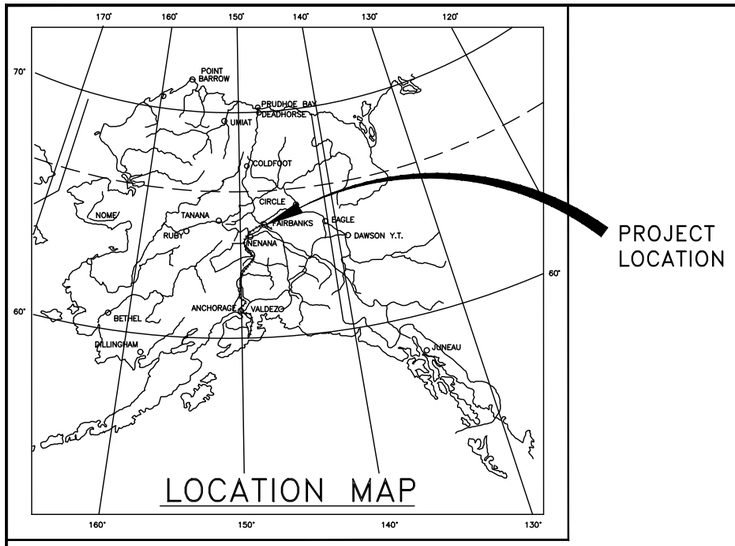


PROJECT LOCATION

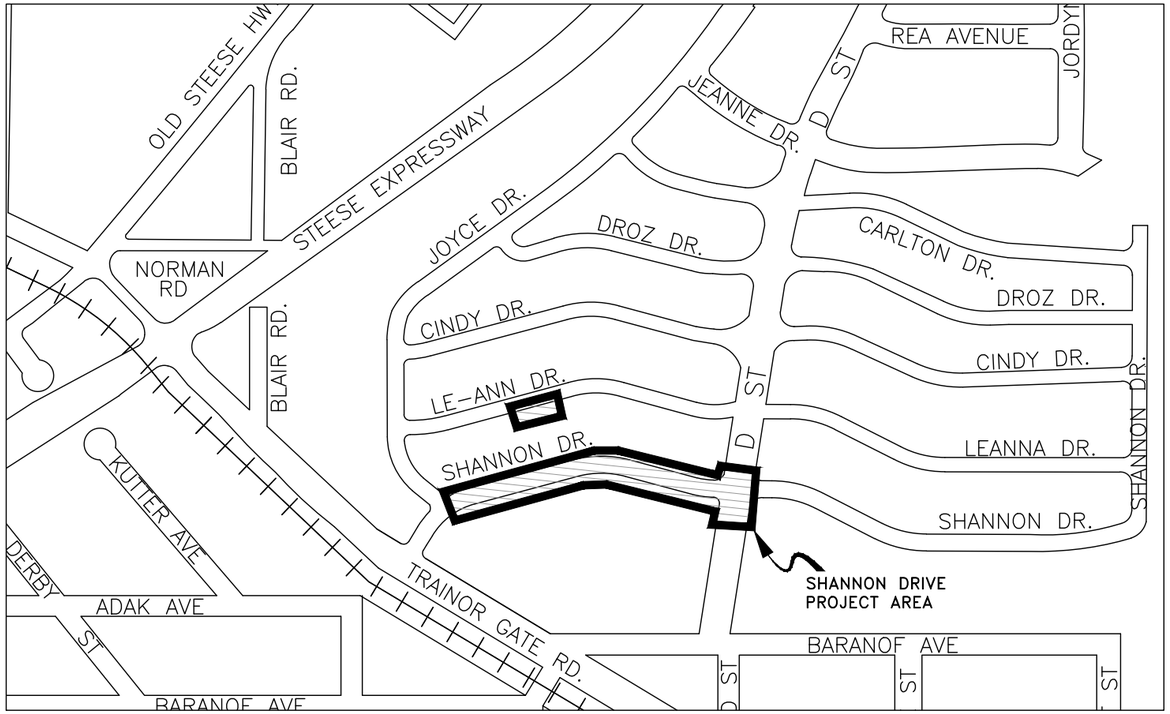
CITY OF FAIRBANKS

PROPOSED UTILITY PROJECT

PROJECT #: ITB-26-04

SHANNON DRIVE UTILITY IMPROVEMENTS

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
A1	TITLE SHEET
A2	LEGEND
A3	GENERAL NOTES & ABBREVIATIONS
A4–A6	SURVEY CONTROL
B1	TYPICAL SECTION
C1	ESTIMATE OF QUANTITIES
E1	MISCELLANEOUS DETAILS
Q1–Q2	EROSION & SEDIMENT CONTROL PLAN
T1	TRAFFIC CONTROL PLAN
U1–U3	STORM DRAIN
U4–U7	WATER AND SEWER
CD1	CITY OF FAIRBANKS STANDARD DETAIL – CONCRETE
SD1–SD2	CITY OF FAIRBANKS STANDARD DETAILS – STORM DRAIN



VICINITY MAP

AS ADVERTISED
MARCH 18, 2026

DATE	REVISION	BY

SCALE:

DESIGNED: RHP / CLS
DRAWN: CLS
CHECKED:
DATE:

SHANNON DRIVE UTILITY IMPROVEMENTS

CITY OF FAIRBANKS, ALASKA
Engineering Department
Project #: ITB-26-04

	RECOVERED	SET
PRIMARY MONUMENT	✠	✠
CENTERLINE MONUMENT IN CASING	⊕	⊕
PRIMARY R.O.W. MONUMENT	⊕	◕
BEARING OBJECT	✳	
MISCELLANEOUS MONUMENT	⊗	
LINE OF SIGHT MONUMENT		⊕
CONCRETE R.O.W. MONUMENT	■	
BENCHMARK		BM
REBAR AND CAP	⊙	⊙
REBAR	•	•
IRON PIPE	●	
PK NAIL		▽
SPIKE		×
HUB AND TACK		⊡
CONSTRUCTION CENTERLINE	5+00	
MISCELLANEOUS CENTERLINE	10+00	
STATION EQUATION	"L"48+97.23 POT BK= "O"48+97.23 PC AHD	
PROJECT RIGHT-OF-WAY LINE	R/W	
EXISTING RIGHT-OF-WAY LINE		
EXISTING PROPERTY LINE		
CONTROLLED ACCESS LINE	C/A	
UTILITY EASEMENT LINE	PUE	
TEMPORARY EASEMENT LINE (TCP OR TCE)	TCP	
ACCESS OR SECTION LINE EASEMENT	ACCESS EASEMENT	
PROPOSED CUT SLOPE LIMIT		
PROPOSED FILL SLOPE LIMIT		
SECTION LINE		
1/4 SECTION LINE		
1/16 SECTION LINE		
TOWNSHIP & RANGE LINE	T. 2 N. / T. 1 N. — R. 1 E. / R. 2 E.	

	EXISTING	PROPOSED
SANITARY SEWER	SS	SS
FUEL LINE	O	O
GAS LINE	G	GAS
WATER LINE	W	W
METER, VALVE, FIRE HYDRANT	W	W
EXISTING STORM DRAIN (FLOW DIRECTION →)	SD	
PROPOSED STORM DRAIN		CB
FIBER OPTIC LINE	FO	
DIRECT BURIAL TELEPHONE CABLE	T	T
ELECTRIC DUCT	E	
ELECTRIC LINE (OVERHEAD)		
POWER POLE LINE		
JOINT USE POWER & TELEPHONE		
TELEPHONE POLE LINE		
POLE ANCHOR		
STUB POLE (POWER OR TELEPHONE)		
ACS TELEPHONE DUCT		
GCI TELEPHONE DUCT		
TELEPHONE PEDESTAL		
BURIED CABLE MARKER		
PIPELINE MARKER OR VALVE		
CATCH BASIN OR DROP INLET		
MANHOLE	MH	MH
SANITARY SEWER CLEAN OUT		

	EXISTING	PROPOSED
ROADWAY/PAVEMENT EDGE		
FENCE		
CURB AND GUTTER		
DETECTABLE WARNINGS		
GUARDRAIL		
CULVERT PIPE		
SIGN		
MAILBOX	MB	MB
RAILROAD TRACKS		
RAILROAD DEVICES	CROSS-BUCK, FLASHING LIGHT	CANTILEVER, SWITCH
TREE LINE		
WATER BOUNDARY		
ORDINARY HIGH WATER LINE		
FLOW CENTERLINE		
FLOW DIRECTION		
WETLANDS		
EXISTING BUILDINGS	H	
POST OR BOLLARD		
WELL OR MONITORING WELL	W	
SEPTIC PIPE	S, SW	
FUEL TANK FILL PIPE/VENT	F	
SATELLITE DISH	SAT. DISH	
TEST HOLE	TH	
CONIFER TREE		
DECIDUOUS TREE		
PARKING METER		
VEHICLE PLUG-IN		
SHRUB		

H = HOUSE
G = GARAGE
M = MERCHANT/STORE
B = BARN
S = SHED
P = PRIVY
SS= SERVICE STATION
W = WAREHOUSE

	EXISTING	PROPOSED
JUNCTION BOX, TYPE IA		5
JUNCTION BOX, TYPE II		6
JUNCTION BOX, TYPE III		3
SIGNAL FACE, VEHICULAR	42	42
SIGNAL FACE, BACKPLATE	42	42
SIGNAL FACE, LEFT TURN, BACKPLATE	43	43
SIGNAL FACE, PEDESTRIAN	60 54	60 54
LOOP DETECTOR	33	73
VIDEO DETECTOR	2	2
RADAR DETECTOR	4	4A
OPTICOM DETECTOR	1	1
PEDESTRIAN PUSH BUTTON	1	1
SIGNAL POST W/O MAST ARM		1
SIGNAL POLE W/MAST ARM		4
SIGNAL CONTROLLER		
LOAD CENTER		
LUMINAIRE		
RIGID METAL CONDUIT		

LEGEND

STATE OF ALASKA
49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER
03/17/2026

DATE	REVISION	BY

SCALE:

DESIGNED: RHP / CLS
DRAWN: CLS
CHECKED:
DATE:

SHANNON DRIVE UTILITY IMPROVEMENTS

CITY OF FAIRBANKS, ALASKA
Engineering Department
Project #: ITB-26-04

A2
OF 22 SHEETS

ABBREVIATIONS

ABD – ABANDONED
AC – ASPHALT CONCRETE
AP – ANGLE POINT
ABC – AGGREGATE

BASE COURSE
BK SDWK – BACK OF SIDEWALK
BLDG – BUILDING
BL – BASELINE
BOP – BEGINNING OF PROJECT
BV – BUTTERFLY VALVE

C – CONDENSATE CB – CATCH BASIN
CC – CURB CUT
CI – CAST IRON
CL – CENTER LINE
CONC – CONCRETE
CS – CONDENSATE SERVICE
CSP – CORRUGATED STEEL PIPE

D – DUCT BANK
DIP – DUCTILE IRON PIPE
DL – DITCH LINE
DG – DOWN GUY
DW – DRIVEWAY

E – EAST
e – SUPERELEVATION
EA – EACH
ELEV – ELEVATION
EOP – END OF PROJECT
EP – EDGE OF PAVEMENT
ES – END SECTION
EXIST – EXISTING

FG – FINISH GRADE
FH – FIRE HYDRANT
FL – FLOW LINE
FLG – FLANGE
FOC – FACE OF CURB
FRM – FRAME
FW – FLUSHWELL

G – GUTTER
GP – GRADE POINT
GRP– GUARD POST
GR – GRADE
GRT – GRATE
GV – GATE VALVE

HB – HORIZONTAL BEND
HDPE – HIGH DENSITY POLYETHYLENE
HPS – HIGH PRESSURE SODIUM LUMINAIRE
HWR – HOT WATER RETURN
HWS – HOT WATER SUPPLY
HWSS – HOT WATER SERVICE SUPPLY

ID – INSIDE DIAMETER
IE – INVERT ELEVATION
INS – INSULATION

L – LENGTH OF CURVE
LTDL – LEFT DITCH LINE
LT – LEFT
LF – LINEAL FEET

MAX – MAXIMUM
MB – MAILBOX
MH – MANHOLE
MIN – MINIMUM
MON – MONUMENT
MV – MERCURY VAPOR LUMINAIRE

NC – NORMALLY CLOSED
NE – NORTHEAST
NW – NORTHWEST
N – NORTH
N.I.C. – NOT IN CONTRACT

OD – OUTSIDE DIAMETER
OG – ORIGINAL GROUND

PC – POINT OF CURVATURE
PCC – POINT OF COMPOUND CURVE
PI – POINT OF INTERSECTION
PIV – POST INDICATOR VALVE
PL – PROPERTY LINE
POT – POINT ON TANGENT
PRC – PROPERTY CORNER
PP – POWER POLE
PT – POINT OF TANGENCY
PLVC – POLYVINYL CHLORIDE
PUE – PERMANENT UTILITY EASEMENT
PVC – POINT OF VERTICAL CURVATURE
PVI – POINT OF VERTICAL INTERSECTION
PVMT – PAVEMENT
PVT – POINT OF VERTICAL TANGENCY

R – RADIUS
RTDL – RIGHT DITCH LINE
RMC – RIGID METAL CONDUIT
ROW – RIGHT OF WAY
R&R – REMOVE AND REPLACE
RT – RIGHT
RPM – REINFORCED PLASTIC MORTAR

SMTA – SELECTED MATERIAL TYPE A
s – SLOPE
S – SOUTH
SE – SOUTHEAST
SM – SEWER MAIN
SMH – SEWER MANHOLE
SMHS– SEWER MANHOLES
SCH – SCHEDULE
SD – STORM DRAIN
SI – STREET INTERSECTION
SL – STREET LIGHT
SP – STEEL PIPE
SS – SEWER SERVICE
ST – STEAM
STA – STATION
STS – STEAM SERVICE
SW – SOUTHWEST

T – TELEPHONE
TC –TOP OF CURB
TCP– TEMP. CONSTRUCTION PERMIT
TOC – TOP OF CONDUIT
TOP – TOP OF PIPE
TYP– TYPICAL

UG – UNDERGROUND

VB – VALVE BOX

W – WEST
WM – WATER MAIN
WS – WATER SERVICE
WSP – WOOD STAVE PIPE

GENERAL NOTES

1. GRADES, ALIGNMENTS, APPROACH LOCATIONS, LENGTHS AND LOCATIONS OF CONDUIT RUNS SHOWN ON THESE PLANS ARE SUBJECT TO MINOR REVISIONS BY THE ENGINEER. ALL DISTANCES SHOWN IN THE PLANS ARE HORIZONTAL MEASUREMENTS.
2. SAWCUT ALL MATCH LINES WHERE NEW CONSTRUCTION OF PAVEMENT, SIDEWALK OR CURBING ABUTS EXISTING. SAWCUTS SUBSIDIARY TO RESPECTIVE PAY ITEMS.
3. APPLY WATER FOR DUST CONTROL DAILY OR AS DIRECTED BY THE ENGINEER. PAY SUBSIDIARY TO PAY ITEM 643.0002.0000 TRAFFIC MAINTENANCE.
4. PAYMENT FOR PAY ITEM 202.0001.0000 REMOVAL OF STRUCTURES AND OBSTRUCTIONS SHALL BE A LUMP SUM PAYMENT FOR REMOVING ALL ITEMS IN CONFLICT WITH THE IMPROVEMENTS. THESE ITEMS ARE NOT LISTED. IT IS THE CONTRACTORS RESPONSIBILITY TO FIELD VERIFY THE NATURE OF THIS WORK BEFORE BIDDING.
5. ALL PAYMENTS REQUESTED BY THE CONTRACTOR SHALL BE DEVELOPED BY THE CONTRACTOR IN A FORM ACCEPTABLE TO THE ENGINEER. PAY ESTIMATES SHALL BE SUBMITTED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
6. CONTRACTOR IS RESPONSIBLE FOR PROVIDING THEIR OWN STAGING AREA.
7. NUMEROUS UNDERGROUND UTILITIES EXIST WITHIN THE PROJECT CORRIDOR. THE CONTRACTOR SHALL CONTACT UTILITY OWNERS AND GET LOCATES PRIOR TO EXCAVATION.
8. PRESERVE AND PROTECT EXISTING LANDSCAPE AND FENCING IN PLACE. SUBSIDIARY TO PAY ITEM 202.0001.0000.
9. CONTRACTOR TO REMOVE EXISTING ASPHALT PAVEMENT ON SHANNON DRIVE FROM JOYCE DRIVE TO D STREET. CONTRACTOR TO DELIVER ASPHALT PAVEMENT TO THE CITY OF FAIRBANKS PUBLIC WORKS YARD AT 2121 PEGER ROAD. PAY SUBSIDIARY TO ITEM 202.0001.0000.

STATE OF ALASKA
49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER
03/17/2026

ABBREVIATIONS
AND GENERAL NOTES

DATE	REVISION	BY

SCALE:

DESIGNED: RHP / CLS
DRAWN: CLS
CHECKED:
DATE:

SHANNON DRIVE UTILITY IMPROVEMENTS

CITY OF FAIRBANKS, ALASKA
Engineering Department
Project #: ITB-26-04

A3
OF 22 SHEETS

CONTROL NOTES

THIS PROJECT IS LOCATED ENTIRELY WITHIN THE FAIRBANKS LOW DISTORTION PROJECTION (LDP), A LOW DISTORTION PROJECTION CREATED BY THE ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES.

