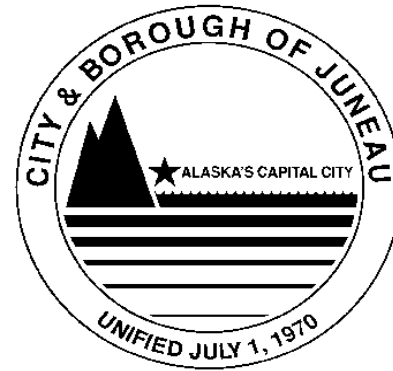


# **SHAUNE DRIVE PAVEMENT AND DRAINAGE IMPROVEMENTS**

**VOLUME II of II**

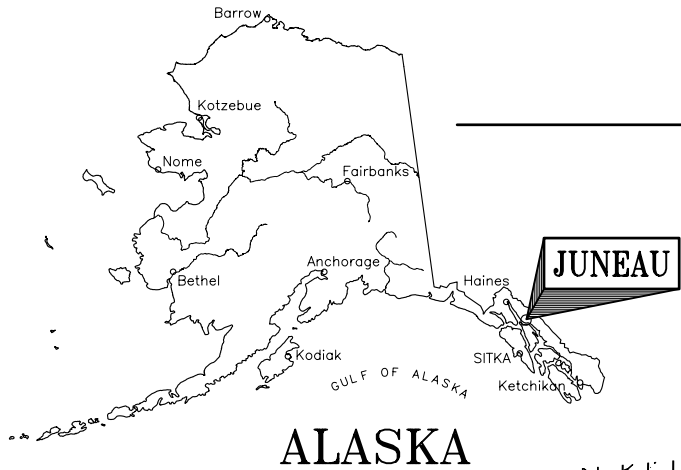
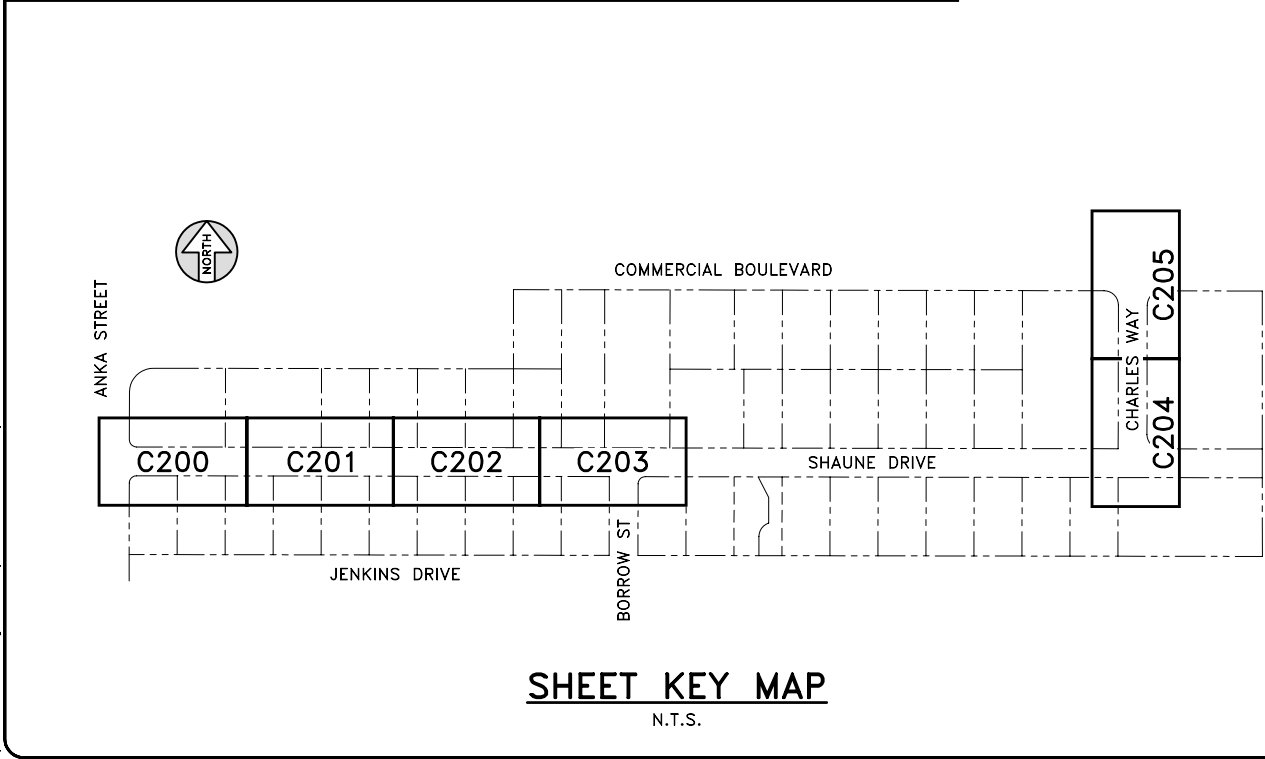
**Contract No. BE18-159**

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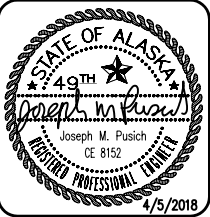
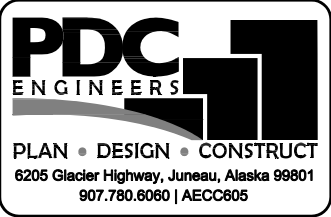
ENGINEERING DEPARTMENT

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SHAUNE DRIVE PAVEMENT & DRAINAGE IMPROVEMENTS

CBJ CONTRACT No. BE18-159

CITY & BOROUGH OF JUNEAU, ALASKA

COVER SHEET

SHEET C001

DATE: April 05, 2018
PDC No. 17379JN
SHEET C001

GENERAL CONSTRUCTION NOTES

1. CBJ ENGINEERING STANDARD DETAILS BOOK FOR CIVIL ENGINEERING PROJECTS AND SUBDIVISION IMPROVEMENTS DATED AUGUST, 2011 AND CBJ ENGINEERING STANDARD SPECIFICATIONS DATED DECEMBER, 2003 ARE MADE A PART OF THIS CONTRACT, WITH CURRENT REVISIONS AS APPLICABLE.
2. LARGE BOULDERS, HARDPAN, STUMPS, LOGS, ORGANICS AND GROUND WATER MAY BE ENCOUNTERED AT VARIOUS DEPTHS DURING TRENCHING, DITCHING AND ROADWAY EXCAVATION OPERATIONS. THESE MATERIALS SHALL BE DISPOSED OF AS REQUIRED BY THE ENGINEER.
3. GRADES AND ALIGNMENTS SHOWN ON THESE PLANS ARE SUBJECT TO MINOR REVISIONS AS APPROVED BY THE ENGINEER.
4. LOCATION OF WATER SYSTEM IMPROVEMENTS, SANITARY SEWER MANHOLES, STORM DRAIN STRUCTURES, PIPING AND PIPE LENGTHS ARE SUBJECT TO MINOR REVISIONS AS APPROVED BY THE ENGINEER.
5. CONNECTIONS TO EXISTING SIDE STREETS AND DRIVEWAYS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
6. LOCATIONS OF EXISTING UNDERGROUND SEWER, WATER, TELEPHONE, CABLE TELEVISION, AND POWER UTILITIES SHOWN ON THESE PLANS WERE DERIVED FROM CBJ AS-BUILTS OR FIELD LOCATES. ACTUAL LOCATIONS MAY VARY FROM THOSE SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING, PROTECTING AND MAINTAINING THE UTILITIES THROUGHOUT THE CONSTRUCTION OF THIS PROJECT. ANY DAMAGE RESULTING TO THESE UNDERGROUND UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY THE CONTRACTOR AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. CALL "DIAL BEFORE YOU DIG" ☎ 586-1333 FOR UNDERGROUND UTILITY LOCATES PRIOR TO ANY EXCAVATION ACTIVITIES. FOR ACS LOCATES DIAL THE 811 ALASKA DIGLINE.
7. CONTRACTOR SHALL ASSURE GARBAGE PICKUP, DAILY MAIL SERVICE, FUEL AND SERVICE DELIVERIES WILL BE UNINTERRUPTED TO ALL RESIDENTS AND BUSINESSES AFFECTED BY THIS PROJECT.
8. PROPERTY LINE LOCATIONS USED IN THESE PLANS WERE DERIVED FROM RECORD PLATS AND DO NOT REPRESENT A BOUNDARY SURVEY.
9. ALL SIGN INSTALLATIONS OR RELOCATIONS SHALL BE PERFORMED ACCORDING TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (M.U.T.C.D.) WITH THE ALASKA SUPPLEMENT.
10. THE CONTRACTOR SHALL DELIVER ALL ASPHALT PAVEMENT REMOVED FROM THIS PROJECT TO A STOCKPILE AREA IN THE CBJ LEMON CREEK PIT TO BE DESIGNATED BY THE ENGINEER. CONTACT THE CBJ PIT MANAGER, ALEC VENECHUK 586-0874, FOR THE EXACT LOCATION OF THE STOCKPILE AREA.
11. ALL ITEMS DESIGNATED TO BE REMOVED SHALL BE DISPOSED OF AT AN APPROVED DISPOSAL SITE, EXCEPT AS NOTED IN THE CONTRACT DOCUMENTS.
12. PROVIDE KNOCKOUTS IN STORM DRAIN STRUCTURES FOR ALL PIPES SHOWN ON THE PLANS.
13. ONLY HORIZONTAL ELBOW FITTINGS (BENDS) ARE SHOWN ON THE PLANS. ADDITIONAL FITTINGS WILL BE REQUIRED FOR VERTICAL DEFLECTIONS NEAR CONNECTION TO EXISTING PIPES, AND AT OTHER LOCATIONS REQUIRING GRADE CHANGES TO AVOID CONFLICTS.
14. THE CONTRACTOR SHALL NOT STORE MATERIALS OR EQUIPMENT OR OPERATE EQUIPMENT WITH ITS TRACKS OR WHEELS PLACED ON PRIVATE PROPERTY WITHOUT THE WRITTEN APPROVAL OF THE PROPERTY OWNER.
15. THE CONTRACTOR SHALL NOTIFY CBJ WATER UTILITIES OPERATOR STEVE LOCKS (321-2969) OF PROPOSED WATER SERVICE INTERRUPTION AND SUBMIT THE "WATER SYSTEM SPECIAL USE PERMIT" (COSIGNED BY THE ENGINEER) AT LEAST 48-HOURS PRIOR TO SHUTDOWN OR FLUSHING OF MAINLINE WATER PIPE. NO WATER SERVICE INTERRUPTION MAY PROCEED UNTIL THIS APPROVAL IS OBTAINED.
16. CONTRACTOR SHALL REFERENCE ALL EXISTING PROPERTY CORNER MONUMENTS (I.E. BRASS CAP MONUMENTS, REBARS OR CHISELED X'S) PRIOR TO CONSTRUCTION THAT WILL BE DISTURBED DURING HIS WORK, AND REMONUMENT AFTER CONSTRUCTION OPERATIONS. ALL WORK SHALL BE DONE BY, OR UNDER THE DIRECTION OF, AN ALASKA REGISTERED LAND SURVEYOR. ALL EXISTING PROPERTY CORNERS ARE NOT NECESSARILY SHOWN ON THE PLANS.
17. THE PLAN DRAWINGS DO NOT NECESSARILY SHOW ALL TREES AND SHRUBS THAT MAY BE ENCOUNTERED DURING CONSTRUCTION ACTIVITIES. NO TREES, SHRUBS OR LANDSCAPING ARE TO BE REMOVED OR DAMAGED, UNLESS SHOWN ON THE DRAWINGS OR DIRECTED BY THE ENGINEER.
18. AEL&P, ACS AND GCI MAY CONDUCT WORK WITHIN THE PROJECT LIMITS TO RELOCATE UTILITIES AND TO UPGRADE THEIR RESPECTIVE SYSTEMS. THE CONTRACTOR SHALL COORDINATE ITS ACTIVITIES WITH EACH UTILITY COMPANY AND PROVIDE ACCESS AS NECESSARY FOR UTILITY COMPANIES TO COMPLETE THEIR WORK.
19. "JUMPING JACK", OR SIMILAR TYPE COMPACTORS SHALL BE USED FOR COMPACTION WITHIN 18-INCHES OF THE OUTSIDE SURFACE OF ALL WATER VALVE BOXES, CATCH BASINS AND MANHOLES.
20. THE USE OF GROUT AND QUICKSET CEMENT PRODUCTS WITH ADJUSTING RINGS, BRICKS, WOOD, STONES AND OTHER SIMILAR GRADE ADJUSTMENT DEVICES TO SUPPORT CATCH BASIN FRAMES OVER CATCH BASINS AND MANHOLES WILL NOT BE PERMITTED ON THIS PROJECT. SEE CBJ STANDARD SPECIFICATIONS, SECTION 02502 – STORM SEWER MANHOLES, INLETS AND CATCH BASINS AND THE DRAWINGS FOR CATCH BASIN FRAME SUPPORT REQUIREMENTS.
21. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ENGINEER APPROVED EROSION CONTROL DEVICES DURING CONSTRUCTION PER SECTION 01570 REQUIREMENTS.
22. TEMPORARY RAMPS SHALL BE PROVIDED AS REQUIRED FOR RESIDENT/BUSINESS ACCESS TO THEIR DRIVEWAYS DURING THE CONSTRUCTION PERIOD.
23. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF EXISTING WATER AND SEWER PIPES, INCLUDING ALL SERVICES ALONG THE STORM DRAIN AND WATER PIPE ALIGNMENTS TO DETERMINE PIPE INSULATION LOCATIONS AND TO ENSURE DAMAGE DOES NOT OCCUR TO THE SERVICE PIPES.
24. WATER PIPES WILL REQUIRE MORE THAN 60-INCHES OF COVER IN AREAS WHERE STORM DRAINAGE PIPES ARE CLOSE TO OR BELOW A DEPTH OF 60-INCHES TO INVERT. DEPTHS OF ALL STORM DRAINAGE PIPES SHALL BE DETERMINED PRIOR TO INSTALLING WATER PIPES TO ENSURE CONFLICTS BETWEEN THESE PIPES DO NOT OCCUR. A MINIMUM CLEARANCE OF 8-INCHES SHALL BE OBTAINED BETWEEN WATER AND OTHER PIPES.
25. THE CONTRACTOR SHALL NOTIFY EACH RESIDENT/BUSINESS OF EACH DRIVEWAY CLOSURE THE DAY PRECEDING THE CLOSURE. THE RESIDENT SHALL BE INFORMED OF THE PERIOD OF TIME THE CLOSURE WILL BE IN EFFECT. NO DRIVEWAY CLOSURES WILL BE PERMITTED UNTIL THIS REQUIREMENT HAS BEEN MET TO THE SATISFACTION OF THE ENGINEER.

