

Mayor Steven J. Carrington
Deputy Mayor Pamela Melin
Council Member Carolina Anzilotti
Council Member John Alcantra
Council Member Richard W. Best
Council Member Thomas Ojala IV
Council Member Joshua Tudor

City Manager John Moosey
City Clerk Shelly M. Acteson, CMC
City Attorney Sarah Heath, Esq.

City of Palmer, Alaska
EMERGENCY City Council Meeting
April 25, 2023, at 5:30 PM
City Council Chambers
231 W. Evergreen Avenue, Palmer
www.palmerak.org

EMERGENCY MEETING AGENDA

A. CALL TO ORDER

B. ROLL CALL

C. PLEDGE OF ALLEGIANCE

D. APPROVAL OF AGENDA

E. AUDIENCE PARTICIPATION

F. ACTION MEMORANDA

- 1. Action Memorandum No. 23-027: Authorizing the City Manager to Negotiate and Enter into a Utility Agreement with the Alaska Department of Transportation & Public Facilities (AKDOT&PF) for the City of Palmer's (City) Share of the Utility Relocation of City of Palmer Water and Sewer Pipes as Part of the Glenn Highway: Parks Highway to Inner Springer Loop, Phase II Construction Project**

G. ADJOURNMENT

**City of Palmer
Action Memorandum No. 23-027**

Subject: Authorizing the City Manager to Negotiate and Enter into a Utility Agreement with the Alaska Department of Transportation & Public Facilities (AKDOT&PF) for the City of Palmer's (City) Share of the Utility Relocation of City of Palmer Water and Sewer Pipes as Part of the Glenn Highway: Parks Highway to Inner Springer Loop, Phase II Construction Project.

Agenda of: April 25, 2023

Council Action: **Approved** **Amended:** _____
 Defeated

Originator Information:

Originator: Jude Bilafer, Director of Public Works

Department Review:

Route to:	Department Director:	Signature:	Date:
_____	Community Development	_____	_____
_____	Finance	_____	_____
_____	Fire	_____	_____
_____	Police	_____	_____
X	Public Works	<i>JPB</i>	04/21/2023

Certification of Funds:

Total amount of funds listed in this legislation: \$ Unknown

- This legislation (√):
- Creates revenue in the amount of: \$ _____
 - Creates expenditure in the amount of: \$ Unknown
 - Creates a saving in the amount of: \$ _____
 - Has no fiscal impact

Funds are (√):

- Budgeted Line item(s): _____
- Not budgeted Future legislation will be presented once City share determined.

Director of Finance Signature: *[Signature]*

Approved for Presentation By:

Signature:	Remarks:
City Manager _____	_____
City Attorney _____	_____
City Clerk _____	_____

Attachment(s):

1. AKDOT&PF Utility Relocation Construction Drawings
2. AKDOT&PF Utility Agreement
3. AKDOT&PF Utility Relocation Estimate Summary
4. City / AKDOT&PF Utility Permit Establishing 50/50 Cost Share (dated 10/25/2005)

Summary Statement/Background:

The City has water and sewer utility lines crossing under the Glenn Highway which serve the Mat-Su Regional Hospital, Imaging Associates, and the Mat-Su College. These lines are also integral to any future expansion of City water and sewer services. The City is permitted by the AKDOT&PF to have these underground utilities within the AKDOT&PF Glenn Highway Right of Way. As part of the Glenn Highway upgrade project, these City utilities must be relocated. As per the attached signed Utility Agreement, the City agreed to split the utility relocation costs evenly with the AKDOT&PF once the Glenn Highway Project commenced. With the Glenn Highway Project scheduled to begin summer of 2023, this utility agreement is critical to the continued reliability of water and sewer service provided by the City.

Once the City's actual cost share amount is determined, a resolution will be brought to the City Council for action.

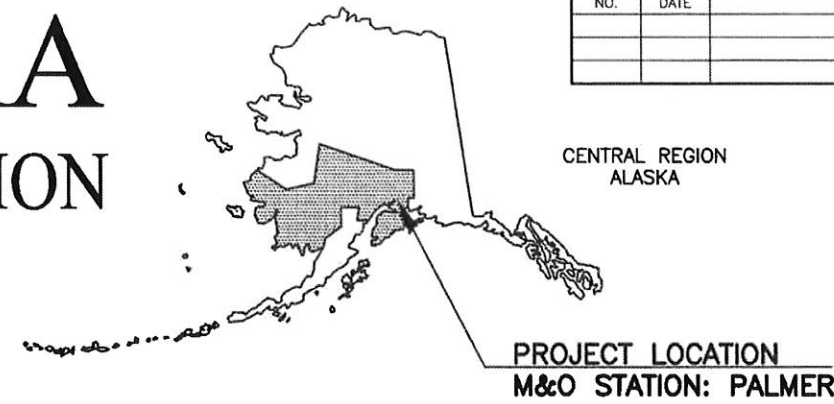
Administration's Recommendation:

Approve Action Memorandum No. 23-027.

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A15037/CFHWY00431 0A15038/CFHWY00432 0A15033/CFHWY00006	2021	A1	A13
CDS ROUTE			135000	MILEPOINT	33.95 TO 38.46		
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STATE OF ALASKA

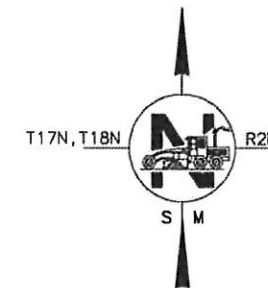
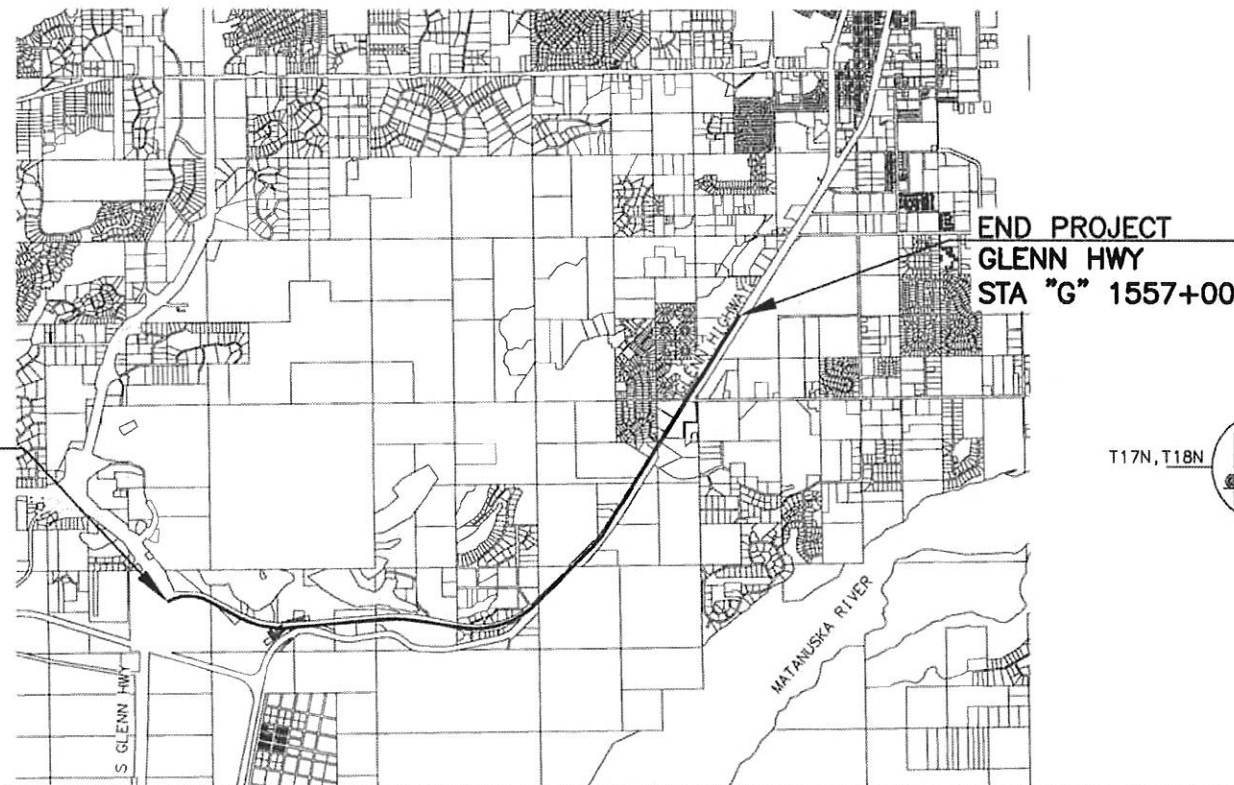
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES



PROPOSED HIGHWAY PROJECT
GLENN HWY: PARKS HWY TO S. INNER SPRINGER LP. (PHASE II)
PROJECT NO. 0A15037/CFHWY00431
GLENN HWY: PARKS TO S. INNER SPRINGER LP. PATHWAY (PHASE II)
PROJECT NO. 0A15038/CFHWY00432
COLLEEN STREET INTERSECTION AND FRONTAGE ROAD
PROJECT NO. 0A15033/CFHWY00006
 GRADING, DRAINAGE, PAVING, PATHWAYS, ILLUMINATION, SIGNALIZATION, SIGNING, AND STRIPING

PROJECT SUMMARY		
ROADWAY	WIDTH	LENGTH
GLENN HWY	50'-110'	4.5 MILES
E MATANUSKA SPUR RD	24'	0.3 MILES
E OUTER SPRINGER LP	24'-47'	0.2 MILES
E BRADLEY LAKE AVE	32'	0.2 MILES
E GRANDVIEW RD	32'	0.7 MILES
E JIMMYS DR	47'	0.1 MILES

DESIGN DESIGNATIONS			
	GLENN HWY PARKS TO JIMMYS	GLENN HWY JIMMYS TO S INNER SPRINGER	BRADLEY GRANDVIEW JIMMYS
FUNCTIONAL CLASS	INTERSTATE	INTERSTATE	COLLECTOR
AADT (2014)	15,600	19,500	2,000
AADT (2034)	36,000	28,800	3,300
DESIGN SPEED (V) (MPH)	60	60	35
DHV (2014)	1,900	1,900	200
DHV (2034)	4,300	2,900	330
T-PERCENT COMMERCIAL TRUCKS (%)	10%	10%	10%
D-DIRECTIONAL DISTRIBUTION (%)	45/55	45/55	50/50
ESALs	4,000,000	3,500,000	500,000



PLANS DEVELOPED BY: HDL ENGINEERING CONSULTANTS

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 4111 AVIATION AVENUE, ANCHORAGE, AK 99502
 (907)269-0590

APPROVED: _____
 REGIONAL PRECONSTRUCTION ENGINEER DATE _____

CONCUR: _____
 REGIONAL CONSTRUCTION ENGINEER DATE _____

CERTIFICATION SET
 NOVEMBER 2021

M:\pba\08-016 Glenn Highway 34-42 (DOT) 09 - PS&E\08-016 Glenn Highway 34-42 (DOT) 09 - PS&E\CAD_P&E DRAWINGS\08016_P2_A01.DWG
 DATE/TIME 11/17/2021 11:37 AM LAYOUT LAYOUT
 DESIGNED CAB CHECKED DRL DRAFTED CDB
 04/21/18 at 13:35 by uncrum

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A15037/CFHWY00431 0A15038/CFHWY00432 0A15033/CFHWY00006	2021	A2	A13

GENERAL NOTES:

- ALL CONSTRUCTION SHALL BE CONTAINED WITHIN THE RIGHT-OF-WAY, TEMPORARY CONSTRUCTION EASEMENTS, AND TEMPORARY CONSTRUCTION PERMITS. NO EXCESS MATERIAL SHALL BE DISPOSED OF WITHIN THE RIGHT-OF-WAY, UNLESS SPECIFICALLY CALLED FOR IN THE PLANS OR DIRECTED BY THE ENGINEER.
- ALL PAVEMENT CUTS SHALL BE MADE WITH A SAW OR ALTERNATE METHOD APPROVED BY THE ENGINEER.
- CLEARING LIMITS SHALL TYPICALLY BE 10 FEET BEYOND SLOPE CATCH POINTS OR 50 FEET FROM ROADWAY EDGE OF PAVEMENT, WHICHEVER IS GREATER. IN WETLAND AREAS, CLEARING LIMITS SHALL BE TO THE SLOPE CATCH POINTS. CLEARING FOR UTILITIES SHALL TYPICALLY BE THE OUTER 15' OF RIGHT-OF-WAY IN AREAS OF UTILITY RELOCATION, UNLESS OTHERWISE SHOWN.
- PLACE 4 INCHES OF TOPSOIL AND SEED FROM:
 - THE SLOPE CATCH TO THE BOTTOM OF AGGREGATE BASE COURSE
 - IN AREAS BETWEEN ROADWAYS AND PATHWAYS OUTSIDE THE AGGREGATE BASE COURSE LIMITS
 - AS DIRECTED BY THE ENGINEER.

OTHER AREAS WITHIN THE RIGHT-OF-WAY DISTURBED BY THE CONTRACTOR SHALL RECEIVE SEED ONLY.
- USE SEEDING, TYPE B IN ALL WETLAND AND RAIN GARDEN AREAS. USE SEEDING, TYPE A IN ALL OTHER AREAS.
- THE EXISTING INFORMATION SHOWN IN THE PLANS IS FROM SURVEY PERFORMED FROM 2008-2019. FIELD CONDITIONS MAY NOT BE ACCURATELY REPRESENTED AND/OR MAY HAVE CHANGED. ADJUST INSTALLATIONS AS DIRECTED BY THE ENGINEER.
- ADJUST ALL PAVEMENT PENETRATIONS TO FINAL GRADE PRIOR TO TOP LIFT OF PAVING.

IF ANY PAVEMENT PENETRATION REQUIRES GRADE ADJUSTMENT AFTER FINAL LIFT PAVING, AS DETERMINED BY THE ENGINEER, SAW CUT A NEAT LINE ALONG THE PAVEMENT TO BE REMOVED. USE AN INFRARED HEATER TO HEAT THE EXISTING PAVEMENT; EQUIPMENT AND MAXIMUM TEMPERATURE SHALL BE APPROVED BY THE ENGINEER. REPLACE THE REMOVED ASPHALT WITH NEW HOT MIX ASPHALT AND THOROUGHLY COMPACT. SEAL JOINTS AT LEAST 12 INCHES WIDE USING ASPHALT SYSTEMS GSB-88 OR APPROVED EQUAL, WHILE THE HOT MIX ASPHALT IS CLEAN, FREE OF MOISTURE AND PRIOR TO STRIPING.

THERE SHALL BE NO PAYMENT FOR ADDITIONAL WORK CAUSED BY FAILURE TO ADJUST PAVEMENT PENETRATIONS TO FINAL GRADE.
- CONSTRUCT CURB RAMPS TO AVOID IMPACTING SIGNAL POLE FOUNDATIONS. DO NOT COVER SIGNAL POLE FOUNDATION BOLTS AND BASE PLATES WITH TOPSOIL.
- ALL GUARDRAIL TO BE INSTALLED AT 31 INCH HEIGHT PER STANDARD PLAN G-05. ALL GUARDRAIL SHALL HAVE REFLECTORS AND FLEXIBLE DELINEATORS PER STANDARD PLAN G-00. ALL GUARDRAIL POST INSTALLATIONS SHALL BE CASE 1 PER STANDARD PLAN G-10.
- FOR PARALLEL GUARDRAIL TERMINALS, USE AN END OFFSET OF 2 FEET.
- ALL TYPE "A" INLET BOXES SHALL HAVE MINIMUM 18" SUMPS.
- SUPER ELEVATION FOR HORIZONTAL CURVES SHALL BE ROTATED ABOUT THE POINT OF ROTATION AS SHOWN ON SHEET E1, AND TYPICAL SECTIONS.
- ALL WIRE CROSSING ELEVATIONS SHOWN ON PROFILES ARE THE APPROXIMATE ELEVATIONS WHERE THE LOWEST WIRE CROSSES THE PROPOSED CENTERLINE OF ROADWAY.

ALIGNMENT ABBREVIATIONS

- "BL" BRADLEY LAKE AVE
- "G" GLENN HIGHWAY
- "GV" GRANDVIEW RD
- "JD" JIMMYS DR
- "M" MAX DRIVE
- "MS" MATANUSKA LAKE RD/EAST MATANUSKA SPUR
- "OS" RUBYMAE DR/OUTER SPRINGER LOOP
- "P1" PATHWAY 1
- "RR" RAILROAD SIDING
- "S" SHERROD DR

PROJECT SPECIFIC LEGEND

	EXISTING	PROPOSED
GRADE TO DRAIN		
SLOPE GRADE		
FIBER OPTIC VAULT		
ABANDONED TELEPHONE		
STORM DRAIN MANHOLE CATCH BASIN		
INLET TYPE C, D		
NEWSPAPER BOX		
CLUSTER MAILBOX		
MONITORING WELL		
ROAD WEATHER INFORMATION SYSTEM		
WATER SPIGOT		
RAILROAD CROSSING SIGNAL		
ALASKA RAILROAD ROW		
RAIN GARDEN		
INFILTRATION BASIN		
DITCH BLOCK		
DITCH LINING		
CRASH CUSHION		
ADDITIONAL CLEARING LIMIT		
TURF REINFORCEMENT MAT		
ATR		
DELINEATOR		
PEDESTRIAN PATHWAY DIVERTER		
EASEMENT		
HIGH TENSION CABLE GUARDRAIL		

INDEX

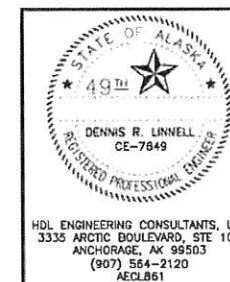
SHEET NO.	DESCRIPTION
A1	TITLE SHEET
A2	INDEX, GENERAL NOTES, AND ABBREVIATIONS
A3	LEGEND SHEET
A4-A5	PROJECT LAYOUT
A6-A13	SURVEY CONTROL
B1-B11	TYPICAL SECTIONS
C1-C4	ESTIMATE OF QUANTITIES
D1-D12	SUMMARY SHEETS
E1-E23	DETAIL SHEETS
E24-E35	PAVEMENT AND MEDIAN LAYOUT SHEETS
F1-F18	PLAN AND PROFILE SHEETS - GLENN HIGHWAY
F19-F22	PLAN AND PROFILE SHEETS - GRANDVIEW
F23-F28	PLAN AND PROFILE SHEETS - SIDESTREETS
F29-F32	PLAN AND PROFILE SHEETS - PATHWAYS
F33	ADDITIONAL CLEARING
F34-F50	APPROACH PROFILES AND LAYOUTS
G1-G8	GRADING PLANS
H1-H36	ILLUMINATION PLANS
HA1-HA5	SIGNAL PLANS - E JIMMYS DR
HB1-HB5	SIGNAL PLANS - S INNER SPRINGER LP
HS1-HS30	SIGNING AND STRIPING SHEETS
J1-J11	TRAFFIC CONTROL SHEETS
K1-K10	AUTOMATED TRAFFIC RECORDERS (ATR)
R1-R67	RIGHT-OF-WAY MAPS
S1-S6	RAILROAD SIDING
UW1-UW13	UTILITY - WATER & SEWER

THE FOLLOWING CENTRAL REGION STANDARD DETAILS APPLY TO THIS PROJECT:
CR-T-01.20, CR-T-04.10

THE FOLLOWING STANDARD PLANS APPLY TO THIS PROJECT:
C-04.12, C-05.20
D-01.02, D-04.22, D-06.10, D-11.01, D-22.01, D-26.04, D-30.11, D-44.12, D-45.12
F-01.04
G-00.05, G-05.11S, G-05.11W, G-10.20, G-11.01, G-20.12
I-21.12, I-22.11
L-30.11
M-20.15, M-23.13
S-00.12, S-05.02, S-23.00, S-30.05, S-31.02, S-32.02
T-05.10, T-20.04, T-21.04, T-22.04, T-23.01, T-25.10, T-30.12
T-52.22, T-53.01, T-55.11, T-56.11, T-57.11

SPECIFICATION:
CONSTRUCT THE IMPROVEMENTS COVERED BY THESE PLANS IN ACCORDANCE WITH THE ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES 2020 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND THE PROJECT SPECIAL PROVISIONS.

CERTIFICATION SET
NOVEMBER 2021



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
**GLENN HWY: PARKS HWY TO S.
INNER SPRINGER LP. (PHASE II)**

**INDEX, GENERAL NOTES, AND
ABBREVIATIONS**

HDL ENGINEERING CONSULTANTS, LLC
3335 ARCTIC BOULEVARD, STE 100
ANCHORAGE, AK 99503
(907) 564-2120
AECL861

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A15037/CFHWY00431 0A15038/CFHWY00432 0A15033/CFHWY00006	2021	A3	A13

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	EXISTING	PROPOSED
EDGE OF PAVEMENT		
LIMIT OF CUT SLOPE & FILL SLOPE		
GRAVEL EDGE		
SIDEWALK AND PATH/TRAIL		
CONCRETE CURB & GUTTER		
CONCRETE CURB CUT		
PARALLEL CURB RAMP		
PERPENDICULAR CURB RAMP		
UNIDIRECTIONAL CURB RAMP & MID-BLOCK CURB RAMP		
DETECTABLE WARNING TILE		
BRIDGE		
TUNNEL		
GUARDRAIL		
END & PARALLEL END SECTIONS		
ROADWAY OBLITERATION		
FENCE		
STONE FENCE		
NOISE BARRIER		
RETAINING WALL		
HEADWALL & WINGWALL		
BOTTOM OF DITCH		
SPECIAL DITCH		
FLAT BOTTOM DITCH		
BERM		
RIPRAP		
BOULDER OR BOULDERS		
PRIVATE SIGN, MAILBOX		
POST, BOLLARD		

	EXISTING	PROPOSED
STORM DRAIN		
STORM DRAIN MANHOLE, CLEANOUT		
CURB INLET CATCH BASIN		
FIELD INLET CATCH BASIN		
PIPE CULVERT WITH END SECTION		
SANITARY SEWER		
SANITARY SEWER MANHOLE, CLEANOUT		
SEPTIC VENT, SEWER SERVICE CONNECTION		
WATER		
FIRE HYDRANT, VALVE OR RISER		
WELL, WATER SERVICE CONNECTION		
NATURAL GAS		
OIL OR GASOLINE PIPELINE		
TANKS (ABOVE GROUND, UNDERGROUND)		
ELECTRIC		
UTILITY POLE, POLE WITH LUMINAIRE		
GUY POLE, GUY WIRE ANCHOR		
TRANSMISSION TOWER (WOOD, STEEL)		
ELECTRIC PEDESTAL, TRANSFORMER		
ELECTRIC MANHOLE, METER		
ELECTRIC OUTLET, LANDSCAPE LIGHT		
TELEPHONE		
TELEPHONE MANHOLE, PEDESTAL		
FIBER OPTIC		
FIBER OPTIC MANHOLE		
CABLE TV		
CABLE TV PEDESTAL, SATELLITE DISH		
UNDERGROUND DUCT, UTILIDOR (ELECTRIC, TELEPHONE, FIBER OPTIC)		
VENT		

	EXISTING	PROPOSED
LOAD CENTER		
TRAFFIC & BEACON CONTROLLER		
TYPE 1A, II, III, IV JUNCTION BOX		
FIBER OPTIC VAULT		
ELECTROLIER		
HIGHTOWER		
SIGNAL POLE WITH MASTARM		
PEDESTRIAN PUSH BUTTON & SIGNAL		
VEHICULAR SIGNAL		
VEHICULAR SIGNAL LEFT & RIGHT		
OPTICAL, CAMERA, RADAR, AND GPS DETECTOR		
LOOP DETECTOR		
COMMUNICATION ANTENNA		
MASTARM BEACON		
RURAL & SCHOOL ZONE BEACON		
LOOP DETECTOR CONDUIT		
SIGNAL CONDUIT		
LIGHTING CONDUIT		
SIGNAL & LIGHTING CONDUIT		
CONDUIT BORING		
CONDUIT SIZE IN INCHES		
INTERCONNECT		
SIGN POST		

	PROPOSED
PROJECT CENTERLINE	
8" & 4" WHITE SOLID STRIPE	
4" WHITE SKIP STRIPE	
8" WHITE LANE GUIDE SKIP	
4" YELLOW SKIP STRIPE	
STRIPING CHANGE STATION INTERVAL	
2' CROSSWALK OR STOPBAR	
LADDER CROSSWALK LAYOUT	
TYPICAL PAINTED MEDIAN	

	RECOVERED	SET THIS PROJECT
FEDERAL GOV'T SURVEY MONUMENT		
GOV'T CONTROL STATION		
PRIMARY MONUMENT (BRASS/AL CAP)		
MISC SECONDARY CORNER		
PRIMARY CENTERLINE MONUMENT		
SECONDARY CENTERLINE MONUMENT		
RANDOM CONTROL MONUMENT		
PRIMARY GPS CONTROL POINT		
HORIZONTAL CONTROL POINT		
SECONDARY CONTROL POINT		
VERTICAL BENCHMARK		
TEMPORARY BENCHMARK		
TOWNSHIP AND RANGE LINES		
SECTION LINE		
1/4 SECTION LINE		
1/16 SECTION LINE		
CORPORATE or CITY LIMITS		
EXISTING RIGHT-OF-WAY		
RIGHT-OF-WAY OR EASEMENT REQUIRED		
PROJECT RIGHT-OF-WAY LINE		
EXISTING RIGHT-OF-WAY EASEMENT		
EXISTING PROPERTY LINE		
CONTROLLED ACCESS LINE		
EXISTING UTILITY EASEMENT		
EXISTING CENTERLINE		
RAILROAD		
TEMPORARY CONSTRUCTION EASEMENT		
TEMPORARY CONSTRUCTION PERMIT		

	EXISTING	PROPOSED
LAKE OR POND, WETLANDS		
TREE (CONIFER/DECIDUOUS)		
TREELINE (EDGE OF VEGETATION)		
PLANTER		
BUILDING OR FOUNDATION		

	EXISTING	PROPOSED
CONTOUR, MAJOR OR MINOR		
DRAINAGE FLOW		
CREEK (CENTERLINE)		
RIVER (EDGE OF WATER)		

CERTIFICATION SET
 NOVEMBER 2021

DENNIS R. LINNELL
CE-7849

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

**GLENN HWY: PARKS HWY TO S.
INNER SPRINGER LP. (PHASE II)**

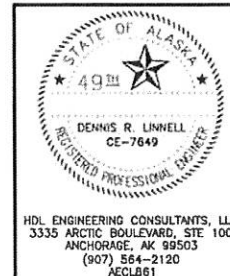
LEGEND

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A15037/CFHWY00431 0A15038/CFHWY00432 0A15033/CFHWY00006	2021	A4	A13

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CERTIFICATION SET
NOVEMBER 2021



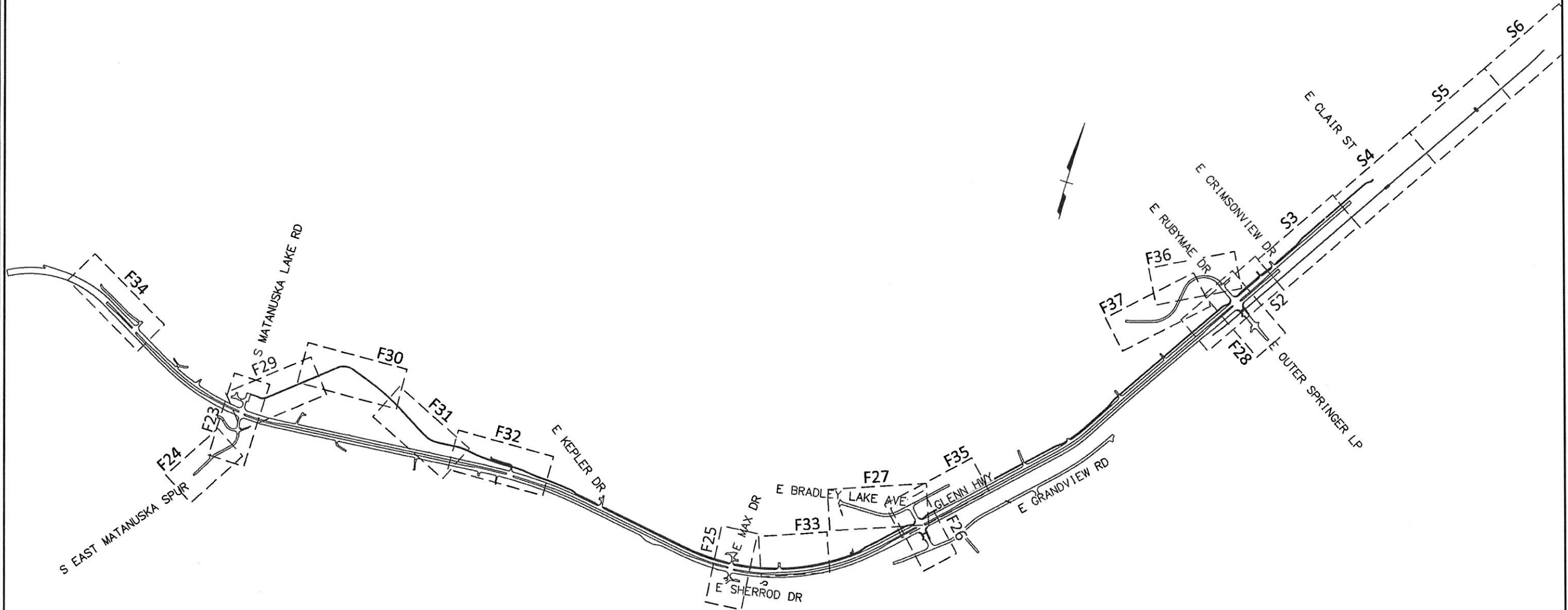
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
**GLENN HWY: PARKS HWY TO S.
INNER SPRINGER LP. (PHASE II)**

PROJECT LAYOUT
GLENN HIGHWAY AND GRANDVIEW

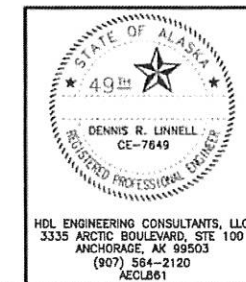
HDL ENGINEERING CONSULTANTS, LLC
3335 ARCTIC BOULEVARD, STE 100
ANCHORAGE, AK 99503
(907) 564-2120
AECLB61

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	DA15037/CFHWY00431 DA15038/CFHWY00432 DA15033/CFHWY00006	2021	A5	A13

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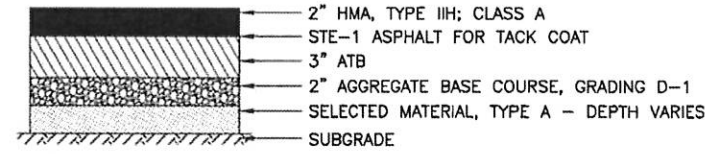
CERTIFICATION SET
NOVEMBER 2021



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
**GLENN HWY: PARKS HWY TO S.
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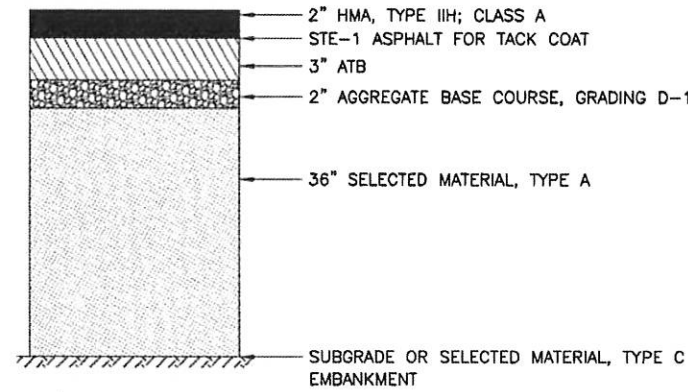
**PROJECT LAYOUT
SIDESTREETS, RAILROAD AND
PATHWAYS**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A15037/CFHWY00431 0A15038/CFHWY00432 0A15033/CFHWY00006	2021	B1	B11