FAIRBANKS LDP DEFINITION:
LINEAR UNIT: U.S. SURVEY FOOT (SFT)
DATUM: NAD83(2011)
PROJECTION: LAMBERT CONFORMAL CONIC, (SINGLE PARALLEL)
STANDARD PARALLEL AND GRID ORIGIN: 64°51'00"N
CENTRAL MERIDIAN (GRID ORIGIN): 146°56'00"W
FALSE NORTHING: 200,000 SFT
FALSE EASTING: 800,000 SFT
STANDARD PARALLEL SCALE: 1.00003 (EXACT)

THE THE BASIS OF COORDINATES FOR THIS PROJECT IS POINT NO. 1, "CITY HALL ROOF2," A FIXED POSITION TRIMBLE ZEPHYR 3 GEODETIC ANTENNA ON THE ROOF OF FAIRBANKS CITY HALL.
THE NAD 83 (2011) EPOCH (2010) POSITION FOR POINT NO. 1 IS BASED ON THE RESULTS OBTAINED FROM THE STATIC GPS OBSERVATIONS SENT TO THE NGS OPUS UTILITY FOR PROCESSING.

NAD 83 (2011) EPOCH (2010)
LATITUDE: 64° 50' 23.61722" NORTH, LONGITUDE 147° 43' 16.35657" WEST
FAIRBANKS LOW DISTORTION PROJECTION COORDINATES (US SURVEY FEET)
PROJECT BEARINGS ARE FAIRBANKS 05-05-15 LDP GRID BEARINGS.

BASIS OF BEARING IS FAIRBANKS LDP.

ROW LINES SHOWN WERE DONE BY CITY OF FAIRBANKS (WILLIAM IRVING, PLS).

THE BASIS OF VERTICAL CONTROL IS THE "CP 10", A CHISELED "X" ON THE SOUTH RIM OF A STORM DRAIN MANHOLE AT THE BACK OF SIDEWALK ±80 EAST ALONG THE TRAINOR GATE ROW: ELEV, 444.87' NAVD88, DERIVED FROM MULTIPLE AVERAGED STATIC GNSS O.P.U.S. SOLUTIONS. TBMS ON SITE ESTABLISHED USING DIFFERENTIAL LEVELS TO FIRE HYDRANT "X" BOLTS, AND CHISELED X MARKS ON MANHOLE RIMS.

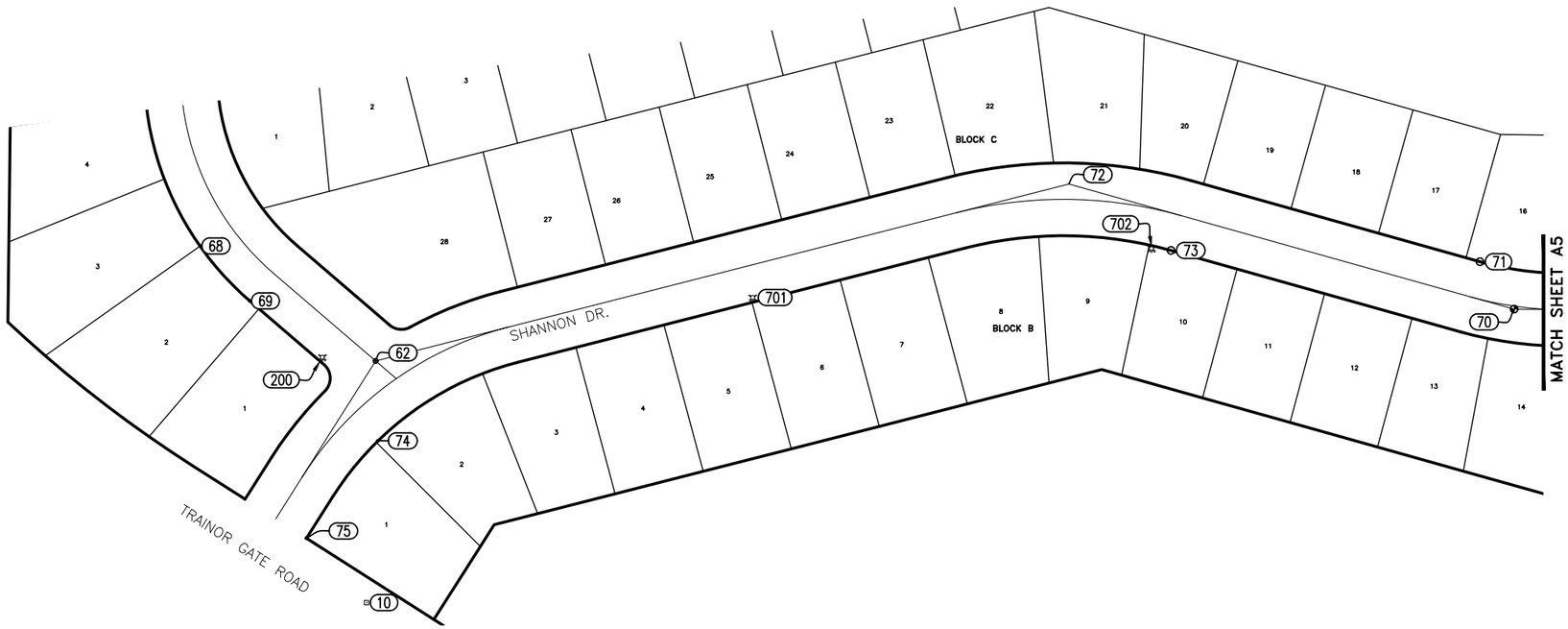
0 60 120 Feet

LEGEND

- CENTERLINE MONUMENT IN CASING
- SPIKE SET
- REBAR AND CAP FOUND
- REBAR FOUND
- FIRE HYDRANT

GENERAL SURVEY NOTES

PROTECT IN PLACE EXISTING PROPERTY CORNERS



NOTE: HORIZONTAL CONTROL REVISIONS WILL BE PROVIDED TO CONTRACTOR BEFORE THE START OF CONSTRUCTION.

SURVEY CONTROL

STATE OF ALASKA 49TH WILLIAM H IRVING LS 13315 REGISTERED PROFESSIONAL LAND SURVEYOR

STATE OF ALASKA 49TH ROBERT H. PRISTASH CIVIL ENGINEER No. 9878 REGISTERED PROFESSIONAL ENGINEER
03/17/2026

DATE	REVISION	BY

SCALE:

DESIGNED: RHP / CLS
DRAWN: CLS
CHECKED:
DATE:

SHANNON DRIVE UTILITY IMPROVEMENTS

CITY OF FAIRBANKS, ALASKA
Engineering Department
Project #: ITB-26-04

A4
OF 22 SHEETS

HORIZONTAL CONTROL				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
10	200443.34	683240.93	444.9	CP 10
11	202309.64	684268.25	444.4	CP JOYCE NORTH
12	200676.77	684257.73	445.8	CP SHANNON
14	200484.67	685456.44	444.1	CP TANANA
70	200685.39	684188.03	445.2	PI CL SHANNON
512	200959.49	684271.22	444.9	SI D ST LEANN
513	201508.62	684277.38	443.8	SI D ST DROZ
546	200684.44	684268.05	444.8	SI SHANNON & D ST

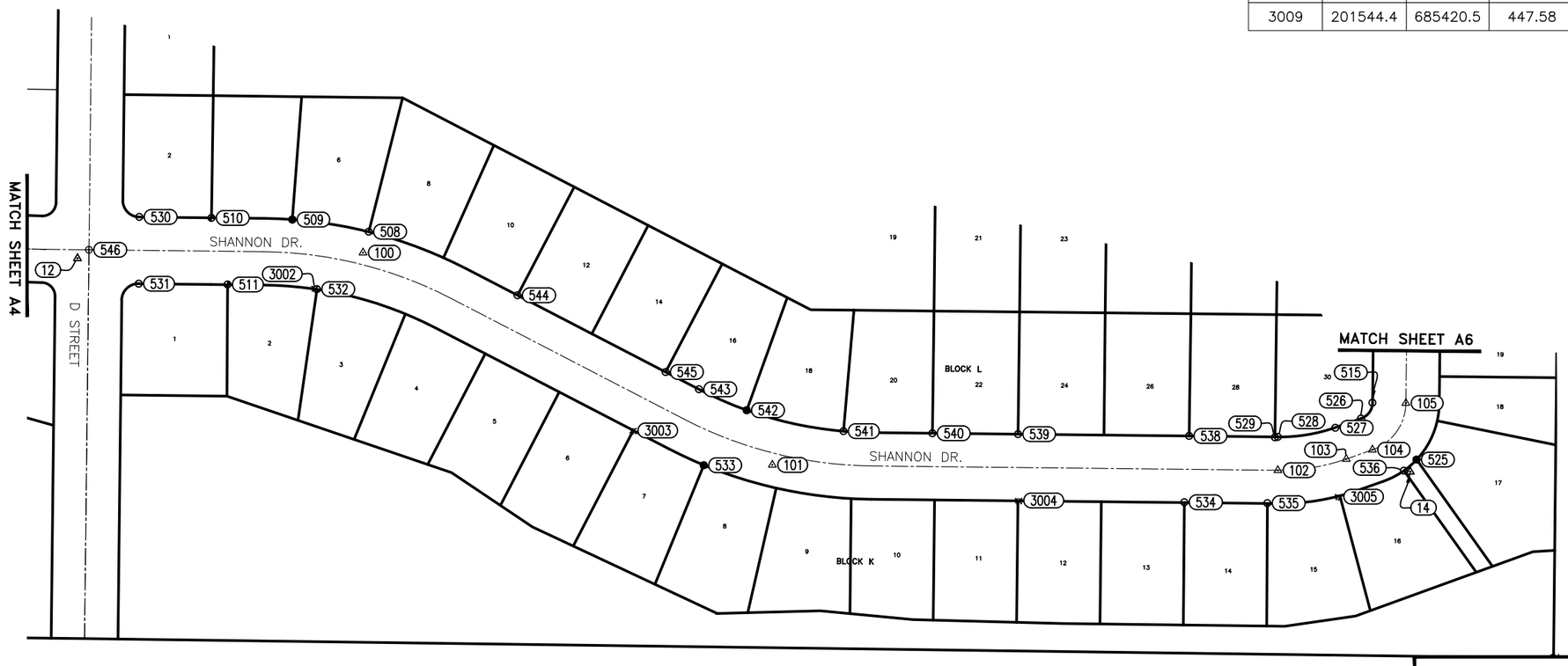
NOTE: HORIZONTAL CONTROL REVISIONS WILL BE PROVIDED TO CONTRACTOR BEFORE THE START OF CONSTRUCTION.

0 60 120 Feet

LEGEND

- CENTERLINE MONUMENT IN CASING
- SPIKE SET
- REBAR AND CAP FOUND
- REBAR FOUND
- FIRE HYDRANT

VERTICAL CONTROL				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
10	200443.3	683240.9	444.87	CP 10
12	200676.8	684257.7	445.81	CP SHANNON
14	200484.7	685456.4	444.11	CP TANANA
200	200645.8	683204.6	448.58	FH XB1
500	201745.5	685474.1	445.00	CP SHANNON N 13
701	200695.0	683559.7	447.98	FH
702	200735.5	683888.8	448.09	FH
3002	200649.7	684471.4	448.01	FH XB1
3003	200521.9	684757.2	446.60	FH XB2
3004	200458.9	685104.2	446.59	FH XB3
3005	200462.3	685392.0	447.63	FH XB4
3006	200727.9	685491.7	447.09	TBM LTD COF
3007	201004.8	685411.7	448.45	FH XB5
3009	201544.4	685420.5	447.58	FH XB6



SURVEY CONTROL

STATE OF ALASKA 49TH WILLIAM H IRVING LS 13315 REGISTERED PROFESSIONAL LAND SURVEYOR

STATE OF ALASKA 49TH ROBERT H. PRISTASH CIVIL ENGINEER No. 9878 REGISTERED PROFESSIONAL ENGINEER

03/17/2026

DATE	REVISION	BY

SCALE:

DESIGNED: RHP / CLS
DRAWN: CLS
CHECKED:
DATE:

SHANNON DRIVE UTILITY IMPROVEMENTS

CITY OF FAIRBANKS, ALASKA
Engineering Department
Project #: ITB-26-04

A5
OF 22 SHEETS

MONUMENTS TO BE REPLACED (BY OTHERS)				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
70	200685.39	684188.03	445.2	PI CL SHANNON
72	200788.56	683820.55	443.6	PI SHANNON
507	200759.81	685454.71	445.5	SI LeANN SHANNON
525	200495.63	685462.10	443.7	RBF L17 ROW BLK K
536	200485.69	685450.76	443.8	RBCF L16 BLK K

CALCULATED CL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
100	200681.80	684514.53	0.0	PI SHANNON C4
101	200490.88	684882.69	0.0	PI SHANNON C5
102	200486.05	685337.37	0.0	PC SHANNON
103	200496.17	685398.84	0.0	PT SHANNON
104	200504.43	685422.39	0.0	PC SHANNON
105	200546.41	685452.50	0.0	PC SHANNON
106	201029.83	685457.76	0.0	SI CINDY SHANNON
107	201299.81	685460.70	0.0	SI DROZ SHANNON

0 60 120 Feet

NOTE: HORIZONTAL CONTROL REVISIONS WILL BE PROVIDED TO CONTRACTOR BEFORE THE START OF CONSTRUCTION.

SURVEY CONTROL

STATE OF ALASKA 49TH
WILLIAM H IRVING
LS 13315
REGISTERED PROFESSIONAL LAND SURVEYOR

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER
03/17/2026

DATE	REVISION	BY

SCALE:

DESIGNED: RHP / CLS
DRAWN: CLS
CHECKED:
DATE:

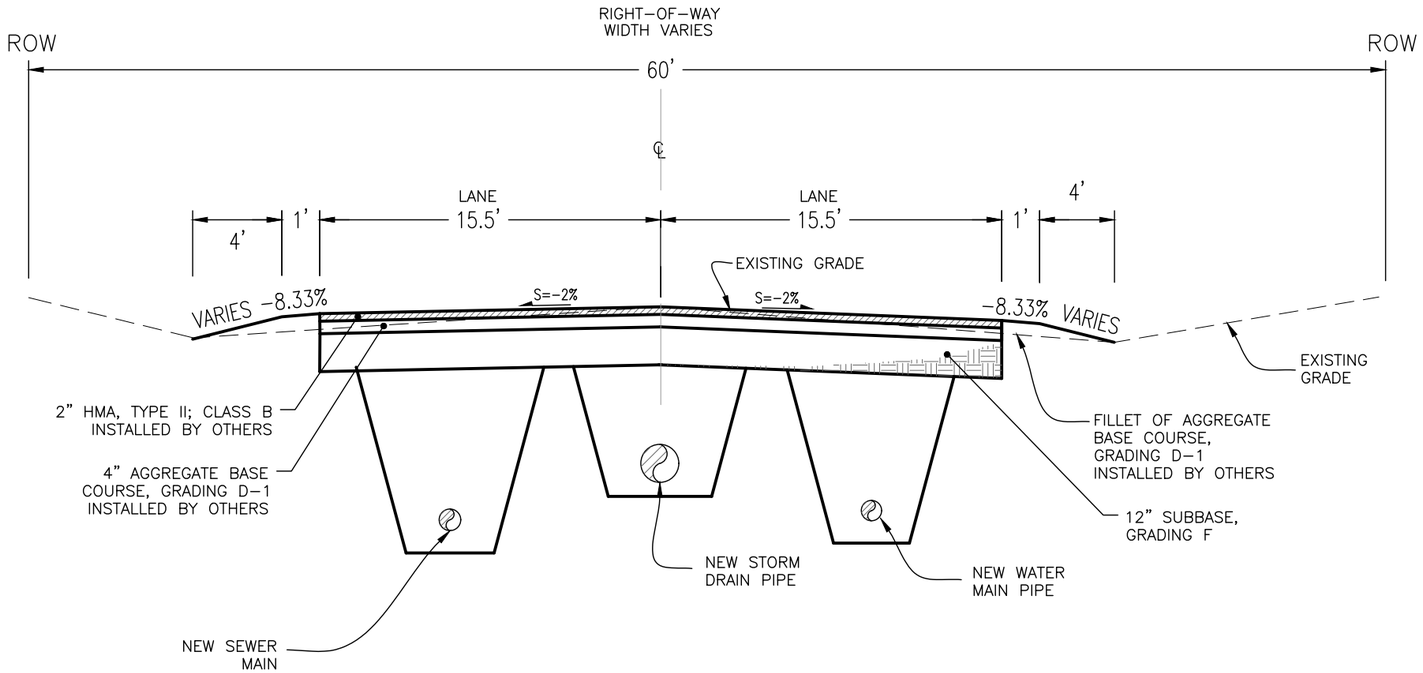
SHANNON DRIVE UTILITY IMPROVEMENTS

CITY OF FAIRBANKS, ALASKA
Engineering Department
Project #: ITB-26-04

A6
OF 22 SHEETS

TYPICAL SECTION NOTES

1. SAW CUT ASPHALT DRIVEWAYS AND PAVE ALL DRIVEWAYS FROM ROADWAY TO LIMITS DEFINED IN DRIVEWAY TABLE.
2. CROSS SECTIONS WILL BE PROVIDED AS REQUESTED.
3. A PORTION OF BEDDING SOURCE MAY BE FROM PROJECT EXCAVATION, AS APPROVED BY THE ENGINEER.