ABBREVIATIONS

AC	ASBESTOS CEMENT
ACS	ALASKA COMMUNICATIONS SYSTEMS
ADD ALT	ADDITIVE ALTERNATE
AEL&P	ALASKA ELECTRIC LIGHT & POWER
APPROX	APPROXIMATE
AST	ABOVEGROUND STORAGE TANK
BC	BACK OF CURB
BOP	BEGINNING OF PROJECT
CB	CATCH BASIN
CBJ	CITY & BOROUGH OF JUNEAU
CHB	CHORD BEARING
CHL	CHORD LENGTH
C/L	CENTERLINE
CIP	CAST IRON PIPE
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CONC	CONCRETE
CONT	CONTINUOUS
CPP	CORRUGATED POLYETHYLENE PIPE
CTE	CONNECT TO EXISTING
DI	DUCTILE IRON
DIP	DUCTILE IRON PIPE
DIA	DIAMETER
E	EASTING
EG	EXISTING GRADE
EJW	EAST JORDAN IRON WORKS
EL	ELEVATION
EOP	END OF PROJECT
EP	EDGE OF PAVEMENT
EXIST	EXISTING
EXP	EXPANSION
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
FM	FORCE MAIN
GCI	GENERAL COMMUNICATION INC.
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HP	HIGH PRESSURE
IE	INVERT ELEVATION
L	LENGTH
LP	LOW POINT
LT	LEFT
MAX	MAXIMUM
MIN	MINIMUM
MJ	MECHANICAL JOINT
MTE	MATCH TO EXISTING
N	NORTHING
N/A	NOT APPLICABLE
NF	NEENAH FOUNDRY COMPANY
NFS	NON-FROST SUSCEPTIBLE
NTS	NOT TO SCALE
NVC	NO VERTICAL CURVE
OC	ON CENTER
OFCO	OLYMPIC FOUNDRY CO.
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PERF	PERFORATED
PI	POINT OF INTERSECTION
P/L	PROPERTY LINE
POC	POINT ON CURVE
POL	POINT ON LINE
PP	POWER POLE
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
R	RADIUS
RAP	RECYCLED ASPHALT PAVEMENT
ROW	RIGHT-OF-WAY
RP	RADIUS POINT
RT	RIGHT
SDMH	STORM DRAIN MANHOLE
SEP	SEPARATOR
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEANOUT
SSMH	SANITARY SEWER MANHOLE
STA	STATION
STD	STANDARD
SWPPP	STORM WATER POLLUTION PREVENTION PLAN
T	TANGENT
TBG	TOP BACK OF GUTTER
TBM	TEMPORARY BENCH MARK
TC	TOP OF CONCRETE
TOB	TOP OF BANK
TOP	TOP OF PIPE
TYP	TYPICAL
UD	UNDERDRAIN
UON	UNLESS OTHERWISE NOTED
UST	UNDERGROUND STORAGE TANK
VC	VERTICAL CURVE
VERT	VERTICAL
VPI	VERTICAL POINT OF INTERSECTION
W/	WITH

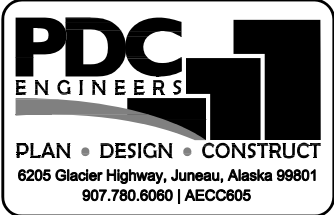
SYMBOLS

EXISTING	PROPOSED	
		PROPERTY / BOUNDARY LINE
		EASEMENT LINE
		PROJECT BASELINE
		TEMPORARY BENCH MARK
		SANITARY SEWER MANHOLE
		SANITARY SEWER LINE
		STORM DRAIN PIPE
		STORM DRAIN CATCH BASIN
		STORM DRAIN MANHOLE
		CURB & GUTTER, TYPE I
		VALLEY GUTTER, TYPE III
		ASPHALT SURFACE
		CONCRETE SURFACE
		SAWCUT AND MTE
		WATER LINE
		WATER VALVE
		FIRE HYDRANT
		PROTECTION BOLLARDS
		UTILITY POLE WITH LIGHT
		ELECTRIC TRANSFORMER
		ELECTRICAL CONDUIT (UNDERGROUND)
		PHONE CONDUIT (UNDERGROUND)
		CABLE CONDUIT (UNDERGROUND)
		TOP OF BANK
		TOE OF SLOPE
		SIGN
		MAILBOX
		CHAIN LINK FENCE
		METAL GUARDRAIL
		MISCELLANEOUS LANDSCAPING
		DECIDUOUS TREE
		STRUCTURE

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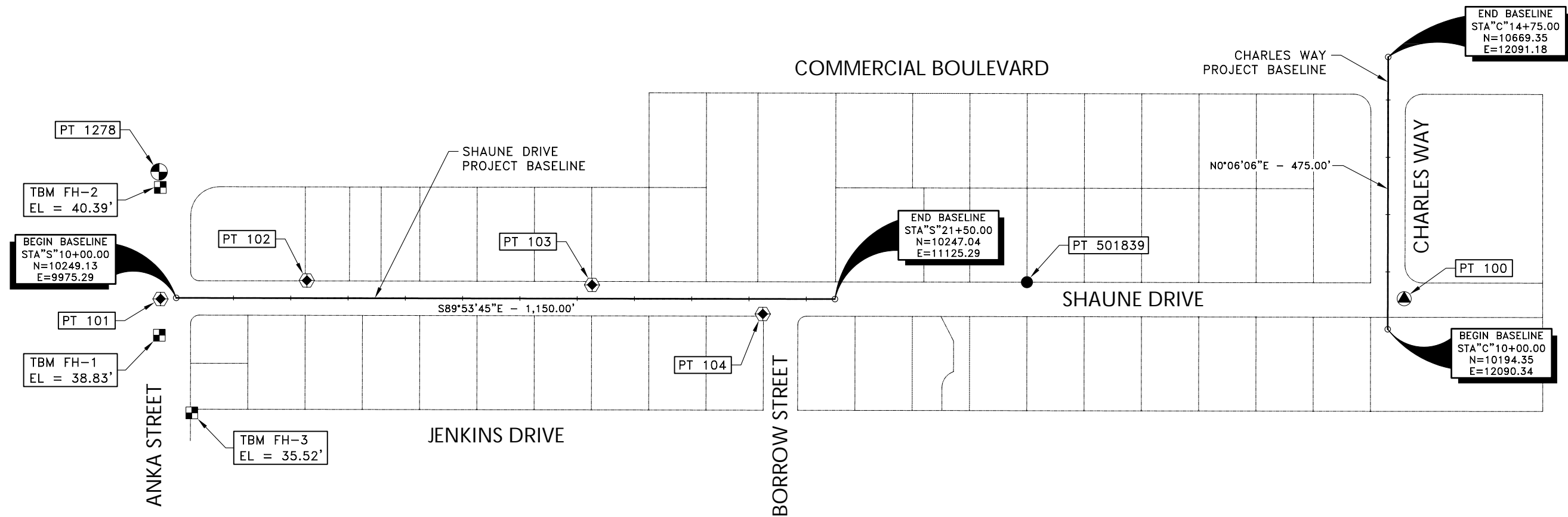
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SHAUNE DRIVE PAVEMENT & DRAINAGE IMPROVEMENTS  
CBJ CONTRACT No. BE18-159  
CITY & BOROUGH OF JUNEAU, ALASKA

GENERAL NOTES,  
ABBREVIATIONS AND  
SYMBOLS

DATE:	April 05, 2018
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SURVEY CONTROL SYMBOLS

- PRIMARY MONUMENT (RECOVERED)
- SECONDARY MONUMENT (RECOVERED)
- 1" DIAMETER SURVEY SPIKE (ESTABLISHED)
- TEMPORARY BENCH MARK (T.B.M.)
- MAG NAIL

NOTE:  
THE CONTRACTOR SHALL PERFORM A CLOSED LEVEL LOOP THROUGH ALL TBM'S AS LISTED HEREON TO VERIFY ELEVATIONS PRIOR TO BEGINNING ANY GRADING WORK.

TABLE OF HORIZONTAL CONTROL

POINT #	NORTHING	EASTING	DESCRIPTION
100	10,247.65	12,119.15	SURVEY SPIKE IN ASPHALT
101	10,247.28	9,947.95	MAG NAIL IN SIDEWALK
102	10,279.56	10,203.37	MAG NAIL IN HUB
103	10,271.78	10,701.31	MAG NAIL IN HUB
104	10,221.12	10,999.42	MAG NAIL IN ASPHALT
1278	10,469.02	9,945.37	1410-S PRIMARY MONUMENT
501839	10,276.43	11,460.48	1410-S SECONDARY MONUMENT

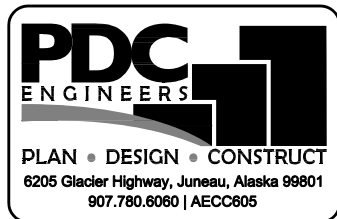
TABLE OF VERTICAL CONTROL

T.B.M.	NORTHING	EASTING	ELEVATION	DESCRIPTION
PT 101	10,247	9,948	36.93'	PK NAIL IN SIDEWALK
FH-1	10,286	10,001	38.83'	NORTH BOLT ON TOP FLANGE OF FIRE HYDRANT
FH-2	-	-	40.39'	NORTH BOLT ON TOP FLANGE OF FIRE HYDRANT LOCATED AT ANKA STREET & COMMERCIAL BLVD INTERSECTION
FH-3	-	-	35.52'	NORTH BOLT ON TOP FLANGE OF FIRE HYDRANT LOCATED AT ANKA STREET & JENKINS DRIVE INTERSECTION

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SHAUNE DRIVE PAVEMENT & DRAINAGE IMPROVEMENTS  
CBJ CONTRACT No. BE18-159  
CITY & BOROUGH OF JUNEAU, ALASKA

SURVEY CONTROL MAP  
GRAPHIC SCALE  
0' 50' 100' 200' 400'

DATE:	April 05, 2018
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EXISTING SANITARY SEWER MANHOLE RECONSTRUCTION SUMMARY					
MANHOLE NUMBER	LOCATION	EXISTING ELEVATION	PROPOSED ELEVATION	NEW COVER & FRAME	REMARKS
M15	"S"14+22.7, 25.6 RT	38.08	38.08	CBJ STD 206A, 24" CLEAR OPENING	WATERPROOF ALL EXTERIOR JOINTS OF MANHOLE USING MIRADRI WATERPROOFING SYSTEM. REMOVE EXISTING COVER & FRAME AND REPLACE WITH NEW. REMOVE EXISTING ADJUSTING RING (1 EACH) 6" HEIGHT, INSTALL NEW INFRA-RISER (RECYCLED RUBBER) GRADE RINGS FOR ADJUSTING AND INSTALLING NEW COVER & FRAME ON MANHOLE TO FINISH GRADE. REMOVE EXISTING METAL STEPS AND INSTALL NEW POLYETHYLENE MANHOLE STEPS PER CBJ STANDARDS.
K15	"S"18+14.4, 25.5 RT	40.57	40.57	CBJ STD 206A, 24" CLEAR OPENING	WATERPROOF ALL EXTERIOR JOINTS OF MANHOLE USING MIRADRI WATERPROOFING SYSTEM. REMOVE EXISTING COVER & FRAME AND REPLACE WITH NEW. REMOVE EXISTING ADJUSTING RING (1 EACH) 6" HEIGHT, INSTALL NEW INFRA-RISER (RECYCLED RUBBER) GRADE RINGS FOR ADJUSTING AND INSTALLING NEW COVER & FRAME ON MANHOLE TO FINISH GRADE. REMOVE EXISTING METAL STEPS AND INSTALL NEW POLYETHYLENE MANHOLE STEPS PER CBJ STANDARDS.
SSG6	"C"14+18.7, 20.9 RT	46.10	46.10	OLYMPIC FOUNDRY No. MH30 (4") 24" CLEAR OPENING	REMOVE EXISTING FRAME & LID (6" HEIGHT), INSTALL NEW INFRA-RISER (RECYCLED RUBBER) GRADE RINGS FOR ADJUSTING AND INSTALL NEW 4" HEIGHT COVER & FRAME ON MANHOLE TO FINISH GRADE.
SSG8	"S"20+65.4, 20.8 RT	41.47	41.44	CBJ STD 206A, 24" CLEAR OPENING	WATERPROOF ALL EXTERIOR JOINTS OF MANHOLE USING MIRADRI WATERPROOFING SYSTEM. REMOVE EXISTING COVER & FRAME AND REPLACE WITH NEW. REMOVE EXISTING ADJUSTING RING (1 EACH) 6" HEIGHT, INSTALL NEW INFRA-RISER (RECYCLED RUBBER) GRADE RINGS FOR ADJUSTING AND INSTALLING NEW COVER & FRAME ON MANHOLE TO FINISH GRADE. REMOVE EXISTING METAL STEPS AND INSTALL NEW POLYETHYLENE MANHOLE STEPS PER CBJ STANDARDS.
SSG11	"C"10+30.2, 21.1 RT	44.27	44.27	CBJ STD 206A, 24" CLEAR OPENING	WATERPROOF ALL EXTERIOR JOINTS OF MANHOLE USING MIRADRI WATERPROOFING SYSTEM. REMOVE EXISTING COVER & FRAME AND REPLACE WITH NEW. REMOVE EXISTING ADJUSTING RING (1 EACH) 4" HEIGHT, INSTALL NEW INFRA-RISER (RECYCLED RUBBER) GRADE RINGS FOR ADJUSTING AND INSTALLING NEW COVER & FRAME ON MANHOLE TO FINISH GRADE. REMOVE EXISTING METAL STEPS AND INSTALL NEW POLYETHYLENE MANHOLE STEPS PER CBJ STANDARDS.

SIGN ASSEMBLY TABLE			
SIGN No.	LOCATION	MUTCD DESIGNATION	LEGEND AND REMARKS
1	"C"13+85.0, 20.3 RT	R1-1	"STOP" (30"x30") & PROVIDE NEW STREET NAME PANEL SIGNS "COMMERCIAL BLVD" & "CHARLES WAY"
<b>NOTES:</b> 1. ALL SIGNS AND POSTS TO BE CONSTRUCTED IN ACCORDANCE WITH CBJ STANDARD DETAIL 127A. 2. ALL SIGNS SHALL BE HIGH INTENSITY AND LOCATED AS DIRECTED BY THE ENGINEER. 3. SALVAGE ALL EXISTING SIGN PANELS AND DELIVER TO CBJ STREET MAINTENANCE SHOP. DISPOSE OF ALL EXISTING POSTS, BRACKETS, POST SOCKETS AND FOUNDATION MATERIALS. 4. ALL NEW POSTS SHALL BE "TELSPAR", OR APPROVED EQUAL AND SHALL BE PRE-PUNCHED WITH ALL KNOCKOUTS REMOVED.			

STORM DRAIN STRUCTURE FRAME & GRATE SUMMARY	
STRUCTURE No.	EAST JORDAN, OLYMPIC FOUNDRY CO., NEENAH FOUNDRY, CBJ STANDARD No., OR APPROVED EQUAL.
S-1	OLYMPIC FOUNDRY SM18DI
S-2	OLYMPIC FOUNDRY SM18DI
S-3	OLYMPIC FOUNDRY SM18DI
S-4	OLYMPIC FOUNDRY SM18DI
S-5	OLYMPIC FOUNDRY SM18DI
S-6	CBJ STD 306 (NON-SKID W/OUT LUGS)
S-7	OLYMPIC FOUNDRY SM18DI
S-8	OLYMPIC FOUNDRY MH34SC
CB4	OLYMPIC FOUNDRY MH34SC
CB5	OLYMPIC FOUNDRY MH34SC
<b>NOTES:</b> 1. CATCH BASIN TOP SLAB OPENINGS SHALL BE DIMENSIONED TO FIT THE FRAME DIMENSIONS. ALL GRATES SHALL BE HEAVY DUTY CONSTRUCTION AND BICYCLE SAFE. ALL FRAMES AND GRATES TO BE DUCTILE IRON.	

