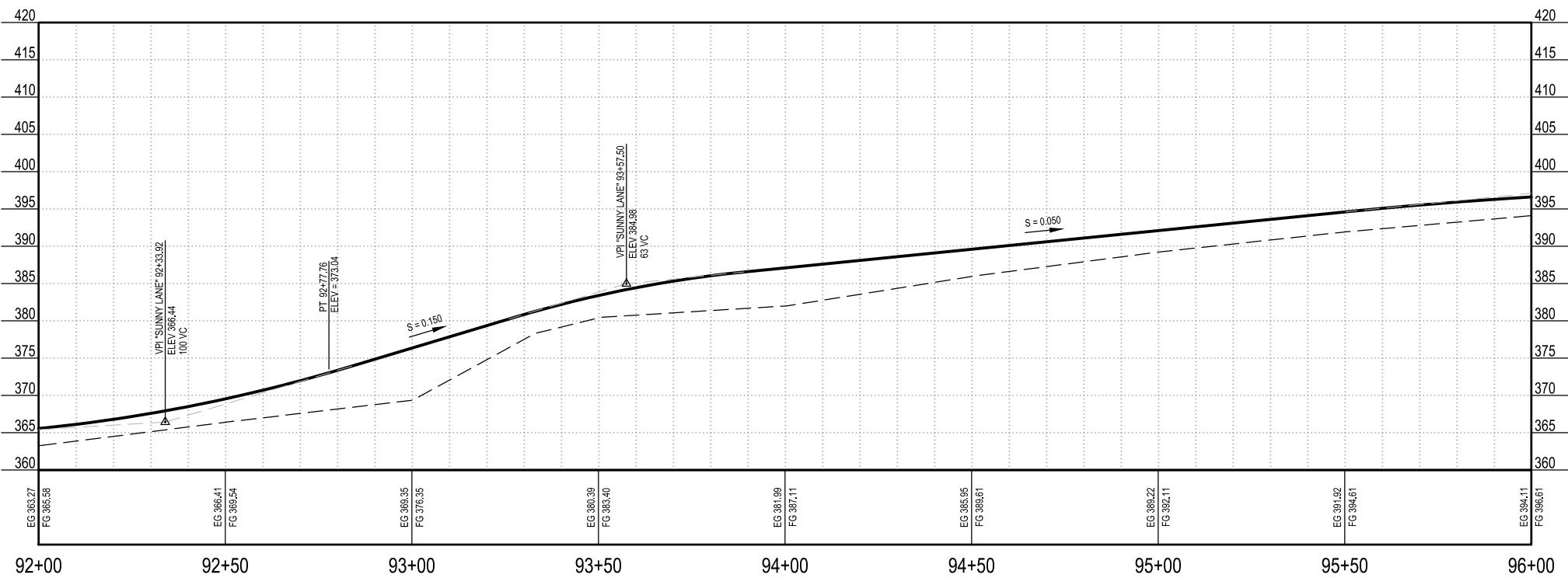
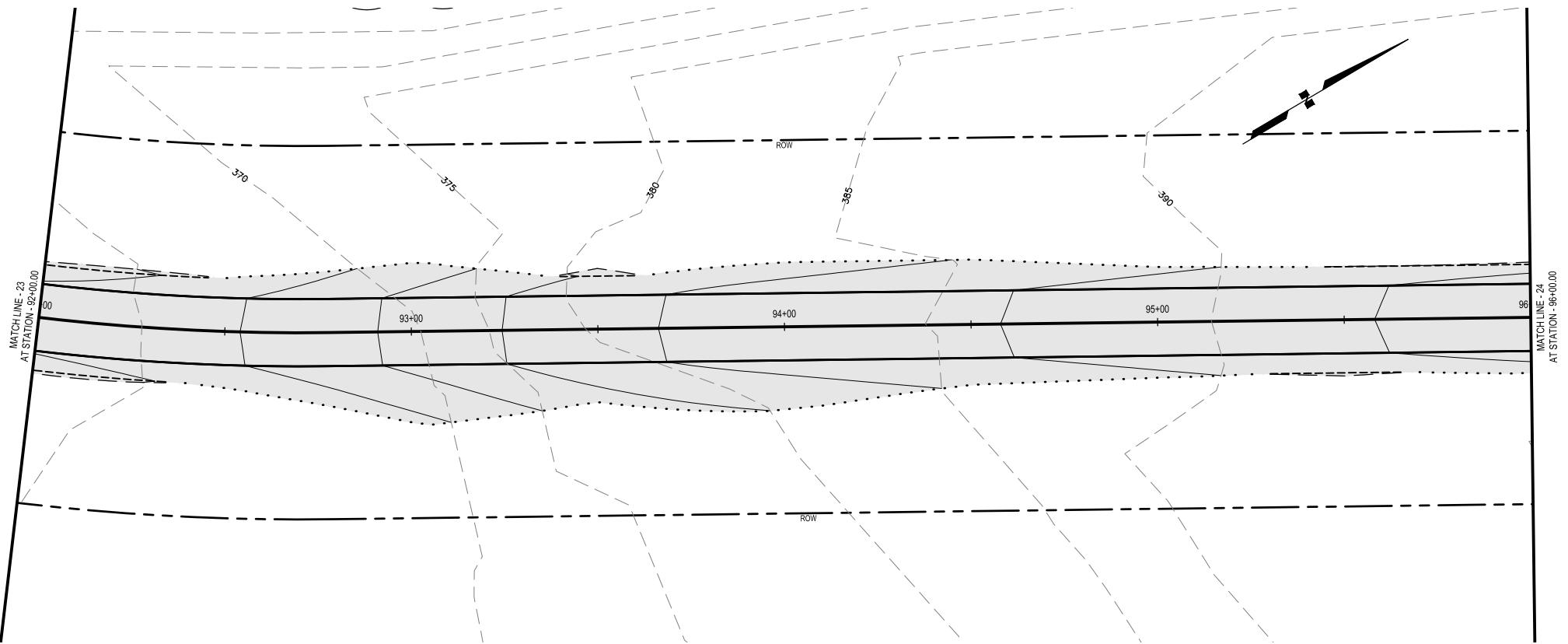


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BRANCH OF TRANSPORTATION

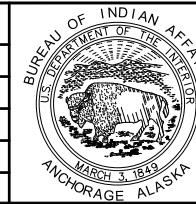
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HUGHES, ALASKA