TYPICAL SECTION 1

JOYCE DR TO D ST
(STA:51+70 TO STA:62+28)

TYPICAL SECTION

STATE OF ALASKA 49TH
Robert H. Pristash
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER
03/17/2026

			SCALE:	DESIGNED: RHP / CLS		SHANNON DRIVE UTILITY IMPROVEMENTS	CITY OF FAIRBANKS, ALASKA Engineering Department Project #: ITB–26–04	B1
				DRAWN: CLS				OF 22 SHEETS
				CHECKED:				
DATE	REVISION	BY		DATE:				

ESTIMATE OF QUANTITIES – BASE BID

ITEM NO.	PAY ITEM	PAY UNIT	QUANTITY
202.0001.0000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LUMP SUM	ALL REQUIRED
203.0003.0000	UNCLASSIFIED EXCAVATION	CUBIC YARD	1830
304.0001.000F	SUBBASE, GRADING F	TON	2435
603.0021.0012	CORRUGATED POLYETHYLENE PIPE 12 INCH	LINEAR FOOT	550
603.0021.0018	CORRUGATED POLYETHYLENE PIPE 18 INCH	LINEAR FOOT	500
604.0001.0000	STORM SEWER MANHOLE, 48 INCH	EACH	5
604.0002.0000	SANITARY SEWER MANHOLE	EACH	3
604.0003.0000	RECONSTRUCT EXISTING MANHOLE, STORM DRAIN	EACH	1
604.0003.0000	RECONSTRUCT EXISTING MANHOLE, SANITARY SEWER	EACH	2
604.0005.000A	INLET, TYPE A	EACH	12
626.0001.0008	SANITARY SEWER CONDUIT, 8 INCH	LINEAR FOOT	1060
626.0002.0000	SANITARY SEWER SERVICE CONNECTION	EACH	22
627.0001.0006	DUCTILE IRON WATER CONDUIT, 6 INCH, CLASS 50	LINEAR FOOT	985
627.0001.0008	DUCTILE IRON WATER CONDUIT, 8 INCH, CLASS 50	LINEAR FOOT	30
627.0003.0000	INSTALL VALVE BOX	EACH	6
627.0005.0000	FIRE HYDRANT INSTALLATION	EACH	2
627.0008.0000	WATER SERVICE CONNECTION	EACH	22
627.0009.0006	GATE VALVE, 6 INCH	EACH	5
627.0009.0010	GATE VALVE, 10 INCH	EACH	1
639.0009.0000	TRAFFIC CALMING DEVICE, TRAFFIC CIRCLE	LUMP SUM	ALL REQUIRED
640.0001.0000	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED
641.0001.0000	EROSION, SEDIMENT AND POLLUTION CONTROL	LUMP SUM	ALL REQUIRED
642.0001.0000	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQUIRED
643.0002.0000	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQUIRED
643.0023.0000	TRAFFIC PRICE ADJUSTMENT	CONTINGENT SUM	ALL REQUIRED

ESTIMATE OF QUANTITIES – ADDITIVE ALTERNATE 1

ITEM NO.	PAY ITEM	PAY UNIT	QUANTITY
627.0011.0000	COMPLETE FIRE HYDRANT INSTALLATION – D STREET	LUMP SUM	ALL REQUIRED

ESTIMATE OF QUANTITIES – ADDITIVE ALTERNATE 2

ITEM NO.	PAY ITEM	PAY UNIT	QUANTITY
627.0012.0000	COMPLETE FIRE HYDRANT INSTALLATION – LEANN DRIVE	LUMP SUM	ALL REQUIRED

ESTIMATING FACTORS

ITEM NO.	PAY ITEM	FACTOR
301.0001.00D1	AGGREGATE BASE COURSE GRADING D–1	145 LB / CF
401.0001.002B	HMA, TYPE II; CLASS B	150 LB / CF
401.0004.0000	ASPHALT BINDER, GRADE PG 52–28	5.5% WEIGHT OF 401.0001.002B

NOTES

1. COMPLETION DATE IS JULY 31, 2026. DOT PROJECT IS SCHEDULE TO COMMENCE AUGUST 15TH, 2026.

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER
03/17/2026

ESTIMATE OF QUANTITIES

DATE	REVISION	BY

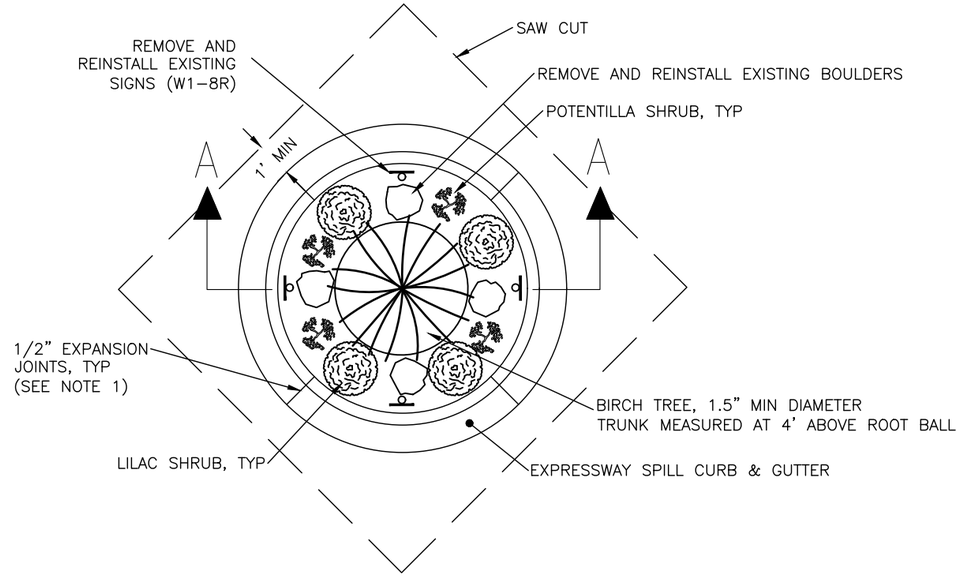
SCALE:

DESIGNED: RHP / CLS
DRAWN: CLS
CHECKED:
DATE:

SHANNON DRIVE UTILITY IMPROVEMENTS

CITY OF FAIRBANKS, ALASKA
Engineering Department
Project #: ITB–26–04

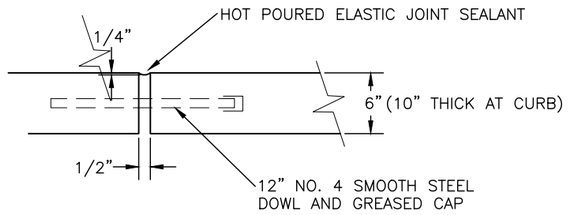
C1
OF 22 SHEETS



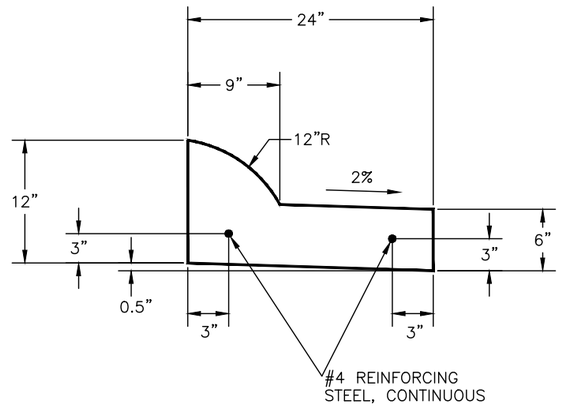
PLAN VIEW
NOT TO SCALE

TRAFFIC CIRCLE NOTES

1. FOUR (4) EXPANSION JOINTS SHALL BE PLACED THROUGH THE CURB & GUTTERS ALONG RADIALS FROM THE CENTER OF THE TRAFFIC CIRCLES. THE EXPANSION JOINTS SHALL BE SEALED AND INCLUDE TWO (2) STEEL DOWEL AND CAP ASSEMBLIES.
2. CURB & GUTTER REINFORCING BARS TO BE SPLICED SHALL BE LAPPED AT LEAST 20 BAR DIAMETERS AND DOUBLE–TIED.
3. CONTRACTOR TO RESTORE PAVEMENT AROUND TRAFFIC CIRCLE AS REQUIRED FOR INSTALLATION.
4. MOUNT SIGNS PER ADOT&PF STANDARD DRAWING S–30.03 FOR SLEEVE TYPE SOIL EMBEDMENT AND IN THE LOCATION STAKED BY ENGINEER.
5. BRACE SIGNS PER ADOT&PF STANDARD DRAWING S–01.00.



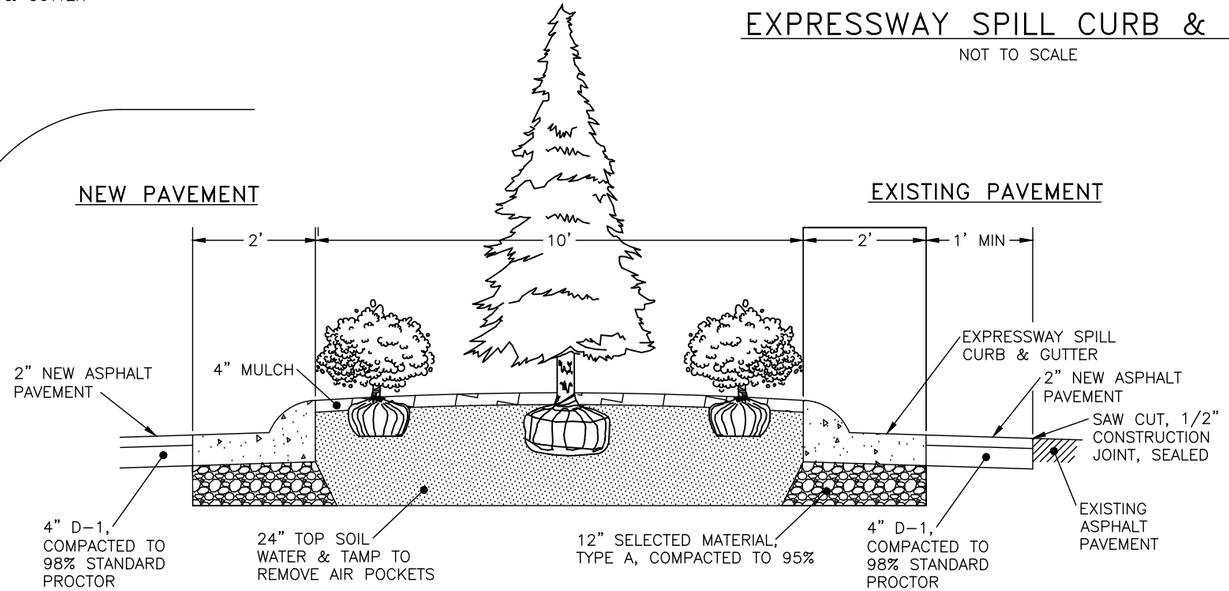
EXPANSION JOINT
NOT TO SCALE



EXPRESSWAY SPILL CURB & GUTTER
NOT TO SCALE

NEW PAVEMENT

EXISTING PAVEMENT



SECTION A–A
NOT TO SCALE

TRAFFIC CIRCLE DETAILS

STATE OF ALASKA
49TH
ROBERT H. PRISTASH
CE 9878
REGISTERED PROFESSIONAL ENGINEER
03/17/2026

DATE	REVISION	BY

SCALE: NONE

DESIGNED: RHP / CLS
DRAWN: CLS
CHECKED:
DATE:

SHANNON DRIVE UTILITY IMPROVEMENTS

CITY OF FAIRBANKS, ALASKA
Engineering Department
Project #: ITB–26–04

E1
OF 22 SHEETS

SITE INFORMATION

1. SITE FUNCTION: ROAD
2. MEAN ANNUAL PRECIPITATION: 10.53 INCHES AT FAIRBANKS INTERNATIONAL AIRPORT (SOURCE: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ak2968
3. 2-YEAR, 24-HOUR RAINFALL EVENT: 1.09 INCHES, STATION: FAIRBANKS F.O. SITE ID: 10-0215 (SOURCE: https://hdsc.nws.noaa.gov/pfds/pfds_map_ak.html
4. PROJECT AREAS ARE LISTED BELOW, MATERIAL SITES NOT INCLUDED:

PROJECT INFORMATION TABLE		
	BASE BID	ADDITIVE ALT
PROJECT AREA (ACRES)	1.52	0.64
DISTURBED AREA (ACRE)	1.03	0.50
PRE-CONSTRUCTION IMPERVIOUS AREA	68%	90%
POST-CONSTRUCTION IMPERVOUS AREA	68%	90%
PRE-CONSTRUCTION RUNOFF COEFFICIENT	0.77	0.83
POST-CONSTRUCTION RUNOFF COEFFICIENT	0.76	0.81

5. MATERIAL SITES: MATERIALS WILL BE CONTRACTOR FURNISHED.
6. LANDSCAPE TOPOGRAPHY: VERY FLAT, URBAN WITH RESIDENTIAL DEVELOPMENT IN PROJECT CORRIDOR. EXISTING SLOPES IN THIS AREA ARE RELATIVELY FLAT. THE NEW ROAD AND STORM DRAIN DESIGN WILL EMULATE THE EXISTING ROAD SLOPES, AND DRAINAGE INFRASTRUCTURE.
7. DRAINAGE PATTERNS: SURFACE DRAINAGE VIA PIPED STORM DRAIN SYSTEM FLOWS TO DRAINAGE SWALES ON TRAINOR GATE.
8. APPROXIMATE GROWING SEASON: MAY 3 THROUGH OCTOBER 3.
9. EXISTING VEGETATION: PROJECT AREA IS RESIDENTIAL AND COMMERCIAL LANDSCAPED GRASS.
10. HISTORIC SITE CONTAMINATION: CONTAMINATED SITES HAVE BEEN IDENTIFIED WITHIN 1500 FEET THE PROJECT AREA (SOURCE: HTTPS://DEC.ALASKA.GOV/SPAR/CSP)
    - HAZARD ID: 24445, FILE ID: 100.26.131 (STATUS: ACTIVE)
    - HAZARD ID: 2328, FILE ID: 100.38.097 (STATUS: ACTIVE)
    - HAZARD ID: 24295, FILE ID: 102.26.055 (STATUS: ACTIVE)
    - HAZARD ID: 3680, FILE ID: 102.38.060 (STATUS: ACTIVE)
    - HAZARD ID: 4098, FILE ID: 102.38.129 (STATUS: CLEANUP COMPLETE)
    - HAZARD ID: 3822, FILE ID: 102.38.124 (STATUS: CLEANUP COMPLETE)
    - HAZARD ID: 24254, FILE ID: 102.26.042 (STATUS: CLEANUP COMPLETE)
    - HAZARD ID: 25500, FILE ID: 102.38.160 (STATUS: CLEANUP COMPLETE)
11. STAGING AND STOCKPILE AREAS: CONTRACTOR MUST SEEK LOCATIONS FOR STOCKPILING MATERIAL AND STAGING AND STORAGE OF EQUIPMENT. STAGING AND STOCKPILE AREAS MUST COMPLY WITH CGP, SWPPP, SECTION 641 SPECIFICATIONS, AND ALL PERMITS.

ENVIRONMENTAL INFORMATION

1. RECEIVING WATERS: NONE
2. IMPAIRED WATER BODIES: NONE
3. TOTAL MAXIMUM DAILY LOAD (TDML): NONE
4. STORM SEWER / DRAINAGE SYSTEMS: FAIRBANKS MS4 DRAINS TO EXISTING SHANNON PARK DRAINAGE BASIN AND TRAINOR GATE DITCH.
5. THREATENED AND ENDANGERED SPECIES: NONE
6. HISTORICAL & CULTURAL RESOURCE PRESENCE: NONE
7. FISH & WILDLIFE HABITAT PRESENCE: ALL CONSTRUCTION ACTIVITIES SHALL COMPLY WITH THE MIGRATORY BIRD TREAT ACT TO PREVENT THE KILLING OR TAKING OF MIGRATORY BIRDS OR ANY PART, NEST, OR EGG OF ANY SUCH BIRDS.
8. EXISTING PUBLIC WATER SYSTEM (PWS) DRINKING WATER PROTECTION AREAS:
    - PWSID: AK2310730
    - WATER SYSTEM NAME: GOLDEN HEART UTILITIES
    - PWS CONTACT INFORMATION
      NAME: TARIK SPEAR PHONE: (907) 455-4444
      ADDRESS: 3691 CAMERON ST #201, FAIRBANKS, AK 99709

EROSION & SEDIMENT CONTROL PLAN (ESCP) NOTES

1. THIS PROJECT WILL RESULT IN GROUND DISTURBANCE OF GREATER THEN 1 ACRE AND HAS THE POTENTIAL TO DISCHARGE STORM WATER TO WATERS OF THE U.S., AND WILL REQUIRE THE CONTRACTOR TO PREPARE A STORM WATER POLLUTION PREVENT PLAN (SWPPP). A NOTICE OF INTENT TO DISCHARGE (NOI) TO APPLY FOR COVERAGE UNDER THE ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM (APDES) CONSTRUCTION GENERAL PERMIT (CGP) WILL BE REQUIRED. SINCE THIS PROJECT IS FURTHER LOCATED WITHIN THE FAIRBANKS URBANIZED AREA AND IS PUBLICLY-FUNDED, AND PURSUANT TO SECTION 2.1.4.3 OF THE CGP, A COPY OF THE SWPPP MUST BE SUBMITTED TO THE ADEC FOR REVIEW. SEE THE ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION (ADEC) STORM WATER WEBPAGE https://dec.alaska.gov/water/wastewater/stormwater/ FOR THE CONSTRUCTION SITE STORM WATER PLAN REVIEW AND INSPECTION REQUIREMENTS APPLICABLE TO THIS PROJECT.
2. THIS EROSION & SEDIMENT CONTROL PLAN (ESCP) IS GENERAL IN NATURE AND IS PROVIDED AS GUIDANCE TO THE CONTRACTOR FOR DEVELOPMENT OF THE SWPPP.
3. SHEET Q2 CONTAINS A PLAN VIEW OF JOYCE DRVE AND ITS EXISTING STORM DRAIN SYSTEM, INCLUDING ALL KNOWN STORM DRAIN INLETS, MANHOLES, AND PIPED SECTIONS. THE CONTRACTOR SHALL SELECT AND APPLY APPROPRIATE CONTROLS TO PREVENT SEDIMENT AND OTHER POLLUTANTS FROM ENTERING THE PIPED STORM DRAIN SYSTEM AND DISCHARGING TO THE CHENA RIVER.
4. AT A MINIMUM, INLET PROTECTION (I.E. FILTER BAGS PLACED UNDER THE INLET GRATE) SHALL BE PROVIDED AT ALL INLETS WITHIN AND IMMEDIATELY ADJACENT TO THE PROJECT LIMITS.
5. INLET AND OUTLET PROTECTION SHALL BE ALSO PROVIDED AT ALL CULVERT LOCATIONS RECEIVING STORM WATER RUNOFF FROM THE PROJECT SITE. INLET PROTECTION FOR CULVERTS SHALL BE DESIGNED TO CONTROL SEDIMENT FROM ENTERING THE PIPE. OUTLET PROTECTION FOR CULVERTS SHALL BE DESIGNED TO CONTROL EROSION AT THE OUTLET BY REDUCING FLOW VELOCITY AND ENERGY. SPECIFIC CONTROL DEVICES SHALL BE SELECTED BY THE CONTRACTOR.
6. INLET PROTECTION INCLUDES ANY AND ALL BMPS TO PREVENT POLLUTION FROM ENTERING INLETS. CONTRACTOR TO ENSURE BMPS ARE IN GOOD WORKING CONDITION, AND ARE MAINTAINED PER ADEC CGP AND MANUFACTURER'S REQUIREMENTS. SPECIFIC BMPS AND LOCATIONS SHALL BE SELECTED BY THE CONTRACTOR.
7. STREET SURFACES ADJACENT TO THE WORK AREA SHALL BE SWEPT DAILY TO COLLECT ANY SEDIMENT OR OTHER CONSTRUCTION DEBRIS TRACKED OFFSITE.
8. THE CONTRACTOR SHALL DESIGNATE A CONCRETE WASHOUT AREA ONSITE, AS NECESSARY, TO CONTAIN THE WASHOUT WATER AND RESIDUALS DURING CONCRETE WORK ON SHANNON DRIVE.
9. HAVE A SPILL KIT AVAILABLE AT EACH WORK AREA WHEN HEAVY EQUIPMENT IS BEING UTILIZED.
10. PROVIDE CONSTRUCTION FENCING OR CONES AROUND WORK AREAS TO LIMIT POTENTIAL FOR VEHICLES TO DRIVE THROUGH AND TRACK SEDIMENT ONTO THE STREET SURFACE.
11. ANY POLLUTANTS THAT ARE COLLECTED IN OR NEAR THE JOYCE DRIVE STORM DRAIN SYSTEM WILL DISCHARGE TO THE EXISTING SHANNON PARK DRAINAGE BASIN AND TRAINOR GATE DITCH.
12. CONTRACTOR SHALL VERIFY DIRECTION OF FLOW PRIOR TO IMPLEMENTING BMPS.