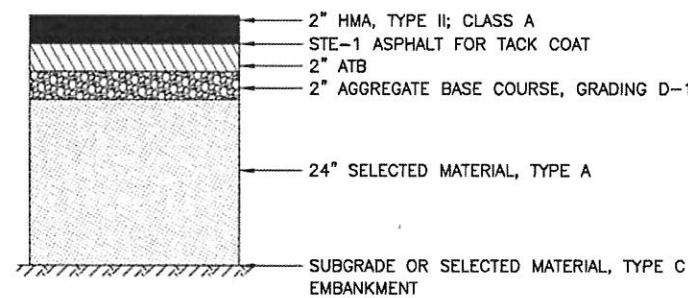
PAVEMENT SECTION A

NTS



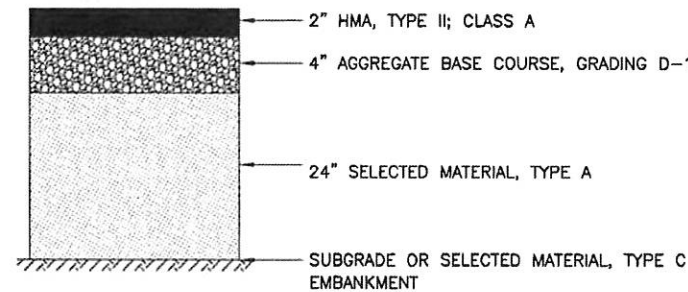
PAVEMENT SECTION B

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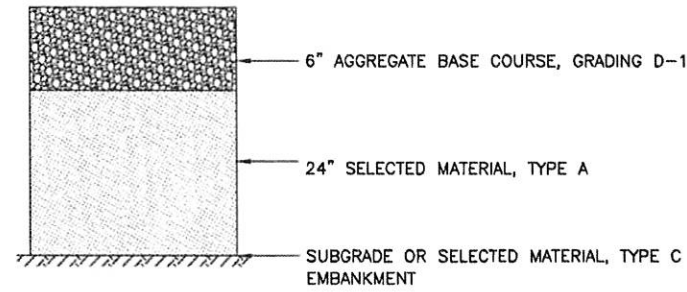
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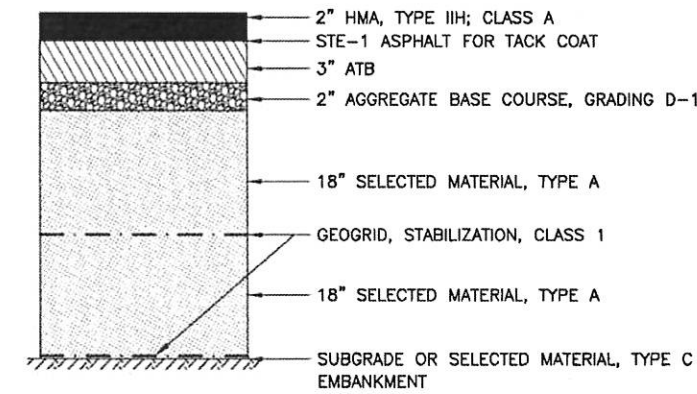
PAVEMENT SECTION D

NTS



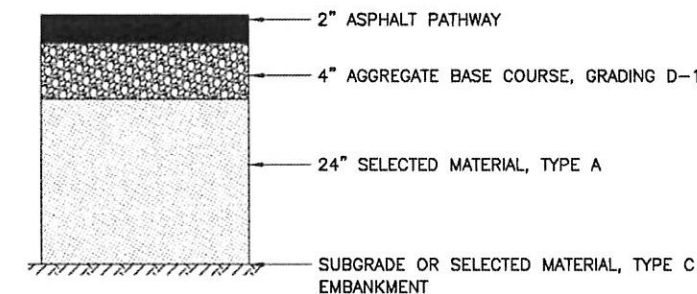
PAVEMENT SECTION E

NTS



PAVEMENT SECTION F

NTS



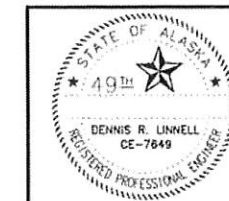
PATHWAY SECTION

NTS

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CERTIFICATION SET
NOVEMBER 2021



HDL ENGINEERING CONSULTANTS, LLC
3335 ARCTIC BOULEVARD, STE 100
ANCHORAGE, AK 99503
(907) 564-2120
AECL061

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
**GLENN HWY: PARKS HWY TO S.
INNER SPRINGER LP. (PHASE II)**

TYPICAL SECTIONS

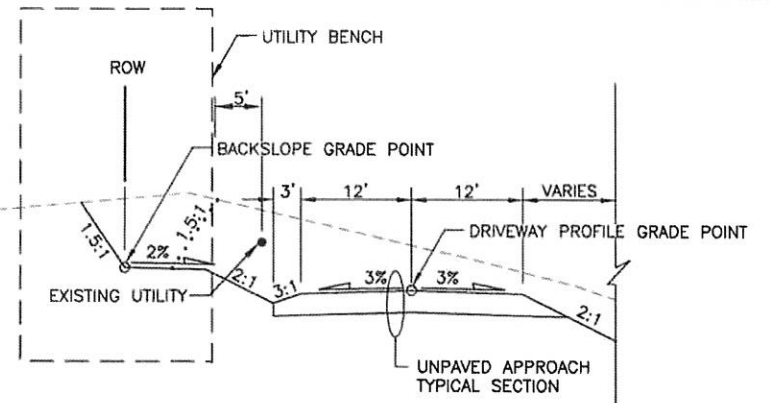
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A15037/CFHWY00431 0A15038/CFHWY00432 0A15033/CFHWY00006	2021	B2	B11

TABLE OF SLOPE EXCEPTIONS

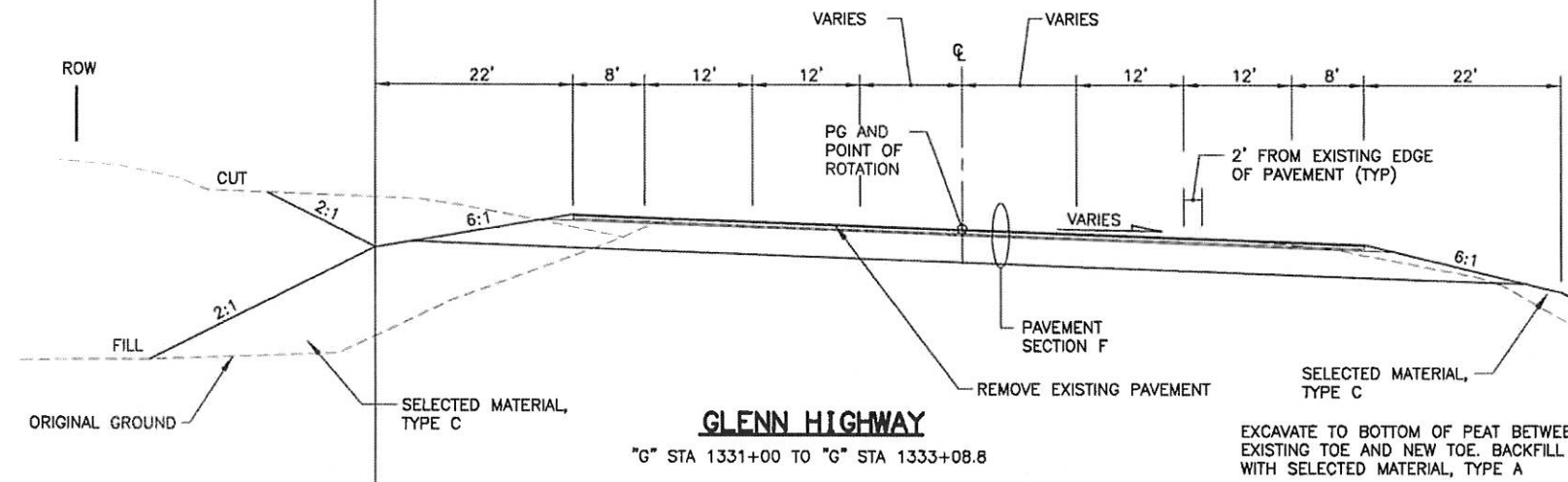
STATION TO STATION	OFFSET	FORE/BACK	SLOPE	REMARKS
"G" 1324+50 TO "G" 1330+50	LT	FORE	2:1	-
"G" 1362+00 TO "G" 1365+00	RT	FORE	2:1	-
"G" 1371+00 TO "G" 1373+00	LT	FORE	2:1	-
"G" 1373+00 TO "G" 1374+50	LT	FORE	2:1 TO 1.1:1*	CATCH AT OHW
"G" 1374+50 TO "G" 1377+00	LT	FORE	2:1	-
"G" 1403+50 TO "G" 1404+46	RT	FORE	2:1	-
"G" 1404+46 TO "G" 1408+00	RT	FORE	2:1 TO 1.3:1*	CATCH AT OHW
"G" 1416+00 TO "G" 1417+50	RT	FORE	2:1 TO 1.7:1*	CATCH AT OHW
"G" 1417+50 TO "G" 1421+50	RT	FORE	2:1	-
"GV" 8+50 TO "GV" 10+50	RT	FORE	1.8:1 TO 1.9:1	CATCH WITHIN ROW

* REINFORCE SLOPE, SEE SHEET B10

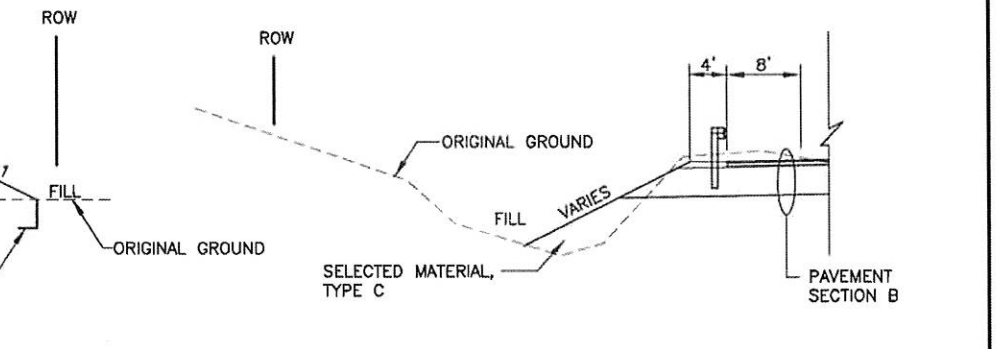
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GLENN HIGHWAY
"G" STA 1332+00 TO "G" STA 1333+08.8

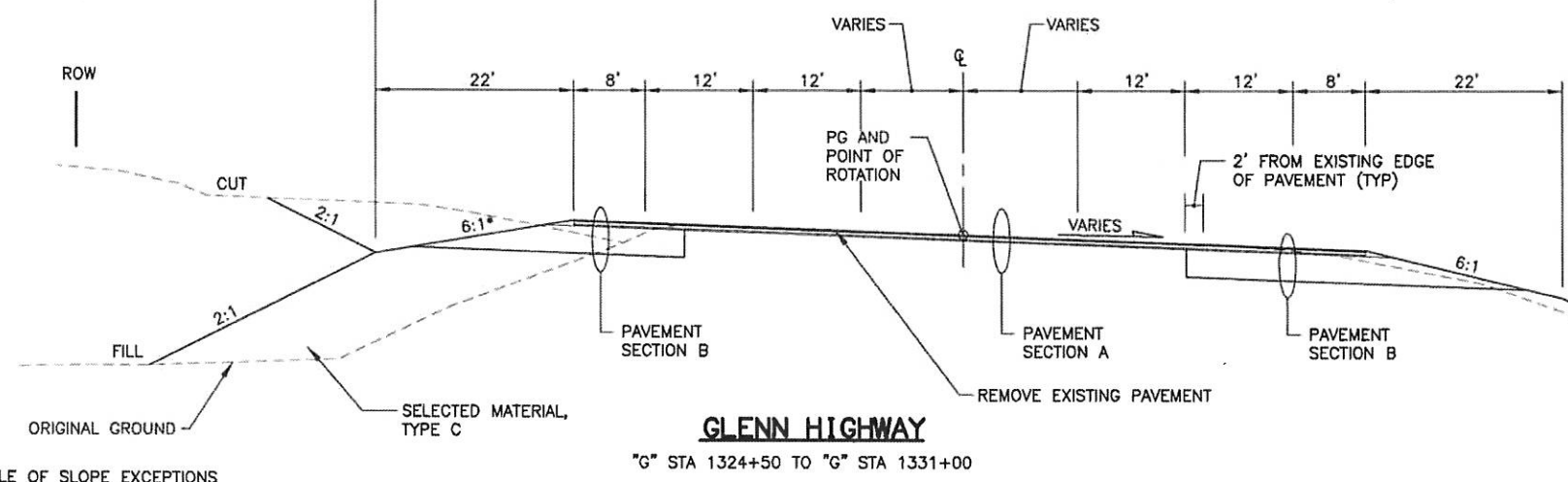


GLENN HIGHWAY
"G" STA 1331+00 TO "G" STA 1333+08.8



GUARDRAIL WIDEN LT

"G" STA 1324+50 TO "G" STA 1333+00
"G" STA 1370+50 TO "G" STA 1381+12.5

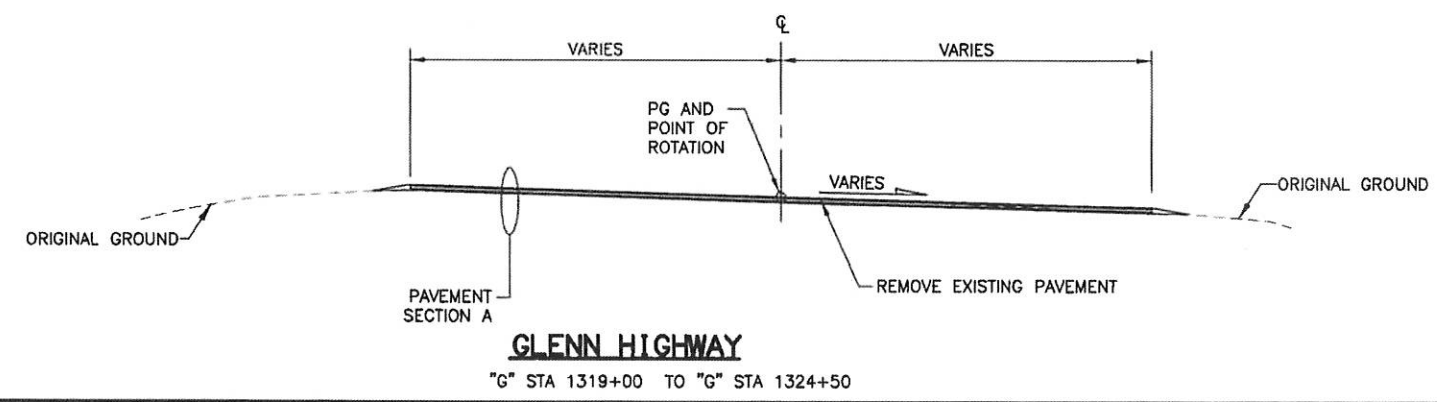


GLENN HIGHWAY
"G" STA 1324+50 TO "G" STA 1331+00

GUARDRAIL WIDEN RT

"G" STA 1358+78 TO "G" STA 1366+00
"G" STA 1399+35 TO "G" STA 1422+00

* SEE TABLE OF SLOPE EXCEPTIONS



GLENN HIGHWAY
"G" STA 1319+00 TO "G" STA 1324+50

NOTE:

1. SEE GUARDRAIL WIDENING TYPICAL.

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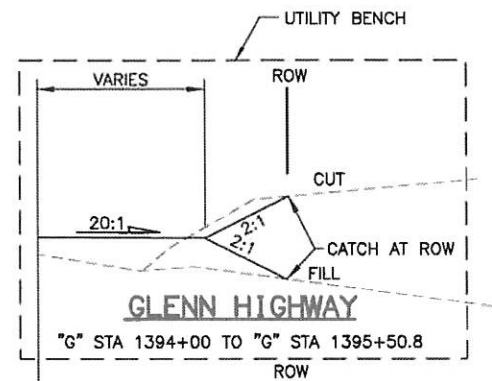
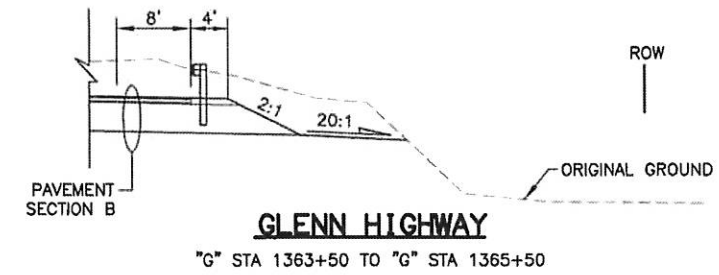
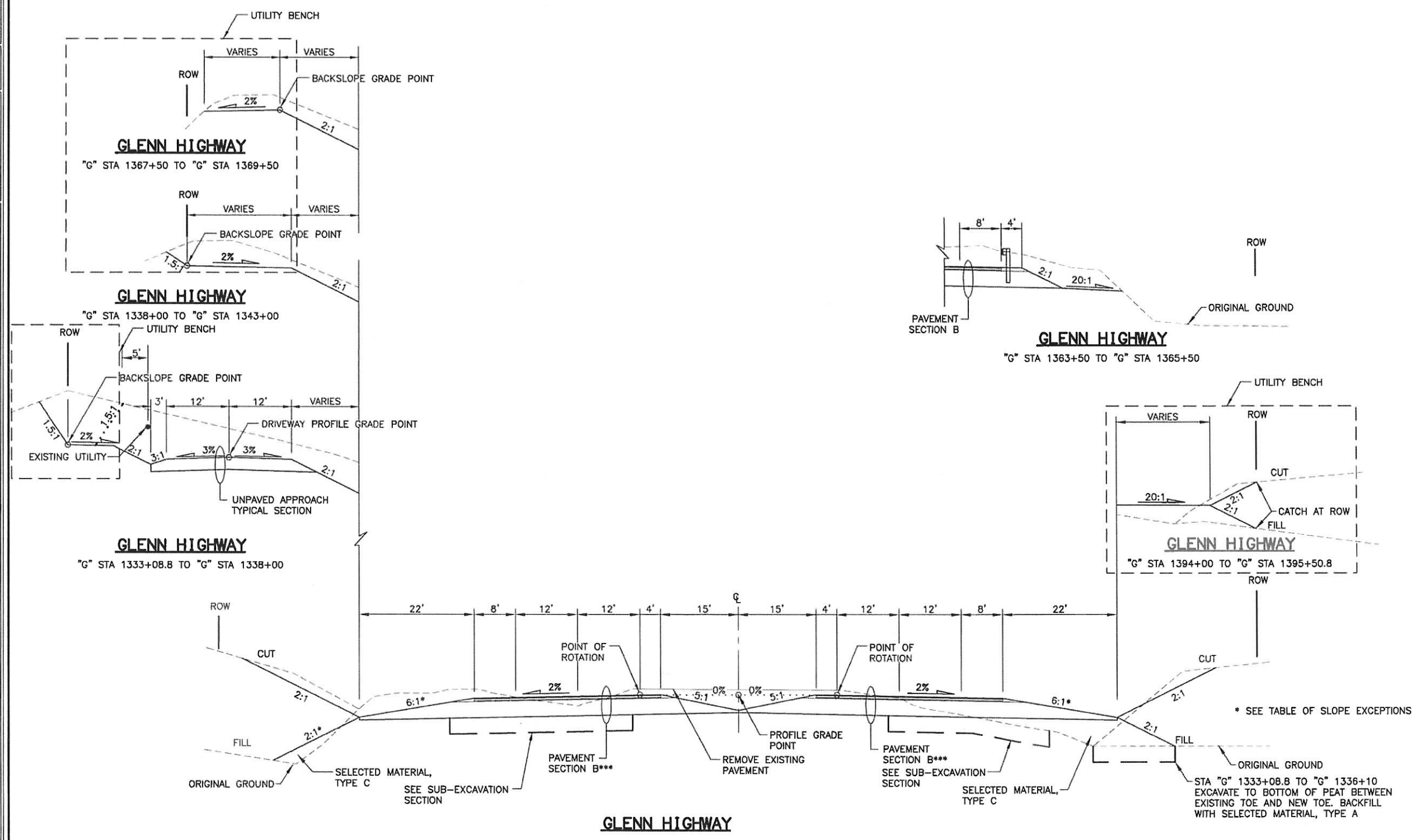
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

**GLENN HWY: PARKS HWY TO S.
INNER SPRINGER LP. (PHASE II)**

TYPICAL SECTIONS

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A15037/CFHWY00431 0A15038/CFHWY00432 0A15033/CFHWY00006	2021	B3	B11

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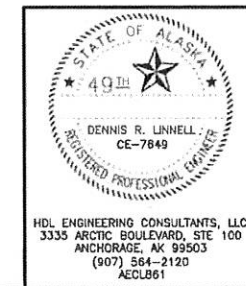
GLENN HIGHWAY

G STA 1333+08.8 TO *G* STA 1395+0.8**
 ** *G* STA 1375+00 TO *G* STA 1379+00 LT - USE WIDENING OVER SOFT FOUNDATION SOIL, SEE SHEET B11
 *** *G* STA 1333+08.8 TO *G* STA 1336+50 USE PAVEMENT SECTION F

* SEE TABLE OF SLOPE EXCEPTIONS

STA "G" 1333+08.8 TO "G" 1336+10
EXCAVATE TO BOTTOM OF PEAT BETWEEN
EXISTING TOE AND NEW TOE. BACKFILL
WITH SELECTED MATERIAL, TYPE A

CERTIFICATION SET
NOVEMBER 2021



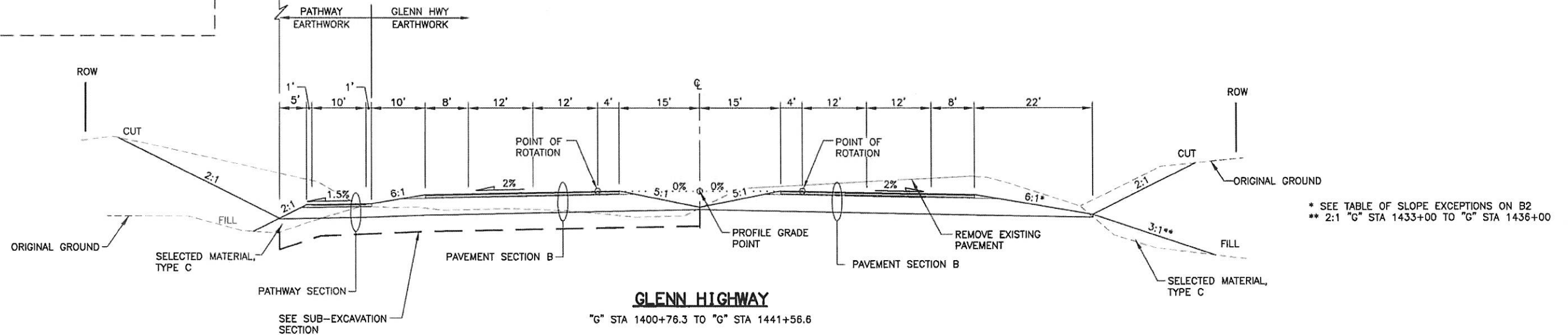
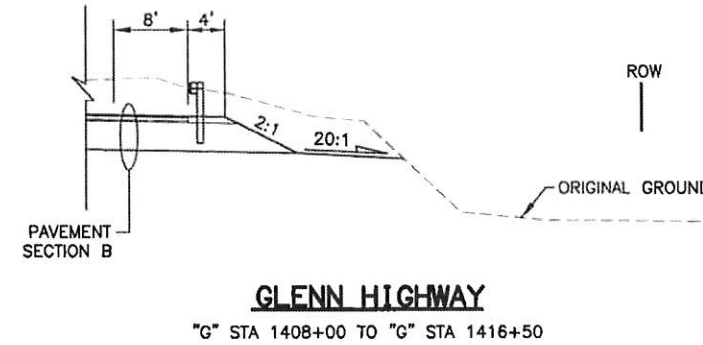
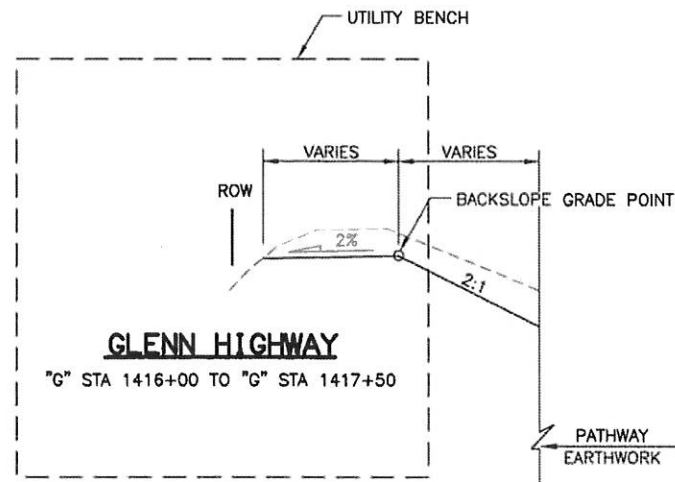
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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**GLENN HWY: PARKS HWY TO S.
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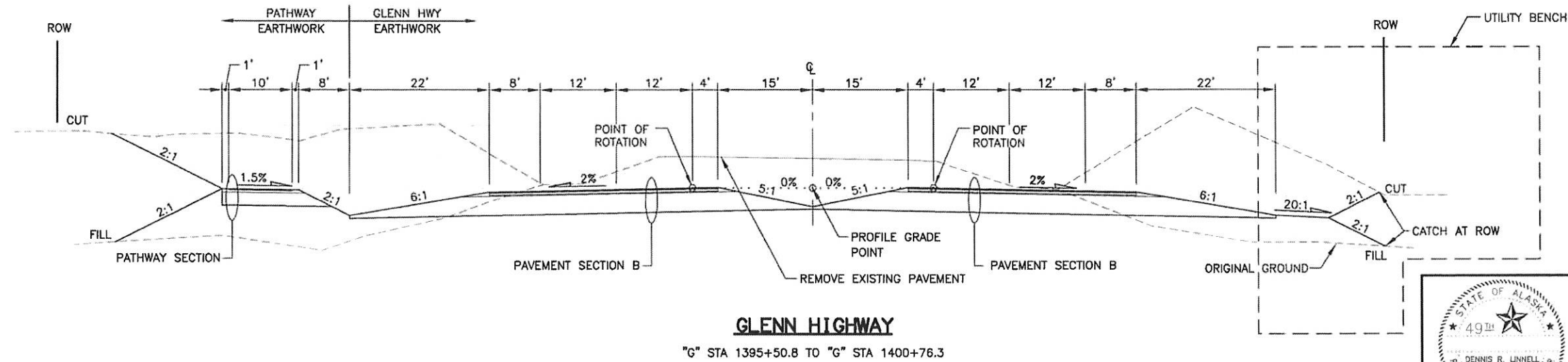
TYPICAL SECTIONS

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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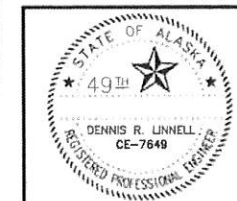


* SEE TABLE OF SLOPE EXCEPTIONS ON B2
 ** 2:1 "G" STA 1433+00 TO "G" STA 1436+00



CERTIFICATION SET
NOVEMBER 2021

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
**GLENN HWY: PARKS HWY TO S.
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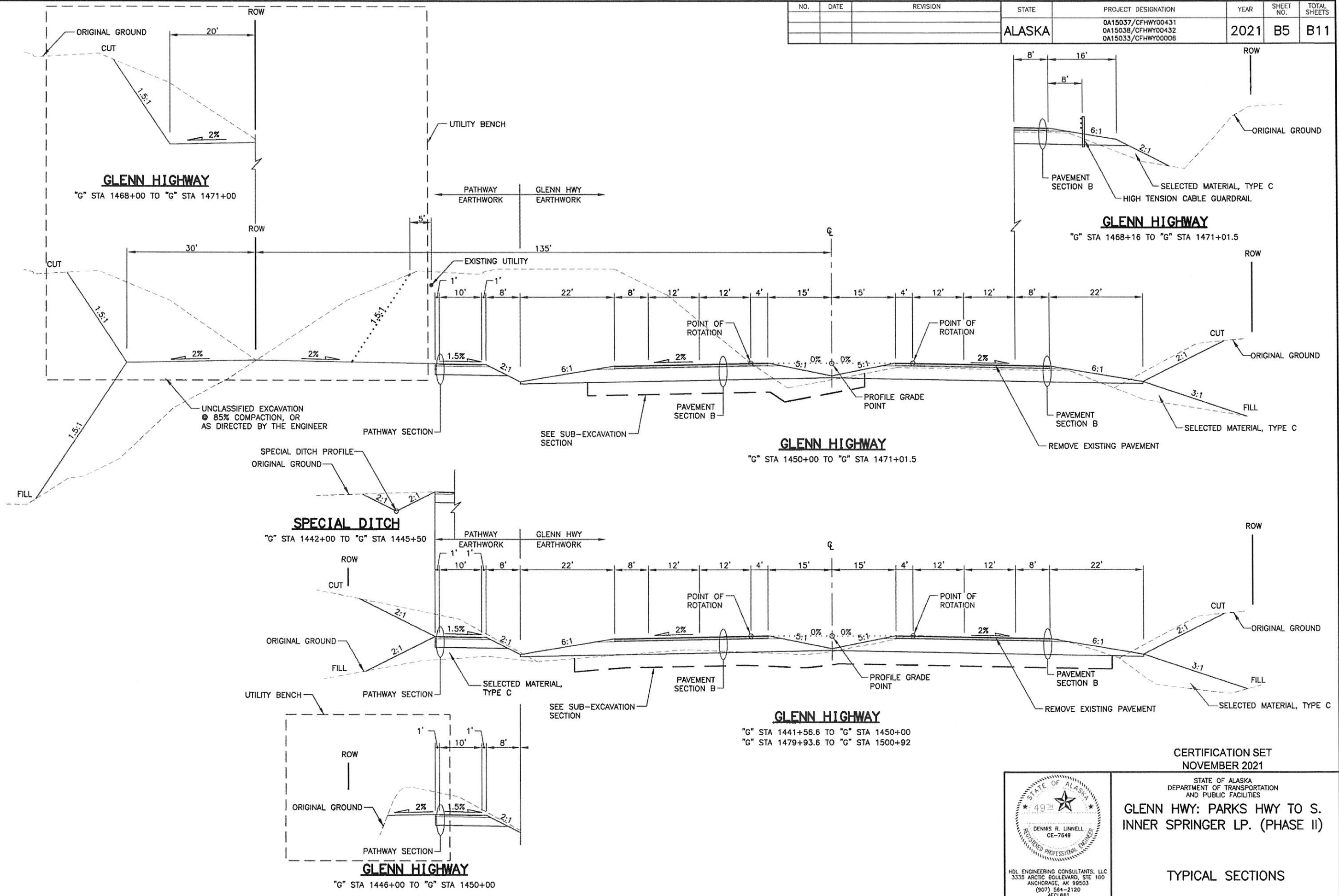


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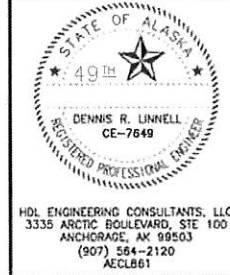
TYPICAL SECTIONS

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A15037/CFHWY00431 0A15038/CFHWY00432 0A15033/CFHWY00006	2021	B5	B11

DRAWING LOCATION: H:\JOBS\08-016 GLENN HIGHWAY 34-42 (DOT)\09 - PS&E\CAD_P&E\DRAWINGS\08016_P2_B01-B11.DWG
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CERTIFICATION SET
NOVEMBER 2021

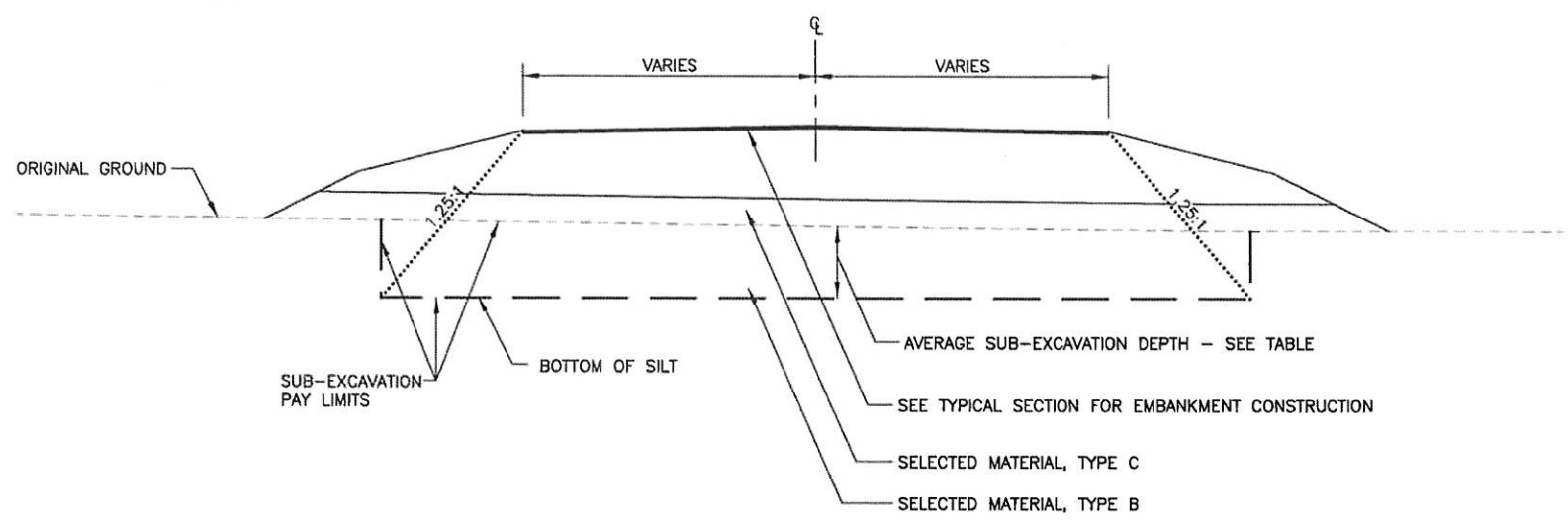


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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**GLENN HWY: PARKS HWY TO S.
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TYPICAL SECTIONS

