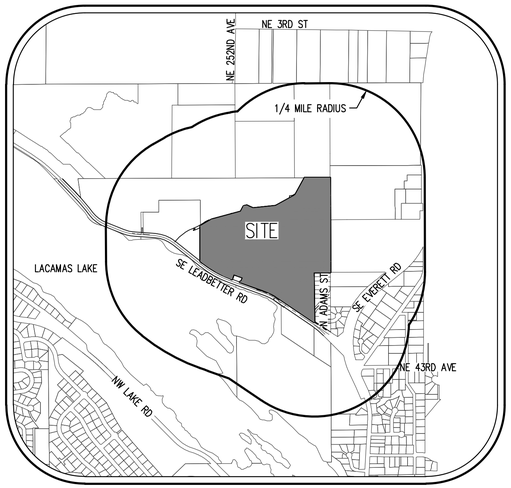
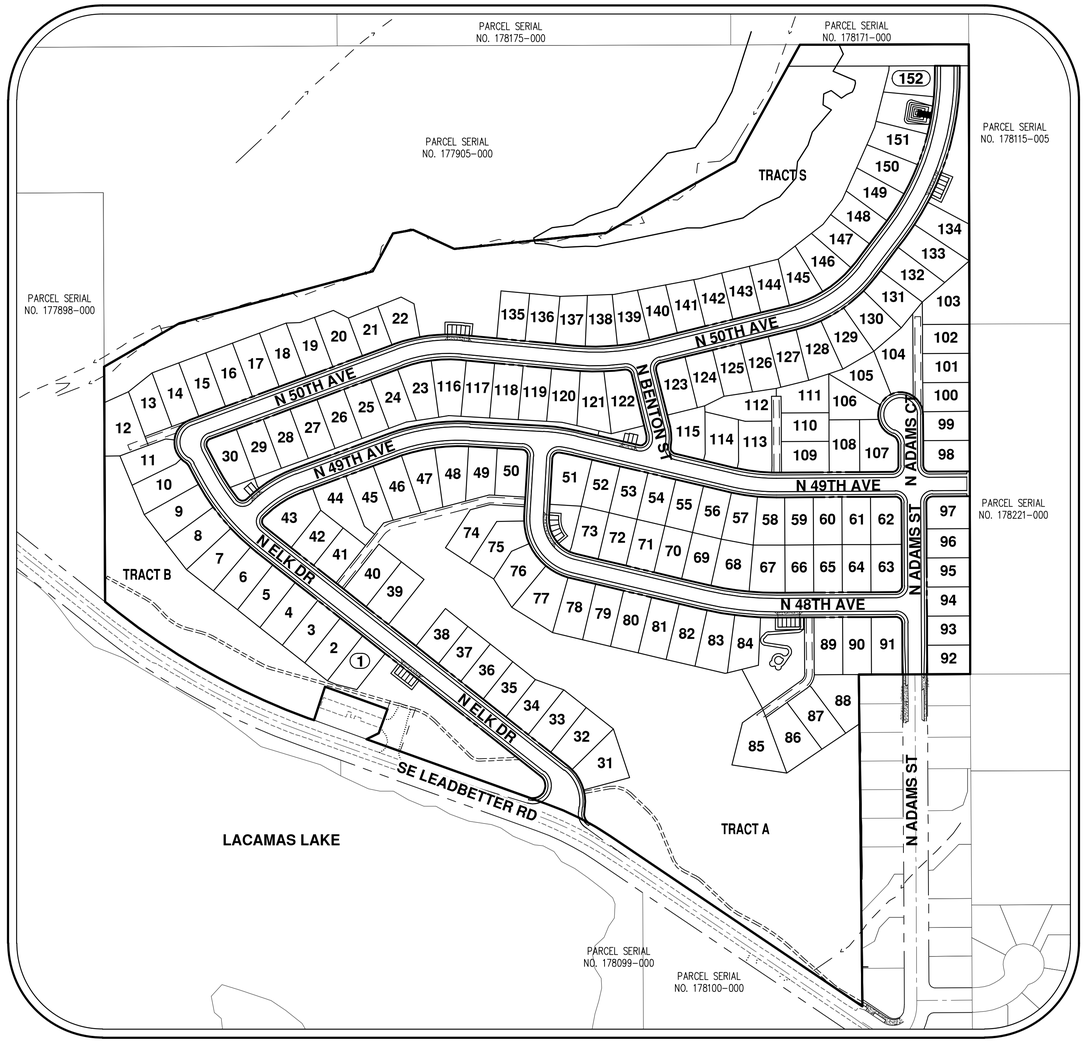
CJ DENS EAST SUBDIVISION

PRELIMINARY SUBDIVISION PLANS



VICINITY MAP

N.T.S.



SITE MAP

1"=150'

SHEET INDEX

LEGEND

	EXISTING	PROPOSED		EXISTING	PROPOSED
DECIDUOUS TREE			STORM DRAIN CLEAN OUT		
CONIFEROUS TREE			STORM DRAIN CATCH BASIN		
FIRE HYDRANT			STORM DRAIN AREA DRAIN		
WATER BLOWOFF			STORM DRAIN MANHOLE		
WATER METER			GAS METER		
WATER VALVE			GAS VALVE		
DOUBLE CHECK VALVE			GUY WIRE ANCHOR		
AIR RELEASE VALVE			UTILITY POLE		
SANITARY SEWER CLEAN OUT			POWER VAULT		
SANITARY SEWER MANHOLE			POWER JUNCTION BOX		
SIGN			POWER PEDESTAL		
STREET LIGHT			COMMUNICATIONS VAULT		
MAILBOX			COMMUNICATIONS JUNCTION BOX		
			COMMUNICATIONS RISER		

	EXISTING	PROPOSED
RIGHT-OF-WAY LINE		
BOUNDARY LINE		
PROPERTY LINE		
CENTERLINE		
DITCH		
CURB		
EDGE OF PAVEMENT		
EASEMENT		
FENCE LINE	XXX	
GRAVEL EDGE		
POWER LINE	PWR	PWR
OVERHEAD WIRE	OHW	OHW
COMMUNICATIONS LINE	COM	COM
FIBER OPTIC LINE	CFO	CFO
GAS LINE	GAS	GAS
STORM DRAIN LINE	STM	STM
SANITARY SEWER LINE	SAN	SAN
WATER LINE	WAT	WAT

APPLICANT/OWNER

CJ DENS LACAMAS II LLC
CONTACT: CARL LAWSON
PO BOX 2239
KALAMA, WA 98625

CONTACT:

AKS ENGINEERING & FORESTRY, LLC.
CONTACT: MICHAEL ANDREOTTI
9600 NE 126TH AVENUE, SUITE 2520
VANCOUVER, WA 98682
PH: 360-882-0419
FAX: 360-882-0426
E-MAIL: ANDREOTTIM@AKS-ENG.COM

PROPERTY DESCRIPTION

LOCATED IN THE NORTHEAST 1/4 OF SECTION 34 & NORTHWEST 1/4 OF SECTION 35, TOWNSHIP 2 NORTH RANGE 3 EAST, WILLAMETTE MERIDIAN, CLARK COUNTY, WASHINGTON. PROPERTY SERIAL #'S 177906-000, 178172-000 AND 178236-000

EXISTING LAND USE

VACANT LAND ON 177906-000, 178236-000 AND 178172-000 ZONED R-7.5

PROJECT PURPOSE

SUBDIVIDE 3 PARCELS INTO 152 DETACHED SINGLE-FAMILY RESIDENTIAL LOTS WITH ASSOCIATED ROADS AND SITE IMPROVEMENTS.

SITE AREA

49.62 AC (2,161,423 SF)

VERTICAL DATUM

ELEVATIONS ARE BASED ON CLARK COUNTY BENCHMARK NO. 237 (BENCHMARK LACAMAS-13), STAMPED "24900-1992", LOCATED AT 24900 LEADBETTER ROAD, 20'W W PARK LOT ENT, 21'N CL, 8'SE END FNC. ELEVATION = 188.08 FEET (NGVD29 (47)).

AKS ENGINEERING & FORESTRY, LLC
9600 NE 126TH AVE, STE 2520
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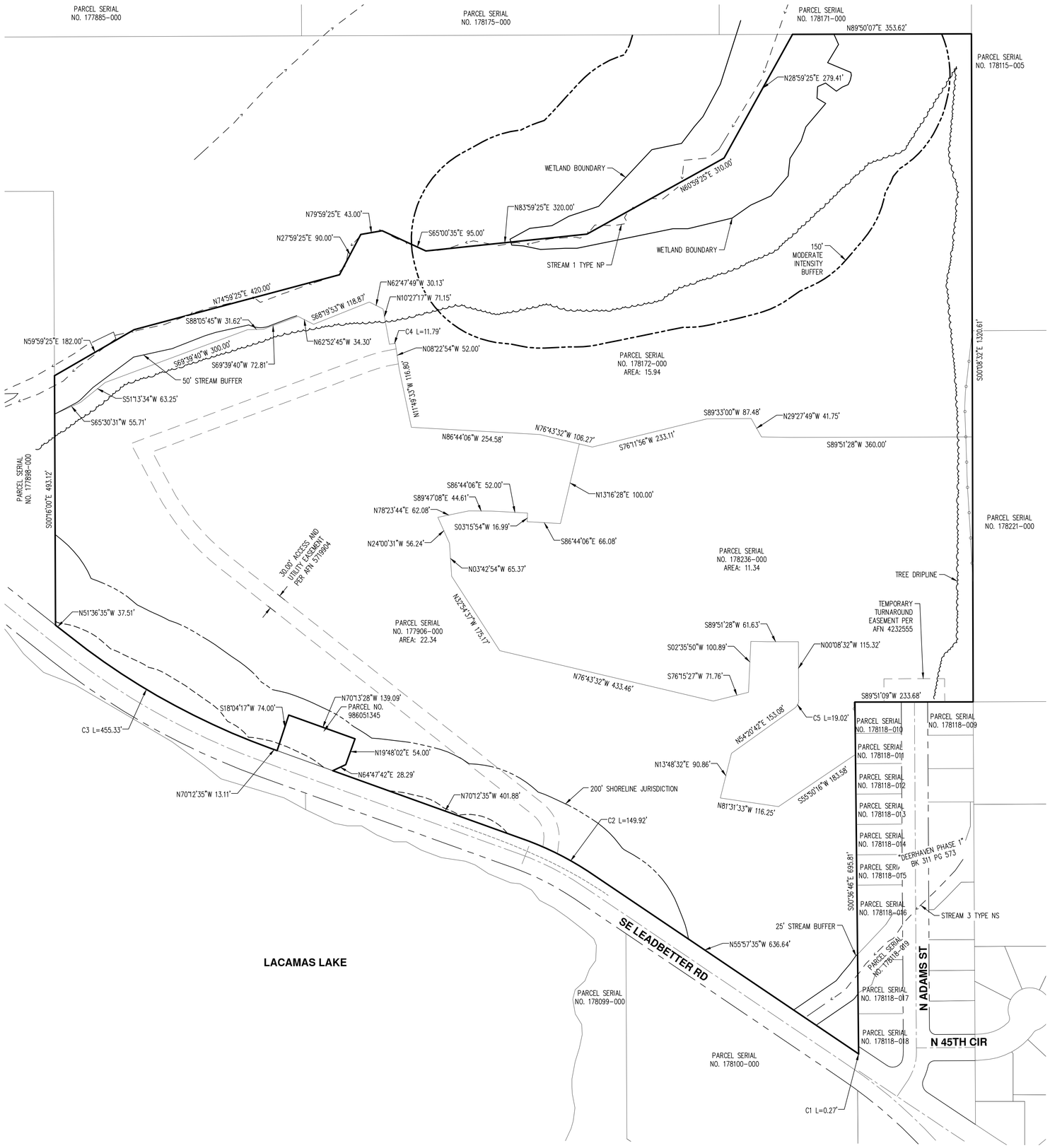
COVER SHEET
CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

PRELIMINARY NOT FOR CONSTRUCTION

JOB NUMBER:	5504
DATE:	11/24/2020
DESIGNED BY:	CJS
DRAWN BY:	NAL
CHECKED BY:	JMM

P1.0

AKS DRAWING FILE: 5504 P1.0 COVER.DWG | LAYOUT: P1.0



N

SCALE: 1"=100 FEET

100 0 20 50 100

ORIGINAL PAGE SIZE: 24" x 36"

NOTES:

1. UTILITIES SHOWN ARE BASED ON UNDERGROUND UTILITY LOCATE MARKINGS AS PROVIDED BY OTHERS, PROVIDED PER UTILITY LOCATE TICKET NUMBERS 20253525, 20253535, AND 20253544. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND LOCATES REPRESENT THE ONLY UTILITIES IN THE AREA. CONTRACTORS ARE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
2. THIS SURVEY INCLUDES TOPOGRAPHIC SURVEY DATA GATHERED BY HAGEDORN, INC IN 2010 AND AKS ENGINEERING AND FORESTRY, LLC JUNE 2019–AUGUST 2020, AND CITY OF CAMAS AS-BUILT CONSTRUCTION PLANS. AKS MAKES NO GUARANTEE REGARDING THE ACCURACY OF SURVEY DATA GATHERED BY OTHERS.
3. VERTICAL DATUM: ELEVATIONS ARE BASED ON CLARK COUNTY BENCHMARK NO. 237 LOCATED NEAR THE ENTRANCE FOR THE PARKING LOT FOR THE NORTH SHORE BOAT LAUNCH ON LACAMAS LAKE. ELEVATION = 188.08 FEET (NAVD 29(47)).
4. THIS MAP DOES NOT CONSTITUTE A PROPERTY BOUNDARY SURVEY.
5. SURVEY IS ONLY VALID WITH SURVEYOR'S STAMP AND SIGNATURE.
6. CONTOUR INTERVAL IS 2 FOOT.
7. WETLAND BOUNDARIES SHOWN WERE DELINEATED BY ELS IN WINTER 2009 AND SPRING 2013.

GENERAL NOTES:

1. REFERENCE TREE PLAN ON SHEETS P5.0–P5.5 FOR TREE INVENTORY AND NOTES.
2. ACCORDING TO CLARK COUNTY HEALTH DEPARTMENT, NO SEPTIC SYSTEMS EXIST ON-SITE.
3. ACCORDING TO CLARK COUNTY HEALTH DEPARTMENT, NO WELLS EXIST ON-SITE.

CURVE TABLE

CURVE	RADIUS	DELTA	LENGTH	CHORD
C1	984.92'	0°00'56"	0.27'	N55°57'07"W 0.27'
C2	602.80'	14°15'00"	149.92'	N63°05'05"W 149.54'
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C5	20.00'	54°29'14"	19.02'	N27°06'05"E 18.31'

LEGEND

EXISTING

- DECIDUOUS TREE
- CONIFEROUS TREE
- FIRE HYDRANT
- WATER BLOWOFF
- WATER METER
- WATER VALVE
- DOUBLE CHECK VALVE
- AIR RELEASE VALVE
- SANITARY SEWER CLEAN OUT
- SANITARY SEWER MANHOLE
- SIGN
- STREET LIGHT
- MAILBOX (MB)

EXISTING

- STORM DRAIN CLEAN OUT
- STORM DRAIN CATCH BASIN
- STORM DRAIN AREA DRAIN
- STORM DRAIN MANHOLE
- GAS METER
- GAS VALVE
- GUY WIRE ANCHOR
- UTILITY POLE
- POWER VAULT (P)
- POWER JUNCTION BOX
- POWER PEDESTAL
- COMMUNICATIONS VAULT (C)
- COMMUNICATIONS JUNCTION BOX
- COMMUNICATIONS RISER

EXISTING

- RIGHT-OF-WAY LINE
- BOUNDARY LINE
- PROPERTY LINE
- CENTERLINE
- DITCH
- CURB
- EDGE OF PAVEMENT
- EASEMENT
- FENCE LINE
- GRAVEL EDGE
- POWER LINE (PWR)
- OVERHEAD WIRE (OHW)
- COMMUNICATIONS LINE (COM)
- FIBER OPTIC LINE (CFO)
- GAS LINE (GAS)
- STORM DRAIN LINE (STM)
- SANITARY SEWER LINE (SAN)
- WATER LINE (WAT)

AKS ENGINEERING & FORESTRY, LLC
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EXISTING CONDITIONS
CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

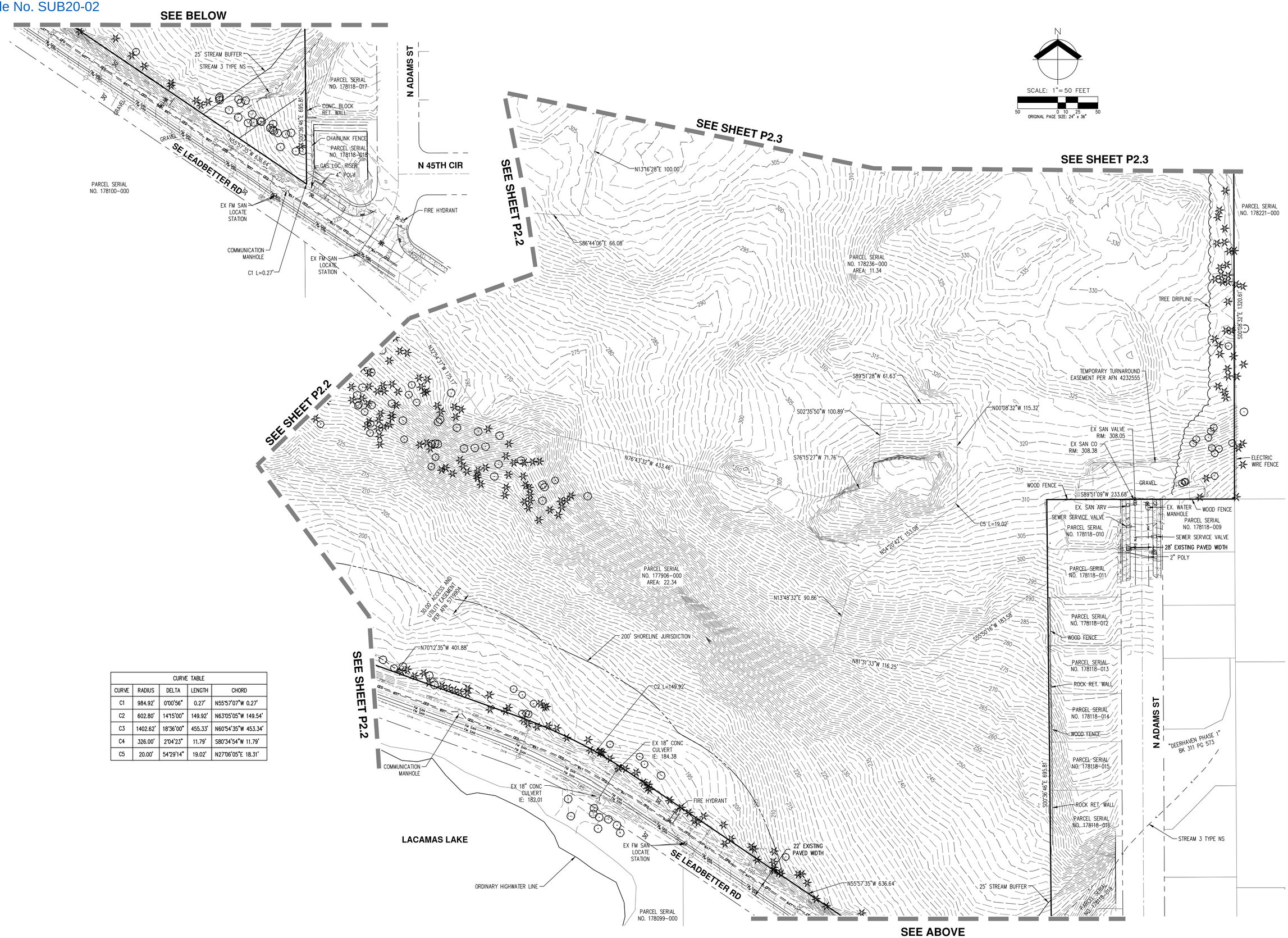
JAMES O. HAGEDORN STATE OF WASHINGTON 22877 REGISTERED PROFESSIONAL LAND SURVEYOR

PRELIMINARY NOT FOR CONSTRUCTION

JOB NUMBER:	5504
DATE:	11/24/2020
DESIGNED BY:	
DRAWN BY:	CJC
CHECKED BY:	JOH

P2.0

AKS DRAWING FILE: 5504 P2.0 EX COND.DWG | LAYOUT: P2.0



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EXISTING CONDITIONS (SOUTH)
CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

PRELIMINARY NOT FOR CONSTRUCTION

JOB NUMBER:	5504
DATE:	11/24/2020
DESIGNED BY:	
DRAWN BY:	CJC
CHECKED BY:	JOH

P2.1

AKS DRAWING FILE: 5504 P2.0 EX COND.DWG | LAYOUT: P2.1

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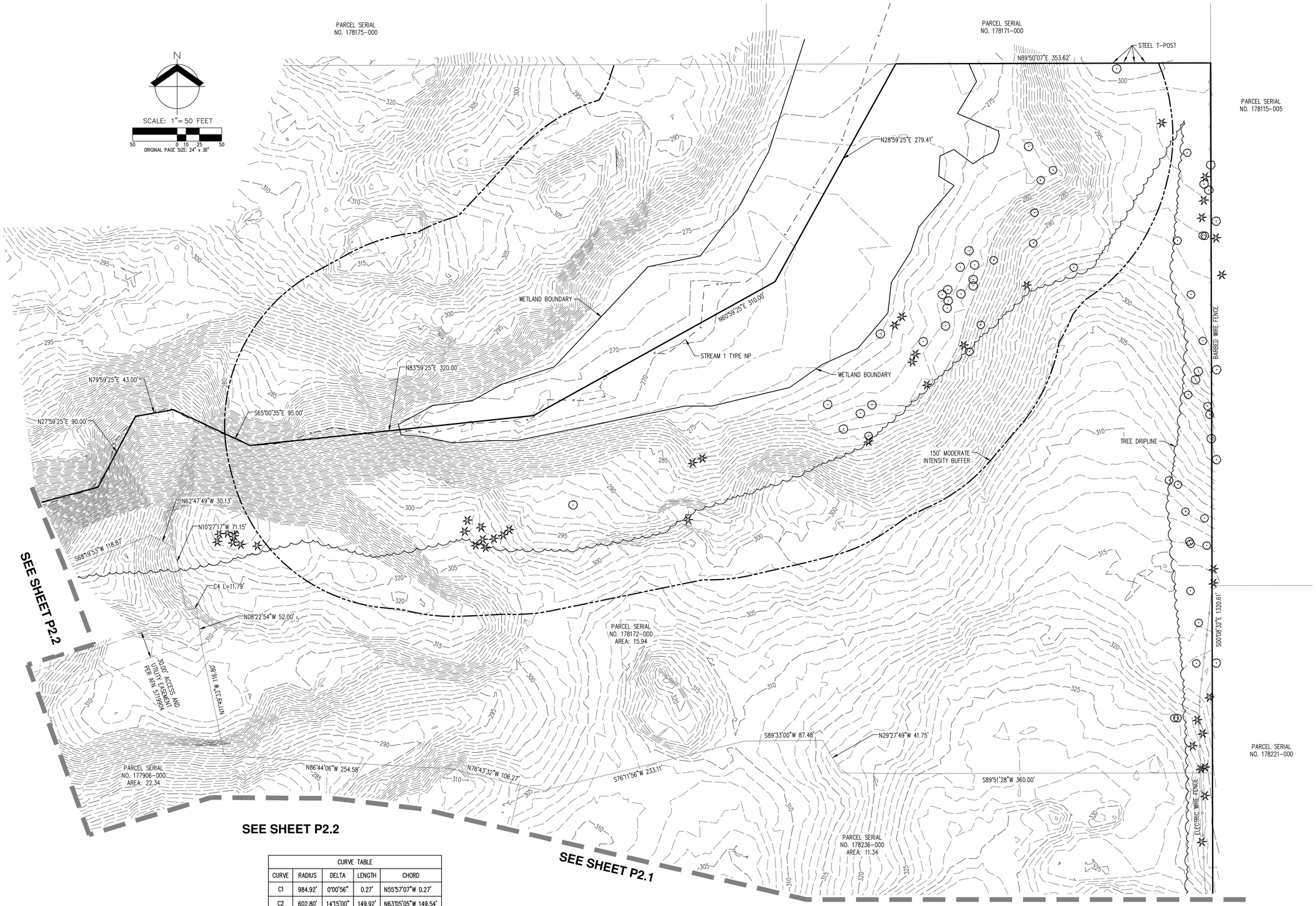
EXISTING CONDITIONS (WEST)
CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

PRELIMINARY NOT FOR CONSTRUCTION

JOB NUMBER:	5504
DATE:	11/24/2020
DESIGNED BY:	
DRAWN BY:	CJC
CHECKED BY:	JOH

P2.2

AKS DRAWING FILE: 5504 P2.0 EX CONDI.DWG | LAYOUT: P2.2



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EXISTING CONDITIONS (NORTH)
CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