DATE	REVISION	BY

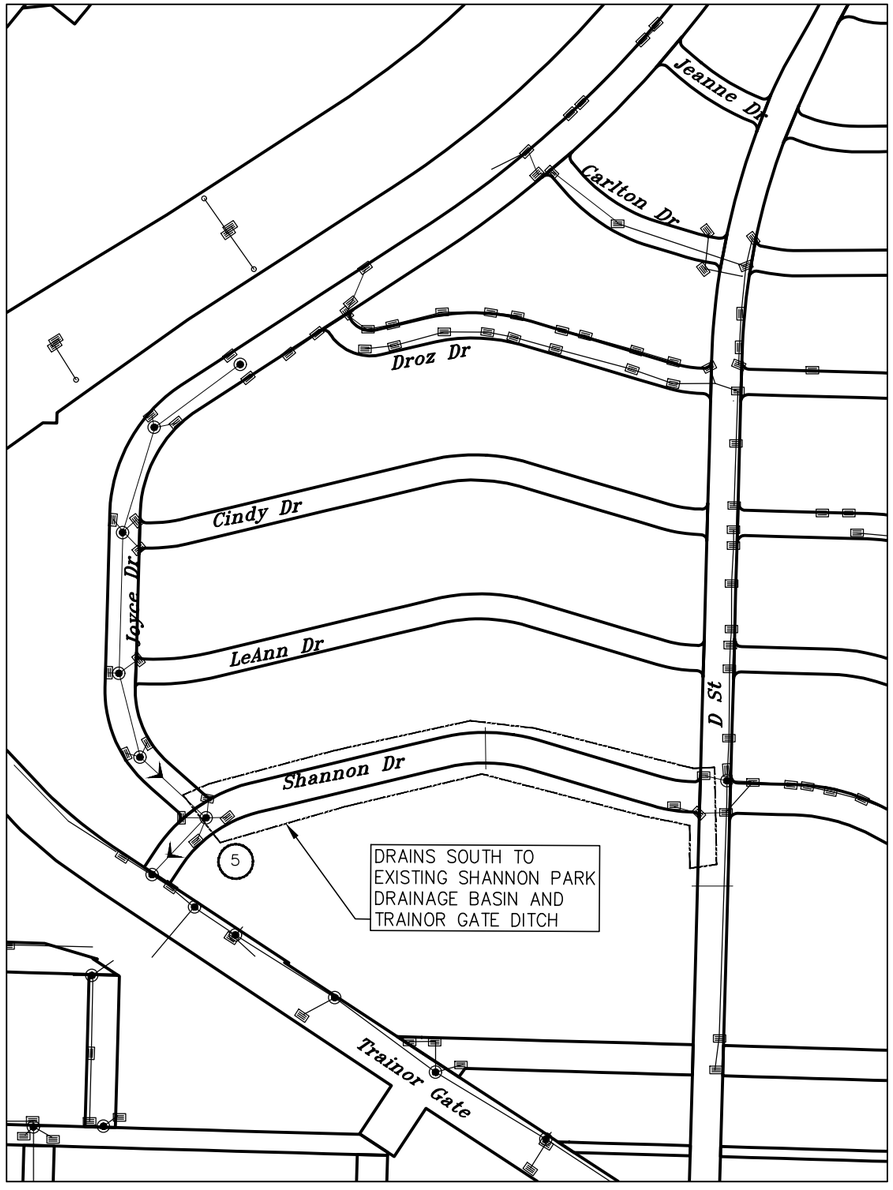
SCALE:

DESIGNED: RHP / CLS
DRAWN: CLS
CHECKED:
DATE:

SHANNON DRIVE UTILITY IMPROVEMENTS

CITY OF FAIRBANKS, ALASKA
Engineering Department
Project #: ITB-26-04

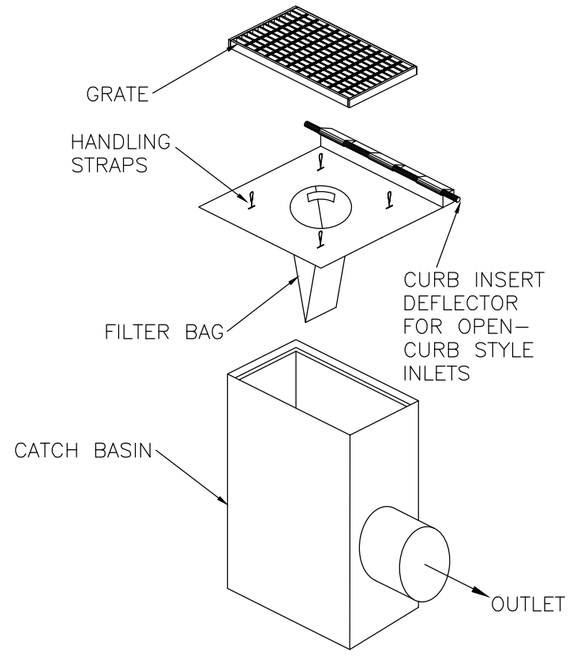
Q1
OF 22 SHEETS



SHANNON DRIVE

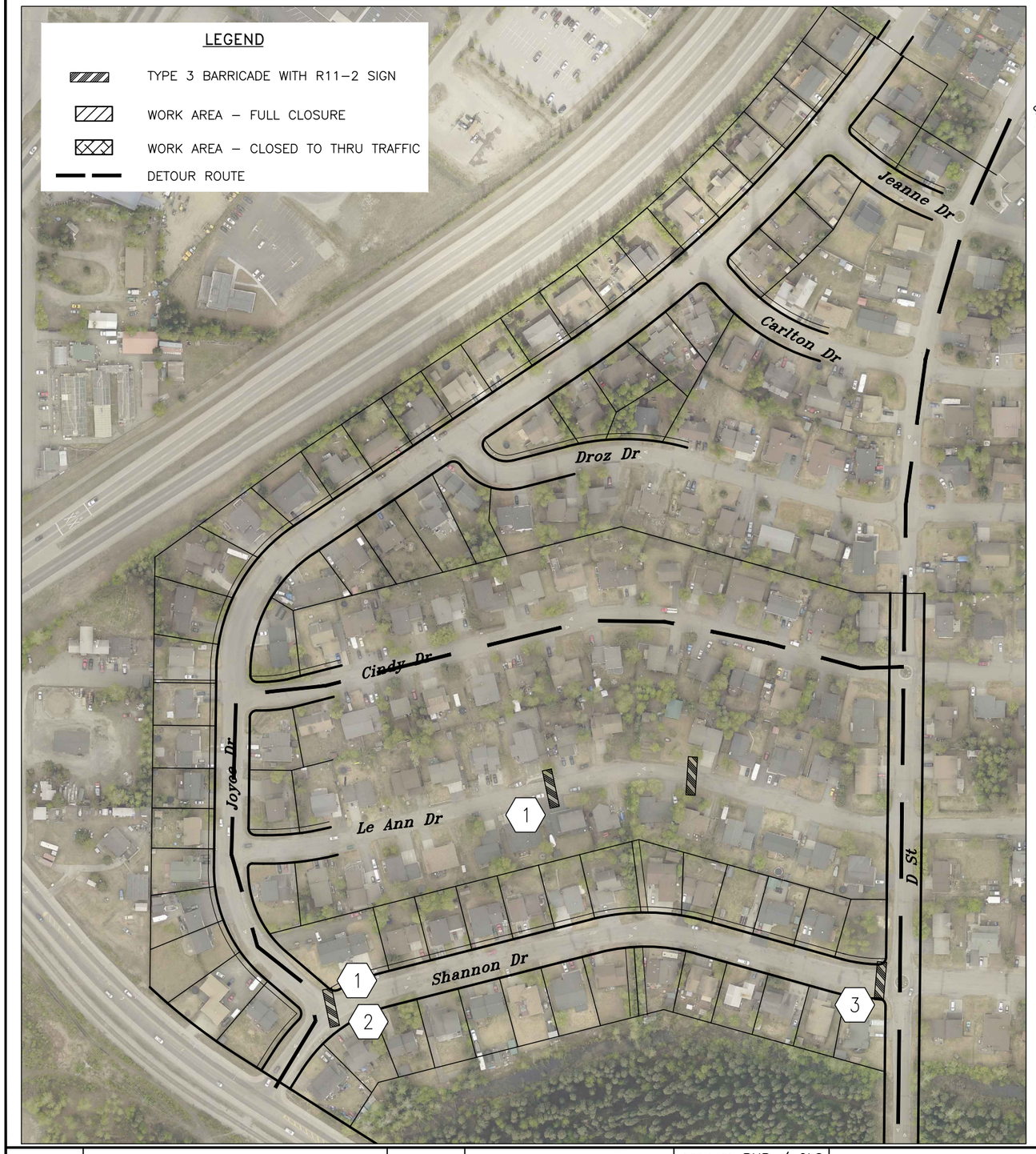
LEGEND

- STORM DRAIN MANHOLE
- STORM DRAIN INLET
- STORM DRAIN PIPE
- PIPE FLOW DIRECTION
- CATCH BASIN & CULVERT PROTECTION AREA
- (##) CATCH BASINs THAT REQUIRE INLET PROTECTION



CATCH BASIN
INLET PROTECTION
DETAIL

			SCALE:	DESIGNED: RHP / CLS		SHANNON DRIVE UTILITY IMPROVEMENTS	CITY OF FAIRBANKS, ALASKA Engineering Department	Q2
				DRAWN: CLS				
				CHECKED:			Project #: ITB–26–04	OF 22 SHEETS
DATE	REVISION	BY		DATE:				



JOYCE DRIVE CONSTRUCTION REQUIREMENT NOTES

1. SHANNON DRIVE & LEANN DRIVE MAY BE CLOSED TO THRU VEHICULAR TRAFFIC BUT ACCESS TO RESIDENTIAL DRIVEWAYS SHALL BE MAINTAINED AT ALL TIMES.
2. SHANNON DRIVE AND JOYCE DRIVE INTERSECTION MAY BE FULLY CLOSED ONLY WHEN THE D STREET AND SHANNON DRIVE INTERSECTION IS OPEN AND USED AS A DETOUR.
3. SHANNON DRIVE AND D ST INTERSECTION MAY BE FULLY CLOSED ONLY WHEN THE JOYCE DRIVE AND SHANNON DRIVE INTERSECTION IS OPEN AND USED AS A DETOUR.

TRAFFIC CONTROL GENERAL NOTES

1. THESE TRAFFIC CONTROL PLANS (TCPs) ARE GENERAL IN NATURE. CONTRACTOR TO PROVIDE DETAILED TRAFFIC CONTROL PLANS TO ENGINEER FOR APPROVAL. NO WORK SHALL BEGIN WITHOUT AN APPROVED TCP.
2. REFER TO THE ALASKA TRAFFIC MANUAL (ATM) CURRENT EDITION FOR TRAFFIC CONTROL PLAN SPECIFICATIONS.
3. IMPLEMENT ONLY ONE TRAFFIC CONTROL SETUP AT A TIME AND RESTORE FULL FUNCTION AS SOON AS PRACTICABLE.
4. ALL SIGNS AND BARRICADES SHALL MEET REQUIREMENTS OF THE CURRENT ALASKA TRAFFIC MANUAL (ATM), MUTCD, AND ALASKA SIGN DESIGN SPECIFICATION (ASDS). THE FINAL JUDGMENT IN THE SELECTION, NUMBER AND APPLICATION OF THE TRAFFIC CONTROL DEVICES AND LOCATION OF ALL TRAFFIC CONTROL MEASURES WILL REST WITH THE ENGINEER.
5. EXISTING SIGNS WHICH CONFLICT WITH CONSTRUCTION SIGNING SHALL BE COVERED DURING PROJECT.
6. CONSTRUCTION SIGNING SPECIFIED MAY BE ALTERED BY THE ENGINEER TO MEET CHANGING CONDITIONS AND TO PROTECT THE TRAVELING PUBLIC.
7. BARRICADE SETUPS SHALL HAVE 1 OPERABLE FLASHING LIGHT FOR EACH 10 FEET OF BARRICADE, WITH A MINIMUM OF 2 LIGHTS PER TYPE III BARRICADE. EXCEPT IN A TAPER WHERE ONLY THE FIRST TWO LIGHTS SHALL FLASH (TYPE A) AND THE REMAINDER SHALL BE STEADY BURN (TYPE C).
8. WHEN STREETS ARE RESTRICTED TO ONE LANE, THE MINIMUM CLEAR WIDTH SHALL BE 12' UNLESS OTHERWISE SPECIFIED ON AN APPROVED TRAFFIC CONTROL PLAN (TCP) OR AS DIRECTED BY THE ENGINEER.
9. ACCESS SHALL BE MAINTAINED FOR THE PASSAGE OF EMERGENCY VEHICLES THROUGH THE PROJECT.
10. ACCESS SHALL BE PROVIDED TO RESIDENTIAL PROPERTIES CONTINUOUSLY. CLOSURES SHALL NOT OCCUR WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER. COORDINATE CLOSURE PLANS WITH THE AFFECTED PROPERTY OWNERS. NOTIFY OWNERS A MINIMUM OF 48 HOURS PRIOR TO IMPLEMENTATION OF AN APPROVED CLOSURE.
11. PEDESTRIAN FLAGGERS SHALL BE PROVIDED FOR PUBLIC ACCESS AS REQUIRED THROUGHOUT THE PROJECT LIMITS.
12. ALTERNATE ACCESS MAY ALSO BE USED AS PART OF AN APPROVED TRAFFIC CONTROL PLAN. ALTERNATE ACCESS ROUTES SHALL BE CLEARLY SIGNED.
13. TYPE "A" FLASHING WARNING LIGHTS SHALL BE USED TO MARK THE TYPE III BARRICADES, ROAD CLOSURES AND ADVANCE DETOUR SIGNING AT NIGHT.
14. CONTRACTOR SHALL INTEGRATE TRAFFIC CONTROL WITH OTHER CONSTRUCTION IN THE AREA AS APPLICABLE.
15. CONTRACTOR SHALL PROVIDE AFFECTED PROPERTY OWNERS NOTICE OF CONSTRUCTION A MAXIMUM OF 3 WEEKS AND A MINIMUM OF 1 WEEK PRIOR TO CONSTRUCTION. NOTICE TO INCLUDE NEWSPAPER ADVERTISEMENT AND FLYERS TO BUSINESS OWNERS.
16. ALL SPECIAL SIGNS SHALL BE FABRICATED OF MATERIALS CONFORMING TO SECTION 615 OF THE SPECIFICATIONS.
17. TEMPORARY DRIVING SURFACE SHALL AT A MINIMUM BE COMPACTED GRAVEL OR AS APPROVED BY THE ENGINEER.