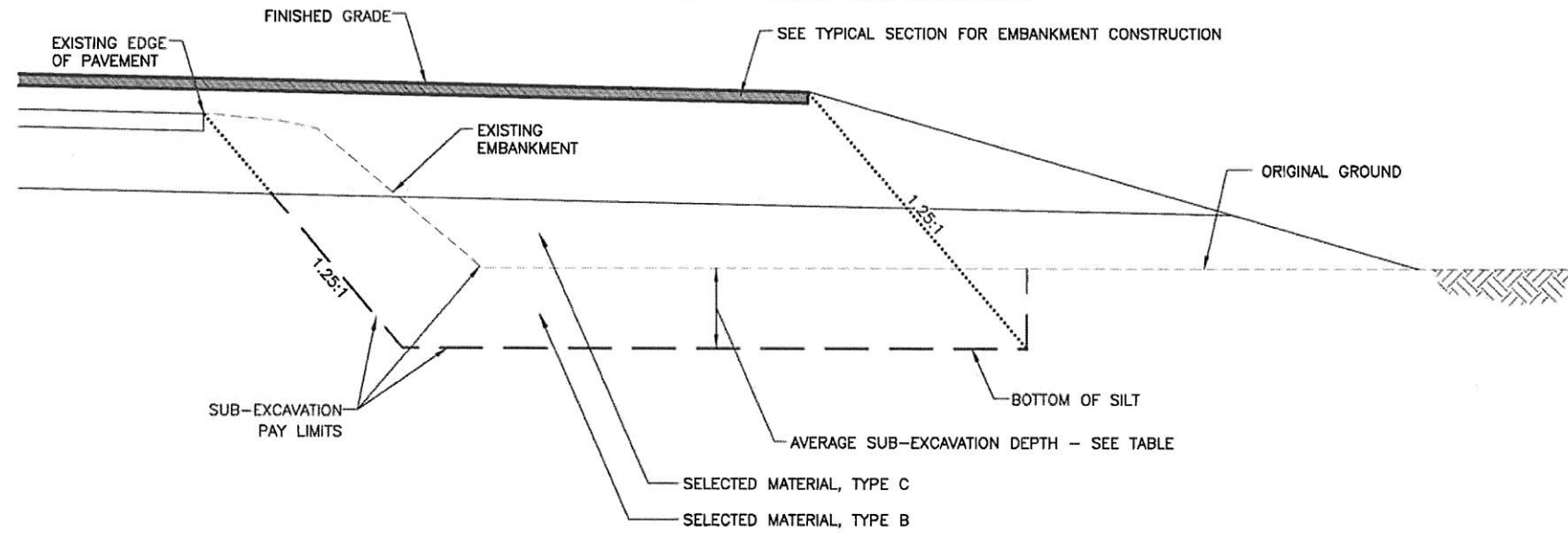
HDL ENGINEERING CONSULTANTS, LLC
3335 ARCTIC BOULEVARD, STE 100
ANCHORAGE, AK 99503
(907) 554-2120
AECL861

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A15037/CFHWY00431 0A15038/CFHWY00432 0A15033/CFHWY00006	2021	B10	B11



SUB-EXCAVATION - FULL WIDTH

STATION TO STATION	AVG. DEPTH	REMARKS
"G" 1442+00 TO "G" 1448+00	5.5' - 7.0'	REMOVE SILT LAYER
"GV" 2+70 TO "GV" 4+25	5.5' - 7.5'	REMOVE SILT LAYER
"GV" 4+25 TO "GV" 6+75	2.0'	REMOVE SILT LAYER
"GV" 17+75 TO "GV" 19+75	2.5'	REMOVE SILT LAYER
"GV" 36+50 TO "GV" 38+22	2.0'	REMOVE SILT LAYER
"JD" 10+55 TO "JD" 11+05	6.5'	REMOVE SILT LAYER
"JD" 11+20 TO "JD" 12+00	2.0'	REMOVE SILT LAYER
"BL" 10+24 TO "BL" 15+00	2.5'	REMOVE SILT LAYER
"BL" 15+00 TO "BL" 17+00	2.5' - 5.5'	REMOVE SILT LAYER
"OS" 6+93 TO "OS" 9+45	2.0'	REMOVE SILT LAYER
"OS" 10+55 TO "OS" 11+05	6.5'	REMOVE SILT LAYER

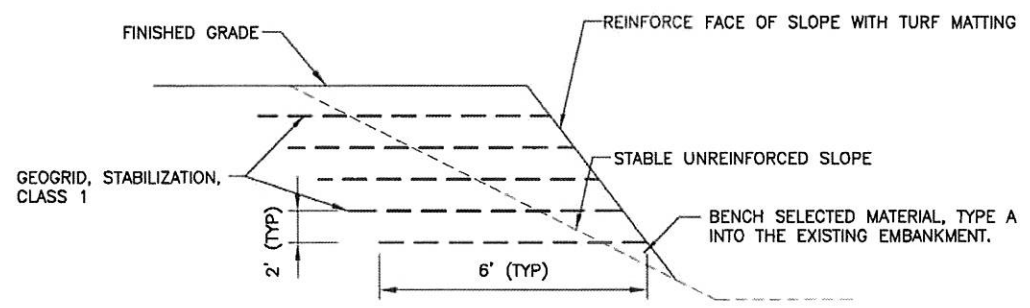


SUB-EXCAVATION - EMBANKMENT WIDENING

STATION TO STATION	OFFSET	AVG. DEPTH	REMARKS
"G" 1338+25 TO "G" 1346+50	LT	1.3'	REMOVE SILT LAYER FROM EXISTING DITCH
"G" 1339+00 TO "G" 1344+75	RT	3.5'	REMOVE SILT LAYER
"G" 1347+00 TO "G" 1348+75	LT	5.5'	REMOVE SILT LAYER
"G" 1349+25 TO "G" 1352+00	LT	2.5'	REMOVE SILT LAYER
"G" 1352+50 TO "G" 1355+50	LT	1.0'	REMOVE SILT LAYER
"G" 1384+50 TO "G" 1386+00	RT	1.5'	REMOVE SILT LAYER
"G" 1390+75 TO "G" 1393+50	RT	1.5'	REMOVE SILT LAYER
"G" 1437+00 TO "G" 1440+00	LT	2.0'	REMOVE SILT LAYER FROM EXISTING DITCH
"G" 1455+00 TO "G" 1459+00	LT	2.5'	REMOVE SILT LAYER FROM EXISTING DITCH
"G" 1472+50 TO "G" 1474+50	LT	5.0' - 7.0'	REMOVE CLAY LAYER
"G" 1474+50 TO "G" 1477+50	LT	3.0'	REMOVE SILT LAYER
"G" 1485+00 TO "G" 1489+00	LT	2.5'	REMOVE SILT LAYER
"G" 1493+75 TO "G" 1521+00	LT	2.3'	REMOVE SILT LAYER
"OS" 11+20 TO "OS" 12+25	LT/RT	2.0'	REMOVE SILT LAYER BENEATH WIDENED SECTIONS
"OS" 14+50 TO "OS" 16+32	LT/RT	2.0'	REMOVE SILT LAYER BENEATH WIDENED SECTIONS

SUB-EXCAVATION NOTES:

1. USE A LONGITUDINAL 10:1 SLOPE TO TRANSITION INTO, OUT OF, AND BETWEEN SUB-EXCAVATION ZONES, OR AS DIRECTED BY THE ENGINEER.



GENERAL REINFORCED SLOPE

- "G" STA 1373+00 RT TO "G" STA 1374+50 RT
- "G" STA 1404+46 RT TO "G" STA 1408+00 RT
- "G" STA 1416+00 RT TO "G" STA 1417+50 RT

CERTIFICATION SET
NOVEMBER 2021



HDL ENGINEERING CONSULTANTS, LLC
3335 ARCTIC BOULEVARD, STE 100
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(907) 561-2120
AECLB61

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

GLENN HWY: PARKS HWY TO S.
INNER SPRINGER LP. (PHASE II)

TYPICAL SECTIONS

DRAWING LOCATION: H:\JOBS\08-016 GLENN HIGHWAY 34-42 (DOT)\09 - PS&E\CAD_P&E\DRAWINGS\08016_P2_B01-B11.DWG
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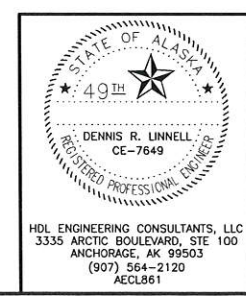
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			ALASKA	0A15037/CFHWY00431 0A15038/CFHWY00432 0A15033/CFHWY00006	2021	C1	C4

ESTIMATE OF QUANTITIES

ITEM NO	ITEM DESCRIPTION	PAY UNIT	GLENN HWY	PATHWAY	COLLEEN	TOTALS
201.0001.0000	CLEARING	ACRE	26	13	7	46
201.0002.0000	GRUBBING	ACRE	63	17	14	94
202.0001.0000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	ALL REQ'D	ALL REQ'D	ALL REQ'D	ALL REQ'D
202.0002.0000	REMOVAL OF PAVEMENT	SY	105,220	-	780	106,000
202.0004.0000	REMOVAL OF CULVERT PIPE	LF	1,910	-	40	1,950
202.0006.0000	REMOVAL OF MANHOLE, SANITARY SEWER	EA	3	-	-	3
202.0010.0000	SINGLE MAIL BOX INSTALLATION	EA	2	-	-	2
202.0012.0000	DOUBLE MAIL BOX INSTALLATION	EA	3	-	-	3
202.2008.0000	REMOVAL OF PIPE, GAS	LF	14,100	-	-	14,100
202.2010.0000	REMOVAL OF TANKS, STORAGE	EA	6	-	-	6
202.2012.0000	GROUND WATER WELL DECOMMISSIONING	EA	1	-	-	1
202.2022.0000	REMOVAL OF FENCE	LF	1,400	50	-	1,450
202.2027.0000	CLUSTER MAIL BOX UNIT	EA	1	-	3	4
203.0003.0000	UNCLASSIFIED EXCAVATION	CY	863,000	35,000	115,000	1,013,000
203.0006.0000	BORROW	TON	507,000	36,000	73,000	616,000
203.0009.0000	OBLITERATION OF ROADWAY	SY	6,330	-	920	7,250
203.2013.0000	CONTAMINATED MATERIAL TESTING, HANDLING & DISPOSAL	CS	ALL REQ'D	-	-	ALL REQ'D
301.0001.00D1	AGGREGATE BASE COURSE, GRADING D-1	TON	32,000	5,500	12,600	50,100
306.0001.0000	ATB	TON	30,200	-	1,900	32,100
306.0002.6440	ASPHALT BINDER, GRADE PG 64-40E	TON	1,601	-	101	1,702
306.2002.0000	ASPHALT MATERIAL PRICE ADJUSTMENT	CS	ALL REQ'D	-	ALL REQ'D	ALL REQ'D
401.0001.002A	HMA, TYPE II; CLASS A	TON	1,350	-	2,300	3,650
401.0004.6440	ASPHALT BINDER, GRADE PG 64-40E	TON	1,150	-	122	1,272
401.0005.002B	HMA, TEMPORARY, TYPE II; CLASS B	TON	5,250	-	-	5,250
401.0015.0000	ASPHALT MATERIAL PRICE ADJUSTMENT	CS	ALL REQ'D	-	ALL REQ'D	ALL REQ'D
401.2001.02HA	HMA, TYPE I1H; CLASS A	TON	19,900	-	-	19,900
401.2022.0000	COMBINED PRICE ADJUSTMENT	CS	ALL REQ'D	-	ALL REQ'D	ALL REQ'D
402.0001.STE1	STE-1 ASPHALT FOR TACK COAT	TON	55	-	6	61
406.0008.0000	RUMBLE STRIPS, SHOULDERS	MILE	14	-	-	14
406.2001.0000	SWEEPING AND DISPOSAL OF MILLINGS, SHOULDERS	LS	ALL REQ'D	-	-	ALL REQ'D
601.2001.0000	METAL FLUME DOWNDRAIN - INLET	EA	6	-	-	6
603.0001.0042	CSP 42 INCH, 10 GA	LF	162	-	-	162
603.0017.0024	PIPE 24 INCH, CASING	LF	335	-	-	335
603.2032.0018	CORRUGATED HDPE PIPE 18 INCH	LF	1,315	189	66	1,570
603.2032.0024	CORRUGATED HDPE PIPE 24 INCH	LF	2,430	102	385	2,917
603.2032.0036	CORRUGATED HDPE PIPE 36 INCH	LF	-	-	344	344
603.2032.0042	CORRUGATED HDPE PIPE 42 INCH	LF	170	-	-	170
603.2033.0018	END SECTION FOR CORRUGATED HDPE PIPE 18 INCH	EA	44	8	2	54
603.2033.0024	END SECTION FOR CORRUGATED HDPE PIPE 24 INCH	EA	28	4	10	42
603.2033.0036	END SECTION FOR CORRUGATED HDPE PIPE 36 INCH	EA	-	-	6	6
603.2033.0042	END SECTION FOR CORRUGATED HDPE PIPE 42 INCH	EA	2	-	-	2
604.0001.0001	STORM SEWER MANHOLE, TYPE I	EA	4	-	-	4
604.0002.0000	SANITARY SEWER MANHOLE, TYPE A	EA	3	-	-	3
604.0004.0000	ADJUST EXISTING MANHOLE, SANITARY SEWER	EA	6	-	-	6
604.0005.000A	INLET, TYPE A	EA	4	-	-	4
604.0005.000C	INLET, TYPE C	EA	25	-	-	25
604.0005.000D	INLET, TYPE D	EA	13	-	-	13

All facilities installed under Utility Permits 1-135000-05-55 (sewer) and 1-135000-05-56 (water) were issued with the provision that all associated relocation costs would be split 50/50 between the DEPARTMENT and the COMPANY.

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STATE OF ALASKA
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ESTIMATE OF QUANTITIES

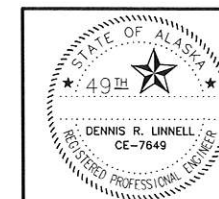
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ESTIMATE OF QUANTITIES

ITEM NO	ITEM DESCRIPTION	PAY UNIT	GLENN HWY	PATHWAY	COLLEEN	TOTALS
605.0005.0000	POROUS BACKFILL MATERIAL	CY	2,500	-	-	2,500
606.0001.0000	W-BEAM GUARDRAIL	LF	4,425	-	1,025	5,450
606.0006.0000	REMOVING AND DISPOSING OF GUARDRAIL	LF	3,600	-	-	3,600
606.0009.0000	SHORT RADIUS GUARDRAIL	EA	-	-	2	2
606.0013.0000	PARALLEL GUARDRAIL TERMINAL	EA	7	-	2	9
606.2022.0000	HIGH TENSION CABLE GUARDRAIL	LF	1,100	-	-	1,100
606.2023.0000	HIGH TENSION CABLE GUARDRAIL - END TERMINAL	EA	2	-	-	2
606.2024.0000	HIGH TENSION CABLE GUARDRAIL - FOUNDATION	EA	2	-	-	2
607.2008.0000	RELOCATE GATE	EA	1	-	-	1
608.2002.0000	ASPHALT PATHWAY	TON	-	2,050	24	2,074
608.2007.0000	ASPHALT, MOW STRIP	SY	360	-	-	360
608.2013.0001	CONCRETE SLABS, BROOM FINISH, 6 INCHES THICK	SY	139	-	139	278
609.0002.0001	CURB AND GUTTER, TYPE I	LF	214	-	214	428
610.0002.0000	DITCH LINING	TON	285	-	151	436
611.0002.0001	RIPRAP, CLASS I	TON	1,248	19	133	1,400
615.0001.0000	STANDARD SIGN	SF	1,750	31	560	2,341
615.0002.0000	REMOVE AND RELOCATE SIGN	EA	2	-	-	2
615.0004.0000	DELINEATOR, RIGID	EA	12	-	-	12
615.0005.0000	DELINEATOR, FLEXIBLE	EA	12	-	12	24
615.0006.0000	SALVAGE SIGN	EA	63	-	9	72
616.0001.0075	THAW PIPE 3/4 INCH DIAMETER	LF	150	-	-	150
617.2005.0000	PEDESTRIAN PATHWAY DIVERTER - STEEL	EA	8	-	8	16
618.0002.0000	SEEDING, TYPE A	LB	2,600	690	600	3,890
618.0002.0000	SEEDING, TYPE B	LB	53	-	-	53
618.0003.0000	WATER FOR SEEDING	M GAL.	1,750	473	400	2,623
619.2002.0000	TURF REINFORCEMENT MAT	SY	4,650	-	-	4,650
619.2003.0000	SEDIMENT RETENTION FIBER ROLLS	LF	1,850	-	-	1,850
619.2009.0000	MANUFACTURED INLET PROTECTION SYSTEM	EA	5	-	-	5
620.0001.0000	TOPSOIL	SY	193,000	51,000	44,000	288,000
620.0001.0000	TOPSOIL - RAIN GARDEN	SY	2,350	-	-	2,350
626.2008.0024	SANITARY SEWER CONDUIT, 24-INCH, HDPE, SDR 17	LF	510	-	-	510
626.2009.0000	SANITARY SEWER PIPE CASING, 30-INCH, STEEL, SCHEDULE 20	LF	79	-	-	79
626.2010.0000	SANITARY SEWER BYPASS	LS	ALL REQ'D	-	-	ALL REQ'D

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 CHECKED BY: DNE
 DRAFTED BY: CDB

CERTIFICATION SET
NOVEMBER 2021



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
**GLENN HWY: PARKS HWY TO S.
INNER SPRINGER LP. (PHASE II)**

HDL ENGINEERING CONSULTANTS, LLC
3335 ARCTIC BOULEVARD, STE 100
ANCHORAGE, AK 99503
(907) 564-2120
AECL861

ESTIMATE OF QUANTITIES

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A15037/CFHWY00431 0A15038/CFHWY00432 0A15033/CFHWY00006	2021	C3	C4

ESTIMATE OF QUANTITIES

ITEM NO	ITEM DESCRIPTION	PAY UNIT	GLENN HWY	PATHWAY	COLLEEN	TOTALS
627.0005.0000	FIRE HYDRANT INSTALLATION	EA	2	-	-	2
627.0007.0000	FIRE HYDRANT REMOVAL	EA	2	-	-	2
627.0009.0018	GATE VALVE, 18 INCH	EA	2	-	-	2
627.0010.0000	ADJUSTMENT OF VALVE BOX	EA	6	-	-	6
627.2007.0000	REMOVE VALVE BOX	EA	4	-	-	4
627.2012.0018	HDPE WATER CONDUIT, 18-INCH, SDR 11	LF	690	-	-	690
627.2013.0000	TEMPORARY WATER SYSTEM	LS	ALL REQ'D	-	-	ALL REQ'D
627.2021.0000	WATER PIPE CASING, 24-INCH, STEEL, SCHEDULE 20	LF	108	-	-	108
630.0001.0003	GEOTEXTILE, SEPARATION, CLASS 3	SY	1,450	-	-	1,450
631.0001.0002	GEOTEXTILE, DRAINAGE, CLASS 2	SY	3,700	-	-	3,700
631.0002.0001	GEOTEXTILE, EROSION CONTROL, CLASS 1	SY	366	21	60	447
633.0001.0000	SILT FENCE	LF	3,200	-	-	3,200
634.0001.0001	GEOGRID, STABILIZATION, CLASS 1	SY	13,000	-	-	13,000
639.2000.0000	APPROACH	EA	36	-	5	41
640.0001.0000	MOBILIZATION AND DEMOBILIZATION	LS	ALL REQ'D	ALL REQ'D	ALL REQ'D	ALL REQ'D
641.0001.0000	EROSION, SEDIMENT AND POLLUTION CONTROL ADMINISTRATION	LS	ALL REQ'D	ALL REQ'D	ALL REQ'D	ALL REQ'D
641.0005.0000	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL BY DIRECTIVE	CS	ALL REQ'D	ALL REQ'D	ALL REQ'D	ALL REQ'D
641.0006.0000	WITHHOLDING	CS	ALL REQ'D	ALL REQ'D	ALL REQ'D	ALL REQ'D
641.0007.0000	SWPPP MANAGER	LS	ALL REQ'D	ALL REQ'D	ALL REQ'D	ALL REQ'D
642.0001.0000	CONSTRUCTION SURVEYING	LS	ALL REQ'D	ALL REQ'D	ALL REQ'D	ALL REQ'D
642.0003.0000	THREE PERSON SURVEY PARTY	HR	290	80	80	450
642.2004.0000	CONTRACTOR-FURNISHED AS-BUILTS	LS	ALL REQ'D	ALL REQ'D	ALL REQ'D	ALL REQ'D
642.2005.0000	CONTRACTOR-FURNISHED COMPUTATIONS	LS	ALL REQ'D	ALL REQ'D	ALL REQ'D	ALL REQ'D
642.2006.0000	CONTRACTOR-FURNISHED ENGINEERING TOOLS	CS	ALL REQ'D	ALL REQ'D	ALL REQ'D	ALL REQ'D
643.0002.0000	TRAFFIC MAINTENANCE	LS	ALL REQ'D	ALL REQ'D	ALL REQ'D	ALL REQ'D
643.0003.0000	PERMANENT CONSTRUCTION SIGNS	LS	ALL REQ'D	ALL REQ'D	ALL REQ'D	ALL REQ'D
643.0023.0000	TRAFFIC PRICE ADJUSTMENT	CS	ALL REQ'D	ALL REQ'D	ALL REQ'D	ALL REQ'D
643.0025.0000	TRAFFIC CONTROL	CS	ALL REQ'D	ALL REQ'D	ALL REQ'D	ALL REQ'D
643.0032.0000	FLAGGING	CS	ALL REQ'D	ALL REQ'D	ALL REQ'D	ALL REQ'D
644.0001.0000	FIELD OFFICE	LS	ALL REQ'D	ALL REQ'D	ALL REQ'D	ALL REQ'D
644.0002.0000	FIELD LABORATORY	LS	ALL REQ'D	ALL REQ'D	ALL REQ'D	ALL REQ'D
644.0015.0000	NUCLEAR TESTING EQUIPMENT STORAGE SHED	EA	1	-	-	1
644.0016.0000	STORAGE CONTAINER	EA	1	-	-	1
644.2004.0000	ENGINEERING COMMUNICATIONS	CS	ALL REQ'D	ALL REQ'D	ALL REQ'D	ALL REQ'D
644.2007.0000	VEHICLE (LT/SUV)	EA	3	1	1	5
645.0001.0000	TRAINING PROGRAM, 6 TRAINEES/APPRENTICES	LH	1,800	300	900	3,000
646.0001.0000	CPM SCHEDULING	LS	ALL REQ'D	ALL REQ'D	ALL REQ'D	ALL REQ'D
646.2000.0000	SCHEDULE PRICE ADJUSTMENT	CS	ALL REQ'D	ALL REQ'D	ALL REQ'D	ALL REQ'D
647.2000.0000	WIDE PAD DOZER, 65-HP MINIMUM	CS	ALL REQ'D	ALL REQ'D	ALL REQ'D	ALL REQ'D
647.2002.0000	BACKHOE, 4WD, 1 CY BUCKET, 75-HP MINIMUM, 15 FT DEPTH	CS	ALL REQ'D	ALL REQ'D	ALL REQ'D	ALL REQ'D

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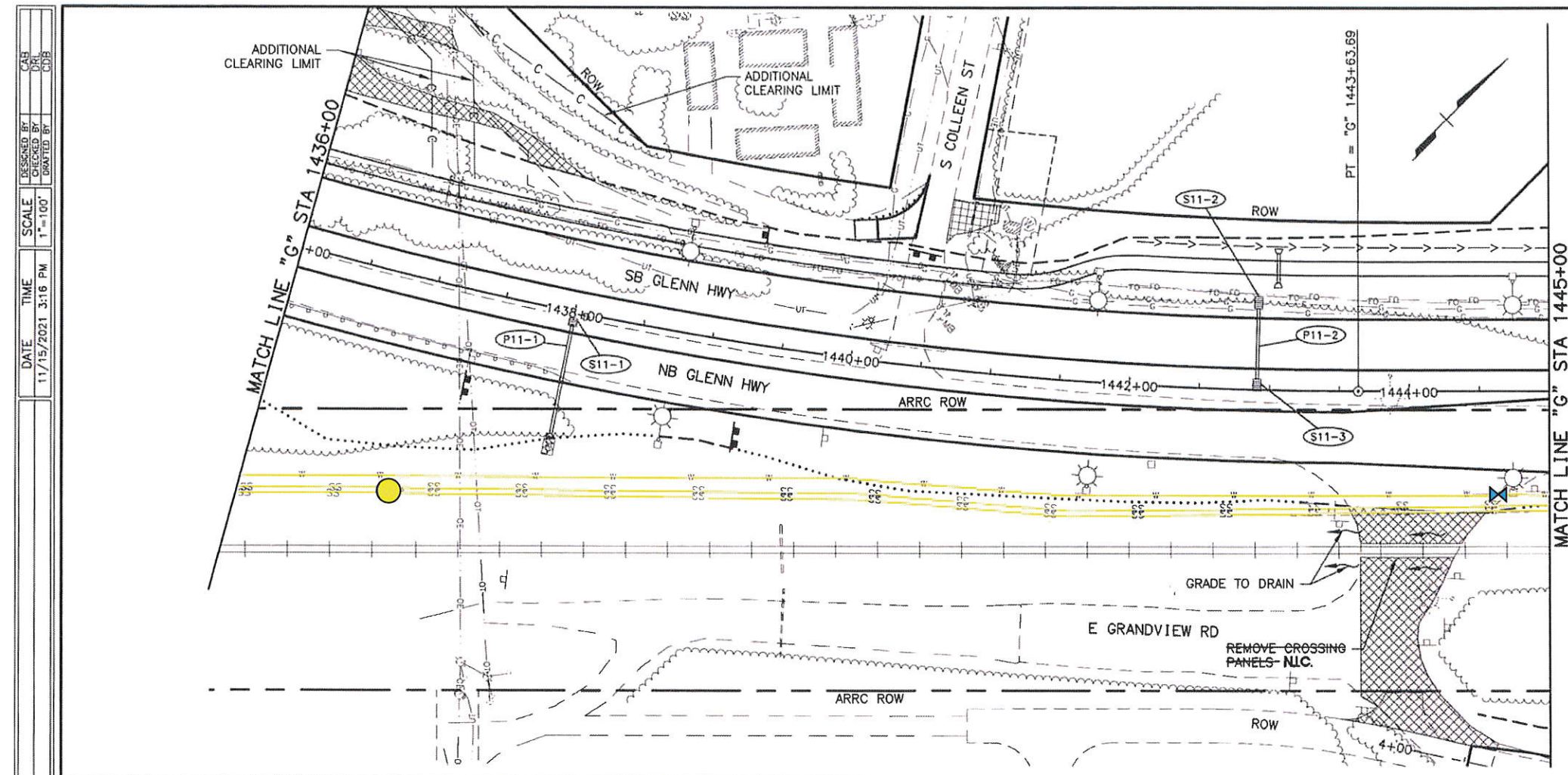
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NOVEMBER 2021



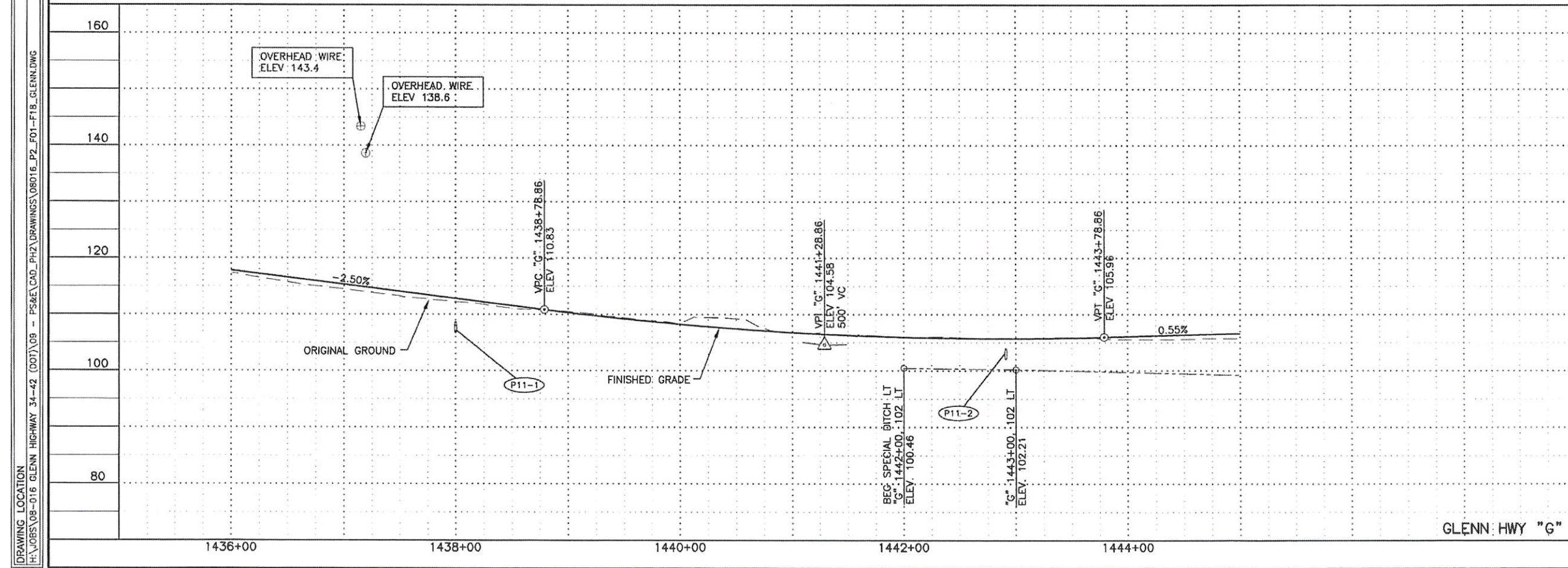
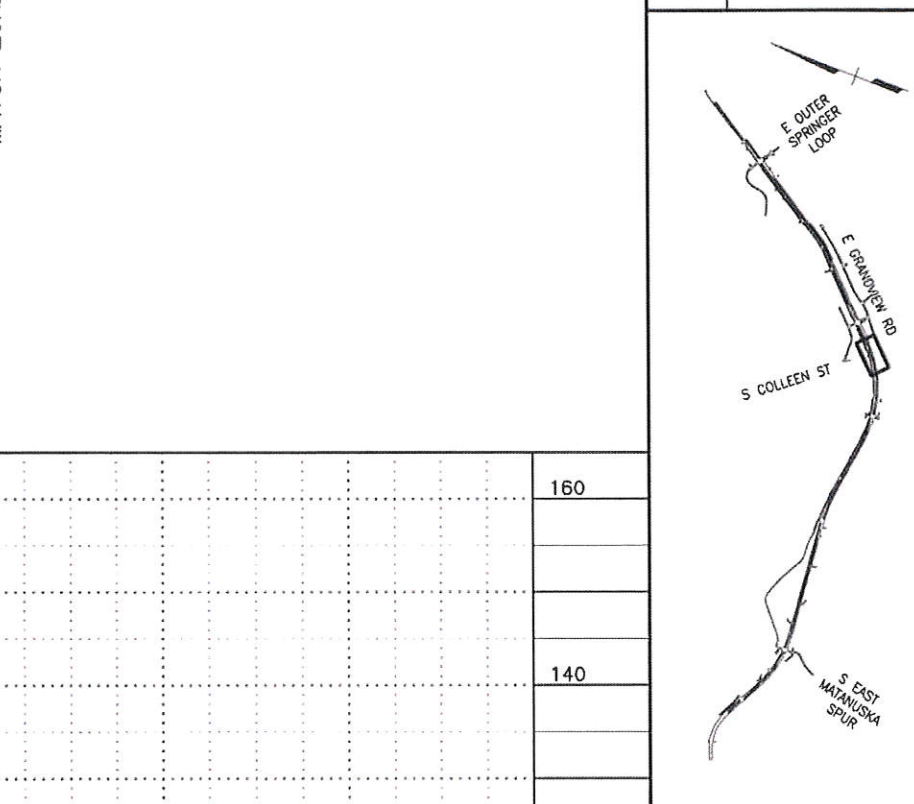
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
**GLENN HWY: PARKS HWY TO S.
INNER SPRINGER LP. (PHASE II)**

HDL ENGINEERING CONSULTANTS, LLC
3335 ARCTIC BOULEVARD, STE 100
ANCHORAGE, AK 99503
(907) 564-2120
AECL861

ESTIMATE OF QUANTITIES &
ESTIMATING FACTORS



SHEET NO.	TOTAL SHEETS
F11	F50
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
OA15037/CFHWY00431 OA15038/CFHWY00432 OA15033/CFHWY00006	
NO.	REVISION
DATE	
NO.	REVISION
DATE	