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PLAN & PROFILE

BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



REVISIONS			
NO.	DATE	BY	DESCRIPTION

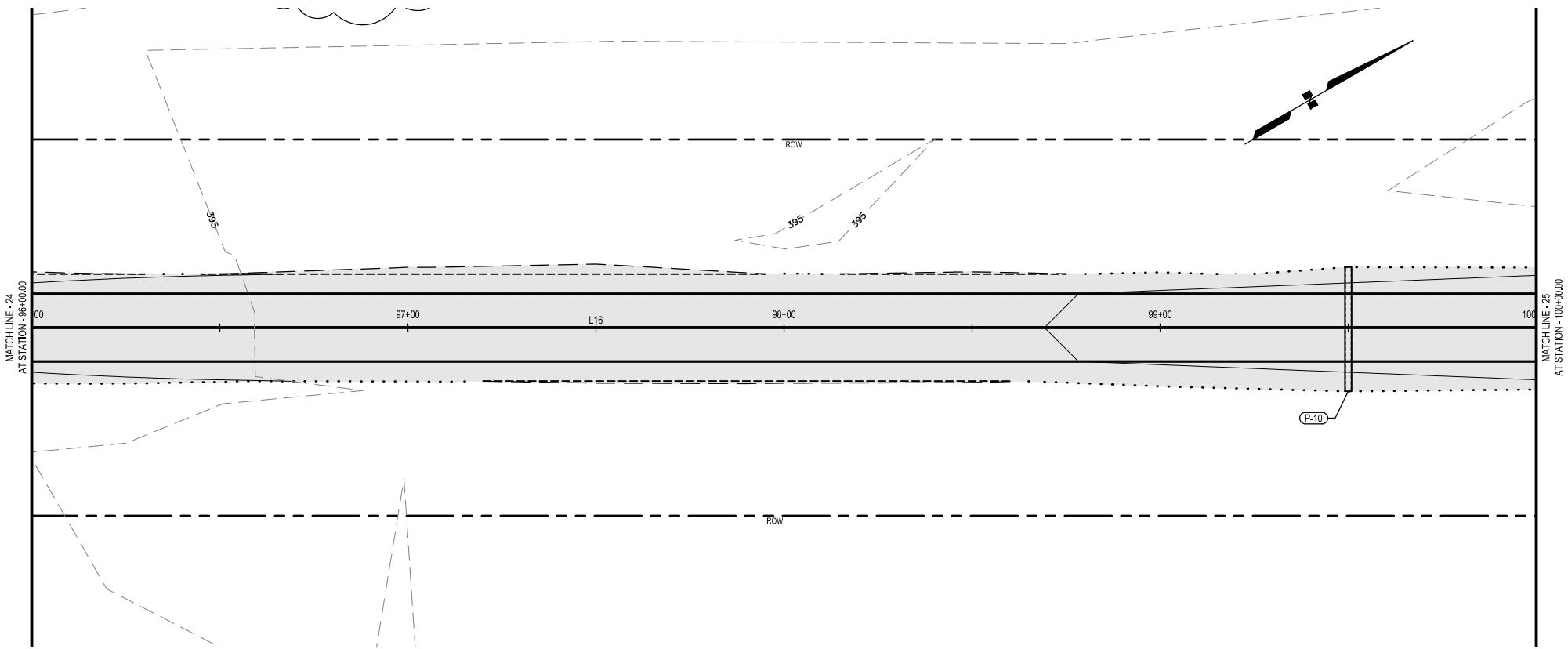


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SUNNY LANE
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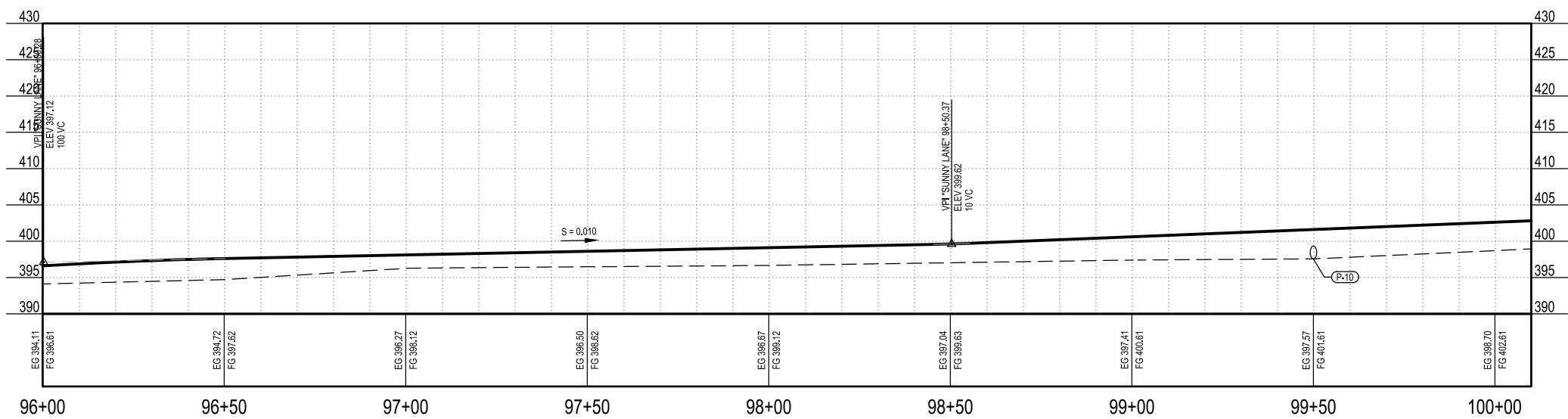
SUNNY LANE
PLAN & PROFILE

BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



CULVERT TABLE

PIPE ID	SIZE (in)	TYPE	LENGTH (ft)	Slope	UPSTREAM STA.	UPSTREAM OFFSET	UPSTREAM INV.	DOWNTSTREAM STA.	DOWNTSTREAM OFFSET	DOWNTSTREAM INV.
P-10	18	CPEP	33	1.21%	99+50	-16,06	397,90	99+50	16,94	397,50



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NO.	DATE	BY	DESCRIPTION



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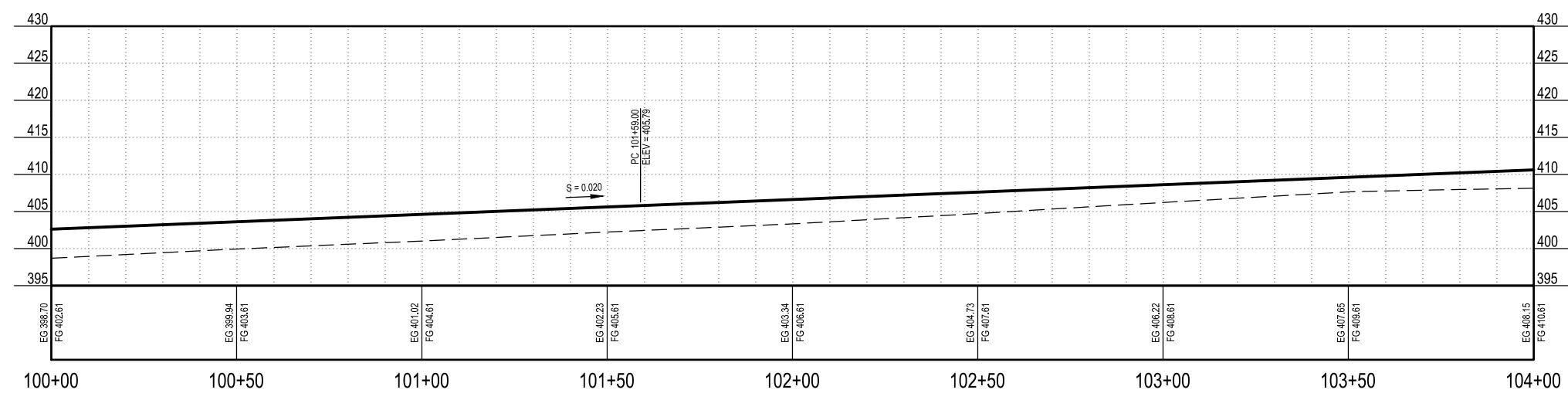
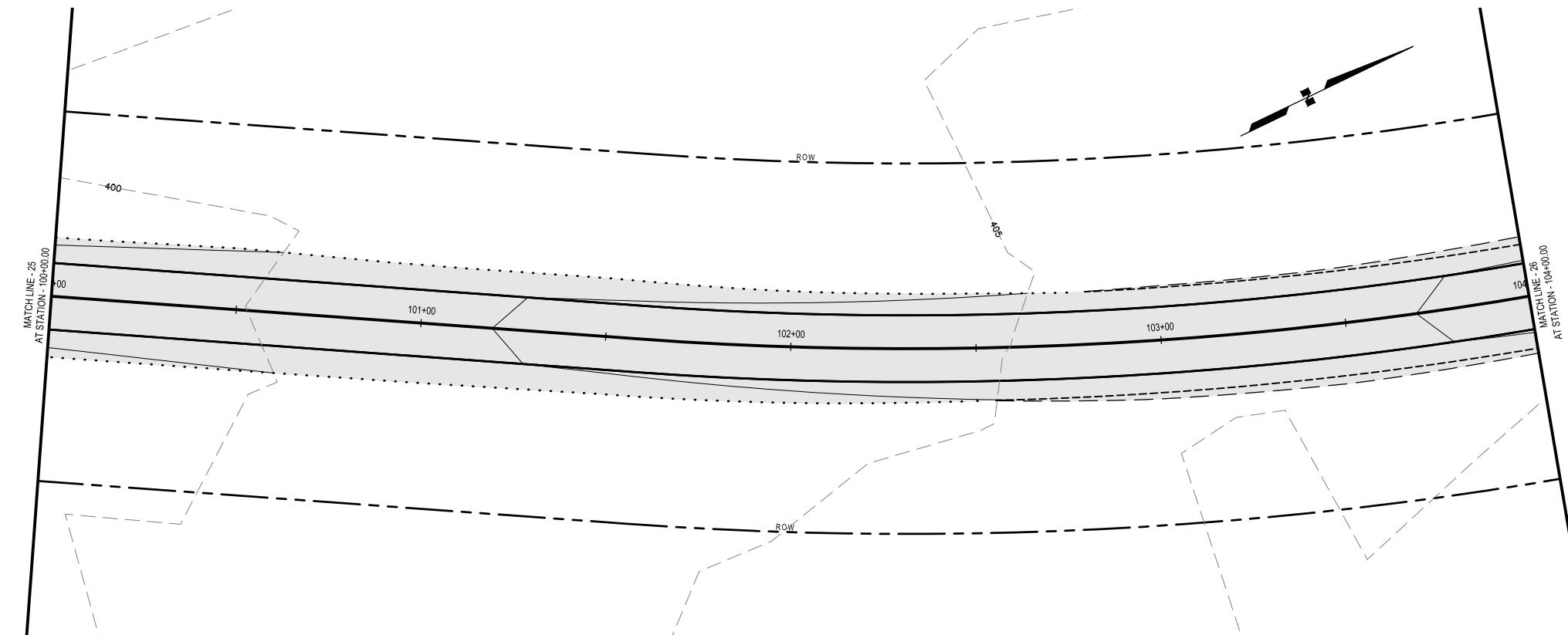
SUNNY LANE PLAN & PROFILE