CONSTRUCTION REQUIREMENTS
1 OF 1

DATE	REVISION	BY

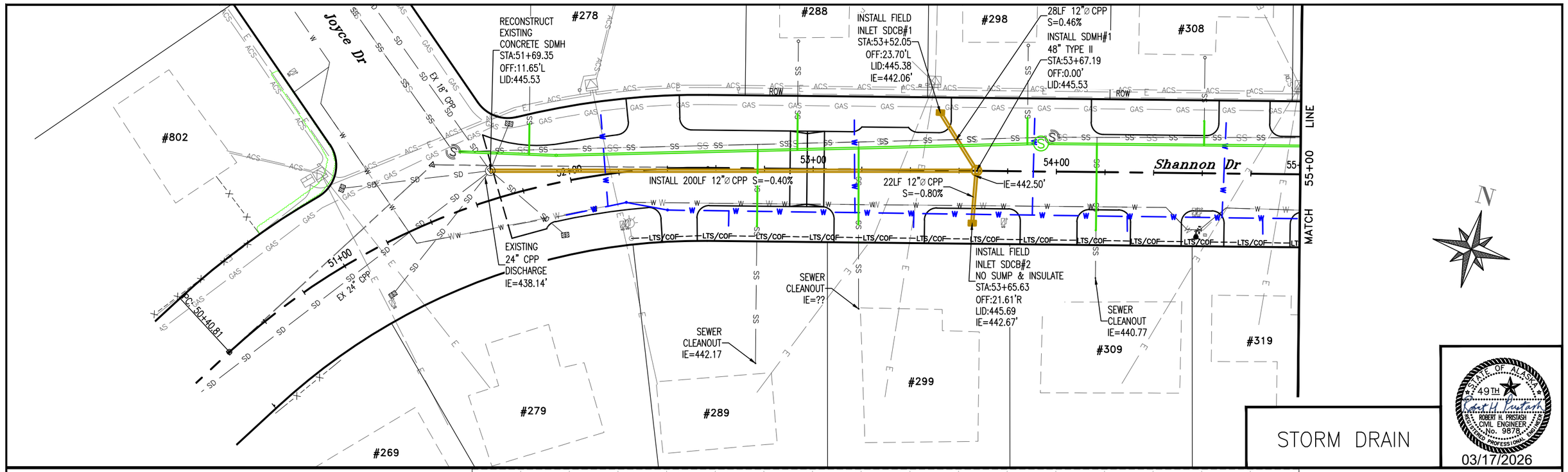
SCALE:

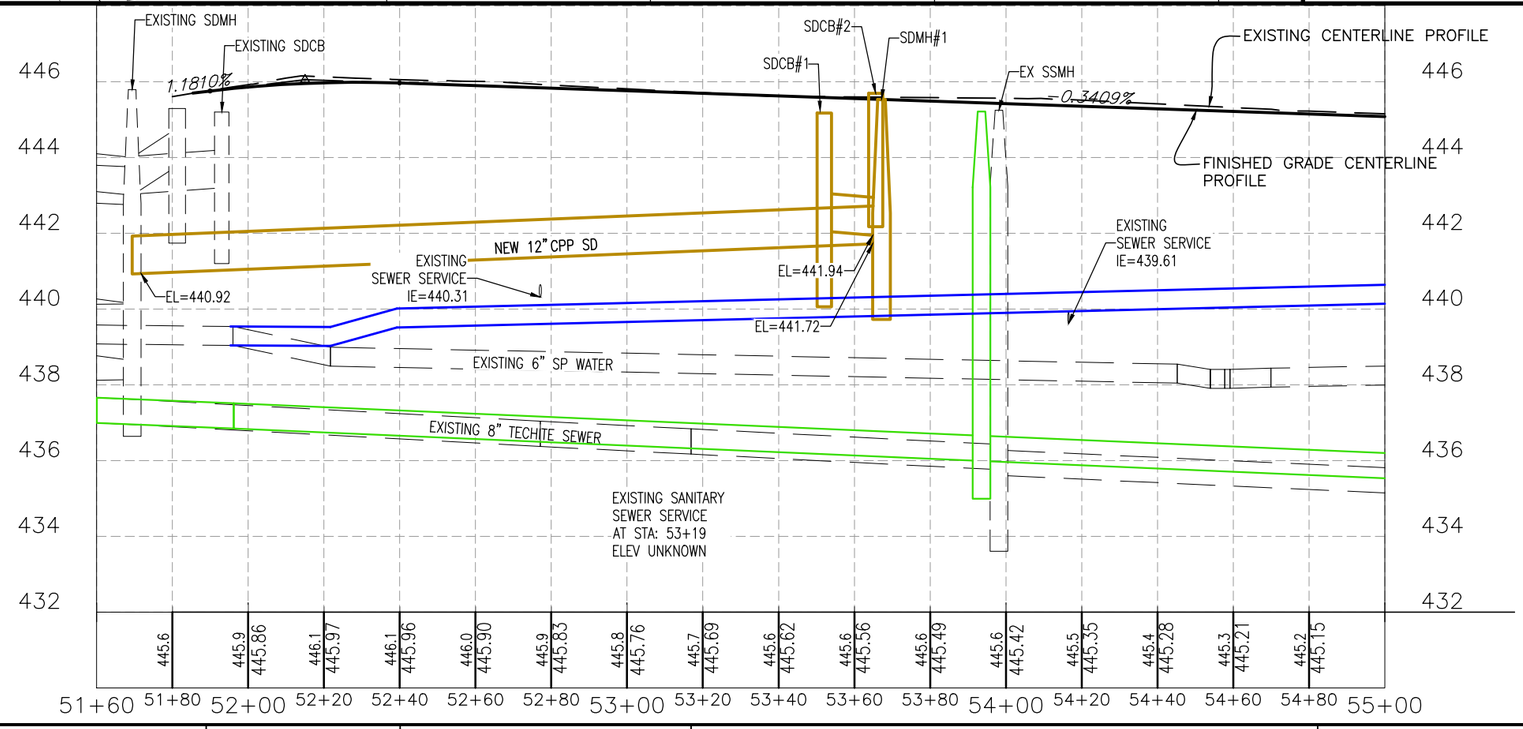
DESIGNED: RHP / CLS
DRAWN: CLS
CHECKED:
DATE:

SHANNON DRIVE UTILITY IMPROVEMENTS

CITY OF FAIRBANKS, ALASKA
Engineering Department
Project #: ITB-26-04

T1
OF 22 SHEETS





DATE	REVISION	BY

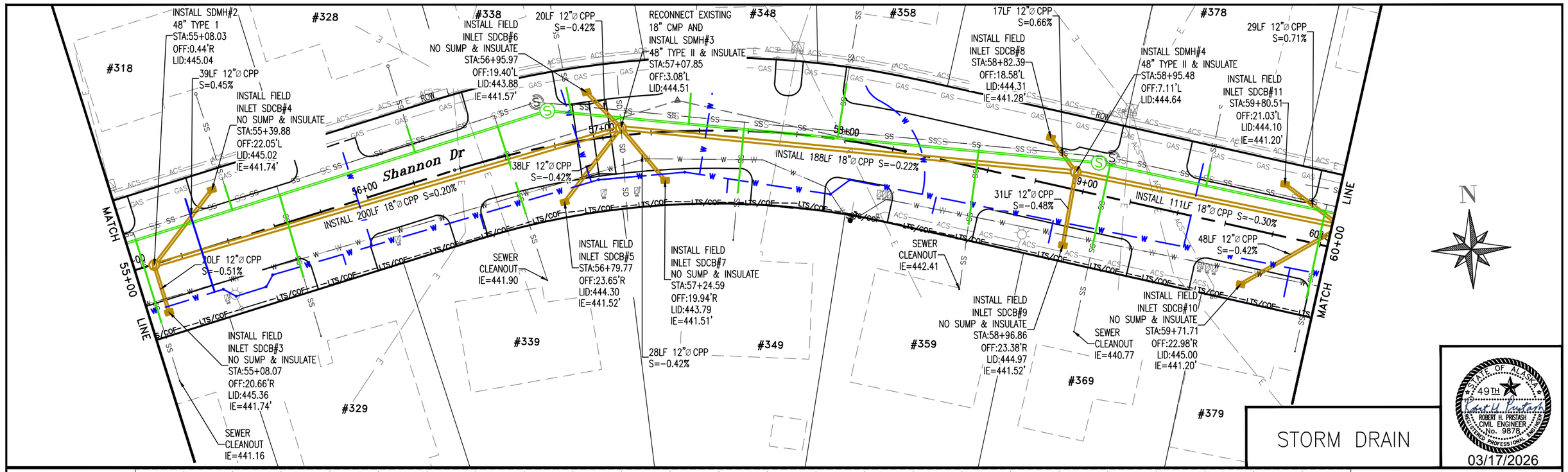
SCALE:
1"=20' HORIZ., 1"=40' HORIZ.,
1"=2' VERT. 1"=4' VERT.
(FULL SIZE) (HALF SIZE)

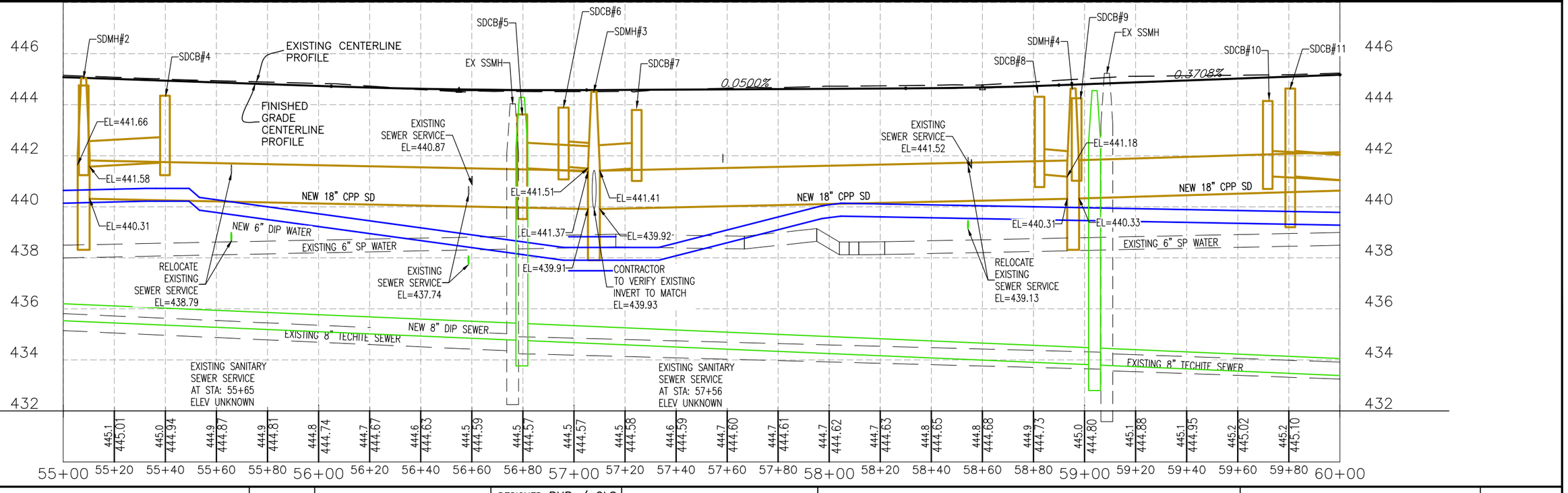
DESIGNED: RHP / CLS
DRAWN: CLS
CHECKED:
DATE:

SHANNON DRIVE UTILITY IMPROVEMENTS

CITY OF FAIRBANKS, ALASKA
Engineering Department
Project #: ITB-26-04

U1
OF 22 SHEETS





DATE	REVISION	BY

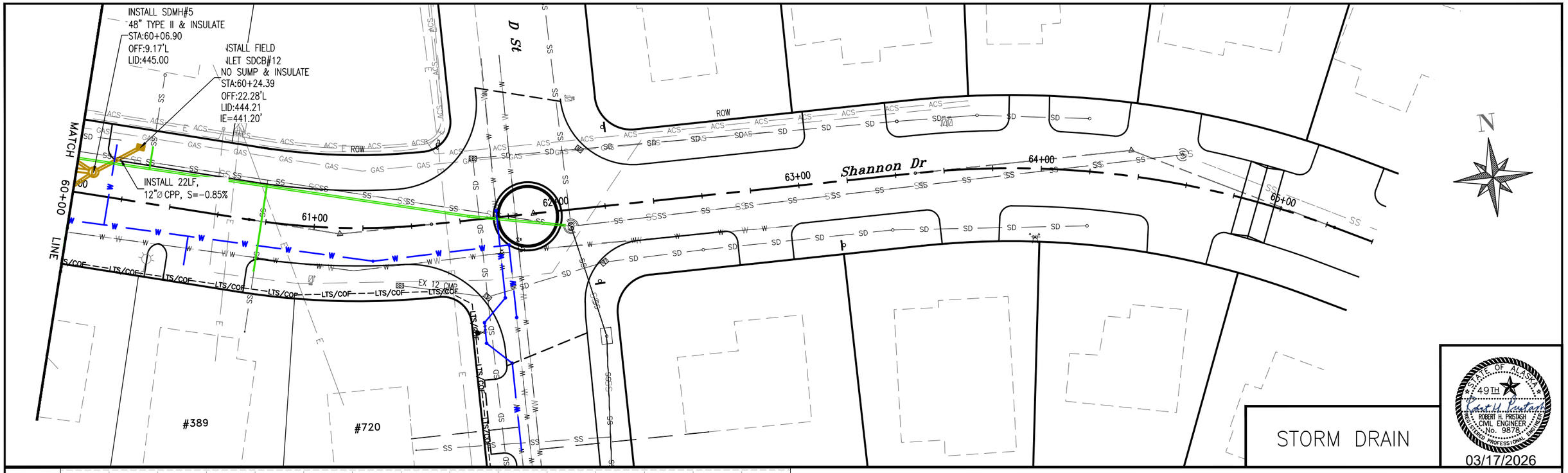
SCALE:
1"=20' HORIZ., 1"=40' HORIZ.
1"=2' VERT. 1"=4' VERT.
(FULL SIZE) (HALF SIZE)

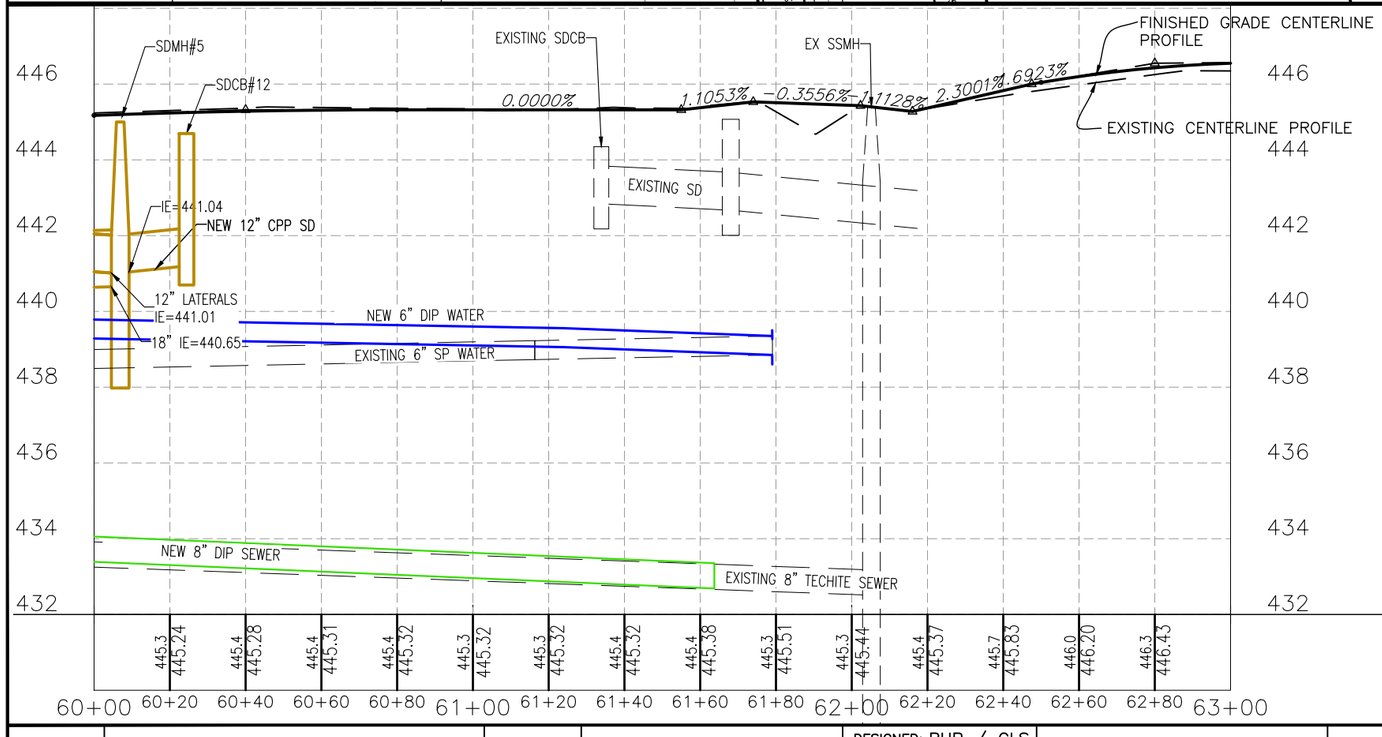
DESIGNED: RHP / CLS
DRAWN: CLS
CHECKED:
DATE:

SHANNON DRIVE UTILITY IMPROVEMENTS

CITY OF FAIRBANKS, ALASKA
Engineering Department
Project #: ITB-26-04

U2
OF 22 SHEETS





STORM DRAIN

STATE OF ALASKA
49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER
03/17/2026