CERTIFICATION SET
NOVEMBER 2021

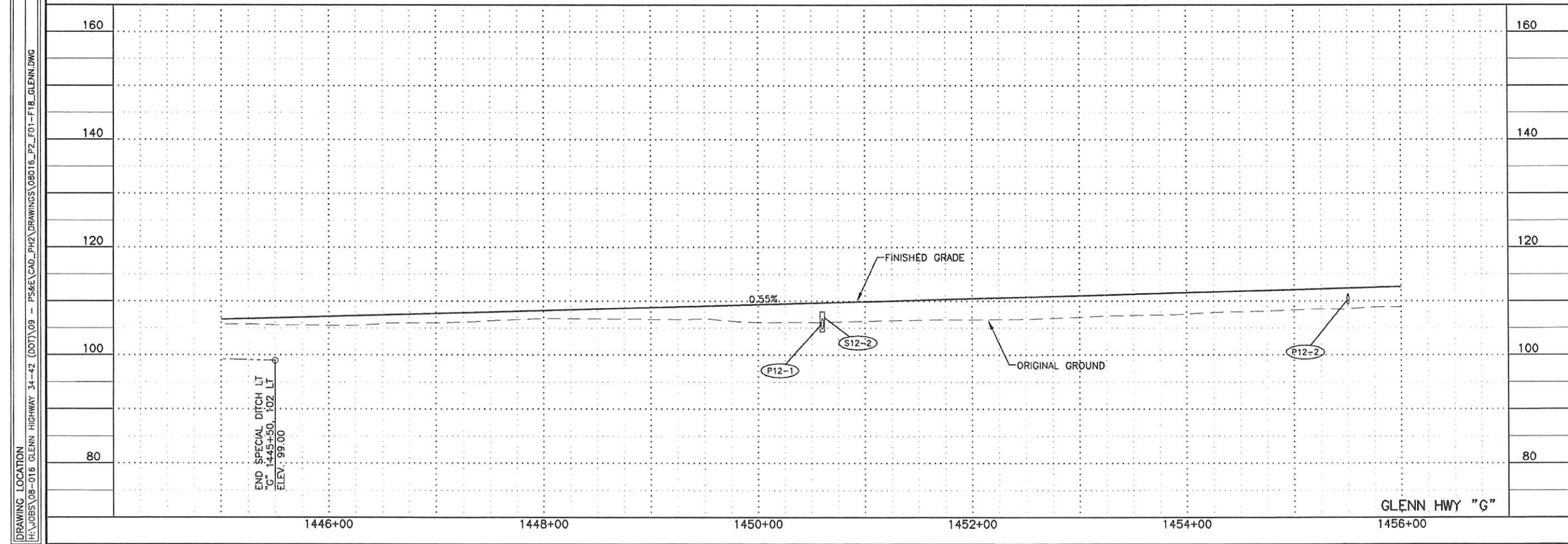
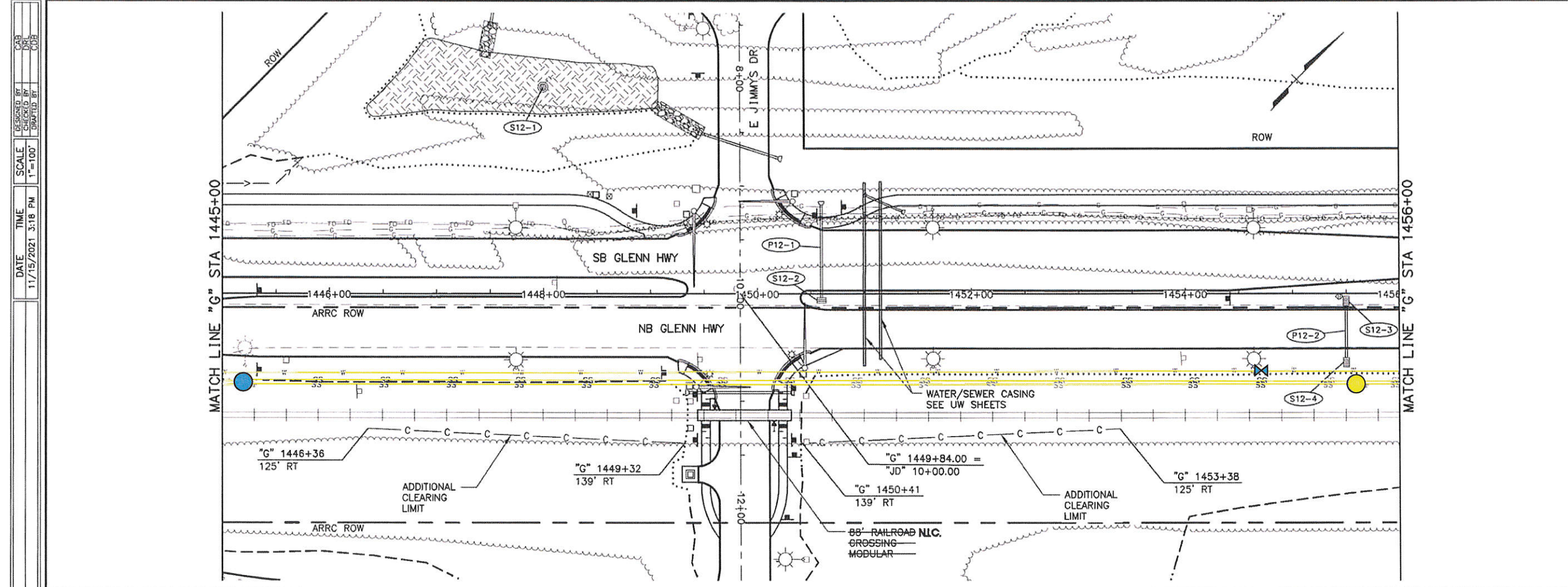
STATE OF ALASKA
49th
DENNIS R. LINNELL
CE-7649
REGISTERED PROFESSIONAL ENGINEER

HDL ENGINEERING CONSULTANTS, LLC
3335 ARCTIC BOULEVARD, STE 100
ANCHORAGE, AK 99503
(907) 584-2120
AECL061

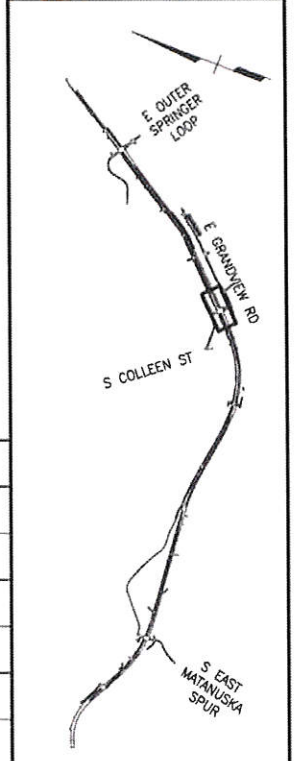
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
GLENN HWY: PARKS HWY TO
S. INNER SPRINGER LP.
(PHASE II)
GLENN HWY
PLAN & PROFILE
1436+00 TO 1445+00

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SHEET NO.	TOTAL SHEETS
F12	F50
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
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NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	



CERTIFICATION SET
NOVEMBER 2021

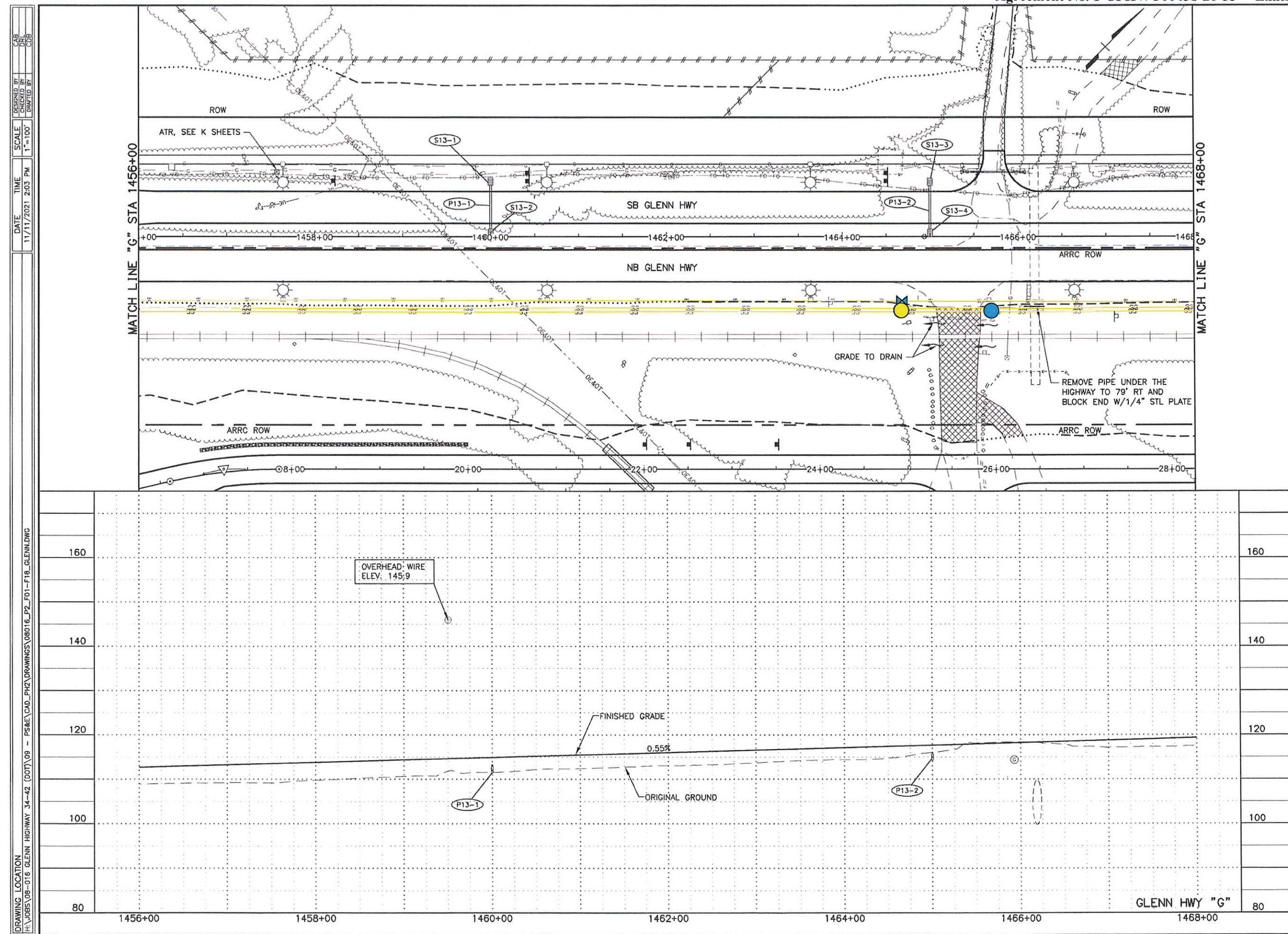
STATE OF ALASKA
49th
DENNIS R. LINNELL
CE-7649
REGISTERED PROFESSIONAL ENGINEER

HDL ENGINEERING CONSULTANTS, LLC
3335 ARCTIC BOULEVARD, STE 100
ANCHORAGE, AK 99503
(907) 564-2120
AECL881

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
GLENN HWY: PARKS HWY TO
S. INNER SPRINGER LP.
(PHASE II)
GLENN HWY
PLAN & PROFILE
1445+00 TO 1456+00

DRAWING LOCATION: H:\JOBS\08-016_GLENN HIGHWAY_34-42_(DOT)\08 - PS&E\CAD_P2\DRAWINGS\08016_P2_F01-F18_GLENN.DWG

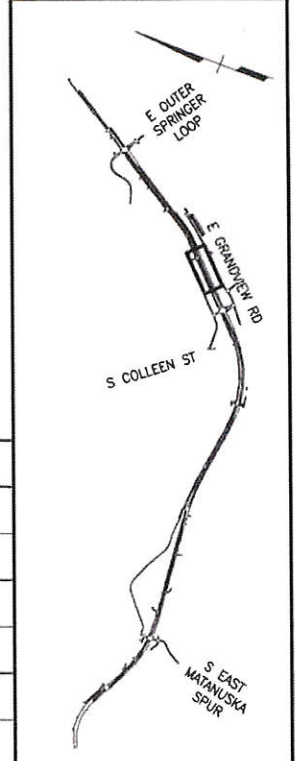
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SHEET NO.	TOTAL SHEETS
F13	F50
STATE	YEAR
ALASKA	2021

PROJECT DESIGNATION
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 OA15038/CFHWY00432
 OA15033/CFHWY00006

NO.	REVISION



CERTIFICATION SET
 NOVEMBER 2021

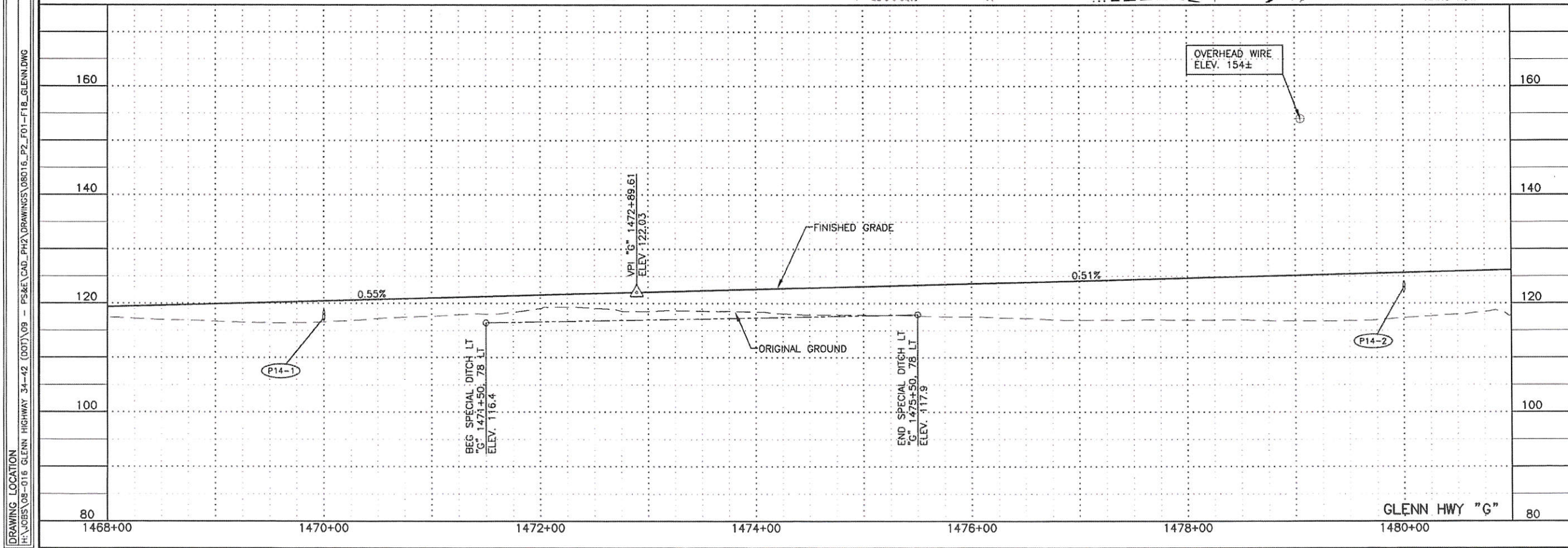
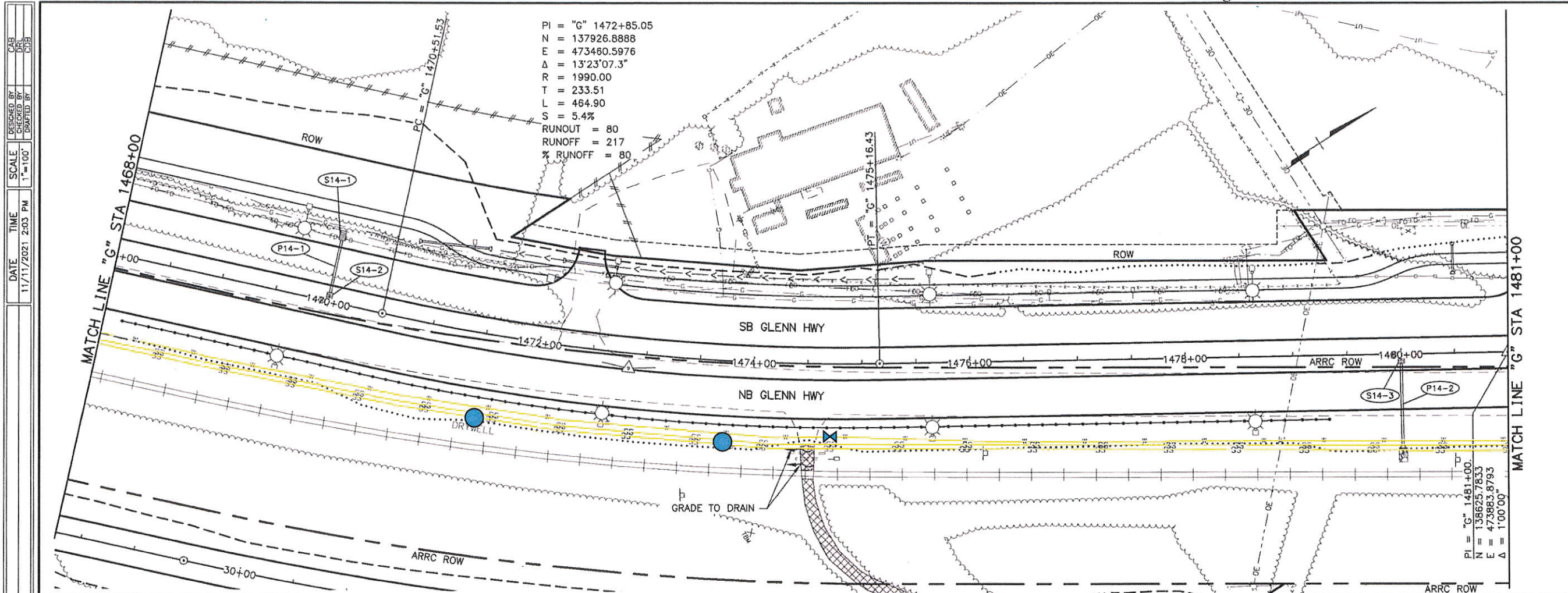
STATE OF ALASKA
 49th
 DENNIS R. LINNELL
 CE-7649
 REGISTERED PROFESSIONAL ENGINEER

HDL ENGINEERING CONSULTANTS, LLC
 3335 ARCTIC BOULEVARD, STE 100
 ANCHORAGE, AK 99503
 (907) 564-2120
 AECL861

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 GLENN HWY: PARKS HWY TO
 S. INNER SPRINGER LP.
 (PHASE II)
 GLENN HWY
 PLAN & PROFILE
 1456+00 TO 1468+00

DRAWING LOCATION
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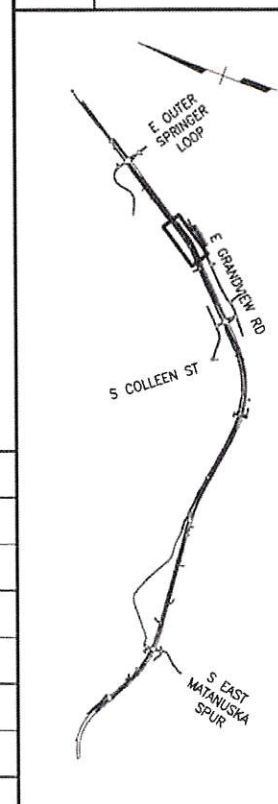
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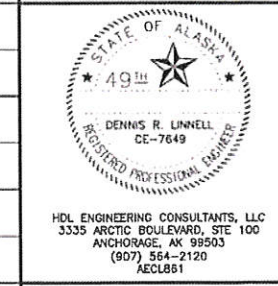
SHEET NO.	TOTAL SHEETS
F14	F50
STATE	YEAR
ALASKA	2021

PROJECT DESIGNATION
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 OA15038/CFHWY00432
 OA15033/CFHWY00006

NO.	REVISION



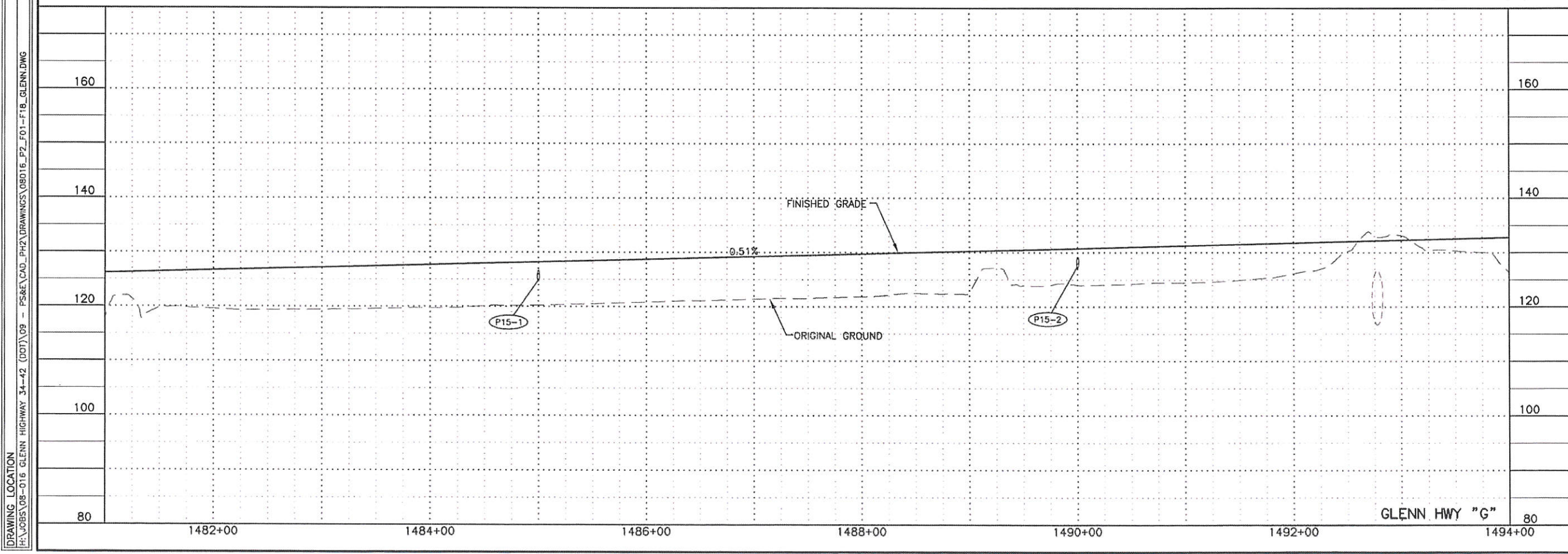
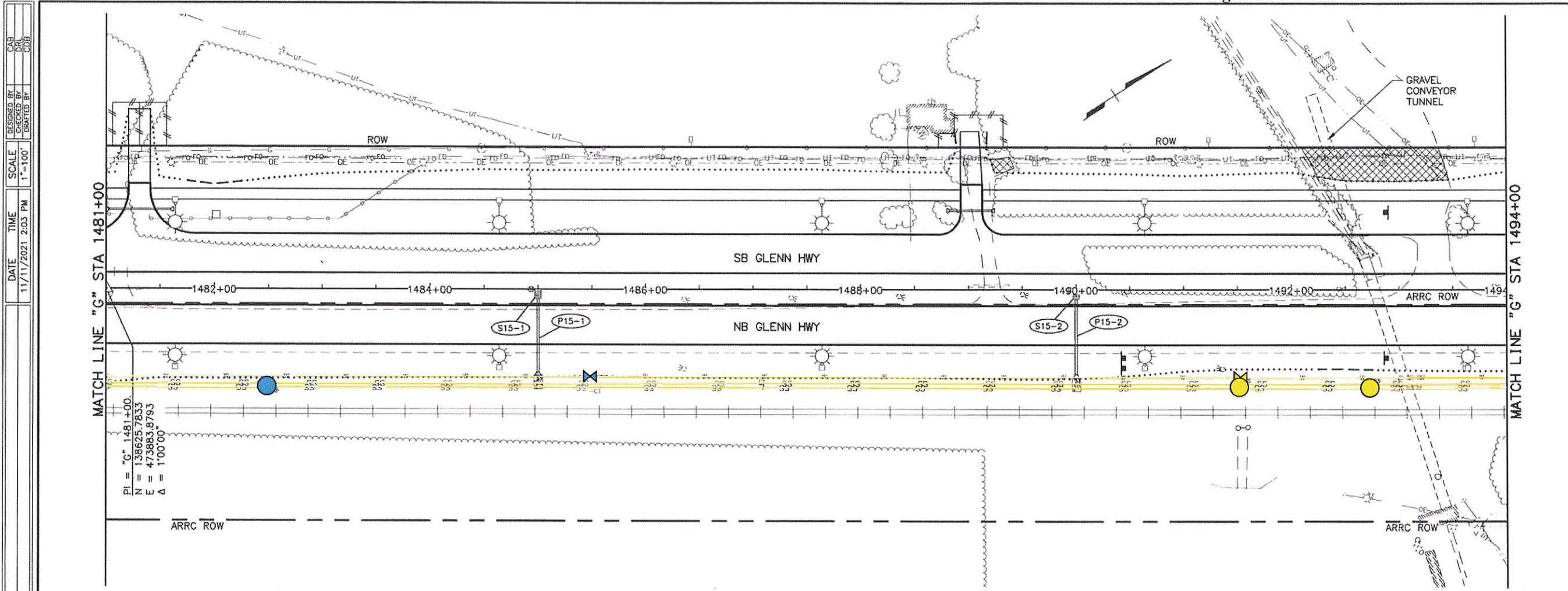
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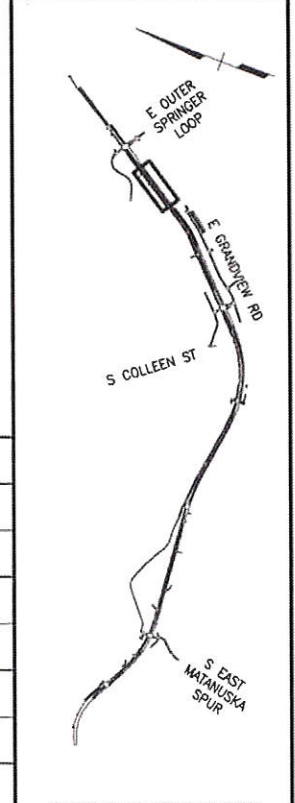
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 GLENN HWY: PARKS HWY TO
 S. INNER SPRINGER LP.
 (PHASE II)
 GLENN HWY
 PLAN & PROFILE
 1468+00 TO 1481+00

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SHEET NO.	TOTAL SHEETS
F15	F50
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
0A15037/CFHWY00431 0A15038/CFHWY00432 0A15033/CFHWY00006	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	



CERTIFICATION SET
NOVEMBER 2021

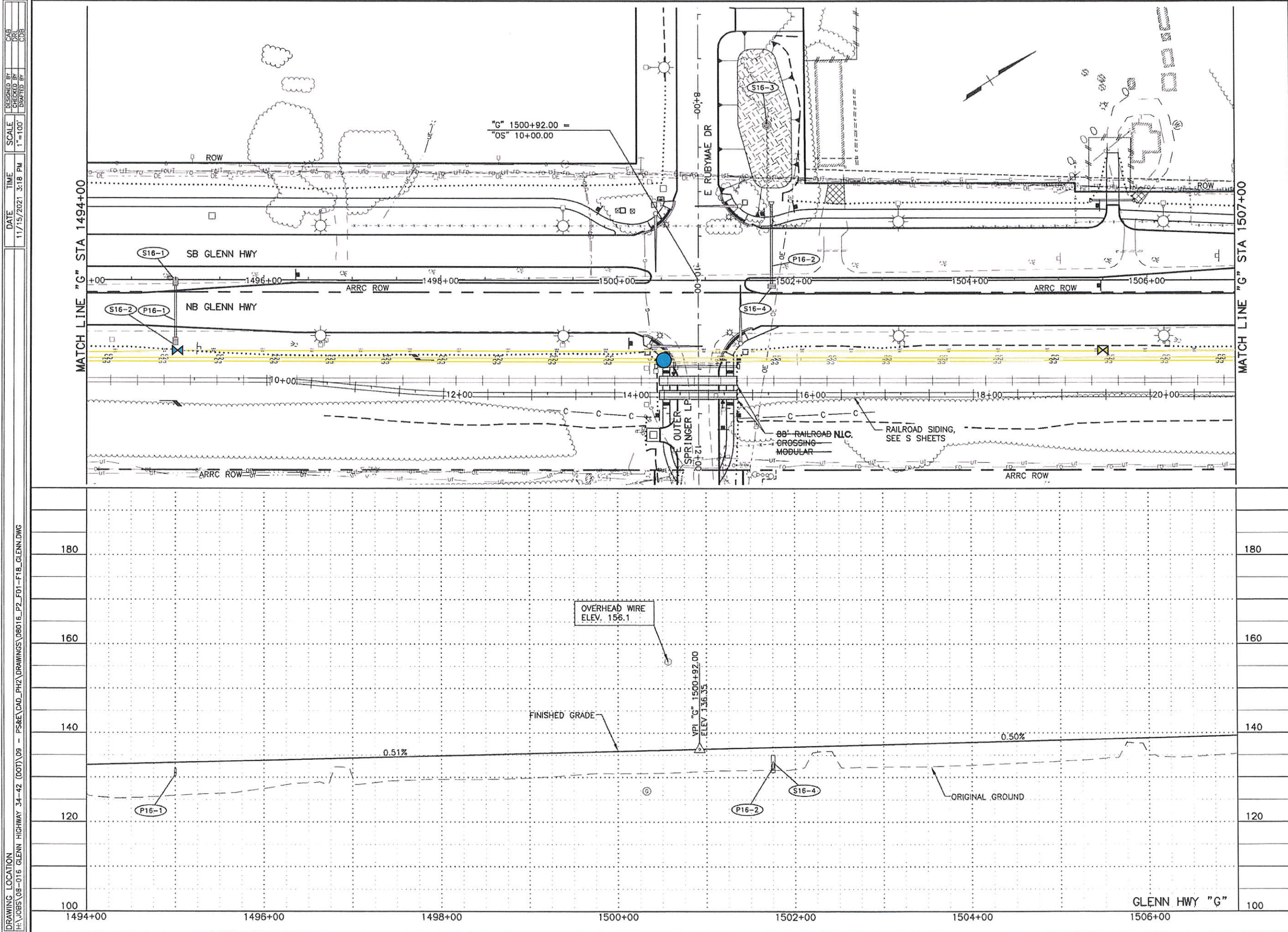
STATE OF ALASKA
49th
DENNIS R. LINNELL
CE-7649
REGISTERED PROFESSIONAL ENGINEER

HDL ENGINEERING CONSULTANTS, LLC
3335 ARCTIC BOULEVARD, STE 100
ANCHORAGE, AK 99503
(907) 564-2120
AECL881

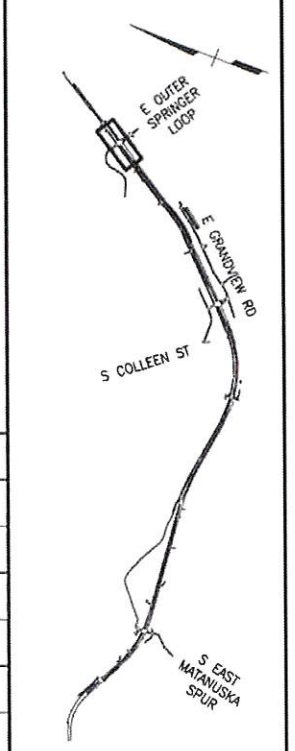
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
GLENN HWY: PARKS HWY TO
S. INNER SPRINGER LP.
(PHASE II)
GLENN HWY
PLAN & PROFILE
1481+00 TO 1494+00

DRAWING LOCATION
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SHEET NO.	TOTAL SHEETS
F16	F50
STATE	YEAR
ALASKA	2021
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0A15038/CFHWY00432	
0A15033/CFHWY00006	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	



CERTIFICATION SET
NOVEMBER 2021

STATE OF ALASKA
49th

DENNIS R. LINNELL
CE-7849
REGISTERED PROFESSIONAL ENGINEER

HDL ENGINEERING CONSULTANTS, LLC
3335 ARCTIC BOULEVARD, STE 100
ANCHORAGE, AK 99503
(907) 564-2120
AECL861

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

GLENN HWY: PARKS HWY TO
S. INNER SPRINGER LP.
(PHASE II)

GLENN HWY
PLAN & PROFILE
1494+00 TO 1507+00

DRAWING LOCATION: H:\JOBS\08-016 GLENN HIGHWAY 34-42 (DOT)\09 - PS&E\CAD_PH2\DRAWINGS\08016_P2_F01-F16_GLENN.DWG

DESIGNED BY: CAB
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A15037/CFHWY00431 0A15038/CFHWY00432 0A15033/CFHWY00006	2021	UW1	UW13

GENERAL UTILITY NOTES:

1. ALL STATIONING IS ALONG WATER OR SEWER LINE, UNLESS NOTED OTHERWISE. PIPE LENGTHS ARE PLAN VIEW LENGTHS ALONG PIPE.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LAYOUT PRIOR TO PROCEEDING WITH THE WORK. ANY DISCREPANCY IN THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
3. EXISTING BURIED UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED ON FIELD SURVEY AND RECORD INFORMATION AVAILABLE TO THE ENGINEER. NOT ALL UTILITY LOCATIONS HAVE BEEN FIELD VERIFIED AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE UTILITY INFORMATION AS SHOWN. THE CONTRACTOR SHALL CONTACT THE LOCATE CALL CENTER OF ALASKA, AS WELL AS ANY NON-PARTICIPATING UTILITIES, TO FIELD LOCATE ALL UTILITIES PRIOR TO DIGGING.
4. NO USER SHALL BE WITHOUT WATER OR SEWER SERVICE FOR LONGER THAN 4 HOURS WITHIN EACH 24 HOUR PERIOD. ALL AFFECTED PARTIES SHALL BE NOTIFIED OF PLANNED INTERRUPTION OF SERVICE AT LEAST 24 HOURS IN ADVANCE. AN APPROVED "TEMPORARY WATER SERVICE PLAN" IS REQUIRED. SEE SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS.
5. TIE-IN ELEVATIONS ARE ESTIMATED BASED ON RECORD INFORMATION. CONTRACTOR SHALL FIELD VERIFY TIE-IN ELEVATIONS PRIOR TO BEGINNING CONSTRUCTION AND MAKE ANY NECESSARY ADJUSTMENTS. CHANGES SHALL BE APPROVED BY THE ENGINEER.