HEET NO.

C25

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BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



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BRANCH OF TRANSPORTATION

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HUGHES, ALASKA

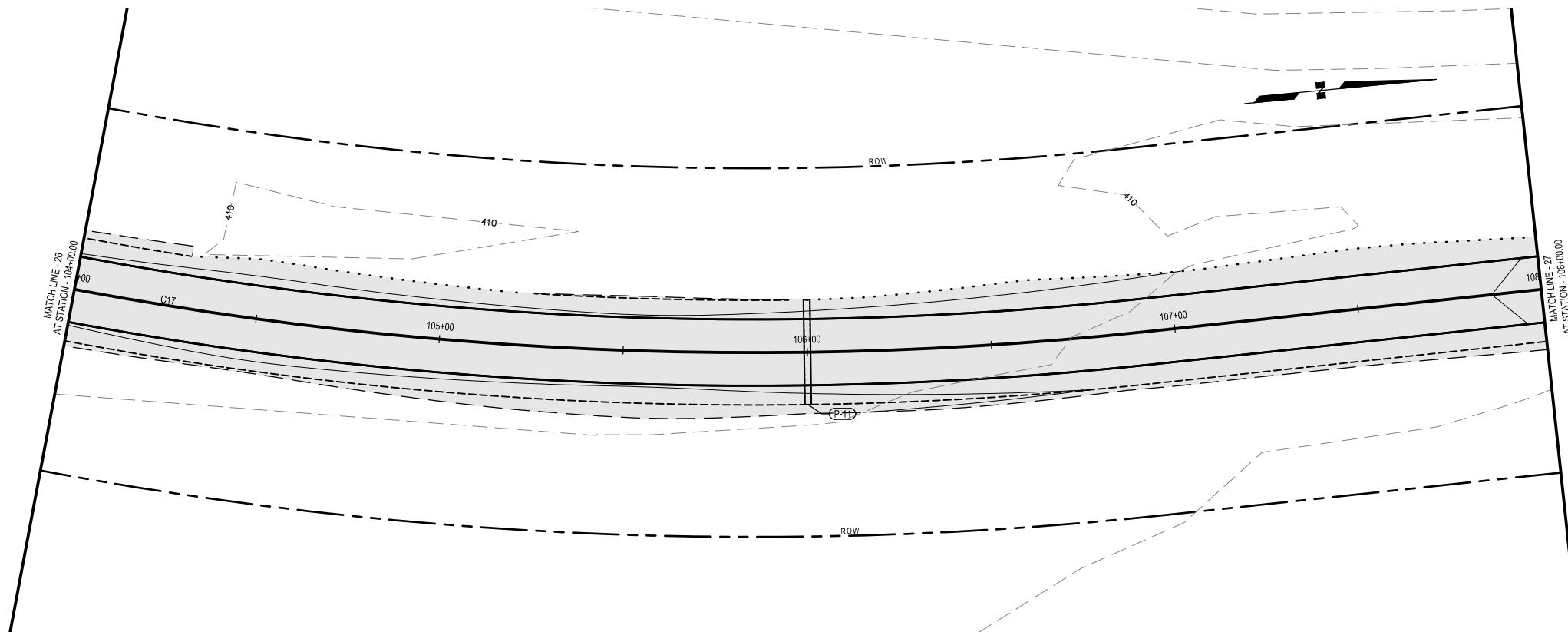
SUNNY LANE
PLAN & PROFILE

SCALE: AS SHOWN DESIGN: LDM CHECK: ELH DRAWN: LDM 9 SEPT 2022 32 OF 40

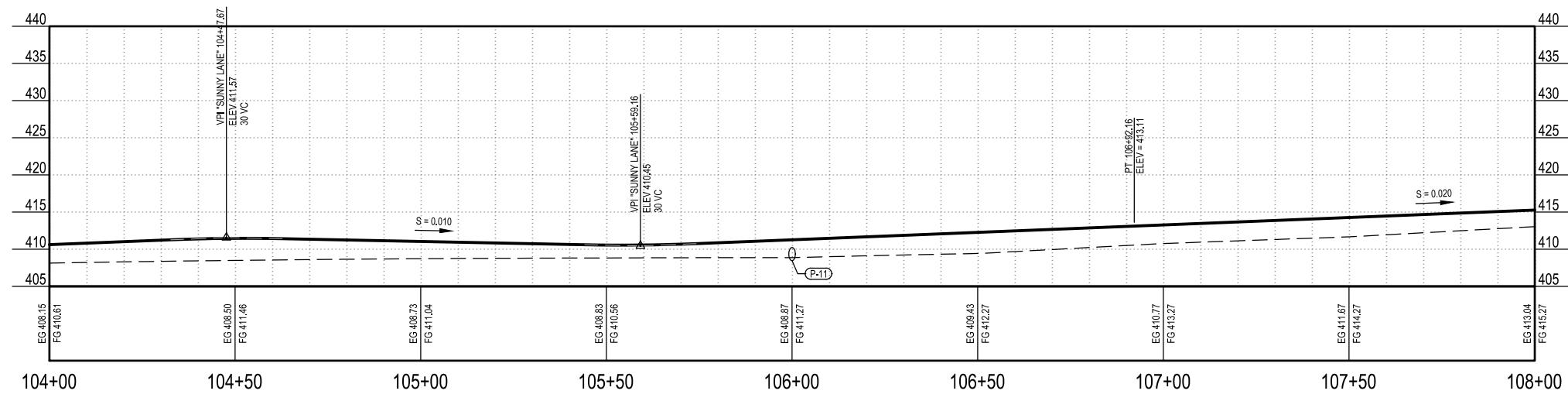
SHEET NO.

C26

BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



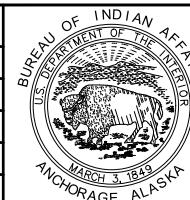
CULVERT TABLE										
PIPE ID	SIZE (in)	TYPE	LENGTH (ft)	Slope	UPSTREAM STA.	UPSTREAM OFFSET	UPSTREAM INV.	DOWNTREAM STA.	DOWNTREAM OFFSET	DOWNTREAM INV.
P-11	18	CPEP	28	-0.70%	106+00	-14.21	408.50	106+00	14.21	408.70



