CITY OF FAIRBANKS

800 Cushman Street
Fairbanks, AK 99701

ENGINEERING DEPARTMENT

Telephone (907)459-6745
Fax (907)452-5913

4TH & STATE STORM DRAIN PROJECT
ITB-24-10

ADDENDUM NO. 2

August 2, 2024

Invitation for Bid No.: **ITB-24-10**
Opening Date and Time: **2:00 P.M., August 13, 2024**

The following changes, clarifications, and or additions are hereby made to the City of Fairbanks 4TH & STATE STORM DRAIN PROJECT ITB-24-10.

The Contract Documents are Modified as Follows:

1. Delete the Bid Schedule in its entirety and substitute the revised Bid Schedule.
2. Delete the Bid Affidavit in its entirety and substitute the revised Bid Affidavit.

The Plans are Modified as Follows

1. Delete the Plan Set in its entirety and substitute the revised Plan Set.

All other terms, conditions, and specifications of the original Invitation for Bid remain unchanged.

CITY OF FAIRBANKS

Robert H. Pristash, P.E.
City Engineer

KIRSTEN LOAIZA FOR

BID SCHEDULE – REVISED PER ADDENDUM #2

The Bidder shall insert a unit bid price or a lump sum price in figures opposite each pay item and total price for which an estimated quantity appears in the bid schedule. The estimated quantity of work for payment on a lump sum basis will be "all required" and as further specified in the contract.

City of Fairbanks		**4TH & STATE STORM DRAIN PROJECT**			
ITB-24-10	**BID SCHEDULE**	**BASE BID**			
Item No.	Item Description	Pay Unit	Quantity	Unit Price	Amount Bid
202.0001.0000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LUMP SUM	ALL REQUIRED		
308.0001.0000	CRUSHED ASPHALT BASE COURSE	SQUARE YARD	1040		
401.0001.002B	HMA, TYPE II; CLASS B	TON	120		
401.0004.0000	ASPHALT BINDER, GRADE 52E-40	TON	7		
603.0021.0012	CORRUGATED POLYTHELYENE PIPE 12 INCH	LINEAR FOOT	375		
604.0003.0000	RECONSTRUCT EXISTING MANHOLE	EACH	1		
604.0004.0000	ADJUST EXISTING MANHOLE	EACH	2		
604.0005.000A	INLET, TYPE A	EACH	6		
640.0001.0000	MOBILIZATION AND DEMOBILIZATION	ALL REQUIRED	LUMP SUM		
642.0001.0000	CONSTRUCTION SURVEYING	ALL REQUIRED	LUMP SUM		
643.0002.0000	TRAFFIC MAINTENANCE	ALL REQUIRED	LUMP SUM		
				A: Total Base Bid:	
				B: Local Bidders Preference (5%), $50,000 max.	
				(A – B): Adjusted Base Bid Amount:	

City of Fairbanks		**4TH & STATE STORM DRAIN PROJECT**			
ITB-24-10	**BID SCHEDULE**	**ADDITIVE ALTERNATE #1**			
Item No.	Item Description	Pay Unit	Quantity	Unit Price	Amount Bid
202.0001.0000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LUMP SUM	ALL REQUIRED		
401.0001.002B	HMA, TYPE II; CLASS B	TON	60		
401.0004.0000	ASPHALT BINDER, GRADE 52E-40	TON	4		
603.0021.0012	CORRUGATED POLYTHELYENE PIPE 12 INCH	LINEAR FOOT	560		
604.0005.000A	INLET, TYPE A	EACH	7		
640.0001.0000	MOBILIZATION AND DEMOBILIZATION	ALL REQUIRED	LUMP SUM		
642.0001.0000	CONSTRUCTION SURVEYING	ALL REQUIRED	LUMP SUM		
643.0002.0000	TRAFFIC MAINTENANCE	ALL REQUIRED	LUMP SUM		
				A: Total Additive Alternate:	
				B: Local Bidders Preference (5%), $50,000 max.	
				(A – B): Adjusted Additive Alternate Amount:	

CITY OF FAIRBANKS

BID AFFIDAVIT

ITB-24-10

Bid of _____
(hereinafter called "BIDDER"), organized and existing under the laws of the State of _____
doing business as _____*,
to the CITY OF FAIRBANKS, a municipal corporation of the State of Alaska (hereinafter called "OWNER").

In compliance with your Advertisement for Bids, BIDDER hereby proposes to perform all WORK for the **4TH & STATE STORM DRAIN PROJECT**, in strict accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the prices stated below.

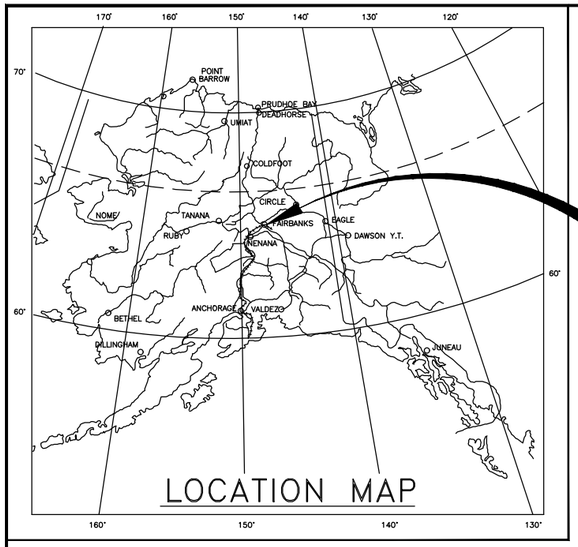
By submission of the BID, each BIDDER certifies, and in the case of a joint BID each party thereto certifies as to its own organization, that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to the BID with any other BIDDER or with any competitor.

BIDDER hereby agrees to commence WORK under this contract on or before a date to be specified in the NOTICE TO PROCEED and to fully complete the PROJECT by October 15, 2024. BIDDER further agrees to pay liquidated damages in accordance with the Contract Documents.

BIDDER acknowledges receipt of the following ADDENDA (give number and date of each):

Addenda	Date Issued	Addenda	Date Issued

*Insert "a corporation", "a partnership", or "an individual" as applicable.



PROJECT LOCATION

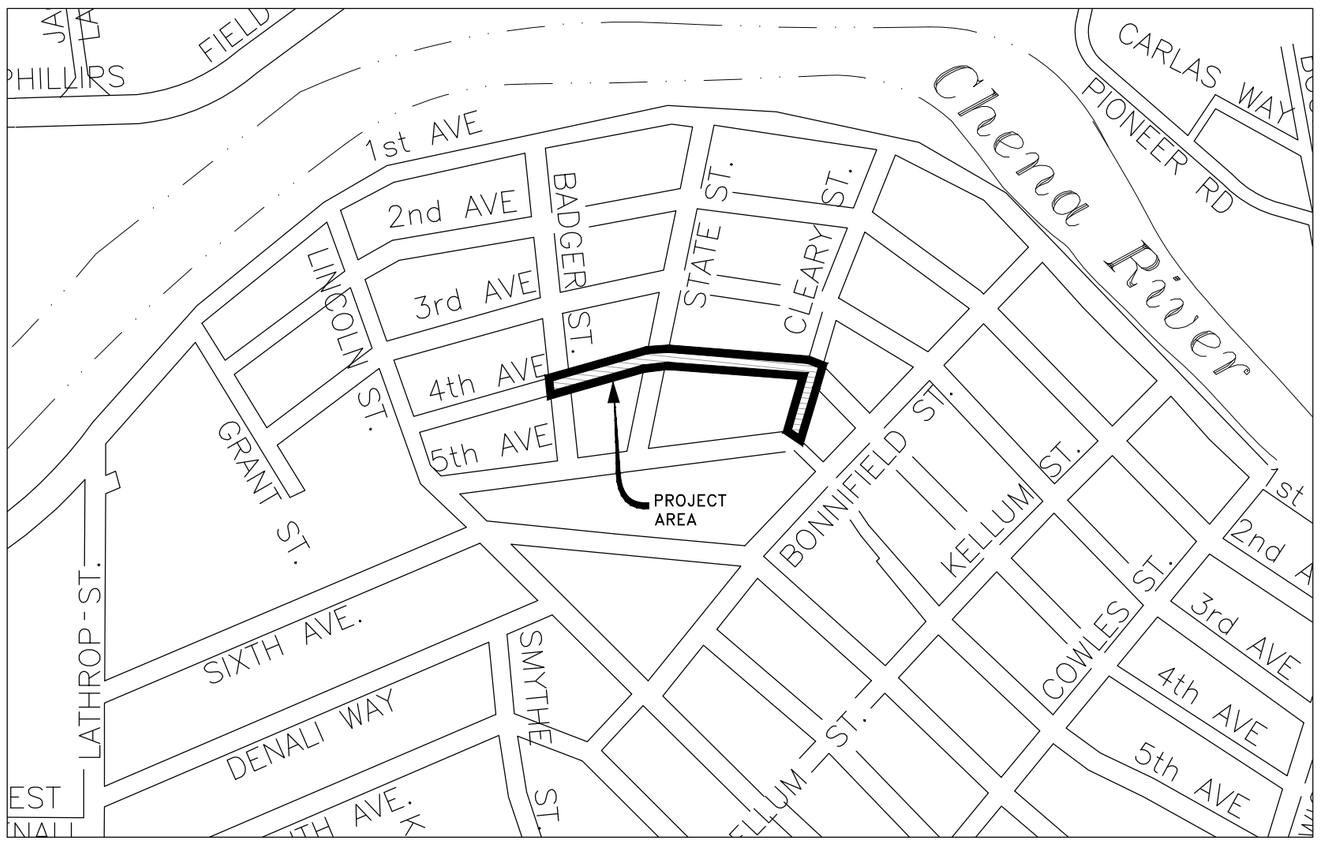
CITY OF FAIRBANKS

PROPOSED UTILITY PROJECT

ITB–24–10

4TH & STATE STORM DRAIN PROJECT

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1.01	TITLE SHEET
1.02	QUANTITIES AND GENERAL NOTES
1.03 – 1.04 ⚠	SURVEY CONTROL
2.01	TYPICAL SECTION
3.01 – 3.04 ⚠	PLAN & PROFILE
4.01	EROSION & SEDIMENT CONTROL PLAN
5.01	TRAFFIC CONTROL PLAN
SD1 – SD2	CITY OF FAIRBANKS STANDARD DETAILS – STORM DRAIN



VICINITY MAP

DATE	REVISION	BY
08/02/24	⚠ ADDENDUM #2	KLL

SCALE: NONE

DESIGNED: RHP/KLL
DRAWN:
CHECKED: RHP
DATE: 06/20/24

APPROVED

CITY ENGINEER

DATE

4TH & STATE STORM DRAIN PROJECT

CITY OF FAIRBANKS, ALASKA
Engineering Department
Project ITB–24–10

1.01
OF 10 SHEETS

ESTIMATE OF QUANTITIES – BASE BID

ITEM NO.	PAY ITEM	PAY UNIT	QUANTITY
202.0001.0000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LUMP SUM	ALL REQUIRED
3.08.0001.0000	CRUSHED ASPHALT BASE COURSE	SQUARE YARD	1040 ⚠
401.0001.002B	HMA, TYPE II; CLASS B	TON	120
401.0004.0000	ASPHALT BINDER, GRADE PG 52E-40	TON	7
603.0021.0015	CORRUGATED POLYETHYLENE PIPE 12 INCH	LINEAR FOOT	375 ⚠
604.0003.0000	RECONSTRUCT EXISTING MANHOLE	EACH	1
604.0004.0000	ADJUST EXISTING MANHOLE	EACH	2
604.0005.000A	INLET, TYPE A	EACH	6 ⚠
640.0001.0000	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED
642.0001.0000	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQUIRED
643.0002.0000	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQUIRED

ESTIMATE OF QUANTITIES – ADDITIVE ALTERNATE 1

ITEM NO.	PAY ITEM	PAY UNIT	QUANTITY
202.0001.0000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LUMP SUM	ALL REQUIRED
401.0001.002B	HMA, TYPE II; CLASS B	TON	60
401.0004.0000	ASPHALT BINDER, GRADE PG 52E-40	TON	4
603.0021.0015	CORRUGATED POLYETHYLENE PIPE 12 INCH	LINEAR FOOT	560
604.0005.000A	INLET, TYPE A	EACH	7
640.0001.0000	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED
642.0001.0000	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQUIRED
643.0002.0000	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQUIRED

⚠

ESTIMATING FACTORS

ITEM NO.	PAY ITEM	FACTOR
401.0001.002B	HMA, TYPE II; CLASS B	150 LB / CF
401.0004.0000	ASPHALT BINDER, GRADE PG 52E-40	5.5% WEIGHT OF 401.0001.002B

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. CONTRACTOR SHALL GET ENGINEER'S APPROVAL PRIOR TO ANY WORK OUTSIDE THE STREET RIGHT OF WAY.
8. NUMEROUS UNDERGROUND UTILITIES EXIST WITHIN THE PROJECT CORRIDOR. THE CONTRACTOR SHALL CONTACT UTILITY OWNERS AND GET LOCATES PRIOR TO EXCAVATION.
9. PRESERVE AND PROTECT EXISTING LANDSCAPE AND FENCING IN PLACE. SUBSIDIARY TO PAY ITEM 202.0001.0000.