DATE	REVISION	BY

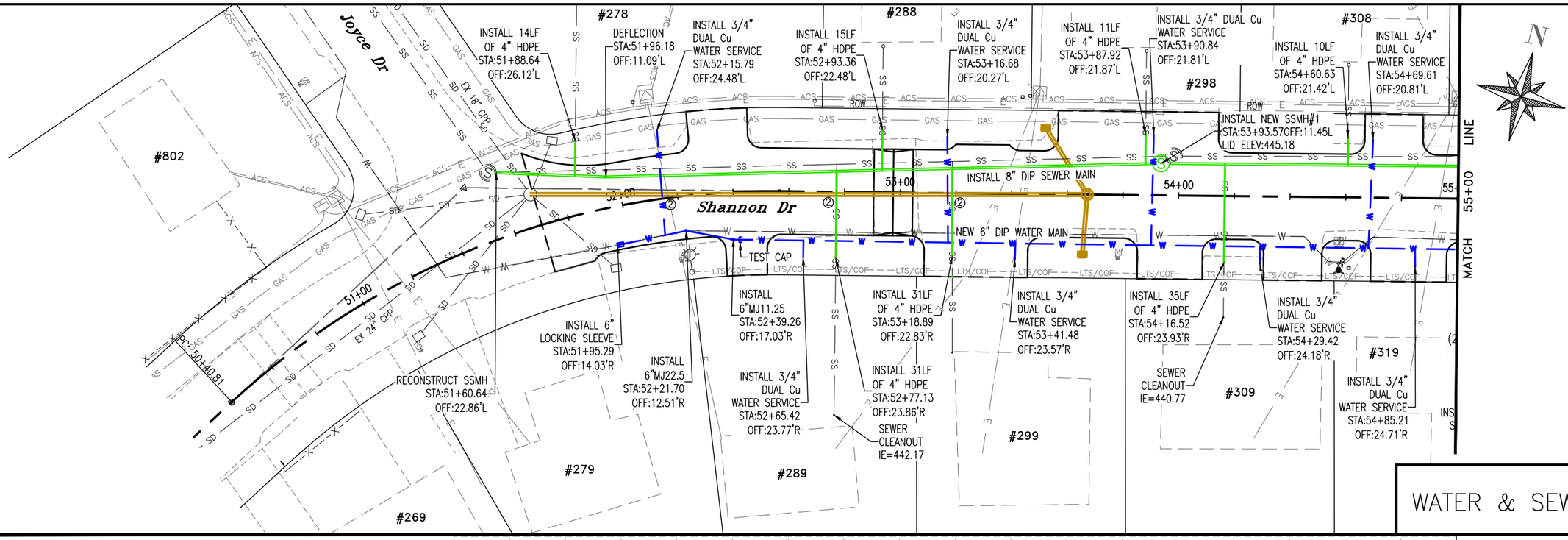
SCALE:
1"=20' HORIZ., 1"=40' HORIZ.,
1"=2' VERT. 1"=4' VERT.
(FULL SIZE) (HALF SIZE)

DESIGNED: RHP / CLS
DRAWN: CLS
CHECKED:
DATE:

SHANNON DRIVE UTILITY IMPROVEMENTS

CITY OF FAIRBANKS, ALASKA
Engineering Department
Project #: ITB-26-04

U3
OF 22 SHEETS



WATER & SEWER

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER
03/17/2026

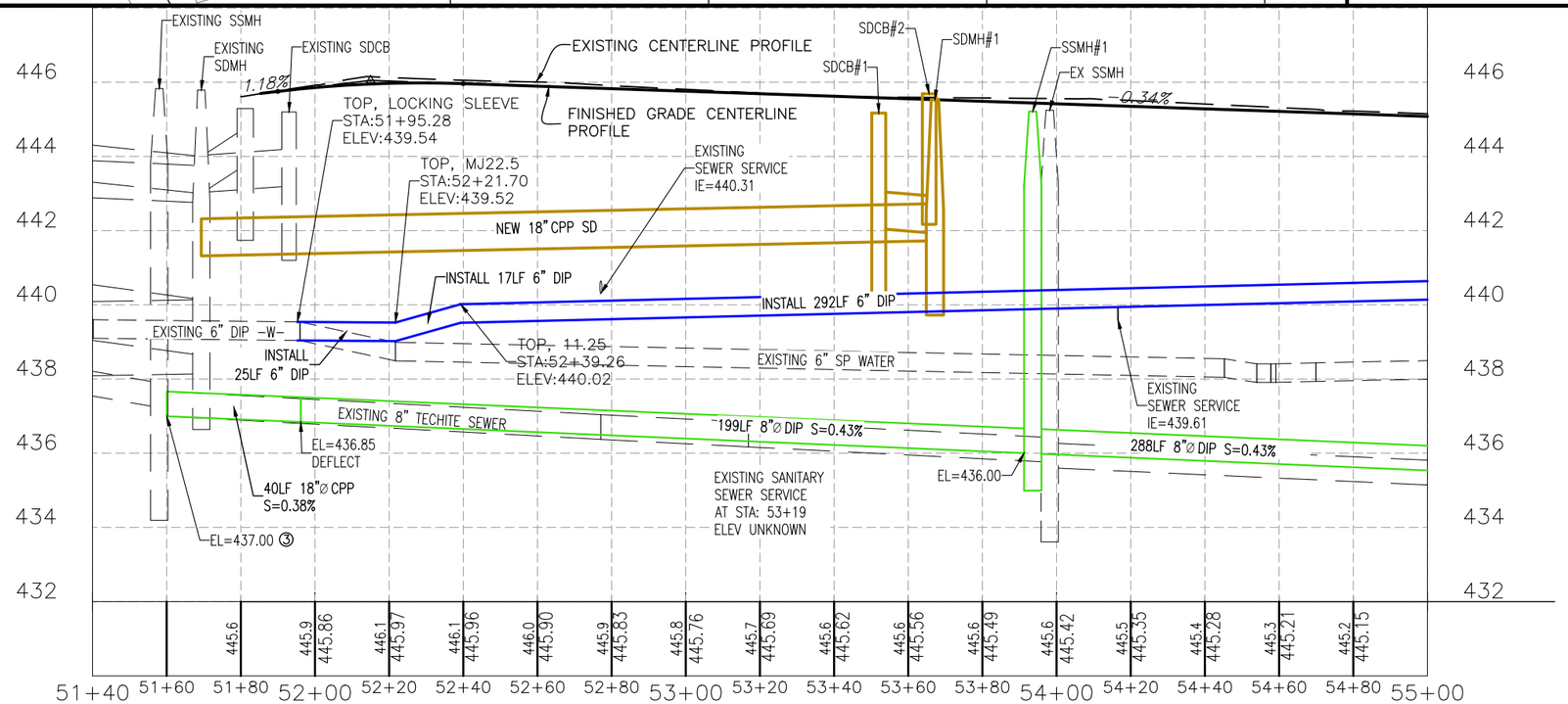
NOTE

1. CONTRACTOR TO EXPOSE SANITARY SEWER SERVICE WHERE CROSSING NEW PROPOSED STORM DRAIN AND WATER MAIN AND REPORT TO ENGINEER BEFORE CONSTRUCTION SO ADJUSTMENTS CAN BE MADE.

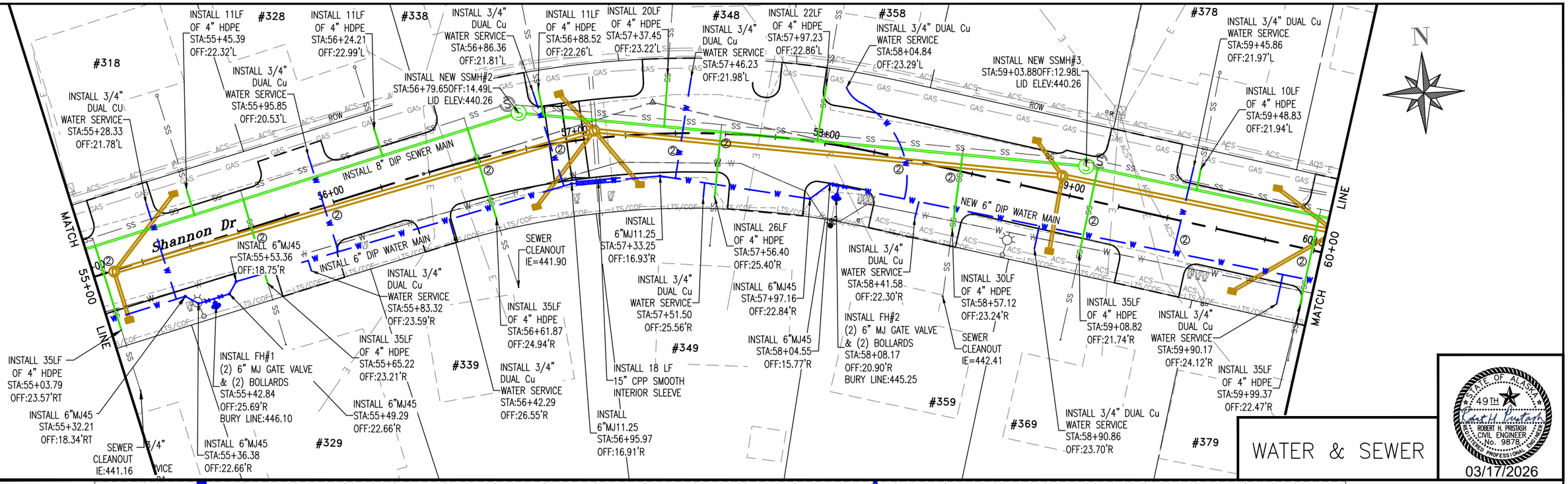
② INSTALL 3" EXTRA INSULATION ON WATER & SEWER SERVICES FOR 7 FEET EACH SIDE OF STORM DRAIN CROSSING.

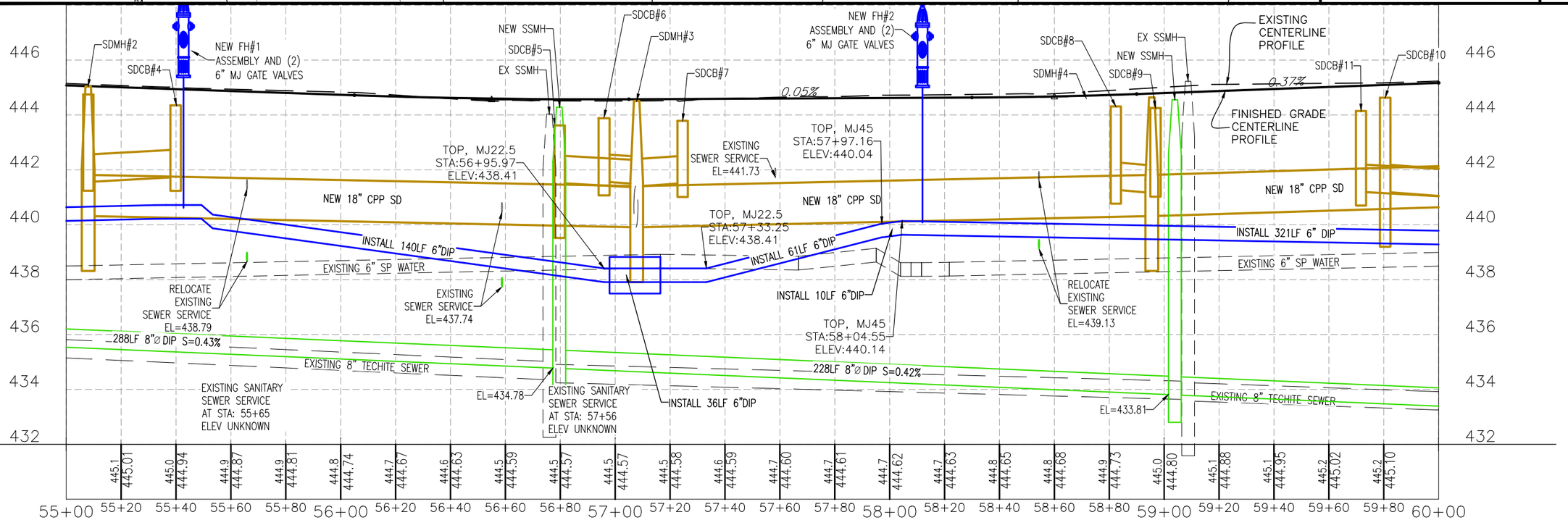
③ CONTRACTOR TO VERIFY INVERT ELEVATION AND REPORT TO ENGINEER PRIOR TO CONSTRUCTION.

4. REMOVE & REINSTALL MAILBOXES SUBSIDIARY TO PAY ITEM 202.0001.0000



			SCALE: 1"=20' HORIZ., 1"=40' HORIZ., 1"=2' VERT. 1"=4' VERT. (FULL SIZE) (HALF SIZE)	DESIGNED: RHP / CLS DRAWN: CLS CHECKED: DATE:		SHANNON DRIVE UTILITY IMPROVEMENTS	CITY OF FAIRBANKS, ALASKA Engineering Department Project #: ITB-26-04	U4 OF 22 SHEETS
DATE	REVISION	BY						





DATE	REVISION	BY

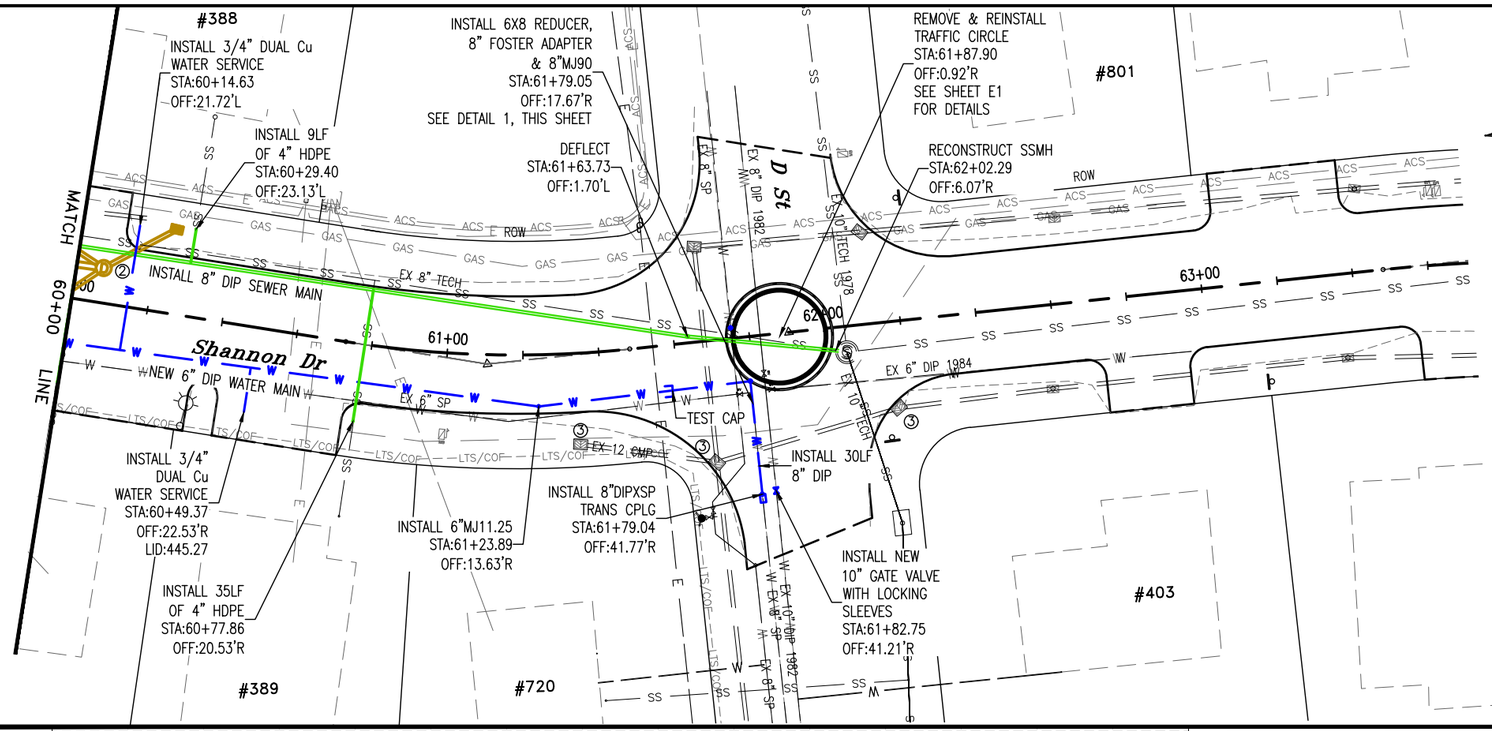
SCALE:
1"=20' HORIZ., 1"=2' VERT. (FULL SIZE)
1"=40' HORIZ., 1"=4' VERT. (HALF SIZE)

DESIGNED: RHP / CLS
DRAWN: CLS
CHECKED:
DATE:

SHANNON DRIVE UTILITY IMPROVEMENTS

CITY OF FAIRBANKS, ALASKA
Engineering Department
Project #: ITB-26-04

U5
OF 22 SHEETS



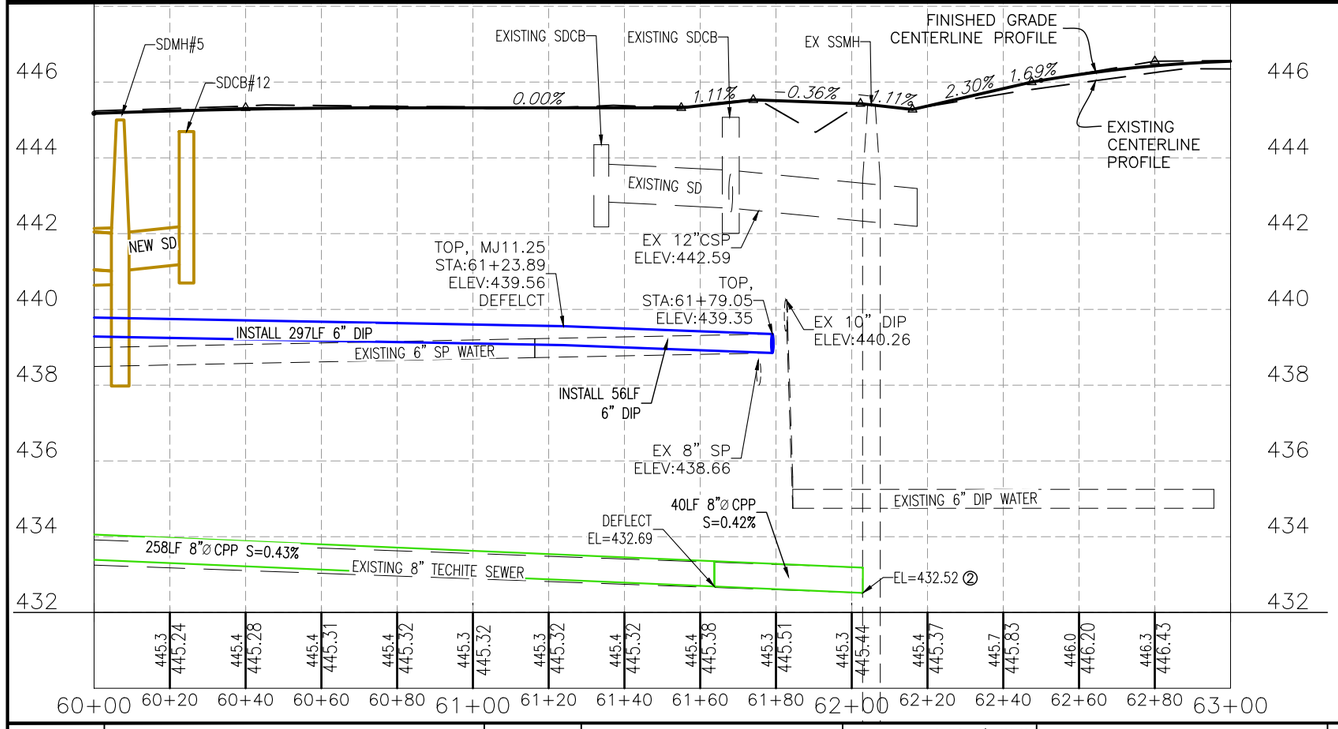
N

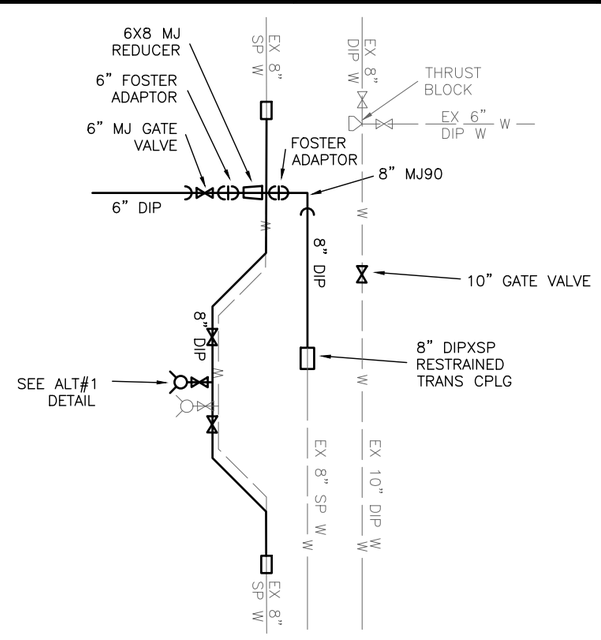
NOTE

1. CONTRACTOR TO EXPOSE SANITARY SEWER SERVICE WHERE CROSSING NEW PROPOSED WATER SERVICES AND STORM DRAIN AND REPORT TO ENGINEER BEFORE CONSTRUCTION SO ADJUSTMENTS CAN BE MADE.
2. CONTRACTOR TO VERIFY INVERT ELEVATION AND REPORT TO ENGINEER PRIOR TO CONSTRUCTION.
3. EXISTING STORM DRAIN AT THE INTERSECTION OF SHANNON DRIVE AND D STREET TO REMAIN. CONTRACTOR TO PROTECT IN PLACE.

WATER & SEWER

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER
03/17/2026





1/U6 **D ST WATER MAIN DETAIL**

DATE	REVISION	BY

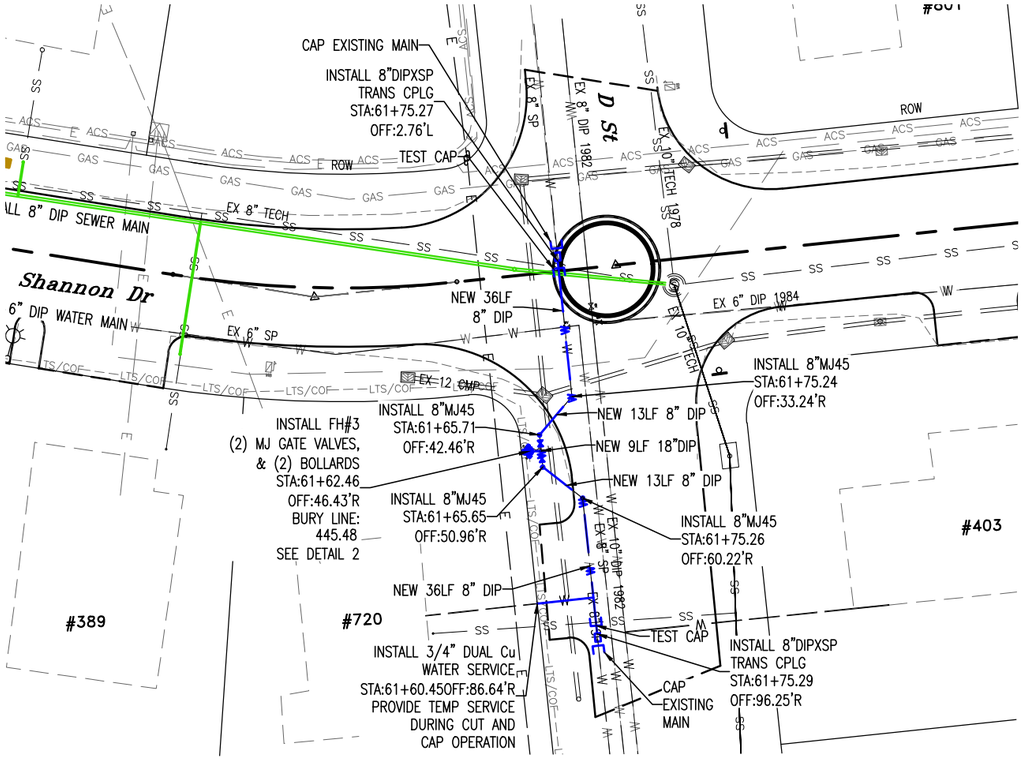
SCALE:
1"=20' HORIZ., 1"=40' HORIZ.,
1"=2' VERT. 1"=4' VERT.
(FULL SIZE) (HALF SIZE)

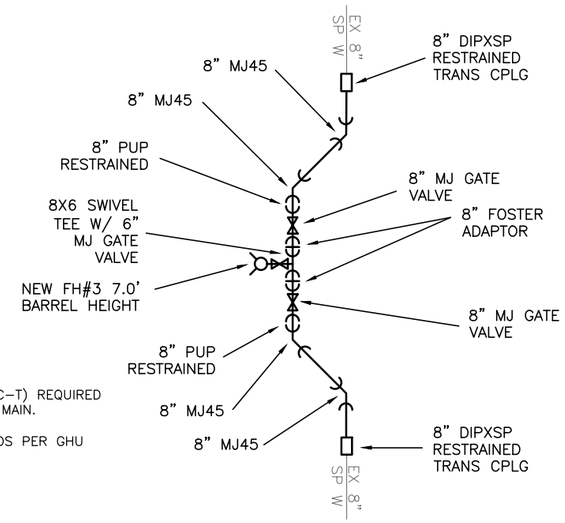
DESIGNED: RHP / CLS
DRAWN: CLS
CHECKED:
DATE:

SHANNON DRIVE UTILITY IMPROVEMENTS

CITY OF FAIRBANKS, ALASKA
Engineering Department
Project #: ITB-26-04

U6
OF 22 SHEETS

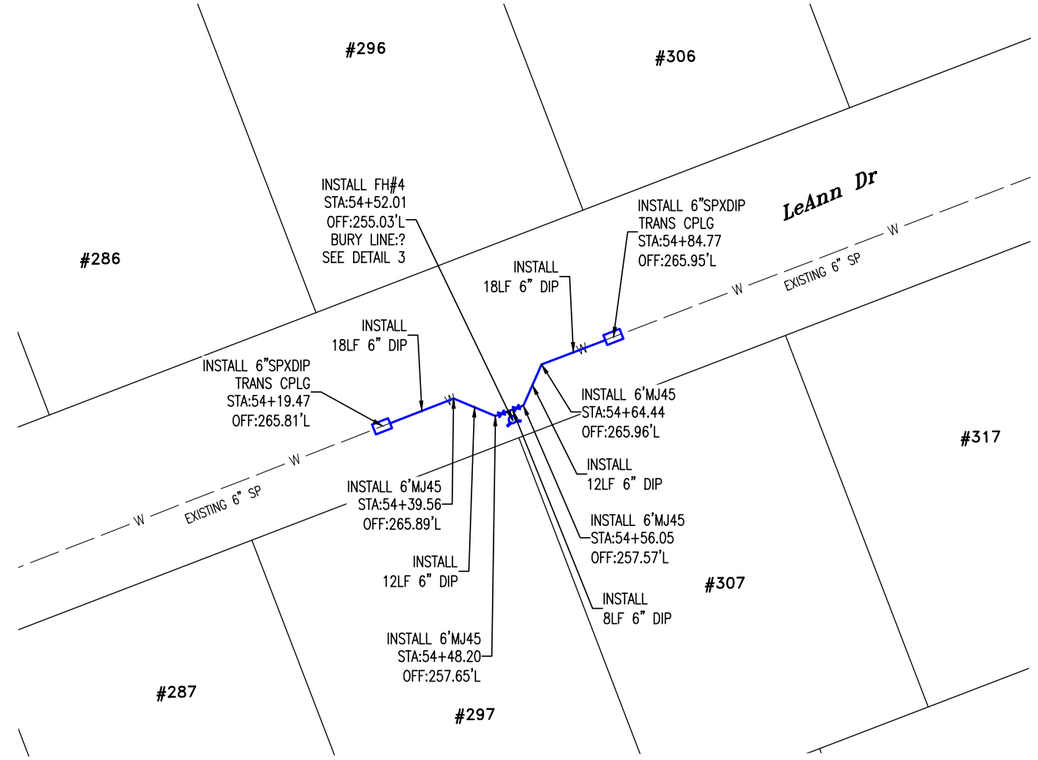


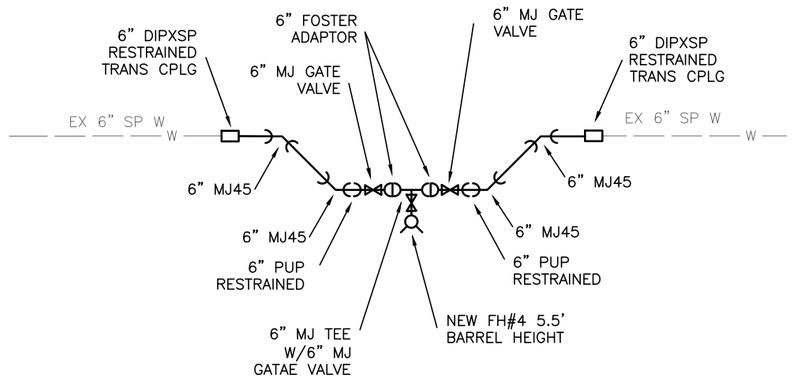


NOTE

1. (2) BIOLOGICAL PURITY TESTS (BAC–T) REQUIRED BEFORE CONNECTION TO EXISTING MAIN.
2. PROVIDE AND INSTALL (2) BOLLARDS PER GHU STANDARD DETAIL WD1

2 / U7 D ST FIRE HYDRANT REPLACEMENT
ALTERNATE #1 DETAIL





NOTE

1. (1) BIOLOGICAL PURITY TESTS (BAC–T) REQUIRED AFTER CONNECTION TO EXISTING MAIN.
2. PROVIDE AND INSTALL (2) BOLLARDS PER GHU STANDARD DETAIL WD1

3 / U7 LEANN FIRE HYDRANT REPLACEMENT
ALTERNATE #2 DETAIL

WATER & SEWER

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER
03/17/2026

DATE	REVISION	BY

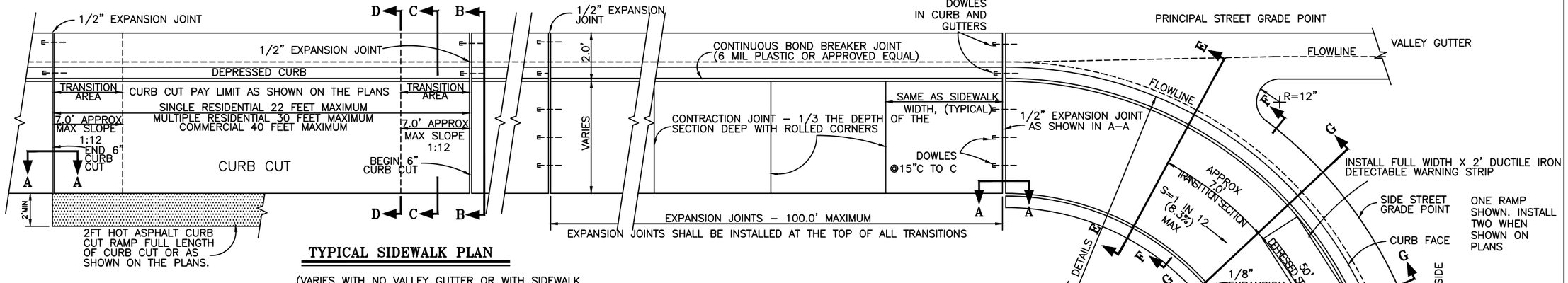
SCALE:
1"=20' HORIZ., 1"=40' HORIZ.,
1"=2' VERT. 1"=4' VERT.
(FULL SIZE) (HALF SIZE)

DESIGNED: RHP / CLS
DRAWN: CLS
CHECKED:
DATE:

SHANNON DRIVE UTILITY IMPROVEMENTS

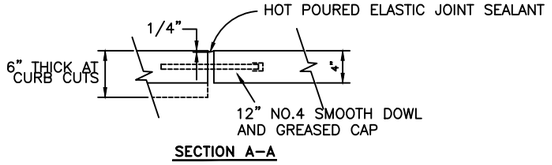
CITY OF FAIRBANKS, ALASKA
Engineering Department
Project #: ITB–26–04

U7
OF 22 SHEETS

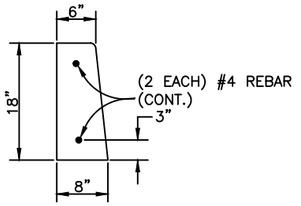


TYPICAL SIDEWALK PLAN

(VARIES WITH NO VALLEY GUTTER OR WITH SIDEWALK SEPARATED FROM CURB AS SHOWN ON PLANS)



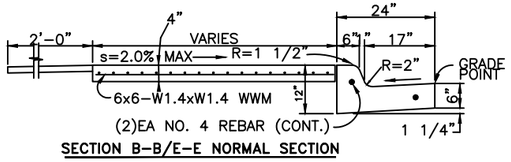
SECTION A–A



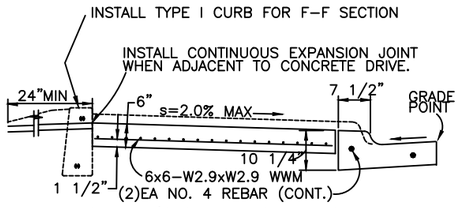
CURB TYPE I

GENERAL NOTES:

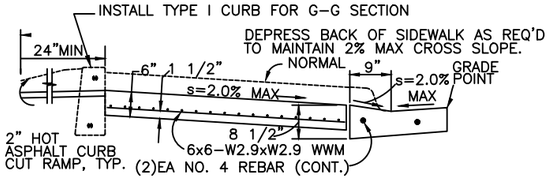
1. CURB CUT SECTIONS SHALL BE 6" THICK TO INCLUDE TRANSITIONS.
2. CURB RAMP SECTIONS SHALL BE 6" THICK TO INCLUDE TRANSITIONS.
3. INSTALL CONTINUOUS FULL DEPTH $\frac{1}{8}$" CONSTRUCTION JOINT AT ALL LOCATIONS WHERE SIDEWALK AND CURB (ANY TYPE) MEET.
4. PROTECT CONCRETE DURING CURE.
5. SIDEWALK – BROOM FINISH (MEDIUM)
6. SEAL ALL EXPANSION JOINTS WITH HOT POURED ELASTIC TYPE JOINT SEAL CONFORMING TO ASTM D6690
7. FOR SIDEWALKS LARGER OR DIFFERENTLY CONFIGURED THAN SHOWN PLACE EXPANSION AND CONTRACTION JOINTS AS ENGINEER DIRECTS.
8. INSTALL $\frac{1}{2}$" CONSTRUCTION JOINT MATERIAL BETWEEN NEW CONCRETE AND AND ADJACENT BUILDINGS, POLES AND HYDRANTS.
9. ALL CURB RAMPS SHALL HAVE A DETECTABLE WARNING STRIP PER ADA REQUIREMENTS.
10. WWM STEEL REINFORCEMENT FOR PEDESTRIAN RAMPS AND CURB CUTS SHALL BE 6"X6"– W2.9 X W2.9 WWM. FOR NORMAL SIDEWALK REINFORCEMENT SHALL BE 6"X6"– W1.4 X W1.4 ALL STEEL SHALL BE SET ON SPACERS AND PULLED UP AS REQUIRED TO POSITION STEEL 1 1/2" UP FROM BOTTOM OF SIDEWALK.
11. EXPANSION AND CONTRACTION JOINTS IN THE SIDEWALK SHALL LINE UP WITH EXPANSION AND CONTRACTION JOINTS IN THE CURB.