PRELIMINARY NOT FOR CONSTRUCTION

JOB NUMBER:	5504
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DESIGNED BY:	
DRAWN BY:	CJC
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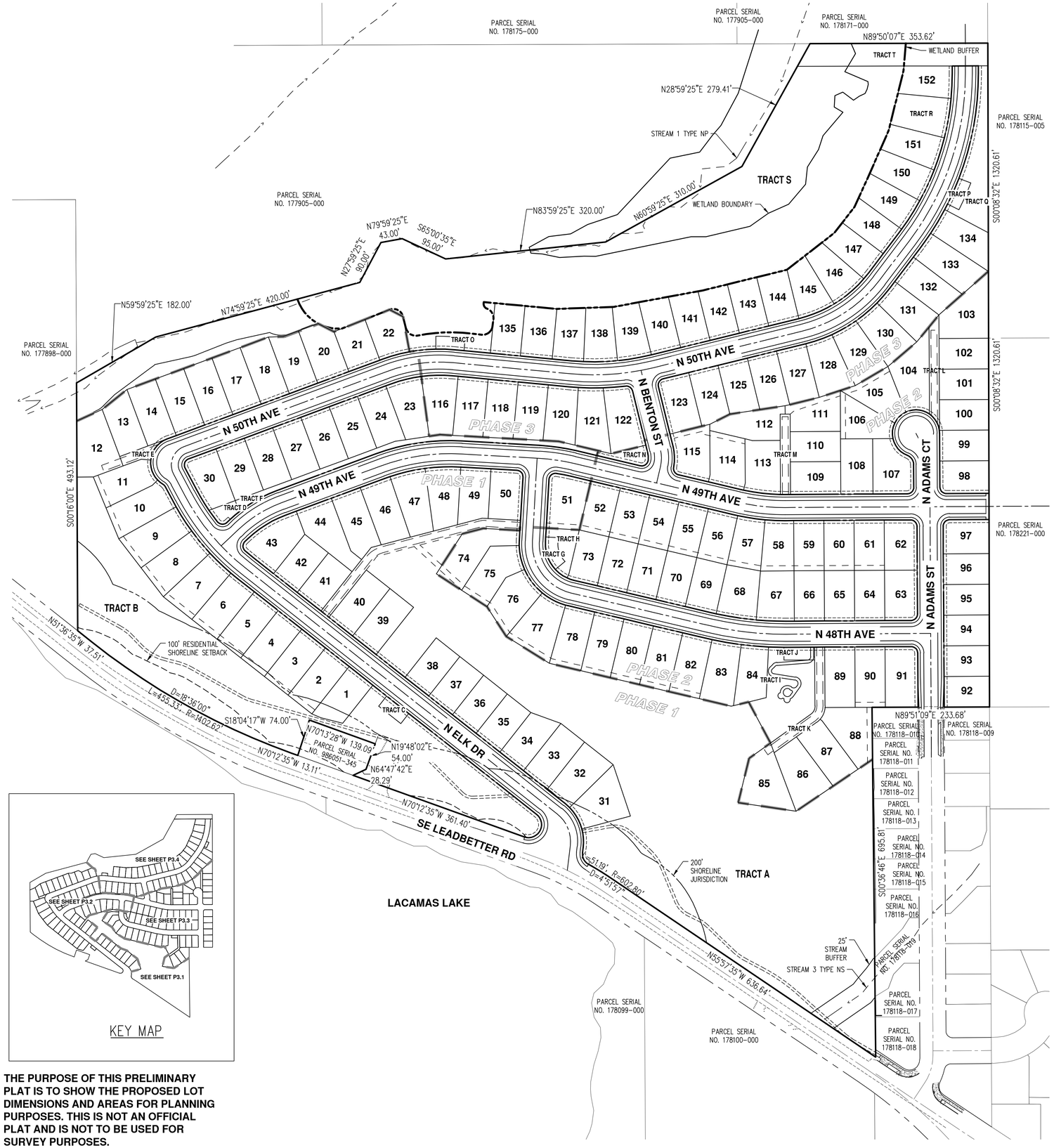
P2.3

AKS DRAWING FILE: 5504 P2.0 EX COND.DWG | LAYOUT: P2.3



THE PURPOSE OF THIS PRELIMINARY PLAT IS TO SHOW THE PROPOSED LOT DIMENSIONS AND AREAS FOR PLANNING PURPOSES. THIS IS NOT AN OFFICIAL PLAT AND IS NOT TO BE USED FOR SURVEY PURPOSES.

APPLICANT/OWNER

CJ DENS LACAMAS II LLC
CONTACT: CARL LAWSON
PO BOX 2239
KALAMA WA, 98625

CONTACT:

AKS ENGINEERING & FORESTRY, LLC.
CONTACT: MICHAEL ANDREOTTI
9600 NE 126TH AVENUE, SUITE 2520
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PH: 360-882-0419
FAX: 360-882-0426
E-MAIL: ANDREOTTIM@AKS-ENG.COM

PROPERTY DESCRIPTION

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EXISTING LAND USE

VACANT LAND ON 177906-000, 178236-000 AND 178172-000
ZONED R-7.5

PROJECT PURPOSE

SUBDIVIDE 3 PARCELS INTO 152 DETACHED SINGLE-FAMILY RESIDENTIAL LOTS WITH ASSOCIATED ROADS AND SITE IMPROVEMENTS.

SITE AREA

49.62 AC (2,161,423 SF) CJ DENS

VERTICAL DATUM

ELEVATIONS ARE BASED ON CLARK COUNTY BENCHMARK NO. 237 (BENCHMARK LACAMAS-13), STAMPED "24900-1992", LOCATED AT 24900 LEADBETTER ROAD, 20'W W PARK LOT ENT, 21'N CL, 8'SE END FNC.
ELEVATION = 188.08 FEET (NGVD29 (47)).

GENERAL NOTES

1. OPEN SPACE TRACTS F, H, I, & Q TO BE OWNED AND MAINTAINED BY THE HOME OWNERS ASSOCIATION (HOA).
2. PARKING TRACTS C, D, G, J, N, O, & P TO BE OWNED AND MAINTAINED BY THE HOA.
3. ACCESS TRACTS E, K, L, & M TO BE OWNED AND MAINTAINED BY THE HOA.
4. STORMWATER TRACT R TO BE OWNED BY THE HOA AND MAINTAINED BY HOA.
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6. FUTURE ROW DEDICATION TRACT T TO BE OWNED AND MAINTAINED BY THE CITY OF CAMAS.
7. BUILDING ENVELOPES SHALL BE PER DEVELOPMENT STANDARDS TABLE.
8. THERE ARE SIX PROPOSED INTERNAL PUBLIC ROADS TO SERVE THE DEVELOPMENT. THE ROADS ARE PROPOSED TO BE CONSTRUCTED TO THE 2 LANE LOCAL/SPRINKLERED SECTION (CITY OF CAMAS STANDARD DETAIL ST3).
9. ALL LOTS WILL BE SERVED WITH PUBLIC SANITARY SEWER AND WATER BY CITY OF CAMAS.
10. SURFACE MATERIAL FOR ALL PROPOSED ROADWAYS IS ASPHALT.
11. STORMWATER WILL EITHER BE DIRECTLY DISCHARGED TO A LARGE WATER BODY AFTER TREATMENT OR DETAINED, TREATED, AND DISCHARGED TO THE EXISTING WETLAND THROUGH TRACT B PER CITY OF CAMAS STANDARDS.
12. THERE ARE NO BICYCLE IMPROVEMENTS PROPOSED ON SITE.
13. NO FRONTAGE IMPROVEMENTS ARE PROPOSED FOR SE LEADBETTER ROAD.
14. 40' X 40' BUILDING FOOTPRINTS SHOWN PER CAMAS CODE 17.19.030.D.3. SEE SECTION ACTUAL BUILDING FOOT PRINTS WILL VARY AND BE DETERMINED AND REVIEWED WITH BUILDING PERMIT.
15. EXISTING ACCESS AND UTILITY EASEMENT PER AFN 5719904 TO BE RELINQUISHED WITH THIS PLAT. EXISTING TEMPORARY TURNAROUND EASEMENT PER AFN 4232555 TO BE RELINQUISHED WITH THIS PLAT.
16. PUBLIC ACCESS EASEMENT DIMENSIONS WILL BE DETERMINED WITH FINAL TRAIL DESIGN. EASEMENT WIDTHS WILL VARY TO INCLUDE TOP AND TOE OF SLOPES.

DEVELOPMENT STANDARDS

AVERAGE LOT AREA	NONE*
MINIMUM LOT SIZE	5,250 SQUARE FEET
MAXIMUM LOT SIZE	9,000 SQUARE FEET
MINIMUM LOT WIDTH	60 FEET
MINIMUM LOT DEPTH	80 FEET
MAXIMUM BUILDING LOT COVERAGE	50%**
MAXIMUM BUILDING HEIGHT	35 FEET
MINIMUM FRONT YARD SETBACK	10** FEET
MINIMUM FRONT YARD – GARAGE	18** FEET
MINIMUM SIDE YARD	5 FEET
MINIMUM STREET SIDE YARD	10 FEET
MINIMUM REAR YARD	15** FEET
MINIMUM LOT FRONTAGE ON CUL-DE-SAC	30 FEET

* THE PROPOSED DEVELOPED IS USING DENSITY TRANSFER STANDARDS. NO AVERAGE LOT AREA IS REQUIRED.

** THESE STANDARDS VARY FROM THE CODE AS ALLOWED BY CMC SECTION 18.09.060(D). THE CITY HAS APPROVED THESE VARIANCES IN PRINCIPLE, ASSUMING THE DEVELOPMENT PROVIDES SOME ACTIVE OPEN SPACE AND TREE MITIGATION PLANTINGS.

PHASING

PHASE 1:	51 LOTS
PHASE 2:	64 LOTS
PHASE 3:	37 LOTS

N

SCALE: 1"=100 FEET
100 0 20 50 100
ORIGINAL PAGE SIZE: 24" x 36"

STATISTICS

TOTAL GROSS AREA:	2,161,423 SF (49.62 AC)
NATURAL AREA TRACTS:	693,826 SF (15.93 AC)
OPEN SPACE TRACTS:	38,118 SF (0.88 AC)
STORMWATER TRACT:	7,812 SF (0.18 AC)
ACCESS TRACTS:	18,091 SF (0.42 AC)
PARKING TRACTS:	11,255 SF (0.26 AC)
FUTURE RIGHT-OF-WAY:	16,477 SF (0.38 AC)
RIGHT-OF-WAY AREA:	336,268 SF (7.72 AC)
AVERAGE LOT AREA:	6,839 SF

DENSITY CALCULATIONS

TOTAL GROSS AREA:	2,161,423 SF (49.62 AC)
NATURAL & OPEN SPACE AREAS:	693,826 SF (15.93 AC)
NET SITE AREA:	1,467,597 SF (33.69 AC)
MAXIMUM LOTS ALLOWED (33.69 AC X 5.8):	195 LOTS
PROPOSED LOTS:	152 LOTS
PROPOSED DENSITY (152 LOTS / 33.69 AC):	4.51 LOTS/NET ACRE

TRACT AREA & PURPOSE

TRACT A:	316,739 SF	NATURAL AREA
TRACT B:	131,101 SF	NATURAL AREA
TRACT C:	1,428 SF	PARKING
TRACT D:	1,590 SF	PARKING
TRACT E:	1,535 SF	ACCESS
TRACT F:	7,978 SF	OPEN SPACE
TRACT G:	1,515 SF	PARKING
TRACT H:	3,150 SF	OPEN SPACE
TRACT I:	15,039 SF	OPEN SPACE
TRACT J:	1,557 SF	PARKING
TRACT K:	4,934 SF	ACCESS
TRACT L:	3,928 SF	ACCESS
TRACT M:	3,203 SF	ACCESS
TRACT N:	2,245 SF	PARKING
TRACT O:	1,460 SF	PARKING
TRACT P:	1,460 SF	PARKING
TRACT Q:	11,855 SF	OPEN SPACE
TRACT R:	7,812 SF	STORMWATER FACILITY
TRACT S:	249,086 SF	NATURAL AREA
TRACT T:	16,477 SF	FUTURE ROW DEDICATION

PARKING STATISTICS

REQUIRED PARKING:	1 SPACE/5 LOTS
PROPOSED PARKING:	30 SPACES (152 LOTS/5 LOTS/SPACE)
TRACT C:	5 SPACES
TRACT D:	2 SPACES
TRACT G:	5 SPACES
TRACT J:	5 SPACES
TRACT N:	3 SPACES
TRACT O:	5 SPACES
TRACT P:	5 SPACES

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PRELIMINARY PLAT OVERVIEW
CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

JOHN MICHAEL ANDREOTTI
STATE OF WASHINGTON
PRELIMINARY NOT FOR CONSTRUCTION
REGISTERED PROFESSIONAL ENGINEER

JOB NUMBER:	5504
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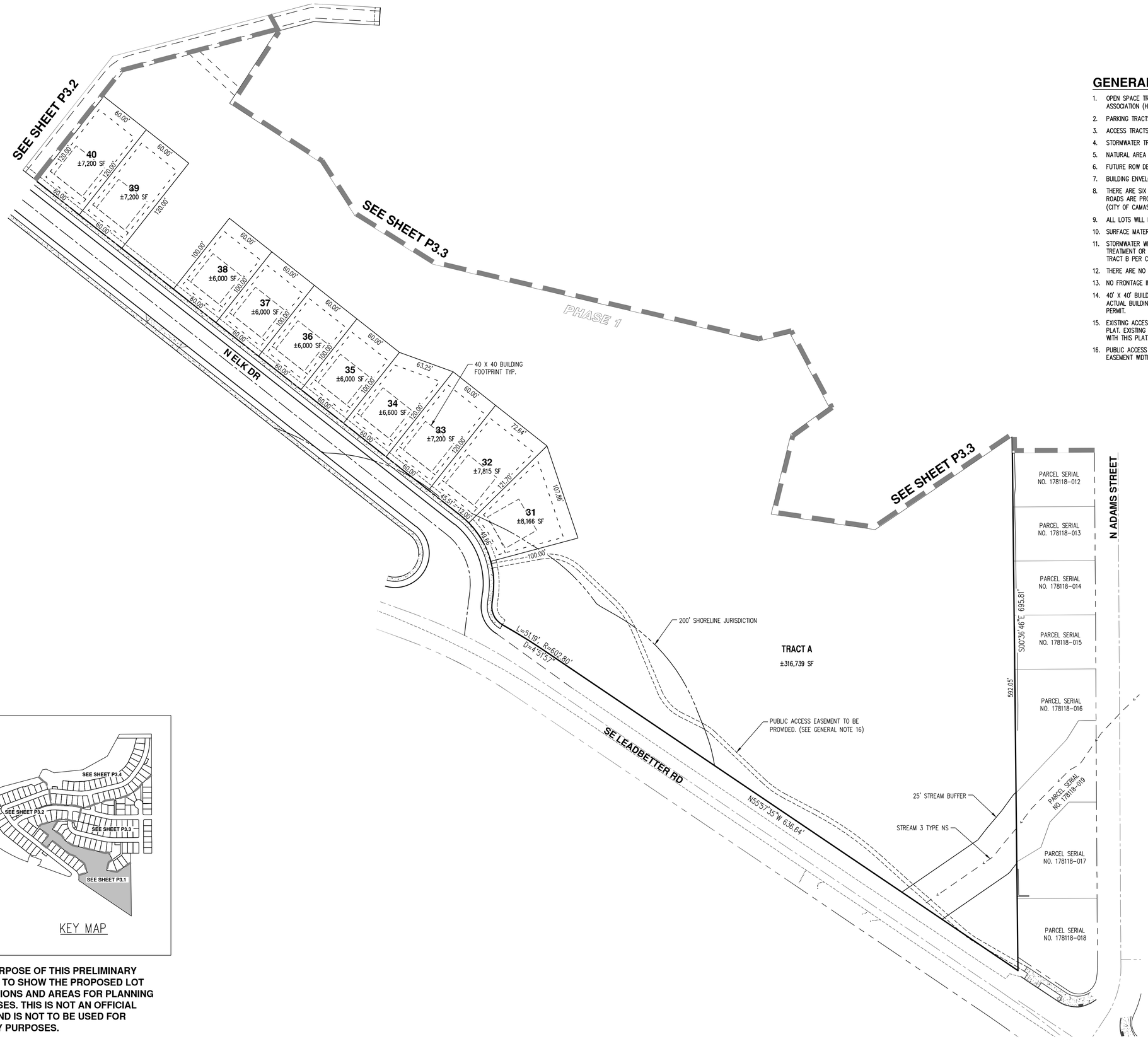
CHECKED BY:	JMM

P3.0

AKS DRAWING FILE: 5504 P3.0 PLATDWG | LAYOUT: P3.0



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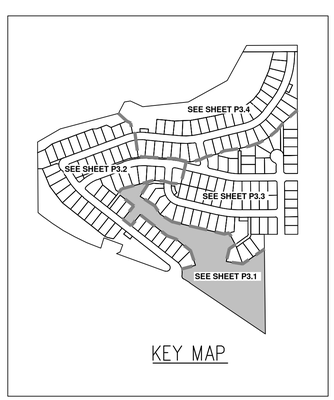

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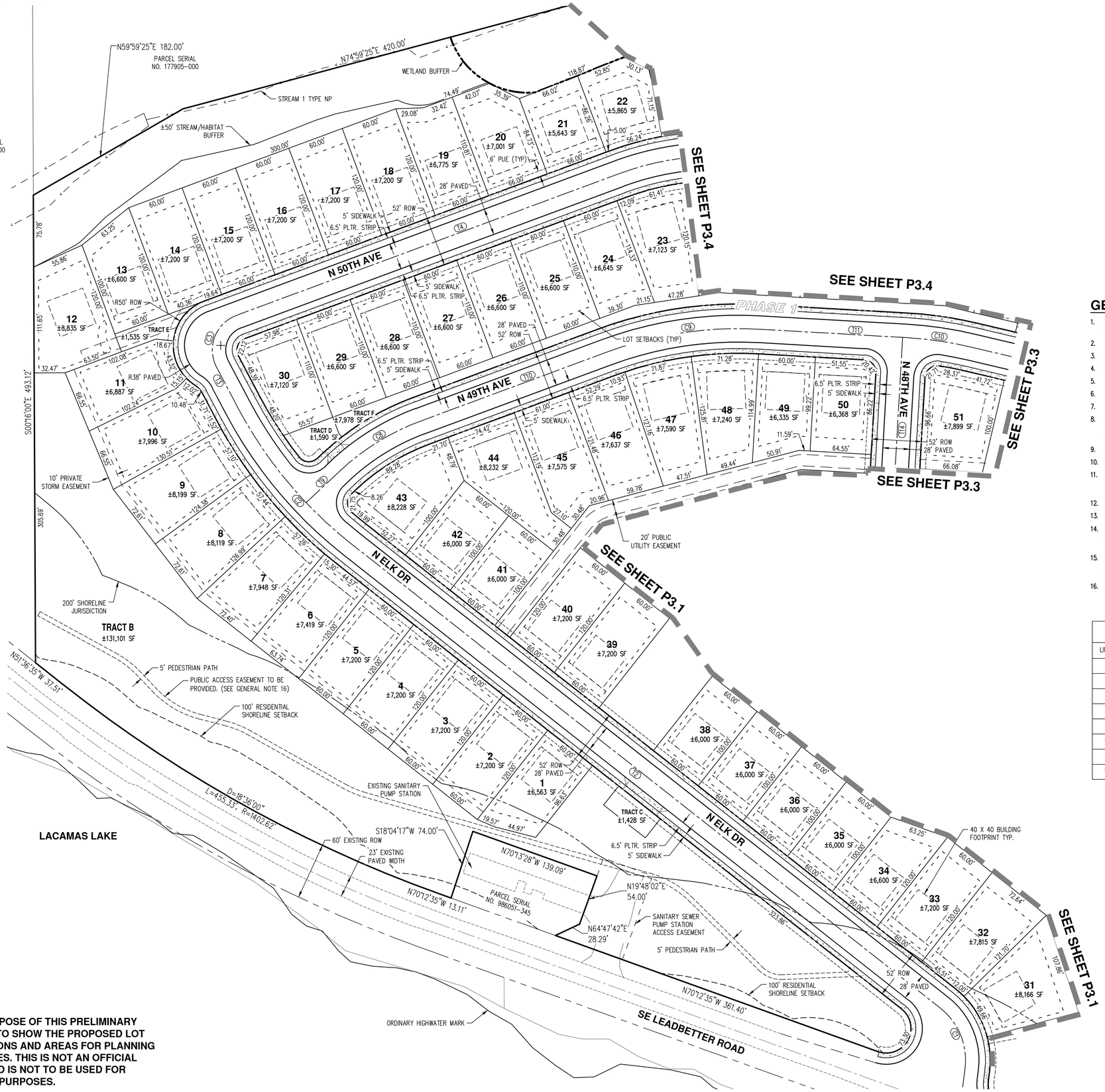
PRELIMINARY PLAT - PHASE 1
CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

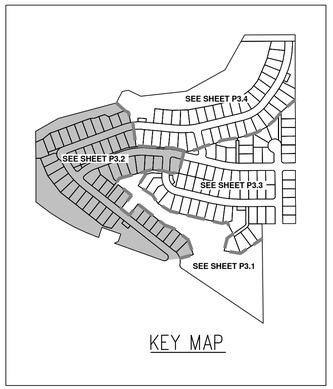
PRELIMINARY NOT FOR CONSTRUCTION

JOB NUMBER:	5504
DATE:	11/24/2020
DESIGNED BY:	CJS
DRAWN BY:	NAL
CHECKED BY:	JMM

P3.1

AKS DRAWING FILE: 5504 P3.0 PLAT.DWG | LAYOUT: P3.1





GENERAL NOTES

1. OPEN SPACE TRACTS F, H, I, & Q TO BE OWNED AND MAINTAINED BY THE HOME OWNERS ASSOCIATION (HOA).
2. PARKING TRACTS C, D, G, J, N, O, & P TO BE OWNED AND MAINTAINED BY THE HOA.
3. ACCESS TRACTS E, K, L, & M TO BE OWNED AND MAINTAINED BY THE HOA.
4. STORMWATER TRACT R TO BE OWNED BY THE HOA AND MAINTAINED BY HOA.
5. NATURAL AREA TRACTS A, B & S TO BE OWNED BY THE HOA.
6. FUTURE ROW DEDICATION TRACT T TO BE OWNED AND MAINTAINED BY THE CITY OF CAMAS.
7. BUILDING ENVELOPES SHALL BE PER DEVELOPMENT STANDARDS TABLE.
8. THERE ARE SIX PROPOSED INTERNAL PUBLIC ROADS TO SERVE THE DEVELOPMENT. THE ROADS ARE PROPOSED TO BE CONSTRUCTED TO THE 2 LANE LOCAL/SPRINKLERED SECTION (CITY OF CAMAS STANDARD DETAIL ST3).
9. ALL LOTS WILL BE SERVED WITH PUBLIC SANITARY SEWER AND WATER BY CITY OF CAMAS.
10. SURFACE MATERIAL FOR ALL PROPOSED ROADWAYS IS ASPHALT.
11. STORMWATER WILL EITHER BE DIRECTLY DISCHARGED TO A LARGE WATER BODY AFTER TREATMENT OR DETAINED, TREATED, AND DISCHARGED TO THE EXISTING WETLAND THROUGH TRACT B PER CITY OF CAMAS STANDARDS.
12. THERE ARE NO BICYCLE IMPROVEMENTS PROPOSED ON SITE.
13. NO FRONTAGE IMPROVEMENTS ARE PROPOSED FOR SE LEADBETTER ROAD.
14. 40' X 40' BUILDING FOOTPRINTS SHOWN PER CAMAS CODE 17.19.030.D.3. SEE SECTION ACTUAL BUILDING FOOT PRINTS WILL VARY AND BE DETERMINED AND REVIEWED WITH BUILDING PERMIT.
15. EXISTING ACCESS AND UTILITY EASEMENT PER AFN 5719904 TO BE RELINQUISHED WITH THIS PLAT. EXISTING TEMPORARY TURNAROUND EASEMENT PER AFN 4232555 TO BE RELINQUISHED WITH THIS PLAT.
16. PUBLIC ACCESS EASEMENT DIMENSIONS WILL BE DETERMINED WITH FINAL TRAIL DESIGN. EASEMENT WIDTHS WILL VARY TO INCLUDE TOP AND TOE OF SLOPES.

CENTERLINE TANGENT TABLE

LINE #	LENGTH	DIRECTION
T1	49.16	N6° 59' 29.61"E
T2	790.79	N51° 44' 06.88"W
T3	48.39	N27° 49' 37.22"W
T4	430.07	N69° 40' 14.28"E
T9	53.40	N46° 50' 02.89"E
T10	209.41	N69° 40' 14.28"E
T11	153.92	S86° 43' 31.24"E
T14	165.22	S3° 16' 28.76"W

CENTERLINE CURVE TABLE

CURVE #	ARC LENGTH	DELTA	RADIUS
C1	71.75	58°43'36"	70.00
C2	187.77	23°54'30"	450.00
C3	66.36	97°29'52"	39.00
C8	99.64	22°50'11"	250.00
C9	164.79	23°36'14"	400.00
C10	69.88	10°00'34"	400.00

THE PURPOSE OF THIS PRELIMINARY PLAT IS TO SHOW THE PROPOSED LOT DIMENSIONS AND AREAS FOR PLANNING PURPOSES. THIS IS NOT AN OFFICIAL PLAT AND IS NOT TO BE USED FOR SURVEY PURPOSES.