SEWER SERVICE SUMMARY CHARLES WAY			
PARCEL	STATION & OFFSET	SIZE/TYPE	REMARKS
SSG, TRACT F	"C"10+21.9, 17.3' RT	6" PVC	SEE NOTE 1
SSG, TRACT B	"C"14+00.7, 36.8' RT	6" PVC	SEE NOTE 1
<b>NOTES:</b> 1. CONSTRUCT NEW 6" PVC SEWER SERVICE, CONNECT TO EXISTING SEWER MAIN PER CBJ STANDARD DETAIL No. 210 AND INSTALL NEW CLEANOUT NEAR PROPERTY LINE PER CBJ STANDARD DETAIL 213.			

WATER SERVICE SUMMARY CHARLES WAY			
PARCEL	STATION & OFFSET	SIZE/TYPE	REMARKS
SSG IV, TRACT F	"C"10+21.9, 11.0' RT	6" DIP	SEE NOTE 1
<b>NOTES:</b> 1. INSTALL NEW WATER SERVICE AND CURB BOX PER CBJ STANDARD DETAIL 406B. STATION & OFFSET ARE GIVEN TO THE CENTER OF VALVE BOX.			

MAILBOX SUMMARY		
HOUSE NUMBER	MAILBOX LOCATION	REMARKS
5454	"S"12+23.0, 18.5' LT	SINGLE MAILBOX
5449	"S"12+25.0, 18.5' LT	GANG MAILBOX
5452		
NO NUMBER	"S"12+27.0, 18.5' LT	GANG MAILBOX
5448		
5445	"S"14+28.0, 18.5' LT	GANG MAILBOX
5445 (SS SOUNDS)		
5438	"S"15+19.5, 18.5' LT	SINGLE MAILBOX
<b>NOTES:</b> 1. MAILBOX STATION & OFFSETS ARE GIVEN TO THE MIDDLE CENTER OF MAILBOX POST. CONTRACTOR SHALL STAKE MAILBOX POST LOCATION AFTER ROADWAY SURFACING HAS BEEN PLACED FOR APPROVAL BY THE ENGINEER PRIOR TO INSTALLATION. 2. REINSTALL EXISTING MAILBOX AND NEWSPAPER RECEPTACLES ON NEW CANTILEVER ARM USING NEW CONNECTING HARDWARE. IF THE RECEPTACLES ARE DAMAGED BY THE CONTRACTOR, NEW RECEPTACLES OF THE SAME SIZE AND COLOR WITH NEW HOUSE NUMBERS SHALL BE PROVIDED BY THE CONTRACTOR. 3. GANG TYPE MAILBOX ASSEMBLIES CONSTRUCTED WITH TWO RECEPTACLES ON ONE POST SHALL BE MEASURED FOR PAYMENT UNDER PAY ITEM 2719.1, AS ONE PAY UNIT. 4. MAIL DELIVERY SERVICE SHALL NOT BE INTERRUPTED AND ACCESS TO EACH MAILBOX RECEPTACLE SHALL BE AVAILABLE TO THE UNITED STATES POSTAL SERVICE AND THE RESIDENTS AT ALL TIMES. 5. EXISTING MAILBOXES THAT ARE MOVED BY THE CONTRACTOR SHALL HAVE TEMPORARY SUPPORTS PROVIDED AS REQUIRED FOR CONTINUED DELIVERY AND PICKUP OF MAIL.		

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No.	DATE	REVISION

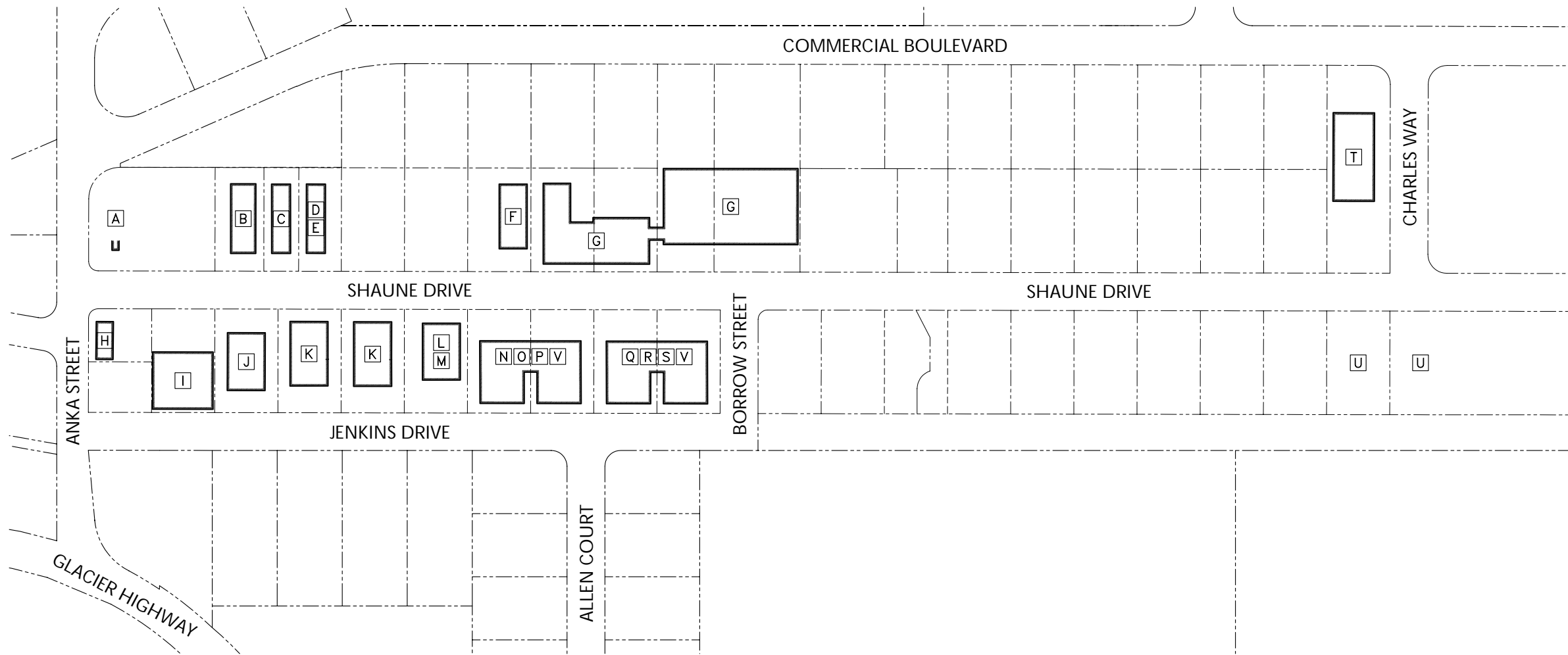


SHAUNE DRIVE PAVEMENT & DRAINAGE IMPROVEMENTS  
CBJ CONTRACT No. BE18-159  
CITY & BOROUGH OF JUNEAU, ALASKA

SUMMARY TABLES

DATE: April 05, 2018  
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SHEET  
C004



TRAFFIC CONTROL NOTES

1. WITH THE EXCEPTION OF PAVING OPERATIONS, THE CONTRACTOR SHALL MAINTAIN ONE WAY TRAFFIC FLOW TO AND THROUGH SHAUNE DRIVE AND CHARLES WAY AT ALL TIMES IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. THE DRIVING LANE SHALL HAVE A MINIMUM WIDTH OF 10 FEET. A MAXIMUM 10 MINUTE TRAFFIC STOPPAGE WILL BE ALLOWED.
2. THE CONTRACTOR SHALL NOTIFY EACH PROPERTY AND BUSINESS OWNER OF BUSINESS ACCESS CLOSURES 48 HOURS PRECEDING THE DAY THE ACCESS IS TO BE CLOSED TO VEHICULAR TRAFFIC. THE PROPERTY AND BUSINESS OWNER SHALL BE INFORMED OF THE PERIOD OF TIME THE CLOSURE WILL BE IN EFFECT. NO BUSINESS ACCESS CLOSURES WILL BE PERMITTED UNTIL THIS REQUIREMENT HAS BEEN MET TO THE SATISFACTION OF THE ENGINEER.
3. ALL TRAFFIC TO BE CONTROLLED PER REQUIREMENTS OF THE ALASKA TRAFFIC MANUAL (U.S. DEPARTMENT OF TRANSPORTATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND THE ALASKA SUPPLEMENT).
4. ALL DETOURS SHALL BE AS APPROVED BY THE ENGINEER.
5. ROAD CLOSURES WILL BE PERMITTED ONLY AS APPROVED BY THE ENGINEER.
6. PROVIDE ACCESS FOR EMERGENCY AND SERVICE VEHICLES AT ALL TIMES.
7. PEDESTRIAN ACCESS SHALL BE AVAILABLE ALONG AT LEAST ONE SIDE OF SHAUNE DRIVE AND CHARLES WAY AT ALL TIMES TO ALLOW ACCESS TO THE BUSINESSES. THE PEDESTRIAN PATHWAY SHALL BE CLEARLY MARKED AND SHALL SATISFY THE REQUIREMENTS AS DESCRIBED IN THE SPECIAL PROVISIONS.

8. THE FOLLOWING BUSINESSES USE SHAUNE DRIVE AND CHARLES WAY TO ACCESS THEIR BUSINESS:

- [A] THE GRIND COFFEE CO. (209-5598)  
6:00 AM - 6:00 PM MON-FRI  
6:00 AM - 5:30 PM SUN
- [B] ALASKAN OUTDOOR WAREHOUSE (586-8201)  
8:00 AM - 6:00 PM MON-FRI  
10:00 AM - 4:00 PM SUN
- [C] DELTA MINI-STORAGE (789-0301)
- [D] TONGASS BUSINESS CENTER (723-9812)  
8:00 AM - 5:00 PM MON-FRI
- [E] REACH INCORPORATED SHREDDING (796-3100)  
8:00 AM - 5:00 PM MON-FRI
- [F] JUNEAU WATER UTILITIES DIVISION (CBJ) (780-6888)  
8:00 AM - 4:30 PM MON-FRI
- [G] ALASKAN BREWING COMPANY (723-3110)  
8:00 AM - 7:00 PM MON-FRI  
11:00 AM - 7:00 PM SAT-SUN
- [H] WRIGHT SERVICES INC (780-5454)  
8:00 AM - 4:00 PM MON-FRI
- [I] ODOM CORPORATION (988-2727)  
8:00 AM - 5:00 PM MON-FRI
- [J] SOUTHEAST FURNITURE WAREHOUSE, INC (780-4872)  
7:00 AM - 7:00 PM MON-SAT  
11:00 AM - 6:00 PM SUN

- [K] GLACIER MINI-STORAGE (780-8600)
- [L] NORTECH (586-6813)  
8:00 AM - 6:00 PM MON-FRI
- [M] LAST FRONTIER CABINETS & MILLWORK (523-4624)  
8:00 AM - 8:00 PM MON-SUN
- [N] NORTHERN REFRIGERATION (523-2700)  
8:00 AM - 4:30 PM MON-FRI
- [O] MMI HYDRAULICS (789-8085)  
7:30 AM - 5:00 PM MON-FRI
- [P] GET GROWING (957-6785)  
10:00 AM - 6:00 PM MON-FRI  
11:00 AM - 4:00 PM SAT-SUN
- [Q] ICY STRAITS LUMBER & MILLING (945-3243)
- [R] PEAK CONSTRUCTION (321-7792)  
7:00 AM - 6:00 PM MON-SUN
- [S] FUSION DANCE (321-3250)
- [T] CONSTRUCTION MACHINERY INDUSTRIAL (780-4030)
- [U] CHEESEMAN CONSTRUCTION, LLC (321-7559)
- [V] RESIDENTIAL APARTMENTS, BUILDING MANAGER (780-6830)

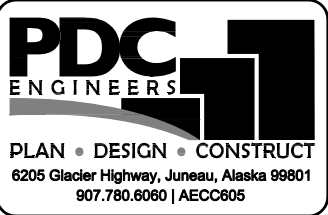
PROJECT PHASING PLAN

PHASE	COMPLETION DATE	REQUIREMENTS
I	JUNE 30, 2018	STA "S"10+42 TO "S"15+50, COMPLETE ALL UNDERGROUND STORM DRAIN PIPE, STORM STRUCTURES, EARTHWORK THROUGH 2" MINUS SHOT ROCK AND VALLEY GUTTER.
II	AUGUST 15, 2018	PHASE I WORK MUST BE COMPLETED PRIOR TO BEGINNING REST OF WORK ON SHAUNE DRIVE. ALL WORK SHALL BE COMPLETE FROM STA "S"10+42 TO "S"20+90.12, INCLUDING ASPHALT PAVEMENT FOR BASE BID AND ADDITIVE ALTERNATE No. 1 IF AWARDED.
III	SEPTEMBER 30, 2018	NO WORK MAY BEGIN ON CHARLES WAY UNTIL ALL WORK IS COMPLETED ON SHAUNE DRIVE. ALL WORK SHALL BE COMPLETE FROM STA "C"10+25 TO "C"14+26.