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

STATE OF ALASKA 49TH
ROBERT H. PRISIASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER
08/02/2024

GENERAL NOTES, ABBREVIATIONS, AND ESTIMATE OF QUANTITIES

DATE	REVISION	BY
08/02/24	⚠ ADDENDUM #2	KLL

SCALE: NONE

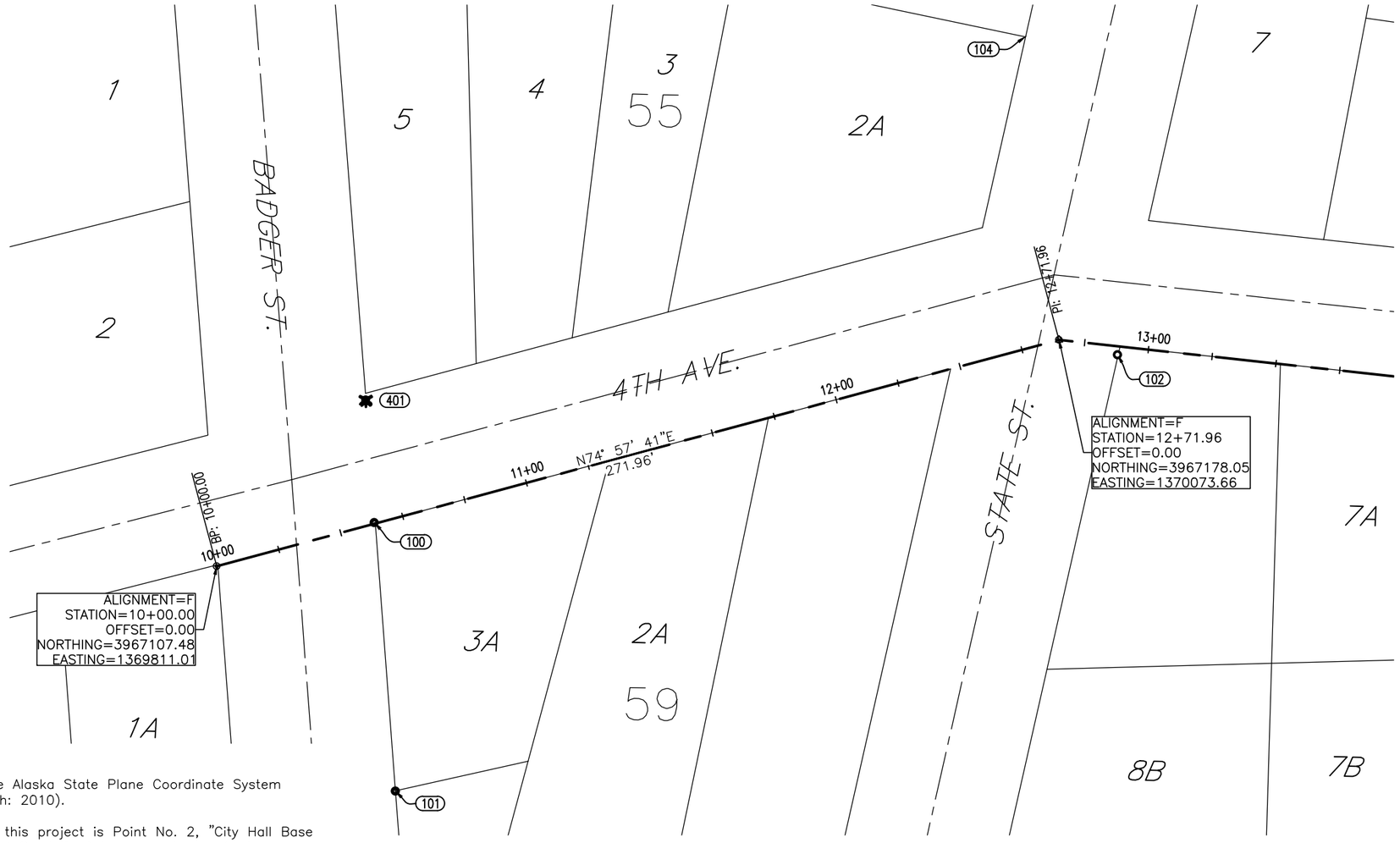
DESIGNED: RHP/KLL
DRAWN:
CHECKED: RHP
DATE: 06/20/24

APPROVED
CITY ENGINEER
DATE

4TH & STATE STORM DRAIN PROJECT

CITY OF FAIRBANKS, ALASKA
Engineering Department
Project ITB-24-10

1.02
OF 10 SHEETS



1"=20' HORIZ., (FULL SIZE)

1"=40' HORIZ., (HALF SIZE)

LEGEND:

- REBAR FOUND
- IRON PIPE
- HYDRANT

CONTROL NOTES

Coordinates shown hereon are Alaska State Plane Coordinate System Zone 3, NAD83 (2011) (Epoch: 2010).

The Basis of Coordinates for this project is Point No. 2, "City Hall Base Station 2," a Trimble Zephyr 3 Geodetic Antenna on the roof of Fairbanks City Hall. The NAD83 (2011) (Epoch 2010) position for Point No. 2 is based on the results obtained from static GPS observations sent to the NGS OPUS utility for processing.

NAD83 (2011) (Epoch: 2010)
Latitude 64° 50'23.61722'' North, Longitude 147°43'16.35657'' West

Alaska State Plane Zone 3 Coordinates (US Survey Feet)
North 3965091.405 usft, East 1372475.351 usft
Orthometric Height: 515.794, Geoid 12B Alaska

Project bearings are Alaska State Plane Zone 3 bearings.

ROW lines shown were determined by City of Fairbanks (William Irving, PLS 13315,) and are based the Theile Plat of 1922, and the unrecorded Beck Maps of 1954 using best fit lines between existing monuments.

The basis of vertical control is the NGS benchmark "P-5", point # 2 elev, 446.65' NAVD 88; PID: TT2861. TBMs on site established using differential levels to fire hydrant "x" bolts.

HORIZONTAL CONTROL				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
100	3967121.03	1369860.11	440.8	IPF NW BL59
101	3967037.33	1369866.74	440.1	IPF SW L3A B59
102	3967173.38	1370091.91	440.8	RBF NWCOR B60
103	3967351.04	1370081.00	440.9	FIP NE BLK 55
104	3967272.56	1370063.20	440.9	RBCF 3TIER L2A/L1A B55
107	3967327.90	1369819.31	439.3	SI 3RD BADGER

VERTICAL CONTROL				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
401	3967159	1369861	442.67	TBM 4TH & BADGER
402	3967399	1370144	442.87	TBM 3RD & STATE
403	3966974	1370418	441.48	TBM 5TH & CLEARY

STATE OF ALASKA 49TH WILLIAM H IRVING LS 13315 REGISTERED PROFESSIONAL LAND SURVEYOR
08/02/2024

STATE OF ALASKA 49TH ROBERT H. PRSIASH CIVIL ENGINEER No. 9878 REGISTERED PROFESSIONAL ENGINEER
08/02/2024

SURVEY CONTROL

DATE	REVISION	BY
08/02/24	⚠ ADDENDUM #2	WHI

SCALE:

DESIGNED: RHP/KLL
DRAWN:
CHECKED: RHP
DATE: 06/20/24

APPROVED

CITY ENGINEER

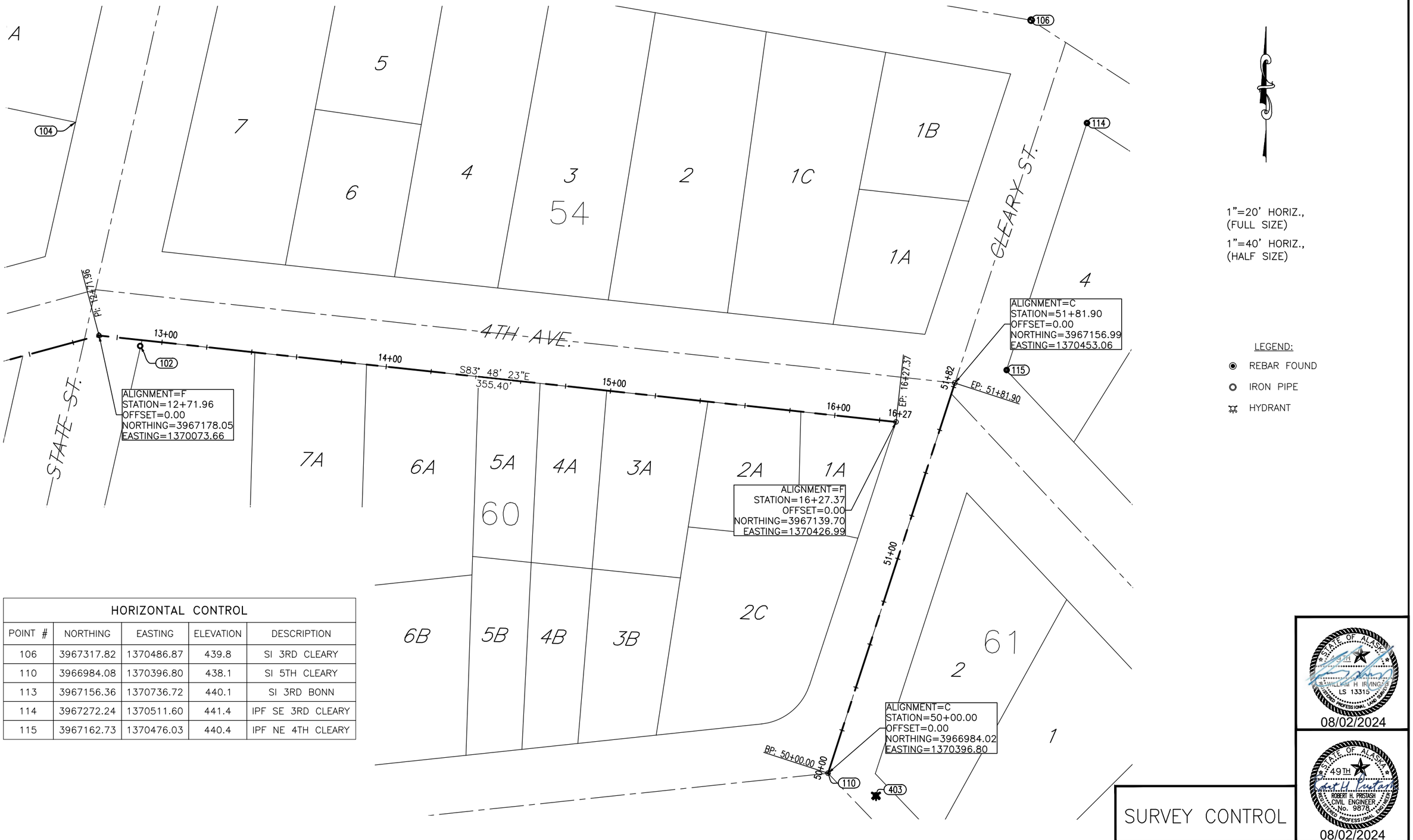
DATE

4TH & STATE STORM DRAIN PROJECT

CITY OF FAIRBANKS, ALASKA
Engineering Department
Project ITB-24-10

1.03

OF 10 SHEETS



1"=20' HORIZ.,
(FULL SIZE)