SCALE: 1"=50 FEET

ORIGINAL PAGE SIZE: 24" x 36"

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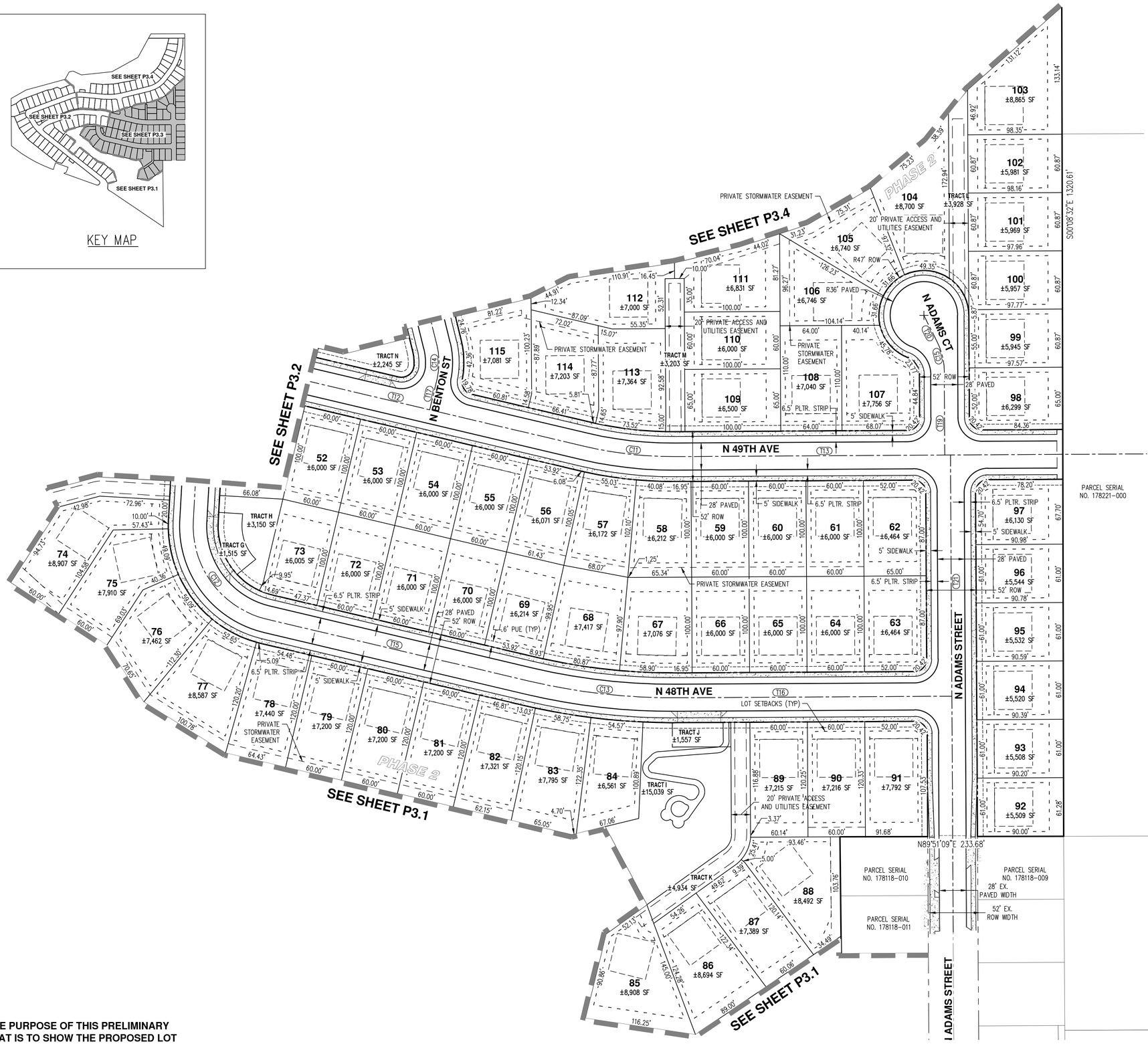

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CENTERLINE TANGENT TABLE

LINE #	LENGTH	DIRECTION
T12	335.64	S76° 42' 57.35"E
T13	405.23	N89° 40' 26.29"E
T14	165.22	S3° 16' 28.76"W
T15	281.29	S76° 42' 57.35"E
T16	287.95	N89° 40' 26.29"E
T17	33.47	N13° 17' 02.65"E
T19	87.44	N0° 19' 33.71"W
T20	30.49	N26° 51' 54.48"W
T21	398.61	S0° 19' 33.71"E

CENTERLINE CURVE TABLE

CURVE #	ARC LENGTH	DELTA	RADIUS
C11	95.02	13°36'36"	400.00
C12	139.61	79°59'26"	100.00
C13	154.88	13°36'36"	652.00
C14	34.97	27°04'32"	74.00
C15	32.42	26°32'21"	70.00

N

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PRELIMINARY PLAT - PHASE 2
CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

PRELIMINARY NOT FOR CONSTRUCTION

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P3.3

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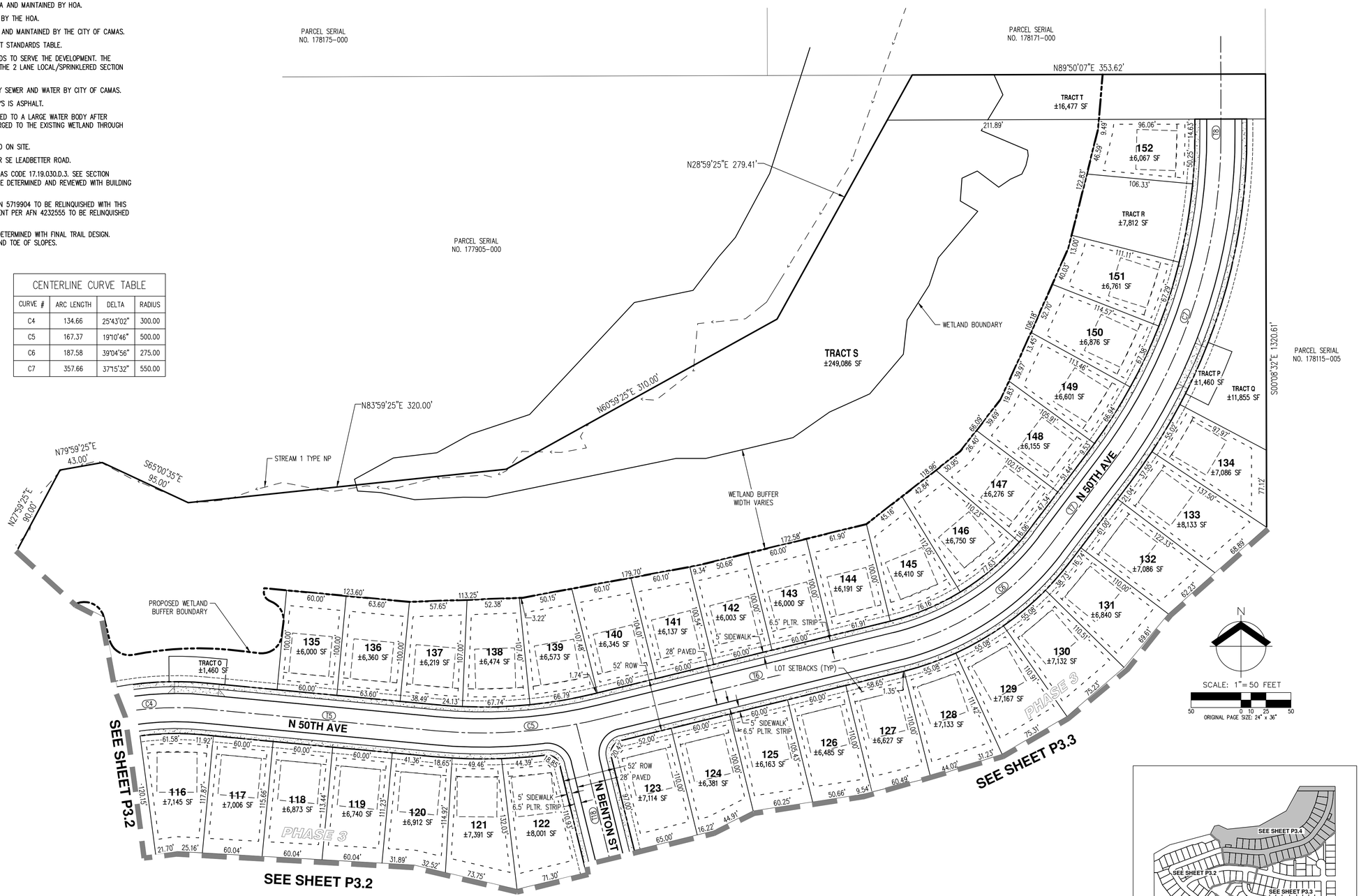
CENTERLINE TANGENT TABLE

LINE #	LENGTH	DIRECTION
T5	233.27	S84° 36' 43.29"E
T6	303.65	N76° 12' 30.70"E
T7	98.78	N37° 07' 34.55"E
T8	14.94	N0° 07' 57.00"W
T18	161.43	N13° 47' 29.30"W

CENTERLINE CURVE TABLE

CURVE #	ARC LENGTH	DELTA	RADIUS
C4	134.66	25°43'02"	300.00
C5	167.37	19°10'46"	500.00
C6	187.58	39°04'56"	275.00
C7	357.66	37°15'32"	550.00



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PRELIMINARY PLAT - PHASE 3
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CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

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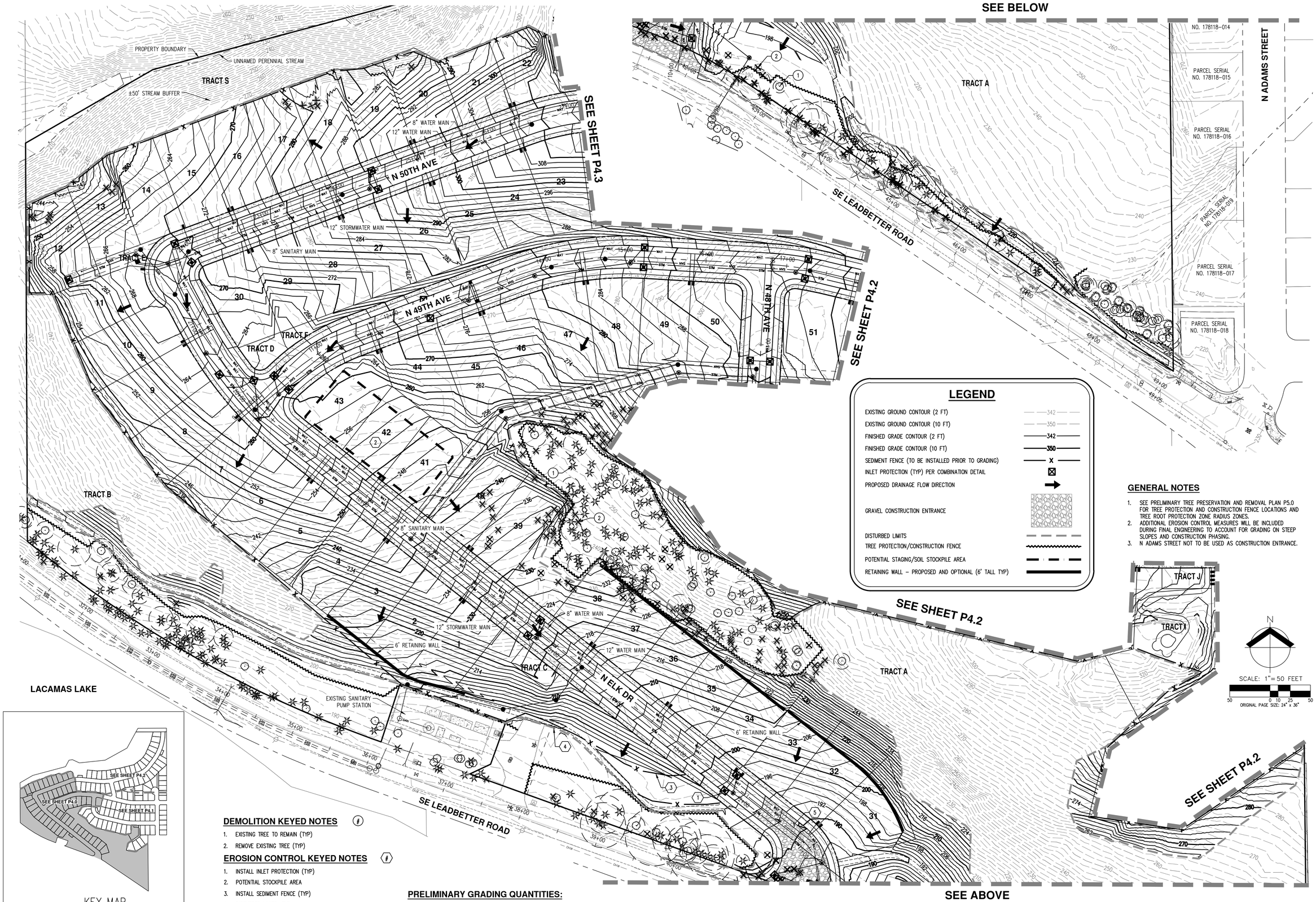
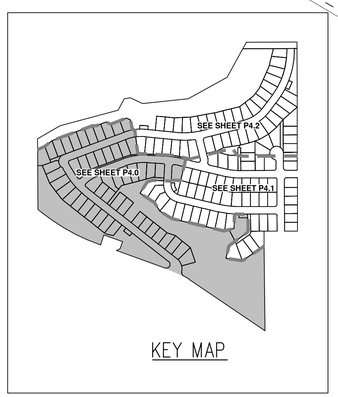


LEGEND

EXISTING GROUND CONTOUR (2 FT)	342
EXISTING GROUND CONTOUR (10 FT)	350
FINISHED GRADE CONTOUR (2 FT)	342
FINISHED GRADE CONTOUR (10 FT)	350
SEDIMENT FENCE (TO BE INSTALLED PRIOR TO GRADING)	X
INLET PROTECTION (TYP) PER COMBINATION DETAIL	⊠
PROPOSED DRAINAGE FLOW DIRECTION	→
GRAVEL CONSTRUCTION ENTRANCE	
DISTURBED LIMITS	
TREE PROTECTION/CONSTRUCTION FENCE	
POTENTIAL STAGING/SOIL STOCKPILE AREA	
RETAINING WALL – PROPOSED AND OPTIONAL (6' TALL TYP)	

GENERAL NOTES

1. SEE PRELIMINARY TREE PRESERVATION AND REMOVAL PLAN P5.0 FOR TREE PROTECTION AND CONSTRUCTION FENCE LOCATIONS AND TREE ROOT PROTECTION ZONE RADIUS ZONES.
2. ADDITIONAL EROSION CONTROL MEASURES WILL BE INCLUDED DURING FINAL ENGINEERING TO ACCOUNT FOR GRADING ON STEEP SLOPES AND CONSTRUCTION PHASING.
3. N ADAMS STREET NOT TO BE USED AS CONSTRUCTION ENTRANCE.



KEY MAP

DEMOLITION KEYED NOTES

1. EXISTING TREE TO REMAIN (TYP)
2. REMOVE EXISTING TREE (TYP)

EROSION CONTROL KEYED NOTES

1. INSTALL INLET PROTECTION (TYP)
2. POTENTIAL STOCKPILE AREA
3. INSTALL SEDIMENT FENCE (TYP)
4. DISTURBED LIMITS (TYP)
5. CONSTRUCTION ENTRANCE

PRELIMINARY GRADING QUANTITIES:

CUT: 150,000 C.Y.
FILL: 75,000 C.Y.

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PRELIMINARY GRADING AND ESC PLAN - PHASE 1
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CJ DENS LACAMAS II LLC
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P4.0

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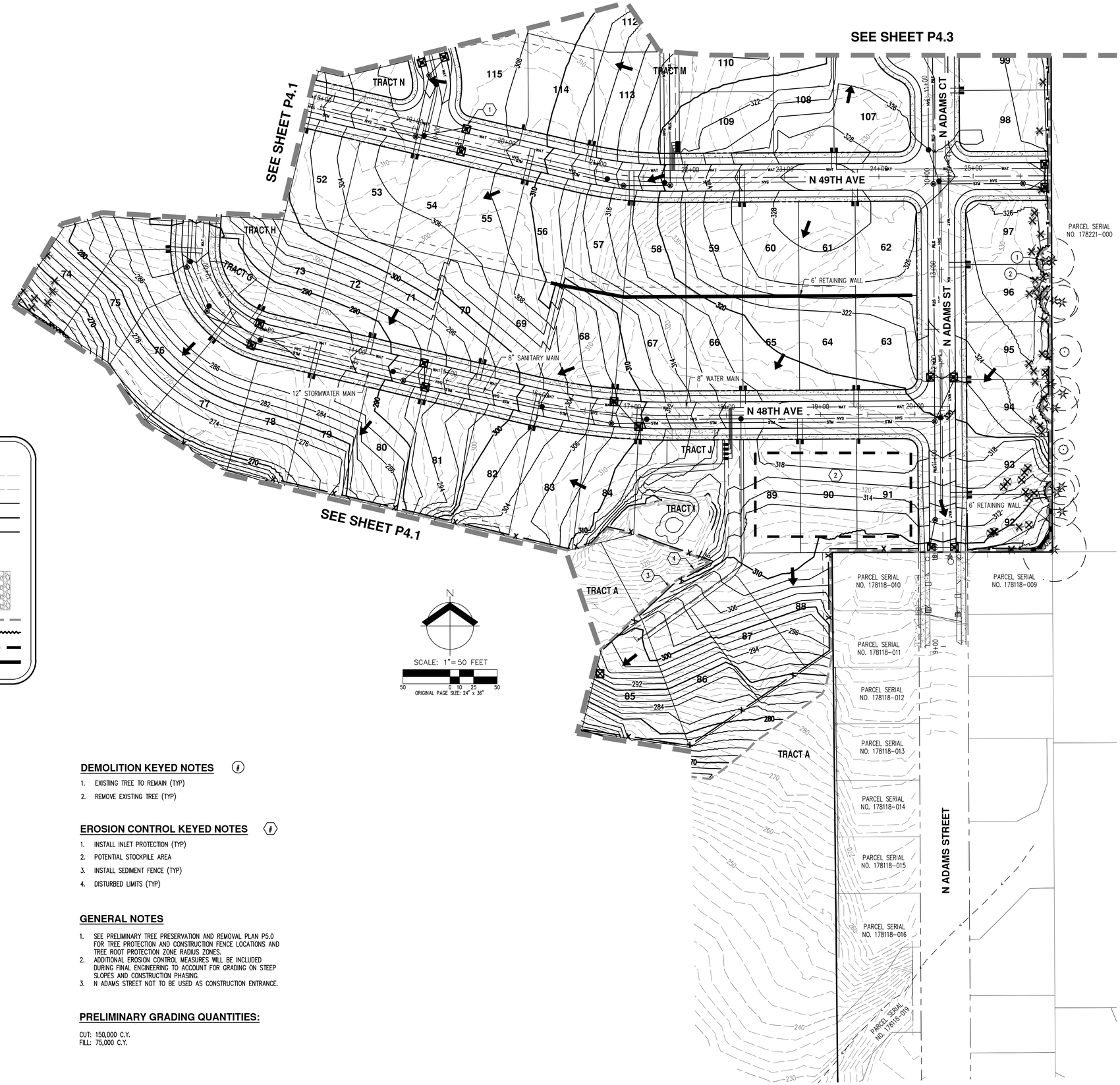

LEGEND

- EXISTING GROUND CONTOUR (2 FT) — 342 —
- EXISTING GROUND CONTOUR (10 FT) — 350 —
- FINISHED GRADE CONTOUR (2 FT) — 342 —
- FINISHED GRADE CONTOUR (10 FT) — 350 —
- SEDIMENT FENCE (TO BE INSTALLED PRIOR TO GRADING) — X —
- INLET PROTECTION (TYP) PER COMBINATION DETAIL
- PROPOSED DRAINAGE FLOW DIRECTION
- GRAVEL CONSTRUCTION ENTRANCE
- DISTURBED LIMITS
- TREE PROTECTION/CONSTRUCTION FENCE
- POTENTIAL STAGING/SOIL STOCKPILE AREA
- RETAINING WALL – PROPOSED AND OPTIONAL (6' TALL TYP)

N

SCALE: 1"=50 FEET

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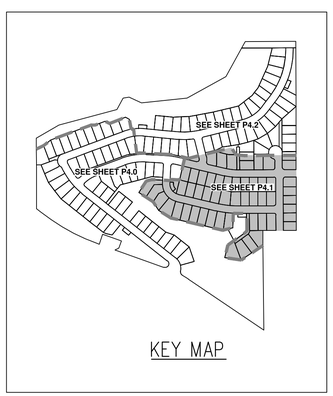

KEY MAP

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1. EXISTING TREE TO REMAIN (TYP)
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EROSION CONTROL KEYED NOTES

1. INSTALL INLET PROTECTION (TYP)
2. POTENTIAL STOCKPILE AREA
3. INSTALL SEDIMENT FENCE (TYP)
4. DISTURBED LIMITS (TYP)

GENERAL NOTES

1. SEE PRELIMINARY TREE PRESERVATION AND REMOVAL PLAN P5.0 FOR TREE PROTECTION AND CONSTRUCTION FENCE LOCATIONS AND TREE ROOT PROTECTION ZONE RADIUS ZONES.
2. ADDITIONAL EROSION CONTROL MEASURES WILL BE INCLUDED DURING FINAL ENGINEERING TO ACCOUNT FOR GRADING ON STEEP SLOPES AND CONSTRUCTION PHASING.
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PRELIMINARY GRADING QUANTITIES:

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FILL: 75,000 C.Y.

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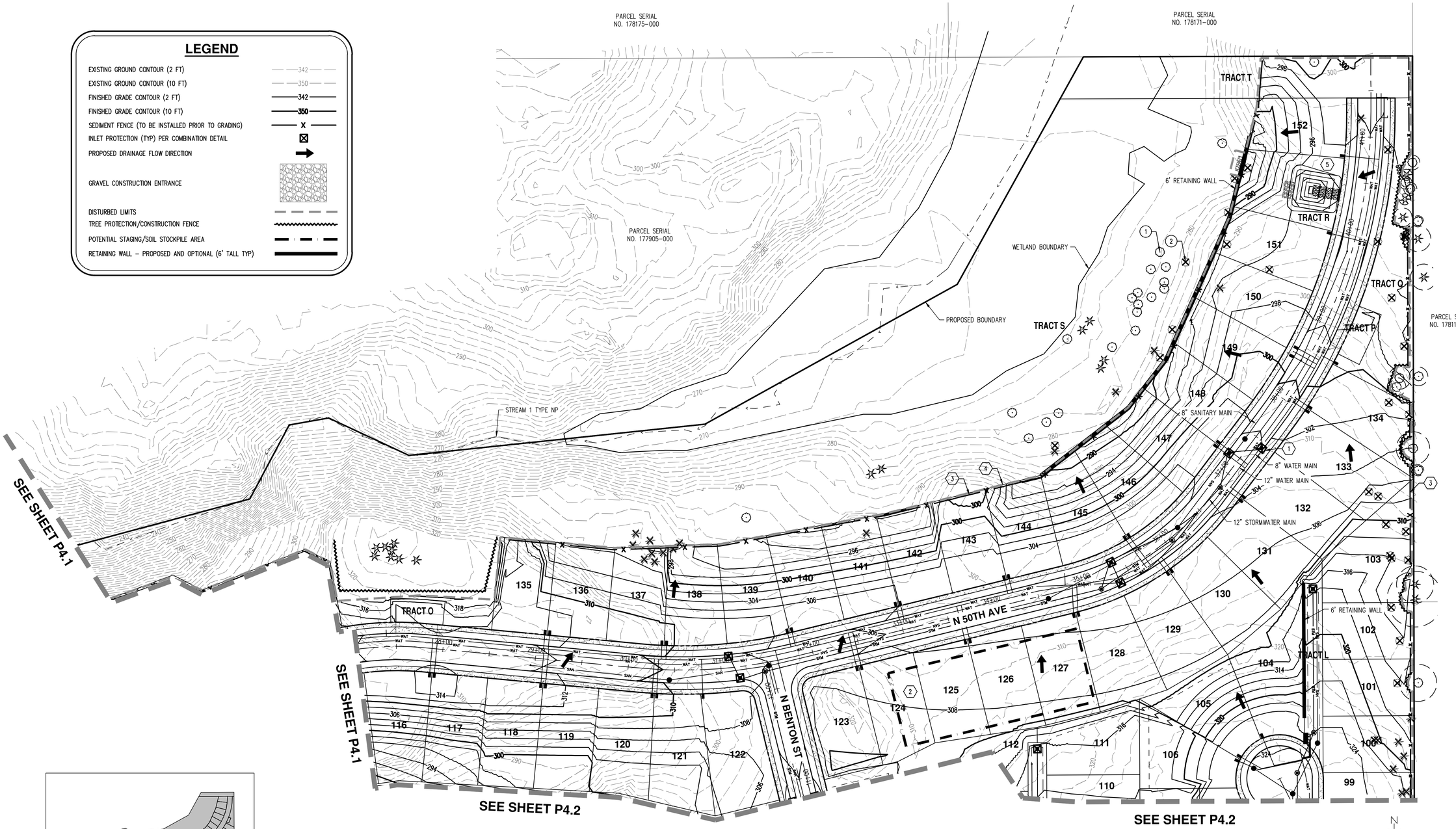

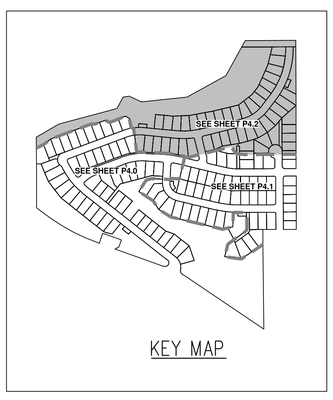

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2. REMOVE EXISTING TREE (TYP)

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1. INSTALL INLET PROTECTION (TYP)
2. POTENTIAL STOCKPILE AND ROCK CRUSHER AREA
3. INSTALL SEDIMENT FENCE (TYP)
4. DISTURBED LIMITS (TYP)
5. PERMANENT POND TO BE USED AS TEMPORARY SEDIMENT CONTROL POND DURING CONSTRUCTION.