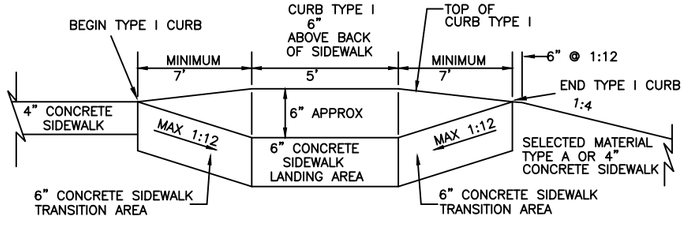
SECTION B–B/E–E NORMAL SECTION



SECTION C–C/F–F TRANSITION SECTION

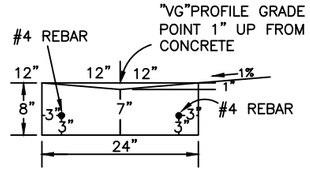


SECTION D–D/G–G DEPRESSED SECTION

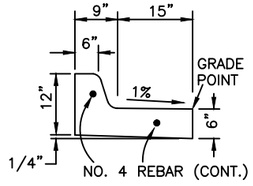


WWM REIENFORCEMENT NOT SHOWN FOR CLARITY
SEE SECTION E–E, F–F, AND G–G THIS SHEET

DEPRESSED/TRANSITION SIDEWALK PROFILE AT PEDESTRIAN CURB RAMP

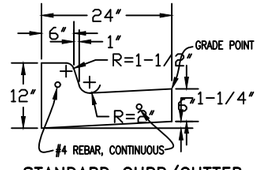


VALLEY GUTTER



1. CONSTRUCT REJECT CURB AND GUTTER AS SHOWN, WHERE INDICATED ON THE TYPICAL SECTIONS.

SPILL CURB & GUTTER



STANDARD CURB/GUTTER

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER

03/17/2026

DATE	REVISION	BY
3/31/21	UPDATE DEP. SECTION DETAIL/DEL. RED DYE NOTE	RHP/KLL
9/26/17	UPDATE CURB CUT & ADA DETAILS	RHP
7/26/17	DELETE AASHTO AND REPLACE WITH ASTM D 6690	RHP
2/1/10	NEW CD1	RHP,GSC

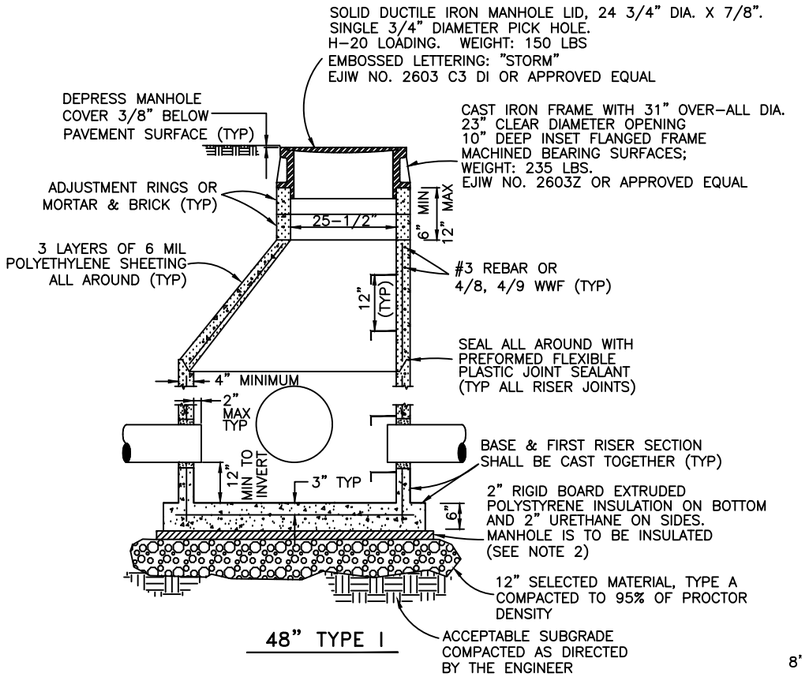
NOT TO SCALE

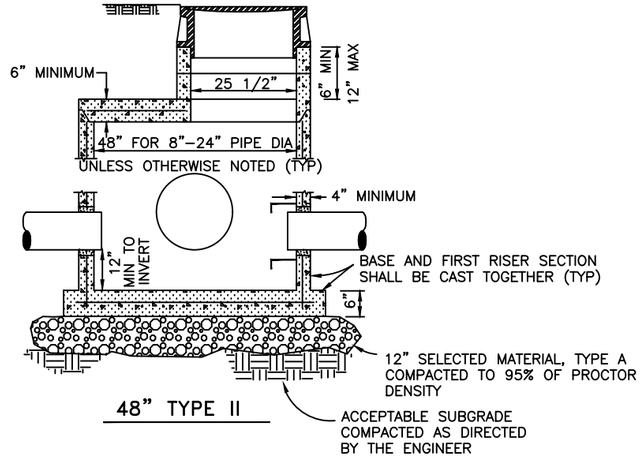
DESIGNED:	
DRAWN:	STAFF
CHECKED:	RHP,GSC
DATE:	3/23/07

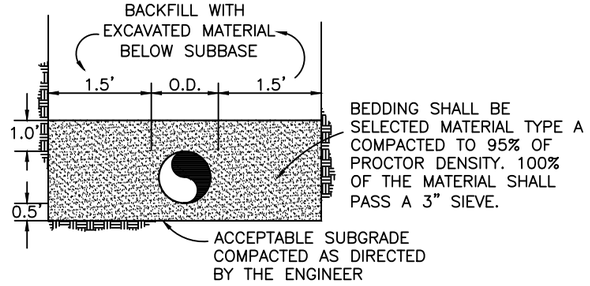
CITY OF FAIRBANKS, ALASKA
ENGINEERING DIVISION

STANDARD CONCRETE DETAILS

CD1

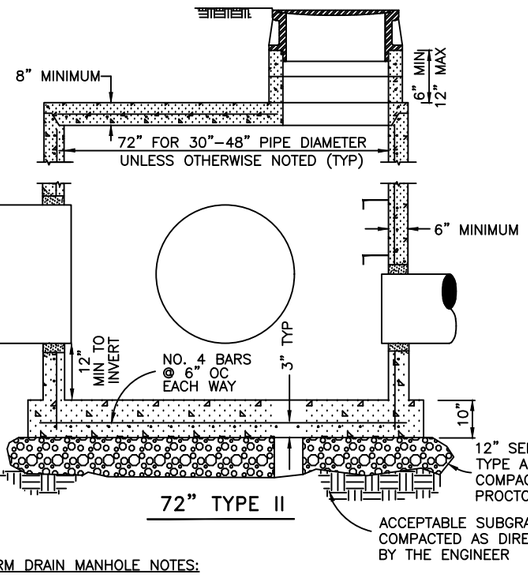


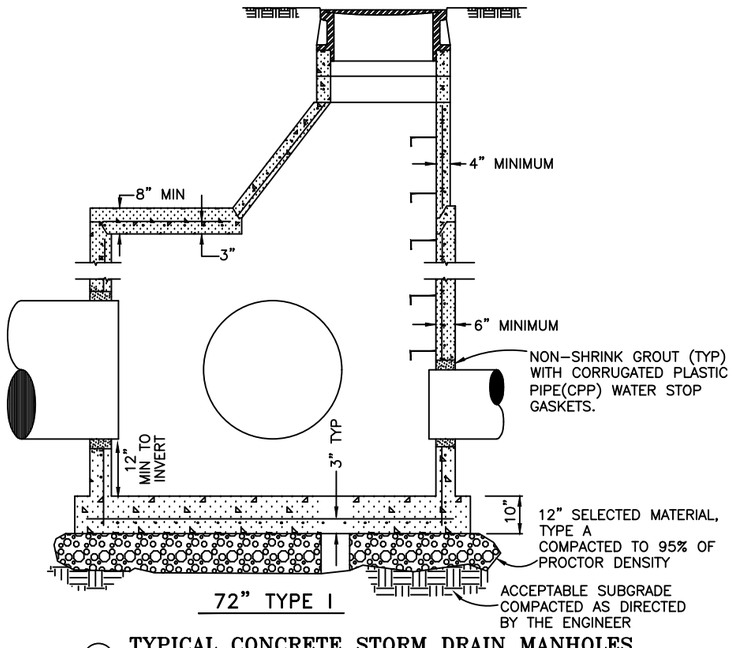




PIPE BEDDING DETAIL

NOT TO SCALE



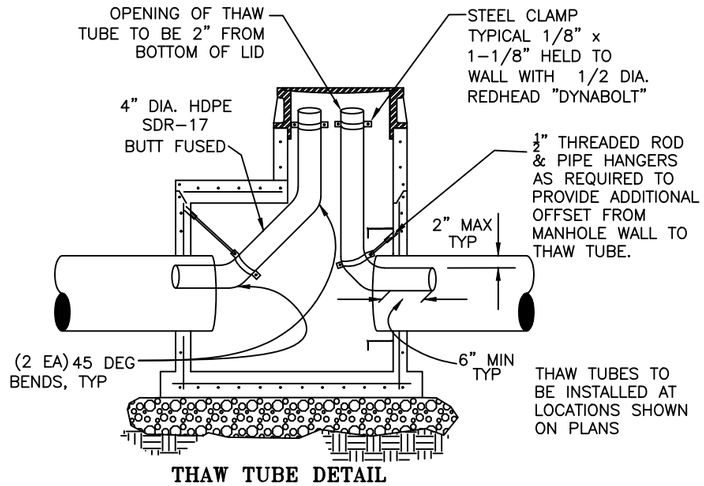


(A) TYPICAL CONCRETE STORM DRAIN MANHOLES

NOT TO SCALE

STORM DRAIN MANHOLE NOTES:

1. OPENINGS IN MANHOLE TO RECEIVE PIPE SHALL BE 1" TO 2" LARGER THEN THE OD AND PIPE. LARGER OPENINGS SHALL BE FILLED AS DIRECTED BY THE ENGINEER. INSIDE GROUT SURFACE SHALL BE SMOOTH. PROVIDE CPP WATER STOP GASKETS.
2. TYPICALLY, STORM DRAIN MANHOLES DO NOT REQUIRE INSULATION. HOWEVER, SPECIAL CASES REQUIRE INSULATION OF ALL OUTSIDE SURFACES. SEE PLANS.
3. SEAL RISER JOINTS WITH FLEXIBLE PLASTIC JOINT SEALERS.
4. MANHOLE STEPS SHALL BE APPROVED GALVANIZED STEEL OR PLASTIC AND MEET CURRENT OSHA STANDARDS.
5. ALL GROUT SHALL BE NON-SHRINK. PROTECT GROUT DURING CURE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED METHOD.
6. REINFORCEMENT IN BASE, RISER, CONE, FLAT LID, AND ADJUSTING RINGS SHALL COMPLY WITH AASHTO SPECIFICATION M199/ASTM478.



THAW TUBE DETAIL

MANHOLE REINFORCEMENT SCHEDULE			
SECTION	MANHOLE SIZE		(SHALL COMPLY WITH AASHTO M 199 /ASTM 478) *CIRCUMFERENTIAL REINFORCING ALL AREAS ARE MINIMUM CROSS-SECTIONAL AREA OF REINFORCEMENT PER FOOT OF SECTION.
	48"	72"	
FLAT BASE	0.39 SQ IN/FT EACH WAY	0.39 SQ IN/FT EACH WAY	
RISER SECTION*	0.12 SQ IN/FT	0.18 SQ IN/FT	
CONE SECTION*	0.12 SQ IN/FT	0.18 SQ IN/FT	
FLAT LID**	0.12 SQ IN/FT EACH WAY	0.12 SQ IN/FT EACH WAY	
ADJUSTING RING	0.024 SQ IN	0.024 SQ IN	

**OPENINGS IN FLAT LIDS SHALL BE ADDITIONALLY REINFORCED WITH A MINIMUM OF THE EQUIVALENT OF 0.2 SQ IN OF STEEL AT 90°.

STATE OF ALASKA 49TH
Robert H. Pristash
R.H. ROBERT H. PRISTASH, P.E.
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER
03/17/2026

DATE		BY
3/13/17	WATER STOP GASKETS	RHP
2/3/10	NEW SD1	GSC,RHP
3/23/07		RHP

NOT TO SCALE

DESIGNED:	
DRAWN:	STAFF
CHECKED:	RHP,GSC
DATE:	3/23/07

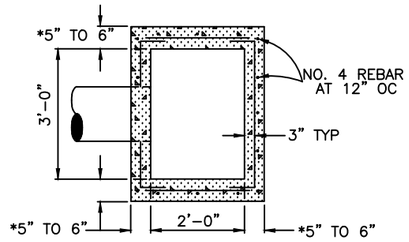
CITY OF FAIRBANKS, ALASKA

ENGINEERING DIVISION

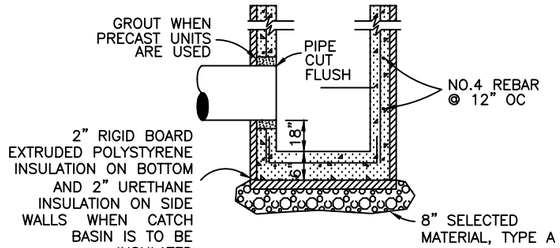
STANDARD DETAILS

STORM DRAIN MANHOLES, THAW TUBES AND BEDDING

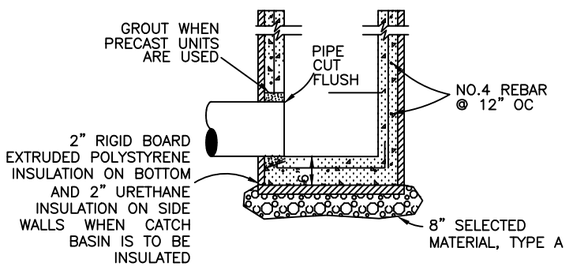
SD1



*DIMENSION WHEN PRECAST INLET BOX WITH CONTINUOUS WWF 6x6 4/4 REINFORCEMENT IS USED



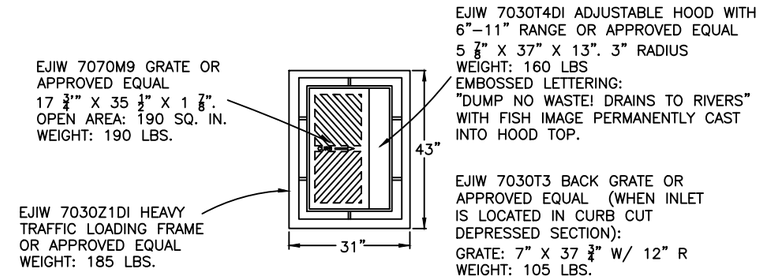
REINFORCED CATCH BASIN (STANDARD)

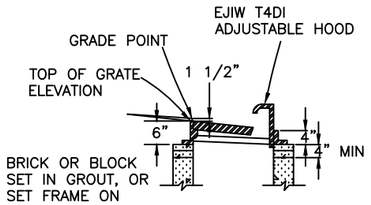


NO SUMP CATCH BASIN

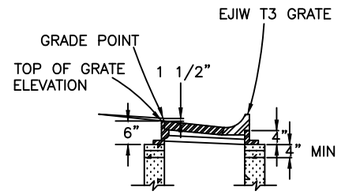
ALTERNATE USED WHERE INDICATED ON PLANS

TYPICAL CURB INLET



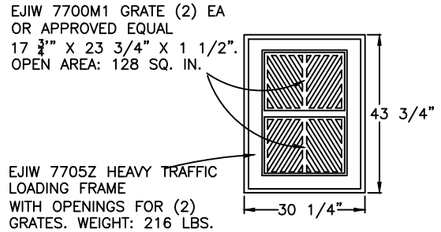


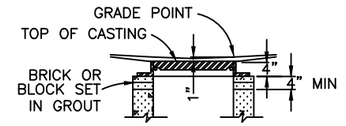
FRAME WITH ADJUSTABLE HOOD FOR INSTALLATION IN CURB FACE



FRAME WITH BACK GRATE FOR INSTALLATION IN CURB CUT

TYPICAL FIELD INLET

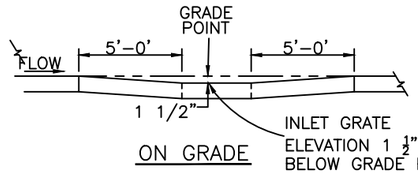




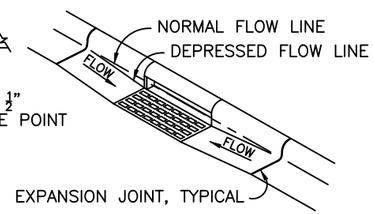
FRAME WITH DOUBLE OPENING

INLET BOX/CATCH BASIN DETAILS

NOT TO SCALE



ON GRADE

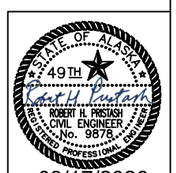


PLAIN ISOMETRIC

DEPRESSION IN FLOW LINE AT INLET

CATCH BASIN NOTES:

1. THE WORDS "INLET" AND "CATCH BASIN" SHALL BE INTERCHANGEABLE.
2. ALL GROUT SHALL BE NON-SHRINK. PROTECT GROUT DURING CURE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED METHOD.
4. TYPICALLY, CATCH BASINS ARE NOT INSULATED. HOWEVER, SPECIAL CASES REQUIRE INSULATION OF ALL OUTSIDE SURFACES. SEE PLAN NOTE TO INSULATE CB.
5. GROUT THE INSIDE FACE OF ALL JOINTS SMOOTH.



03/17/2026

DATE	REVISION	BY
2/3/10	NEW SD2	GSC,RHP
3/23/07		RHP

NOT TO SCALE

DESIGNED:
DRAWN: STAFF
CHECKED: RHP,GSC
DATE: 3/23/07

CITY OF FAIRBANKS, ALASKA
ENGINEERING DIVISION

STANDARD DETAILS
STORM DRAIN CATCH BASIN

SD2