1"=40' HORIZ.,
(HALF SIZE)

LEGEND:

- REBAR FOUND
- IRON PIPE
- HYDRANT

HORIZONTAL CONTROL				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
106	3967317.82	1370486.87	439.8	SI 3RD CLEARY
110	3966984.08	1370396.80	438.1	SI 5TH CLEARY
113	3967156.36	1370736.72	440.1	SI 3RD BONN
114	3967272.24	1370511.60	441.4	IPF SE 3RD CLEARY
115	3967162.73	1370476.03	440.4	IPF NE 4TH CLEARY

STATE OF ALASKA
49TH
WILLIAM H IRVING JR
LS 13315
REGISTERED PROFESSIONAL LAND SURVEYOR
08/02/2024

STATE OF ALASKA
49TH
ROBERT H. PROTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER
08/02/2024

SURVEY CONTROL

DATE	REVISION	BY
08/02/24	⚠ ADDENDUM #2	KLL

SCALE:

DESIGNED: RHP/KLL
DRAWN:
CHECKED: RHP
DATE: 06/20/24

APPROVED

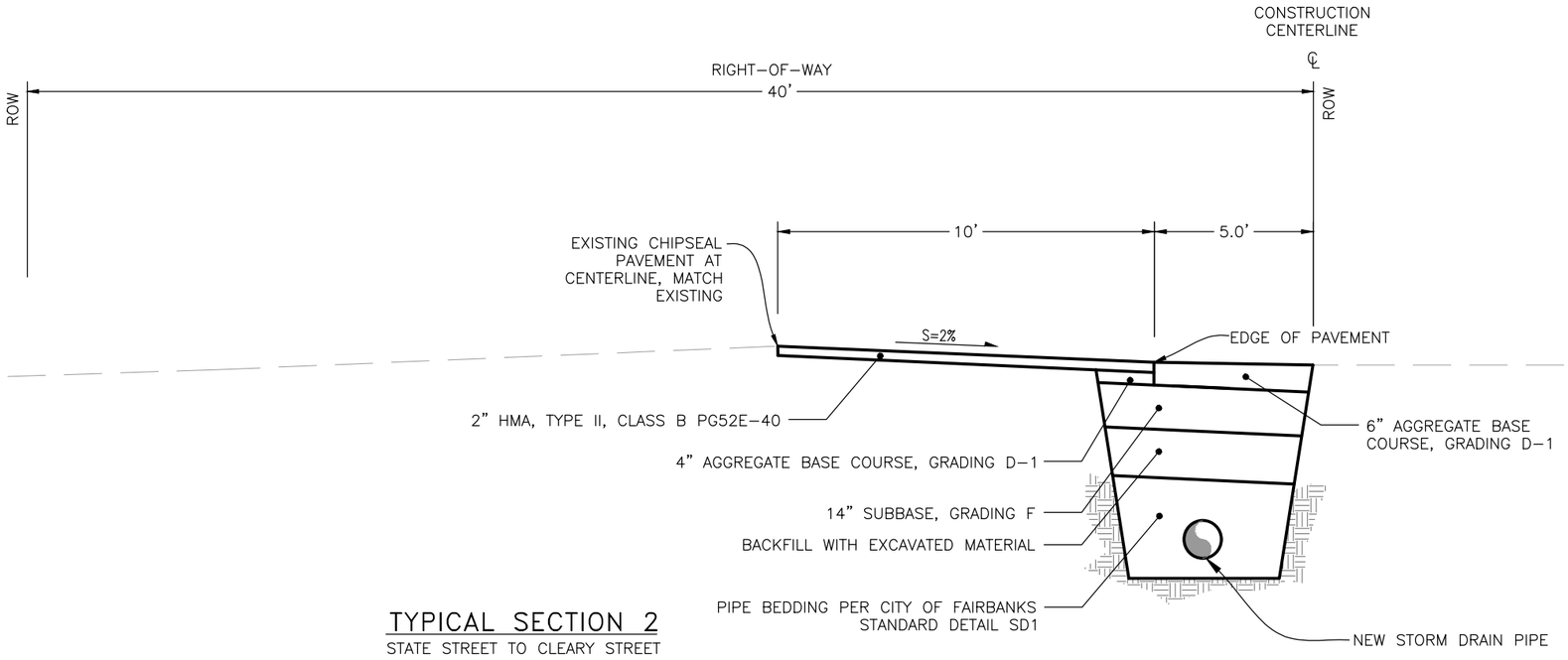
CITY ENGINEER

DATE

4TH & STATE STORM DRAIN PROJECT

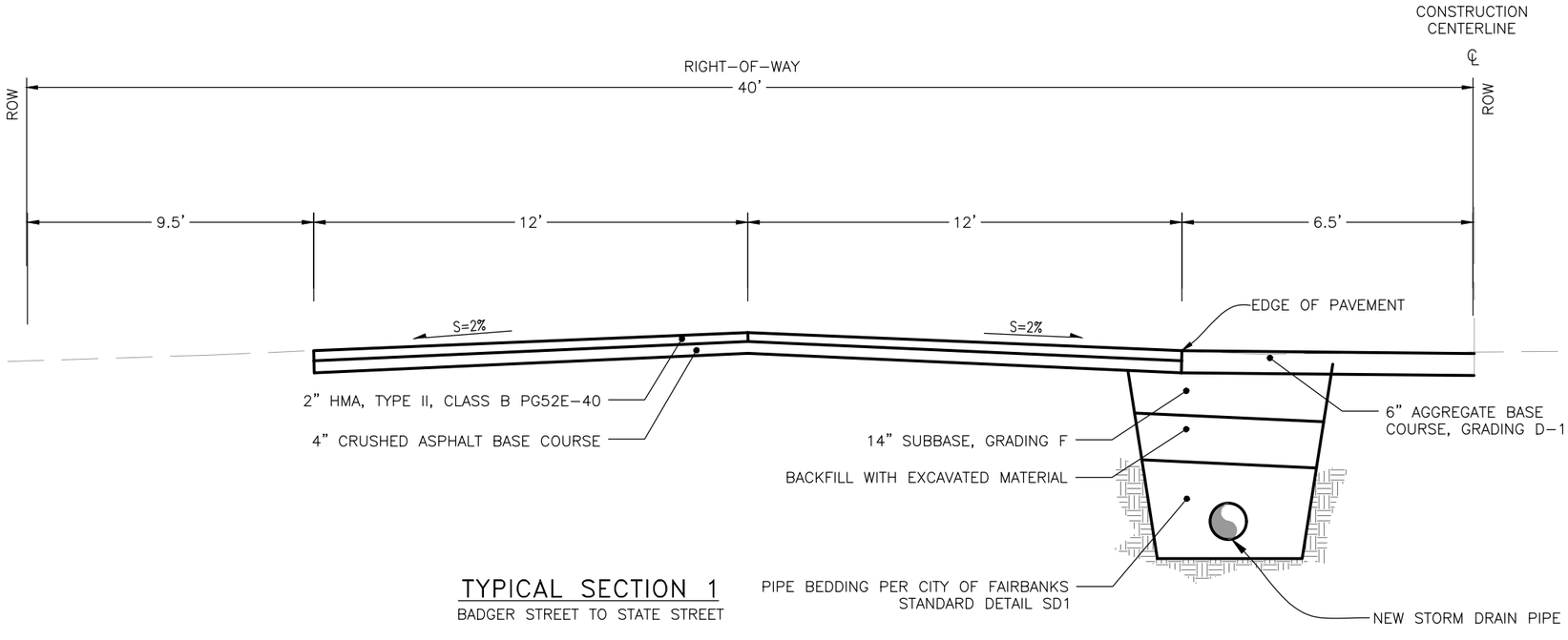
CITY OF FAIRBANKS, ALASKA
Engineering Department
Project ITB-24-10

1.04
OF 10 SHEETS



TYPICAL SECTION 2

STATE STREET TO CLEARY STREET



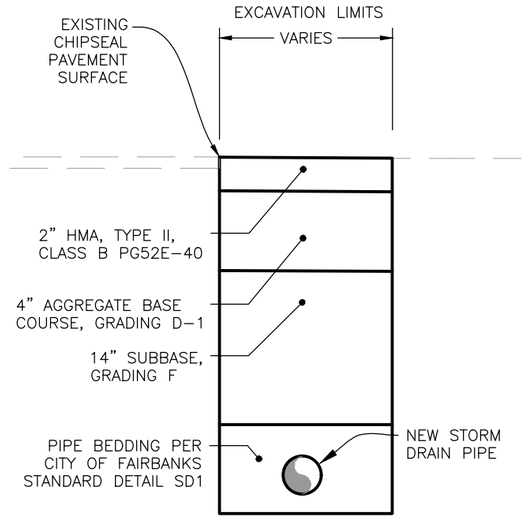
TYPICAL SECTION 1

BADGER STREET TO STATE STREET

TYPICAL SECTION NOTE:

1. SEE SHEET 3.03 FOR TYPICAL SECTION ALONG CLEARY STREET.

2. AGGREGATE BASE COURSE GRADING D–1, SUBBASE GRADING F, SEEDING, AND TOPSOIL WILL NOT BE MEASURED FOR PAYMENT BUT ARE SUBSIDIARY TO THE RESPECTIVE STORM DRAIN STRUCTURE OR PIPE.



TYPICAL TRENCH DETAIL

STATE OF ALASKA
49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER
08/02/2024

TYPICAL SECTION

DATE	REVISION	BY
08/02/24	⚠ ADDENDUM #2	KLL

SCALE:

DESIGNED: RHP/KLL
DRAWN:
CHECKED: RHP
DATE: 06/20/24

APPROVED

CITY ENGINEER

DATE

4TH & STATE STORM DRAIN PROJECT

CITY OF FAIRBANKS, ALASKA
Engineering Department

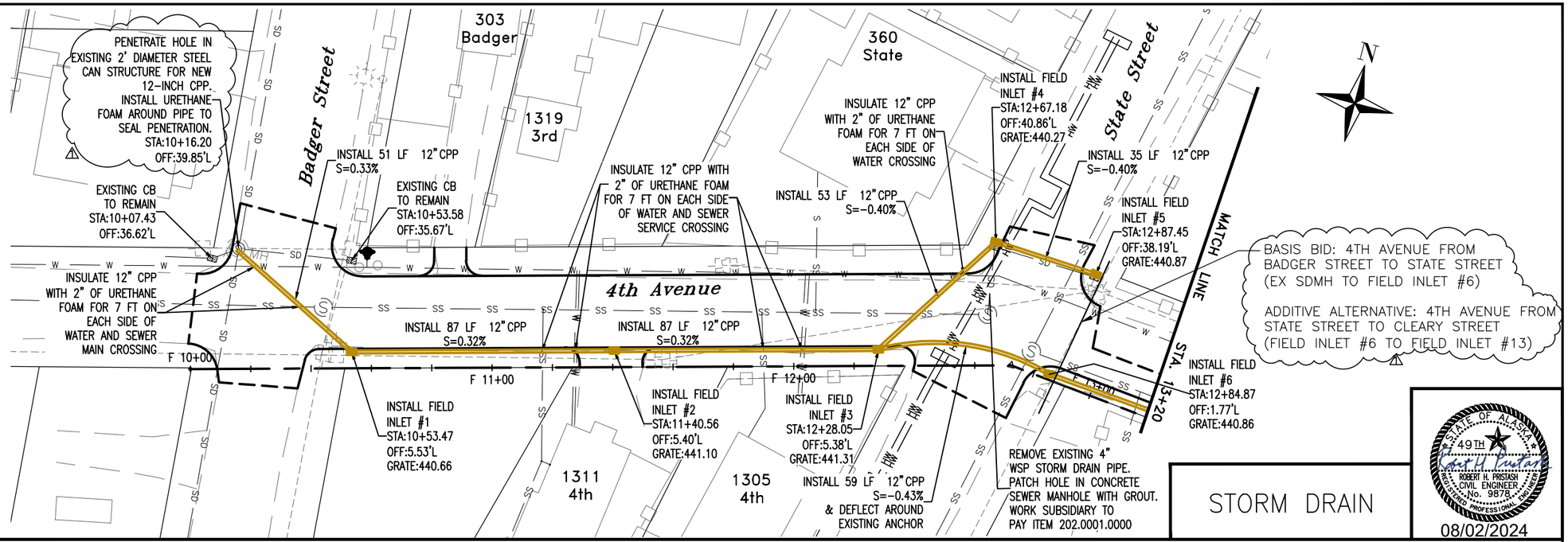
Project ITB–24–10

2.01

OF 10 SHEETS

NOTES:

1. CONTRACTOR TO EXPOSE EXISTING HOT WATER AND EXISTING SEWER SERVICE TO 1305 4TH AVENUE BEFORE CASTING STORM DRAIN STRUCTURES. REPORT TOP AND BOTTOM OF PIPE ELEVATIONS TO THE ENGINEER SO CHANGES CAN BE MADE IN THE GRADES AND INVERTS AS REQUIRED. ⚠
2. FIELD INLETS STATION/OFFSET AND ELEVATIONS ARE AT CENTER OF STRUCTURE.
3. VERIFY ELEVATIONS OF STORM DRAIN CONNECTION POINTS AND REPORT THESE SURVEY ELEVATIONS TO THE ENGINEER SO CHANGES CAN BE MADE IN THE GRADES AND INVERTS AS REQUIRED.
4. CONTRACTOR TO POTHOLE AHEAD OF NEW STORM DRAIN WORK TO VERIFY ELEVATIONS OF EXISTING WATER AND SEWER SERVICES.
5. SUPPORT EXISTING POLES AS REQUIRED DURING STORM DRAIN INSTALLATION. SUBSIDIARY TO 603.0021.0012.
6. INSULATE 12" CPP WITH 2" OF URETHANE FOAM FOR 7 FT ON EACH SIDE OF WATER OR SEWER SERVICE CROSSING, ⚠

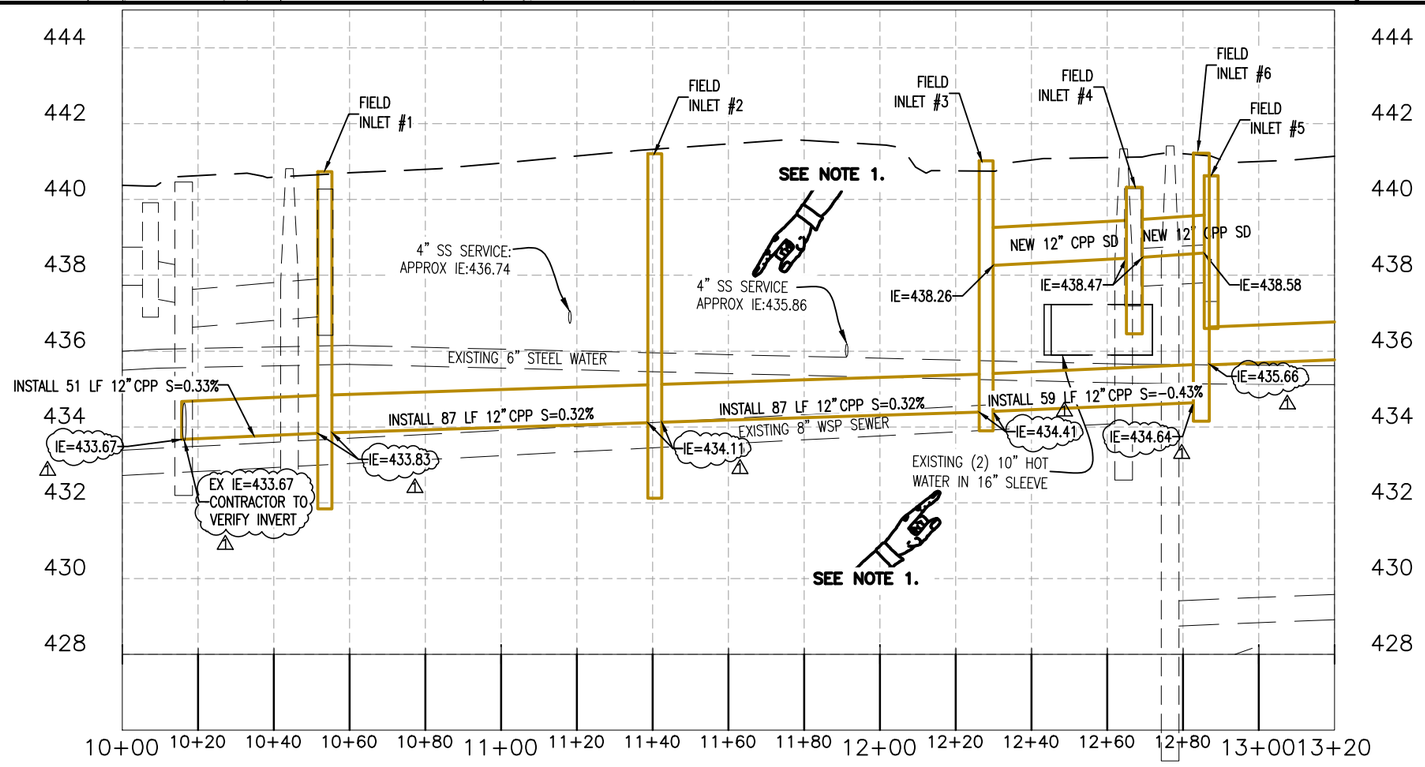


BASIS BID: 4TH AVENUE FROM BADGER STREET TO STATE STREET (EX SDMH TO FIELD INLET #6)

ADDITIVE ALTERNATIVE: 4TH AVENUE FROM STATE STREET TO CLEARY STREET (FIELD INLET #6 TO FIELD INLET #13) ⚠

STORM DRAIN

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER
08/02/2024



DATE	REVISION	BY
08/02/24	⚠ ADDENDUM #2	KLL

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

DESIGNED: RHP/KLL
DRAWN: KLL
CHECKED: RHP
DATE: 06/20/24

APPROVED
CITY ENGINEER
DATE

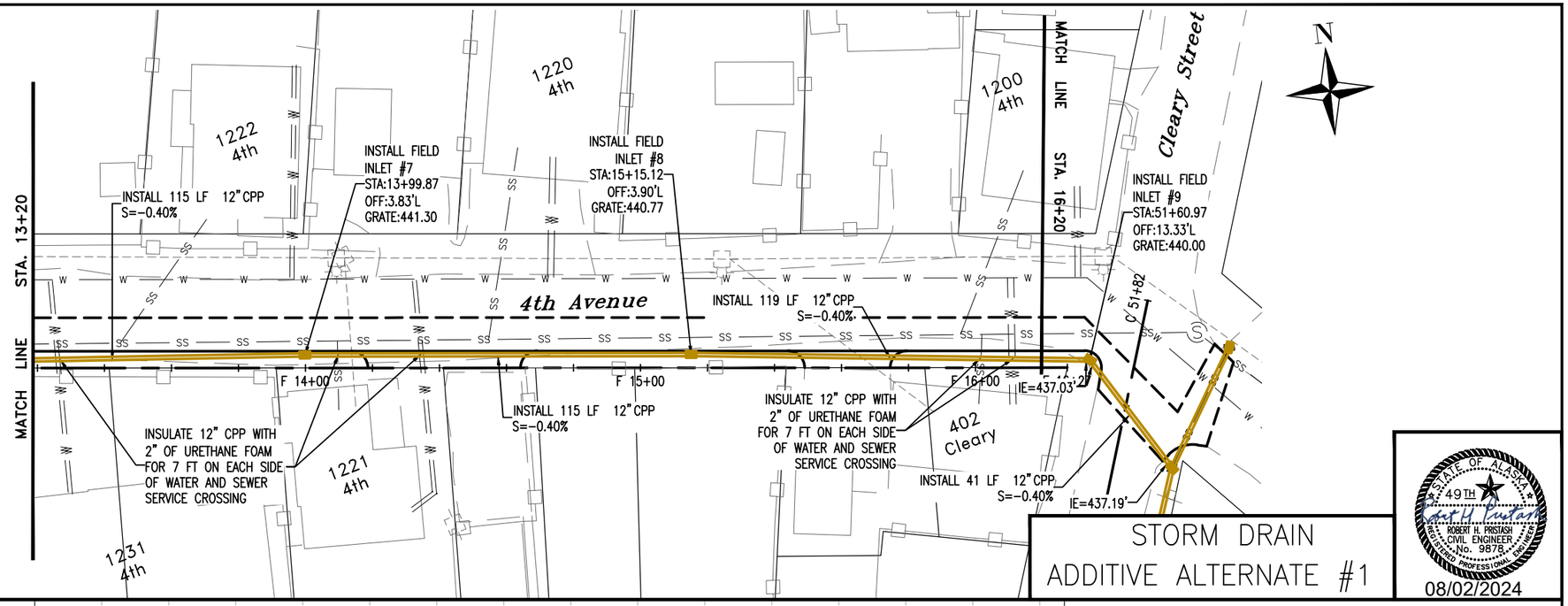
4TH & STATE STORM DRAIN PROJECT

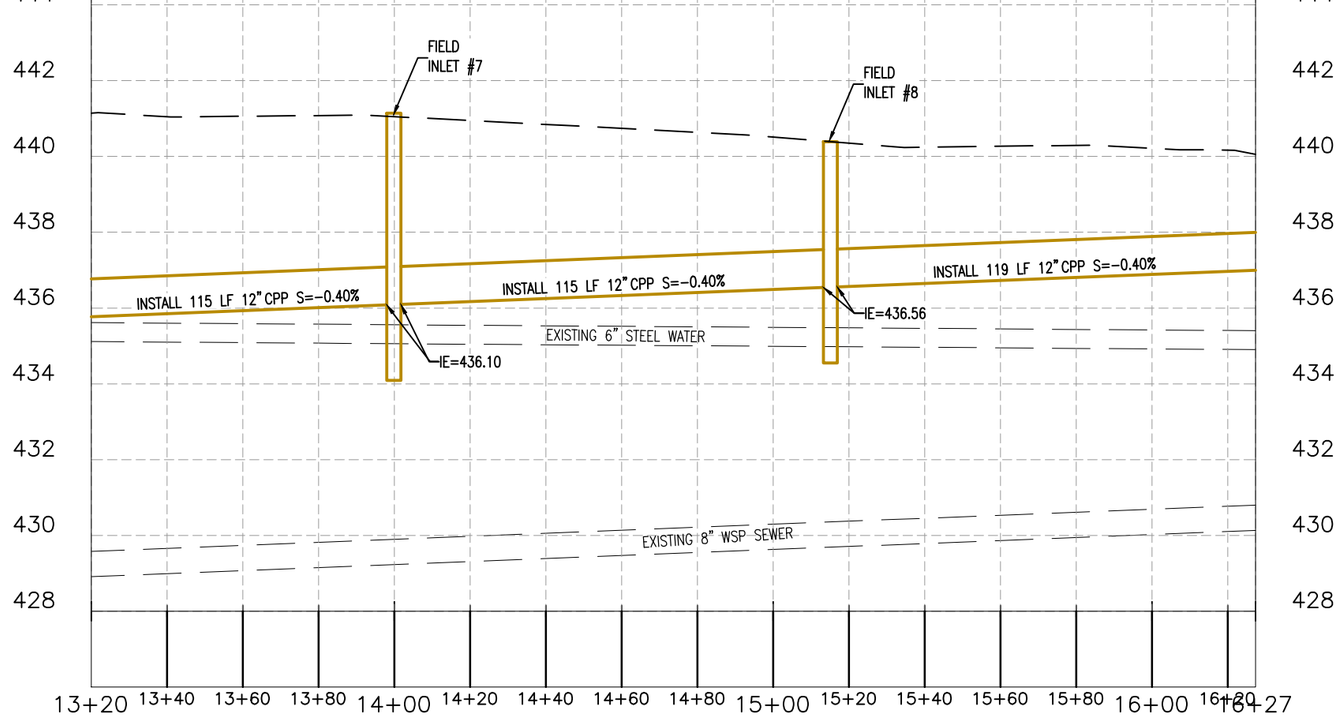
CITY OF FAIRBANKS, ALASKA
Engineering Department
Project ITB-24-10