N

SCALE: 1"=50 FEET

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PRELIMINARY GRADING AND ESC PLAN - PHASE 3
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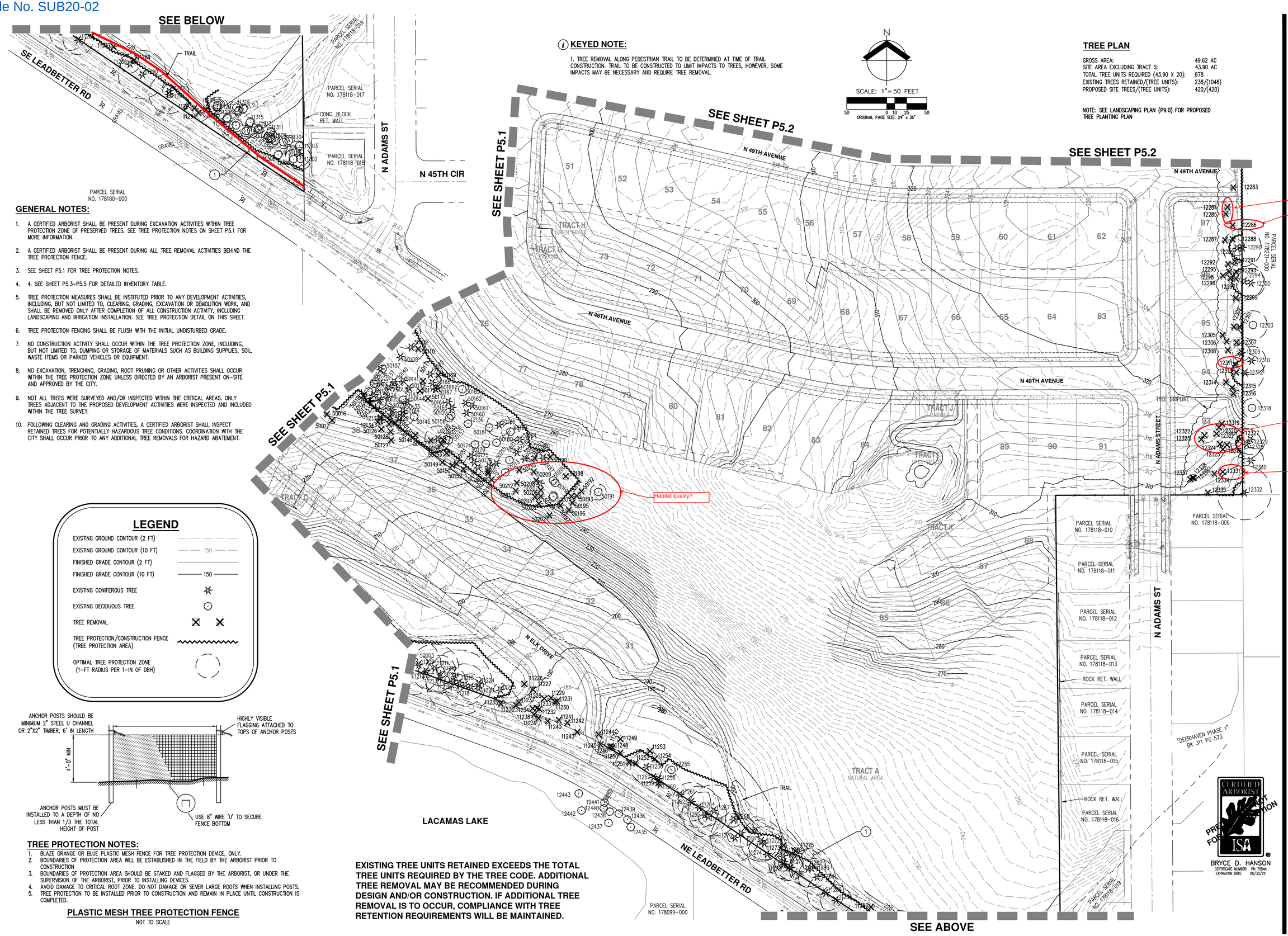

KEYED NOTE:

1. TREE REMOVAL ALONG PEDESTRIAN TRAIL TO BE DETERMINED AT TIME OF TRAIL CONSTRUCTION. TRAIL TO BE CONSTRUCTED TO LIMIT IMPACTS TO TREES, HOWEVER, SOME IMPACTS MAY BE NECESSARY AND REQUIRE TREE REMOVAL.

TREE PLAN

GROSS AREA:	49.62 AC
SITE AREA EXCLUDING TRACT S:	43.90 AC
TOTAL TREE UNITS REQUIRED (43.90 X 20):	878
EXISTING TREES RETAINED/(TREE UNITS):	238/(1048)
PROPOSED SITE TREES/(TREE UNITS):	420/(420)

NOTE: SEE LANDSCAPING PLAN (P9.0) FOR PROPOSED TREE PLANTING PLAN

GENERAL NOTES:

1. A CERTIFIED ARBORIST SHALL BE PRESENT DURING EXCAVATION ACTIVITIES WITHIN TREE PROTECTION ZONE OF PRESERVED TREES. SEE TREE PROTECTION NOTES ON SHEET P5.1 FOR MORE INFORMATION.
2. A CERTIFIED ARBORIST SHALL BE PRESENT DURING ALL TREE REMOVAL ACTIVITIES BEHIND THE TREE PROTECTION FENCE.
3. SEE SHEET P5.1 FOR TREE PROTECTION NOTES.
4. 4. SEE SHEET P5.3–P5.5 FOR DETAILED INVENTORY TABLE.
5. TREE PROTECTION MEASURES SHALL BE INSTITUTED PRIOR TO ANY DEVELOPMENT ACTIVITIES, INCLUDING, BUT NOT LIMITED TO, CLEARING, GRADING, EXCAVATION OR DEMOLITION WORK, AND SHALL BE REMOVED ONLY AFTER COMPLETION OF ALL CONSTRUCTION ACTIVITY, INCLUDING LANDSCAPING AND IRRIGATION INSTALLATION. SEE TREE PROTECTION DETAIL ON THIS SHEET.
6. TREE PROTECTION FENCING SHALL BE FLUSH WITH THE INITIAL UNDISTURBED GRADE.
7. NO CONSTRUCTION ACTIVITY SHALL OCCUR WITHIN THE TREE PROTECTION ZONE, INCLUDING, BUT NOT LIMITED TO, DUMPING OR STORAGE OF MATERIALS SUCH AS BUILDING SUPPLIES, SOIL, WASTE ITEMS OR PARKED VEHICLES OR EQUIPMENT.
8. NO EXCAVATION, TRENCHING, GRADING, ROOT PRUNING OR OTHER ACTIVITIES SHALL OCCUR WITHIN THE TREE PROTECTION ZONE UNLESS DIRECTED BY AN ARBORIST PRESENT ON–SITE AND APPROVED BY THE CITY.
9. NOT ALL TREES WERE SURVEYED AND/OR INSPECTED WITHIN THE CRITICAL AREAS. ONLY TREES ADJACENT TO THE PROPOSED DEVELOPMENT ACTIVITIES WERE INSPECTED AND INCLUDED WITHIN THE TREE SURVEY.
10. FOLLOWING CLEARING AND GRADING ACTIVITIES, A CERTIFIED ARBORIST SHALL INSPECT RETAINED TREES FOR POTENTIALLY HAZARDOUS TREE CONDITIONS. COORDINATION WITH THE CITY SHALL OCCUR PRIOR TO ANY ADDITIONAL TREE REMOVALS FOR HAZARD ABATEMENT.

LEGEND

- EXISTING GROUND CONTOUR (2 FT)
- EXISTING GROUND CONTOUR (10 FT) — 150
- FINISHED GRADE CONTOUR (2 FT)
- FINISHED GRADE CONTOUR (10 FT) — 150
- EXISTING CONIFEROUS TREE
- EXISTING DECIDUOUS TREE
- TREE REMOVAL
- TREE PROTECTION/CONSTRUCTION FENCE (TREE PROTECTION AREA)
- OPTIMAL TREE PROTECTION ZONE (1–FT RADIUS PER 1–IN OF DBH)

TREE PROTECTION NOTES:

1. BLAZE ORANGE OR BLUE PLASTIC MESH FENCE FOR TREE PROTECTION DEVICE, ONLY.
2. BOUNDARIES OF PROTECTION AREA WILL BE ESTABLISHED IN THE FIELD BY THE ARBORIST PRIOR TO CONSTRUCTION
3. BOUNDARIES OF PROTECTION AREA SHOULD BE STAKED AND FLAGGED BY THE ARBORIST, OR UNDER THE SUPERVISION OF THE ARBORIST, PRIOR TO INSTALLING DEVICES.
4. AVOID DAMAGE TO CRITICAL ROOT ZONE. DO NOT DAMAGE OR SEVER LARGE ROOTS WHEN INSTALLING POSTS.
5. TREE PROTECTION TO BE INSTALLED PRIOR TO CONSTRUCTION AND REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED.

PLASTIC MESH TREE PROTECTION FENCE

NOT TO SCALE

EXISTING TREE UNITS RETAINED EXCEEDS THE TOTAL TREE UNITS REQUIRED BY THE TREE CODE. ADDITIONAL TREE REMOVAL MAY BE RECOMMENDED DURING DESIGN AND/OR CONSTRUCTION. IF ADDITIONAL TREE REMOVAL IS TO OCCUR, COMPLIANCE WITH TREE RETENTION REQUIREMENTS WILL BE MAINTAINED.

AKS ENGINEERING & FORESTRY, LLC
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PRELIMINARY TREE PRESERVATION AND REMOVAL PLAN (SOUTH)

CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

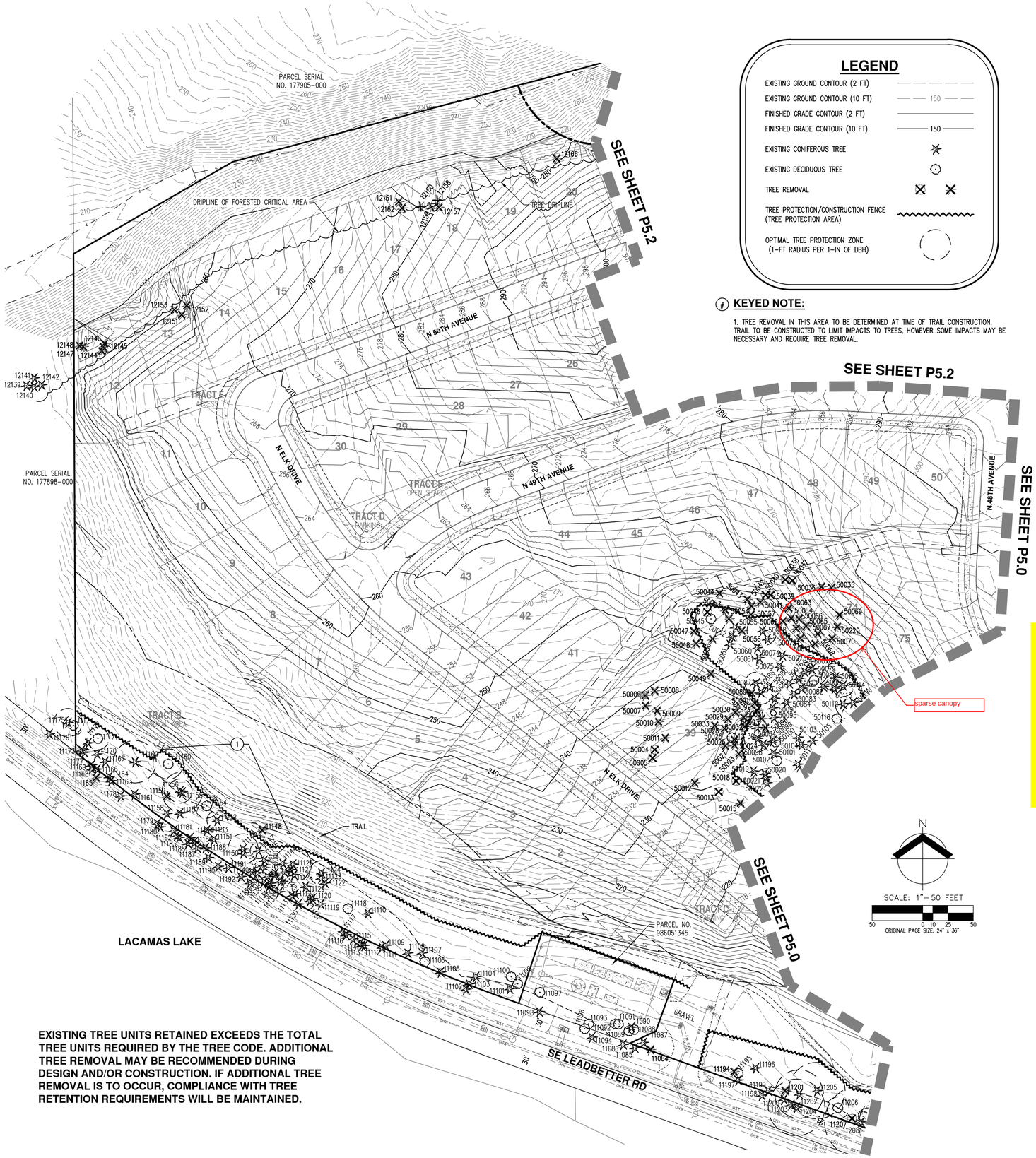
PRELIMINARY NOT FOR CONSTRUCTION

BRYCE D. HANSON
CERTIFICATE NUMBER: PN 7554A
EXPIRATION DATE: 06/30/22

JOB NUMBER:	5504
DATE:	11/24/2020
DESIGNED BY:	CJS
DRAWN BY:	BRK
CHECKED BY:	BDH

P5.0

AKS DRAWING FILE: 5504 P5.0 TREE PLAN.DWG | LAYOUT: P5.0



LEGEND

- EXISTING GROUND CONTOUR (2 FT)
- EXISTING GROUND CONTOUR (10 FT) — 150
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- EXISTING CONIFEROUS TREE
- EXISTING DECIDUOUS TREE
- TREE REMOVAL
- TREE PROTECTION/CONSTRUCTION FENCE (TREE PROTECTION AREA)
- OPTIMAL TREE PROTECTION ZONE (1-FT RADIUS PER 1-IN OF DBH)

KEYED NOTE:

1. TREE REMOVAL IN THIS AREA TO BE DETERMINED AT TIME OF TRAIL CONSTRUCTION. TRAIL TO BE CONSTRUCTED TO LIMIT IMPACTS TO TREES, HOWEVER SOME IMPACTS MAY BE NECESSARY AND REQUIRE TREE REMOVAL.

N

SCALE: 1"=50 FEET

50 0 10 25 50

ORIGINAL PAGE SIZE: 24" x 36"

EXISTING TREE UNITS RETAINED EXCEEDS THE TOTAL TREE UNITS REQUIRED BY THE TREE CODE. ADDITIONAL TREE REMOVAL MAY BE RECOMMENDED DURING DESIGN AND/OR CONSTRUCTION. IF ADDITIONAL TREE REMOVAL IS TO OCCUR, COMPLIANCE WITH TREE RETENTION REQUIREMENTS WILL BE MAINTAINED.

TREE PROTECTION NOTES

A. PLACING MATERIALS NEAR TREES – NO PERSON MAY CONDUCT ANY ACTIVITY WITHIN THE PROTECTED AREA OF ANY TREE DESIGNATED TO REMAIN, INCLUDING, BUT NOT LIMITED TO, PARKING EQUIPMENT, PLACING SOLVENTS, STORING BUILDING MATERIALS AND SOIL DEPOSITS, DUMPING CONCRETE WASHOUT, ETC.

B. ATTACHMENTS TO TREES – DURING CONSTRUCTION, NO PERSON SHALL ATTACH ANY OBJECT TO ANY TREE DESIGNATED FOR PROTECTION.

C. PROTECTIVE BARRIER – BEFORE DEVELOPMENT, LAND CLEARING, FILLING OR ANY LAND ALTERATION FOR WHICH A TREE REMOVAL PERMIT IS REQUIRED, THE CONTRACTOR:

C.A. SHALL ERECT AND MAINTAIN READILY VISIBLE PROTECTIVE TREE FENCING ALONG THE OUTER EDGE AND COMPLETELY SURROUNDING THE PROTECTED AREA OF ALL PROTECTED TREES OR GROUP OF TREES. FENCES SHALL BE CONSTRUCTED PER THE DETAIL ON THIS SHEET.

C.B. MAY BE REQUIRED TO COVER WITH MULCH TO A DEPTH OF AT LEAST SIX (6) INCHES OR WITH PLYWOOD OR SIMILAR MATERIAL IN THE AREAS ADJOINING THE CRITICAL ROOT ZONE OF A TREE IN ORDER TO PROTECT ROOTS FROM DAMAGE CAUSED BY HEAVY EQUIPMENT.

C.C. SHALL PROHIBIT EXCAVATION OR COMPACTING OF EARTH OR OTHER POTENTIALLY DAMAGING ACTIVITIES WITHIN THE BARRIERS.

C.D. MAY BE REQUIRED TO MINIMIZE ROOT DAMAGE BY EXCAVATING A TWO (2) FOOT DEEP TRENCH, AT EDGE OF CRITICAL ROOT ZONE, TO CLEANLY SEVER THE ROOTS OF TREES TO BE RETAINED. ROOTS ONE (1) INCH DIAMETER OR GREATER SHALL BE CLEANLY CUT WITH A SAW OR PRUNERS.

C.E. MAY BE REQUIRED TO HAVE CORRECTIVE PRUNING PERFORMED ON PROTECTED TREES IN ORDER TO AVOID DAMAGE FROM MACHINERY OR BUILDING ACTIVITY. MAY BE REQUIRED TO MAINTAIN TREES THROUGHOUT THE CONSTRUCTION PERIOD BY WATERING AND FERTILIZING.

C.F. SHALL MAINTAIN THE PROTECTIVE BARRIERS IN PLACE UNTIL THE PROJECT ARBORIST AUTHORIZES THEIR REMOVAL OR A FINAL CERTIFICATE OF OCCUPANCY IS ISSUED, WHICHEVER OCCURS FIRST.

C.G. SHALL ENSURE THAT ANY LANDSCAPING DONE IN THE PROTECTED ZONE SUBSEQUENT TO THE REMOVAL OF THE BARRIERS SHALL BE ACCOMPLISHED WITH LIGHT MACHINERY OR HAND LABOR.

D. GRADE

D.A. THE GRADE SHALL NOT BE ELEVATED OR REDUCED WITHIN THE CRITICAL ROOT ZONE OF TREES TO BE PRESERVED WITHOUT THE PROJECT ARBORISTS'S AUTHORIZATION. THE PROJECT ARBORIST MAY ALLOW COVERAGE OF UP TO ONE HALF OF THE AREA OF THE TREE'S CRITICAL ROOT ZONE WITH LIGHT SOILS (NO CLAY) TO THE MINIMUM DEPTH NECESSARY TO CARRY OUT GRADING OR LANDSCAPING PLANS, IF IT WILL NOT IMPERIL THE SURVIVAL OF THE TREE. AERATION DEVICES MAY BE REQUIRED TO ENSURE THE TREE'S SURVIVAL.

D.B. IF THE GRADE ADJACENT TO A PRESERVED TREE IS RAISED SUCH THAT IT COULD SLOUGH OR ERODE INTO THE TREES CRITICAL ROOT ZONE, IT SHALL BE PERMANENTLY STABILIZED TO PREVENT SUFFOCATION OF THE ROOTS.

D.C. THE APPLICANT SHALL NOT INSTALL AN IMPERVIOUS SURFACE WITHIN THE CRITICAL ROOT ZONE OF ANY TREE TO BE RETAINED WITHOUT THE AUTHORIZATION OF THE PROJECT ARBORIST. THE PROJECT ARBORIST MAY REQUIRE SPECIFIC CONSTRUCTION METHODS AND/OR USE OF AERATION DEVICES TO ENSURE THE TREE'S SURVIVAL AND TO MINIMIZE THE POTENTIAL FOR ROOT INDUCED DAMAGE TO THE IMPERVIOUS SURFACE.

D.D. TO THE GREATEST EXTENT PRACTICAL, UTILITY TRENCHES SHALL BE LOCATED OUTSIDE OF THE CRITICAL ROOT ZONE OF TREES TO BE RETAINED. THE PROJECT ARBORIST MAY REQUIRE THAT UTILITIES BE TUNNELED UNDER THE ROOTS OF TREES TO BE RETAINED IF THE PROJECT ARBORIST DETERMINES THAT TRENCHING WOULD SIGNIFICANTLY REDUCE THE CHANCES OF THE TREE'S SURVIVAL.

D.E. TREE AND OTHER VEGETATION TO BE RETAINED SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. CLEARING OPERATIONS SHALL BE CONDUCTED SO AS TO EXPOSE THE SMALLEST PRACTICAL AREA OF SOIL TO EROSION FOR THE LEAST POSSIBLE TIME. TO CONTROL EROSION, SHRUBS, GROUND COVER, AND STUMPS SHALL BE MAINTAINED ON THE INDIVIDUAL LOTS, WHERE FEASIBLE. WHERE NOT FEASIBLE, APPROPRIATE EROSION CONTROL PRACTICES SHALL BE IMPLEMENTED PURSUANT TO CAMAS MUNICIPAL CODE CHAPTER 14.06.

E. DIRECTIONAL FELLING OF TREES SHALL BE USED TO AVOID DAMAGE TO TREES DESIGNATED FOR RETENTION.

F. ADDITIONAL REQUIREMENTS – THE PROJECT ARBORIST MAY REQUIRE ADDITIONAL TREE PROTECTION MEASURES WHICH ARE CONSISTENT WITH ACCEPTED URBAN FORESTRY PRACTICES.

G. ENCROACHMENT INTO THE ROOT PROTECTION ZONE IS ALLOWED WITH PROJECT ARBORIST APPROVAL AS DESCRIBED IN THE FOLLOWING NOTES:

G.A. EXCAVATION IN THE TOP 24 INCHES OF THE SOIL IN THE CRITICAL ROOT ZONE AREA SHOULD BEGIN AT THE EXCAVATION LINE THAT IS CLOSEST TO THE TREE.

G.B. THE EXCAVATION SHOULD BE DONE BY HAND/SHOVEL OR WITH A BACKHOE AND A MAN WITH A SHOVEL, PRUNING SHEARS, AND A PRUNING SAW.

G.C. IF DONE BY HAND, ALL ROOTS 1 INCH OR LARGER SHOULD BE PRUNED AT THE EXCAVATION LINE.

G.D. IF DONE WITH BACKHOE (MOST LIKELY SCENARIO), THEN THE OPERATOR SHALL START THE CUT AT THE EXCAVATION LINE AND CAREFULLY "FEEL" FOR ROOT/RESISTANCE. WHEN THERE IS RESISTANCE, THE MAN WITH THE SHOVEL HAND DIGS AROUND THE ROOTS AND PRUNES THE ROOTS LARGER THAN 1 INCH DIAMETER.

G.E. THE BACKHOE IS TO REMAIN OFF OF THE TREE ROOTS TO BE PRESERVED AT ALL TIMES.

G.F. ALL ROOTS SHALL BE CUT CLEANLY WITH PRUNING SHEARS OR A PRUNING SAW.

G.G. PROJECT ARBORIST MUST BE ONSITE DURING ANY WORK WITHIN THE TREE ROOT PROTECTION ZONE.

G.H. THE CITY PLANNER MUST BE CONTACTED 24 HOURS PRIOR TO WORKING WITHIN THE TREE ROOT PROTECTION ZONE.

H. TREE PROTECTION ZONE IS DEFINED AS ALL AREAS BOUND AND PROTECTING THE OPTIMAL TREE PROTECTION ZONE.

I. TIMELINE FOR CLEARING, GRADING, AND INSTALLATION OF TREE PROTECTION MEASURES: WORK WILL BEGIN IMMEDIATELY FOLLOWING FINAL APPROVAL BY THE CITY. TREE PROTECTION MEASURES WILL BE DONE DURING CLEARING AND ANY GRADING WILL FOLLOW.

J. PRUNING/TREE REMOVAL NOTES: THE WORK TO BE COMPLETED UNDER THIS PROJECT SHALL CONSIST OF TREE REMOVAL AND TREE TRIMMING AS LISTED.