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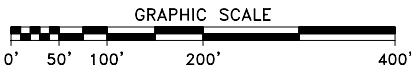
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DRAWN KAP  
CHECK JMP  
APPROVED JMP

No.	DATE	REVISION



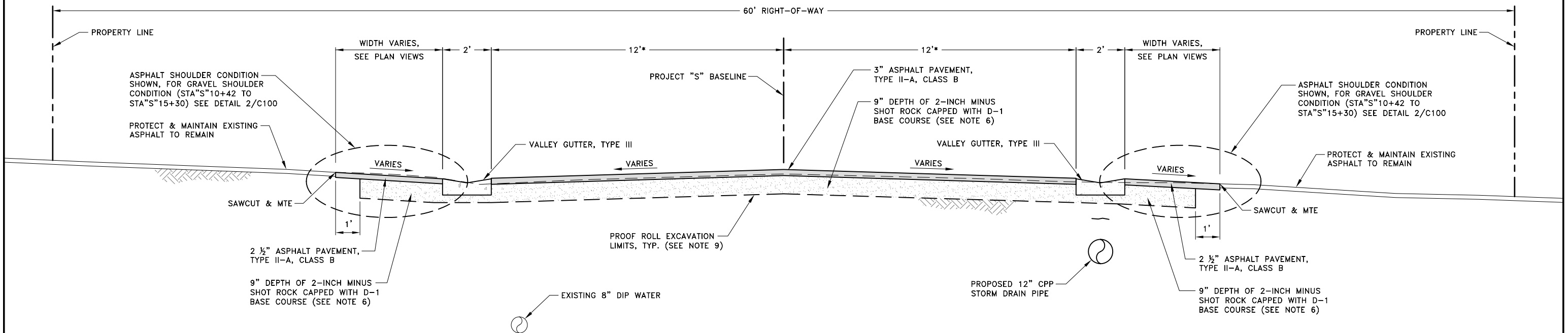
**SHAUNE DRIVE PAVEMENT & DRAINAGE IMPROVEMENTS**  
**CBJ CONTRACT No. BE18-159**  
CITY & BOROUGH OF JUNEAU, ALASKA

TRAFFIC CONTROL MAP & PROJECT PHASING



DATE: April 05, 2018  
PDC No. 17379JN  
SHEET **C005**

PA 2017\17379JN-CBJ-Shaune.DWG 17379JN-wk.dwg PLOT: April 05, 2018 dt: 3:34pm



### TYPICAL SECTION NOTES

- SIDE SLOPES, WIDTHS AND GRADES MAY VARY AT SOME LOCATIONS, SEE GRADING SHEETS C400-C402 FOR ADDITIONAL INFORMATION.
- UNDERGROUND SEWER, WATER AND STORM SEWER SERVICES NOT SHOWN FOR CLARITY. SEE PLAN VIEW SHEETS FOR APPROXIMATE LOCATIONS.
- ADDITIONAL EXCAVATION BELOW THE NEATLINE SUBCUT LEVEL MAY BE REQUIRED BY THE ENGINEER IF ORGANIC OR OTHER UNSUITABLE MATERIALS ARE FOUND AT OR NEAR THE PLANNED SUBCUT LEVEL. USABLE MATERIAL FROM EXCAVATION SHALL BE USED TO BACKFILL THE ADDITIONAL AREAS OF EXCAVATION. BACKFILLING WITH USABLE MATERIAL FROM EXCAVATION WILL BE CONSIDERED INCIDENTAL TO OTHER WORK.
- REMOVE AND DISPOSE OF EXISTING SANITARY SEWER, STORM AND WATER PIPES THAT ARE BEING REPLACED, UNLESS NOTED OTHERWISE.
- DRIVEWAYS DISTURBED DURING CONSTRUCTION SHALL BE RECONSTRUCTED TO EQUAL OR BETTER CONDITION WITH SUBGRADE REPLACED IN LAYERS TO MATCH THOSE REMOVED, EXCEPT:
  - EXISTING ASPHALT PAVED DRIVEWAYS DISTURBED DURING CONSTRUCTION SHALL BE SUBCUT TO 12-INCHES BELOW FINISH GRADE AND REPLACED WITH 9" OF 2-INCH MINUS SHOT ROCK W/ BASE COURSE AND 2-1/2" OF ASPHALT PAVEMENT, TYPE II-A, CLASS B.
  - EXISTING GRAVEL DRIVEWAYS DISTURBED DURING CONSTRUCTION SHALL BE SUBCUT TO 4-INCHES BELOW FINISH GRADE AND REPLACED WITH 4-INCHES OF BASE COURSE, GRADING D-1.
  - ORGANICS, ROOTS, WOOD OR OTHER DELETERIOUS MATERIALS ENCOUNTERED IN THE DRIVEWAYS DURING EXCAVATION OPERATIONS SHALL BE REMOVED AS DIRECTED BY THE ENGINEER AND DISPOSED OF AT AN APPROVED OFFSITE DISPOSAL SITE. BACKFILL VOIDS BELOW THE REQUIRED SUBCUT LAYER WITH USABLE EXCAVATION.
- THE BASE COURSE LAYER SHALL BE 7" TO 8" OF 2-INCH MINUS SHOT ROCK WITH 1" TO 2" TOP LAYER OF BASE COURSE, GRADING D-1 FOR A TOTAL COMPACTED THICKNESS OF 9". THE 2-INCH MINUS SHOT ROCK SHALL BE WELL COMPACTED PRIOR TO PLACING BASE COURSE, GRADING D-1. THIS APPLIES TO ALL TYPICAL SECTIONS FOR THIS PROJECT.
- TOP OF PAVEMENT GRADES GIVEN ON THE PLANS ARE ACTUAL FINISHED PAVEMENT SURFACE ELEVATIONS. TOP OF A.C. PAVEMENT ALONG NEW CONCRETE GUTTERS SHALL BE FINISHED 1/4-INCH ABOVE THE LIP OF GUTTER.
- THE LIMITS OF USABLE MATERIAL AND TOPSOIL OUTSIDE THE STRUCTURAL SECTION WILL VARY IN DISTANCE FROM RIGHT-OF-WAY LINES. PLACE AND GRADE THESE MATERIALS TO PROVIDE A SMOOTH, WELL-DRAINED TRANSITION TO EXISTING GRADES, AS DIRECTED BY THE ENGINEER.
- PROOF ROLLING BOTTOM OF SUBCUT EXCAVATION SHALL BE PERFORMED USING A MINIMUM 10-TON SELF-PROPELLED VIBRATORY COMPACTOR. A MINIMUM OF TWO (2) PASSES (ONE PASS EQUALS DOWN AND BACK) SHALL BE MADE OVER THE SUBCUT SOILS AND AS APPROVED BY THE ENGINEER.

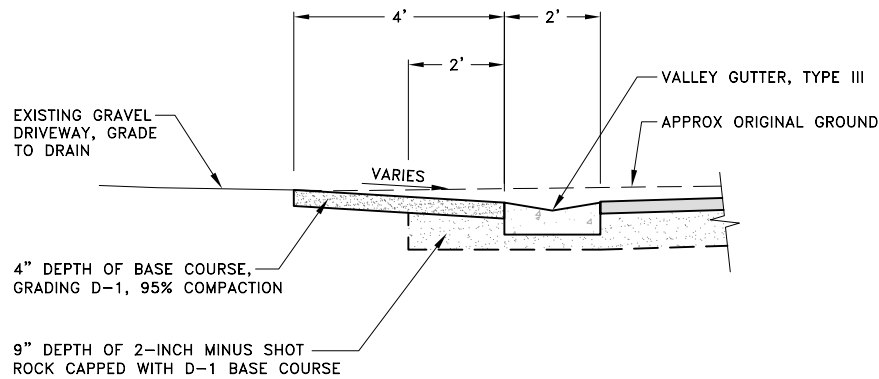
### PAVING SEQUENCE REQUIREMENTS

- LAYDOWN OPERATIONS SHALL BE CONDUCTED IN A MANNER WHICH ENSURES THAT THE MINIMUM TEMPERATURE ALONG THE CENTERLINE EDGE OF THE FIRST PAVED LANE DOES NOT FALL BELOW 200°F BEFORE THE SECOND LANE IS PAVED.
- THE CONTRACTOR SHALL MONITOR THE TEMPERATURE OF THE CENTERLINE EDGE OF THE FIRST PAVED LANE AND MOVE THE LAYDOWN OPERATIONS TO THE SECOND LANE ALLOWING SUFFICIENT TIME FOR THE PAVEMENT OF THE SECOND LANE TO COVER THE CENTERLINE EDGE OF THE FIRST LANE PRIOR TO COOLING TO LESS THAN 200°F.
- SHAUNE DRIVE ROADWAY PAVING OPERATIONS SHALL START AFTER 5:00 PM AND BE COMPLETED PRIOR TO 8:00 AM THE FOLLOWING MORNING.

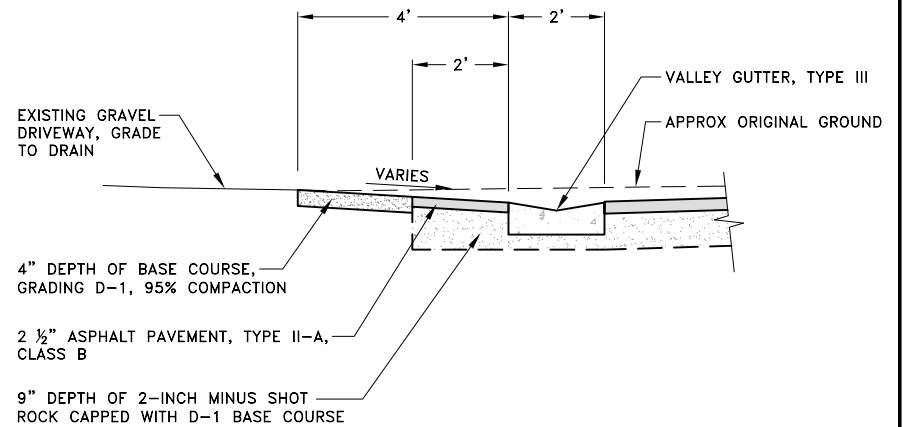
### TYPICAL SECTION - SHAUNE DRIVE STA "S"10+42 TO STA "S"20+90.12

1

N.T.S.  
VIEW LOOKING AHEAD IN STATIONING  
\* WIDTH VARIES AT INTERSECTIONS, SEE SHEET C400 & C401



### BASE BID



### ADDITIVE ALTERNATE

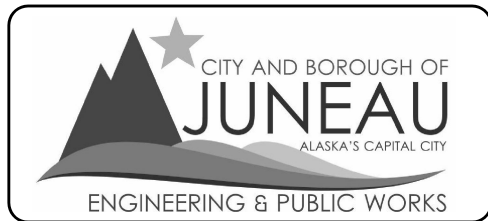
### TYPICAL SECTION - GRAVEL SHOULDER CONDITION STA "S"10+42 TO STA "S"15+30

2

N.T.S.

DESIGN JMP/KAP  
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APPROVED JMP

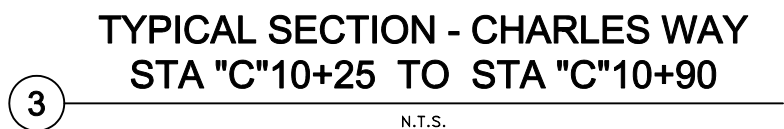
No.	DATE	REVISION



SHAUNE DRIVE PAVEMENT &  
DRAINAGE IMPROVEMENTS  
CBJ CONTRACT No. BE18-159  
CITY & BOROUGH OF JUNEAU, ALASKA

TYPICAL SECTIONS  
SHAUNE DRIVE

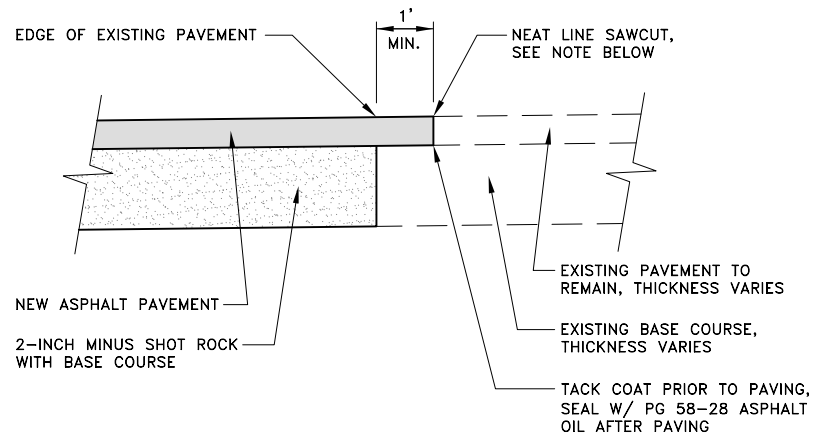
DATE: April 05, 2018  
PDC No. 17379JN  
SHEET C100



DATE: April 05, 2018  
DC No. 17379JN

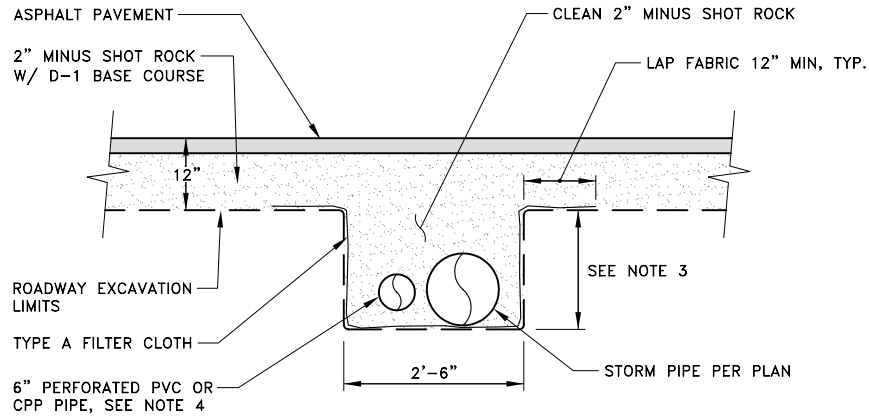
SHEET C101





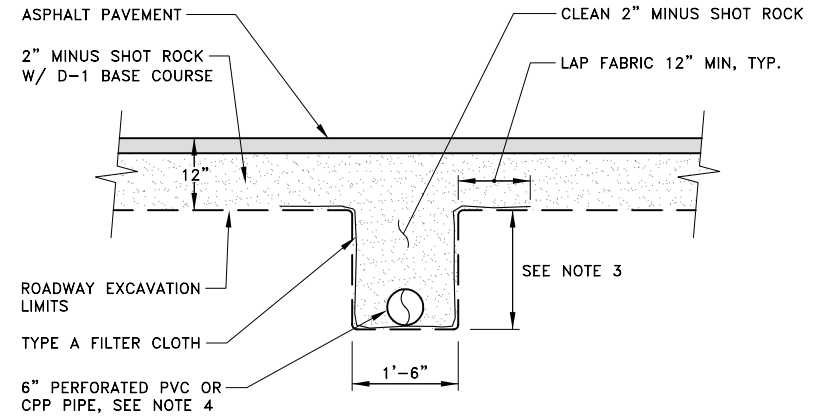
**NOTE:**  
SAWCUT OF EXISTING PAVEMENT SHALL NOT BE  
MADE UNTIL 24 HOURS PRIOR TO FINAL PAVING.

1 **PAVEMENT MATCH JOINT DETAIL**  
N.T.S.



- NOTES:**
1. OUTFALL CONNECTIONS WILL BE INTO CATCH BASINS.
  2. BOTH ENDS OF PIPES SHALL BE CONNECTED IN STORM DRAIN STRUCTURES AND THE FILTER CLOTH FOLDED AND OVERLAPPED TO SEAL END OF DRAINAGE ROCK SECTION.
  3. DEPTH VARIES, SEE PLAN VIEWS.
  4. MINIMUM PIPE SLOPE SHALL BE 1%.

2 **6" PARALLEL UNDERDRAIN DETAIL**  
N.T.S.



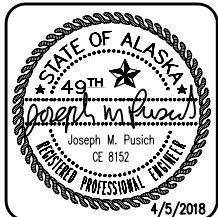
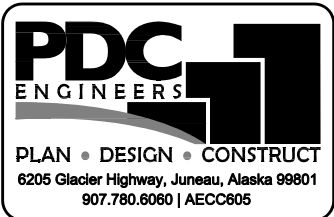
- NOTES:**
1. OUTFALL CONNECTIONS WILL BE INTO CATCH BASINS.
  2. UPSTREAM END OF PIPES SHALL BE CAPPED AND THE FILTER CLOTH FOLDED AND OVERLAPPED TO SEAL END OF DRAINAGE ROCK SECTION.
  3. DEPTH VARIES, SEE PLAN VIEWS.
  4. MINIMUM PIPE SLOPE SHALL BE 1%.

3 **6" UNDERDRAIN DETAIL**  
N.T.S.