3.01
OF 10 SHEETS

NOTES:

1. FIELD INLETS STATION/OFFSET AND ELEVATIONS ARE AT CENTER OF STRUCTURE.
2. CONTRACTOR TO POTHOLE AHEAD OF NEW STORM DRAIN WORK TO VERIFY ELEVATIONS OF EXISTING WATER AND SEWER SERVICES.
3. SUPPORT AND PROTECT EXISTING FENCES AS REQUIRED DURING STORM DRAIN INSTALLATION. THIS WORK IS SUBSIDIARY TO 603.0021.0012.
4. INSULATE 12" CPP WITH 2" OF URETHANE FOAM FOR 7 FT ON EACH SIDE OF WATER OR SEWER SERVICE CROSSING,





STORM DRAIN
ADDITIVE ALTERNATE #1

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER
08/02/2024

DATE	REVISION	BY
08/02/24	⚠ ADDENDUM #2	KLL

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

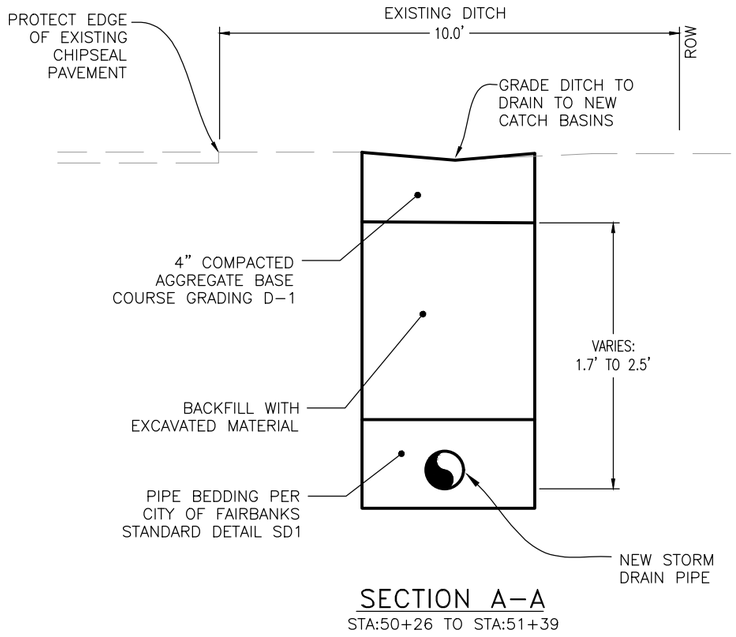
DESIGNED: RHP/KLL
DRAWN: KLL
CHECKED: RHP
DATE: 06/20/24

APPROVED
CITY ENGINEER
DATE

4TH & STATE STORM DRAIN PROJECT

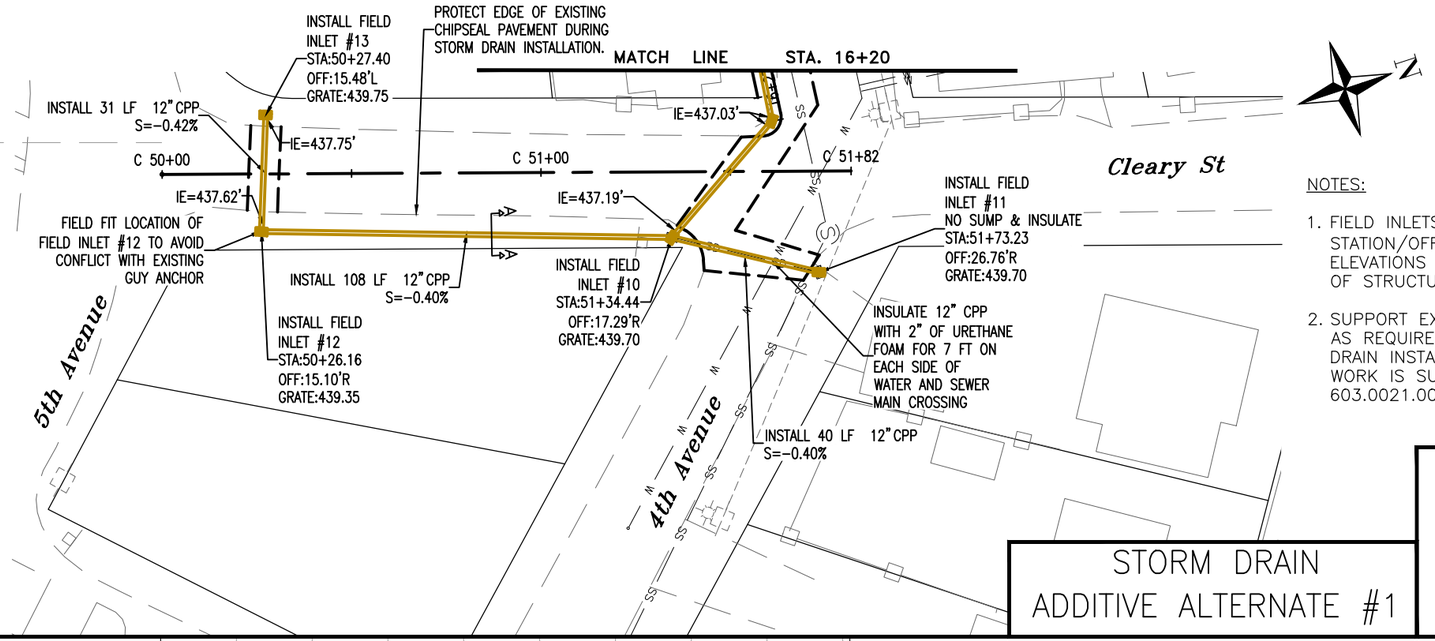
CITY OF FAIRBANKS, ALASKA
Engineering Department
Project ITB-24-10

3.02
OF 10 SHEETS



SECTION A–A

STA:50+26 TO STA:51+39



NOTES:

1. FIELD INLETS STATION/OFFSET AND ELEVATIONS ARE AT CENTER OF STRUCTURE.
2. SUPPORT EXISTING POLES AS REQUIRED DURING STORM DRAIN INSTALLATION. THIS WORK IS SUBSIDIARY TO 603.0021.0012.

STORM DRAIN ADDITIVE ALTERNATE #1

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
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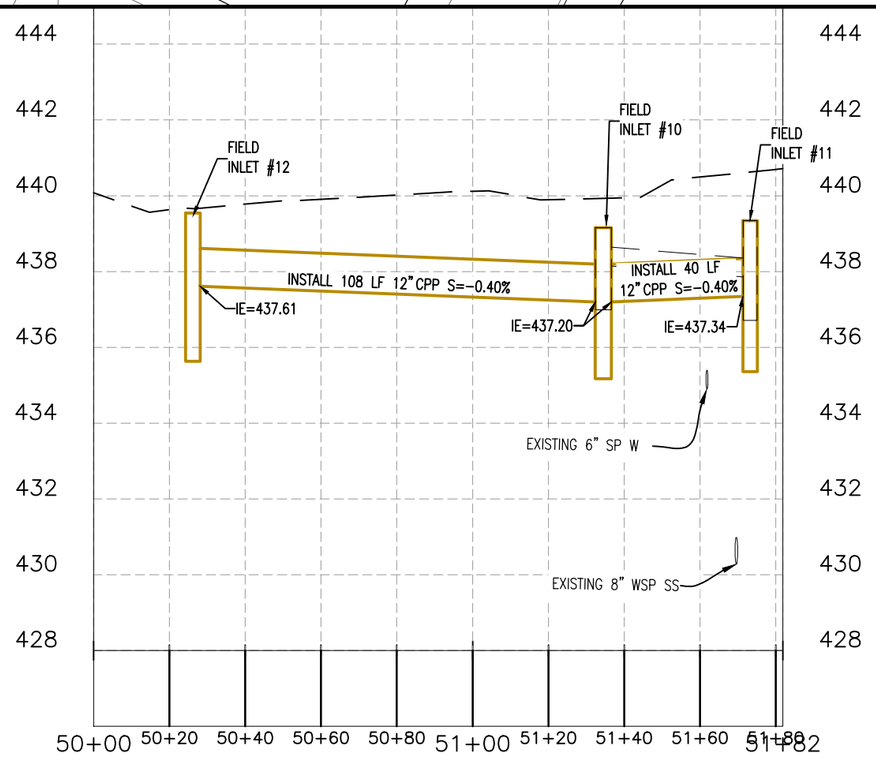
08/02/2024



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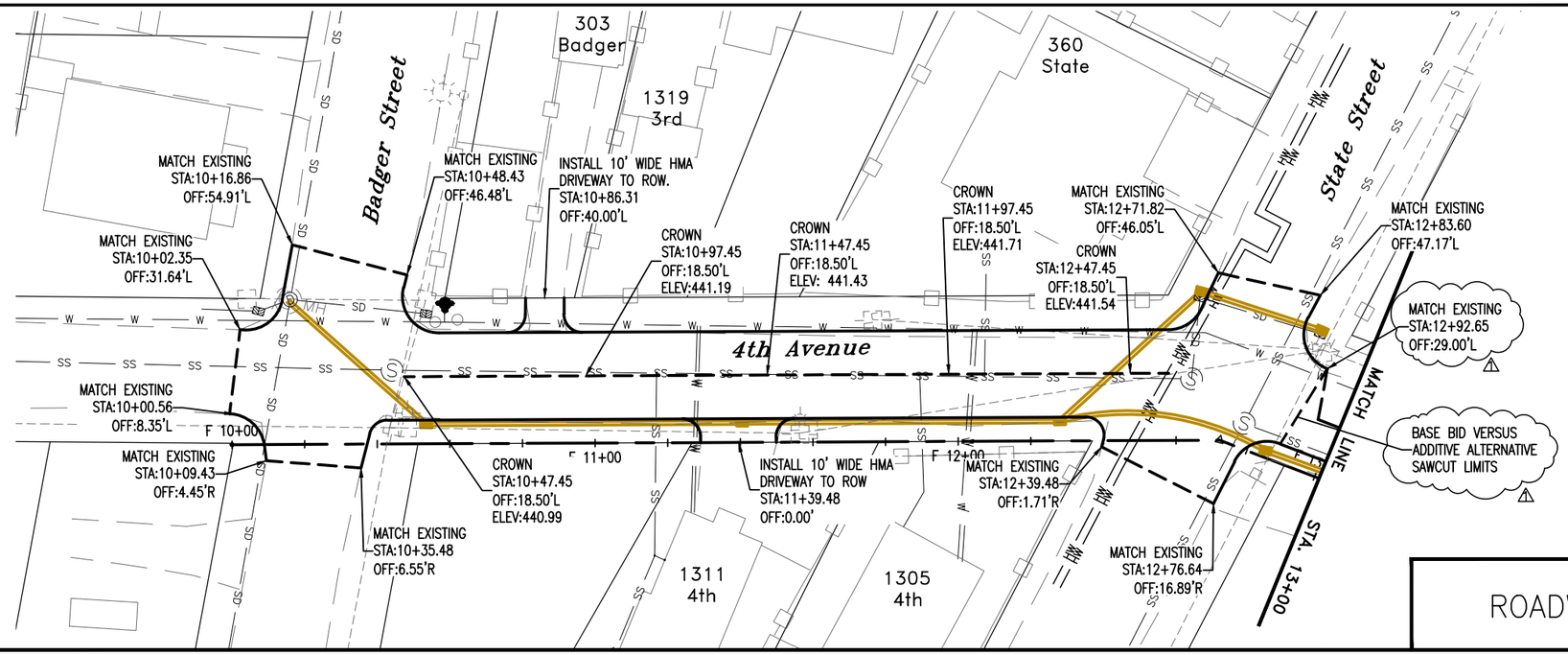
4TH & STATE STORM DRAIN PROJECT