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NO. DATE BY DESCRIPTION



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BRANCH OF TRANSPORTATION

SUNNY LANE
HUGHES, ALASKA

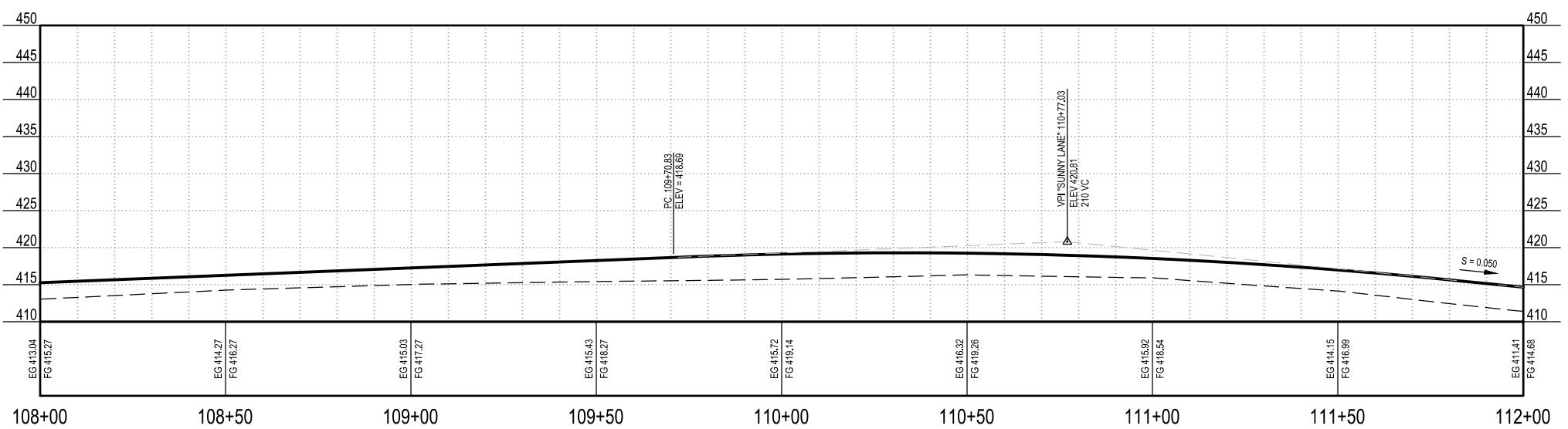
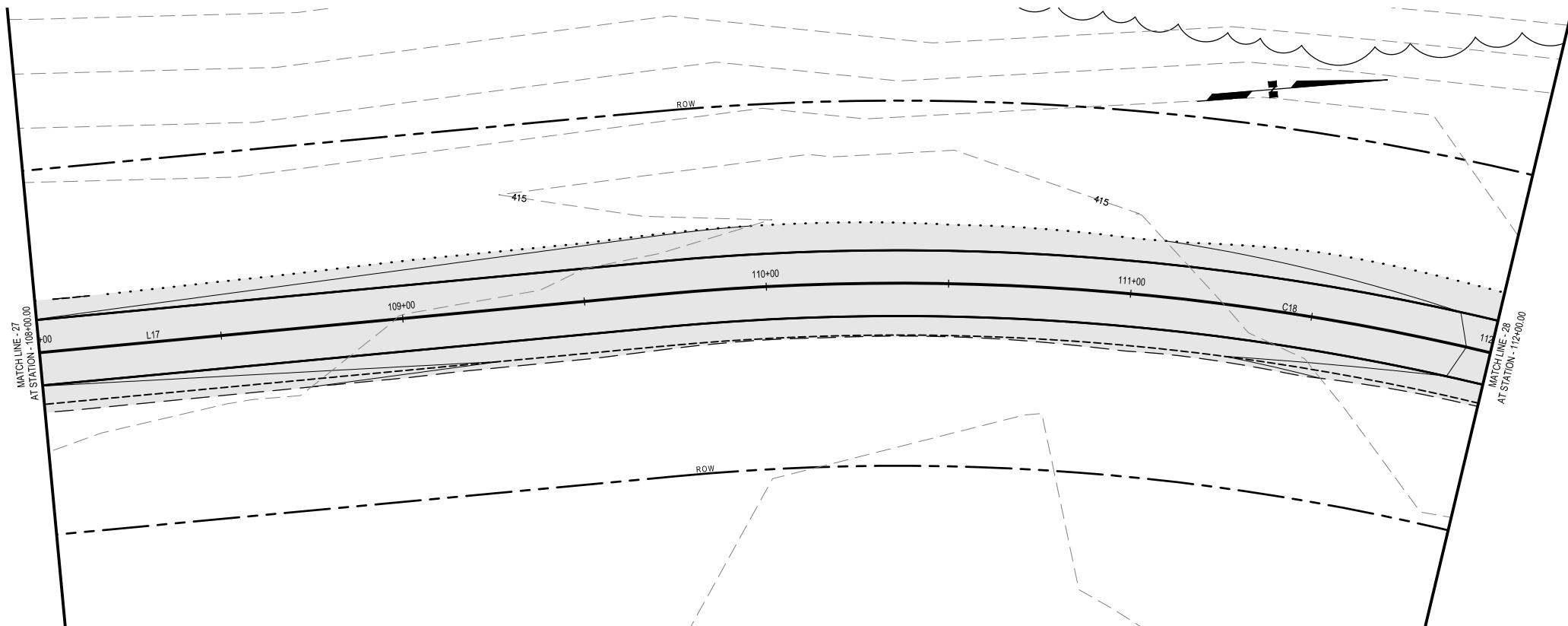
SUNNY LANE
PLAN & PROFILE

SCALE: AS SHOWN DESIGN: LDM CHECK: ELH DRAWN: LDM 9 SEPT 2022

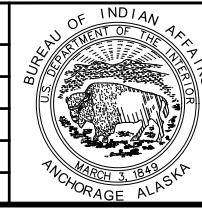
33 OF 40

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BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