WATER SYSTEM NOTES:

1. GRADE BREAKS AND ANGLE POINTS NOT UTILIZING A FITTING MAY BE MADE BY BENDING THE PIPE IN A RADIUS NO SMALLER THAN THE PIPE MANUFACTURER'S RECOMMENDED MINIMUM BENDING RADIUS, PROVIDED THAT THE MINIMUM COVER IS MAINTAINED OVER THE PIPE AND THE PIPE REMAINS IN THE RIGHT-OF-WAY.
2. ALL WATER SYSTEM CONSTRUCTION, FLUSHING, PRESSURE TESTING AND DISINFECTION SHALL BE CONDUCTED SO AS TO MINIMIZE INTERRUPTION OF EXISTING SERVICE.
3. LOCATION OF VALVES ARE TO CENTER OF TEE OR CROSS TO WHICH THEY ARE ATTACHED.
4. REMOVAL OF EXISTING WATER PIPE, SERVICES, VALVES, TEES, AND OTHER APPURTENANCES TO FACILITATE NEW PIPE INSTALLATION SHALL BE SUBSIDIARY, UNLESS NOTED OTHERWISE.
5. PROVIDE 4" THICK X 4' WIDE RIGID INSULATION (INSULATION BOARD) WHERE SHOWN ON THE PLANS AND WHERE LESS THAN 10' OF COVER OVER PIPE.
6. RESTRAINED JOINTS SHALL BE INSTALLED WHERE THE WATER PIPE TERMINATES, BRANCHES, OR CHANGES ALIGNMENT UTILIZING A FITTING FOR THE LENGTH INDICATED ON THE PLANS. THE ENTIRE LENGTH OF HYDRANT LEGS SHALL BE RESTRAINED.

SEWER SYSTEM NOTES:

1. LOCATION OF MANHOLES ARE TO CENTER OF STRUCTURE.
2. GRADE BREAKS AND ANGLE POINTS NOT UTILIZING A FITTING MAY BE MADE BY BENDING THE PIPE IN A RADIUS NO SMALLER THAN THE PIPE MANUFACTURER'S RECOMMENDED MINIMUM BENDING RADIUS, PROVIDED THAT THE MINIMUM COVER IS MAINTAINED OVER THE PIPE AND THE PIPE REMAINS IN THE RIGHT OF WAY.
3. PAY LENGTHS FOR SANITARY SEWER CONDUIT ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

UTILITY LEGEND:

	EXISTING	PROPOSED
WATER SYSTEM		
SANITARY SEWER SYSTEM		
SANITARY SEWER MANHOLE		
PIPE CASING		
FIRE HYDRANT		
FLUSHING HYDRANT		
VALVE, VALVE BOX		
END CAP		
WATER SERVICE AND KEY BOX		
AIR RELIEF VALVE		
REDUCER		
4" RIGID INSULATION		

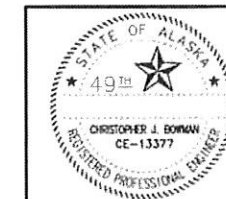
UTILITY SYSTEM ABBREVIATIONS:

AB	ABANDONED
BFG	BELOW FINISHED GRADE
BOP	BOTTOM OF PIPE
CL	CLASS
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
EL	ELEVATION
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
INV	INVERT
ME	MATCH EXISTING
MJ	MECHANICAL JOINT
OD	OUTSIDE DIAMETER
SCH	SCHEDULE
SSMH	SANITARY SEWER MANHOLE
TB	THRUST BLOCK
VB	VALVE BOX
W/	WITH

SHEET INDEX

SHEET NO.	DESCRIPTION
UW1	INDEX, UTILITY NOTES, AND ABBREVIATIONS
UW2	PROJECT LAYOUT
UW3-UW4	SUMMARY SHEET
UW5-UW7	WATER AND SEWER SYSTEM DETAIL SHEETS
UW9-UW11	WATER SYSTEM PLAN AND PROFILE SHEETS
UW11-UW13	SEWER SYSTEM PLAN AND PROFILE SHEETS

CERTIFICATION SET
NOVEMBER 2021



HDL ENGINEERING CONSULTANTS, LLC
3335 ARCTIC BOULEVARD, STE 100
ANCHORAGE, AK 99503
(907) 564-2120
AECL861

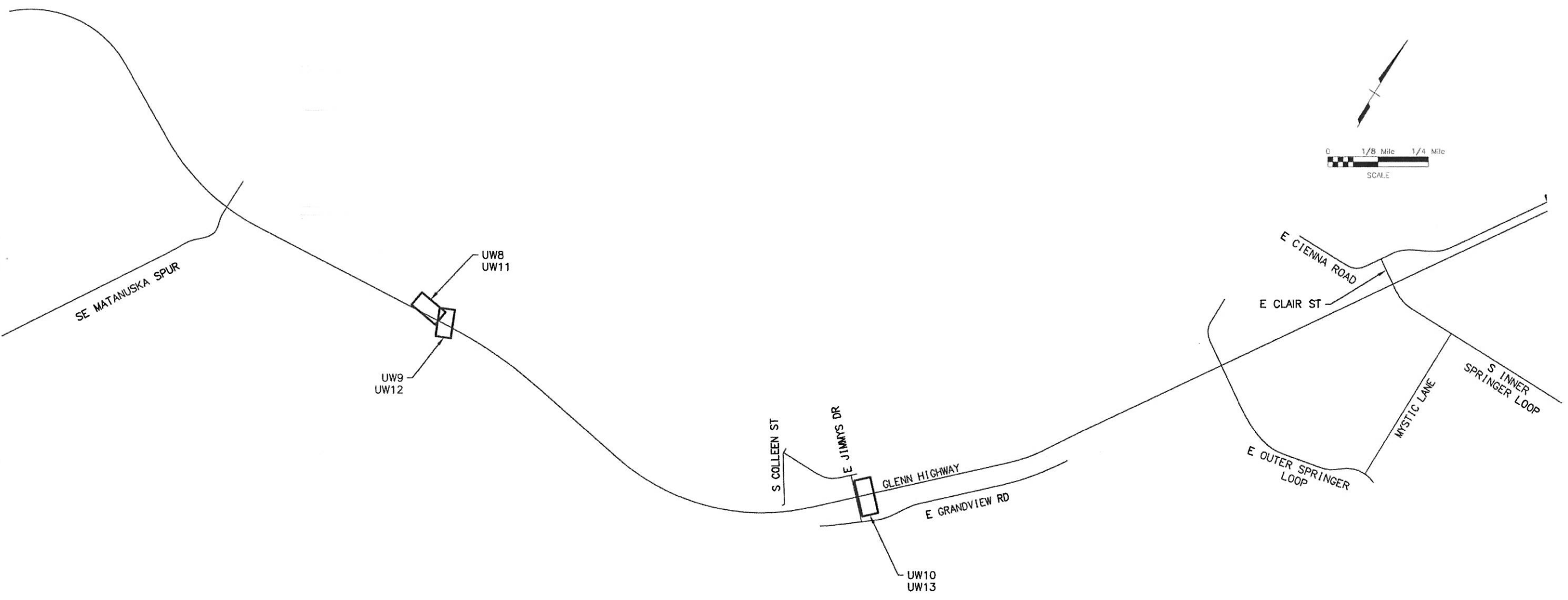
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
GLENN HWY: PARKS HWY TO S.
INNER SPRINGER LP. (PHASE II)

WATER AND SEWER SYSTEM
NOTES, LEGEND,
AND ABBREVIATIONS

FILE H:\JOBS\08-016 GLENN HIGHWAY 34-42 (DOT)\09 - PS&E\CAD_UW - PH2\DRAWINGS\08016_P2_UW01_LEGEND.DWG by cburiburger DATE/TIME 11/19/2021 12:34 PM LAYOUT U1 DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A15037/CFHWY00431 0A15038/CFHWY00432 0A15033/CFHWY00006	2021	UW2	UW13

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 DESIGNED NMY CHECKED CJB DRAFTED NMY



CERTIFICATION SET
NOVEMBER 2021



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
**GLENN HWY: PARKS HWY TO S.
INNER SPRINGER LP. (PHASE II)**

PROJECT LAYOUT

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A15037/CFHWY00431 0A15038/CFHWY00432 0A15033/CFHWY00006	2021	UW3	UW13

All facilities installed under Utility Permits 1-135000-05-55 (sewer) and 1-135000-05-56 (water) were issued with the provision that all associated relocation costs would be split 50/50 between the DEPARTMENT and the COMPANY.

202.0006.0000 - REMOVAL OF MANHOLE, SANITARY SEWER

SHEET	STATION	OFFSET	REMARKS
UW11	"S" 1+50.0	0 LT	REPLACE WITH NEW SSMH
	"S" 3+00.3	24.9 RT	
UW12	"S" 4+77.2	0 LT	
TOTAL: 3			
PAY ITEM QUANTITY: 3			

603.0017.0024 - PIPE 24 INCH, CASING

SHEET	INLET			OUTLET			SLOPE	LENGTH	REMARKS
	STATION	OFFSET	BOP	STATION	OFFSET	BOP			
UW10	"WC" 0+57.00	0.00	92.62	"WC" 2+22.00	0.00	92.62	0.00%	165.0	FUTURE WATER
UW13	"SC" 0+58.00	0.00	96.23	"SC" 2+28.00	0.00	96.23	0.00%	170.0	FUTURE SEWER
TOTAL: 335.0									
PAY ITEM QUANTITY: 335									

604.0002.0000 - SANITARY SEWER MANHOLE, TYPE A

SHEET	STATION	OFFSET	REMARKS
UW11	"S" 1+50.00	0.00	REPLACE EXISTING SSMH AND CONNECT TO EXISTING SS
	"S" 3+20.09	0.00	
UW12	"S" 4+37.92	0.00	PERFORM EXFILTRATION TEST
TOTAL: 3			
PAY ITEM QUANTITY: 3			

626.2008.0024 - SANITARY SEWER CONDUIT, 24-INCH, HDPE, SDR 17

SHEET	INLET			OUTLET			SLOPE	LENGTH	REMARKS
	STATION	OFFSET	INV	STATION	OFFSET	INV			
UW11	"S" 1+50.00	0.00	104.22	"S" 3+20.09	0.00	102.57	-1.00%	170.1	
	"S" 3+20.09	0.00	102.24	"S" 4+37.92	0.00	88.62	-12.07%	117.8	CONTINUED ON UW12
UW12	"S" 4+37.92	0.00	88.25	"S" 6+21.91	0.00	83.42	-2.66%	184.0	
	"S" 6+21.91	0.00	83.42	"S" 6+56.44	0.00	83.4±, ME	-0.17%	34.5	CONNECT TO EXISTING SSMH
TOTAL: 506.4									
PAY ITEM QUANTITY: 510									

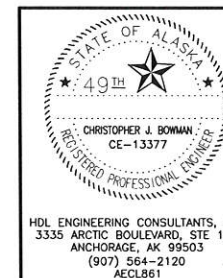
604.0004.0000 - ADJUST EXISTING MANHOLE, SANITARY SEWER

SHEET	STATION	OFFSET	REMARKS
F12	"G" 1445+19.6	81.9 RT	SSMH
F13	"G" 1465+68.4	82.4 RT	SSMH
F14	"G" 1471+51.1	79.0 RT	SSMH
	"G" 1473+74.1	74.2 RT	SSMH
F15	"G" 1482+48.5	88.6 RT	SSMH
F16	"G" 1500+52.3	89.3 RT	SSMH
TOTAL: 6			
PAY ITEM QUANTITY: 6			

626.2009.0000 - SANITARY SEWER PIPE CASING, 30-INCH, STEEL, SCHEDULE 20

SHEET	INLET			OUTLET			SLOPE	LENGTH	REMARKS
	STATION	OFFSET	INV	STATION	OFFSET	INV			
UW12	"S" 4+50.82	0.00	87.98	"S" 5+01.82	0.00	86.3±, ME	-2.7%, ME	51.0	
	"S" 5+91.82	0.00	84.2±, ME	"S" 6+18.91	0.00	83.50	-2.7%, ME	27.1	
TOTAL: 78.1									
PAY ITEM QUANTITY: 79									

CERTIFICATION SET
NOVEMBER 2021



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
**GLENN HWY: PARKS HWY TO S.
INNER SPRINGER LP. (PHASE II)**

SUMMARY SHEETS

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A15037/CFHWY00431 0A15038/CFHWY00432 0A15033/CFHWY00006	2021	UW4	UW13

FILE: H:\JOBS\08-016 GLENN HIGHWAY 34-42 (DOT)\09 - PS&E\CAD_UW - PHZ\DRAWINGS\08016_P2_UW03-UW04-SUMMARY.DWG by cburiburger DATE/TIME 11/19/2021 12:41 PM LAYOUT MODEL DESIGNED CHECKED DRAFTED

627.0005.0000 - FIRE HYDRANT INSTALLATION			
SHEET	STATION	OFFSET	REMARKS
UW8	"W" 2+30.00	10.00 LT	
UW9	"W" 7+54.00	10.00 LT	
TOTAL: 2			
PAY ITEM QUANTITY: 2			

627.2007.0000 - REMOVE VALVE BOX			
SHEET	STATION	OFFSET	REMARKS
UW8	"W" 1+39.4	3.1 RT	
	"W" 1+45.0	0 RT	
UW9	"W" 5+64.2	0 LT	
	"W" 5+71.1	1.8 RT	
TOTAL: 4			
PAY ITEM QUANTITY: 4			

627.0007.0000 - FIRE HYDRANT REMOVAL			
SHEET	STATION	OFFSET	REMARKS
UW8	"W" 2+30.00	12.00 RT	FLUSHING HYDRANT SALVAGE AND RETURN TO CITY OF PALMER
UW9	"W" 7+40.00	12.00 RT	
TOTAL: 2			
PAY ITEM QUANTITY: 2			

627.2012.0018 - HDPE WATER CONDUIT, 18-INCH, SDR 11									
SHEET	INLET			OUTLET			SLOPE	LENGTH	REMARKS
	STATION	OFFSET	BOP	STATION	OFFSET	BOP			
UW8	"W" 1+39.44	0.00	111.3±, ME	"W" 1+60.00	0.00	111.30	0.00%	20.0	
	"W" 1+60.00	0.00	111.30	"W" 2+54.36	0.00	111.30	0.00%	94.4	
	"W" 2+54.36	0.00	111.30	"W" 4+96.09	0.00	111.30	0.00%	241.7	CONT'D ON UW9
UW9	"W" 4+96.09	0.00	111.30	"W" 5+08.69	0.00	106.08	-41.42%	12.6	
	"W" 5+08.69	0.00	106.08	"W" 5+51.75	0.00	88.23	-41.42%	43.1	
	"W" 5+51.75	0.00	88.23	"W" 7+66.45	0.00	83.77	-2.08%	214.7	
	"W" 7+66.45	0.00	83.77	"W" 8+26.00	0.00	83.2±, ME	-0.96%	59.6	
TOTAL: 686.1									
PAY ITEM QUANTITY: 690									

627.0009.0018 - GATE VALVE, 18 INCH			
SHEET	STATION	OFFSET	REMARKS
UW8	"W" 1+39.44	0.00	
UW9	"W" 8+26.00	0.00	
TOTAL: 2			
PAY ITEM QUANTITY: 2			

627.2021.0000 - WATER PIPE CASING, 24-INCH, STEEL, SCHEDULE 20									
SHEET	INLET			OUTLET			SLOPE	LENGTH	REMARKS
	STATION	OFFSET	BOP	STATION	OFFSET	BOP			
UW9	"W" 5+60.00	0.00	87.95	"W" 6+05.00	0.00	86.9±, ME	-2.08%, ME	45.0	
	"W" 6+85.00	0.00	85.4±, ME	"W" 7+48.00	0.00	84.00	-2.08%, ME	63.0	
TOTAL: 108									
PAY ITEM QUANTITY: 108									


627.0010.0000 - ADJUSTMENT OF VALVE BOX			
SHEET	STATION	OFFSET	REMARKS
F11	"G" 1444+62.6	72.7 RT	
F12	"G" 1454+70.7	71.0 RT	
F13	"G" 1464+67.2	71.9 RT	
F14	"G" 1474+69.8	66.5 RT	
F15	"G" 1485+48.0	80.0 RT	
F16	"G" 1495+02.1	79.1 RT	
TOTAL: 6			
PAY ITEM QUANTITY: 6			

CERTIFICATION SET
NOVEMBER 2021

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

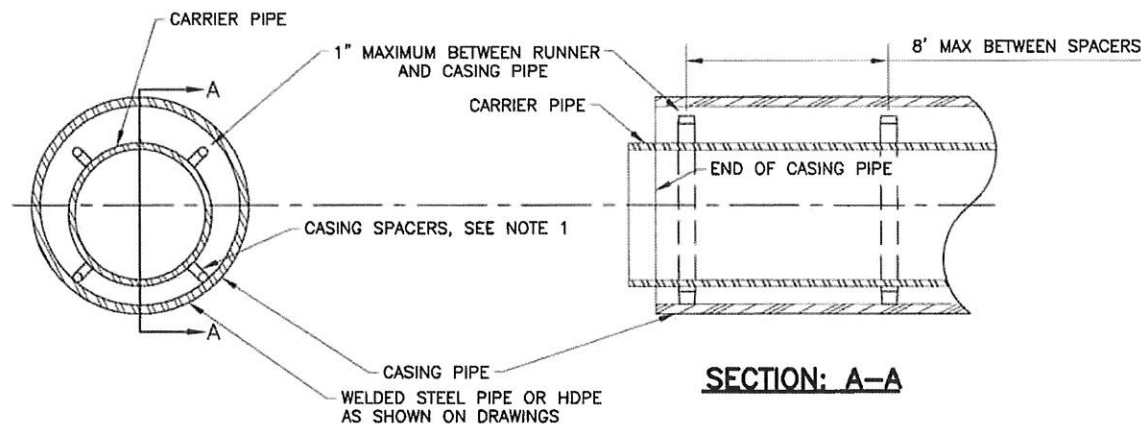
GLENN HWY: PARKS HWY TO S.
INNER SPRINGER LP. (PHASE II)

SUMMARY SHEETS



HDL ENGINEERING CONSULTANTS, LLC
3335 ARCTIC BOULEVARD, STE 100
ANCHORAGE, AK 99503
(907) 564-2120
AECL861

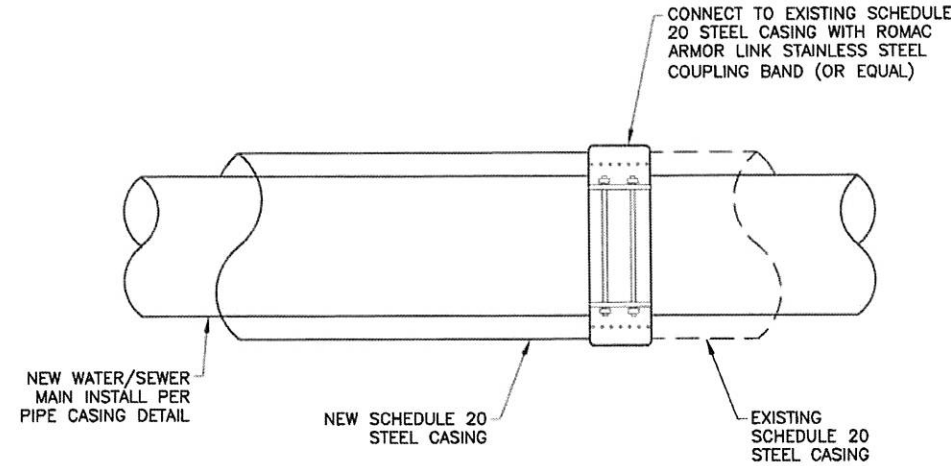
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A15037/CFHWY00431 0A15038/CFHWY00432 0A15033/CFHWY00008	2021	UW5	UW13



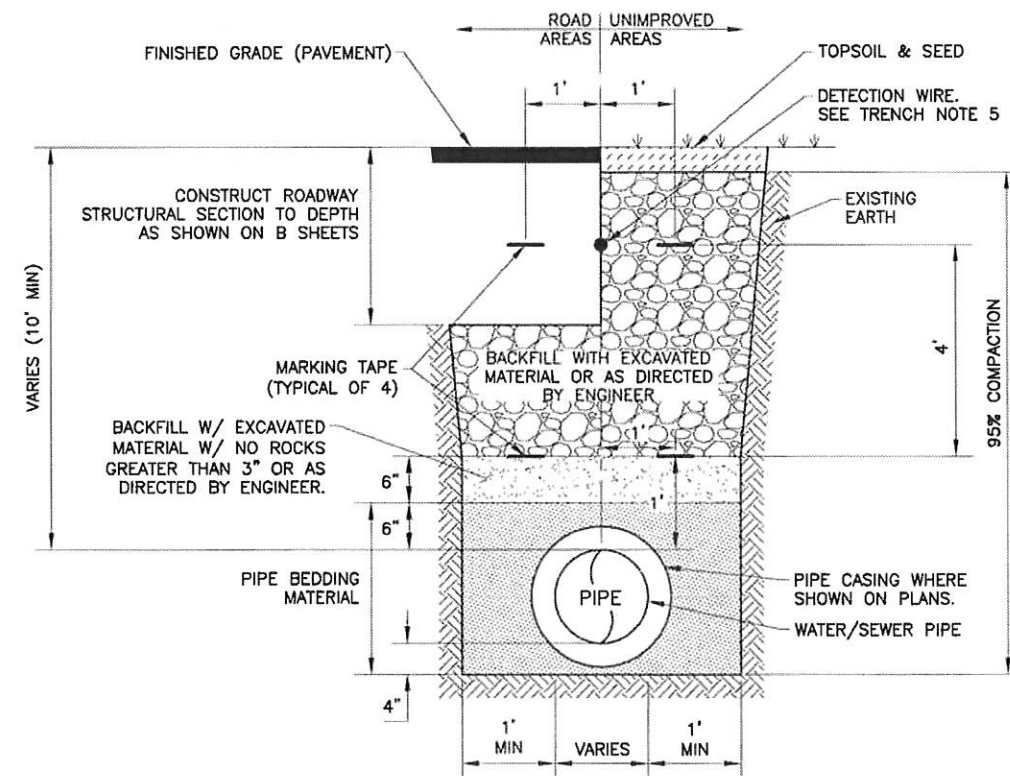
PIPE CASING
NTS

NOTES:

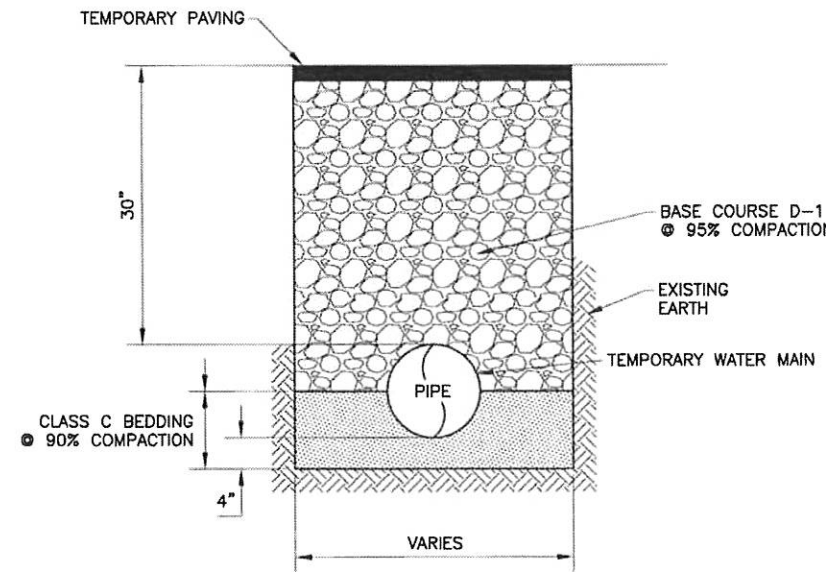
1. INSTALL CASING SPACERS A MAXIMUM OF ONE FOOT (1') FROM EACH SIDE OF EACH PIPE JOINT. CASING SPACERS SHALL BE CASCADE WATERWORKS MFG. STAINLESS STEEL WITH POLYETHYLENE RUNNERS OR APPROVED EQUAL, INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
2. ENDS OF CASING PIPE SHALL BE SEALED WITH SYNTHETIC RUBBER SEAL WITH STAINLESS STEEL BANDS. CASING SHALL BE WATERTIGHT.
3. CARRIER PIPE SHALL BE CONSTRUCTED WITH RESTRAINED JOINTS INSTALLED ENTIRE LENGTH OF CASING PIPE AND AT CONNECTIONS BETWEEN EXISTING AND NEW PIPE.
4. PERFORM LAMP TESTINGS TO VERIFY PROPER CASING ALIGNMENT AFTER CASING PIPE IS BACKFILLED A MINIMUM OF 2 FEET AND PRIOR TO CARRIER PIPE INSTALLATION.



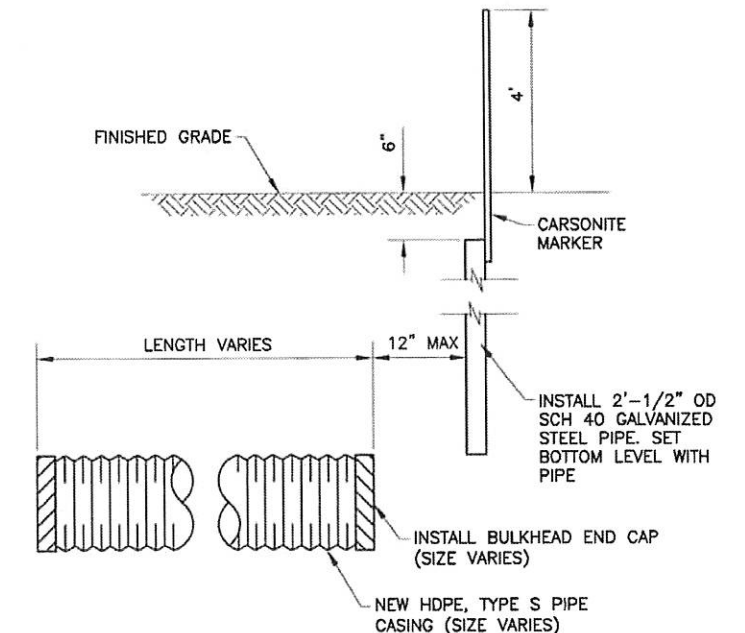
CONNECT TO EXISTING STEEL PIPE CASING
NTS



TYPICAL TRENCH SECTION
NTS



TEMPORARY WATER CROSSING AT GLENN
NTS

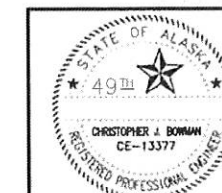


INSTALL NEW HDPE PIPE CASING (FOR FUTURE USE)
NTS

TRENCH NOTES:

1. TRENCH WALLS SHALL BE SLOPED OR SHORED AS REQUIRED FOR SAFETY.
2. ALL BEDDING, BACKFILL AND SURFACING SHALL BE COMPACTED TO THE SPECIFIED PERCENTAGE OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557 METHOD D, UNLESS NOTED OTHERWISE.
3. ANY EXCESS TRENCH EXCAVATION SHALL BE REMOVED BY CONTRACTOR AT NO ADDITIONAL COST.
4. NO ORGANIC MATERIAL WILL BE ALLOWED IN TRENCH BACKFILL.
5. PROVIDE #10 SOLID COPPER DETECTION WIRE OVER HDPE PIPING, CENTERED ON PIPE AND BURIED TO MATCH DEPTH OF EXISTING DETECTION WIRE. SPLICE WITH EXISTING DETECTION WIRE USING SOLDER AND WRAP WITH HEAT SHRINK TAPE.

CERTIFICATION SET
NOVEMBER 2021

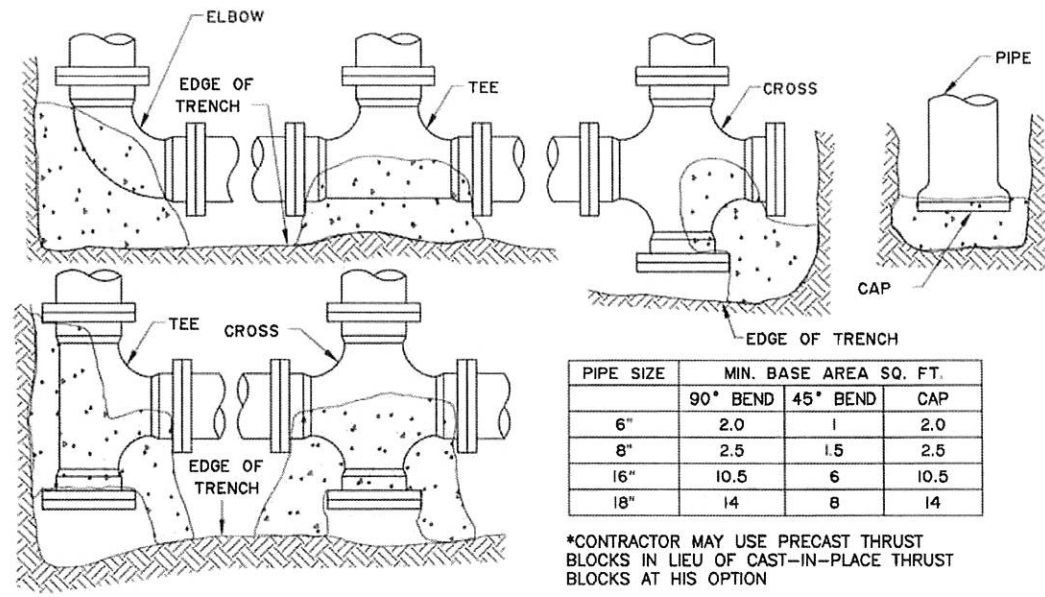


HDL ENGINEERING CONSULTANTS, LLC
3335 ARCTIC BOULEVARD, STE 100
ANCHORAGE, AK 99503
(907) 564-2120
AEC0861

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
**GLENN HWY: PARKS HWY TO S.
INNER SPRINGER LP. (PHASE II)**

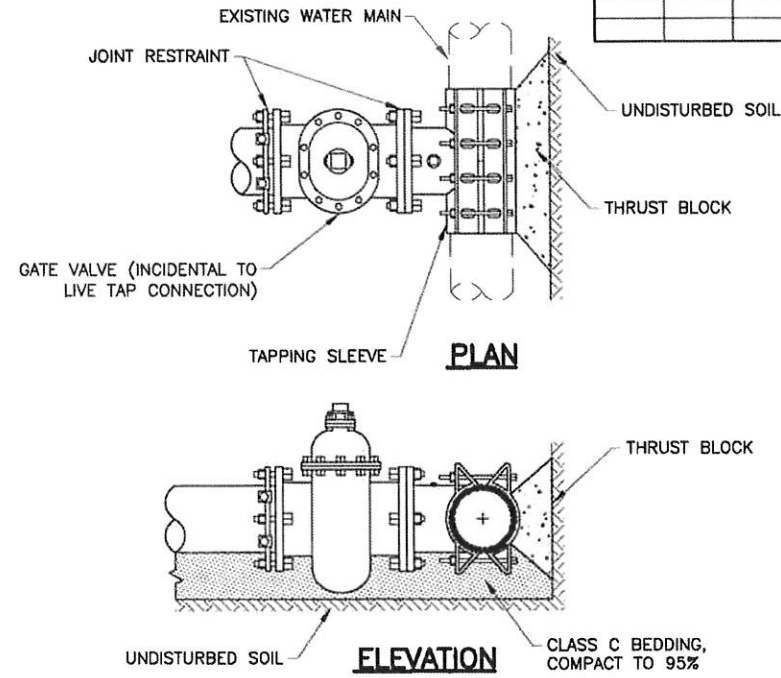
**TRENCH SECTIONS AND PIPE
CASING DETAILS**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A15037/CFHWY00431 0A15038/CFHWY00432 0A15033/CFHWY00006	2021	UW6	UW13

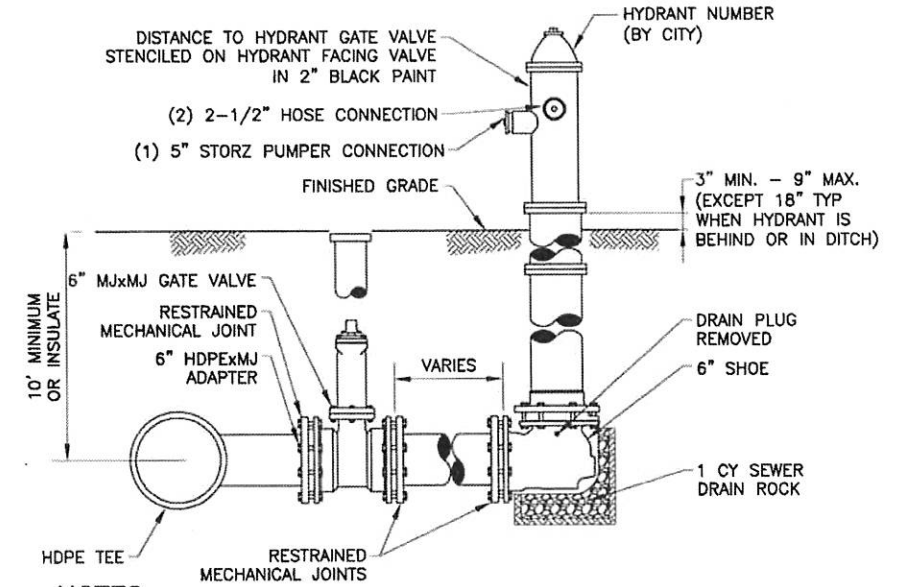


THRUST BLOCKS
NTS

*CONTRACTOR MAY USE PRECAST THRUST BLOCKS IN LIEU OF CAST-IN-PLACE THRUST BLOCKS AT HIS OPTION



TYPICAL LIVE TAP
NTS

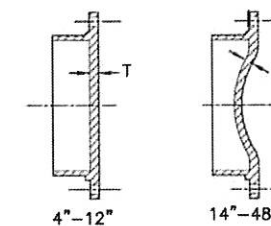


NOTES:

1. HYDRANT BARREL MUST BE INSTALLED PLUMB AND THE LEG MUST BE INSTALLED LEVEL.
2. DRAIN PLUGS TO BE REMOVED BY CONTRACTOR, UNLESS HYDRANT SHOE IS INSTALLED WITHIN 2' OF WATER TABLE. DELIVER REMOVED PLUGS TO WATER UTILITY.
3. LOCATION SHALL BE AS SHOWN ON PLANS.
4. ALL HYDRANTS SHALL BE PAINTED CATERPILLAR YELLOW.
5. AUXILIARY GATE VALVE BOX TO BE INSTALLED ACCORDING TO DETAIL FOR TYPICAL VALVE BOX.
6. ALL JOINTS SHALL BE RESTRAINED.
7. PROVIDE 4" x 4" WIDE RIGID INSULATION WHERE 10.0' COVER IS NOT POSSIBLE.
8. HYDRANTS SHALL BE LEFT-HAND (COUNTERCLOCKWISE) OPENING.
9. ADJUSTMENT OF HYDRANT TO REQUIRED ELEVATION SHALL BE BY CONTRACTOR AT NO ADDITIONAL COST, INCLUDING BARREL EXTENSIONS AS NECESSARY.