CITY OF FAIRBANKS, ALASKA
Engineering Department
Project ITB-24-10

3.03
OF 10 SHEETS

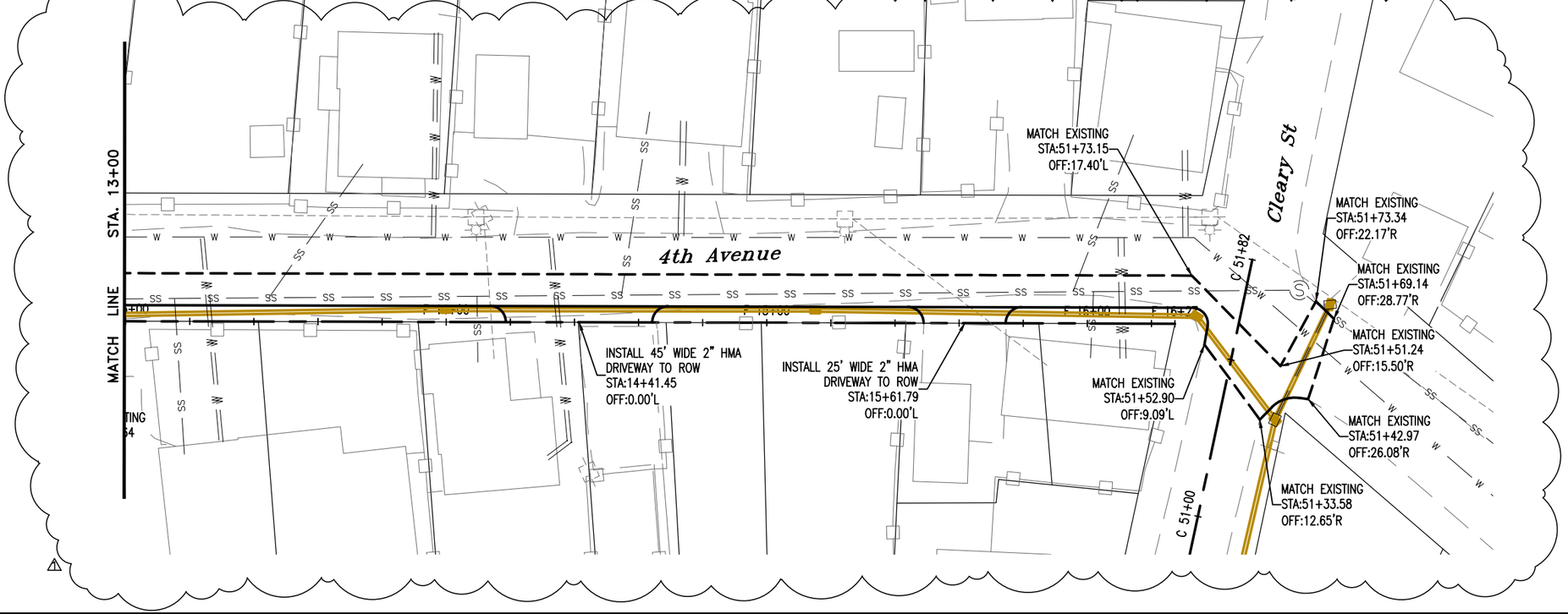
NOTES:

1. EXISTING PAVEMENT SURFACE IS CHIPSEAL. PROTECT EDGE DURING CONSTRUCTION ACTIVITIES.



ROADWAY

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER
08/02/2024



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4TH & STATE STORM DRAIN PROJECT

CITY OF FAIRBANKS, ALASKA
Engineering Department
Project ITB-24-10

3.04
OF 10 SHEETS

PROJECT SITE INFORMATION

1. SITE FUNCTION: STORM DRAIN AND SANITARY SEWER CROSS CONNECTION REPAIR

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:
   SOURCE: https://hdsc.nws.noaa.gov/pfds/pfds_map_ak.html

4. PROJECT AREAS ARE LISTED BELOW, MATERIAL SITES NOT INCLUDED:
   PROJECT AREA: 0.60 ACRES
   DISTURBED AREA: 0.60 ACRES
   PRE-CONSTRUCTION PERCENT IMPERVIOUS AREA: 66
   POST CONSTRUCTION PERCENT IMPERVIOUS AREA: 66
   PRE-CONSTRUCTION RUNOFF COEFFICIENT: 0.60
   POST-CONSTRUCTION RUNOFF COEFFICIENT: 0.60

5. MATERIAL SITES: MATERIALS WILL BE CONTRACTOR FURNISHED.

6. LANDSCAPE TOPOGRAPHY: VERY FLAT RESIDENTIAL DEVELOPMENT IN PROJECT CORRIDOR. EXISTING SLOPES IN THIS AREA ARE RELATIVELY FLAT WITH POSITIVE DRAINAGE AWAY FROM STRUCTURES AND ROADS INTO EXISTING STORM DRAIN INFRASTRUCTURE.

7. DRAINAGE PATTERNS: SURFACE DRAINAGE VIA PIPED STORM DRAIN SYSTEM FLOWS TO THE CHENA RIVER VIA EXISTING OUTFALL LOCATED AT THE GHU WATER TREATMENT PLANT.

8. APPROXIMATE GROWING SEASON: MAY 3 THROUGH OCTOBER 3.

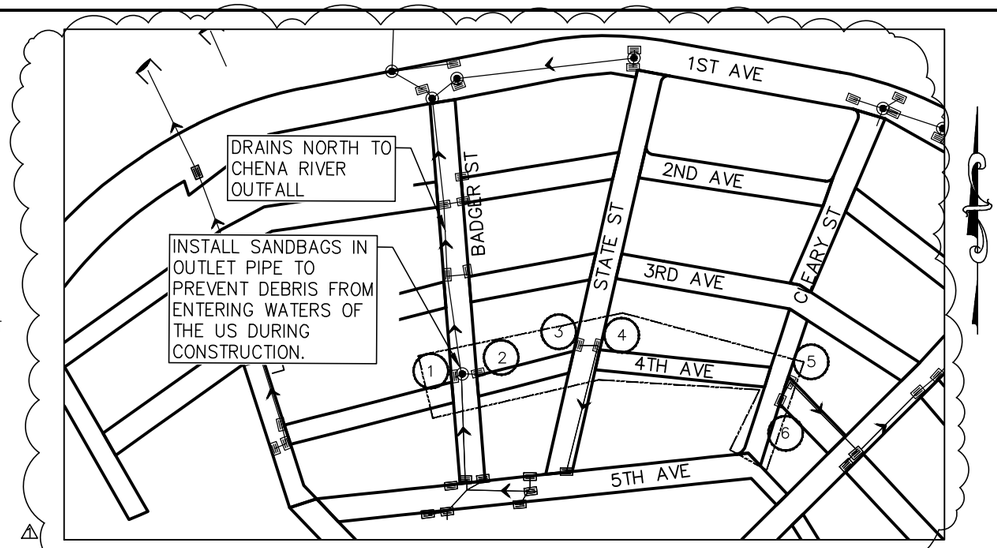
9. EXISTING VEGETATION: PROJECT AREA IS COMMERCIAL LANDSCAPED GRASS, AND TREES.

10. HISTORIC SITE CONTAMINATION: CONTAMINATED SITES HAVE BEEN IDENTIFIED WITHIN 1500 FEET THE PROJECT AREA (SOURCE: HTTPS://DEC.ALASKA.GOV/SPAR/CSP
    - HAZARD ID: 23053, SITE NAME: FMUS FIRE WELL #3 (STATUS: CLEANUP COMPLETE)
    - HAZARD ID: 25024, SITE NAME: FMUS PUMP STA #8 (STATUS: CLEANUP COMPLETE)
    - HAZARD ID: 540, SITE NAME: FAIRBANKS POWER PLANT (USTs2 & 3) (STATUS: CLEANUP COMPLETE)
    - HAZARD ID: 24996, SITE NAME: FMUS – WAREHOUSE FUEL ISLAND (STATUS: CLEANUP COMPLETE)
    - HAZARD ID: 1385, SITE NAME: CITY OF FAIRBANKS 60K GALLON AGSTs (STATUS: CLEANUP COMPLETE)
    - HAZARD ID: 24956, SITE NAME: FMUS – FUEL ISLAND WAREHOUSE/GARAGE (STATUS: CLEANUP COMPLETE)
    - HAZARD ID: 24202, SITE NAME: FMUS – WATER TREATMENT PLANT PS #1 (STATUS: CLEANUP COMPLETE)
    - HAZARD ID: 1403, SITE NAME: GVEA STORAGE PROPERTY (STATUS: CLEANUP COMPLETE)
    - HAZARD ID: 3817, SITE NAME: ARRC FAIRBANKS HOT (FORMERLY MIDNIGHT SUN) (STATUS: CLEANUP COMPLETE)
    - HAZARD ID: 2918, SITE NAME: FORMER A&W WHOLESALE (STATUS: CLEANUP COMPLETE, INSTITUTIONAL CONTROL)

11. STAGING AND STOCKPILE AREAS: CONTRACTOR MUST SEEK LOCATIONS FOR STOCKPILING MATERIAL AND STAGING AND STORAGE OF EQUIPMENT.

LEGEND

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



4TH AND STATE

ENVIRONMENTAL INFORMATION

1. RECEIVING WATERS: CHENA RIVER, FAIRBANKS MS4

2. IMPAIRED WATER BODIES: NONE

3. TOTAL MAXIMUM DAILY LOAD (TDML): NONE

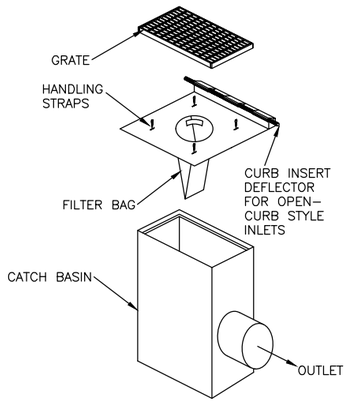
4. STORM SEWER / DRAINAGE SYSTEMS: CITY OF FAIRBANKS MS4 CONSISTING OF PIPED AND SURFACE WATER DRAINAGE NETWORK TO OUTFALLS AT CHENA RIVER.

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
     EMAIL: TARIK.SPEAR@AKWATER.COM
     ADDRESS: 3691 CAMERON ST #201, FAIRBANKS, AK 99709



CATCH BASIN INLET PROTECTION DETAIL

EROSION & SEDIMENT CONTROL PLAN (ESCP) NOTES

1. THIS PROJECT IS UNDER ONE ACRE AND WILL NOT BE REQUIRED TO DEVELOP A SWPPP OR FILE AN NOI WITH ADEC. EVEN IF THIS PROJECT DOES NOT NEED PERMIT COVERAGE, EROSION AND SEDIMENT CONTROLS WILL BE REQUIRED AND WATER QUALITY WILL BE PROTECTED.