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APPROVED	JMP

No.	DATE	REVISION



**SHAUNE DRIVE PAVEMENT & DRAINAGE IMPROVEMENTS**  
**CBJ CONTRACT No. BE18-159**  
CITY & BOROUGH OF JUNEAU, ALASKA

**CONSTRUCTION DETAILS**

DATE: April 05, 2018  
PDC No. 17379JN  
SHEET **C102**

CORROSION PROTECTION SPECIFICATIONS AND NOTES:

ANODES

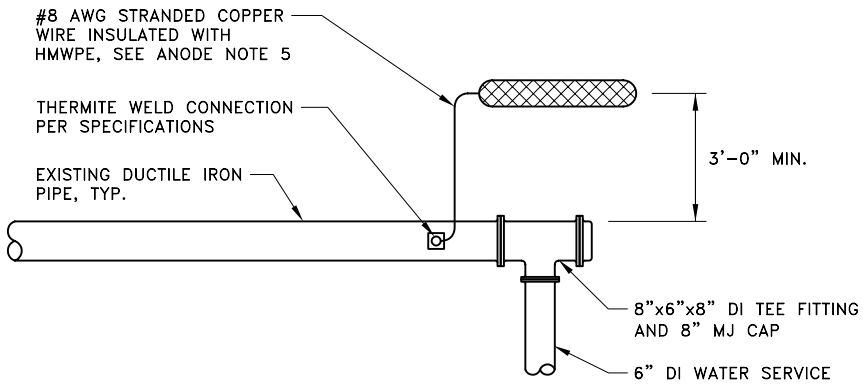
- 1. ANODES SHALL BE 18# BARE WEIGHT ZINC WITH PREPACKAGED ANODE BACKFILL.
- 2. ACCEPTABLE ANODE MODELS ARE:
  - a. MODEL NO. ZUR-18 FROM FARWEST INDUSTRIES
  - b. MODEL S18 FROM MESA PRODUCTS
  - c. APPROVED EQUAL
- 3. INSTALL TYPE, SIZE AND NUMBER OF ANODES SPECIFIED.
- 4. INSTALL 2 ANODES TO ALL CONNECTIONS TO EXISTING CAST IRON OR DUCTILE IRON PIPE 12-INCH DIAMETER AND LARGER.
- 5. CONDUCTOR WIRE SHALL BE A MINIMUM SIZE OF #8 AWG, INSULATED WITH HMWPE AND SHALL BE A MINIMUM OF 10- FEET LONG.
- 6. PREPACKAGED ANODE SHALL BE SATURATED WITH WATER PRIOR TO BACKFILL.
- 7. ANODES SHALL BE PLACED IN NATIVE EARTH BACKFILL. DO NOT PLACE IN PIPE BEDDING MATERIAL.

THERMITE (EXOTHERMIC) WELDING

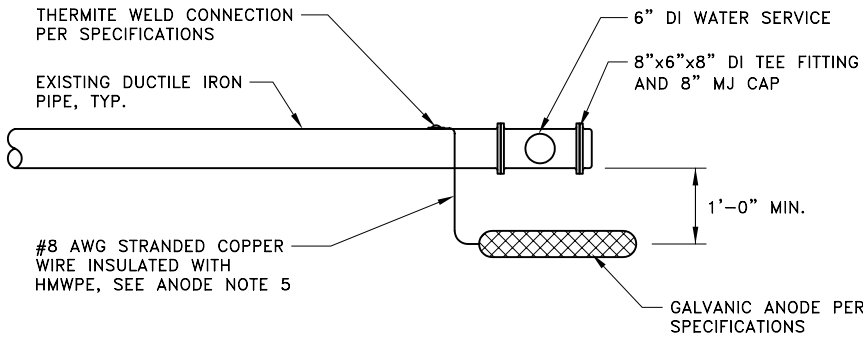
- 1. THERMITE WELD MATERIALS SHALL BE DESIGNED FOR CONNECTION OF COPPER TO DUCTILE IRON AND CAST IRON SURFACES AND SHALL BE INSTALLED PER MANUFACTURERS INSTRUCTIONS.
- 2. ACCEPTABLE MANUFACTURERS OF THERMITE WELD PRODUCTS ARE:
  - a. CADWELD BY ERICO PRODUCTS INC.
  - b. THERMOWELD BY CONTINENTAL INDUSTRIES INC.
  - c. APPROVED EQUAL
- 3. A 2-INCH MINUS SQUARE AREA IN THE PIPE SURFACE SHALL BE GROUND CLEAN PER MANUFACTURERS RECOMMENDATIONS PRIOR TO THERMITE WELDING.
- 4. WIRE ENDS SHALL HAVE PROPER ADAPTER SLEEVES TO ENSURE PROPER BOND. #8 AWG SHALL HAVE ADAPTER SLEEVES SPECIFIED BY THERMITE WELD MANUFACTURER. FIELD INSTALLED SLEEVES SHALL HAVE WIRE CONDUCTOR EXTEND 1/4-INCH BEYOND ENDS OF SLEEVE.
- 5. WIRE CONNECTION SHALL BE TESTED FOR INTEGRITY PRIOR TO COATING.
- 6. CONTINUITY STRAPS SHALL BE #2 AWG COPPER STRANDED WIRE WITH THW INSULATION AND SHALL BE ATTACHED TO THE PIPE BY THERMITE WELDING AND COATED AND SEALED AS DESCRIBED BELOW.

COATING AND SEALING

- 1. ALL THERMITE WELDS SHALL BE PROTECTED AND SEALED BY:
  - a. PREFABRICATED THERMITE WELD CAPS, SIZED ACCORDING TO WIRE SIZE, MINIMUM DIMENSIONS OF 4-INCH BY 4-INCH FILLED WITH ELASTOMERIC MASTIC COATING OR,
  - b. HEAT SHRINK SLEEVE PIPE ENCASEMENT AFTER COATING THERMITE WELD WITH ELASTOMERIC MASTIC COATING – HEAT SHRINK SLEEVE SHALL BE CANUSA AQUA OR APPROVED EQUAL.
- 2. ALL PIPE SURFACE COATING DAMAGED BEYOND THE WELD CAPS OR HEAT SHRINK SHALL BE COATED WITH PROTAL 7125 FROM DENSO NORTH AMERICA OR APPROVED EQUAL.



PLAN



ELEVATION

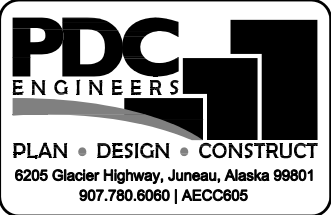
GALVANIC ANODE INSTALLATION FOR EXISTING METALLIC PIPE CONNECTIONS OR LEAK REPAIR LOCATIONS DETAIL

1 N.T.S.

P:\2017\17379JN-SHAUNE.DWG SHAUNE.DWG 17379JN\_wk.dwg PLOT: April 05, 2018 at: 3:35pm

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No.	DATE	REVISION



SHAUNE DRIVE PAVEMENT & DRAINAGE IMPROVEMENTS  
CBJ CONTRACT No. BE18-159  
CITY & BOROUGH OF JUNEAU, ALASKA

CORROSION PROTECTION  
DETAILS

DATE: April 05, 2018
PDC No. 17379JN
SHEET C103

DIAL BEFORE YOU DIG!  
**586-1333**  
U/G POWER, TELEPHONE & T.V.  
SHOWN ON THIS DRAWING INDICATE  
EXISTENCE ONLY AND DO NOT  
SUBSTITUTE FOR FIELD LOCATES  
FOR ACS LOCATES DIAL THE  
811 ALASKA DIGLINE

EXIST. SDMH (CB1)	
GRATE EL=	36.20
E 12" (IN) IE=	32.99
N 18" (OUT) IE=	32.92

EXIST. CB (CB2)	
GRATE EL=	36.18
S 12" (IN) IE=	33.38
E 12" (IN) IE=	33.53
W 12" (OUT) IE=	33.27

STORM DRAIN PIPE SUMMARY				
PIPE	DIA.	LENGTH	TYPE	SLOPE
P-1	12"	204'	CPP	0.50%
P-2	12"	26'	CPP	0.50%
P-3	12"	286'	CPP	0.60%
P-7	12"	13'	CPP	2.00%

NOTE: PIPE LENGTHS AND SLOPES ARE  
MEASURED AND CALCULATED FROM CENTER  
TO CENTER OF STRUCTURES, UON.

S-2	CB TYPE-IV
STA"S"12+50.00,	13.00 LT
FRAME FL EL=	37.88
P-2 IE=	35.00
P-7 IE=	35.10
6" UD IE=	35.62
SUMP=	16" MIN.

S-8	CB TYPE-III*
STA"S"12+50.00,	26.00 LT
FRAME EL=	37.84
P-7 IE=	35.36
SUMP=	12" MIN.

\* W/ CONC AREA DRAIN

S-1	CB TYPE-IV
STA"S"12+50.00,	13.00 RT
FRAME FL EL=	37.88
P-1 IE=	34.77
P-2 IE=	34.87
P-3 IE=	34.87
6" UD IE=	35.27
SUMP=	16" MIN.

EXIST. CB (CB3)	
GRATE EL=	36.46
N 12" (OUT) IE=	33.65

EXIST. SSMH (—)	
STA"S"10+19.78,	17.37 RT
EXIST. LID EL=	36.18
N 8" (IN) IE=	26.92
SE 8" (OUT) IE=	26.85

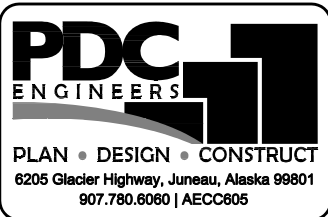
EXIST. SSMH (O15.1)	
STA"S"10+31.58,	28.81 RT
EXIST. LID EL=	36.75
NW 8" (IN) IE=	22.99
E 8" (IN) IE=	23.86
SW 8" (OUT) IE=	22.71

#### NOTES:

1. STORM DRAIN STRUCTURE STATION AND OFFSET IS GIVEN TO THE CENTER OF THE STRUCTURE. FRAME ELEVATION IS GIVEN TO THE FLOW LINE OF THE FRAME & GRATE.
2. PROVIDE ALL ADAPTERS, ELBOWS AND OTHER FITTINGS NECESSARY TO CONNECT TO DISSIMILAR PIPE SIZES, MATERIALS AND DEPTHS.
3. INSULATE WATER LINE AT STORM DRAIN CROSSING.
4. SAWCUT, REMOVE AND DISPOSE OF EXISTING CONCRETE SIDEWALK. REPLACE WITH NEW 4" BASE COURSE GRADING D-1 AND 4" THICK CONCRETE SIDEWALK.
5. SAWCUT, REMOVE AND REPLACE EXISTING CONCRETE AREA DRAIN PER CBJ STANDARD DRAWINGS, REUSE EXISTING FRAME AND GRATE.

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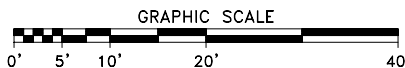
No.	DATE	REVISION



**SHAUNE DRIVE PAVEMENT &  
DRAINAGE IMPROVEMENTS**  
CBJ CONTRACT No. BE18-159

CITY & BOROUGH OF JUNEAU, ALASKA

**PLAN VIEW - SHAUNE DRIVE**  
STA "S" 10+00 to STA "S" 12+70



DATE: April 05, 2018  
PDC No. 17379JN

SHEET  
**C200**

P:\2017\17379JN-CBJ-Shaune-PA-C17379JN-wk.dwg PLOT: April 05, 2018 dt: 3:35pm

MATCH LINE STA "S" 12+70, SHEET C201

PA 2017\17379\JN-CBJ-Shaune.dwg PLOT: April 05, 2018 dt: 3:35pm

MATCH LINE STA "S" 12+70, SHEET C200

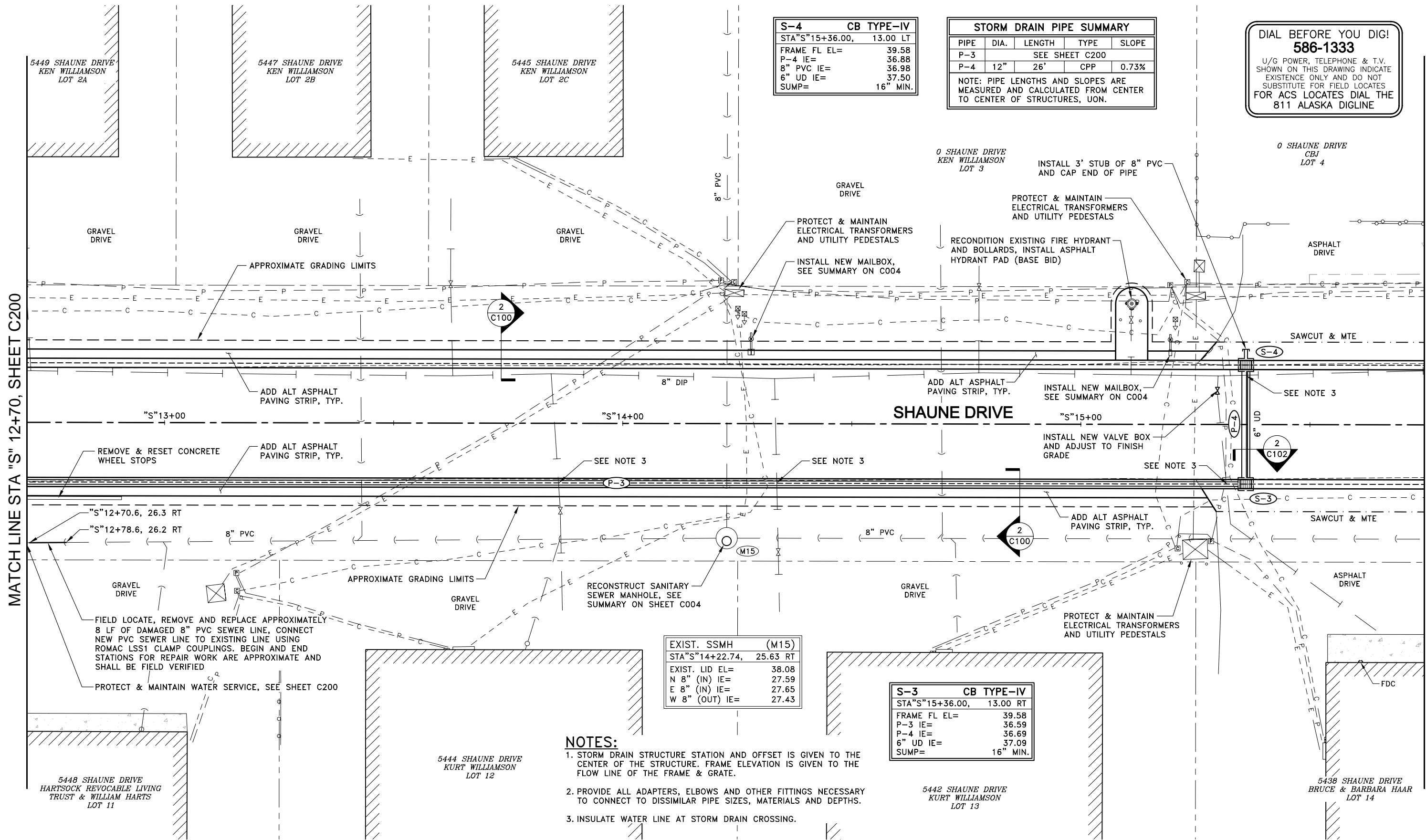
MATCH LINE STA "S" 15+75, SHEET C202

S-4 CB TYPE-IV	
STA "S" 15+36.00,	13.00 LT
FRAME FL EL=	39.58
P-4 IE=	36.88
8" PVC IE=	36.98
6" UD IE=	37.50
SUMP=	16" MIN.