J.A. THE CONTRACTOR SHALL PROVIDE ADEQUATE CREW OF MEN, EQUIPMENT AND MATERIALS TO SAFELY AND EFFICIENTLY COMPLETE THE ASSIGNED WORK. EACH SUCH CREW SHALL INCLUDE AN INDIVIDUAL WHO SHALL BE DESIGNATED AS THE CREW SUPERVISOR AND WHO SHALL BE RESPONSIBLE FOR THE CREW'S ACTIVITIES AND WHO SHALL RECEIVE INSTRUCTION FROM THE OWNER OR THE OWNER'S REPRESENTATIVE AND DIRECT THE CREW TO ACCOMPLISH SUCH WORK.

J.B. WHENEVER A TREE, WHICH IS NOT SCHEDULED TO BE REMOVED, MUST BE TRIMMED OR PRUNED, THE CONTRACTOR SHALL INSURE THAT SUCH TRIMMING AND PRUNING IS CARRIED OUT UNDER THE DIRECT SUPERVISION OF A LICENSED ARBORIST. ALL PRUNING AND TRIMMING SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF ANSI A 300 "STANDARD PRACTICES FOR TREE, SHRUB AND OTHER WOODY PLANT MAINTENANCE".

J.C. THE CONTRACTOR SHALL BE REQUIRED TO CUT TREES TO A HEIGHT OF APPROXIMATELY 12". THE STUMPS AND ROOTS SHALL BE GROUND DOWN A MINIMUM OF TWELVE (12) INCHES BELOW NORMAL GROUND LEVEL.

J.D. THE CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE LATEST GOVERNMENTAL SAFETY REGULATIONS. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ANSI Z133.1 "PRUNING, TRIMMING, REPAIRING, MAINTAINING AND REMOVING TREES AND CUTTING BRUSH–SAFETY REQUIREMENTS" WITH SPECIAL EMPHASIS GIVEN TO THE REQUIREMENT THAT ONLY QUALIFIED LINE–CLEARANCE TREE TRIMMERS BE ASSIGNED TO WORK WHERE A POTENTIAL ELECTRICAL HAZARD EXISTS.

J.E. THE CONTRACTOR SHALL MAKE ALL THE NECESSARY ARRANGEMENTS WITH ANY UTILITY THAT MUST BE PROTECTED OR RELOCATED IN ORDER TO ACCOMPLISH THE WORK. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PROTECTION OF THE OPERATING CONDITION OF ALL ACTIVE UTILITIES WITHIN THE AREA OF CONSTRUCTION AND THEY SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO EXISTING UTILITIES.

J.F. ANY MATERIAL RESULTING FROM THE TRIMMING OR REMOVAL OF ANY TREES SHALL BECOME THE RESPONSIBILITY OF THE CONTRACTOR.

J.G. HAZARDOUS TREES–REPORTING – ANY PERSON ENGAGED IN TRIMMING OR PRUNING WHO BECOMES AWARE OF A TREE OF DOUBTFUL STRENGTH, THAT COULD BE DANGEROUS TO PERSONS AND PROPERTY, SHALL REPORT SUCH TREE(S) TO THE OWNER OR THE OWNERS REPRESENTATIVE. SUCH TREES SHALL INCLUDE THOSE THAT ARE OVER MATURE, DISEASED, OR SHOWING SIGNS OF DECAY OR OTHER STRUCTURAL WEAKNESS.

J.H. DAMAGES–ANY DAMAGE CAUSED BY THE CONTRACTOR, INCLUDING, BUT NOT LIMITED TO, BROKEN SIDEWALK, CURB, RUTTED LAWN, BROKEN WATER SHUT–OFFS, WIRE DAMAGE, BUILDING DAMAGE, STREET DAMAGE, ETC., WILL BE REPAIRED OR REPLACED IN A TIMELY MANNER, TO THE OWNER'S SATISFACTION, AND ALL COSTS PAID BY THE CONTRACTOR.

J.I. ANY BRUSH CLEARING REQUIRED WITHIN THE TREE PROTECTION ZONE SHALL BE ACCOMPLISHED WITH HAND OPERATED EQUIPMENT.

J.J. TREES TO BE REMOVED SHALL BE FELLED SO AS TO FALL AWAY FROM TREE ROOT PROTECTION ZONES AND TO AVOID PULLING AND BREAKING OF ROOTS TO REMAIN.

J.K. ALL DOWNED BRUSH AND TREES SHALL BE REMOVED FROM THE TREE PROTECTION ZONE EITHER BY HAND OR WITH EQUIPMENT SITTING OUTSIDE THE TREE ROOT PROTECTION ZONE. EXTRACTION SHALL OCCUR BY LIFTING THE MATERIAL OUT, NOT BY SKIDDING IT ACROSS THE GROUND.

J.L. IF TEMPORARY HAUL OR ACCESS ROADS MUST PASS OVER THE ROOT AREA OF TREES TO BE RETAINED A ROADBED OF 6 INCHES OF MULCH OR GRAVEL SHALL BE CREATED TO PROTECT THE SOIL. THE ROADBED MATERIAL SHALL BE REPLENISHED AS NECESSARY TO MAINTAIN A 6–INCH DEPTH.

J.M. PRUNING. TREES SHALL BE PRUNED PRIOR TO THE START OF CONSTRUCTION. TREES SHALL BE CROWN CLEANED TO REMOVE THE DEADWOOD 2 INCHES IN DIAMETER AND OVER. TREES SHALL BE CROWN THINNED BY 10–20% CROWNS MAY BE RAISED BY REMOVING BOTTOM BRANCHES AS NECESSARY UP TO 14 FEET HIGH TO GIVE CLEARANCE FOR ANY CONSTRUCTION TRAFFIC, ACTIVITIES, ETC. ALL WORK TO BE DONE IN ACCORDANCE WITH ANSI A300 PRUNING STANDARDS. REMOVE ANY LIMBS OF DOUBTFUL STRENGTH THAT COULD BE DANGEROUS TO PERSONS AND PROPERTY.

ARBORIST DISCLOSURE STATEMENT

ARBORISTS ARE TREE SPECIALISTS WHO USE THEIR EDUCATION, KNOWLEDGE, TRAINING, AND EXPERIENCE TO EXAMINE TREES, RECOMMEND MEASURES TO ENHANCE THE HEALTH OF TREES, AND ATTEMPT TO REDUCE THE RISK OF LIVING NEAR TREES. THE CLIENT AND JURISDICTION MAY CHOOSE TO ACCEPT OR DISREGARD THE RECOMMENDATIONS OF THE ARBORIST, OR SEEK ADDITIONAL ADVICE.

ARBORISTS CANNOT DETECT EVERY CONDITION THAT COULD POSSIBLY LEAD TO THE STRUCTURAL FAILURE OF A TREE. TREES ARE LIVING ORGANISMS THAT FAIL IN WAYS WE DO NOT FULLY UNDERSTAND. CONDITIONS ARE OFTEN HIDDEN WITHIN TREES AND BELOW GROUND. ARBORISTS CANNOT GUARANTEE THAT A TREE WILL BE HEALTHY OR SAFE UNDER ALL CIRCUMSTANCES, OR FOR A SPECIFIED PERIOD OF TIME. LIKEWISE, REMEDIAL TREATMENTS, LIKE MEDICINE, CANNOT BE GUARANTEED.

TREES CAN BE MANAGED, BUT THEY CANNOT BE CONTROLLED. TO LIVE NEAR TREES IS TO ACCEPT SOME DEGREE OF RISK. THE ONLY WAY TO ELIMINATE ALL RISK ASSOCIATED WITH TREES IS TO ELIMINATE ALL TREES.

AT THE COMPLETION OF CONSTRUCTION, ALL TREES MUST ONCE AGAIN BE REVIEWED TO EVALUATE THEIR HAZARD RATING. LAND CLEARING AND REMOVAL OF ADJACENT TREES CAN EXPOSE PREVIOUSLY UNSEEN DEFECTS AND OTHERWISE HEALTHY TREES CAN BE DAMAGED DURING CONSTRUCTION.

TREE INFORMATION GATHERED UNDER THE SUPERVISION OF BRYCE HANSON, CERTIFIED ARBORIST, WITH AKS ENGINEERING AND FORESTRY, LLC.

TREES SHOWN TO BE SAVED WILL BE EVALUATED BY THE PROJECT ARBORIST PRIOR TO, DURING, AND AFTER CONSTRUCTION. TREES ADVERSELY AFFECTED BY CONSTRUCTION AND/OR DETERMINED TO BE A SAFETY HAZARD WILL BE REMOVED.

GENERAL NOTES:

1. A CERTIFIED ARBORIST SHALL BE PRESENT DURING EXCAVATION ACTIVITIES WITHIN TREE PROTECTION ZONE OF PRESERVED TREES. SEE TREE PROTECTION NOTES ON THIS SHEET FOR MORE INFORMATION.
2. A CERTIFIED ARBORIST SHALL BE PRESENT DURING ALL TREE REMOVAL ACTIVITIES BEHIND THE TREE PROTECTION FENCE.
3. SEE SHEET THIS SHEET FOR TREE PROTECTION NOTES.
4. 4. SEE SHEET P5.3–P5.5 FOR DETAILED INVENTORY TABLE.
5. TREE PROTECTION MEASURES SHALL BE INSTITUTED PRIOR TO ANY DEVELOPMENT ACTIVITIES, INCLUDING, BUT NOT LIMITED TO, CLEARING, GRADING, EXCAVATION OR DEMOLITION WORK, AND SHALL BE REMOVED ONLY AFTER COMPLETION OF ALL CONSTRUCTION ACTIVITY, INCLUDING LANDSCAPING AND IRRIGATION INSTALLATION. SEE TREE PROTECTION DETAIL ON SHEET P5.0.
6. TREE PROTECTION FENCING SHALL BE FLUSH WITH THE INITIAL UNDISTURBED GRADE.
7. NO CONSTRUCTION ACTIVITY SHALL OCCUR WITHIN THE TREE PROTECTION ZONE, INCLUDING, BUT NOT LIMITED TO, DUMPING OR STORAGE OF MATERIALS SUCH AS BUILDING SUPPLIES, SOIL, WASTE ITEMS OR PARKED VEHICLES OR EQUIPMENT.
8. NO EXCAVATION, TRENCHING, GRADING, ROOT PRUNING OR OTHER ACTIVITIES SHALL OCCUR WITHIN THE TREE PROTECTION ZONE UNLESS DIRECTED BY AN ARBORIST PRESENT ON–SITE AND APPROVED BY THE CITY.
9. NOT ALL TREES WERE SURVEYED AND/OR INSPECTED WITHIN THE CRITICAL AREAS. ONLY TREES ADJACENT TO THE PROPOSED DEVELOPMENT ACTIVITIES WERE INSPECTED AND INCLUDED WITHIN THE TREE SURVEY.
10. FOLLOWING CLEARING AND GRADING ACTIVITIES, A CERTIFIED ARBORIST SHALL INSPECT RETAINED TREES FOR POTENTIALLY HAZARDOUS TREE CONDITIONS. COORDINATION WITH THE CITY SHALL OCCUR PRIOR TO ANY ADDITIONAL TREE REMOVALS FOR HAZARD ABATEMENT.
11. EXISTING TREE UNITS RETAINED EXCEEDS THE TOTAL TREE UNITS REQUIRED BY THE TREE CODE. ADDITIONAL TREE REMOVAL MAY BE RECOMMENDED DURING DESIGN AND/OR CONSTRUCTION. IF ADDITIONAL TREE REMOVAL IS TO OCCUR, COMPLIANCE WITH TREE RETENTION REQUIREMENTS WILL BE MAINTAINED.

CERTIFIED ARBORIST
PRELIMINARY NOT FOR CONSTRUCTION
ISA
BRYCE D. HANSON
CERTIFICATE NUMBER: PN 7554A
EXPIRATION DATE: 06/30/22

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PRELIMINARY TREE PRESERVATION AND REMOVAL PLAN (WEST)

CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

PRELIMINARY NOT FOR CONSTRUCTION

JOB NUMBER:	5504
DATE:	11/24/2020
DESIGNED BY:	CJS
DRAWN BY:	BRK
CHECKED BY:	BDH

P5.1

AKS DRAWING FILE: 5504 P5.0 TREE PLAN.DWG | LAYOUT: P5.1

GENERAL NOTES:

1. A CERTIFIED ARBORIST SHALL BE PRESENT DURING EXCAVATION ACTIVITIES WITHIN TREE PROTECTION ZONE OF PRESERVED TREES. SEE TREE PROTECTION NOTES ON SHEET P5.1 FOR MORE INFORMATION.
2. A CERTIFIED ARBORIST SHALL BE PRESENT DURING ALL TREE REMOVAL ACTIVITIES BEHIND THE TREE PROTECTION FENCE.
3. SEE SHEET P5.1 FOR TREE PROTECTION NOTES.
4. 4. SEE SHEET P5.3–P5.5 FOR DETAILED INVENTORY TABLE.
5. TREE PROTECTION MEASURES SHALL BE INSTITUTED PRIOR TO ANY DEVELOPMENT ACTIVITIES, INCLUDING, BUT NOT LIMITED TO, CLEARING, GRADING, EXCAVATION OR DEMOLITION WORK, AND SHALL BE REMOVED ONLY AFTER COMPLETION OF ALL CONSTRUCTION ACTIVITY, INCLUDING LANDSCAPING AND IRRIGATION INSTALLATION. SEE TREE PROTECTION DETAIL ON SHEET P5.0.
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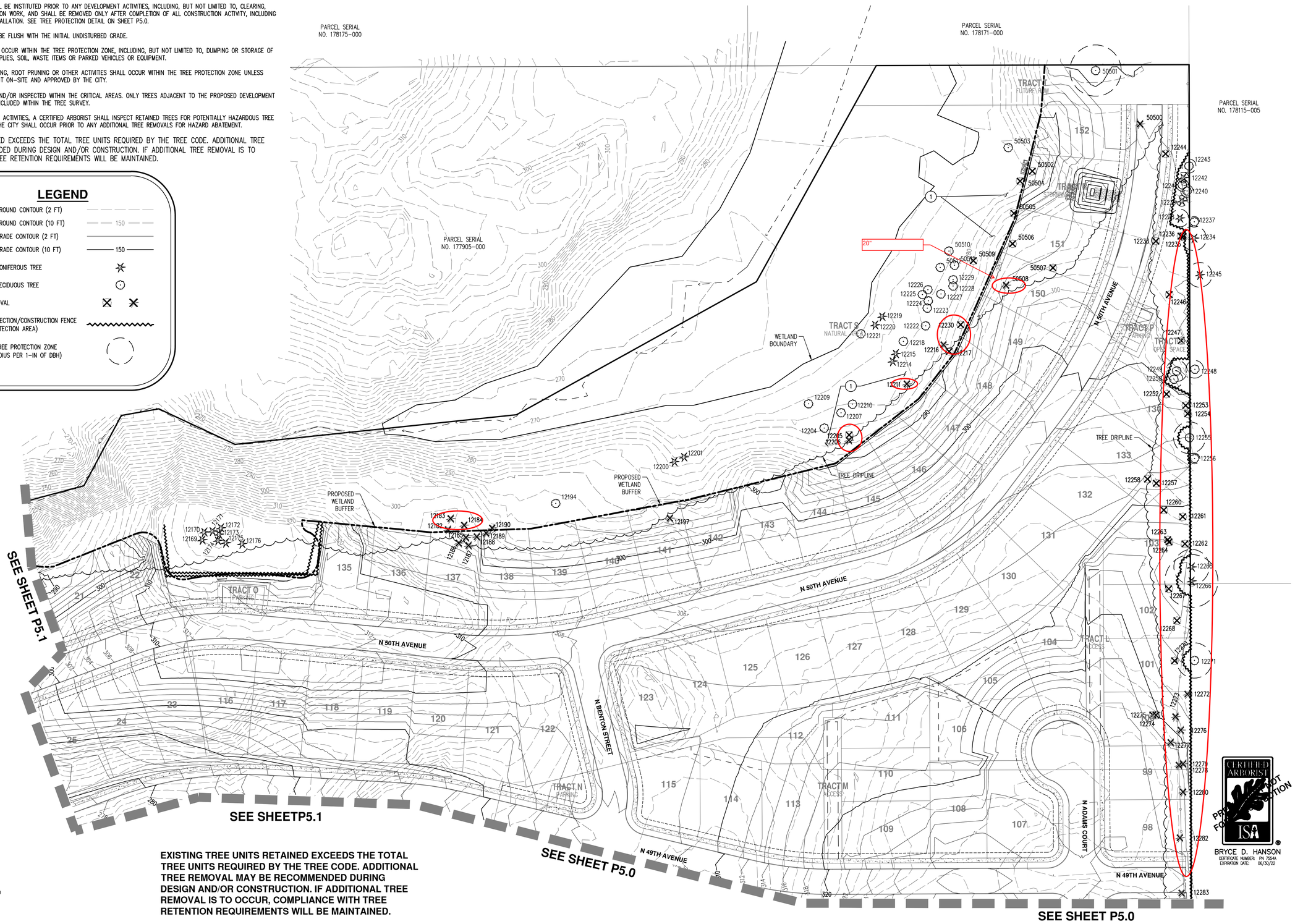
- TREE PROTECTION/CONSTRUCTION FENCE (TREE PROTECTION AREA)
- OPTIMAL TREE PROTECTION ZONE (1-FT RADIUS PER 1-IN OF DBH)

KEYED NOTES:

1. TREES SHOWN WITHIN WETLAND BUFFER ARE HAZARD TREES ONLY. TREE REMOVAL WITHIN THE WETLAND BUFFER SHALL BE CONDUCTED USING HAND TOOLS AND METHODS ONLY (NO HEAVY MACHINERY). TREES SHOWN FOR REMOVAL SHALL HAVE THEIR CROWNS REDUCED TO REDUCE THE TARGET ZONE AND MITIGATE RISK ASSOCIATED WITH POTENTIAL WHOLE TREE FAILURE. TREES MAY ALSO BE CUT AND LEFT IN PLACE. ARBORIST OBSERVATION RECOMMENDED FOR TREE REMOVAL WITHIN WETLAND BUFFER.



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FORESTRY · PLANNING · LANDSCAPE ARCHITECTURE

PRELIMINARY TREE PRESERVATION AND REMOVAL PLAN (NORTH)

CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

PRELIMINARY NOT FOR CONSTRUCTION

CERTIFIED ARBORIST ISA

BRYCE D. HANSON
CERTIFICATE NUMBER: PN 7554A
EXPIRATION DATE: 06/30/22

JOB NUMBER:	5504
DATE:	11/24/2020
DESIGNED BY:	CJS
DRAWN BY:	BRK
CHECKED BY:	BDH

P5.2

AKS DRAWING FILE: 5504 P5.0 TREE PLAN.DWG | LAYOUT: P5.2

Detailed Tree Inventory for CJ Dens

AKS JOB NO. 5504 **Site Area = 43.90 acres**

AKS Reference #	Total DBH (In)	Tree Species Common Name (*Scientific name*)	Tree Units Initial	Condition/Comments	Windthrow Rating	Reason for Removal	Tree Units Retained
11084	7	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
11085	30	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, Unbalanced crown, broken branches, Poor live crown ratio	B		0
11086	34	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, Unbalanced crown, broken branches, Poor live crown ratio	B		0
11087	10	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor live crown ratio, some branch dieback	B		2
11088	11	Bigleaf Maple (*Acer macrophyllum*)	0	Poor live crown ratio, broken branches	B		0
11089	13	Bigleaf Maple (*Acer macrophyllum*)	0	Deformed bole	B		0
11090	14	Douglas-fir (*Pseudotsuga menziesii*)	0	Codominant top with included bark, sparse canopy	B		0
11091	17	Bigleaf Maple (*Acer macrophyllum*)	0	Unbalanced crown, some branch dieback	B		0
11092	8	Bigleaf Maple (*Acer macrophyllum*)	0	Healthy	C		0
11093	12	Bigleaf Maple (*Acer macrophyllum*)	0	Healthy	C		0
11094	20, 22	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, codominant base, deformed bole, lean, unbalanced crown	B		0
11096	12	Bigleaf Maple (*Acer macrophyllum*)	0	Off site, dead	A		0
11097	10	Bigleaf Maple (*Acer macrophyllum*)	0	Off site, Broken branches with decay, dead branches in crown	B		0
11098	30	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, dead	A		0
11099	13	Bigleaf Maple (*Acer macrophyllum*)	3	Bore holes, sluffing bark	B		3
11100	9	Bigleaf Maple (*Acer macrophyllum*)	2	Healthy	C		2
11101	15	Douglas-fir (*Pseudotsuga menziesii*)	4	Dead scaffold branches, sparse canopy	B		4
11102	24	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, broken top	A		0
11103	32	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, poor live crown ratio, branch dieback	B		0
11104	34	Douglas-fir (*Pseudotsuga menziesii*)	13	Some dead branches in crown	C		13
11105	28	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, unbalanced crown, sweep	B		0
11106	12	Bigleaf Maple (*Acer macrophyllum*)	2	Healthy	C		2
11107	22	Douglas-fir (*Pseudotsuga menziesii*)	7	Poor live crown ratio	B		7
11108	36	Douglas-fir (*Pseudotsuga menziesii*)	14	Healthy	C		14
11109	20	Douglas-fir (*Pseudotsuga menziesii*)	6	Unbalanced crown	B		6
11110	20	Douglas-fir (*Pseudotsuga menziesii*)	6	Unbalanced crown, dead branches in crown, crown cleaning recommended	B		6
11111	9	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, dead	A		0
11112	16	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, unbalanced crown	B		0
11113	16	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, unbalanced crown, poor live crown ratio	B		0
11114	20	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11115	12	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, suppressed, sparse canopy	B		0
11116	28	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11117	20	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11118	10	Bigleaf Maple (*Acer macrophyllum*)	2	Healthy	C		2
11119	15	Douglas-fir (*Pseudotsuga menziesii*)	4	Unbalanced crown	B		4
11120	21	Douglas-fir (*Pseudotsuga menziesii*)	7	Unbalanced crown	B		7
11121	8	Douglas-fir (*Pseudotsuga menziesii*)	2	Suppressed	C		2
11122	16	Douglas-fir (*Pseudotsuga menziesii*)	4	Sparse canopy, some branch dieback	B		4
11123	10	Douglas-fir (*Pseudotsuga menziesii*)	2	Sparse canopy, some branch dieback	B		2
11124	12	Douglas-fir (*Pseudotsuga menziesii*)	2	Sparse canopy, some branch dieback	B		2
11125	20	Douglas-fir (*Pseudotsuga menziesii*)	6	Healthy	C		6
11127	6	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A		0
11128	8	Douglas-fir (*Pseudotsuga menziesii*)	2	Suppressed, unbalanced crown	B		2
11129	17	Douglas-fir (*Pseudotsuga menziesii*)	5	Dead branches in crown	C		5
11130	28	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, unbalanced crown	B		0
11131	20	Douglas-fir (*Pseudotsuga menziesii*)	6	Unbalanced crown	B		6
11132	14	Douglas-fir (*Pseudotsuga menziesii*)	3	Sparse canopy, some branch dieback	B		3
11133	22	Douglas-fir (*Pseudotsuga menziesii*)	7	Healthy	C		7
11134	16	Douglas-fir (*Pseudotsuga menziesii*)	4	Healthy	C		4
11135	8,18	Douglas-fir (*Pseudotsuga menziesii*)	6	Codominant base	C		6
11137	18, 14	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, codominant base, unbalanced crown	B		0
11139	10	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor live crown ratio	B		2
11140	6	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A		0
11141	6	Douglas-fir (*Pseudotsuga menziesii*)	2	Suppressed, sparse canopy, some branch dieback	B		2
11142	6	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A		0
11143	6	Douglas-fir (*Pseudotsuga menziesii*)	2	Suppressed, declining health	A		2
11144	13	Douglas-fir (*Pseudotsuga menziesii*)	3	Healthy	C		3
11145	6	Douglas-fir (*Pseudotsuga menziesii*)	2	Suppressed, sparse canopy	B		2
11146	9	Douglas-fir (*Pseudotsuga menziesii*)	2	Deformed top	B		2
11147	8	Douglas-fir (*Pseudotsuga menziesii*)	2	Suppressed, sparse canopy, some branch dieback	B		2
11148	31	Douglas-fir (*Pseudotsuga menziesii*)	12	Healthy	C	Impacted by proposed path grading	0
11149	17	Douglas-fir (*Pseudotsuga menziesii*)	5	Healthy	C		5
11150	11	Douglas-fir (*Pseudotsuga menziesii*)	2	Dead scaffold branches, crown cleaning recommended	B		2
11151	18	Douglas-fir (*Pseudotsuga menziesii*)	5	Healthy	C		5
11152	11	Douglas-fir (*Pseudotsuga menziesii*)	2	Healthy	C		2
11153	18	Douglas-fir (*Pseudotsuga menziesii*)	5	Healthy	C		5
11154	12	Bigleaf Maple (*Acer macrophyllum*)	2	Healthy	C		2
11155	23	Douglas-fir (*Pseudotsuga menziesii*)	8	Poor live crown ratio	B		8
11156	12	Douglas-fir (*Pseudotsuga menziesii*)	2	Unbalanced crown, epicormic sprouts	B		2
11157	24	Douglas-fir (*Pseudotsuga menziesii*)	8	Healthy	C		8
11158	12	Douglas-fir (*Pseudotsuga menziesii*)	2	Healthy	C		2
11159	15	Douglas-fir (*Pseudotsuga menziesii*)	4	Several large conks up bole	A	Poor tree health	0
11160	15	Bigleaf Maple (*Acer macrophyllum*)	4	Lean	B		4
11161	40	Douglas-fir (*Pseudotsuga menziesii*)	16	Some bore holes	C		16
11162	21	Douglas-fir (*Pseudotsuga menziesii*)	7	Healthy	C		7
11163	10	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, deformed top, some dead branches in crown	B		0
11164	16	Douglas-fir (*Pseudotsuga menziesii*)	4	Lean, sweep	B		4
11165	16	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, numerous conks up bole, recommend removal of city owned tree	A	Poor tree health	0
11166	10	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11167	7	Douglas-fir (*Pseudotsuga menziesii*)	2	Sparse canopy	B		2
11168	12	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11169	18	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11170	28	Douglas-fir (*Pseudotsuga menziesii*)	10	Healthy	C		10
11171	12	Bigleaf Maple (*Acer macrophyllum*)	2	Cavity with decay in base	B		2
11172	18	Douglas-fir (*Pseudotsuga menziesii*)	5	Healthy	C		5
11173	42	Douglas-fir (*Pseudotsuga menziesii*)	17	Codominant top	B		17
11174	11	Bigleaf Maple (*Acer macrophyllum*)	0	Off site, healthy	C		0
11175	14	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11176	20	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11177	13	Douglas-fir (*Pseudotsuga menziesii*)	3	Healthy	C		3
11178	26	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, suppressed	B		0
11179	24	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, unbalanced crown	B		0
11180	14	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, unbalanced crown	B		0
11181	23	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, unbalanced crown	B		0
11182	18	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11183	8	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, suppressed	B		0
11184	14	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, poor live crown ratio, unbalanced crown, dead branches in crown	B		0
11185	14	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, top lean, scars up bole	B		0
11186	8	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, dead branches in crown	C		0
11187	30	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11188	13	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11189	22	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11190	30	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11191	26	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11192	7	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11194	26	Douglas-fir (*Pseudotsuga menziesii*)	9	Large conks up bole, uneven canopy, poor live crown ratio	A	Poor tree health	0
11195	8	Bigleaf Maple (*Acer macrophyllum*)	2	Lean	B		2
11196	36	Douglas-fir (*Pseudotsuga menziesii*)	14	Poor live crown ratio, bore holes	B		14
11197	24	Douglas-fir (*Pseudotsuga menziesii*)	8	Unbalanced crown	B		8
11198	22	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, lean, codominant top with included bark, deformed bole	B		0
11199	35	Douglas-fir (*Pseudotsuga menziesii*)	14	Unbalanced crown	B		14
11200	35	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, unbalanced crown, Some branch dieback, bore holes	B		0
11201	22	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
11202	28	Douglas-fir (*Pseudotsuga menziesii*)	10	Poor live crown ratio, some dead branches in crown	B		10
11203	18	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, dead	A		0
11204	28	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, unbalanced crown	B		0
11205	28	Douglas-fir (*Pseudotsuga menziesii*)	10	Poor live crown ratio, some dead branches in crown	B		10
11206	13	Bigleaf Maple (*Acer macrophyllum*)	3	Healthy	C		3
11207	8	Bigleaf Maple (*Acer macrophyllum*)	0	Dead	A	Tree is dead	0
11208	36	Douglas-fir (*Pseudotsuga menziesii*)	14	Healthy	C		14