2. THIS SHEET CONTAINS A PLAN VIEW OF MARIKA ROAD 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 NOYES SLOUGH.

3. HAVE A SPILL KIT AVAILABLE AT EACH WORK AREA WHEN HEAVY EQUIPMENT IS BEING UTILIZED.

4. ALL ENTRANCE AND EXITS WILL BE SWEPT AT A FREQUENCY TO MINIMIZE THE TRACK OUT FORM THE PROJECT OR AS DIRECTED BY THE ENGINEER.

TEMPORARY BEST MANAGEMENT PRACTICES (BMPS)

1. BEST MANAGEMENT PRACTICES (BMPS) IMPLEMENTED ON THIS PROJECT WILL UTILIZE THE SPECIFICATIONS PROVIDED IN THE ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION STORM WATER GUIDE OR THE DOT&PF BMP GUIDE, WHENEVER POSSIBLE.

2. INSTALL EROSION AND SEDIMENT CONTROL BMP'S PRIOR TO THE START OF CONSTRUCTION, AS NECESSARY TO MINIMIZE EROSION FROM DISTURBED SURFACES AND CAPTURE SEDIMENT ONSITE.

3. 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.

4. MAINTAIN BMPS ON A REGULAR BASIS INCLUDING, BUT NOT LIMITED TO, REMOVAL AND DISPOSAL OF SEDIMENT AND REPLACING DAMAGED BMPS OR AS DIRECTED BY THE ENGINEER.

HAZARDOUS MATERIAL CONTROL PLAN (HMCP)

1. SUBMIT AN ELECTRONIC COPY TO THE ENGINEER FOR APPROVAL. THE CITY WILL REVIEW THE HMCP SUBMITTAL WITHIN 14 DAYS AFTER IT IS RECEIVED.

2. PREPARE THE HMCP FOR PREVENTION OF POLLUTION FROM STORAGE, USE, CONTAINMENT, CLEANUP, AND DISPOSAL OF ALL HAZARDOUS MATERIALS, INCLUDING PETROLEUM PRODUCTS RELATED TO CONSTRUCTION ACTIVITIES AND EQUIPMENT. COMPILE MATERIAL SAFETY DATA SHEETS IN ONE LOCATION AND REFERENCE THAT LOCATION IN THE HMCP.

3. DESIGNATE A CONTRACTOR'S SPILL RESPONSE FIELD REPRESENTATIVE WITH 24 HOUR CONTACT INFORMATION. DESIGNATE A SUBCONTRACTOR SPILL RESPONSE COORDINATOR FOR EACH SUBCONTRACTOR. THE SUPERINTENDENT AND CONTRACTOR'S SPILL RESPONSE FIELD REPRESENTATIVE MUST HAVE 24 HOUR CONTACT INFORMATION FOR EACH SUBCONTRACTOR SPILL RESPONSE COORDINATOR AND THE UTILITY SPILL RESPONSE COORDINATOR.

HAULING

1. ENSURE LOADS ARE STABLE OR COVERED SO THAT NO MATERIAL ESCAPEMENT OCCURS DURING HAULING ACTIVITIES.

DATE	REVISION	BY
08/02/24	⚠ ADDENDUM #2	KLL

SCALE:

DESIGNED: RHP/KLL
DRAWN:
CHECKED: RHP
DATE: 06/20/24

APPROVED

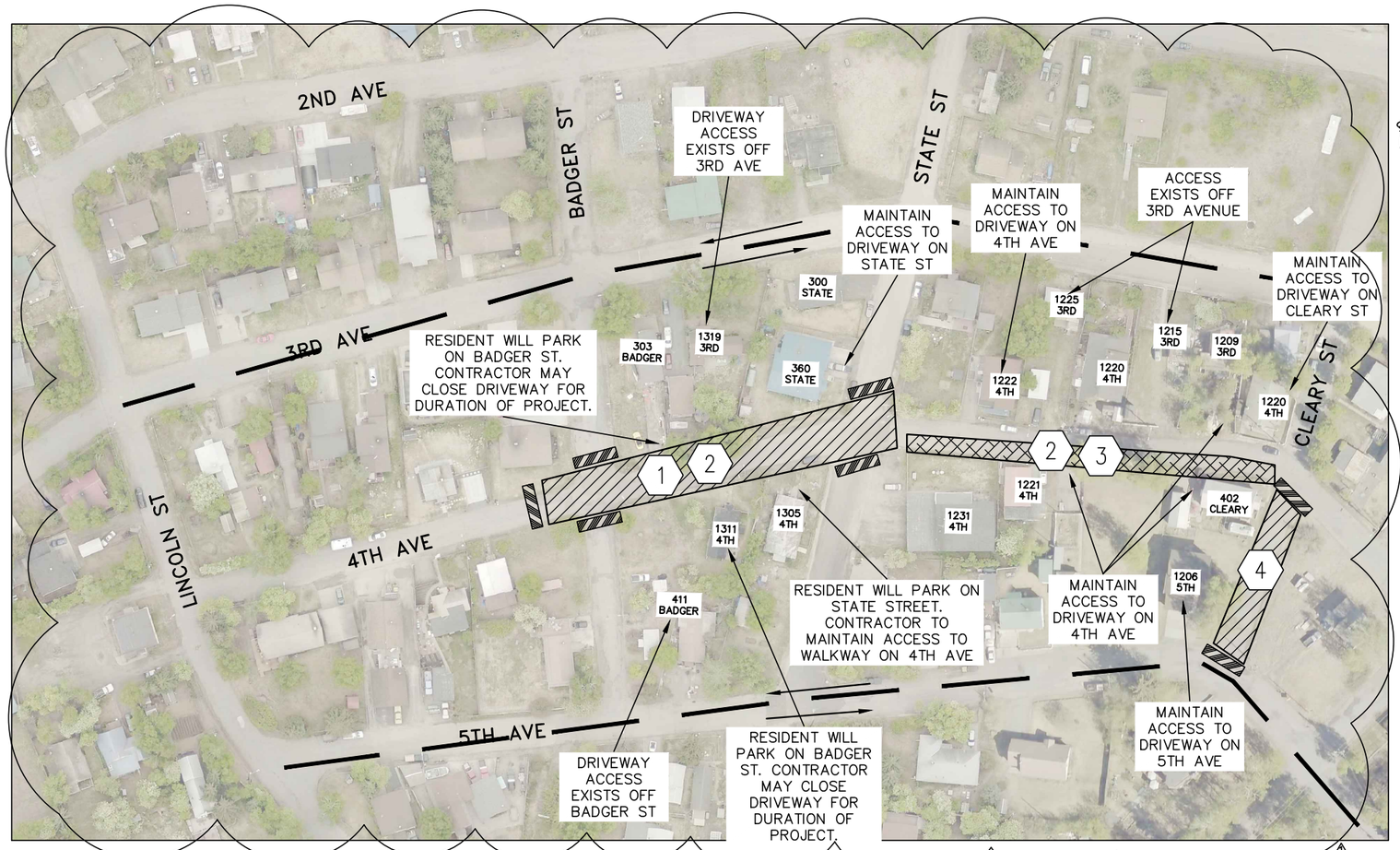
CITY ENGINEER

DATE

4TH & STATE STORM DRAIN PROJECT

CITY OF FAIRBANKS, ALASKA
Engineering Department
Project ITB-24-10

4.01
OF 10 SHEETS



4TH AVENUE CONSTRUCTION REQUIREMENT NOTES

1. 4TH AVENUE FROM BADGER STREET TO STATE STREET MAY BE FULLY CLOSED TO VEHICULAR TRAFFIC FOR THE DURATION OF THE PROJECT. USE 3RD AVENUE AND 5TH AVENUE FOR VEHICULAR DETOUR.
2. PEDESTRIAN ACCESS SHALL BE MAINTAINED THROUGH PROJECT AREA TO ALL RESIDENTIAL PROPERTIES.
3. 4TH AVENUE FROM STATE STREET TO CLEARY STREET MAY BE CLOSED TO THRU VEHICULAR TRAFFIC BUT ACCESS TO RESIDENTIAL DRIVEWAYS SHALL BE MAINTAINED AT ALL TIMES.
4. CLEARY STREET FROM 4TH AVENUE TO 5TH AVENUE MAY BE FULLY CLOSED TO VEHICULAR TRAFFIC FOR THE DURATION OF THE PROJECT. USE LINCOLN ST AND BONNIFIELD STREET FOR VEHICULAR DETOUR.

LEGEND

- TYPE 3 BARRICADE WITH R11–2 SIGN
- WORK AREA – FULL CLOSURE
- WORK AREA – CLOSED TO THRU TRAFFIC
- DETOUR ROUTE

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 DURING THEIR BUSINESS HOURS. CLOSURES SHALL NOT OCCUR WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER. COORDINATE CLOSURE PLANS WITH THE AFFECTED BUSINESS OWNERS AND 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
08/02/24	⚠ ADDENDUM #2	KLL

SCALE:

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DRAWN:
CHECKED: RHP
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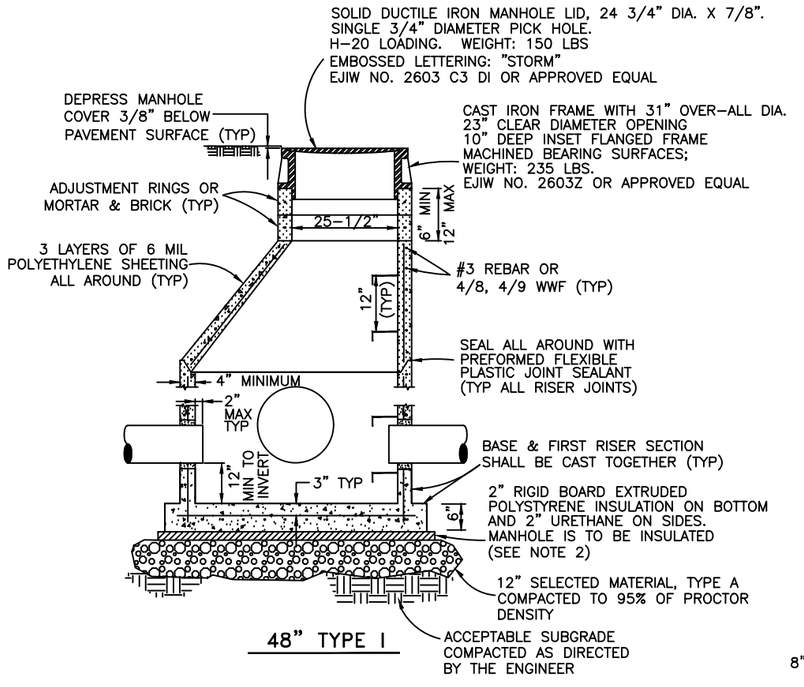
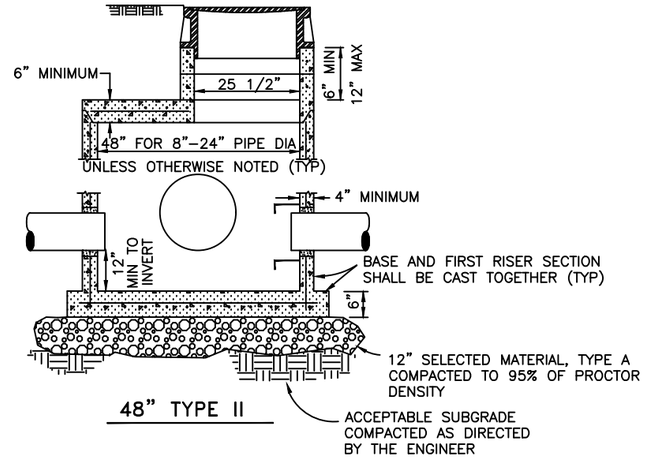
APPROVED
CITY ENGINEER
DATE