STORM DRAIN PIPE SUMMARY				
PIPE	DIA.	LENGTH	TYPE	SLOPE
P-3		SEE SHEET C200		
P-4	12"	26'	CPP	0.73%

NOTE: PIPE LENGTHS AND SLOPES ARE MEASURED AND CALCULATED FROM CENTER TO CENTER OF STRUCTURES, UON.

DIAL BEFORE YOU DIG!  
**586-1333**  
U/G POWER, TELEPHONE & T.V. SHOWN ON THIS DRAWING INDICATE EXISTENCE ONLY AND DO NOT SUBSTITUTE FOR FIELD LOCATES FOR ACS LOCATES DIAL THE 811 ALASKA DIGLINE



EXIST. SSMH (M15)	
STA "S" 14+22.74,	25.63 RT
EXIST. LID EL=	38.08
N 8" (IN) IE=	27.59
E 8" (IN) IE=	27.65
W 8" (OUT) IE=	27.43

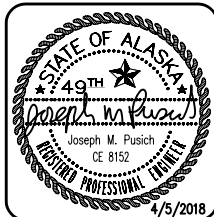
S-3 CB TYPE-IV	
STA "S" 15+36.00,	13.00 RT
FRAME FL EL=	39.58
P-3 IE=	36.59
P-4 IE=	36.69
6" UD IE=	37.09
SUMP=	16" MIN.

NOTES:

1. STORM DRAIN STRUCTURE STATION AND OFFSET IS GIVEN TO THE CENTER OF THE STRUCTURE. FRAME ELEVATION IS GIVEN TO THE FLOW LINE OF THE FRAME & GRATE.
2. PROVIDE ALL ADAPTERS, ELBOWS AND OTHER FITTINGS NECESSARY TO CONNECT TO DISSIMILAR PIPE SIZES, MATERIALS AND DEPTHS.
3. INSULATE WATER LINE AT STORM DRAIN CROSSING.

DESIGN JMP/KAP  
DRAWN KAP  
CHECK JMP  
APPROVED JMP

No.	DATE	REVISION



**SHAUNE DRIVE PAVEMENT & DRAINAGE IMPROVEMENTS**  
CBJ CONTRACT No. BE18-159  
CITY & BOROUGH OF JUNEAU, ALASKA

**PLAN VIEW - SHAUNE DRIVE**  
STA "S" 12+70 to STA "S" 15+75  
GRAPHIC SCALE  
0' 5' 10' 20' 40'

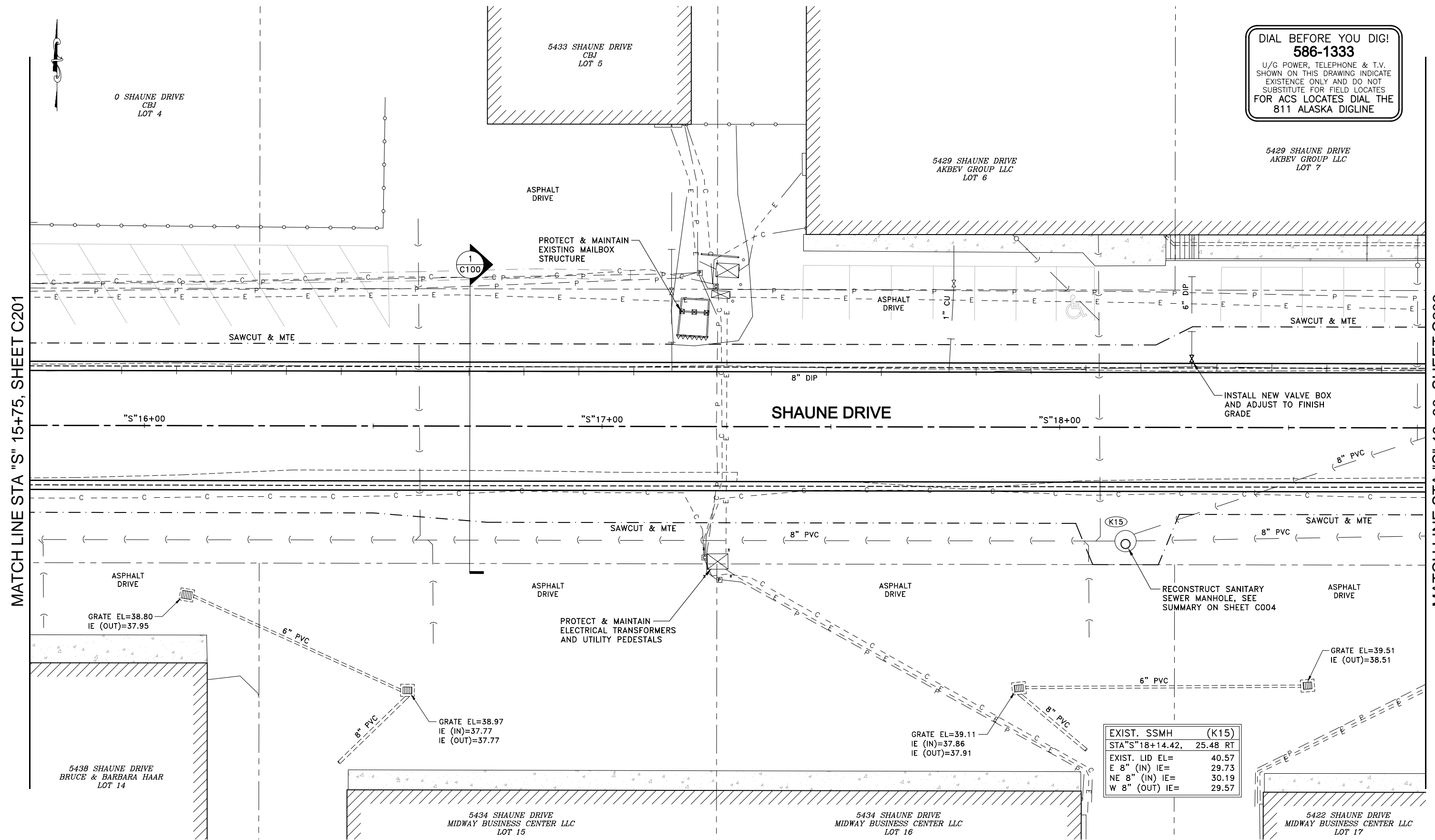
DATE: April 05, 2018  
PDC No. 17379JN  
SHEET **C201**

PA 2017\17379\IN-CBJ-Shaune.DWG 17379\IN-wk.dwg PLOT: April 05, 2018 dt: 3:35pm

MATCH LINE STA "S" 15+75, SHEET C201

MATCH LINE STA "S" 18+80, SHEET C203

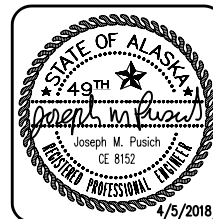
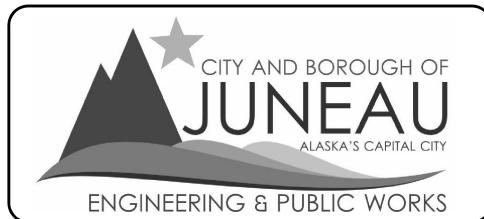
DIAL BEFORE YOU DIG!  
**586-1333**  
U/G POWER, TELEPHONE & T.V.  
SHOWN ON THIS DRAWING INDICATE  
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SUBSTITUTE FOR FIELD LOCATES  
FOR ACS LOCATES DIAL THE  
811 ALASKA DIGLINE



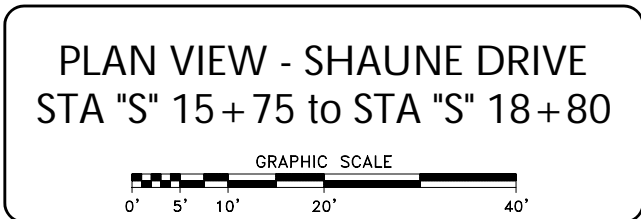
EXIST. SSMH (K15)	
STA "S" 18+14.42,	25.48 RT
EXIST. LID EL=	40.57
E 8" (IN) IE=	29.73
NE 8" (IN) IE=	30.19
W 8" (OUT) IE=	29.57

DESIGN JMP/KAP  
DRAWN KAP  
CHECK JMP  
APPROVED JMP

No.	DATE	REVISION



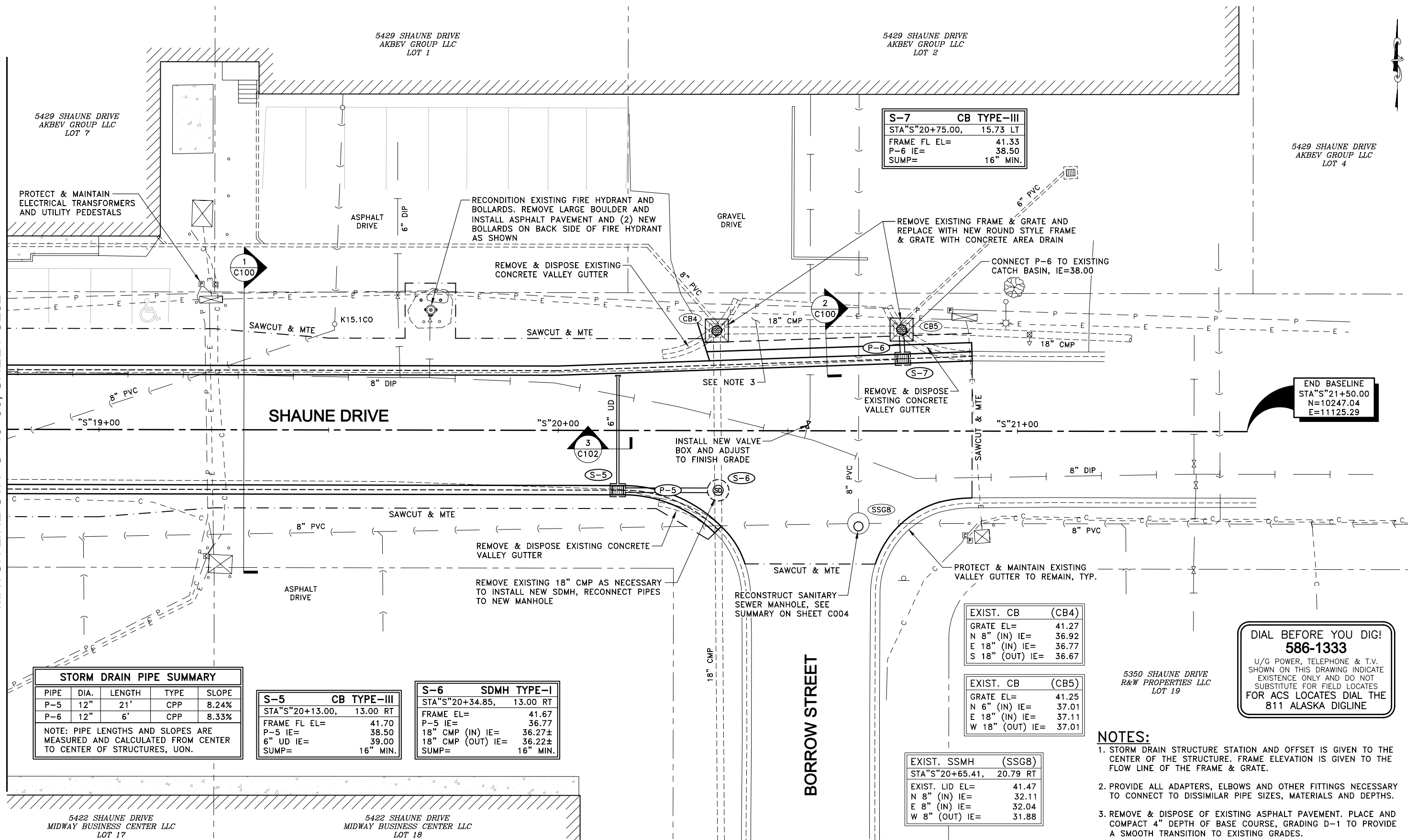
**SHAUNE DRIVE PAVEMENT & DRAINAGE IMPROVEMENTS**  
**CBJ CONTRACT No. BE18-159**  
CITY & BOROUGH OF JUNEAU, ALASKA



DATE: April 05, 2018  
PDC No. 17379JN  
SHEET **C202**

PA 2017\17379\IN-CBJ-Shaune.dwg PLOT: April 05, 2018 dt: 3:35pm

MATCHLINE STA "S" 18+80, SHEET C202



STORM DRAIN PIPE SUMMARY				
PIPE	DIA.	LENGTH	TYPE	SLOPE
P-5	12"	21'	CPP	8.24%
P-6	12"	6'	CPP	8.33%

NOTE: PIPE LENGTHS AND SLOPES ARE MEASURED AND CALCULATED FROM CENTER TO CENTER OF STRUCTURES, UON.

S-5	CB TYPE-III
STA"S"20+13.00,	13.00 RT
FRAME FL EL=	41.70
P-5 IE=	38.50
6" UD IE=	39.00
SUMP=	16" MIN.

S-6	SDMH TYPE-I
STA"S"20+34.85,	13.00 RT
FRAME EL=	41.67
P-5 IE=	36.77
18" CMP (IN) IE=	36.27±
18" CMP (OUT) IE=	36.22±
SUMP=	16" MIN.

S-7	CB TYPE-III
STA"S"20+75.00,	15.73 LT
FRAME FL EL=	41.33
P-6 IE=	38.50
SUMP=	16" MIN.

EXIST. CB	(CB4)
GRATE EL=	41.27
N 8" (IN) IE=	36.92
E 18" (IN) IE=	36.77
S 18" (OUT) IE=	36.67

EXIST. CB	(CB5)
GRATE EL=	41.25
N 6" (IN) IE=	37.01
E 18" (IN) IE=	37.11
W 18" (OUT) IE=	37.01

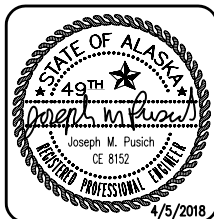
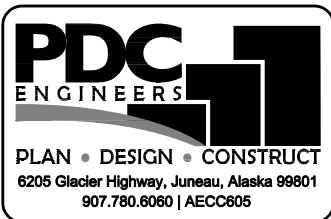
EXIST. SSMH	(SSG8)
STA"S"20+65.41,	20.79 RT
EXIST. LID EL=	41.47
N 8" (IN) IE=	32.11
E 8" (IN) IE=	32.04
W 8" (OUT) IE=	31.88

#### NOTES:

1. STORM DRAIN STRUCTURE STATION AND OFFSET IS GIVEN TO THE CENTER OF THE STRUCTURE. FRAME ELEVATION IS GIVEN TO THE FLOW LINE OF THE FRAME & GRATE.
2. PROVIDE ALL ADAPTERS, ELBOWS AND OTHER FITTINGS NECESSARY TO CONNECT TO DISSIMILAR PIPE SIZES, MATERIALS AND DEPTHS.
3. REMOVE & DISPOSE OF EXISTING ASPHALT PAVEMENT. PLACE AND COMPACT 4" DEPTH OF BASE COURSE, GRADING D-1 TO PROVIDE A SMOOTH TRANSITION TO EXISTING GRADES.