FIRE HYDRANT INSTALLATION

NTS



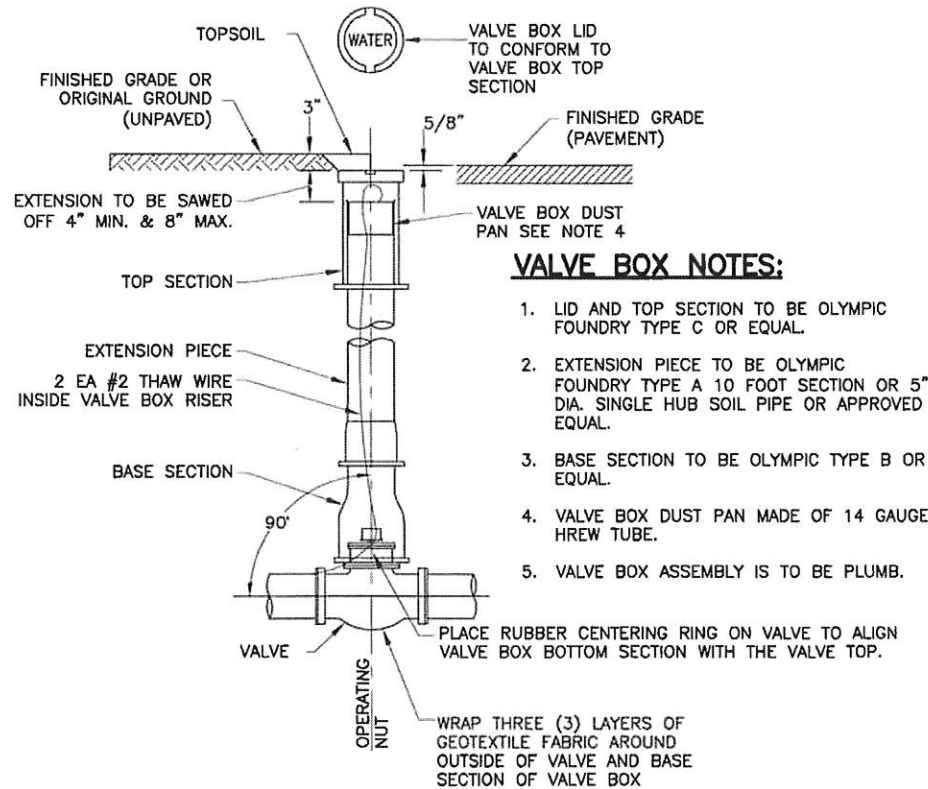
MJ CAP

NOTES:

1. MECHANICAL JOINT RESTRAINT EBAA IRON MEGALUG OR EQUAL.
2. COST OF THIS FITTING TO BE INCLUDED IN BID PRICE OF PIPE.
3. T = THICKNESS PER AWWA C110 STANDARDS.

MJ CAP
NTS

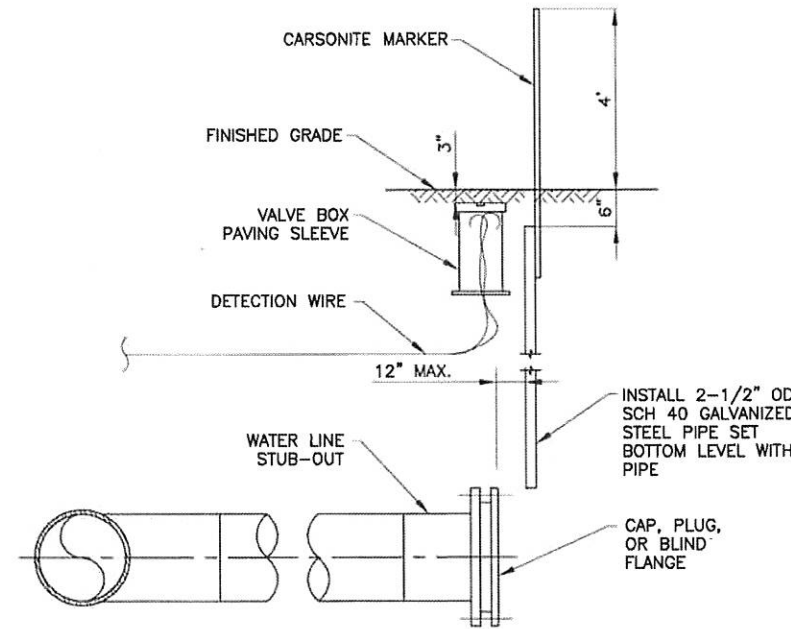
CERTIFICATION SET
NOVEMBER 2021



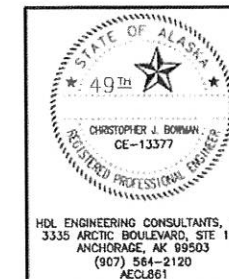
TYPICAL VALVE BOX
NTS

VALVE BOX NOTES:

1. LID AND TOP SECTION TO BE OLYMPIC FOUNDRY TYPE C OR EQUAL.
2. EXTENSION PIECE TO BE OLYMPIC FOUNDRY TYPE A 10 FOOT SECTION OR 5" DIA. SINGLE HUB SOIL PIPE OR APPROVED EQUAL.
3. BASE SECTION TO BE OLYMPIC TYPE B OR EQUAL.
4. VALVE BOX DUST PAN MADE OF 14 GAUGE HREW TUBE.
5. VALVE BOX ASSEMBLY IS TO BE PLUMB.

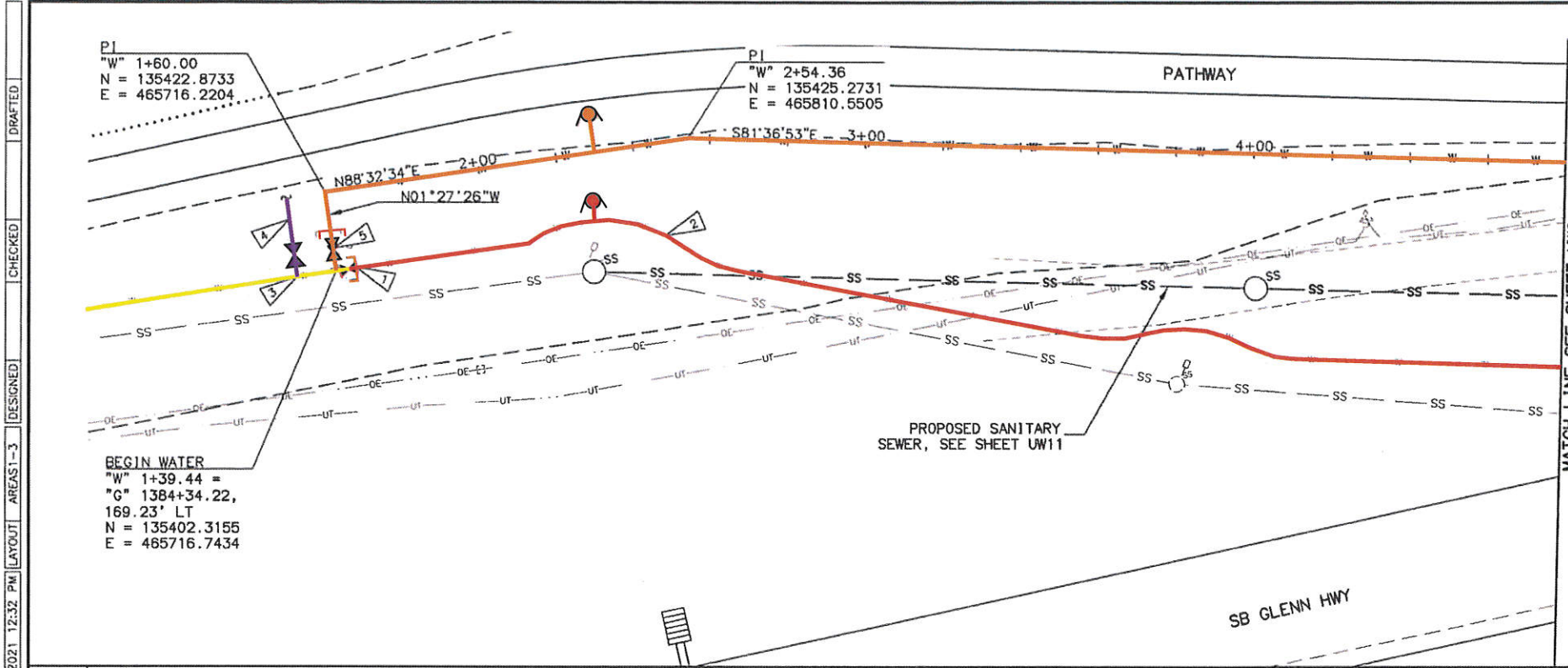


END OF PIPE MARKER DETAIL
NTS

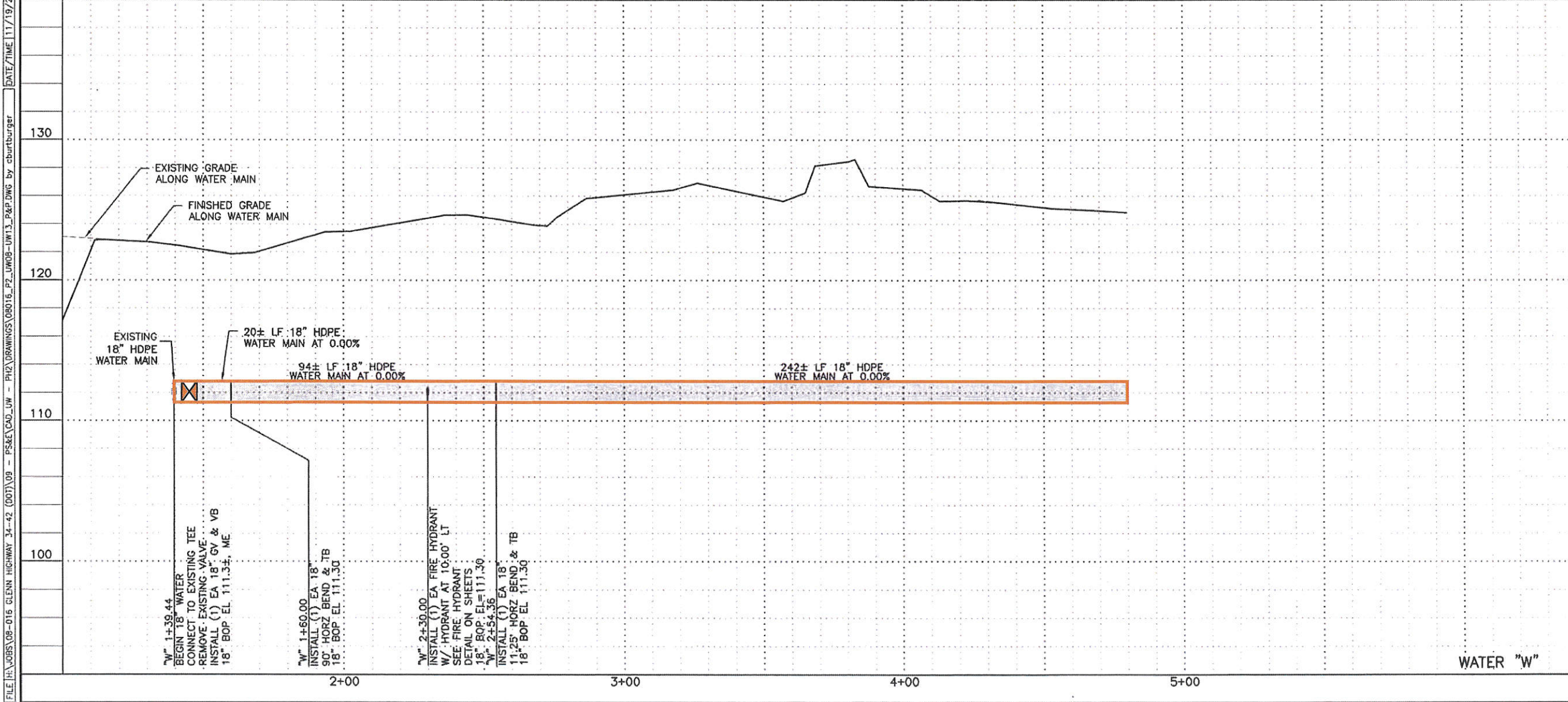
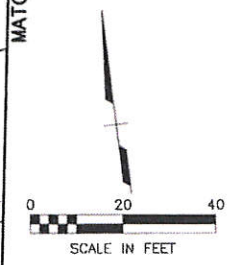


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
**GLENN HWY: PARKS HWY TO S.
INNER SPRINGER LP. (PHASE II)**
WATER DETAILS

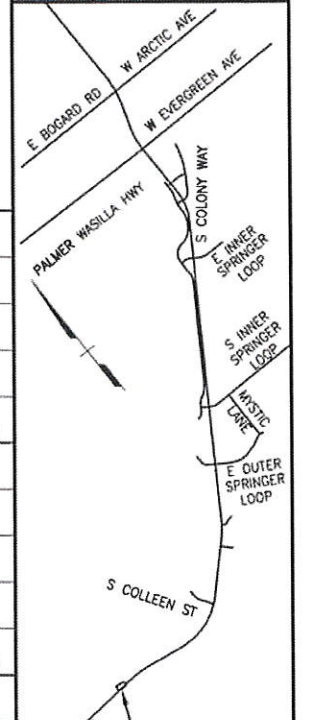
HDL ENGINEERING CONSULTANTS, LLC
3335 ARCTIC BOULEVARD, STE 100
ANCHORAGE, AK 99503
(907) 564-2120
AECL861



- 1 REMOVE EXISTING VALVE AND VALVE BOX, INSTALL BLIND FLANGE AT EXISTING TEE.
- 2 REMOVE EXISTING 18" HDPE WATER MAIN (SUBSIDIARY TO HDPE WATER CONDUIT INSTALLATION) APPROX 637 LF TOTAL.
- 3 INSTALL 18" X 8" LIVE TAP FOR TEMPORARY WATER SYSTEM. CLOSE VALVE, CAP OPEN END, AND ABANDON IN PLACE UPON COMPLETION OF PERMANENT WATER SYSTEM.
- 4 8" SDR 11 HDPE TEMPORARY WATER MAIN. ROUTE AS REQUIRED FOR CONSTRUCTION.
- 5 REMOVE EXISTING VALVE AND VALVE BOX.



SHEET NO.	TOTAL SHEETS
UW8	UW13
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
0A15037/CFHWY00431 0A15038/CFHWY00432 0A15033/CFHWY00006	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

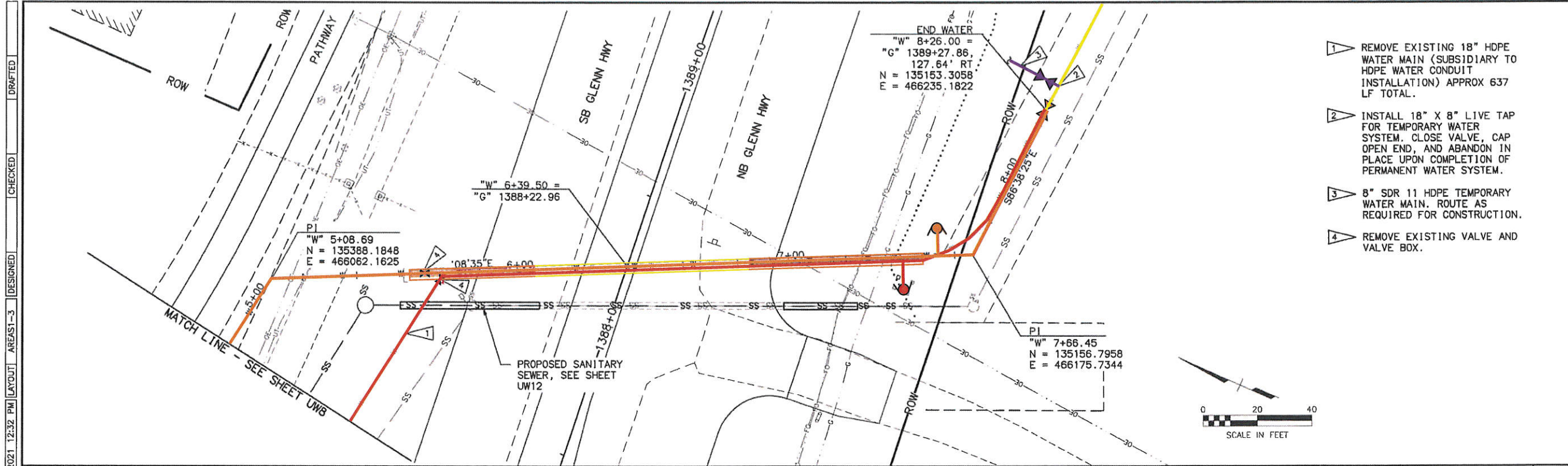


THIS SHEET
CERTIFICATION SET
NOVEMBER 2021



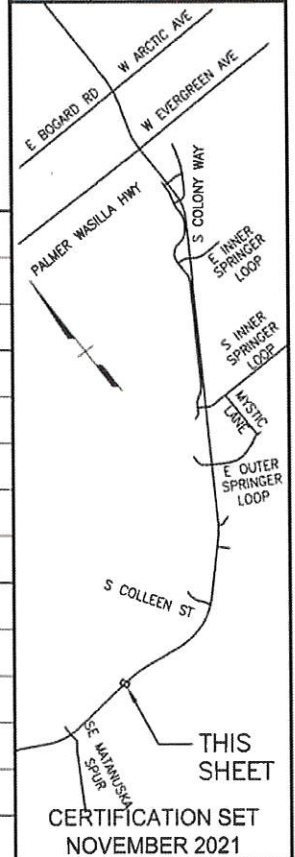
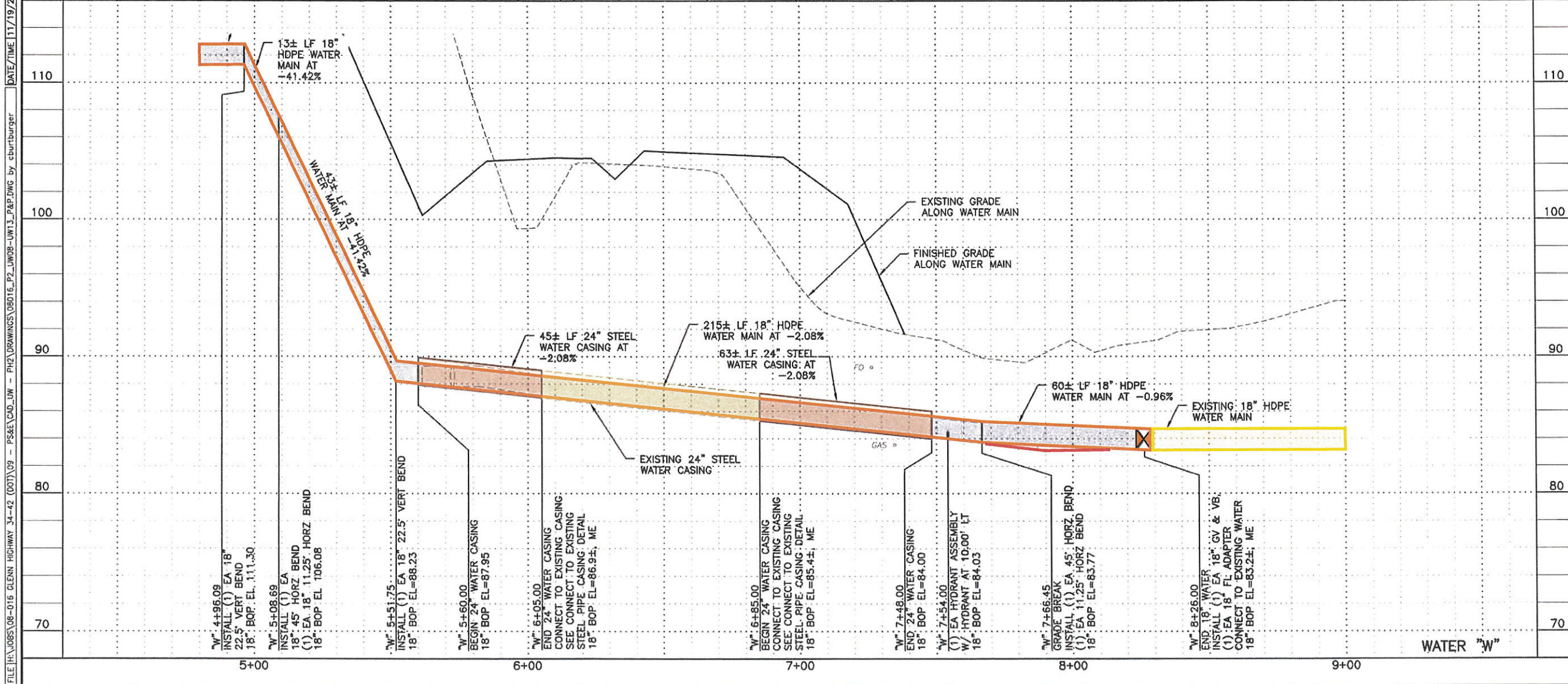
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
GLENN HWY: PARKS HWY TO
S. INNER SPRINGER LP.
(PHASE II)

UTILITY
PLAN & PROFILE
WATER



- 1 REMOVE EXISTING 18" HDPE WATER MAIN (SUBSIDIARY TO HDPE WATER CONDUIT INSTALLATION) APPROX 637 LF TOTAL.
- 2 INSTALL 18" X 8" LIVE TAP FOR TEMPORARY WATER SYSTEM. CLOSE VALVE, CAP OPEN END, AND ABANDON IN PLACE UPON COMPLETION OF PERMANENT WATER SYSTEM.
- 3 8" SDR 11 HDPE TEMPORARY WATER MAIN. ROUTE AS REQUIRED FOR CONSTRUCTION.
- 4 REMOVE EXISTING VALVE AND VALVE BOX.

SHEET NO.	TOTAL SHEETS
UW9	UW13
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
0A15037/CFHWY00431 0A15038/CFHWY00432 0A15033/CFHWY00006	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

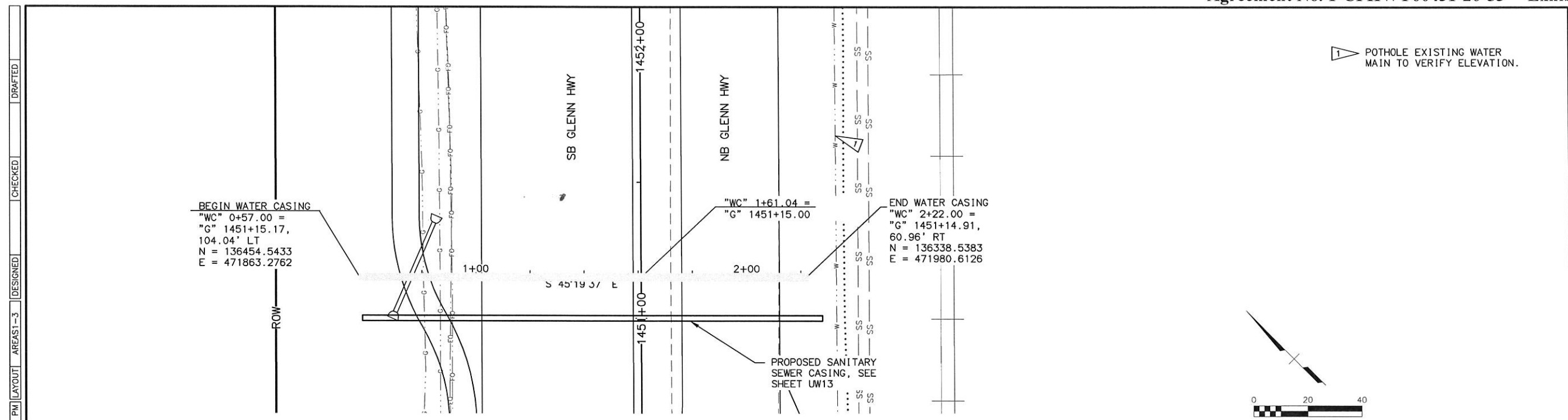


STATE OF ALASKA
 49TH
 CHRISTOPHER J. BONMAN
 CE-13377
 REGISTERED PROFESSIONAL ENGINEER

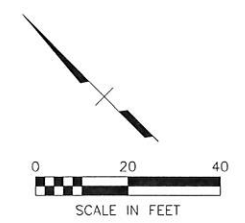
HDL ENGINEERING CONSULTANTS, LLC
 3335 ARCTIC BOULEVARD, STE 100
 ANCHORAGE, AK 99503
 (907) 584-2120
 AECL881

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 GLENN HWY: PARKS HWY TO
 S. INNER SPRINGER LP.
 (PHASE II)

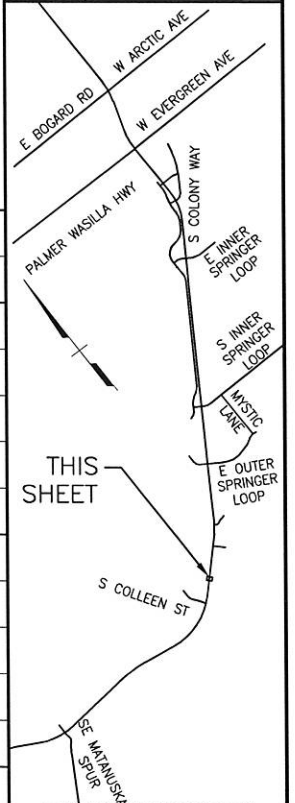
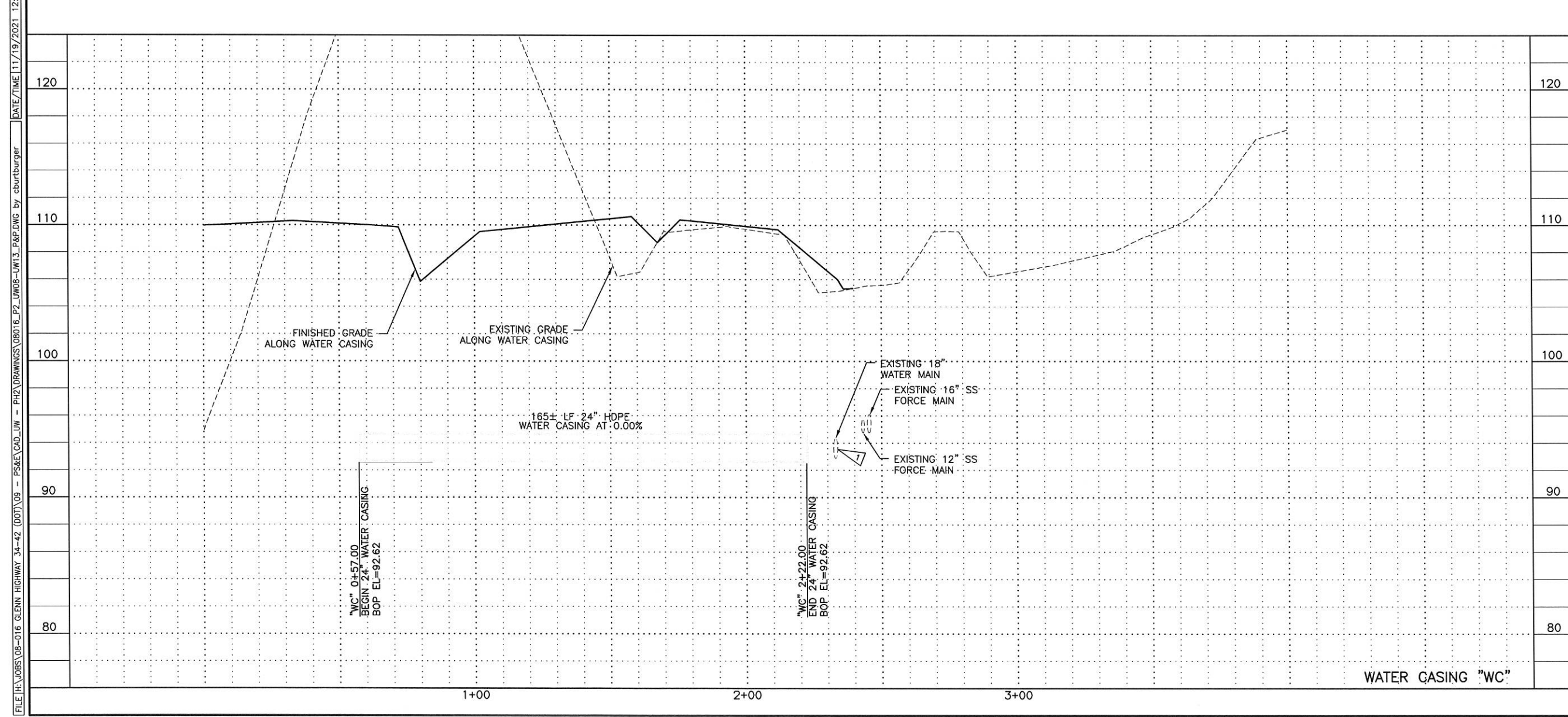
UTILITY
 PLAN & PROFILE
 WATER



POTHOLE EXISTING WATER MAIN TO VERIFY ELEVATION.