Detailed Tree Inventory for CJ Dens

AKS JOB NO. 5504 **Site Area = 43.90 acres**

AKS Reference #	Total DBH (In)	Tree Species Common Name (*Scientific name*)	Tree Units Initial	Condition/Comments	Windthrow Rating	Reason for Removal	Tree Units Retained
11209	13	Douglas-fir (*Pseudotsuga menziesii*)	3	Healthy	C		3
11210	10	Douglas-fir (*Pseudotsuga menziesii*)	2	Healthy	C		2
11211	30	Douglas-fir (*Pseudotsuga menziesii*)	11	Poor live crown ratio	B		11
11212	20	Bigleaf Maple (*Acer macrophyllum*)	6	Deformed bole	B		6
11213	20	Douglas-fir (*Pseudotsuga menziesii*)	6	Unbalanced crown	B		6
11214	12	Bigleaf Maple (*Acer macrophyllum*)	2	Lean	B		2
11215	16	Douglas-fir (*Pseudotsuga menziesii*)	4	Cavity with decay, some branch dieback	B		4
11216	41	Douglas-fir (*Pseudotsuga menziesii*)	17	Unbalanced crown	B		17
11217	28	Douglas-fir (*Pseudotsuga menziesii*)	10	Poor live crown ratio	B		10
11218	17	Douglas-fir (*Pseudotsuga menziesii*)	5	Suppressed	C		5
11223	34	Douglas-fir (*Pseudotsuga menziesii*)	13	Healthy	C		13
11224	38	Douglas-fir (*Pseudotsuga menziesii*)	15	Healthy	C		15
11225	8	Douglas-fir (*Pseudotsuga menziesii*)	2	Sweep, codominant top	B		2
11226	6,7,10	Bigleaf Maple (*Acer macrophyllum*)	3	Dead codominant stems, scars, sparse canopy, branch dieback	B	Located within proposed road grading	0
11227	6	Bigleaf Maple (*Acer macrophyllum*)	2	Broken branches with decay, codominant top	B	Located within proposed road grading	0
11228	12	Bigleaf Maple (*Acer macrophyllum*)	2	Healthy	C	Located within proposed road grading	0
11229	16	Douglas-fir (*Pseudotsuga menziesii*)	4	Crooked bole, poor live crown ratio, branch dieback	B	Located within proposed road grading	0
11230	10	Douglas-fir (*Pseudotsuga menziesii*)	2	Sparse canopy	B	Located within proposed road grading	0
11231	12	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
11232	12	Bigleaf Maple (*Acer macrophyllum*)	2	Decaying foliage, sparse canopy	B	Located within proposed road grading	0
11233	9	Bigleaf Maple (*Acer macrophyllum*)	2	Lean (S)	B	Located within proposed road grading	0
11234	11	Bigleaf Maple (*Acer macrophyllum*)	2	Healthy	C	Located within proposed road grading	0
11235	36	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C	Located within proposed road grading	0
11236	24	Douglas-fir (*Pseudotsuga menziesii*)	8	Healthy	C	Located within proposed road grading	0
11237	34	Douglas-fir (*Pseudotsuga menziesii*)	13	Poor live crown ratio, dead scaffold branches	B	Located within proposed road grading	0
11238	17	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C	Located within proposed road grading	0
11239	27	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, poor live crown ratio, unbalanced crown	B	Located within proposed road grading	0
11240	15	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, sparse canopy, unbalanced crown	B	Located within proposed road grading	0
11241	17	Douglas-fir (*Pseudotsuga menziesii*)	5	Healthy	C	Located within proposed road grading	0
11242	22	Douglas-fir (*Pseudotsuga menziesii*)	7	Healthy	C	Located within proposed road grading	0
11243	50	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, bore holes, broken branches	C	Located within proposed road grading	0
11244	36	Douglas-fir (*Pseudotsuga menziesii*)	14	Healthy	C	Located within proposed road grading	0
11245	7	Grand Fir (*Abies grandis*)	0	Off site, healthy	C	Located within proposed road grading	0
11246	12	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
11247	8	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
11248	37	Douglas-fir (*Pseudotsuga menziesii*)	15	Unbalanced crown	B	Road grading greatly impacts root zone	0
11249	12	Bigleaf Maple (*Acer macrophyllum*)	2	Healthy	C	Road grading greatly impacts root zone	0
11250	18	Grand Fir (*Abies grandis*)	0	Dead	A	Tree is dead	0
11251	28	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, unbalanced crown	B	Road grading greatly impacts root zone	0
11252	30	Douglas-fir (*Pseudotsuga menziesii*)	11	Poor live crown ratio, some branch dieback	B	Road grading greatly impacts root zone	0
11253	7	Bigleaf Maple (*Acer macrophyllum*)	2	Sweep, lean (S)	B	Road grading greatly impacts root zone	0
11254	12	Bigleaf Maple (*Acer macrophyllum*)	2	Poor live crown ratio	B	Road grading greatly impacts root zone	0
11255	8,8	Bigleaf Maple (*Acer macrophyllum*)	2	Cavity with decay, top lean (S), codominant base	B		2
11256	20	Douglas-fir (*Pseudotsuga menziesii*)	6	Sparse canopy	B		6
11257	22	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, conks up bole, branch die back, sparse canopy	A		0
11258	15	Douglas-fir (*Pseudotsuga menziesii*)	4	Poor live crown ratio	B		4
11259	15	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, sparse canopy, branch dieback	B		0
11260	24	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11261	30	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11262	30	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11264	26	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11265	32	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11266	13	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11267	32	Douglas-fir (*Pseudotsuga menziesii*)	12	Healthy	C		12
11268	10	Douglas-fir (*Pseudotsuga menziesii*)	2	Healthy	C		2
11269	18	Douglas-fir (*Pseudotsuga menziesii*)	5	Healthy	C		5
11270	30	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11271	28	Douglas-fir (*Pseudotsuga menziesii*)	10	Healthy	C		10
11272	21	Douglas-fir (*Pseudotsuga menziesii*)	7	Broken scaffold branches	C		7
11273	9	Douglas-fir (*Pseudotsuga menziesii*)	2	Deformed bole, poor live crown ratio	B	Impacted by proposed path grading	0
11274	24	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11275	10	Bigleaf Maple (*Acer macrophyllum*)	0	Dead	A	Tree is dead	0
11276	6	Douglas-fir (*Pseudotsuga menziesii*)	2	Suppressed	C		2
11277	12	Douglas-fir (*Pseudotsuga menziesii*)	2	Healthy	C		2
11278	18	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, unbalanced crown	B		0
11279	20	Douglas-fir (*Pseudotsuga menziesii*)	6	Broken branches, poor live crown ratio	B		6
11280	18	Douglas-fir (*Pseudotsuga menziesii*)	5	Healthy	C		5
11282	23	Douglas-fir (*Pseudotsuga menziesii*)	8	Healthy	C		8
11283	25	Douglas-fir (*Pseudotsuga menziesii*)	9	Healthy	C		9
11284	23	Douglas-fir (*Pseudotsuga menziesii*)	8	Deformed bole	B		8
11285	25	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11286	23	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, healthy	C		0
11287	20	Douglas-fir (*Pseudotsuga menziesii*)	6	Healthy	C	Impacted by proposed path grading	0
11288	12	Douglas-fir (*Pseudotsuga menziesii*)	2	Healthy	C		2
11289	8	Bigleaf Maple (*Acer macrophyllum*)	2	Healthy	C	Impacted by proposed path grading	0
11290	30	Douglas-fir (*Pseudotsuga menziesii*)	11	Healthy	C		11
11291	25	Douglas-fir (*Pseudotsuga menziesii*)	9	Healthy	C		9
11292	8	Douglas-fir (*Pseudotsuga menziesii*)	2	Healthy	C		2
11293	20	Douglas-fir (*Pseudotsuga menziesii*)	6	Healthy	C	Impacted by proposed path grading	0
11294	36	Douglas-fir (*Pseudotsuga menziesii*)	14	Broken top with weak leaders, significant decay	A	Poor tree health	0
11295	25	Douglas-fir (*Pseudotsuga menziesii*)	9	Healthy	C	Impacted by proposed path grading	0
11296	14	Douglas-fir (*Pseudotsuga menziesii*)	3	Healthy	C		3
11297	10	Douglas-fir (*Pseudotsuga menziesii*)	2	Healthy	C		2
11298	7	Bigleaf Maple (*Acer macrophyllum*)	2	Sparse canopy	B		2
11300	6,12	Bigleaf Maple (*Acer macrophyllum*)	3	Dead scaffold branches, machete damage, crown cleaning recommended	B		3
11301	16	Douglas-fir (*Pseudotsuga menziesii*)	4	Healthy	C		4
11302	14	Bigleaf Maple (*Acer macrophyllum*)	3	Dead scaffold branches, several cavities with decay	B		3
11303	6	Bigleaf Maple (*Acer macrophyllum*)	2	Healthy	C		2
11304	7	Bigleaf Maple (*Acer macrophyllum*)	2	Dead scaffold branch	C		2
11305	8,10	Bigleaf Maple (*Acer macrophyllum*)	3	Dead scaffold branch	C		3
11306	6,6,6,6	Pacific Serviceberry (*Amelanchier alnifolia*)	2	Healthy	C		2
11307	7,9	Bigleaf Maple (*Acer macrophyllum*)	2	Several large cavities with decay	B		2
11308	8,10	Bigleaf Maple (*Acer macrophyllum*)	2	Healthy	C		2
11309	7	Bigleaf Maple (*Acer macrophyllum*)	2	Deformed bole	B		2
11310	8	Bigleaf Maple (*Acer macrophyllum*)	2	Healthy	C		2
11311	6	Bigleaf Maple (*Acer macrophyllum*)	2	Healthy	C		2
11312	10	Bigleaf Maple (*Acer macrophyllum*)	2	Healthy	C		2
11313	6,6	Bigleaf Maple (*Acer macrophyllum*)	2	Dead codominant stem	B		2
11314	8,8,9	Bigleaf Maple (*Acer macrophyllum*)	3	Codominant base with included bark, lean (S)	B		3
11315	6	Bigleaf Maple (*Acer macrophyllum*)	2	Healthy	C		2
11316	7	Bigleaf Maple (*Acer macrophyllum*)	2	Lean (S)	B		2
11317	7	Bigleaf Maple (*Acer macrophyllum*)	2	Sparse canopy, dead scaffold branches	B		2
11318	6	Bigleaf Maple (*Acer macrophyllum*)	2	Healthy	C		2
11319	8	Bigleaf Maple (*Acer macrophyllum*)	2	Healthy	C		2
11320	7,7,8	Sweet Cherry (*Prunus avium*)	3	Codominant base, lean (S), crooked bole	B		3
11321	7	Bigleaf Maple (*Acer macrophyllum*)	2	Healthy	C		2
12130	14	Douglas-fir (*Pseudotsuga menziesii*)	3	Unbalanced crown, dead branches in crown	B		3
12132	14	Coniferous	3	Not Evaluated by an Arborist	-	Lot grading greatly impacts root zone	0
12133	8	Deciduous	2	Not Evaluated by an Arborist	-	Lot grading greatly impacts root zone	0
12134	9	Coniferous	2	Not Evaluated by an Arborist	-	Lot grading greatly impacts root zone	0
12136	12,12,6,7	Deciduous	2	Not Evaluated by an Arborist	-		2
12139	16	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, Poor Health	A		0
12140	7	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, Poor Health	A		0
12141	11	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, Poor Health	A		0
12142	12	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, Poor Health	A		0
12144	12	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor health	A	Poor tree health	0
12145	6	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor health	A	Poor tree health	0
12146	12	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor health	A	Poor tree health	0
12147	12	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor health	A	Poor tree health	0
12148	10	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor health	A	Poor tree health	0