DESIGN JMP/KAP  
DRAWN KAP  
CHECK JMP  
APPROVED JMP

No.	DATE	REVISION



**SHAUNE DRIVE PAVEMENT & DRAINAGE IMPROVEMENTS**  
**CBJ CONTRACT No. BE18-159**  
CITY & BOROUGH OF JUNEAU, ALASKA

**PLAN VIEW - SHAUNE DRIVE**  
**STA "S" 18+80 to STA "S" 21+50**  
GRAPHIC SCALE  
0' 5' 10' 20' 40'

DATE: April 05, 2018  
PDC No. 17379JN  
SHEET **C203**

- NOTES:**
1. PROVIDE ALL ADAPTERS, ELBOWS AND OTHER FITTINGS NECESSARY TO CONNECT TO DISSIMILAR PIPE SIZES, MATERIALS AND DEPTHS.
  2. REMOVE & DISPOSE OF EXISTING 8" CAP, INSTALL NEW 8"x6"x8" MJ TEE FITTING AND 8" MJ CAP.
  3. INSTALL NEW VALVE BOXES AND ADJUST TO FINISH GRADE, INSTALL ANODE.
  4. LIMITS OF OVER-EXCAVATION AND 24" DEPTH SHOT ROCK BORROW PLACEMENT.
  5. INSTALL CONCRETE HEADWALL WITH TRASH RACK, STA "C"10+80.9, 33.1' RT, P-8 INVERT ELEVATION = 40.59'.

5314 SHAUNE DRIVE  
GENE R. CHEESEMANS  
SSG III, LOT 3B

EXIST. CB	(CB6)
GRATE EL=	43.25
N 24" (IN) IE=	39.71
E 18" (IN) IE=	40.00
S 24" (OUT) IE=	39.72

EXIST. CB	(CB7)
GRATE EL=	43.42
N 24" (IN) IE=	-
E 18" (IN) IE=	39.97
S 24" (OUT) IE=	40.06

EXIST. CB	(CB9)
GRATE EL=	44.77
N 24" (IN) IE=	40.86
S 24" (OUT) IE=	40.73

5302 COMMERCIAL BLVD  
GGATS LLC  
WILLIAMS LOT 2A

TYPE-I CURB & GUTTER  
REMOVAL & REPLACEMENT  
LIMITS, SEE SHEET C402

PROTECT & MAINTAIN  
CONCRETE DUMPSTER  
SLAB

GRAVEL  
DRIVE

CHARLES WAY

EXIST. SSMH	(SSG11)
STA "C"10+30.21, 21.10 RT	
EXIST. LID EL=	44.27
W 8" (OUT) IE=	36.34

5230 SHAUNE DRIVE  
GENE R. CHEESEMANS  
SSG IV, TRACT F

STORM DRAIN PIPE SUMMARY				
PIPE	DIA.	LENGTH	TYPE	SLOPE
P-8	18"	62'	CPP	1.00%
P-9	24"	45'	CPP	0.78%

NOTE: PIPE LENGTHS AND SLOPES ARE MEASURED AND CALCULATED FROM CENTER TO CENTER OF STRUCTURES, UON.

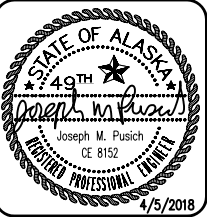
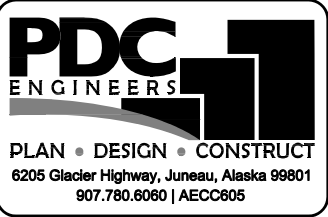
5220 COMMERCIAL BLVD  
GEOFFREY & MARCELLE LARSON  
SSG IV, TRACT B

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FOR ACS LOCATES DIAL THE  
811 ALASKA DIGLINE

EXIST. CB	(CB8)
GRATE EL=	43.86
W 18" (OUT) IE=	40.58

DESIGN JMP/KAP  
DRAWN KAP  
CHECK JMP  
APPROVED JMP

No.	DATE	REVISION



**SHAUNE DRIVE PAVEMENT & DRAINAGE IMPROVEMENTS**  
**CBJ CONTRACT No. BE18-159**  
CITY & BOROUGH OF JUNEAU, ALASKA

**PLAN VIEW - CHARLES WAY**  
**STA "C" 10+00 to STA "C" 12+35**  
GRAPHIC SCALE  
0' 5' 10' 20' 40'

DATE: April 05, 2018  
PDC No. 17379JN  
SHEET **C204**

PA:2017\17379\IN-CBJ-Shaune.DWG 17379\IN-wk.dwg PLOT: April 05, 2018 dt: 3:35pm

MATCH LINE STA "C" 12+35, SHEET C204

5302 COMMERCIAL BLVD  
GGATS LLC  
WILLIAMS LOT 2A

EXIST. CB	(CB10)
GRATE EL=	46.42
NE 24" (IN) IE=	42.63
S 24" (OUT) IE=	42.58

EXIST. CB	(CB13)
GRATE EL=	45.73
E 18" (IN) IE=	42.77
SW 24" (OUT) IE=	42.71

PROTECT & MAINTAIN  
EXISTING LANDSCAPING,  
TYP.

ASPHALT  
DRIVE

PROTECT & MAINTAIN  
EXISTING LANDSCAPING,  
TYP.

ASPHALT  
DRIVE

24" CPP

CB10

CHARLES WAY

"C" 13+00

8" DIP

2  
C101

EXISTING LOG BARRIERS  
AND CONCRETE BLOCKS  
TO REMAIN, TYP.

INSTALL NEW VALVE BOX  
AND ADJUST TO FINISH  
GRADE

PROTECT & MAINTAIN CURB  
& GUTTER TO REMAIN, TYP.

5220 COMMERCIAL BLVD  
GEOFFREY & MARCELLE LARSON  
SSG IV, TRACT B

INSTALL NEW STOP &  
STREET NAME SIGNS,  
SEE SUMMARY ON  
SHEET C004

24" CPP

"C" 14+00

18" CMP

CB13

PROTECT & MAINTAIN  
EXISTING CATCH BASIN

SAWCUT & MTE

8" PVC

18" CMP

24" CMP

COSTCO

END BASELINE  
STA "C" 14+75.00  
N=10669.35  
E=12091.18

PROTECT & MAINTAIN  
ELECTRICAL TRANSFORMERS  
AND UTILITY PEDESTALS

PROTECT & MAINTAIN  
EXISTING CATCH BASIN

INSTALL NEW 6" PVC  
SEWER SERVICE

REMOVE & REPLACE CURB, GUTTER  
AND SIDEWALK FOR SEWER SERVICE  
INSTALLATION

EXIST. CB	(CB12)
GRATE EL=	45.94
W 18" (OUT) IE=	43.01

EXIST. CB	(CB11)
GRATE EL=	47.41
E 24" (IN) IE=	43.62
SW 24" (OUT) IE=	43.49

RECONSTRUCT SANITARY SEWER MANHOLE,  
SEE SUMMARY ON SHEET C004

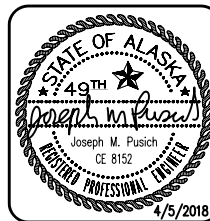
CONNECT NEW SEWER SERVICE TO  
EXISTING 8" STUB, SEE NOTE 1

EXIST. SSMH	(SSG6)
STA "C" 14+18.70,	20.93 RT
EXIST. LID EL=	46.10
E 8" (IN) IE=	42.77
S 8" (IN) IE=	42.39
W 8" (OUT) IE=	42.04

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FOR ACS LOCATES DIAL THE  
811 ALASKA DIGLINE

DESIGN JMP/KAP  
DRAWN KAP  
CHECK JMP  
APPROVED JMP

No.	DATE	REVISION



SHAUNE DRIVE PAVEMENT &  
DRAINAGE IMPROVEMENTS  
CBJ CONTRACT No. BE18-159  
CITY & BOROUGH OF JUNEAU, ALASKA

PLAN VIEW - CHARLES WAY  
STA "C" 12+35 to STA "C" 14+75  
GRAPHIC SCALE  
0' 5' 10' 20' 40'

DATE: April 05, 2018  
PDC No. 17379JN  
SHEET C205

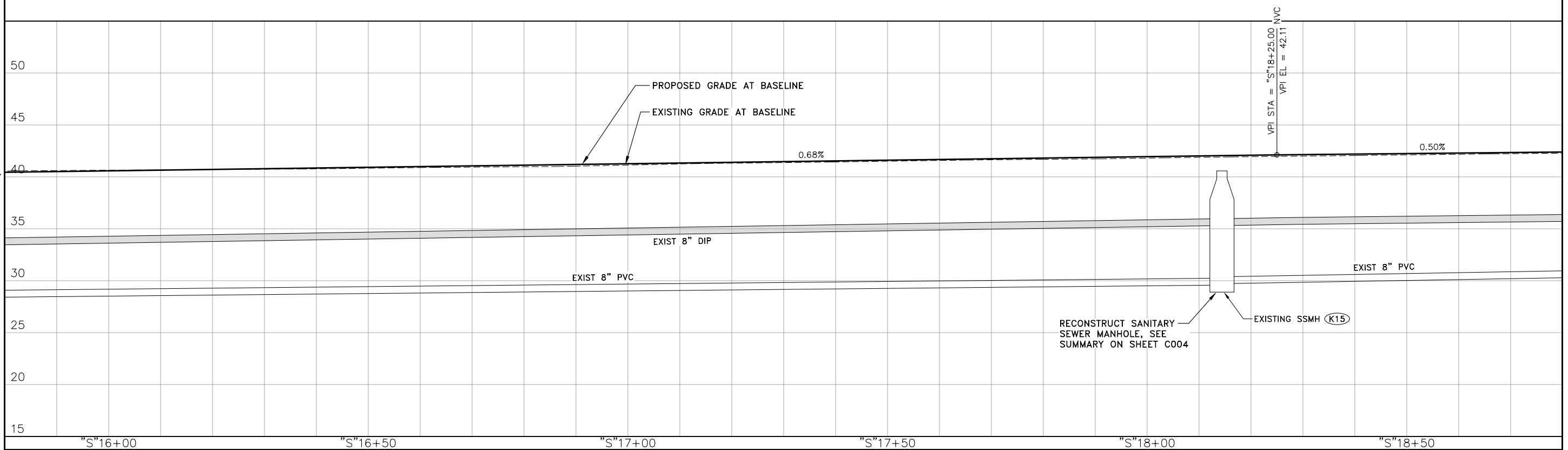




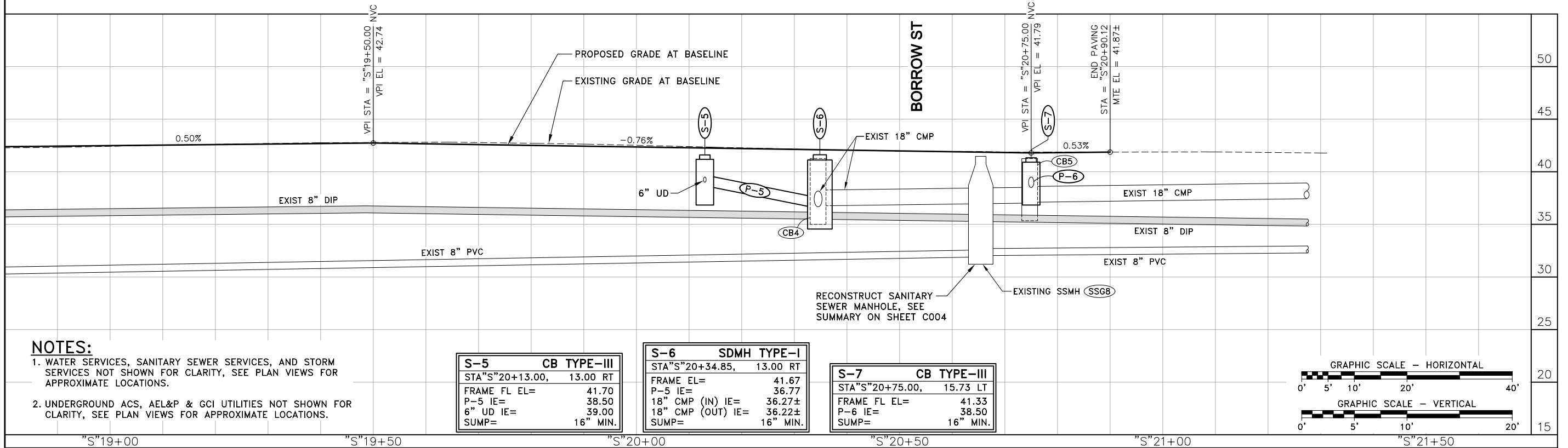
PA:2017\17379JN-CBJ\_Shaune.DWG SHAUNE.DWG PLOT: April 05, 2018 dt: 3:35pm

MATCH LINE STA "S" 15+80, SHEET C300

MATCH LINE STA "S" 18+80

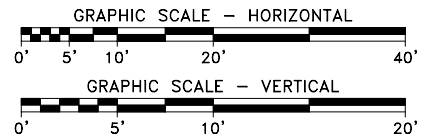


MATCH LINE STA "S" 18+80



**NOTES:**

1. WATER SERVICES, SANITARY SEWER SERVICES, AND STORM SERVICES NOT SHOWN FOR CLARITY, SEE PLAN VIEWS FOR APPROXIMATE LOCATIONS.
2. UNDERGROUND ACS, AEL&P & GCI UTILITIES NOT SHOWN FOR CLARITY, SEE PLAN VIEWS FOR APPROXIMATE LOCATIONS.