REVISIONS			
NO.	DATE	BY	DESCRIPTION

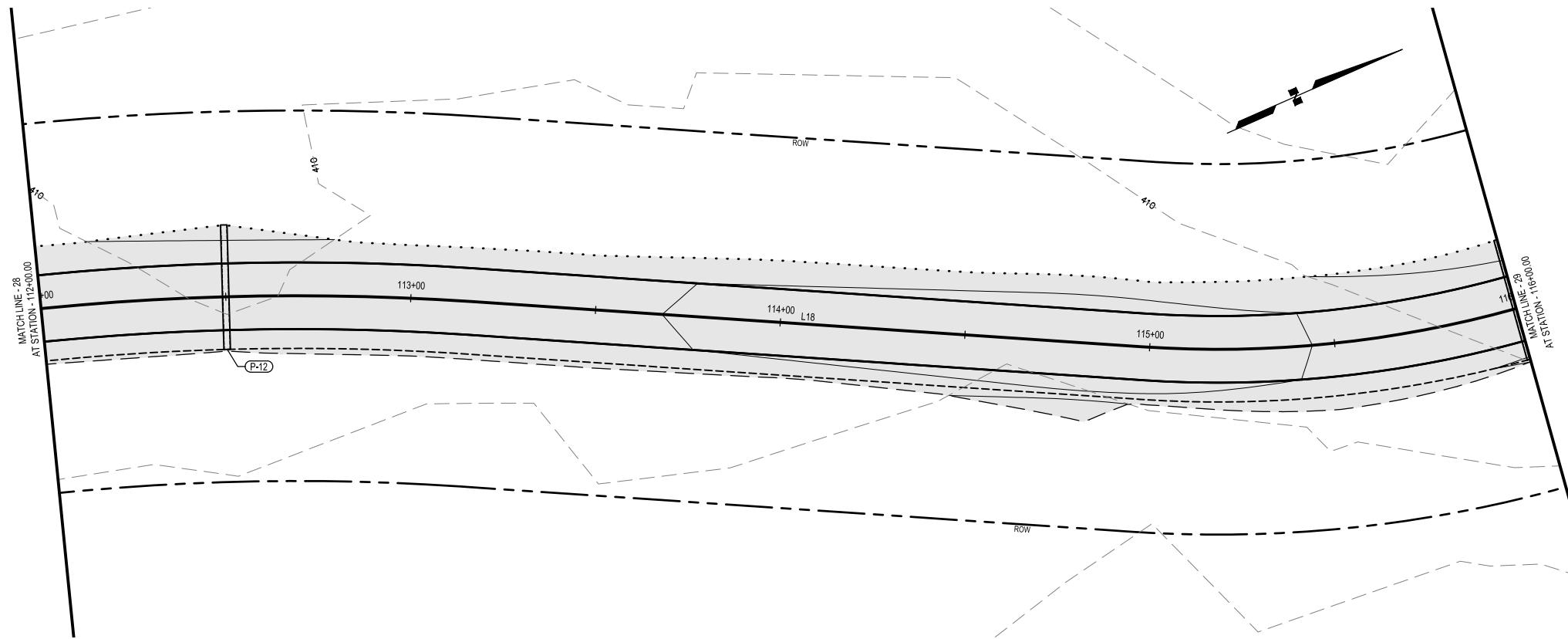


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ALASKA REGIONAL OFFICE
BRANCH OF TRANSPORTATION

SUNNY LANE
HUGHES, ALASKA

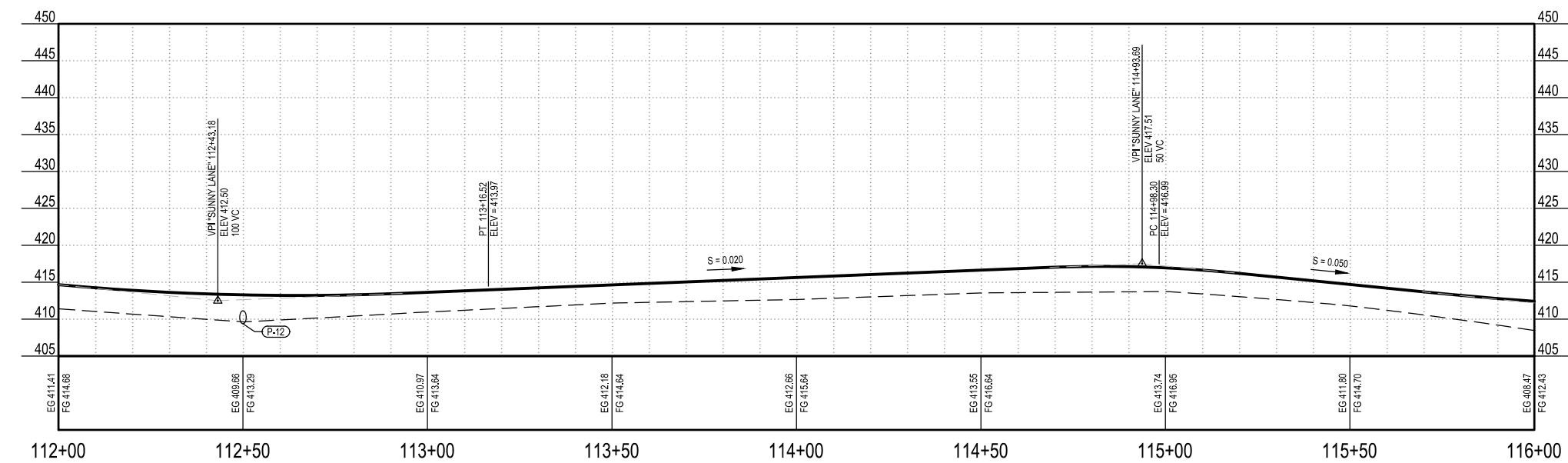
SUNNY LANE
PLAN & PROFILE

BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



CULVERT TAB

PIPE ID	SIZE (in)	TYPE	LENGTH (ft)	Slope	UPSTREAM STA.	UPSTREAM OFFSET	UPSTREAM INV.	DOWNTSTREAM STA.	DOWNTSTREAM OFFSET	DOWNTSTREAM INV.
P-12	18	CPEP	34	-8.33%	112+50	-19.40	407.90	112+50	14.21	410.70



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REVISIONS

NO.	DATE	BY	DESCRIPTION



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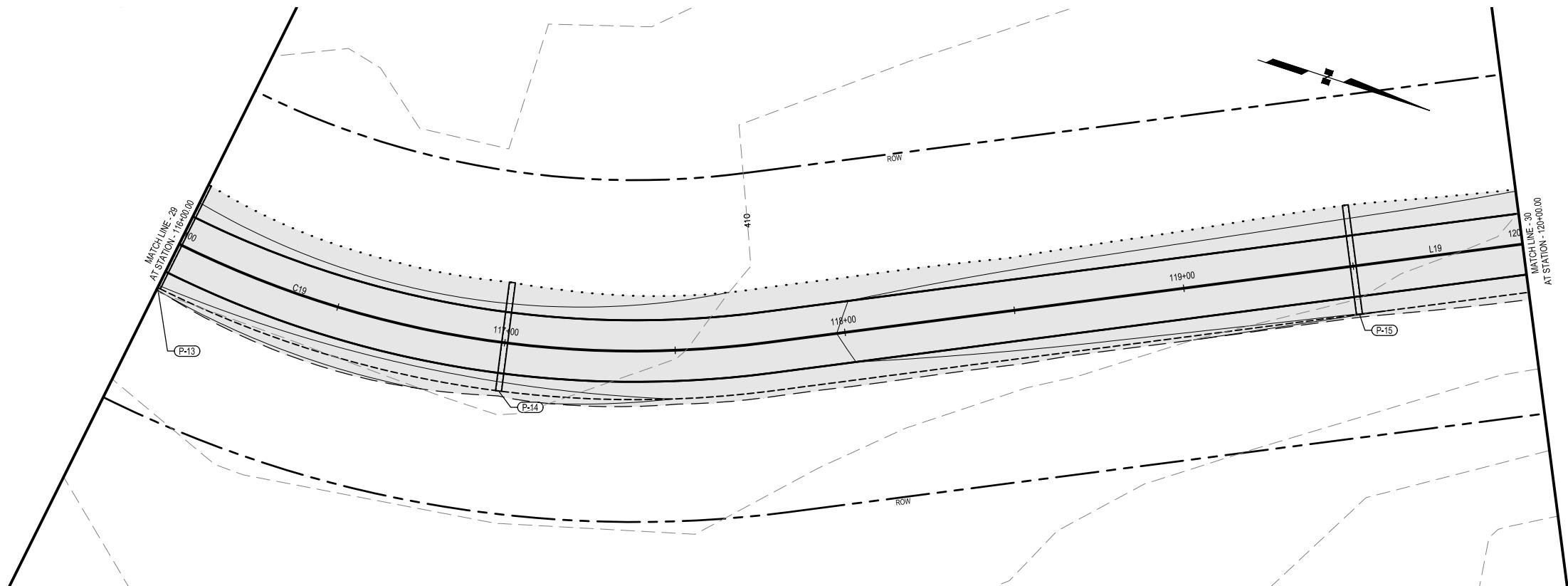
SUNNY LANE HUGHES, ALASKA

SUNNY LANE PLAN & PROFILE

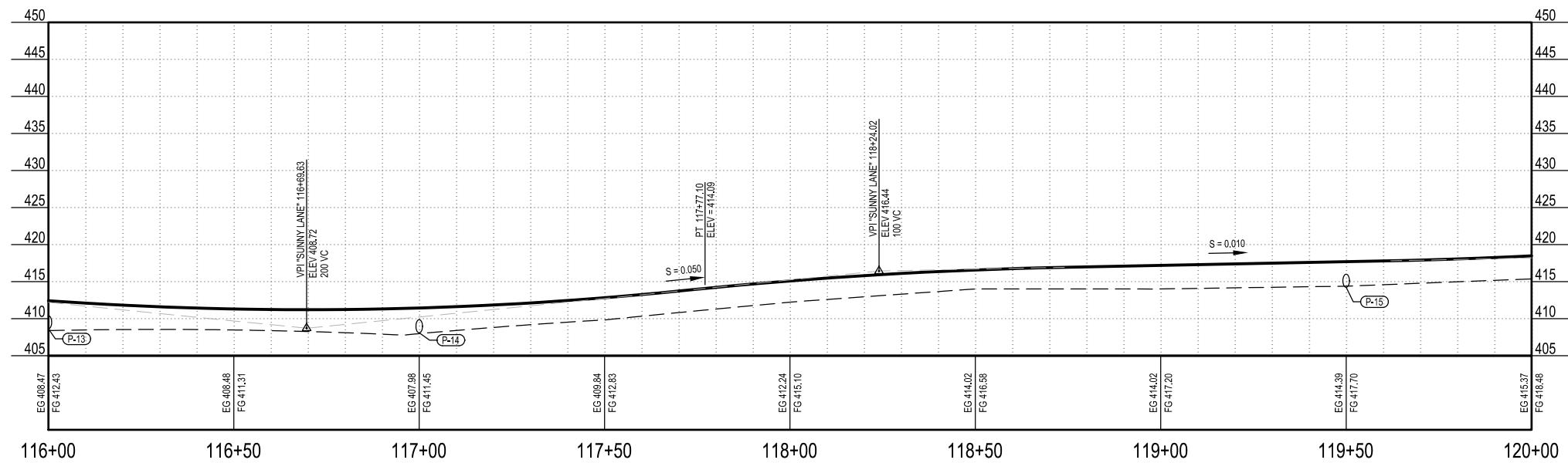
SCALE: AS SHOWN DESIGN: LDM CHECK: ELH DRAWN: LDM 9 SEPT 2022 35 OF 40

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BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