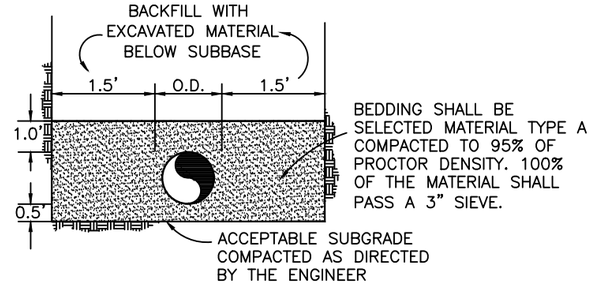
4TH & STATE STORM DRAIN PROJECT

CITY OF FAIRBANKS, ALASKA
Engineering Department
Project ITB–24–10

5.01
OF 10 SHEETS

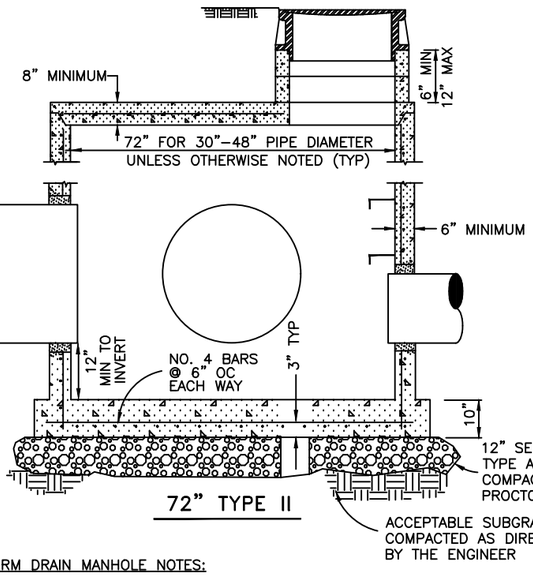


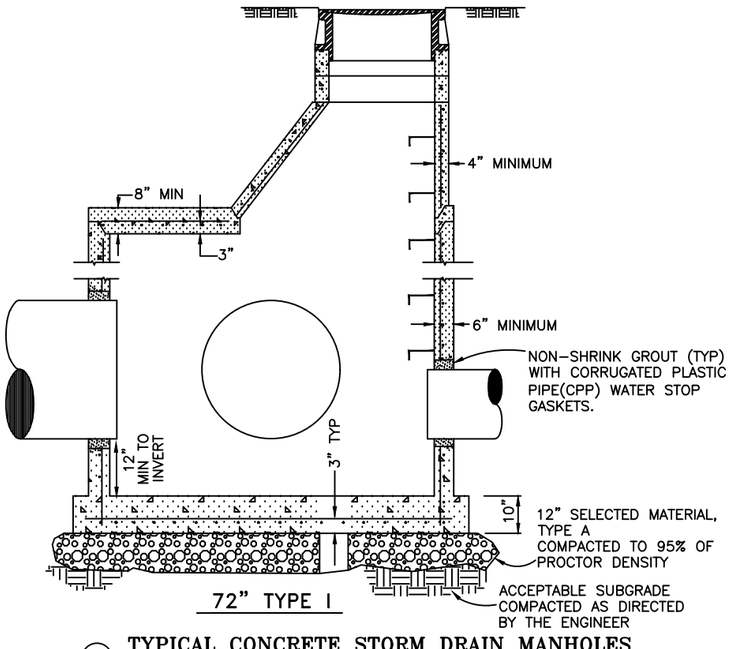




PIPE BEDDING DETAIL

NOT TO SCALE



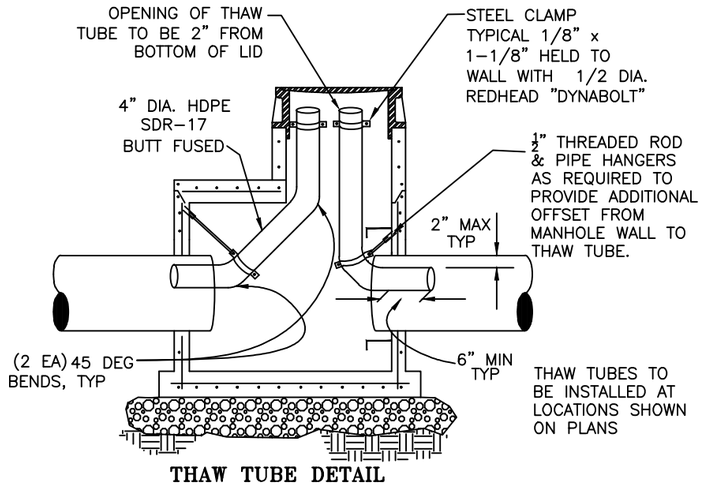


(A) TYPICAL CONCRETE STORM DRAIN MANHOLES

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. PRUSHA JR.
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER
08/02/2024

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

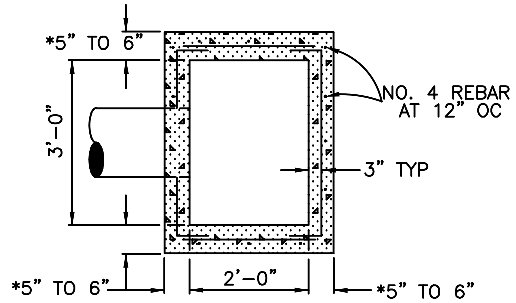
NOT TO SCALE

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

CITY OF FAIRBANKS, ALASKA
ENGINEERING DIVISION

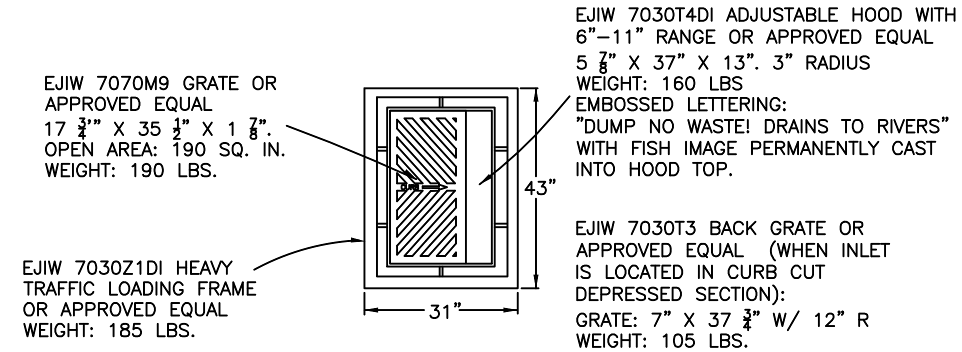
STANDARD DETAILS
STORM DRAIN MANHOLES, THAW TUBES AND BEDDING

SD1

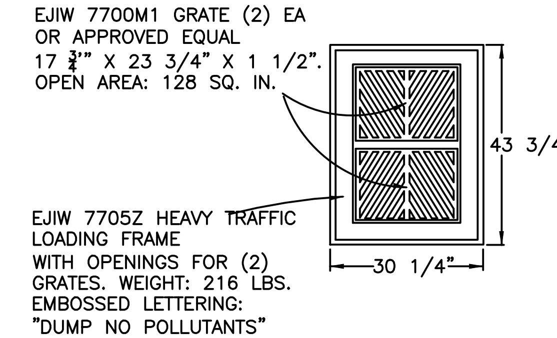


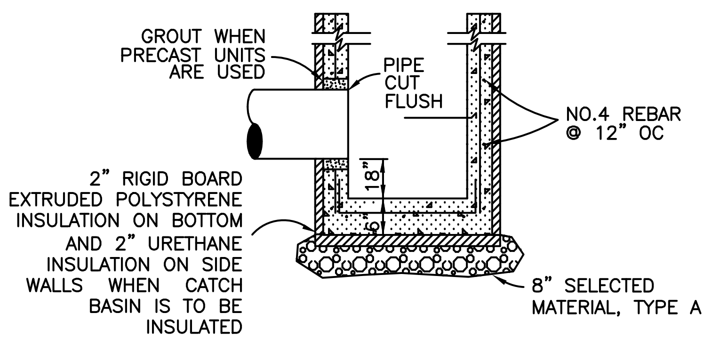
*DIMENSION WHEN PRECAST INLET BOX WITH CONTINUOUS WWF 6x6 4/4 REINFORCEMENT IS USED

TYPICAL CURB INLET

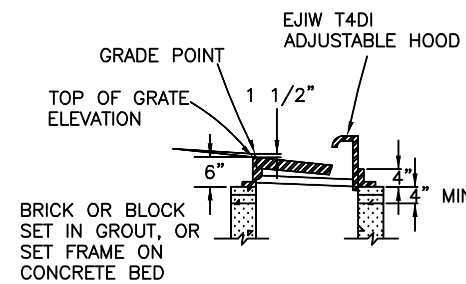


TYPICAL FIELD INLET

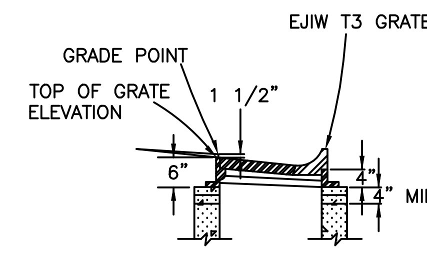




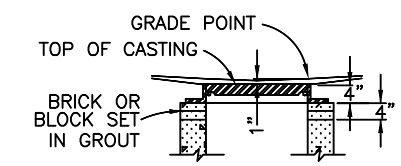
REINFORCED CATCH BASIN (STANDARD)



FRAME WITH ADJUSTABLE HOOD FOR INSTALLATION IN CURB FACE



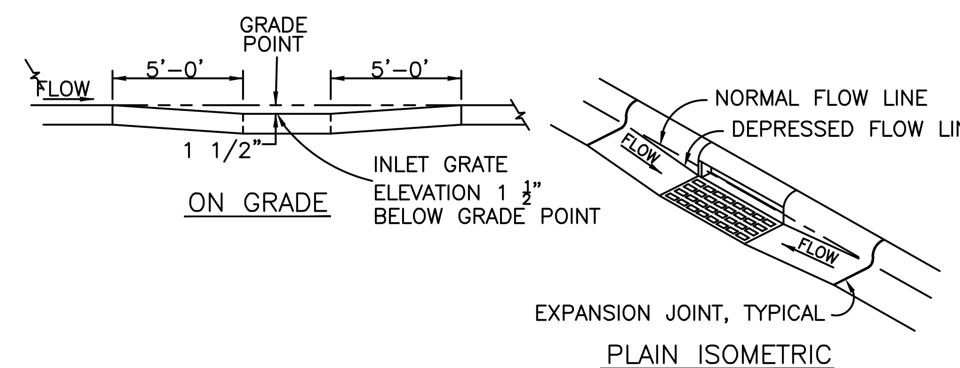
FRAME WITH BACK GRATE FOR INSTALLATION IN CURB CUT



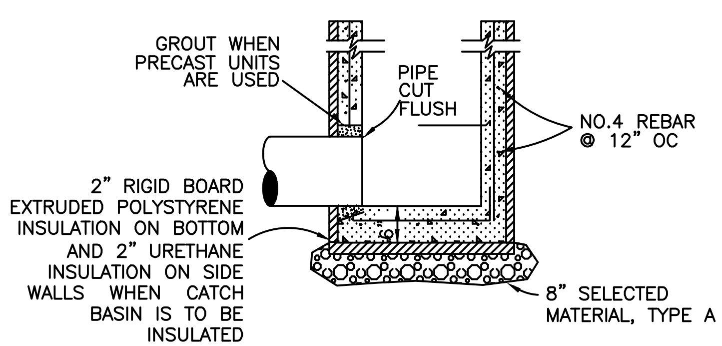
FRAME WITH DOUBLE OPENING

INLET BOX/CATCH BASIN DETAILS

NOT TO SCALE



DEPRESSION IN FLOW LINE AT INLET



NO SUMP CATCH BASIN

ALTERNATE USED WHERE INDICATED ON PLANS

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.

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

08/02/2024

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