DESIGN JMP/KAP  
DRAWN KAP  
CHECK JMP  
APPROVED JMP

No.	DATE	REVISION



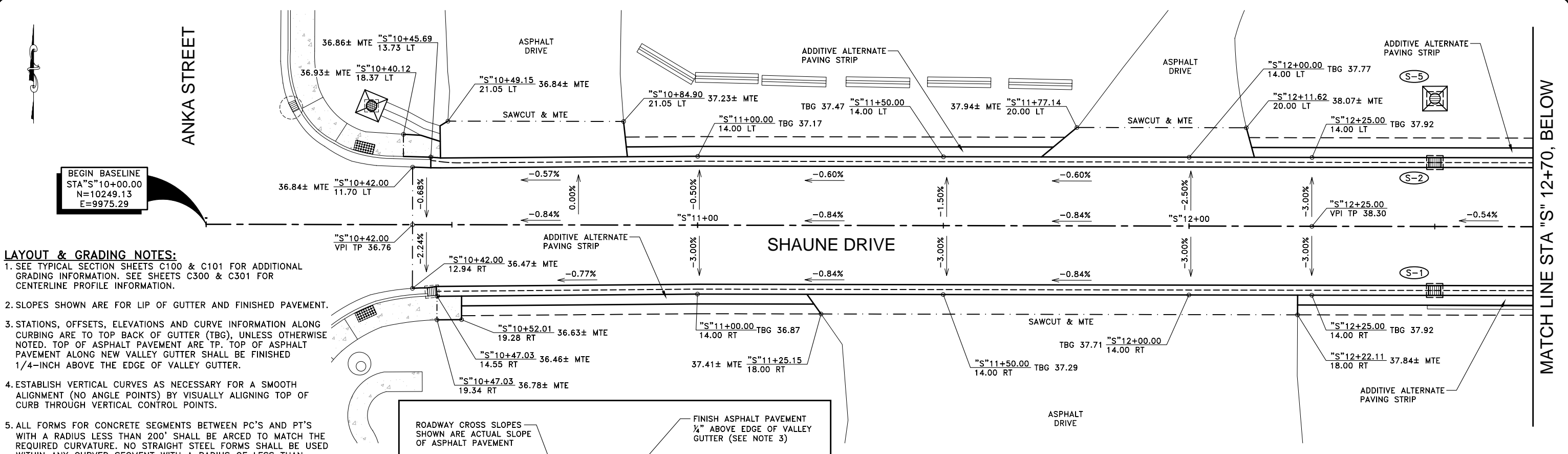
**SHAUNE DRIVE PAVEMENT & DRAINAGE IMPROVEMENTS**  
**CBJ CONTRACT No. BE18-159**  
CITY & BOROUGH OF JUNEAU, ALASKA

**PROFILE VIEW - SHAUNE DRIVE**  
**STA "S" 15+80 to STA "S" 21+50**

DATE: April 05, 2018  
PDC No. 17379JN  
SHEET **C301**

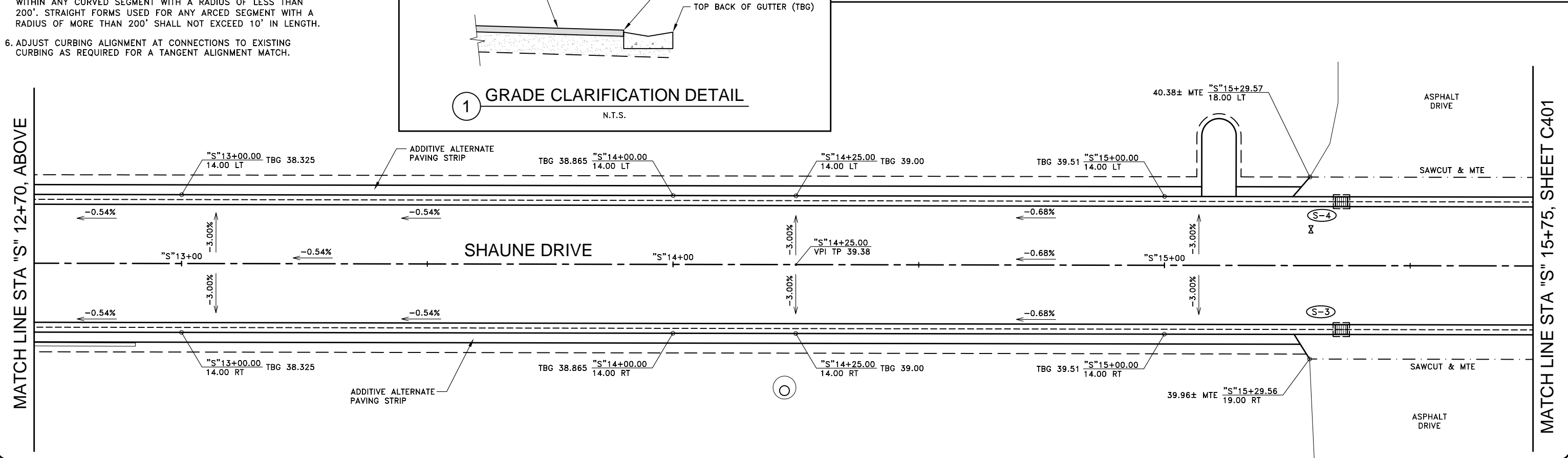
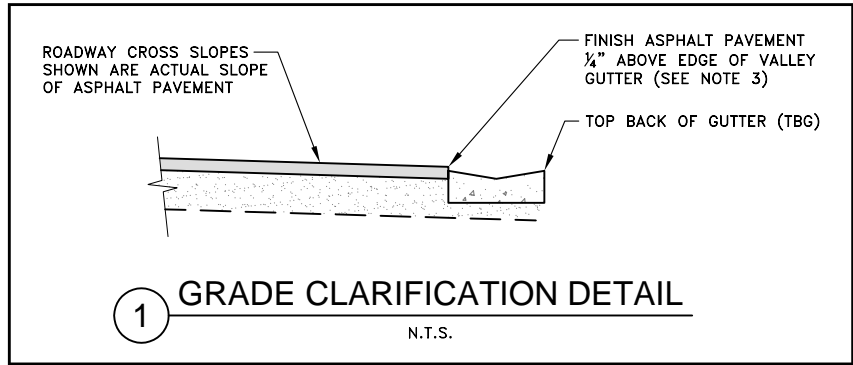
PA 2017\17379\IN-CBJ-Shaune.dwg PLOT: April 05, 2018 dt: 3:35pm

MATCH LINE STA "S" 12+70, ABOVE



LAYOUT & GRADING NOTES:

1. SEE TYPICAL SECTION SHEETS C100 & C101 FOR ADDITIONAL GRADING INFORMATION. SEE SHEETS C300 & C301 FOR CENTERLINE PROFILE INFORMATION.
2. SLOPES SHOWN ARE FOR LIP OF GUTTER AND FINISHED PAVEMENT.
3. STATIONS, OFFSETS, ELEVATIONS AND CURVE INFORMATION ALONG CURBING ARE TO TOP BACK OF GUTTER (TBG), UNLESS OTHERWISE NOTED. TOP OF ASPHALT PAVEMENT ARE TP. TOP OF ASPHALT PAVEMENT ALONG NEW VALLEY GUTTER SHALL BE FINISHED 1/4-INCH ABOVE THE EDGE OF VALLEY GUTTER.
4. ESTABLISH VERTICAL CURVES AS NECESSARY FOR A SMOOTH ALIGNMENT (NO ANGLE POINTS) BY VISUALLY ALIGNING TOP OF CURB THROUGH VERTICAL CONTROL POINTS.
5. ALL FORMS FOR CONCRETE SEGMENTS BETWEEN PC'S AND PT'S WITH A RADIUS LESS THAN 200' SHALL BE ARCED TO MATCH THE REQUIRED CURVATURE. NO STRAIGHT STEEL FORMS SHALL BE USED WITHIN ANY CURVED SEGMENT WITH A RADIUS OF LESS THAN 200'. STRAIGHT FORMS USED FOR ANY ARCED SEGMENT WITH A RADIUS OF MORE THAN 200' SHALL NOT EXCEED 10' IN LENGTH.
6. ADJUST CURBING ALIGNMENT AT CONNECTIONS TO EXISTING CURBING AS REQUIRED FOR A TANGENT ALIGNMENT MATCH.



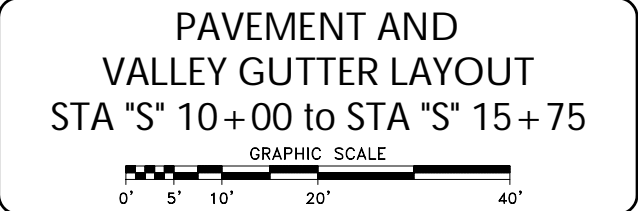
MATCH LINE STA "S" 15+75, SHEET C401

DESIGN	JMP/KAP
DRAWN	KAP
CHECK	JMP
APPROVED	JMP

No.	DATE	REVISION



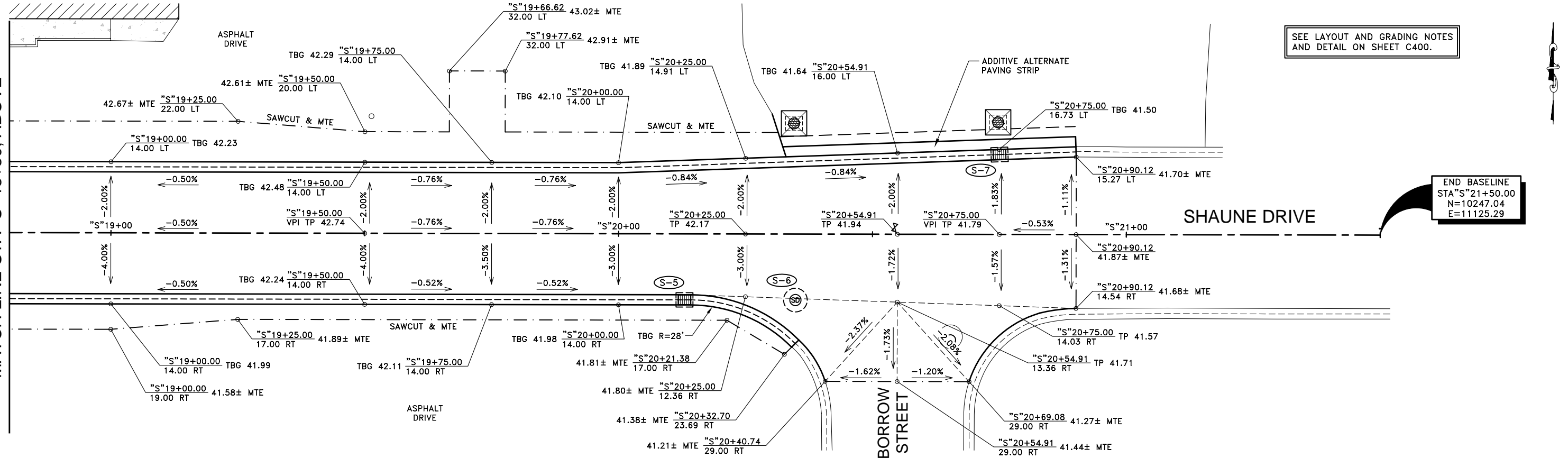
SHAUNE DRIVE PAVEMENT & DRAINAGE IMPROVEMENTS  
CBJ CONTRACT No. BE18-159  
CITY & BOROUGH OF JUNEAU, ALASKA



DATE: April 05, 2018
PDC No. 17379JN
SHEET C400

MATCH LINE STA "S" 18+80, ABOVE

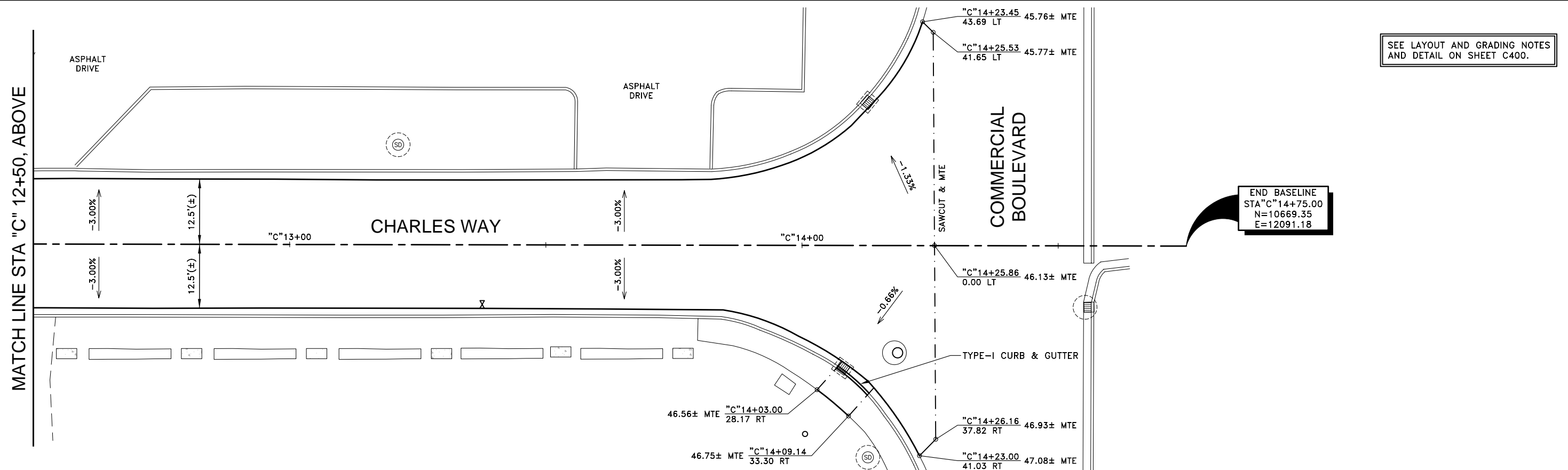
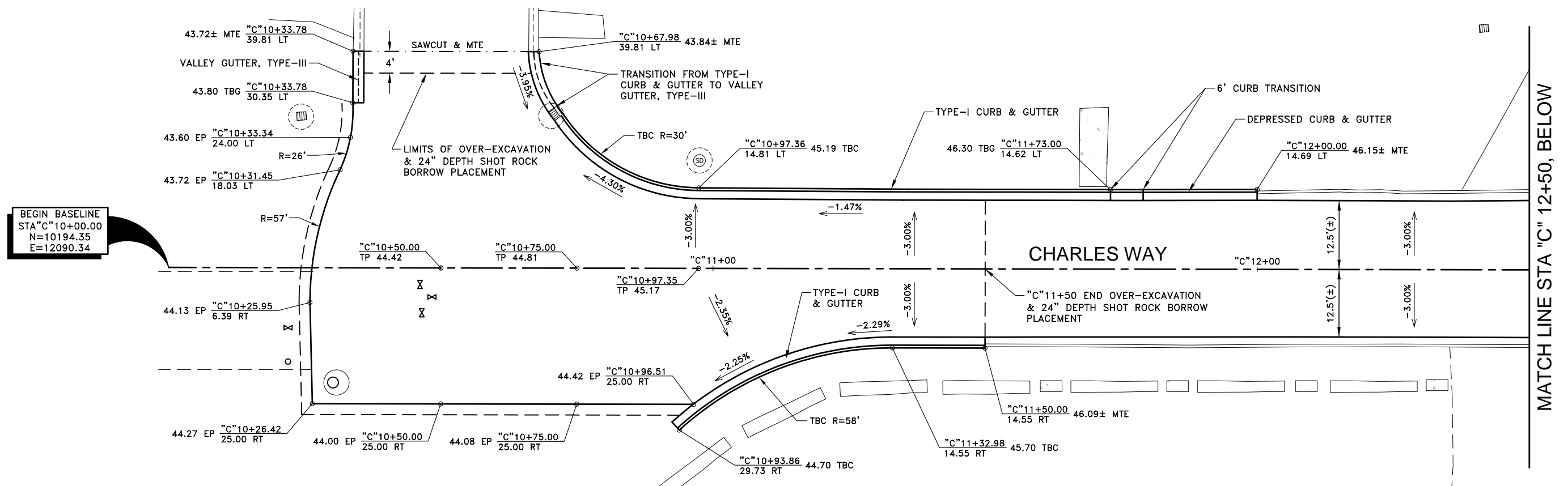
§



END BASELINE  
STA"S"21+50.00  
N=10247.04  
E=11125.29

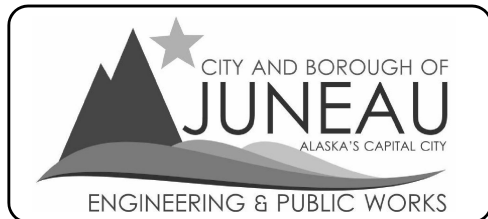
DATE: April 05, 2018  
PDC No. 17379JN

SHEET **C401**



DESIGN JMP/KAP  
DRAWN KAP  
CHECK JMP  
APPROVED JMP

No.	DATE	REVISION
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**SHAUNE DRIVE PAVEMENT &  
DRAINAGE IMPROVEMENTS  
CBJ CONTRACT No. BE18-159**

CITY & BOROUGH OF JUNEAU, ALASKA

PAVEMENT AND  
CURB & GUTTER LAYOUT  
STA "C" 10+00 to STA "C" 14+75

GRAPHIC SCALE



0' 5' 10' 20' 40'

DATE: April 05, 2018  
PDC No. 17379JN

SHEET **C402**