CULVERT TABLE									
PIPE ID	SIZE (in)	TYPE	LENGTH (ft)	Slope	UPSTREAM STA.	UPSTREAM OFFSET	UPSTREAM INV.	DOWNSTREAM STA.	DOWNSTREAM OFFSET
P-13	18	CPEP	33	-8.65%	116+00	-19.29	407.10	116+00	14.21
P-15	18	CPEP	32	-6.52%	119+50	-18.00	413.20	119+50	14.21
P-14	18	CPEP	32	-7.50%	117+00	-17.79	406.90	117+00	14.21
									409.30



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NO.	DATE	BY	DESCRIPTION

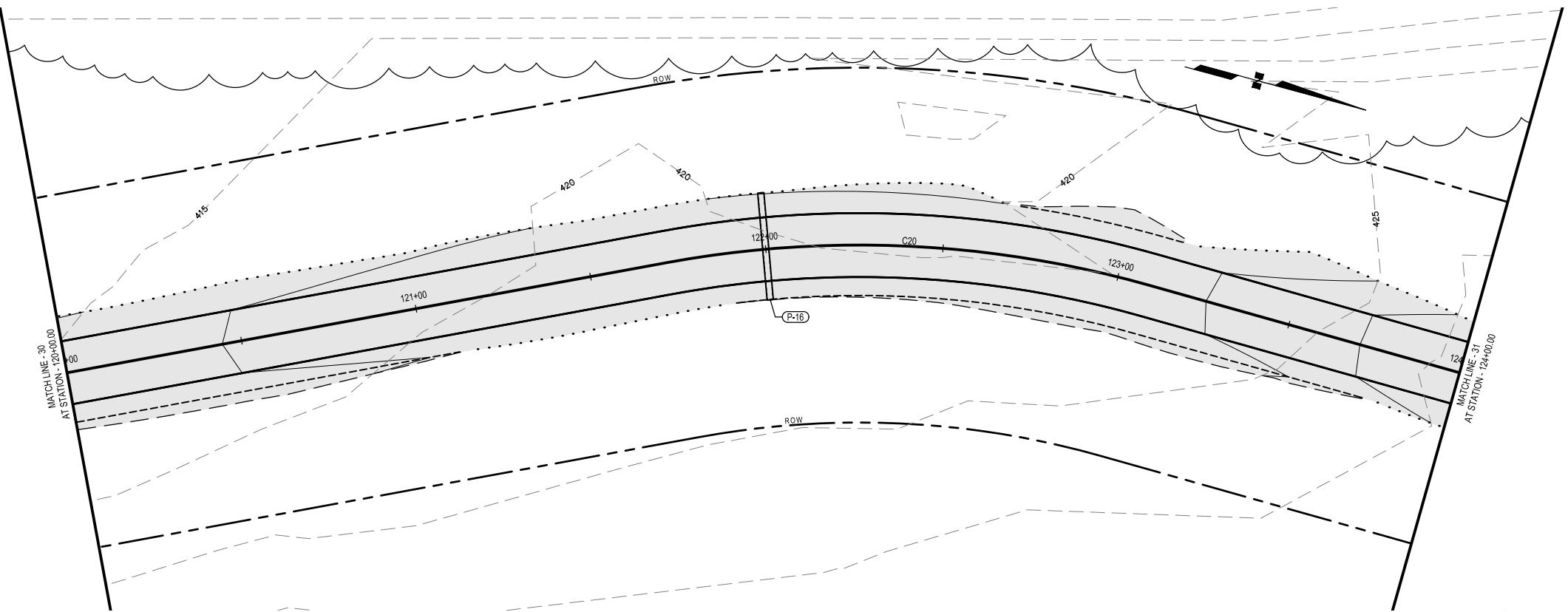


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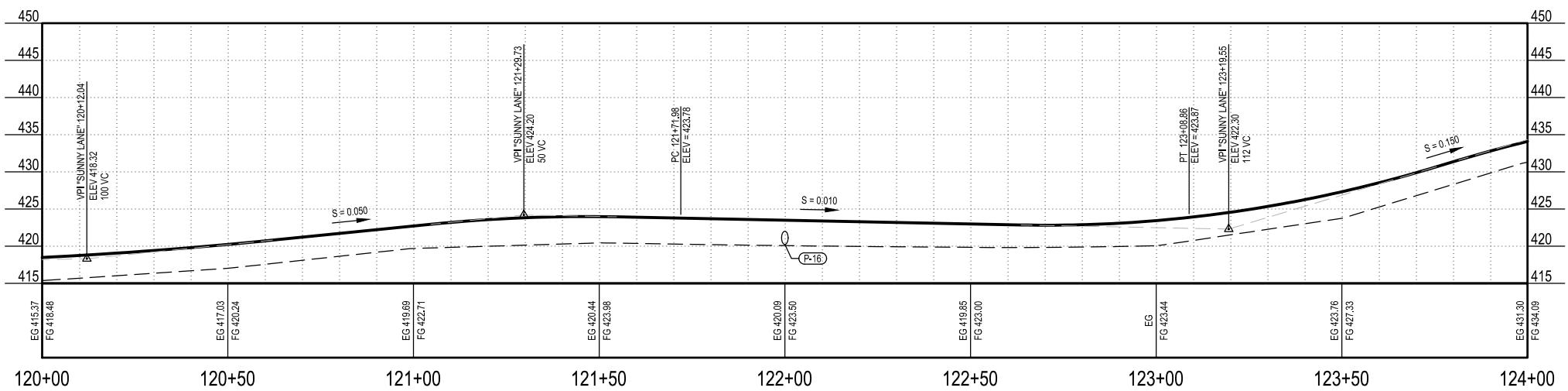
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HUGHES, ALASKA

SUNNY LANE
PLAN & PROFILE

BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



CULVERT TABLE										
PIPE ID	SIZE (in)	TYPE	LENGTH (ft)	Slope	UPSTREAM STA.	UPSTREAM OFFSET	UPSTREAM INV.	DOWNTREAM STA.	DOWNTREAM OFFSET	DOWNTREAM INV.
P-16	18	CPEP	30	-2.97%	122+00	-15.96	419.90	122+00	14.33	420.80



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REVISIONS			
NO.	DATE	BY	DESCRIPTION