SHEET NO.	TOTAL SHEETS
UW10	UW13
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
0A15037/CFHWY00431 0A15038/CFHWY00432 0A15033/CFHWY00006	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	



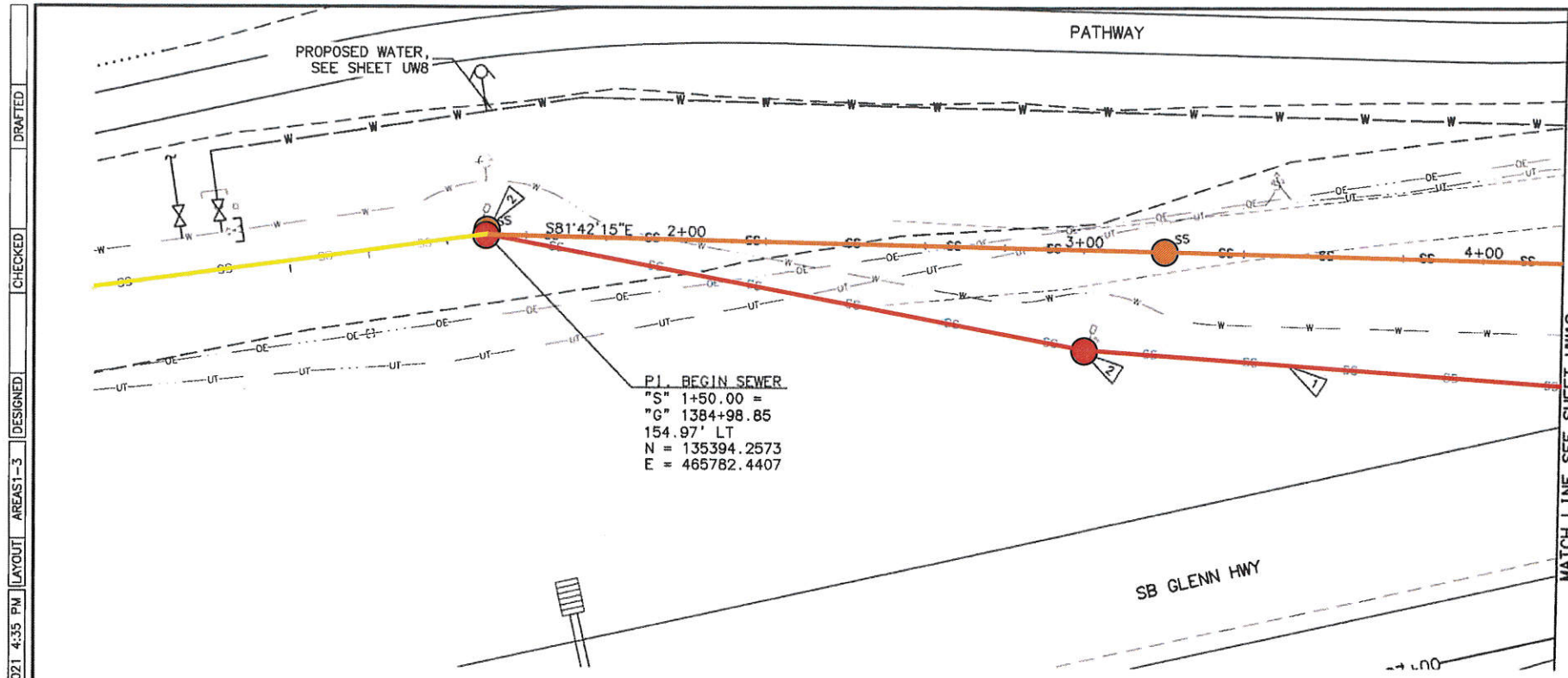
CERTIFICATION SET
NOVEMBER 2021

STATE OF ALASKA
 49th
 CHRISTOPHER J. BONHAM
 REGISTERED PROFESSIONAL ENGINEER
 CE-13377

HDL ENGINEERING CONSULTANTS, LLC
 3335 ARCTIC BOULEVARD, STE 100
 ANCHORAGE, AK 99503
 (907) 564-2120
 AECL861

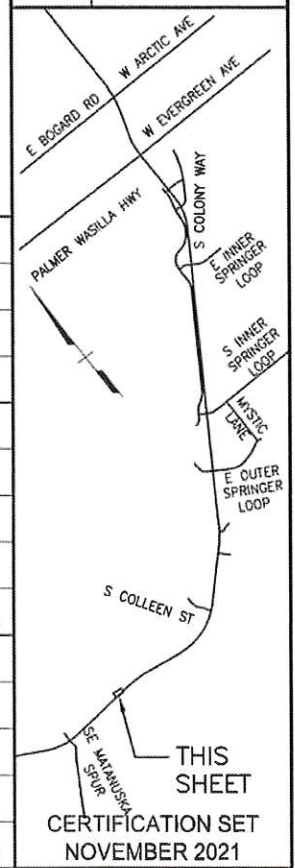
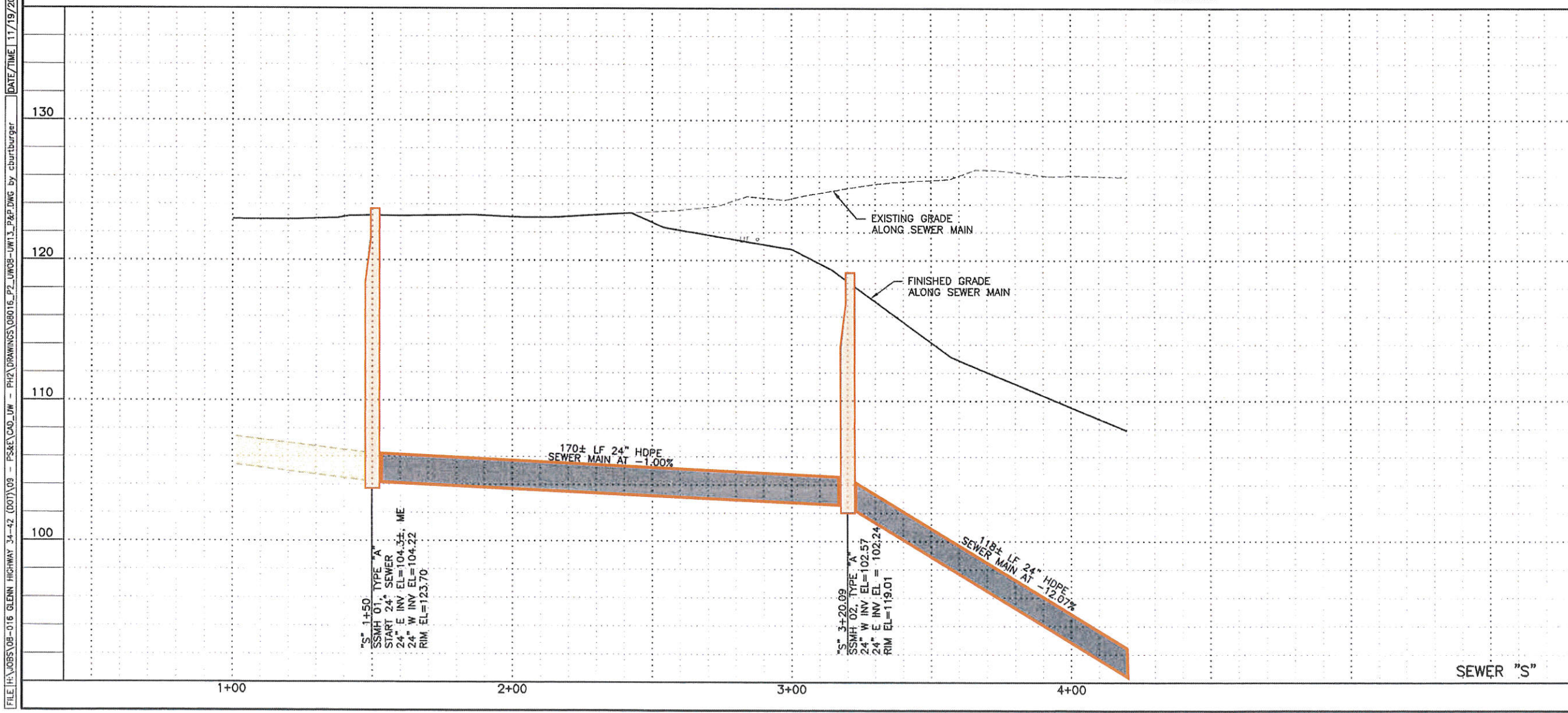
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 GLENN HWY: PARKS HWY TO
 S. INNER SPRINGER LP.
 (PHASE II)
 UTILITY
 PLAN & PROFILE
 WATER

FILE: H:\JOBS\08-016 GLENN HIGHWAY 34-42 (DOT)\08 - PS&E\CAD_UW - PH2\DRAWINGS\08016_P2_UW08-UW13_P&F.DWG by cburburger DATE/TIME 11/19/2021 12:32 PM LAYOUT AREAS1-3 [DESIGNED] [CHECKED] [DRAFTED]



- 1 REMOVE EXISTING 24" HDPE SEWER MAIN (SUBSIDIARY TO SANITARY SEWER CONDUIT INSTALLATION) APPROX 311 LF TOTAL.
- 2 REMOVE EXISTING SANITARY SEWER MANHOLE.

SHEET NO.	TOTAL SHEETS
UW11	UW13
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
0A15037/CFHWY00431	
0A15038/CFHWY00432	
0A15033/CFHWY00006	
NO.	REVISION
DATE	
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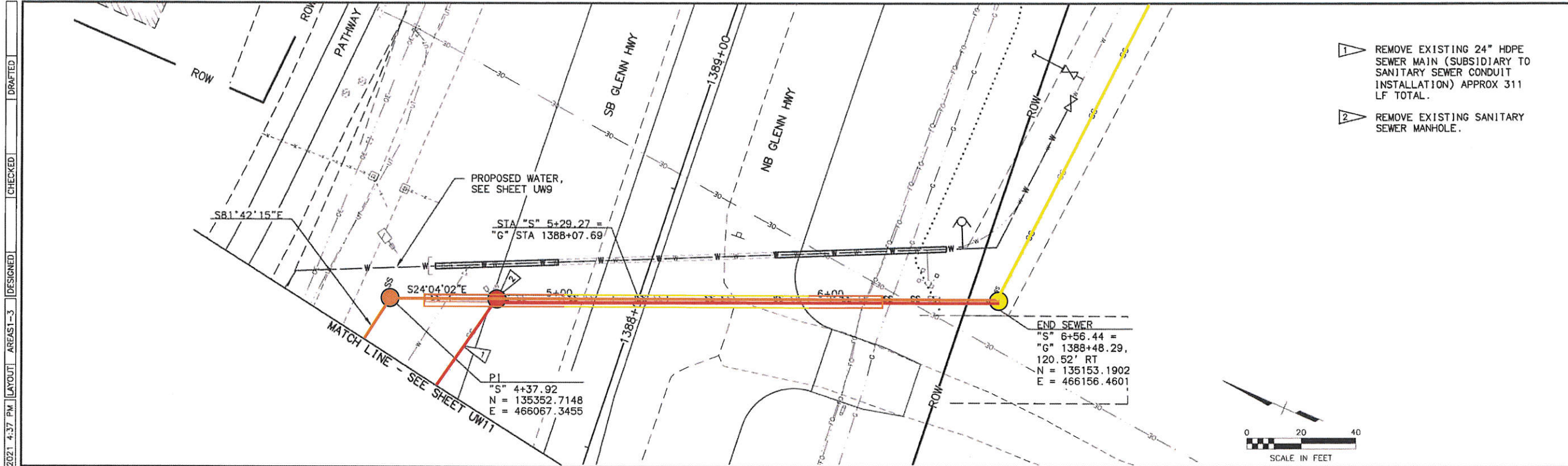


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 ANCHORAGE, AK 99503
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STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
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 GLENN HWY: PARKS HWY TO
 S. INNER SPRINGER LP.
 (PHASE II)

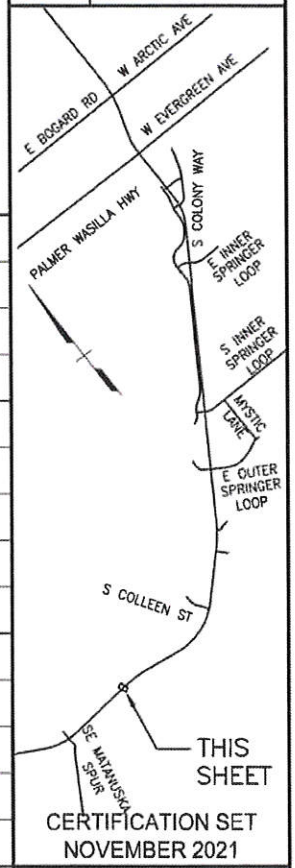
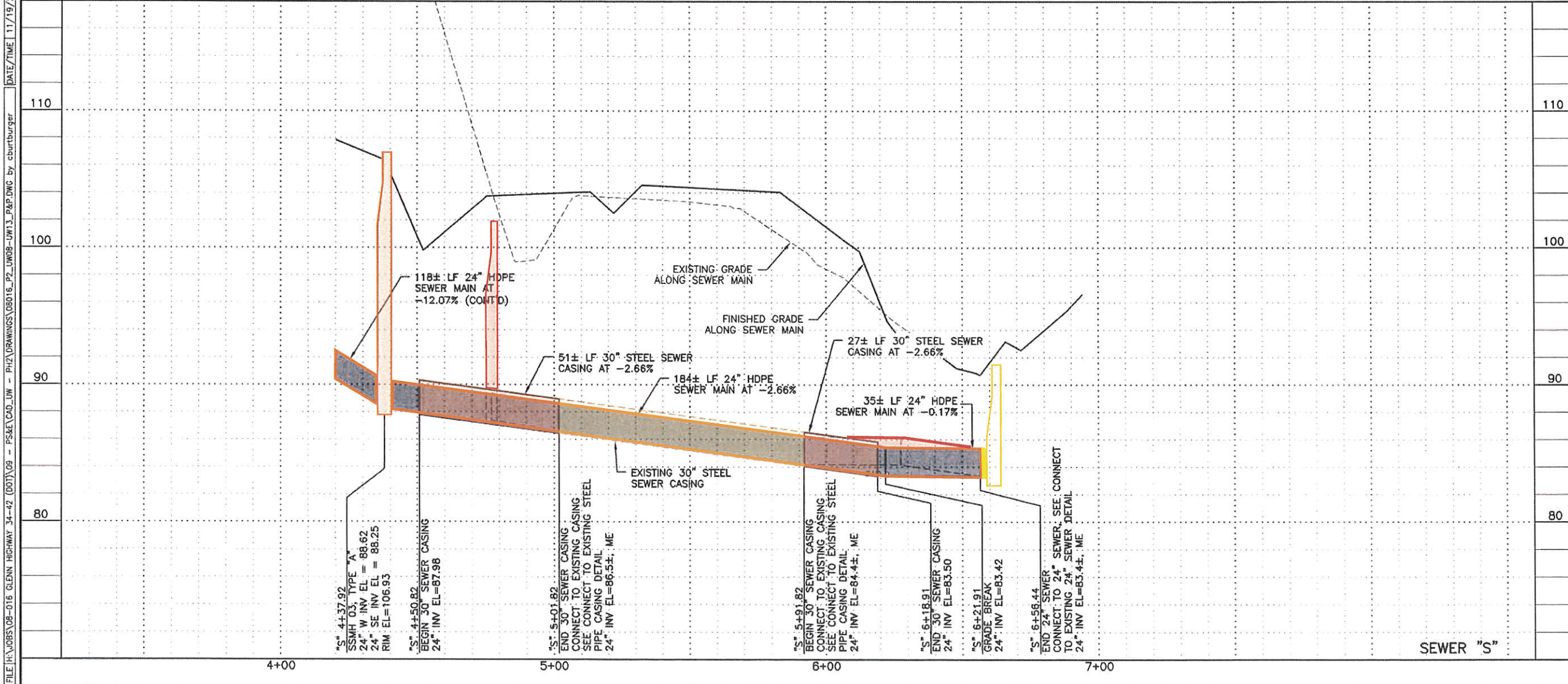
UTILITY
 PLAN & PROFILE
 SEWER

FILE H:\JOBS\08-016 GLENN HIGHWAY 34-42 (001)\09 - P&S\CAD\DWG - P&S\DRAWINGS\08016_P2_UW08-UW13_P&P.DWG by cburburger DATE/TIME 11/19/2021 4:35 PM LAYOUT AREA1-3 DESIGNED CHECKED DRAFTED



- 1 REMOVE EXISTING 24" HDPE SEWER MAIN (SUBSIDIARY TO SANITARY SEWER CONDUIT INSTALLATION) APPROX 311 LF TOTAL.
- 2 REMOVE EXISTING SANITARY SEWER MANHOLE.

SHEET NO.	TOTAL SHEETS
UW12	UW13
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
0A15037/CFHWY00431 0A15038/CFHWY00432 0A15033/CFHWY00006	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

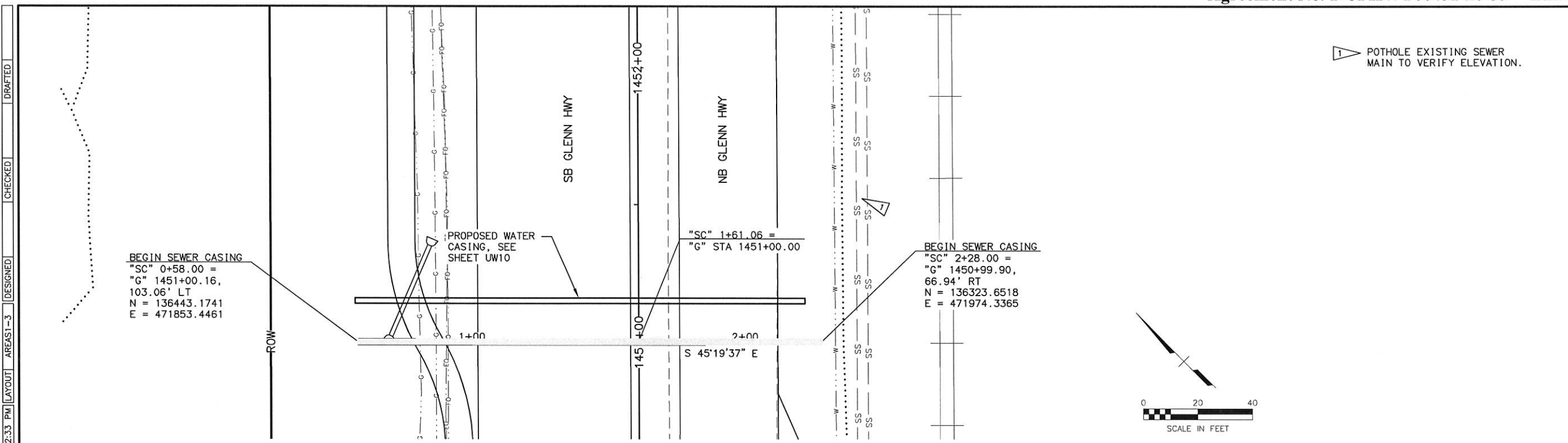


THIS SHEET
CERTIFICATION SET
NOVEMBER 2021

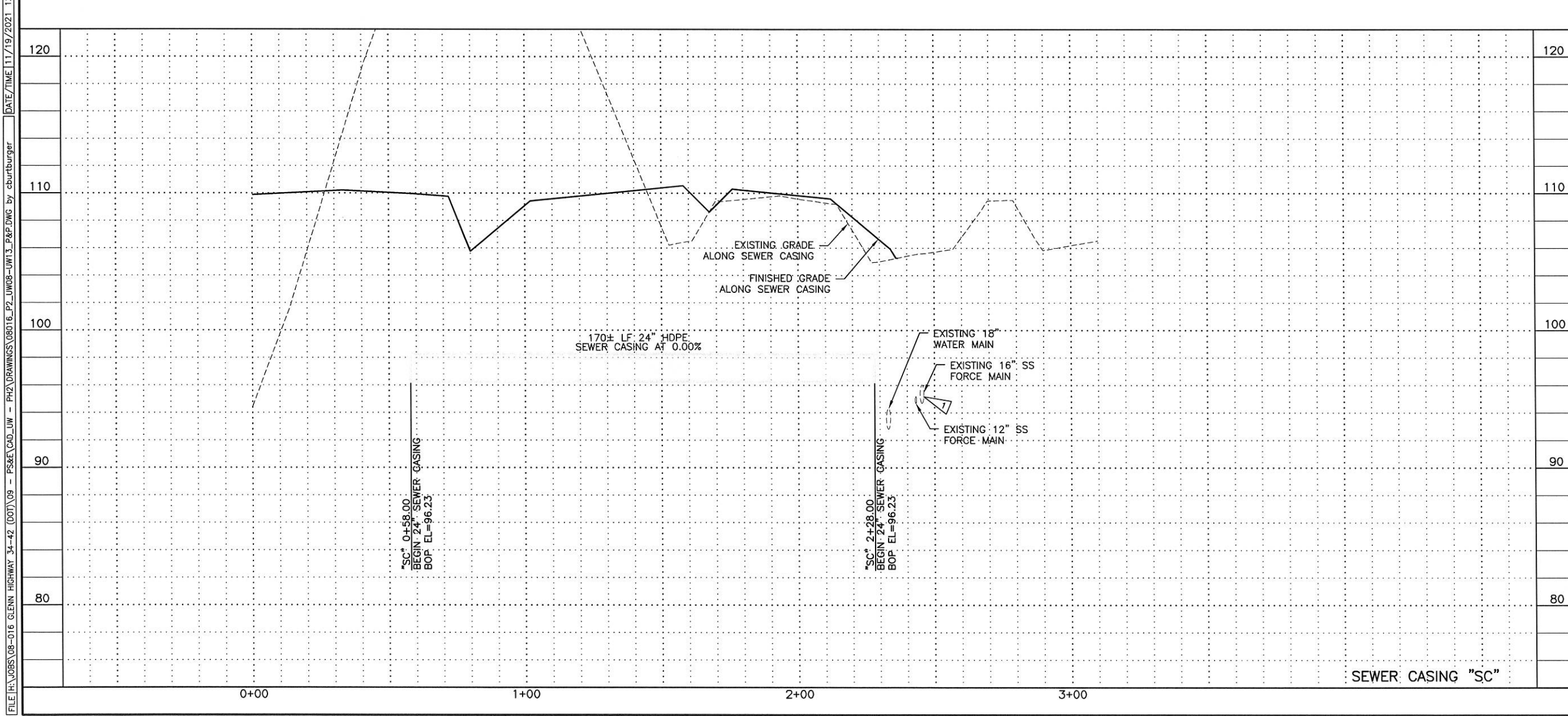
HDL ENGINEERING CONSULTANTS, LLC
3335 ARCTIC BOULEVARD, STE 100
ANCHORAGE, AK 99503
(907) 564-2120
AECL861

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
GLENN HWY: PARKS HWY TO
S. INNER SPRINGER LP.
(PHASE II)
UTILITY
PLAN & PROFILE
SEWER

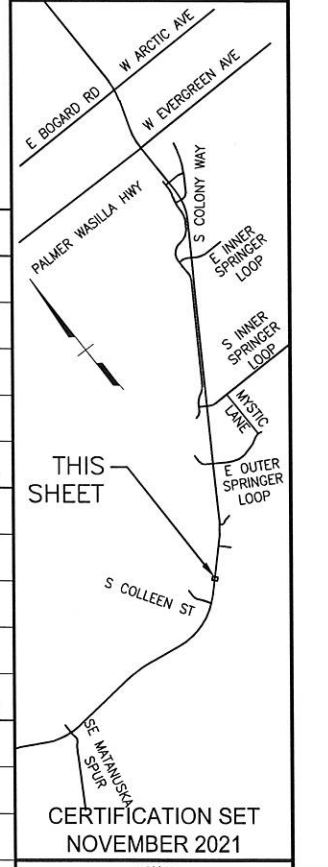
FILE H:_OBRS\08-016 GLENN HIGHWAY 34-42 (DOT) 09 - P&E\CAD_LIN - PH2\DRAWINGS\08016_P2_UW08-UW13_P&P.DWG by cburburger DATE/TIME 11/19/2021 4:37 PM [LAYOUT] AREA1-3 [DESIGNED] [CHECKED] [DRAFTED]



POTHOLE EXISTING SEWER MAIN TO VERIFY ELEVATION.



SHEET NO.	TOTAL SHEETS
UW13	UW13
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
0A15037/CFHWY00431 0A15038/CFHWY00432 0A15033/CFHWY00006	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	



STATE OF ALASKA
40th
REGISTERED PROFESSIONAL ENGINEER
CHRISTOPHER J. BONMAN
CE-13377

HDL ENGINEERING CONSULTANTS, LLC
3335 ARCTIC BOULEVARD, STE 100
ANCHORAGE, AK 99503
(907) 564-2120
AECL861

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
GLENN HWY: PARKS HWY TO
S. INNER SPRINGER LP.
(PHASE II)

UTILITY
PLAN & PROFILE
SEWER

FILE: H:\JOBS\08-016 GLENN HIGHWAY 34-42 (DOT)\09 - PS&E\CAD_UW - PH2\DRAWINGS\08016_P2_UW08-UW13_P&F.DWG by cburburger DATE/TIME 11/19/2021 12:33 PM LAYOUT AREAS1-3 DESIGNED CHECKED DRAFTED

**STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES**

UTILITY AGREEMENT

**UTILITY REIMBURSABLE SERVICES AGREEMENT
(WORK BY STATE FOR COMPANY)**

Region: **CENTRAL**

Agreement No.: **1-CFHwy00431-20-84**

Project No.: **0A15037/CFHwy00431**

URSA No.: **CRMBS00795**

Utility Work Order No.: **Non-Reimbursable Water # (TBD)
Non-Reimbursable Sewer # (TBD)**

This Agreement made and entered into this _____ day of _____ 20____, by and between the State of Alaska, acting by and through the Department of Transportation and Public Facilities, hereinafter called the DEPARTMENT, and **CITY of PALMER (COP)** hereinafter called the COMPANY.

WITNESSETH:

WHEREAS, the DEPARTMENT, in the interest of public safety and convenience proposes to construct, reconstruct or otherwise improve a portion of the DEPARTMENT facility known as the **GLENN HIGHWAY: PARKS HIGHWAY TO S. INNER SPRINGER LOOP, PHASE II** which shall require the adjustment, relocation or removal of the COMPANY's facilities along, over, under or within said DEPARTMENT facility such adjustment relocation or removal work to hereinafter be described as "relocation work", and

WHEREAS, the COMPANY has requested that the DEPARTMENT incorporate into its facility design and specifications for installation of water & sewer casings and 50/50 share of the relocation costs associated with the facilities installed under permits 1-135000-05-055 and 1-135000-05-56.

WHEREAS, the benefits to the COMPANY will impose additional construction and incidental costs upon the DEPARTMENT, and

WHEREAS, it is the intention of both parties that the additional costs of the construction and all incidental items as shown on "Exhibit A" to the benefit of the COMPANY, shall be borne by the COMPANY, and

WHEREAS, the DEPARTMENT and the COMPANY have reviewed the plans for said improvements for the COMPANY and are in mutual agreement as to the scope of work to be performed, as described in the attached "Certificate of Finding", marked "Exhibit B";

NOW THEREFORE, in consideration of the mutual undertaking promises, covenants, and considerations by and between the parties contained herein, do hereby agree as follows:

- A. The DEPARTMENT will incorporate as part of the design plans and specifications the adjustments, relocation, removal, betterments and/or additions as requested by the COMPANY in the final design of the DEPARTMENT's project as shown in "Exhibit C".
- B. The COMPANY will participate in the costs of the construction and incidental items as outlined in "Exhibit A". The COMPANY's cost will be billed using the successful bidder's Unit Prices established in the project contract.
- C. The COMPANY will participate in the DEPARTMENT's preliminary engineering (PE) and contract administration (CE) costs relative to the UTILITY REIMBURSABLE SERVICES AGREEMENT (URSA) work outlined herein to incorporate the COMPANY's requested betterments and/or additions into the DEPARTMENT's contract by one of the following methods:

- (1) Actual DEPARTMENT labor costs with additives.
- X (2) A fixed percentage rate of **3%** for Preliminary Engineering.
A fixed percentage rate of **15%** for Construction Engineering.
- X (3) A lump sum amount of **\$42,044.07** for Preliminary Engineering (HDL).
A lump sum amount of **\$0** for Construction Engineering.
- X (4) Actual Indirect Cost Allocation Plan (ICAP) as percentage of total costs. The ICAP rate is approved by FHWA, and is assessed at the time of billing.

The total estimated amount of the COMPANY's cost participation for the construction and incidentals as outlined herein is **\$412,487**.

- D. The COMPANY will reimburse the DEPARTMENT within sixty (60) days after receipt of a billing from the DEPARTMENT for that portion of the system construction and incidentals covered under this agreement. Such billing will include the Project, Agreement, and Utility Work Order numbers, the Termini and the cost breakdown as outlined in "Exhibit A". Each billing will contain a recapitulation showing the total cost to date, and the amount of previous billings. Partial billings may be submitted to the COMPANY for the work as completed.
- E. The administration of the construction of the facilities shall be the prerogative and responsibility of the DEPARTMENT. The COMPANY, or its authorized representative, may inspect and obtain appropriate field data to insure proper compliance with COMPANY requirements during construction of the facilities, and secure data for further reference.

- F. During the performance of the work, the COMPANY or its authorized representative will make all construction orders or changes to the contract through the DEPARTMENT'S Project Engineer. Any negotiated changes to the contract between the COMPNAY and the Contractor will be made through the DEPARTMENT'S Project Engineer.

- G. The COMPANY is allowed to relocate/locate its facilities upon the highway right-of-way, subject to the terms of the required permit and applicable Federal, State and Local Statutes, codes and regulations. The COMPANY shall assume all liability related in any way to the presence, operation and/or maintenance of said facilities.

EXHIBIT A - ESTIMATE SUMMARY

The City of Palmer (COP) estimate of work and materials required in connection with Project No.:0A15037/CFHWHY00431,
Project Name: **GLENN HIGHWAY: PARKS HIGHWAY TO INNER SPRINGER LOOP, PHASE II**, Utility Work Order No. TBD,
Agreement No. 1-CFHWHY00431-20-84, URSA No.: CRMBS00795

	FEDERAL PARTICIPATION	STATE PARTICIPATION	UTILITY COST NON-REIMBURS.	TOTAL
PART I. UTILITY WORK				
Right of Way (Acquisition Only)				-
Preliminary Engineering				-
Preliminary Engineering Overhead				-
073 - TOTAL PRELIMINARY ENGINEERING	-	-	-	-
Construction Engineering				-
Construction Engineering Overhead				-
266 - TOTAL CONSTRUCTION ENGINEERING	-	-	-	-
Construction Labor				-
Materials & Supplies				-
Materials Handling Charges				-
Transportation & Equipment				-
Contract Construction				-
Miscellaneous Expenses				-
Construction Overhead				-
GROSS CONSTRUCTION COSTS	-	-	-	-
Shared Costs				-
Salvage & Scrap				-
Betterment				-
Non-Reimbursable				-
Other				-
TOTAL CREDITS	-	-	-	-
265 - NET CONSTRUCTION COSTS	-	-	-	-
TOTAL UTILITY WORK	-	-	-	-
PART II. STATE WORK FOR UTILITY				
Preliminary Engineering @ 3%			8,744	8,744
Preliminary Engineering (HDL)			42,045	42,045
Construction Engineering @ 15%			43,720	43,720
Shared Costs			38,548	38,548
Contract Construction			252,913	252,913
ICAP (CIP Projects) 6.87%			26,517	26,517
TOTAL STATE WORK FOR UTILITY	-	-	412,487	412,487
TOTAL ESTIMATED RELOCATION COSTS (Parts I & II)	-	-	412,487	412,487

UTILITY CONCURRENCE, BY: _____ SUBMITTED BY: _____

DATE: _____ TITLE: _____

**EXHIBIT A
BILLING FORMAT**

1. The COMPANY agrees to reimburse the DEPARTMENT for all costs associated with Utility Reimbursable Services Agreement (URSA) No. CRMBS00795 subject to the terms and conditions of this Agreement. These costs include, but are not limited to, Preliminary and Construction Engineering costs associated with the development and execution of this Agreement, as well as all work supplied by/through the DEPARTMENT and/or other utility companies.

2. **DOLWD FILING REQUIREMENTS:**

UTILITY COMPANIES NOT OWNED/OPERATED BY A GOVERNMENT AGENCY:

On public construction projects, if any portion of the utility work is reimbursable by the DEPARTMENT, the COMPANY is required to file the following:

1. Notice of Work
2. Certified Payroll OR a sworn affidavit containing the following information:
 - a. All work classifications and wage rates and fringe benefit rates to be paid for all workers on the project, and
 - b. A statement that the combined total of the wage and fringe benefit amount shall meet or exceed the total prevailing wage and fringe benefits for the specified classification of the worker as listed in the applicable *Laborers' and Mechanics' Minimum Rates of Pay* pamphlet.
3. Notice of Completion

The DEPARTMENT will file the Notice of Award (NOA) with DOLWD prior to beginning utility relocation work. A DOLWD project number will be provided to the DEPARTMENT and to the COMPANY upon approval of the NOA.

UTILITY COMPANIES OWNED/OPERATED BY A GOVERNMENT AGENCY:

On public construction projects, the COMPANY is required to file the NOA with DOLWD if any portion of the utility work is contracted out. The DEPARTMENT will provide the project name required for filing the NOA. After the COMPANY files the NOA, the COMPANY's contractor will file the following:

1. Notice of Work
2. Certified Payroll
3. Notice of Completion

DOLWD FILING FEE:

DOLWD assesses a 1% filing fee on the sum of all construction contracts issued for a DEPARTMENT project and this fee is capped at \$5,000. The DEPARTMENT's General Contractor will pay the full cap amount, therefore a DOL filing fee will not be assessed on the utility relocation contract.

3. **BUY AMERICA:**

The COMPANY is required to meet the Buy America requirements as set forth in 23 U.S. Code § 313 and 23 Code of Federal Regulations, Part 635.410.

4. The DEPARTMENT, through its design contract with HDL Consultants, has developed and incorporated an estimate for the COMPANY's water and sewer relocation work. The notes below describe/quantify some of the costs included in that estimate.