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PRELIMINARY TREE PRESERVATION AND REMOVAL TABLE

CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

CERTIFIED ARBORIST
PRELIMINARY NOT FOR CONSTRUCTION
ISA

BRYCE D. HANSON
CERTIFICATE NUMBER: PN 7554A
EXPIRATION DATE: 06/30/22

PRELIMINARY NOT FOR CONSTRUCTION

JOB NUMBER:	5504
DATE:	11/24/2020
DESIGNED BY:	CJS
DRAWN BY:	BRK
CHECKED BY:	BDH

P5.3

AKS DRAWING FILE: 5504 P5.0 TREE TABLES.DWG | LAYOUT: 5.3

Exhibit 7

Detailed Tree Inventory for CJ Dens

AKS JOB NO. 5504 **Site Area = 43.90 acres**

Detailed Tree Inventory for CJ Dens

AKS JOB NO. 5504 **Site Area = 43.90 acres**

AKS Reference #	Total DBH (In)	Tree Species Common Name (*Scientific name*)	Tree Units Initial	Condition/Comments	Windthrow Rating	Reason for Removal	Tree Units Retained
12151	6	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor health	A	Poor tree health	0
12152	14	Douglas-fir (*Pseudotsuga menziesii*)	3	Poor health	A	Poor tree health	0
12153	14	Douglas-fir (*Pseudotsuga menziesii*)	3	Poor health	A	Poor tree health	0
12157	10	Douglas-fir (*Pseudotsuga menziesii*)	3	Poor health	A	Poor tree health	0
12158	13	Douglas-fir (*Pseudotsuga menziesii*)	3	Poor health	A	Poor tree health	0
12159	12	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor health	A	Poor tree health	0
12160	12	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor health	A	Poor tree health	0
12161	12	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor health	A	Poor tree health	0
12162	14	Douglas-fir (*Pseudotsuga menziesii*)	3	Poor health	A	Poor tree health	0
12166	12	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor health	A	Poor tree health	0
12169	10	Douglas-fir (*Pseudotsuga menziesii*)	0	Poor Health, located in Critical Area Tract S	A		0
12170	18	Douglas-fir (*Pseudotsuga menziesii*)	0	Poor Health, located in Critical Area Tract S	A		0
12171	12	Douglas-fir (*Pseudotsuga menziesii*)	0	Poor Health, located in Critical Area Tract S	A		0
12172	12	Douglas-fir (*Pseudotsuga menziesii*)	0	Poor Health, located in Critical Area Tract S	A		0
12173	12	Douglas-fir (*Pseudotsuga menziesii*)	0	Poor Health, located in Critical Area Tract S	A		0
12174	14	Douglas-fir (*Pseudotsuga menziesii*)	0	Poor Health, located in Critical Area Tract S	A		0
12175	12	Douglas-fir (*Pseudotsuga menziesii*)	0	Poor Health, located in Critical Area Tract S	A		0
12176	12	Douglas-fir (*Pseudotsuga menziesii*)	0	Poor Health, located in Critical Area Tract S	A		0
12182	10	Douglas-fir (*Pseudotsuga menziesii*)	0	Poor Health, located in Critical Area Tract S	A	Poor tree health	0
12183	13	Douglas-fir (*Pseudotsuga menziesii*)	0	Poor Health, located in Critical Area Tract S	A	Poor tree health	0
12184	11	Douglas-fir (*Pseudotsuga menziesii*)	0	Poor Health, located in Critical Area Tract S	A	Poor tree health	0
12185	11	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor health	A	Poor tree health	0
12186	12	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor health	A	Poor tree health	0
12187	14	Douglas-fir (*Pseudotsuga menziesii*)	3	Poor health	A	Poor tree health	0
12188	14	Douglas-fir (*Pseudotsuga menziesii*)	3	Poor health	A	Poor tree health	0
12189	9	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor health	A	Poor tree health	0
12190	9	Douglas-fir (*Pseudotsuga menziesii*)	0	Poor Health, located in Critical Area Tract S	A	Poor tree health	0
12194	12	Red Alder (*Alnus rubra*)	0	Poor Health, located in Critical Area Tract S	A		0
12197	16	Douglas-fir (*Pseudotsuga menziesii*)	4	Poor health	A	Poor tree health	0
12200	20	Douglas-fir (*Pseudotsuga menziesii*)	0	Poor Health, located in Critical Area Tract S	A		0
12201	20	Douglas-fir (*Pseudotsuga menziesii*)	0	Poor Health, located in Critical Area Tract S	A		0
12204	12,10	Red Alder (*Alnus rubra*)	0	Poor Health, located in Critical Area Tract S	A		0
12205	12	Red Alder (*Alnus rubra*)	0	Poor Health, located in Critical Area Tract S	A	Poor tree health	0
12206	9	Douglas-fir (*Pseudotsuga menziesii*)	0	Poor Health, located in Critical Area Tract S	A	Poor tree health	0
12207	10	Red Alder (*Alnus rubra*)	0	Poor Health, located in Critical Area Tract S	A		0
12209	9	Red Alder (*Alnus rubra*)	0	Poor Health, located in Critical Area Tract S	A		0
12210	11	Bigleaf Maple (*Acer macrophyllum*)	0	Poor Health, located in Critical Area Tract S	A		0
12211	14	Douglas-fir (*Pseudotsuga menziesii*)	0	Poor Health, located in Critical Area Tract S	A	Poor tree health	0
12214	16	Douglas-fir (*Pseudotsuga menziesii*)	0	Poor Health, located in Critical Area Tract S	A		0
12215	12	Douglas-fir (*Pseudotsuga menziesii*)	0	Poor Health, located in Critical Area Tract S	A		0
12216	12	Douglas-fir (*Pseudotsuga menziesii*)	0	Poor Health, located in Critical Area Tract S	A	Poor tree health	0
12217	8	Red Alder (*Alnus rubra*)	0	Poor Health, located in Critical Area Tract S	A	Poor tree health	0
12218	8,6,6	Red Alder (*Alnus rubra*)	0	Poor Health, located in Critical Area Tract S	A		0
12219	23	Douglas-fir (*Pseudotsuga menziesii*)	0	Poor Health, located in Critical Area Tract S	A		0
12220	18	Douglas-fir (*Pseudotsuga menziesii*)	0	Poor Health, located in Critical Area Tract S	A		0
12221	14	Red Alder (*Alnus rubra*)	0	Poor Health, located in Critical Area Tract S	A		0
12222	12,12	Red Alder (*Alnus rubra*)	0	Poor Health, located in Critical Area Tract S	A		0
12223	12	Red Alder (*Alnus rubra*)	0	Poor Health, located in Critical Area Tract S	A		0
12224	8	Red Alder (*Alnus rubra*)	0	Poor Health, located in Critical Area Tract S	A		0
12225	8	Red Alder (*Alnus rubra*)	0	Poor Health, located in Critical Area Tract S	A		0
12226	6	Red Alder (*Alnus rubra*)	0	Poor Health, located in Critical Area Tract S	A		0
12227	10,10,8,8	Red Alder (*Alnus rubra*)	0	Poor Health, located in Critical Area Tract S	A		0
12228	12	Red Alder (*Alnus rubra*)	0	Poor Health, located in Critical Area Tract S	A		0
12229	12,10,10	Red Alder (*Alnus rubra*)	0	Poor Health, located in Critical Area Tract S	A		0
12230	12,8	Red Alder (*Alnus rubra*)	0	Poor Health, located in Critical Area Tract S	A	Poor tree health	0
12233	27,8,7,7	Bigleaf Maple (*Acer macrophyllum*)	11		C	Located within proposed road grading	0
12234	14	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, evaluated behind fence, crooked bole	C		0
12235	7	Red Alder (*Alnus rubra*)	2	Dead top, in decline	A	Poor tree health	0
12236	7	Red Alder (*Alnus rubra*)	2	Dead top, in decline	A	Poor tree health	0
12237	6,6,6	Bigleaf Maple (*Acer macrophyllum*)	0	Off site, evaluated behind fence, dead branches in canopy	B		0
12238	10	Douglas-fir (*Pseudotsuga menziesii*)	2		C		2
12239	6	Douglas-fir (*Pseudotsuga menziesii*)	2	Suppressed	B		2
12240	7,7,7,7	Bigleaf Maple (*Acer macrophyllum*)	3		C		3
12241	7,7,7,7,7	Bigleaf Maple (*Acer macrophyllum*)	4		C		4
12242	6	Douglas-fir (*Pseudotsuga menziesii*)	2	Suppressed	B		2
12243	8	Red Alder (*Alnus rubra*)	0	Off site, evaluated behind fence	C		0
12244	8,8,8,8,7	Bigleaf Maple (*Acer macrophyllum*)	5		C	Located within proposed road grading	0
12245	14	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, evaluated from property line, unbalanced crown	B		0
12246	6	Beaked Hazelnut (Corylus cornuta)	2	Clustered shrub, stem lean, broken top	A	Poor tree health	0
12247	6	Red Alder (*Alnus rubra*)	0	Snag	A	Tree is dead	0
12248	10	Red Alder (*Alnus rubra*)	0	Off site, Snag	A		0
12249	12	Bigleaf Maple (*Acer macrophyllum*)	2	Crooked bole, dead branches, unbalanced crown	B		2
12250	10,9	Bigleaf Maple (*Acer macrophyllum*)	3	Unbalanced crown	B		3
12252	9	Bigleaf Maple (*Acer macrophyllum*)	2		C	Lot grading greatly impacts root zone	0
12253	14	Bigleaf Maple (*Acer macrophyllum*)	0	Snag	A	Tree is dead	0
12254	14	Bigleaf Maple (*Acer macrophyllum*)	0	Snag	A	Tree is dead	0
12255	18	Bigleaf Maple (*Acer macrophyllum*)	5	Crooked bole, dead branches, dead foliage, epicormic sprouts	B		5
12256	6	Bigleaf Maple (*Acer macrophyllum*)	2	Lean, unbalanced crown	B		2
12257	7	Bigleaf Maple (*Acer macrophyllum*)	0	Snag	A	Tree is dead	0
12258	8	Bigleaf Maple (*Acer macrophyllum*)	2	Sparse canopy, crooked bole	B	Lot grading greatly impacts root zone	0
12260	12,11,10,10,9,9,9	Bigleaf Maple (*Acer macrophyllum*)	2	Dead top, in decline, sparse canopy	A	Poor tree health	0
12261	11	Bigleaf Maple (*Acer macrophyllum*)	2	crooked bole, sparse canopy, dead scaffold branches	B	Lot grading greatly impacts root zone	0
12262	9,8	Bigleaf Maple (*Acer macrophyllum*)	2	Dead top, in decline, sparse canopy	A	Poor tree health	0
12263	9	Bigleaf Maple (*Acer macrophyllum*)	0	Snag	A	Tree is dead	0
12264	6	Bigleaf Maple (*Acer macrophyllum*)	0	Snag	A	Tree is dead	0
12265	20	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, Snag	A		0
12266	36	Douglas-fir (*Pseudotsuga menziesii*)	14		C		14
12267	11,10,10,8,7,6,6,6	Bigleaf Maple (*Acer macrophyllum*)	2	Dead tops, epicormic sprouts, dead limbs	A	Poor tree health	0
12268	9	Bigleaf Maple (*Acer macrophyllum*)	2	Dead branches, lopsided canopy	B	Lot grading greatly impacts root zone	0
12270	6	Bigleaf Maple (*Acer macrophyllum*)	2	Broken top, sparse canopy, many epicormic sprouts	A	Poor tree health	0
12271	20,20	Bigleaf Maple (*Acer macrophyllum*)	0	Off site, evaluated behind fence	C		0
12272	38	Douglas-fir (*Pseudotsuga menziesii*)	15	Evaluated behind fence	C	Lot grading greatly impacts root zone	0
12273	6	Douglas-fir (*Pseudotsuga menziesii*)	2	Suppressed, in decline	A	Poor tree health	0
12274	12	Bigleaf Maple (*Acer macrophyllum*)	2	Dead top	A	Poor tree health	0
12275	6	Bigleaf Maple (*Acer macrophyllum*)	2	Lean, sparse canopy, dead top	A	Poor tree health	0
12276	16	Douglas-fir (*Pseudotsuga menziesii*)	4	Evaluated behind fence, Codominant top, dead branches in canopy	B	Lot grading greatly impacts root zone	0
12277	6	Douglas-fir (*Pseudotsuga menziesii*)	2	Suppressed	B	Lot grading greatly impacts root zone	0
12278	7	Douglas-fir (*Pseudotsuga menziesii*)	0	Evaluated behind fence, dead	A	Tree is dead	0
12279	26	Douglas-fir (*Pseudotsuga menziesii*)	9	Evaluated behind fence	C	Lot grading greatly impacts root zone	0
12280	9	Douglas-fir (*Pseudotsuga menziesii*)	2	Evaluated behind fence, Codominant top, epicormic sprouts, dead branches in canopy	B	Lot grading greatly impacts root zone	0
12282	30	Douglas-fir (*Pseudotsuga menziesii*)	11	Evaluated behind fence, Butt sweep, crooked top	B	Lot grading greatly impacts root zone	0
12283	19	Douglas-fir (*Pseudotsuga menziesii*)	6		C	Located within proposed road grading	0
12284	14	Douglas-fir (*Pseudotsuga menziesii*)	3	Seepage, sparse canopy, epicormic sprouts	B	Lot grading greatly impacts root zone	0
12285	12	Douglas-fir (*Pseudotsuga menziesii*)	2	Seepage, sparse canopy, epicormic sprouts	B	Lot grading greatly impacts root zone	0
12286	20	Douglas-fir (*Pseudotsuga menziesii*)	6		C	Lot grading greatly impacts root zone	0
12287	8	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
12288	10	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
12289	10	Douglas-fir (*Pseudotsuga menziesii*)	2	Unbalanced crown, dead branches in canopy	B		2
12290	24	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, evaluated behind fence	C		0
12291	6	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
12292	10	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
12293	10	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
12294	24	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, evaluated behind fence, dead branches in canopy	C		0
12295	10	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
12296	10	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
12297	8	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
12298	9	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
12299	13	Douglas-fir (*Pseudotsuga menziesii*)	0	Snag	A	Tree is dead	0
12300	20	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, evaluated behind fence, unbalanced crown	B		0
12301	11	Douglas-fir (*Pseudotsuga menziesii*)	2	Very sparse canopy, dead top, in decline	A	Poor tree health	0
12302	12	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
12303	18	Bigleaf Maple (*Acer macrophyllum*)	0	Off site, evaluated behind fence, pruned branches, dead scaffold branches	B		0
12305	10	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
12306	8	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
12307	10	Bigleaf Maple (*Acer macrophyllum*)	2		C	Lot grading greatly impacts root zone	0
12308	8	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
12309	11	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor live crown ratio, sparse canopy	B		2
12310	18	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, evaluated behind fence	C		0
12311	12	Douglas-fir (*Pseudotsuga menziesii*)	2		C	Lot grading greatly impacts root zone	0
12312	24	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, evaluated behind fence, scar with seepage, lopsided canopy	B		0
12313	9	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
12314	10	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
12315	10	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
12316	16	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
12318	12	Bigleaf Maple (*Acer macrophyllum*)	0	Off site, evaluated behind fence	C		0
12319	9	Bigleaf Maple (*Acer macrophyllum*)	2	Lean, dead branches in canopy	B	Lot grading greatly impacts root zone	0
12320	13	Bigleaf Maple (*Acer macrophyllum*)	3	Codominant with included bark, dead branches in canopy	B	Lot grading greatly impacts root zone	0
12321	11	Bigleaf Maple (*Acer macrophyllum*)	2	Unbalanced crown, dead scaffold branches	B	Lot grading greatly impacts root zone	0
12322	7	Bigleaf Maple (*Acer macrophyllum*)	2	Many dead branches, sparse canopy, butt sweep, in decline	A	Poor tree health	0
12323	8	Bigleaf Maple (*Acer macrophyllum*)	2	Broken codominant stem with decay	B	Lot grading greatly impacts root zone	0
12324	10	Bigleaf Maple (*Acer macrophyllum*)	2	Unbalanced crown	B	Lot grading greatly impacts root zone	0
12325	12	Bigleaf Maple (*Acer macrophyllum*)	2		C	Lot grading greatly impacts root zone	0
12326	7	Cherry (*Prunus sp.*)	2	Lean	B	Lot grading greatly impacts root zone	0
12327	11	Cherry (*Prunus sp.*)	2	Exposed buttress roots, dead branches in crown	B	Lot grading greatly impacts root zone	0
12328	19	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, evaluated behind fence, dead top, very sparse canopy, in decline	A		0
12329	19	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, evaluated behind fence, dead	A		0
12330	16	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, evaluated behind fence, dead	A		0
12331	56	Bigleaf Maple (*Acer macrophyllum*)	24	Weakly attached scaffold branches, codominant stem pruned leaving cavity	B	Lot grading greatly impacts root zone	0
12332	34	Douglas-fir (*Pseudotsuga menziesii*)	0	Off site, evaluated from property line	C		0
12334	12	Douglas-fir (*Pseudotsuga menziesii*)	2	Unbalanced crown	B	Lot grading greatly impacts root zone	0
12335	14	Douglas-fir (*Pseudotsuga menziesii*)	3	Codominant top with included bark	B	Lot grading greatly impacts root zone	0
12336	6	Cherry (*Prunus sp.*)	2	Sweep, lean	B	Lot grading greatly impacts root zone	0
12337	8	Cherry (*Prunus sp.*)	2		C	Lot grading greatly impacts root zone	0
12338	14	Bigleaf Maple (*Acer macrophyllum*)	3	Unbalanced crown	B	Lot grading greatly impacts root zone	0
12435	18	Deciduous	0	Off site, Not evaluated by an Arborist	-		0
12436	10	Deciduous	0	Off site, Not evaluated by an Arborist	-		0
12437	10	Deciduous	0	Off site, Not evaluated by an Arborist	-		0
12438	10	Deciduous	0	Off site, Not evaluated by an Arborist	-		0
12439	10	Deciduous	0	Off site, Not evaluated by an Arborist	-		0
12440	18	Deciduous	0	Off site, Not evaluated by an Arborist	-		0
12441	14	Deciduous	0	Off site, Not evaluated by an Arborist	-		0
12442	10,10	Deciduous	0	Off site, Not evaluated by an Arborist	-		0
12443	10,22	Deciduous	0	Off site, Not evaluated by an Arborist	-		0
50000	6	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A		0
50001	6	Douglas-fir (*Pseudotsuga menziesii*)	2	Sweep	C		2
50002	6	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A		0
50003	6	Bigleaf Maple (*Acer macrophyllum*)	2	Healthy	C		2
50004	12,8,13,10,11	Bigleaf Maple (*Acer macrophyllum*)	8	Dead scaffold branches, stem lean, some dead branches in crown	B	Lot grading greatly impacts root zone	0
50005	8,8,15	Bigleaf Maple (*Acer macrophyllum*)	6	Stem lean, dead scaffold branches, dead codominant stems, unbalanced crown	B	Lot grading greatly impacts root zone	0
50006	12	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50007	12	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50008	14	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50009	10	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50010	10	Douglas-fir (*Pseudotsuga menziesii*)	2	Very sparse canopy, dead branches in crown, in decline	A	Tree is dead	0
50011	19	Douglas-fir (*Pseudotsuga menziesii*)	6	Exposed buttress roots, some dead branches in crown	C	Lot grading greatly impacts root zone	0
50012	12	Bigleaf Maple (*Acer macrophyllum*)	2		C	Lot grading greatly impacts root zone	0
50013	12	Oregon Ash (*Fraxinus latifolia*)	2	Crooked bole, codominant top, some broken branches	B	Lot grading greatly impacts root zone	0
50015	15	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead, significant lean, uprooted	A	Tree is dead	0
50016	17	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50017	8,10	Bigleaf Maple (*Acer macrophyllum*)	3	Sluffing bark, codominant base, lean, dead top	A	Poor tree health	0
50018	17	Bigleaf Maple (*Acer macrophyllum*)	5	Other tree leaning on this tree	B	Lot grading greatly impacts root zone	0
50019	17	Douglas-fir (*Pseudotsuga menziesii*)	5	Unbalanced crown	B		5
50020	12	Douglas-fir (*Pseudotsuga menziesii*)	2		C		2
50021	19	Douglas-fir (*Pseudotsuga menziesii*)	6		C		6
50022	16	Douglas-fir (*Pseudotsuga menziesii*)	4		C		4
50023	13	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50024	7	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50025	18	Douglas-fir (*Pseudotsuga menziesii*)	5	Some dead branches, poor live crown ratio	B	Lot grading greatly impacts root zone	0
50026	11	Bigleaf Maple (*Acer macrophyllum*)	2	Crooked bole	B		2
50027	6,10	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50028	14	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50029	8	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50030	8	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead, uprooted	A	Tree is dead	0
50031	11	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor live crown ratio, sparse canopy, unbalanced crown, epicormic sprouts	B	Lot grading greatly impacts root zone	0
50032	15	Douglas-fir (*Pseudotsuga menziesii*)	4	Poor live crown ratio, sparse canopy, unbalanced crown, epicormic sprouts	B	Lot grading greatly impacts root zone	0
50033	15	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50034	10	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor live crown ratio, unbalanced crown	B		2
50035	13	Douglas-fir (*Pseudotsuga menziesii*)	3	Poor live crown ratio, sparse canopy	B	Lot grading greatly impacts root zone	0
50036	17	Douglas-fir (*Pseudotsuga menziesii*)	5	Dead branches in crown, Crown cleaning recommended	C	Lot grading greatly impacts root zone	0
50037	8	Red Alder (*Alnus rubra*)	0	Dead	A	Tree is dead	0
50038	8,10	Red Alder (*Alnus rubra*)	2	Dead tops, codominant base, in decline	A	Poor tree health	0
50039	10	Bigleaf Maple (*Acer macrophyllum*)	2	Dead codominant stems, crooked	B	Lot grading greatly impacts root zone	0
50040	6,8	Bigleaf Maple (*Acer macrophyllum*)	2	Broken top, dead codominant stems	A	Poor tree health	0
50041	14	Douglas-fir (*Pseudotsuga menziesii*)	3	Poor live crown ratio	B	Lot grading greatly impacts root zone	0
50042	12	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor live crown ratio, sparse canopy	B	Lot grading greatly impacts root zone	0
50043	20	Douglas-fir (*Pseudotsuga menziesii*)	6	Some dead branches in crown, Crown cleaning recommended	C	Lot grading greatly impacts root zone	0
50044	18	Douglas-fir (*Pseudotsuga menziesii*)	5	Unbalanced crown, sparse canopy, poor live crown ratio	B	Lot grading greatly impacts root zone	0
50045	6,6,7,12,12	Bigleaf Maple (*Acer macrophyllum*)	6	Dead codominant stems, unbalanced crown	B		6
50046	6,6,7,12,12	Bigleaf Maple (*Acer macrophyllum*)	6	Dead codominant stems, cavities	B	Lot grading greatly impacts root zone	0
50047	13	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50048	8	Douglas-fir (*Pseudotsuga menziesii*)	0	Snag	A	Tree is dead	0
50049	16	Douglas-fir (*Pseudotsuga menziesii*)	4	Sparse canopy, sap seepage	B	Lot grading greatly impacts root zone	0
50050	7	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50051	11	Douglas-fir (*Pseudotsuga menziesii*)	2	Significant lean, sweep, dead branches, sparse canopy	A		2
50052	12	Douglas-fir (*Pseudotsuga menziesii*)	2	Sparse canopy, poor live crown ratio, dead branches in crown	B		2
50053	19	Douglas-fir (*Pseudotsuga menziesii*)	6	Crown cleaning recommended	C	Lot grading greatly impacts root zone	0
50054	13	Douglas-fir (*Pseudotsuga menziesii*)	3	Sparse canopy, poor live crown ratio, dead branches in crown	B	Lot grading greatly impacts root zone	0
50055	20	Douglas-fir (*Pseudotsuga menziesii*)	6	Unbalanced crown, poor live crown ratio	B		6
50056	12	Douglas-fir (*Pseudotsuga menziesii*)	2	Very poor live crown ratio, sparse canopy	A	Poor tree health	0
50057	10	Douglas-fir (*Pseudotsuga menziesii*)	2	Sparse canopy, poor live crown ratio	B	Lot grading greatly impacts root zone	0
50058	16	Douglas-fir (*Pseudotsuga menziesii*)	4	Sparse canopy, poor live crown ratio	B		4
50059	17	Douglas-fir (*Pseudotsuga menziesii*)	5	Sparse canopy, poor live crown ratio	B		5
50060	18	Douglas-fir (*Pseudotsuga menziesii*)	5	Unbalanced crown	B		5
50061	18	Douglas-fir (*Pseudotsuga menziesii*)	5	Unbalanced crown	B		5
50062	13	Douglas-fir (*Pseudotsuga menziesii*)	3	Unbalanced crown, poor live crown ratio	B	Lot grading greatly impacts root zone	0
50063	10	Douglas-fir (*Pseudotsuga menziesii*)	2	Sweep, very sparse canopy, very poor live crown ratio	A	Poor tree health	0
50064	14	Douglas-fir (*Pseudotsuga menziesii*)	3	Poor live crown ratio, Sparse canopy	B	Lot grading greatly impacts root zone	0
50065	14	Douglas-fir (*Pseudotsuga menziesii*)	3	Poor live crown ratio, Sparse canopy	B	Lot grading greatly impacts root zone	0
50066	14	Douglas-fir (*Pseudotsuga menziesii*)	3	Poor live crown ratio, Sparse canopy	B	Lot grading greatly impacts root zone	0
50067	14	Douglas-fir (*Pseudotsuga menziesii*)	3	Poor live crown ratio, Sparse canopy	B	Lot grading greatly impacts root zone	0
50068	16	Douglas-fir (*Pseudotsuga menziesii*)	4	Poor live crown ratio, Sparse canopy	B	Lot grading greatly impacts root zone	0
50069	15	Douglas-fir (*Pseudotsuga menziesii*)	4	Poor live crown ratio, Sparse canopy	B	Lot grading greatly impacts root zone	0
50070	18	Douglas-fir (*Pseudotsuga menziesii*)	5	Poor live crown ratio, Sparse canopy	B	Lot grading greatly impacts root zone	0
50071	17	Douglas-fir (*Pseudotsuga menziesii*)	5	Poor live crown ratio, Sparse canopy, unbalanced crown	B	Lot grading greatly impacts root zone	0
50072	20	Douglas-fir (*Pseudotsuga menziesii*)	6	Unbalanced crown	B	Lot grading greatly impacts root zone	0
50073	6	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A		0
50074	20	Douglas-fir (*Pseudotsuga menziesii*)	6		C		6
50075	18	Douglas-fir (*Pseudotsuga menziesii*)	5		C		5
50076	17	Douglas-fir (*Pseudotsuga menziesii*)	5		C		5
50077	15	Douglas-fir (*Pseudotsuga menziesii*)	4	Very poor live crown ratio, sparse canopy	B		0

AKS DRAWING FILE: 5504 P5.0 TREE TABLES.DWG | LAYOUT: 5.4

CERTIFIED ARBORIST
ISA®
BRYCE D. HANSON
CERTIFICATE NUMBER: PN 7554A
EXPIRATION DATE: 06/30/22

PRELIMINARY
NOT FOR
CONSTRUCTION

AKS ENGINEERING & FORESTRY, LLC
9600 NE 126TH AVE, STE 2520
VANCOUVER, WA 98682
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ENGINEERING · SURVEYING · NATURAL RESOURCES
FORESTRY · PLANNING · LANDSCAPE ARCHITECTURE

PRELIMINARY TREE PRESERVATION AND REMOVAL TABLE (CON.)
CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

PRELIMINARY
NOT FOR
CONSTRUCTION

JOB NUMBER: 5504
DATE: 11/24/2020
DESIGNED BY: CJS
DRAWN BY: BRK
CHECKED BY: BDH

P5.4

Detailed Tree Inventory for CJ Dens

AKS JOB NO. 5504 — Site Area = 43.90 acres

AKS Reference #	Total DBH (In)	Tree Species: Common Name (*Scientific name*)	Tree Units: Initial	Condition/Comments	Windthrow Rating	Reason for Removal	Tree Units: Retained
50078	15	Douglas-fir (*Pseudotsuga menziesii*)	4	Very poor live crown ratio, sparse canopy	B		4
50079	20	Douglas-fir (*Pseudotsuga menziesii*)	6	Poor live crown ratio	B		6
50080	12	Bigleaf Maple (*Acer macrophyllum*)	0	Snag	A		0
50081	16	Douglas-fir (*Pseudotsuga menziesii*)	4	Poor live crown ratio, unbalanced crown	B		4
50082	13	Douglas-fir (*Pseudotsuga menziesii*)	3	Poor live crown ratio, sparse canopy	B		3
50083	13	Douglas-fir (*Pseudotsuga menziesii*)	3	Very poor live crown ratio, sparse canopy	B		3
50084	13	Douglas-fir (*Pseudotsuga menziesii*)	3	Very poor live crown ratio, sparse canopy	B		3
50085	14	Douglas-fir (*Pseudotsuga menziesii*)	3	Very poor live crown ratio, sparse canopy	B		3
50086	16	Douglas-fir (*Pseudotsuga menziesii*)	4	Poor live crown ratio, sparse canopy	B		4
50087	14	Douglas-fir (*Pseudotsuga menziesii*)	3	Poor live crown ratio, sparse canopy	B		3
50088	13	Douglas-fir (*Pseudotsuga menziesii*)	3	Poor live crown ratio, sparse canopy	B		3
50089	13	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50090	17	Douglas-fir (*Pseudotsuga menziesii*)	5	Poor live crown ratio, sparse canopy	B		5
50091	12	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor live crown ratio, very sparse canopy	A	Poor tree health	0
50092	15	Douglas-fir (*Pseudotsuga menziesii*)	4	Poor live crown ratio, very sparse canopy	A	Poor tree health	0
50093	13	Douglas-fir (*Pseudotsuga menziesii*)	3	Poor live crown ratio, very sparse canopy	A	Poor tree health	0
50095	17	Douglas-fir (*Pseudotsuga menziesii*)	5	Poor live crown ratio	B		5
50096	15	Douglas-fir (*Pseudotsuga menziesii*)	4	Poor live crown ratio, dead branches in crown	B	Lot grading greatly impacts root zone	0
50098	18	Douglas-fir (*Pseudotsuga menziesii*)	5	Unbalanced crown	B		5
50099	17	Douglas-fir (*Pseudotsuga menziesii*)	5	Poor live crown ratio	B		5
50100	10	Bigleaf Maple (*Acer macrophyllum*)	2	Dead scaffold branches, unbalanced crown	B		2
50101	17	Douglas-fir (*Pseudotsuga menziesii*)	5	Unbalanced crown, dead lower branches	B		5
50102	6	Bigleaf Maple (*Acer macrophyllum*)	2	dead branches in crown, Crown cleaning recommended	C		2
50103	17	Douglas-fir (*Pseudotsuga menziesii*)	5	Poor live crown ratio	B		5
50104	22	Douglas-fir (*Pseudotsuga menziesii*)	7	Unbalanced crown	B		7
50105	13	Douglas-fir (*Pseudotsuga menziesii*)	3	Unbalanced crown, dead branches in crown	B		3
50106	20	Douglas-fir (*Pseudotsuga menziesii*)	6	Dead lower branches	C		6
50107	7	Bigleaf Maple (*Acer macrophyllum*)	2	Crooked bole, dead scaffold branches, shiffing bark	B		2
50108	14	Douglas-fir (*Pseudotsuga menziesii*)	3	dead branches in crown, Crown cleaning recommended	C		3
50109	20	Douglas-fir (*Pseudotsuga menziesii*)	6	Unbalanced crown, codominant top	B		6
50110	16	Douglas-fir (*Pseudotsuga menziesii*)	4	Unbalanced crown, dead branches in crown	B	Lot grading greatly impacts root zone	0
50111	17	Douglas-fir (*Pseudotsuga menziesii*)	5	dead branches in crown, Crown cleaning recommended	C		5
50112	17	Douglas-fir (*Pseudotsuga menziesii*)	5	Unbalanced crown	B		5
50113	17	Douglas-fir (*Pseudotsuga menziesii*)	5	Unbalanced crown, dead branches in crown	B		5
50114	11	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor live crown ratio, sparse canopy	B		2
50115	14	Douglas-fir (*Pseudotsuga menziesii*)	3	Poor live crown ratio, sparse canopy	B		3
50116	8	Red Alder (*Alnus rubra*)	2	Epicormic sprouts, dead branches in crown, dead top	B		2
50117	17	Douglas-fir (*Pseudotsuga menziesii*)	5	Sap seepage, dead lower branches	C		5
50118	13	Douglas-fir (*Pseudotsuga menziesii*)	3	Poor live crown ratio	B	Lot grading greatly impacts root zone	0
50119	6,6,6,7	Bigleaf Maple (*Acer macrophyllum*)	3	Unbalanced crown, dead scaffold branches, dead codominant stems at base	B		3
50120	10	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor live crown ratio	B		2
50121	9	Bigleaf Maple (*Acer macrophyllum*)	2		C	Lot grading greatly impacts root zone	0
50122	6	Bigleaf Maple (*Acer macrophyllum*)	2	Sparse canopy, lean	B	Lot grading greatly impacts root zone	0
50123	6,6,8,8	Bigleaf Maple (*Acer macrophyllum*)	3	Lean	B	Lot grading greatly impacts root zone	0
50124	12	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor live crown ratio	B		2
50125	10	Bigleaf Maple (*Acer macrophyllum*)	2	Lean, unbalanced crown	B		2
50126	7,8	Bigleaf Maple (*Acer macrophyllum*)	2	In decline, lean, unbalanced crown, dead codominant stems	A	Poor tree health	0
50127	9	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50128	12	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor live crown ratio, dead branches in crown	B	Lot grading greatly impacts root zone	0
50129	14	Douglas-fir (*Pseudotsuga menziesii*)	3	Unbalanced crown	B	Lot grading greatly impacts root zone	0
50130	10	Douglas-fir (*Pseudotsuga menziesii*)	2	Very sparse canopy, poor live crown ratio	A	Poor tree health	0
50131	15	Douglas-fir (*Pseudotsuga menziesii*)	4	Dead lower branches	C	Lot grading greatly impacts root zone	0
50132	14	Douglas-fir (*Pseudotsuga menziesii*)	3	Poor live crown ratio	B	Lot grading greatly impacts root zone	0
50133	16	Douglas-fir (*Pseudotsuga menziesii*)	4	Poor live crown ratio	B		4
50134	15	Douglas-fir (*Pseudotsuga menziesii*)	4	Unbalanced crown	B		4
50135	9	Cherry (*Prunus sp.*)	2	Dead top, epicormic sprouts, in decline	A		2
50137	16	Douglas-fir (*Pseudotsuga menziesii*)	4	Poor live crown ratio	B		4
50138	19	Douglas-fir (*Pseudotsuga menziesii*)	6		C		6
50139	15	Douglas-fir (*Pseudotsuga menziesii*)	4		C		4
50140	12	Douglas-fir (*Pseudotsuga menziesii*)	2	Unbalanced crown, poor live crown ratio	B		2
50141	18	Douglas-fir (*Pseudotsuga menziesii*)	5	Dead lower branches, some dead branches in crown, Crown cleaning recommended	C		5
50142	13	Douglas-fir (*Pseudotsuga menziesii*)	3	Unbalanced crown, poor live crown ratio	B		3
50143	6	Bigleaf Maple (*Acer macrophyllum*)	2	Dead top, in decline	A		2
50144	17	Douglas-fir (*Pseudotsuga menziesii*)	5		C		5
50145	8,10	Bigleaf Maple (*Acer macrophyllum*)	3	Codominant base	B		3
50146	10	Bigleaf Maple (*Acer macrophyllum*)	2	Crooked bole, sparse canopy	B	Lot grading greatly impacts root zone	0
50147	11	Douglas-fir (*Pseudotsuga menziesii*)	2	Branch dieback, Sparse canopy, poor live crown ratio, unbalanced crown	A	Poor tree health	0
50148	18	Douglas-fir (*Pseudotsuga menziesii*)	5	Dead branches in crown, Crown cleaning recommended	C		5
50149	17,18	Bigleaf Maple (*Acer macrophyllum*)	9	Cavities, dead codominant stem	B	Lot grading greatly impacts root zone	0
50150	19	Douglas-fir (*Pseudotsuga menziesii*)	6	Poor live crown ratio, branch dieback	B	Lot grading greatly impacts root zone	0
50151	12	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor live crown ratio, branch dieback	B	Lot grading greatly impacts root zone	0
50152	11	Douglas-fir (*Pseudotsuga menziesii*)	2	Dead branches in crown	B	Lot grading greatly impacts root zone	0
50153	6,8	Bigleaf Maple (*Acer macrophyllum*)	2	Dead codominant stems at base, sparse canopy	B	Lot grading greatly impacts root zone	0
50154	10	Douglas-fir (*Pseudotsuga menziesii*)	2	Insignificant lean	A	Poor tree health	0
50155	6	Bigleaf Maple (*Acer macrophyllum*)	2	Significant lean, broken codominant stems, in decline	A	Poor tree health	0
50156	10	Bigleaf Maple (*Acer macrophyllum*)	2	Cavity, crooked bole, poor live crown ratio	B		2
50157	6,9	Bigleaf Maple (*Acer macrophyllum*)	2		C		2
50158	7	Bigleaf Maple (*Acer macrophyllum*)	2	Lean, codominant top	B		2
50159	7,10	Bigleaf Maple (*Acer macrophyllum*)	2	Dead top, in decline	A		2
50160	17	Douglas-fir (*Pseudotsuga menziesii*)	5	Unbalanced crown	B		5
50161	16	Douglas-fir (*Pseudotsuga menziesii*)	4	Unbalanced crown	B		4
50162	16	Douglas-fir (*Pseudotsuga menziesii*)	4	Unbalanced crown, poor live crown ratio	B		4
50163	8	Bigleaf Maple (*Acer macrophyllum*)	2	Dead branches in crown, sparse canopy	B		2
50164	18	Douglas-fir (*Pseudotsuga menziesii*)	5	Unbalanced crown	B		5
50165	20	Douglas-fir (*Pseudotsuga menziesii*)	6	Unbalanced crown, dead branches in crown	B		6
50166	13	Douglas-fir (*Pseudotsuga menziesii*)	3	Poor live crown ratio	B		3
50167	10	Douglas-fir (*Pseudotsuga menziesii*)	2	Poor live crown ratio, epicormic sprouts, dead branches	B		2
50168	23	Douglas-fir (*Pseudotsuga menziesii*)	8	Crooked bole, unbalanced crown	B		8
50169	12,13	Douglas-fir (*Pseudotsuga menziesii*)	5	Codominant base with included bark, sparse canopy	B	Lot grading greatly impacts root zone	0
50170	17	Douglas-fir (*Pseudotsuga menziesii*)	5	Unbalanced crown	B		5
50171	10	Cherry (*Prunus sp.*)	2	Sparse canopy, many dead branches, in decline	A	Poor tree health	0
50172	10	Cherry (*Prunus sp.*)	0	Dead	A	Tree is dead	0
50173	9	Cherry (*Prunus sp.*)	2	Sparse canopy, many dead branches, in decline	A	Poor tree health	0
50174	10	Bigleaf Maple (*Acer macrophyllum*)	2	Dead branches in crown, codominant base	B		2
50175	15	Douglas-fir (*Pseudotsuga menziesii*)	4	Sweep, poor live crown ratio	B		4
50176	17	Douglas-fir (*Pseudotsuga menziesii*)	5	Poor live crown ratio, sparse canopy, epicormic sprouts	B		5
50178	15	Douglas-fir (*Pseudotsuga menziesii*)	4	Poor live crown ratio, dead branches in crown	B		4
50179	10	Bigleaf Maple (*Acer macrophyllum*)	2	Dead top	B		2
50180	6,9,9	Bigleaf Maple (*Acer macrophyllum*)	3	Branch dieback, sparse canopy	B		3
50181	6,6,7	Bigleaf Maple (*Acer macrophyllum*)	2	Branch dieback, sparse canopy, dead codominant stem	B		2
50183	7,7,9,10,10	Bigleaf Maple (*Acer macrophyllum*)	6	Clustered base, some branch dieback, dead scaffold branches	B		6
50184	16	Douglas-fir (*Pseudotsuga menziesii*)	4	Poor live crown ratio	B		4
50185	17	Douglas-fir (*Pseudotsuga menziesii*)	5	Poor live crown ratio, sparse canopy	B		5
50186	15	Douglas-fir (*Pseudotsuga menziesii*)	4	Poor live crown ratio, sparse canopy	B		4
50187	8	Bigleaf Maple (*Acer macrophyllum*)	2	Sweep	B		2
50188	13	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50190	9	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50191	6,6,6,7,10,10	Bigleaf Maple (*Acer macrophyllum*)	6	Dead scaffold branches, cavities in base	B		6
50192	16	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50193	13	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50194	12	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50195	17	Douglas-fir (*Pseudotsuga menziesii*)	5	Poor live crown ratio, sparse canopy, dead branches in crown	B	Lot grading greatly impacts root zone	5
50196	7	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50197	17	Douglas-fir (*Pseudotsuga menziesii*)	5	Poor live crown ratio, sparse canopy, dead branches in crown	B	Lot grading greatly impacts root zone	5
50198	10,10	Bigleaf Maple (*Acer macrophyllum*)	2	Significant lean	A	Poor tree health	0
50199	10	Douglas-fir (*Pseudotsuga menziesii*)	2	Tree leaning on	B		2
50200	10	Douglas-fir (*Pseudotsuga menziesii*)	2	Lean	B		2
50201	6	Douglas-fir (*Pseudotsuga menziesii*)	2		C		2
50202	11	Douglas-fir (*Pseudotsuga menziesii*)	2	Very poor live crown ratio, very sparse canopy, in decline	A	Poor tree health	0
50203	15	Douglas-fir (*Pseudotsuga menziesii*)	4	Very poor live crown ratio, very sparse canopy, in decline	A	Poor tree health	0