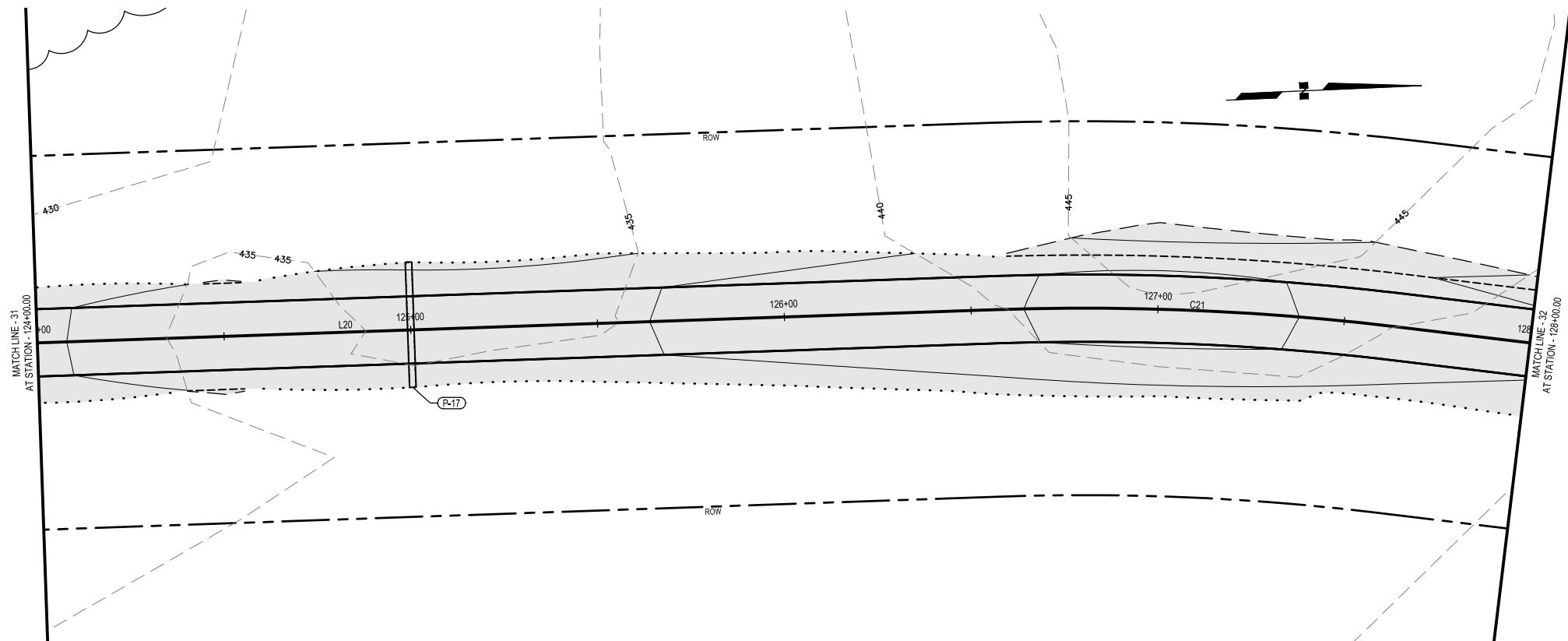


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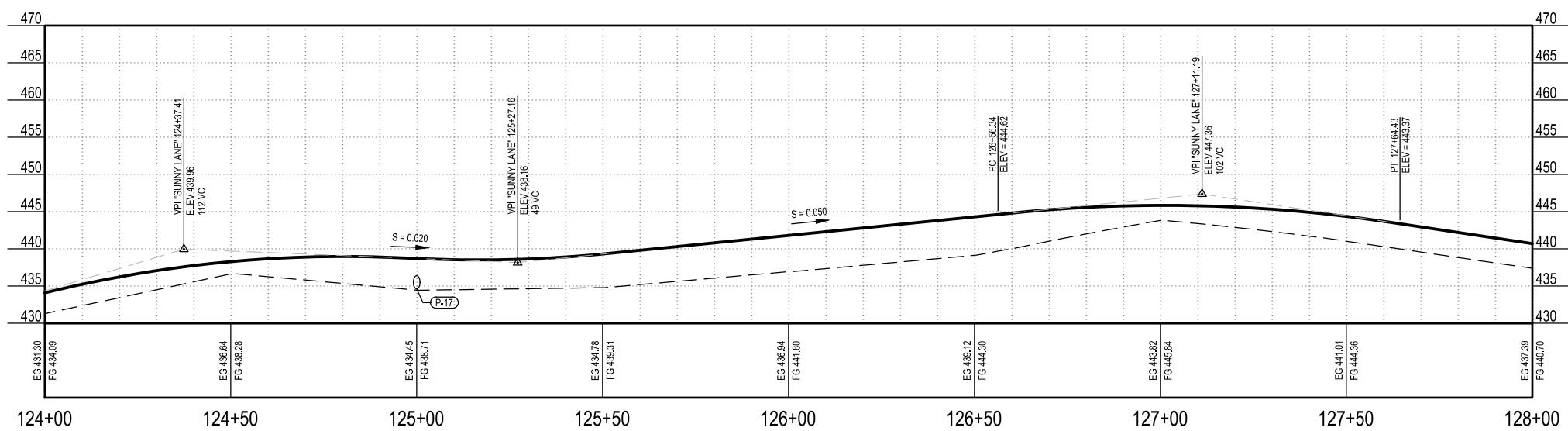
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HUGHES, ALASKA

SUNNY LANE
PLAN & PROFILE

BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



CULVERT TABLE										
PIPE ID	SIZE (in)	TYPE	LENGTH (ft)	Slope	UPSTREAM STA.	UPSTREAM OFFSET	UPSTREAM INV.	DOWNSTREAM STA.	DOWNSTREAM OFFSET	
P-17	18	CPEP	33	-4.18%	125+00	-18.15	434.00	125+00	15.35	435.40



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REVISIONS			
NO.	DATE	BY	DESCRIPTION

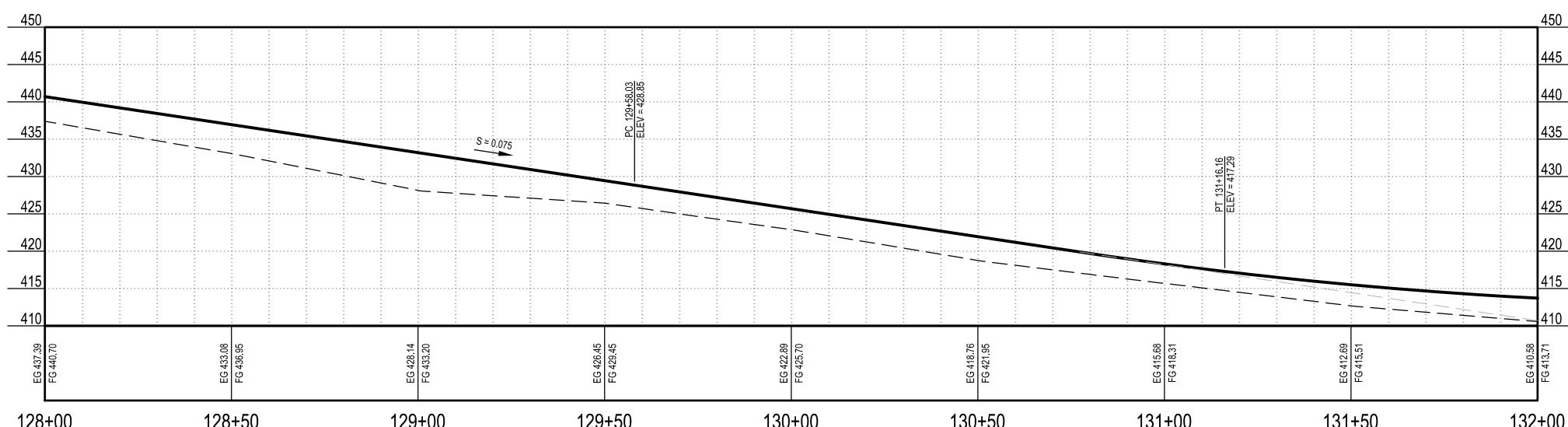
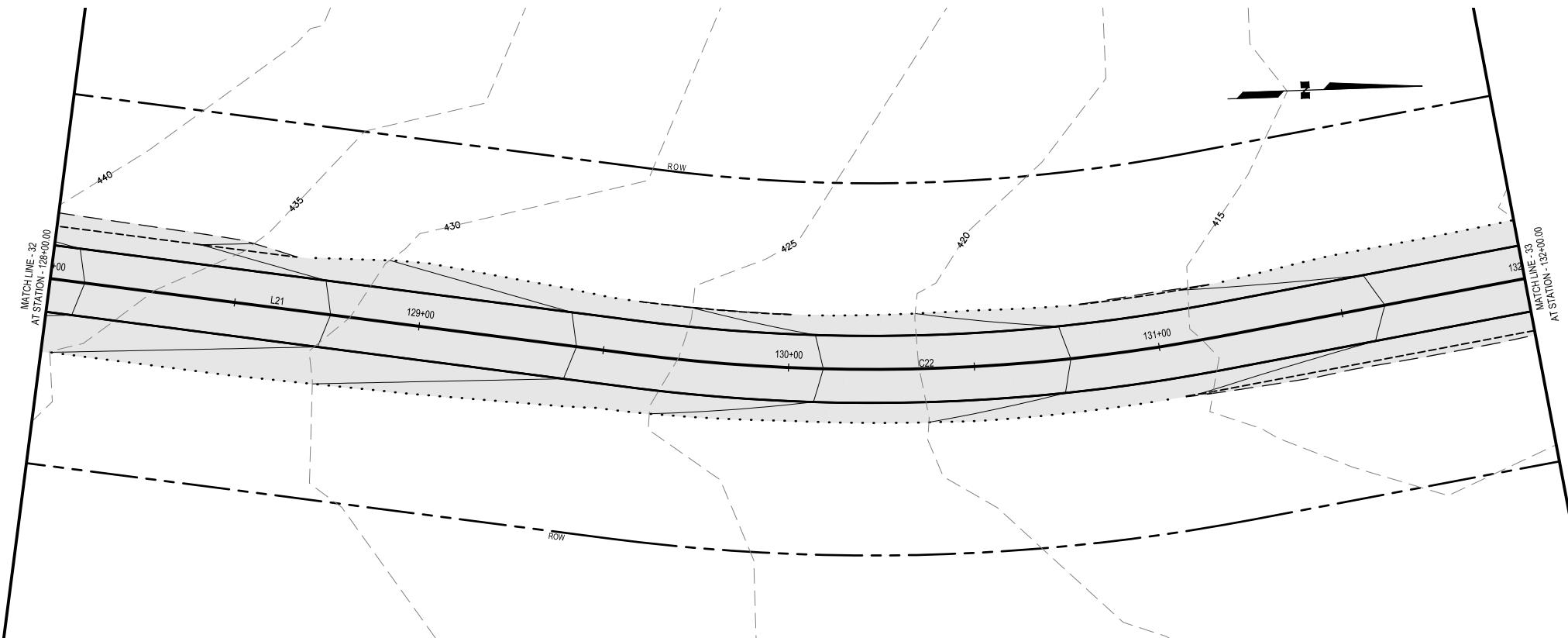