- **Preliminary Engineering Costs:**

The design for the COMPANY's relocations and elective work was completed by HDL Consultants under the DEPARTMENT's design contract. A non-reimbursable percentage was derived by determining the ratio of non-reimbursable to total water and sewer construction costs (sample calculation below).

$$\frac{\text{Betterment}(\text{Const}) + \text{Non - Reimbursable}(\text{Const})}{\text{Total}(\text{Const})} = \text{Non - Reimb \%}$$

$$\frac{\text{Betterment}(\$209,362.50) + \text{Non - Reimbursable}(\$43,550.00)}{\text{Total}(\$472,475.00)} = 53.53 \%$$

The non-reimbursable percentage has been applied to HDL's total water and sewer design costs. The resulting cost represents the COMPANY's share of the Preliminary Engineering costs incurred.

$$\begin{aligned} (\text{Total HDL Engineering}) * 53.53\% &= \text{Non-Reimbursable HDL Costs} \\ (\$70,871.25) * 53.53\% &= \$42,044.07 \end{aligned}$$

The DEPARTMENT has calculated and applied a 3% fee for internal Preliminary Engineering costs associated with the work necessary to include the COMPANY's betterment/non-reimbursable work into the construction contract.

$$\begin{aligned} \text{Non - Reimb}(\text{Contract Const} + \text{Shared Costs}) * 3.00\% &= \text{Non-Reimb PE Costs} \\ (\$252,913 + \$38,548) * 3.00\% &= \$8,744 \end{aligned}$$

- **Construction Engineering Costs:**

The DEPARTMENT has calculated and applied a 15% fee for Construction Engineering costs associated with administering that portion of the construction contract related to the betterment/non-reimbursable unit costs and applicable shared costs. This work includes, but is not limited to, coordination, inspection, documentation, as-building, and invoicing COMPANY.

$$\begin{aligned} \text{Non - Reimb}(\text{Contract Const} + \text{Shared Costs}) * 15.00\% &= \text{Non-Reimb PE Costs} \\ (\$252,913 + \$38,548) * 15.00\% &= \$43,720 \end{aligned}$$

5. **Shared Costs:**

Costs assessed to the COMPANY for DEPARTMENT expenses incurred in support of non-reimbursable and betterment utility work associated with the project. The shared costs include, but are not limited to, clearing, grubbing, traffic control, surveying, and SWPPP (See Exhibit A page 6). The shared cost value will be recalculated and fixed upon bid opening. If there are changes to the COMPANY's scope of work, the DEPARTMENT reserves the right to recompute this value. The shared cost value will be recalculated and fixed upon bid opening. If there are changes to the COMPANY's scope of work, the DEPARTMENT reserves the right to recompute this value.

6. This project will be a unit bid contract. The Contract Construction and Shared Cost items identified in this Agreement will be recalculated and fixed as a lump sum at bid opening, and invoiced to the COMPANY. If the final Contract Construction costs vary by more than 10% from the net sum of those calculated in Exhibit A and all approved change orders, a billing correction shall be processed.

**ESTIMATE OF STATE WORK FOR UTILITY
CITY OF PALMER WATER & SEWER
GLENN HIGHWAY: PARKS HIGHWAY TO INNER SPRINGER LOOP, PHASE II
PROJECT NO. 0A15037/CFHWY00431**

ITEM NO.	PAY ITEM	PAY UNIT	UNIT PRICE	REIMBURSABLE		NON-REIMBURSABLE		TOTAL COSTS	
				QTY	COSTS	QTY	COSTS	QTY	COSTS
202.0006.0000	Removal of Manhole, Sanitary Sewer*	EA	\$ 2,000.00	1.5	\$ 3,000.00	1.5	\$ 3,000.00	3.0	\$ 6,000.00
603.0017.0024	Pipe, 24 Inch, Casing (Water)	LF	\$ 130.00	0.0	-	165.0	\$ 21,450.00	165.0	\$ 21,450.00
603.0017.0024	Pipe, 24 Inch, Casing (Sewer)	LF	\$ 130.00	0.0	-	170.0	\$ 22,100.00	170.0	\$ 22,100.00
604.0002.0000	Sanitary Sewer Manhole Type A*	EA	\$ 10,000.00	1.5	\$ 15,000.00	1.5	\$ 15,000.00	3.0	\$ 30,000.00
604.0004.0000	Adjust Existing Manhole, Sanitary Sewer	EA	\$ 1,000.00	6.0	\$ 6,000.00	0.0	-	6.0	\$ 6,000.00
626.2008.0024	Sanitary Sewer Conduit, 24-inch, HDPE, SDR 17*	LF	\$ 200.00	255.0	\$ 51,000.00	255.0	\$ 51,000.00	510.0	\$ 102,000.00
626.2009.0000	Sanitary Sewer Pipe Casing, 30-inch, Steel, Schedule 20*	LF	\$ 275.00	39.5	\$ 10,862.50	39.5	\$ 10,862.50	79.0	\$ 21,725.00
626.2010.0000	Sanitary Sewer Bypass*	LS	\$ 45,000.00	0.5	\$ 22,500.00	0.5	\$ 22,500.00	1.0	\$ 45,000.00
627.0005.0000	Fire Hydrant Installation*	EA	\$ 8,500.00	1.0	\$ 8,500.00	1.0	\$ 8,500.00	2.0	\$ 17,000.00
627.0007.0000	Fire Hydrant Removal*	EA	\$ 2,000.00	1.0	\$ 2,000.00	1.0	\$ 2,000.00	2.0	\$ 4,000.00
627.0009.0018	Gate Valve, 18-inch*	EA	\$ 12,500.00	1.0	\$ 12,500.00	1.0	\$ 12,500.00	2.0	\$ 25,000.00
627.0010.0000	Adjustment of Valve Box	EA	\$ 700.00	6.0	\$ 4,200.00	0.0	-	6.0	\$ 4,200.00
627.2007.0000	Remove Valve Box*	EA	\$ 150.00	2.0	\$ 300.00	2.0	\$ 300.00	4.0	\$ 600.00
627.2012.0018	HDPE Water Conduit, 18-inch, SDR11*	LF	\$ 160.00	345.0	\$ 55,200.00	345.0	\$ 55,200.00	690.0	\$ 110,400.00
627.2013.0000	Temporary Water System*	LS	\$ 30,000.00	0.5	\$ 15,000.00	0.5	\$ 15,000.00	1.0	\$ 30,000.00
627.2021.0000	Water Pipe Casing, 24-inch Steel, Schedule 20*	LF	\$ 250.00	54.0	\$ 13,500.00	54.0	\$ 13,500.00	108.0	\$ 27,000.00
SUBTOTAL CONTRACT ITEMS					\$ 219,562.50		\$ 252,912.50		\$ 472,475.00
SHARED COSTS							\$ 38,547.46		\$ 38,547.46
PRELIMINARY ENGINEERING					\$ 6,586.88		\$ 8,743.80		\$ 15,330.68
PRELIMINARY ENGINEERING @ 3%					\$ 36,498.93		\$ 42,044.07		\$ 78,543.00
HDL DESIGN SERVICES @ 46.47% of \$78,543.00									
CONSTRUCTION ENGINEERING @ 15%					\$ 32,934.38		\$ 43,718.99		\$ 70,871.25
ICAP (FEDERAL) 7.18%, (MISC. CIP) 6.87%					\$ 21,222.84		\$ 26,515.92		\$ 47,738.76
TOTAL STATE WORK FOR THE UTILITY					\$ 316,805.53		\$ 412,482.74		\$ 723,506.15

* Items distributed 50/50

**SHARED CONSTRUCTION UNITS
GLENN HIGHWAY: PARKS HWY. TO S. INNER SPRINGER LOOP, PHASE II
WATER & SEWER SHARED COSTS**

TOTAL BASIC DOT&PF CONTRACT ESTIMATE \$ 34,928,037.83

ITEM	DESCRIPTION	UNIT	UNIT COST	QUANTITY	AMOUNT
640.0001.0000	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	\$1,150,000	ALL REQ'D	\$1,150,000
641.0001.0000	EROSION AND POLLUTION CONTROL ADMINISTRATION	LUMP SUM	\$14,000	ALL REQ'D	\$14,000
641.0005.0000	TEMPORARY EROSION AND POLLUTION CONTROL	CONTINGENT SUM	\$700,000	ALL REQ'D	\$700,000
641.0006.0000	WITHHOLDING	CONTINGENT SUM	\$0	ALL REQ'D	\$0
641.0007.0000	SWPPP MANAGER	LUMP SUM	\$14,000	ALL REQ'D	\$14,000
642.0001.0000	CONSTRUCTION SURVEYING	LUMP SUM	\$220,000	ALL REQ'D	\$220,000
642.0003.0000	THREE PERSON SURVEY PARTY	HOURLY	\$290	290	\$84,100
643.0002.0000	TRAFFIC MAINTENANCE	LUMP SUM	\$575,000	ALL REQ'D	\$575,000
643.0003.0000	PERMANENT CONSTRUCTION SIGNS	LUMP SUM	\$60,000	ALL REQ'D	\$60,000
643.0023.0000	TRAFFIC PRICE ADJUSTMENT	CONTINGENT SUM	\$0	ALL REQ'D	\$0
643.0025.0000	TRAFFIC CONTROL	CONTINGENT SUM	\$1,400,000	ALL REQ'D	\$1,400,000
643.0032.0000	FLAGGING	CONTINGENT SUM	\$1,000,000	ALL REQ'D	\$1,000,000
644.0001.0000	FIELD OFFICE	LUMP SUM	\$75,000	ALL REQ'D	\$75,000
644.0002.0000	FIELD LABORATORY	LUMP SUM	\$20,000	ALL REQ'D	\$20,000
645.0001.0000	TRAINING PROGRAM, 6 TRAINEES/APPRENTICES	HOURLY	\$3	1,800	\$5,400
646.0001.0000	CPM SCHEDULING	LUMP SUM	\$6,000	ALL REQ'D	\$6,000
SUBTOTAL OF SHARED CONSTRUCTION ITEMS					\$5,323,500
TOTAL BASIC DOT&PF CONTRACT CONSTRUCTION - SHARED ITEMS					\$29,604,537.83
COP NON-REIMBURSABLE WATER CONSTRUCTION ITEMS					\$252,912.50
COP BETTERMENT PERCENTAGE					0.72410%
COP BETTERMENT SHARED ITEM COSTS					\$ 38,547.46

EXHIBIT B
Certificate of Finding

PROJECT: 0A15037/CFHWY00431

TERMINI: Glenn Highway: Parks Highway to S. Inner Springer Loop,
Phase II

UTILITY TYPE: Water & Wastewater

**UTILITY NAME
AND ADDRESS:** City of Palmer
Department of Public Works (COP)
231 W. Evergreen Avenue
Palmer, Alaska 99645

UTILITY CONTACT: Jude Bilafer
Public Works Director
(907) 761-1350
jbilafer@palmerak.org

**UTILITY WORK
ORDER NUMBER:** TBD

**UTILITY LOCATION OF
ACCOUNTS AND RECORDS:** 231 W. Evergreen Avenue
Palmer, Alaska 99645

UTILITY BILLINGS: None

TYPE OF FACILITY: Water & Wastewater Casings + Water & Sewer Mains

ELIGIBILITY: The COMPANY's new facilities are not eligible for state participation.

PROPERTY INTEREST: Facilities installed within DEPARTMENT managed right of way will be issued a no cost utility permit. The COMPANY is responsible for obtaining permits/property interest for areas outside of the DEPARTMENT's right of way.

BETTERMENT: The water and sewer facilities installed under utility permits 1-135000-05-55 (sewer) and 1-130000-05-56 (water) are only eligible up to 50% of the associated relocation costs.

NON-REIMBURSABLE: The COMPANY has elected to have the DEPARTMENT incorporate the design and installation of new water and sewer casings into the current project.

SALVAGE/SCRAP: N/A

PART I: GENERAL

PROJECT SCOPE: The DEPARTMENT proposes to reconstruct the Glenn Highway between the Parks Highway and S. Inner Springer Loop. The improvements will include widening from a 2-lane to a 4-lane divided facility, including grading, drainage, paving, pathways, illumination, signalization, signing and striping. The COMPANY owns and operates water and sewer facilities within the project limits.

RELOCATION SERVICES: The COMPANY's relocation design was completed by the DEPARTMENT's design consultant (HDL) and the work will be performed under/through the DEPARTMENT's construction contract. The engineering costs associated with the non-reimbursable water and sewer items have been pro-rated as outlined in Exhibit A.

RIGHT-OF-WAY/EASEMENTS: Additional right of way and easements were acquired to support utility relocation work (See Right of Way Map Alaska Project Glenn Highway MP 34 to 42 Reconstruction Parks Hwy to Old Glenn Hwy Project No. 0A15024/0A15033 Z581040000/CFHWY00006)

COORDINATION REQUIREMENTS: The DEPARTMENT's Engineer and the General Contractor will coordinate with the COMPANY as detailed in Sections 604, 626, and 627 of the Standard Modifications and Special Provisions (See Exhibit D).

UTILITY CONTRACTORS AND ENGINEERING CONSULTANT CONTRACTS: The COMPANY shall submit contract documents to the DEPARTMENT for review and approval for the use of engineering consultants.

WEEKLY UTILITY COORDINATION MEETINGS: Utility scheduling and coordination meetings will be held weekly through the duration of highway construction. Attendance at the meetings by the COMPANY is encouraged.

CHANGE ORDERS: Changes to the COMPANY design, either in scope or location, must be reviewed and approved by the DEPARTMENT prior to implementation. This will allow for:

1. A joint determination as to the most acceptable solution to accomplish the work; and
2. A joint determination of the level of DEPARTMENT and Utility participation.

Change order work initiated by the COMPANY without DEPARTMENT concurrence will jeopardize the DEPARTMENT's participation with the change order.

Change orders will be reviewed on a case-by-case basis to assess the COMPANY's level of participation in the costs associated with the modified scope of work.

PART II: DETAILED SCOPE OF WORK

The DEPARTMENT’s plans are attached and made part of this agreement as Exhibit C.

The following sanitary sewer items were installed under the DEPARTMENT’s Utility Permit No. 1-135000-05-055, which stipulates those items associated with the relocation of the existing facilities will be split 50/50 between the DEPARTMENT and the COMPANY:

**Exhibit C Pages 12, 23, & 31 - 32
Item 202.0006.0000 – Removal of Manhole, Sanitary Sewer**

Sheet	Station	Offset	Quantity (EA)
UW11	“S” 1+50.00	0 LT	1
	“S” 3+00.30	24.9 RT	1
UW12	“S” 4+77.20	0 LT	1
		TOTAL	3
		DEPARTMENT	1.5
		COMPANY	1.5

**Exhibit C Pages 12, 23, & 31 - 32
Item 604.0002.0000 – Sanitary Sewer Manhole, Type A**

Sheet	Station	Offset	Quantity (EA)
UW11	“S” 1+50.00	0 LT	1
	“S” 3+20.09	0 LT	1
UW12	“S” 4+37.92	0 LT	1
		TOTAL	3
		DEPARTMENT	1.5
		COMPANY	1.5

**Exhibit C Pages 13, 23, & 31 - 32
Item 626.2008.0024 – Sanitary Sewer Conduit, 24-Inch, HDPE, SDR 17**

Sheet	Station	Offset	Quantity (LF)
UW11	“S” 1+50.00 – 3+20.09	0 LT	170.1
	“S” 3+20.09 – 4+37.92	0 LT	117.8
UW12	“S” 4+37.92 – 6+21.91	0 LT	184.0
	“S” 6+21.91 – 6+56.44	0 LT	34.5
		TOTAL	506.4 Use 510
		DEPARTMENT	255
		COMPANY	255

**Exhibit C Pages 13, 23, & 32
Item 626.2009.0000 – Sanitary Sewer Pipe Casing, 30-Inch, Steel, Schedule 20**

Sheet	Station	Offset	Quantity (LF)
UW12	“S” 4+50.82 – 5+01.82	0 LT	51.0
	“S” 5+91.82 – 6+18.91	24.9 RT	27.1
		TOTAL	78.1 use 79
		DEPARTMENT	39.5
		COMPANY	39.5

Exhibit C Page 13

Item 626.2010.0000 – Sanitary Sewer Bypass

A bypass system will be constructed by the Contractor to maintain sanitary sewer service to the Mat-Su Regional Hospital while the new sanitary sewer facilities are being installed. This item will be split 50/50 between the DEPARTMENT and the COMPANY.

The following water items were installed under the DEPARTMENT’s Utility Permit No. 1-135000-05-056, which stipulates those items associated with the relocation of the existing facilities will be split 50/50 between the DEPARTMENT and the COMPANY:

Exhibit C Pages 14, 24, & 28 - 29
Item 627.0005.0000 – Fire Hydrant Installation

Sheet	Station	Offset	Quantity (EA)
UW8	“W” 2+30.00	10.00 LT	1
UW9	“W” 7+54.00	10.00 LT	1
		TOTAL	2
		DEPARTMENT	1
		COMPANY	1

Exhibit C Pages 14, 24, & 28 - 29
Item 627.0007.0000 – Fire Hydrant Removal

Sheet	Station	Offset	Quantity (EA)
UW8	“W” 2+30.00	12.00 LT	1
UW9	“W” 7+40.00	12.00 LT	1
		TOTAL	2
		DEPARTMENT	1
		COMPANY	1

Exhibit C Pages 14, 24, & 28 - 29
Item 627.0009.0018 – Gate Valve, 18 Inch

Sheet	Station	Offset	Quantity (EA)
UW8	“W” 1+39.44	0.00 LT	1
UW9	“W” 8+26.00	0.00 LT	1
		TOTAL	2
		DEPARTMENT	1
		COMPANY	1

Exhibit C Pages 14, 24, & 28 - 29
Item 627.2007.0000 – Remove Valve Box

Sheet	Station	Offset	Quantity (EA)
UW8	“W” 1+39.40	3.1 RT	1
	“W” 1+45.00	0.0 RT	1
UW9	“W” 5+64.20	0.0 RT	1
	“W” 5+71.10	1.8 RT	1
		TOTAL	4
		DEPARTMENT	2
		COMPANY	2

Exhibit C Pages 14, 24, & 28 - 29
Item 627.2012.0018 – HDPE Water Conduit, 18-Inch, SDR 11

Sheet	Station	Offset	Quantity (LF)
UW8	“W” 1+39.44 – 1+60.00	0 LT	20.0
	“W” 1+60.00 – 2+54.36	0 LT	94.4
	“W” 2+54.36 – 4+96.09	0 LT	241.7
UW9	“W” 4+96.09 – 5+08.69	0 LT	12.6
	“W” 5+08.69 – 5+51.75	0 LT	43.1
	“W” 5+51.75 – 7+66.45	0 LT	214.7
	“W” 7+66.45 – 8+26.00	0 LT	59.6
		TOTAL	686.1 Use 690
		DEPARTMENT	345
		COMPANY	345

Exhibit C Pages 14, 24, & 29
Item 627.2021.0000 – Water Pipe Casing, 24-Inch Steel, Schedule 20

Sheet	Station	Offset	Quantity (LF)
UW9	“W”5+60.00 – 6+05.00	0.00 LT	45.0
	“W”6+85.00 – 7+48.00	0.00 LT	63.0
		TOTAL	108.0
		DEPARTMENT	54.0
		COMPANY	54.0

Exhibit C Page 14
Item 627.2013.0000 – Temporary Water System

A temporary water system will be constructed by the Contractor to maintain water service to the Mat-Su Regional Hospital while the new water facilities are being installed. This item will be split 50/50 between the DEPARTMENT and the COMPANY.

Exhibit C Pages 12, 16, 23, 30, & 33

The COMPANY has elected to install new casing pipes across the Glenn Highway to accommodate future water and sewer system expansions as part of this project:

Item 603.0017.0024 – Pipe 24-Inch, Casing

Sheet	Pay Item	Station	Quantity (LF)
UW10	Water Casing	“G” 1451+15.17 – “G” 1451+14.91	165
UW13	Sewer Casing	“G” 1451+00.16 – “G” 1450+99.90	170
		TOTAL	335

PREPARED BY: _____ DATE: _____

CERTIFICATION: I, _____ DATE: _____
for the Department of Transportation certify the findings of facts as presented in this Exhibit and in Exhibit “A”.

REGIONAL COPY

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

Glenn Highway
Amends 1-135000-05-058

UTILITY PERMIT
(MINOR)

Approval
Recommended:
Title:

Michael P. Stewart
Regional Permit Officer

Date:
Region:

10/25/05
Central

THE STATE OF ALASKA, acting by and through the DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES, hereinafter called the DEPARTMENT, grants a Utility Permit to **City of Palmer** hereinafter called the PERMITTEE, to construct, install and thereafter perform routine maintenance, use and operate an **underground water utility** hereinafter called the FACILITY, located as follows: **This permit amends permit no. 1-135000-05-058 by crossing from the east to the west side of the Glenn Highway + 1,720' north of Inner Springer Loop to exit the right of way. All other conditions, provisions, and specifications contained in the original permit remain in full force and effect.** across, along or under property of the DEPARTMENT, acquired and utilized in the operation and maintenance of a State Transportation System, at the aforementioned locations and/or positions, and in strict conformance with plans, specifications and special provisions attached hereto and made a part hereof, and not otherwise.

A. In accepting this Utility Permit for the FACILITY, the PERMITTEE agrees to comply with the provisions of AS 02.15.102, AS 02.15.106, AS 19.25.010, AS 19.25.200, AS 35.10.210, and AS 35.10.230; the terms, requirements and regulations as set forth in 17 AAC 15 as authorized under Administrative Procedures Act, AS 44.62.010 -- 44.62.650 and the applicable policies, directives and orders issued by the Commissioner of the DEPARTMENT.

B. The entire cost of routine maintenance operations of the FACILITY are to be paid for by the PERMITTEE, and said Facility shall comply with all applicable codes.

C. The PERMITTEE'S construction, installation and maintenance operations of the FACILITY shall be accomplished with minimum interference and interruption of the use, operation and maintenance of the DEPARTMENT'S right-of-way and/or public facility; or as hereinafter provided in the DEPARTMENT'S Special Provisions, attached hereto and made a part hereof, and shall at all times in no way endanger the general public in its use of the public property.

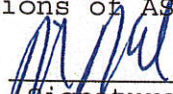
D. The DEPARTMENT, in granting this Utility Permit, reserves the right to use, occupy and enjoy its property for a public transportation system and for public transportation purposes in such a manner and at such times as it deems necessary, the same as if this instrument had not been executed by the DEPARTMENT. If any such use by the DEPARTMENT shall at any time necessitate any change in location of said FACILITY, or any part thereof, such change or alteration shall be made by the PERMITTEE according to the terms of one of the two clauses set out below as identified by a check mark before the applicable clause.

_____ (1) The PERMITTEE will be reimbursed in full by the DEPARTMENT for all costs incurred in making such changes or alterations to the FACILITY that qualify under the provisions of AS 02.15.104(c), AS 19.25.020(c), or AS 35.10.220(c).

_____ (2) The PERMITTEE shall promptly remove or relocate said FACILITY at no cost to the DEPARTMENT in accordance with the provisions of AS 02.15.104(c)(4) or (5), AS 19.25.020(c)(4) or (5), or AS 35.10.220(c)(4) or (5).

___XX___ (3) The PERMITTEE waives relocation reimbursement rights provided under AS 19.25.020 (c) as follows:

- For the first five years from the date the permit is authorized, the PERMITTEE shall relocate or adjust its facility at no cost to the DEPARTMENT in accordance with the provisions of AS 19.25.020 (c) (4).
- For the period from five years from permit authorization until construction is complete for the DEPARTMENT's *Glenn Hwy: MP 34-42 Parks to Old Glenn Hwy Project*, the PERMITTEE and the DEPARTMENT will split relocation and adjustment costs 50/50 to make modifications to the FACILITY as necessitated by the DEPARTMENT's project.
- Upon completion of the *Glenn Hwy: MP 34-42 Parks to Old Glenn Hwy Project*, the PERMITTEE will be reimbursed in full by the DEPARTMENT for all costs incurred in making changes or alterations to the FACILITY that qualify under the provisions of AS 19.25.020 (c).



Signature acknowledging waiver

Title: Director, Public Works

E. On public property being utilized for right-of-way on highways originally established as, or converted to, controlled access highways, ingress and egress thereto for maintenance and operation of the FACILITY is limited to the locations as designated by the DEPARTMENT. However, the DEPARTMENT may allow the PERMITTEE ingress and egress whenever such is necessary to effect repairs and maintenance of the FACILITY and when no other access is available. If the DEPARTMENT determines such access is in conflict with the use of the controlled access highway, the FACILITY will be relocated.

F. The State of Alaska and the DEPARTMENT for the purpose of this Utility Permit, hereby disclaim any representation or implication to the PERMITTEE that the DEPARTMENT has any title in any property other than the interest conveyed to the DEPARTMENT for specific purposes as described by the instrument conveying the land to the DEPARTMENT.

G. The PERMITTEE by these presents accepts notice and agrees that any expenses or damages incurred by the PERMITTEE through the abandonment, removal, reconstruction or alteration of any public facility, or incurred by said PERMITTEE as a result of this disclaimer shall be borne by said PERMITTEE at no expense whatsoever to the DEPARTMENT or the State of Alaska.

- H. The waiver or breach of any of the terms or conditions of this Utility Permit or provisions of the Administrative Code, by the DEPARTMENT shall be limited to the act or acts constituting such breach, and shall never be construed as being continuing or a permanent waiver of any such term or condition, unless expressly agreed to in writing by the parties hereto, all of which shall remain in full force and affect as to future acts or happenings, notwithstanding any such individual waiver or any breach thereof.
- I. Only the Commissioner of the DEPARTMENT or his delegate shall have the authority to waive any term or condition herein contained.
- J. The PERMITTEE shall not assign or transfer any of the rights authorized by this Utility Permit except upon notification to and approval by the DEPARTMENT.
- K. The PERMITTEE agrees to comply with all regulations concerning present and future use of the public property acquired, or reimbursed by Federal-aid funds.
- L. The PERMITTEE shall give the DEPARTMENT not less than ten (10) days prior written notice, unless otherwise agreed to by the parties hereto, of the PERMITTEE'S intention to enter upon the DEPARTMENT'S property for the purpose of major maintenance, reconstruction, altering or removal of the FACILITY, provided, however, that normal routine maintenance is excepted from this provision, and provided further, that in any instance of sudden emergency requiring prompt and immediate action to protect the public safety, or to mitigate damage to private or public property, no prior notification to the DEPARTMENT will be required. The PERMITTEE shall notify the DEPARTMENT and the Alaska State Troopers, of the location of the emergency and extent of work required by the most expeditious means of communication as soon as reasonably possible to do so, and the PERMITTEE shall take such measures as are required to protect the health and safety of the traveling public or public facility users for the duration of such emergency operations.
- M. The PERMITTEE shall indemnify and hold harmless the State of Alaska and the DEPARTMENT, or either of them, from all liability for damage to property, or injury to or death of persons, arising wholly or in part from any action taken by the PERMITTEE in relation to the PERMITTEE'S FACILITIES on DEPARTMENT right-of-ways or other permitted locations. (17 AAC 15.061)
- N. The PERMITTEE is subject to all previous easements and Utility Permits and any damage to any other utility will be the PERMITTEE'S responsibility.
- O. The PERMITTEE agrees to be responsible for the compliance with all applicable Federal, State, and local laws, regulations, codes, and ordinances.
- P. The PERMITTEE agrees to be responsible for obtaining all other appropriate permits or letters of non-objection needed from Federal, State, and local agencies, or conflicting lessees, property owners, or utilities.
- Q. The PERMITTEE may be required, within thirty (30) days after completion of any improvement placed upon or in the premises herein, deliver to the DEPARTMENT as-built drawings showing the location and construction specifications of said improvement.
- R. This Utility Permit is issued under the provisions of applicable Alaska Statutes and Administrative Code effective as of the date of execution of this instrument by the DEPARTMENT.

S. The PERMITTEE agrees that the FACILITY will be constructed in accordance with the attached:

1. Plans dated October 13, 2005, consisting of 1 sheets;
2. Specifications consisting of page thru page ; and
3. (Other) ,

which, by this reference, are made a part hereof, and in accordance with the applicable codes pertaining to the FACILITY, and not otherwise, unless prior written authorization is obtained from the DEPARTMENT to do so.

- T. The PERMITTEE agrees to reimburse the DEPARTMENT for actual costs of inspection and testing as required during the performance of the work proposed by the PERMITTEE. The scope of inspection and testing shall be determined by the Chief; Traffic, Safety & Utilities Section. The costs billed to the PERMITTEE will be the actual DEPARTMENT'S costs incurred while performing the inspection and testing, under Reimbursable Service Agreement No. 58555.
- U. The PERMITTEE agrees by entering on the DEPARTMENT'S property to indemnify the DEPARTMENT and its contractors of all costs tangible or intangible that would be the result of any delay in a construction project of the DEPARTMENT caused by work done under this permit.
- V. The PERMITTEE agrees to reimburse the DEPARTMENT for the length of the facility to be installed in excess of 200 feet (as indicated on the attached plans referred to in paragraph "S" above) which is calculated to be N/A linear feet at \$0.25 per foot = \$0.00, (but not to exceed \$2,500) payable at the time the permit is executed by the DEPARTMENT, unless arrangements have been made for the PERMITTEE to be billed on a monthly basis.

PIPE CARRIERS

Transmittant: water Flash Point:

Working Pressure: Temperature:

Number of Conduits (Pipes): one

Diameter of Pipe: 18"

Type and Class of Pipe: HDPE, SDR II

Encasement Diameter and Type:

Vent Locations: Left: Right of Highway Centerline

Cathodic Protection:

Crossing Angle: 90° Length: 100'

Depth Below Road Surface: 15'

Depth Below Ditch Bottom: 10'

Method of Crossing Installation: Boring: X Jacking: Open Cut:

Longitudinal Facility Length:

Offset from Highway Right-of-way Line: Depth of Bury (Min. 36"): 10'

Method of Longitudinal Installation: Trenching: X Plowing:

Construction Code(s) Applicable:

ADDITIONAL INFORMATION: Amends Permit No. 1-135000-05-058 by crossing Glenn Highway ± 1,720' north of Inner Springer Loop to exit Right of Way.

SPECIAL PROVISIONS

THE PERMITTEE PROMISES TO COMPLY WITH THESE SPECIAL PROVISIONS BY SIGNATURE ON THE PERMIT. IT IS THE PERMITTEE'S RESPONSIBILITY TO FAMILIARIZE ITS' EMPLOYEES, AGENTS, AND/OR CONTRACTORS WITH THESE PROVISIONS, AND INSIST ON STRICT COMPLIANCE.

1.0 BORING AND JACKING

1.1 The Permittee shall not place bore pits within thirty feet (30') of the edge of traveled way (fogline) without an approved traffic control plan that includes placement of concrete barriers.

1.2 The Permittee shall, in the event of a failed bore path, immediately fill all voids by injecting an excavatable, flowable fill (sand slurry).

1.3 The Permittee shall not attempt recovery of any drill head, auger, or drill stems that require excavating into paved road or pathway surfaces, without prior approval from the Department.

In consideration of the benefits accruing to the Permittee by reasons of the foregoing agreement, this permit is hereby accepted by the Permittee and the Permittee hereby agrees to comply with all of the terms, provisions, conditions and stipulations therein contained.

Dated this 28th day of October, 2005

THE COMPANY OR PERMITTEE

City of Palmer
Name of Company

By: [Signature]

Title: Dir. Public Works

Attest: _____

Title: _____

ACKNOWLEDGEMENT OF COMPANY OR PERMITTEE

STATE OF ALASKA)
3RD JUDICIAL DISTRICT)ss

BE IT REMEMBERED that on this 28th day of October, 2005, before me, the undersigned, a Notary Public of the State of Alaska, personally appeared

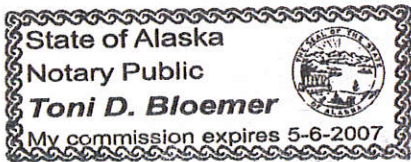
Rick Koch

and
both to me personally known and known to me to be the identical individuals named in and who executed the foregoing permit, and acknowledged the said instrument to be the free and voluntary act and deed of the above named company for the uses and purposes therein expressed and on oath stated that they were authorized to execute said instrument.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Seal of my Office the day and year first above written.

My Commission Expires: May 16, 07

Toni D. Bloemer
A Notary Public



The State of Alaska, acting by and through its Department of Transportation and Public Facilities has caused this Utility Permit to be executed on this 14th day of November, 2005.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

CENTRAL REGION

By: [Signature]

Title: Utilities Engineer

ACKNOWLEDGEMENT OF DEPARTMENT

STATE OF ALASKA)
3RD JUDICIAL DISTRICT)ss

BE IT REMEMBERED THAT ON THIS 14th day of November, 2005, before me, the undersigned, a Notary Public of the State of Alaska, personally appeared

Kenneth M. Mutton

of the Department of Transportation and Public Facilities known to me to be the identical individual who executed the foregoing Permit, and he acknowledged to me that he executed the same for and on behalf of the State of Alaska, Department of Transportation and Public Facilities with full authority so to do, and for the uses and purposes therein expressed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Seal of my Office the day and year first above written.

My Commission Expires: July 16, 2007

Darleen C. Stepler
A Notary Public