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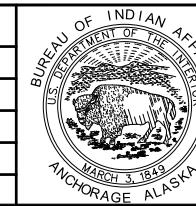
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PLAN & PROFILE

BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



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REVISIONS			
NO.	DATE	BY	DESCRIPTION

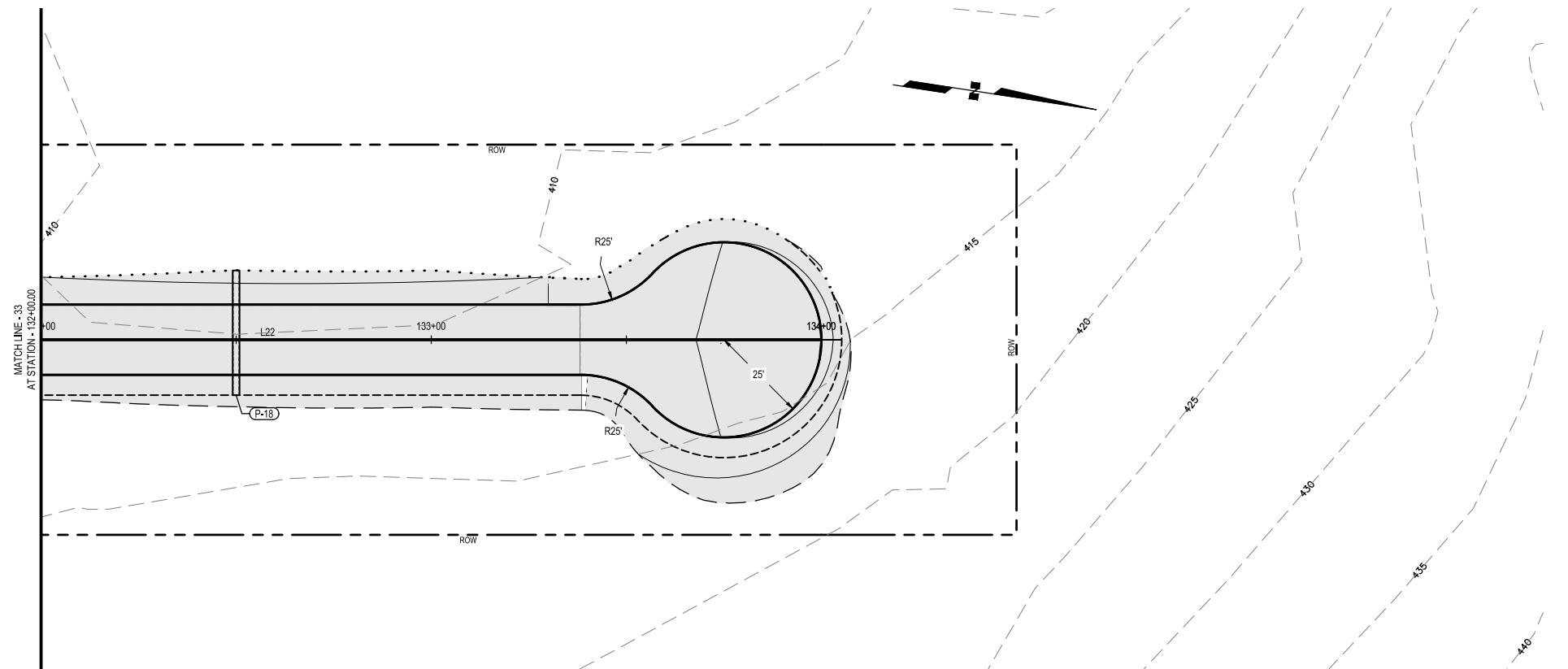


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HUGHES, ALASKA

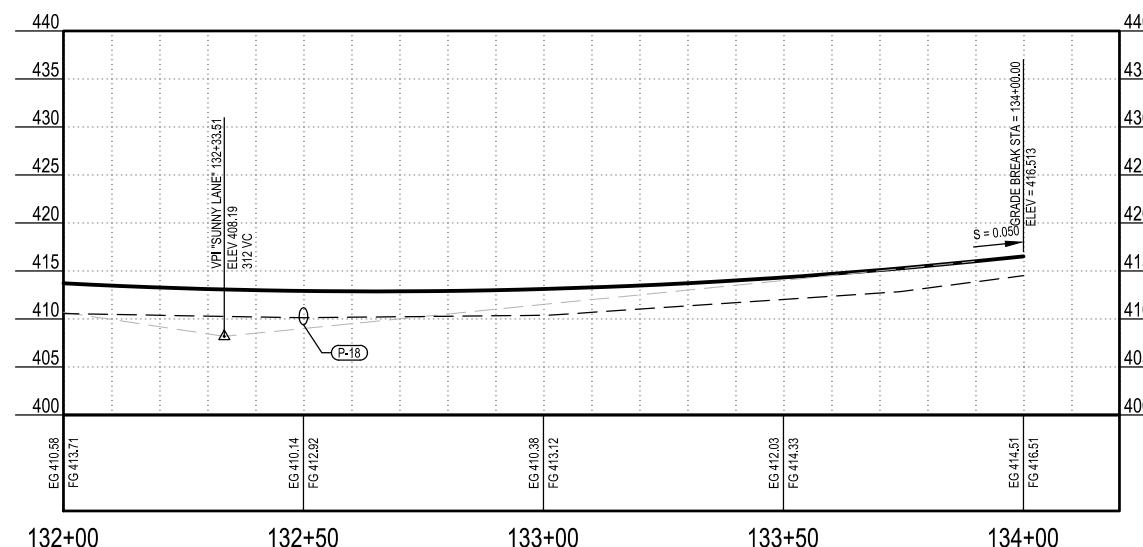
SUNNY LANE
PLAN & PROFILE

BIA REGION	BIA DESIGN PROJECT NO.	VILLAGE	ROUTE NUMBER	YEAR
ALASKA	XXX	HUGHES	XXX	2022



CULVERT TABLE

PIPE ID	SIZE (in)	TYPE	LENGTH (ft)	Slope	UPSTREAM STA.	UPSTREAM OFFSET	UPSTREAM INV.	DOWNTSTREAM STA.	DOWNTSTREAM OFFSET	DOWNTSTREAM INV.
P-18	18	CPEP	32	-6.76%	132+50	-17.76	408.34	132+50	14.21	410.50



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SUNNY LANE PLAN & PROFILE

HEET NO.

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SCALE: AS SHOWN DESIGN: LDM CHECK: ELH DRAWN: LDM 9 SEPT 2022 40 OF 40