Detailed Tree Inventory for CJ Dens

AKS JOB NO. 5504 — Site Area = 43.90 acres

AKS Reference #	Total DBH (In)	Tree Species: Common Name (*Scientific name*)	Tree Units: Initial	Condition/Comments	Windthrow Rating	Reason for Removal	Tree Units: Retained
50204	15	Douglas-fir (*Pseudotsuga menziesii*)	4	Very poor live crown ratio, very sparse canopy, in decline	A	Poor tree health	0
50205	10	Douglas-fir (*Pseudotsuga menziesii*)	0	Snag	A	Tree is dead	0
50206	6	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50207	20	Douglas-fir (*Pseudotsuga menziesii*)	6	Poor live crown ratio	B		6
50208	12	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50209	17	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50210	7	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50211	12	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50212	15	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A	Tree is dead	0
50213	6	Bigleaf Maple (*Acer macrophyllum*)	2	Lean	B		2
50214	6,6,6,10,10,10	Bigleaf Maple (*Acer macrophyllum*)	6	Dead branches, dead codominant stems	B		6
50215	15	Douglas-fir (*Pseudotsuga menziesii*)	4	Poor live crown ratio	B		4
50216	14	Douglas-fir (*Pseudotsuga menziesii*)	3	Poor live crown ratio, sparse canopy	B		3
50217	6	Douglas-fir (*Pseudotsuga menziesii*)	0	Snag	A	Tree is dead	0
50218	7	Douglas-fir (*Pseudotsuga menziesii*)	0	Snag	A	Tree is dead	0
50219	15	Douglas-fir (*Pseudotsuga menziesii*)	4	Poor live crown ratio, sparse canopy	B	Lot grading greatly impacts root zone	0
50220	16	Douglas-fir (*Pseudotsuga menziesii*)	4	Poor live crown ratio, sparse canopy	B	Lot grading greatly impacts root zone	0
50221	9	Douglas-fir (*Pseudotsuga menziesii*)	0	Dead	A		0
50222	14	Coniferous	3	Not Evaluated by an Arborist	-		3
50223	7	Deciduous	2	Not Evaluated by an Arborist	-		2
50500	8	Douglas-fir (*Pseudotsuga menziesii*)	2		C	Located within proposed road grading	0
50501	29	Bigleaf Maple (*Acer macrophyllum*)	11		C		11
50502	17	Red Alder (*Alnus rubra*)	0	Snag	A	Tree is dead	0
50503	18	Bigleaf Maple (*Acer macrophyllum*)	0	Large hollow in base with significant decay, located in Critical Area Tract S	A		0
50504	13	Red Alder (*Alnus rubra*)	0	Snag, located in Critical Area Tract S	A	Tree is dead	0
50505	17	Bigleaf Maple (*Acer macrophyllum*)	0	Sweep, deformed bole, located in Critical Area Tract S	B	Lot grading greatly impacts root zone	0
50506	12,11,10,6,6,6	Bigleaf Maple (*Acer macrophyllum*)	7	Cavity with decay in base, dead limbs	B	Lot grading greatly impacts root zone	0
50507	13,13,10,6	Bigleaf Maple (*Acer macrophyllum*)	7	Dead scaffold branches, broken Codominant stems	B	Lot grading greatly impacts root zone	0
50508	20	Douglas-fir (*Pseudotsuga menziesii*)	6	Poor live crown ratio, located in Critical Area Tract S	B	Lot grading greatly impacts root zone	0
50509	13	Red Alder (*Alnus rubra*)	0	Dead top, poor live crown ratio, in decline., located in Critical Area Tract S	A	Poor tree health	0
50510	12	Bigleaf Maple (*Acer macrophyllum*)	0	Located in Critical Area Tract S	C		0
50511	14	Red Alder (*Alnus rubra*)	0	Dead branches,, located in Critical Area Tract S	C		0
50512	15,6,6	Bigleaf Maple (*Acer macrophyllum*)	0	Located in Critical Area Tract S	C		0

NOTE: On site trees existed during the site visits performed on 07/06/2020 - 8/13/2020.

Total # of On Site Existing Trees= 408
Total On Site Existing Tree Units = 1699.0
Total # of On Site Trees Retained= 238
Total # of Tree Units Retained= 1048.0
Minimum Tree Units Required per City Code = 878
(43.90 acres * 20 trees/acre)
Minimum # Trees to replant= 0

Total # of Existing Trees Removed= 170
Total Existing Tree Units Removed= 651.0

Windthuow Rating:
A=Least windthrow resistant
B=Moderate windthrow resistant
C=Most windthrow resistant

Tree Root Protection Zone: The tree root protection zone for each tree is a circle with a radius equal to 1 foot per 1 inch DBH.

Arborist Disclosure Statement:
Arborists are tree specialists who use their education, knowledge, training, and experience to examine trees, recommend measures to enhance the health of trees, and attempt to reduce the risk of living near trees. The Client and Jurisdiction may choose to accept or disregard the recommendations of the arborist, or seek additional advice.
Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand.
Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time.
Likewise, remedial treatments, like medicine, cannot be guaranteed. Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk.
The only way to eliminate all risk associated with trees is to eliminate all trees.
At the completion of construction, all trees must once again be reviewed to evaluate their hazard rating. Land clearing and removal of adjacent trees can expose previously unseen defects and otherwise healthy trees can be damaged during construction. Additional tree removal may be recommended by the project arborist.

NOTE:
THIS PROJECT RESERVES THE RIGHT THE REMOVE ADDITIONAL TREES, AS DEEMED NECESSARY/RECOMMENDED BY THE PROJECT CERTIFIED ARBORIST, FOR HAZARD ABATEMENT PURPOSES. THIS CANNOT BE EVALUATED UNTIL AFTER CONSTRUCTION AS DISCUSSED WITHIN THE ARBORIST REPORT AND THESE PLANS. THE CITY WILL BE NOTIFIED OF SUCH REMOVALS AND WILL BE CONSULTED WITH IF A SIGNIFICANT AMOUNT OF TREES ARE RECOMMENDED FOR REMOVAL POST CONSTRUCTION ACTIVITIES.

CERTIFIED ARBORIST ISA
PRELIMINARY NOT FOR CONSTRUCTION
BRYCE D. HANSON
CERTIFICATE NUMBER: PN 7554A
EXPIRATION DATE: 06/30/22

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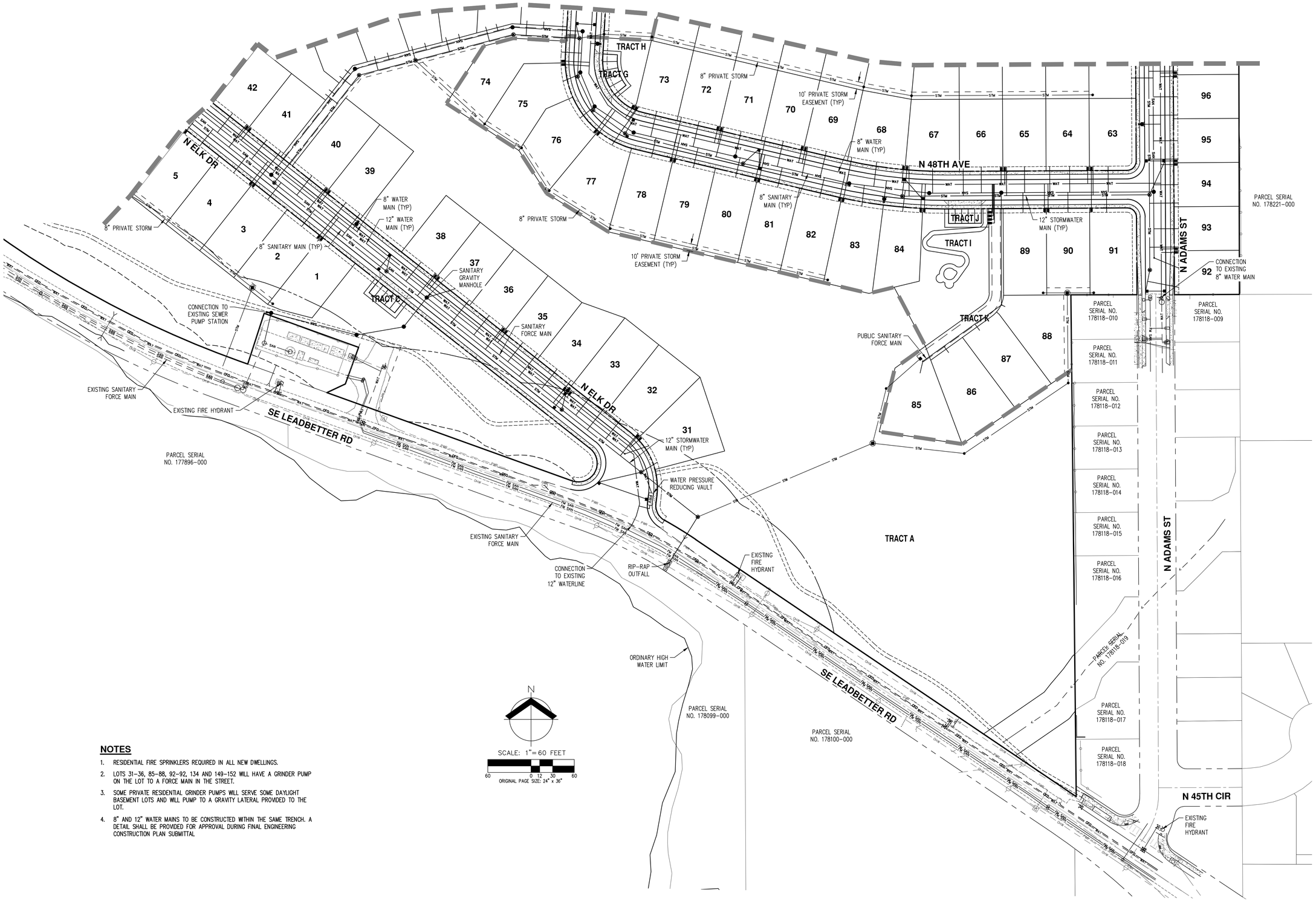
PRELIMINARY TREE PRESERVATION AND REMOVAL TABLE (CON.)

CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

PRELIMINARY NOT FOR CONSTRUCTION

JOB NUMBER:	5504
DATE:	11/24/2020
DESIGNED BY:	CJS
DRAWN BY:	BRK
CHECKED BY:	BDH

P5.5



NOTES

1. RESIDENTIAL FIRE SPRINKLERS REQUIRED IN ALL NEW DWELLINGS.
2. LOTS 31-36, 85-88, 92-92, 134 AND 149-152 WILL HAVE A GRINDER PUMP ON THE LOT TO A FORCE MAIN IN THE STREET.
3. SOME PRIVATE RESIDENTIAL GRINDER PUMPS WILL SERVE SOME DAYLIGHT BASEMENT LOTS AND WILL PUMP TO A GRAVITY LATERAL PROVIDED TO THE LOT.
4. 8" AND 12" WATER MAINS TO BE CONSTRUCTED WITHIN THE SAME TRENCH. A DETAIL SHALL BE PROVIDED FOR APPROVAL DURING FINAL ENGINEERING CONSTRUCTION PLAN SUBMITTAL

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PRELIMINARY COMPOSITE UTILITY PLAN (SOUTH)

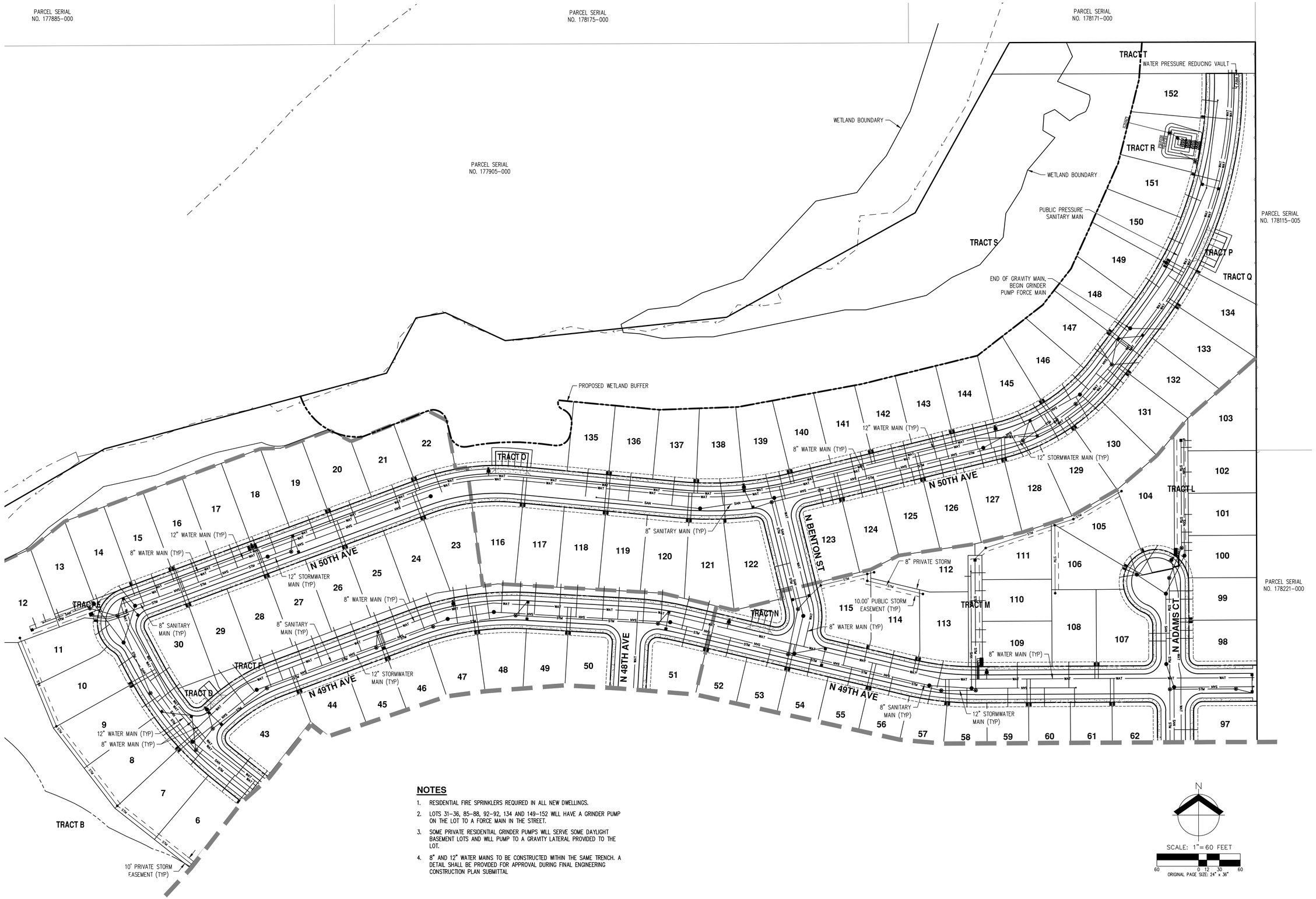
CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

PRELIMINARY NOT FOR CONSTRUCTION

JOB NUMBER:	5504
DATE:	11/24/2020
DESIGNED BY:	CJS
DRAWN BY:	NAL
CHECKED BY:	JMM

P6.0

AKS DRAWING FILE: 5504 P6.0 UTILITY PLAN.DWG | LAYOUT: P6.0



NOTES

1. RESIDENTIAL FIRE SPRINKLERS REQUIRED IN ALL NEW DWELLINGS.
2. LOTS 31-36, 85-88, 92-92, 134 AND 149-152 WILL HAVE A GRINDER PUMP ON THE LOT TO A FORCE MAIN IN THE STREET.
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N

SCALE: 1"=60 FEET

60 0 12 30 60

ORIGINAL PAGE SIZE: 24" x 36"

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PRELIMINARY COMPOSITE UTILITY PLAN (NORTH)

CJ DENS SUBDIVISION

CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

PRELIMINARY NOT FOR CONSTRUCTION

JOB NUMBER:	5504
DATE:	11/24/2020
DESIGNED BY:	CJS
DRAWN BY:	NAL
CHECKED BY:	JMM

P6.1

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LEGEND

- EXISTING GROUND CONTOUR (2 FT)
- EXISTING GROUND CONTOUR (10 FT) — 350 —
- FINISHED GRADE CONTOUR (2 FT)
- FINISHED GRADE CONTOUR (10 FT) — 350 —
- PHASE BOUNDARY
- STORMWATER FLOW ARROWS
- STORM FACILITY ACCESS

GENERAL NOTES

1. CONTOUR INTERVAL IS 2 FOOT.
2. TREES ARE NOT SHOWN.
3. STORMWATER DETENTION POND 1.1 ON TRACT R TO BE OWNED AND MAINTAINED BY THE HOA.
4. ACCORDING TO CLARK COUNTY GIS, THE SITE IS NOT WITHIN OR ADJACENT TO A 100-YEAR FLOODPLAIN.
5. THERE ARE NO KNOWN EXISTING ON-SITE STORMWATER FACILITIES.
6. NATIVE VEGETATION WITHIN TRACT A, TRACT B, TRACT S, AND THE CRITICAL AREAS WILL BE RETAINED AS MUCH AS POSSIBLE AND ENHANCED, AS NEEDED, PER THE WETLAND MITIGATION PLAN.
7. SOME OFF-SITE FLOW OCCURS FROM ADJACENT PARCELS. ANALYSIS OF OFF-SITE FLOW WAS NOT DONE AT THIS TIME AND WILL BE INCLUDED WITH THE FINAL STORMWATER PLAN.
8. REAR YARD RUNOFF FOR LOTS 12-22 AND 135-152 WILL BE COLLECTED AND DISPERSED INTO THE ADJACENT WETLAND BUFFER. ROOFS WILL DRAIN TO A STORMWATER LATERAL.
9. REAR YARD RUNOFF FOR LOTS 92-103 WILL BE COLLECTED AND DISPERSED INTO THE NEIGHBORING PROPERTY. ROOFS WILL DRAIN TO A STORMWATER LATERAL.

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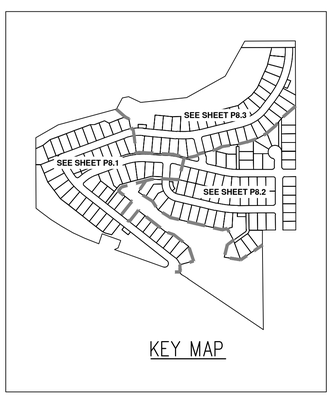
PRELIMINARY STORMWATER PLAN
CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

PRELIMINARY NOT FOR CONSTRUCTION

JOB NUMBER:	5504
DATE:	11/24/2020
DESIGNED BY:	CJS
DRAWN BY:	NAL
CHECKED BY:	JMM

P7.0

AKS DRAWING FILE: 5504 P7.0 STM.DWG | LAYOUT: P7.0



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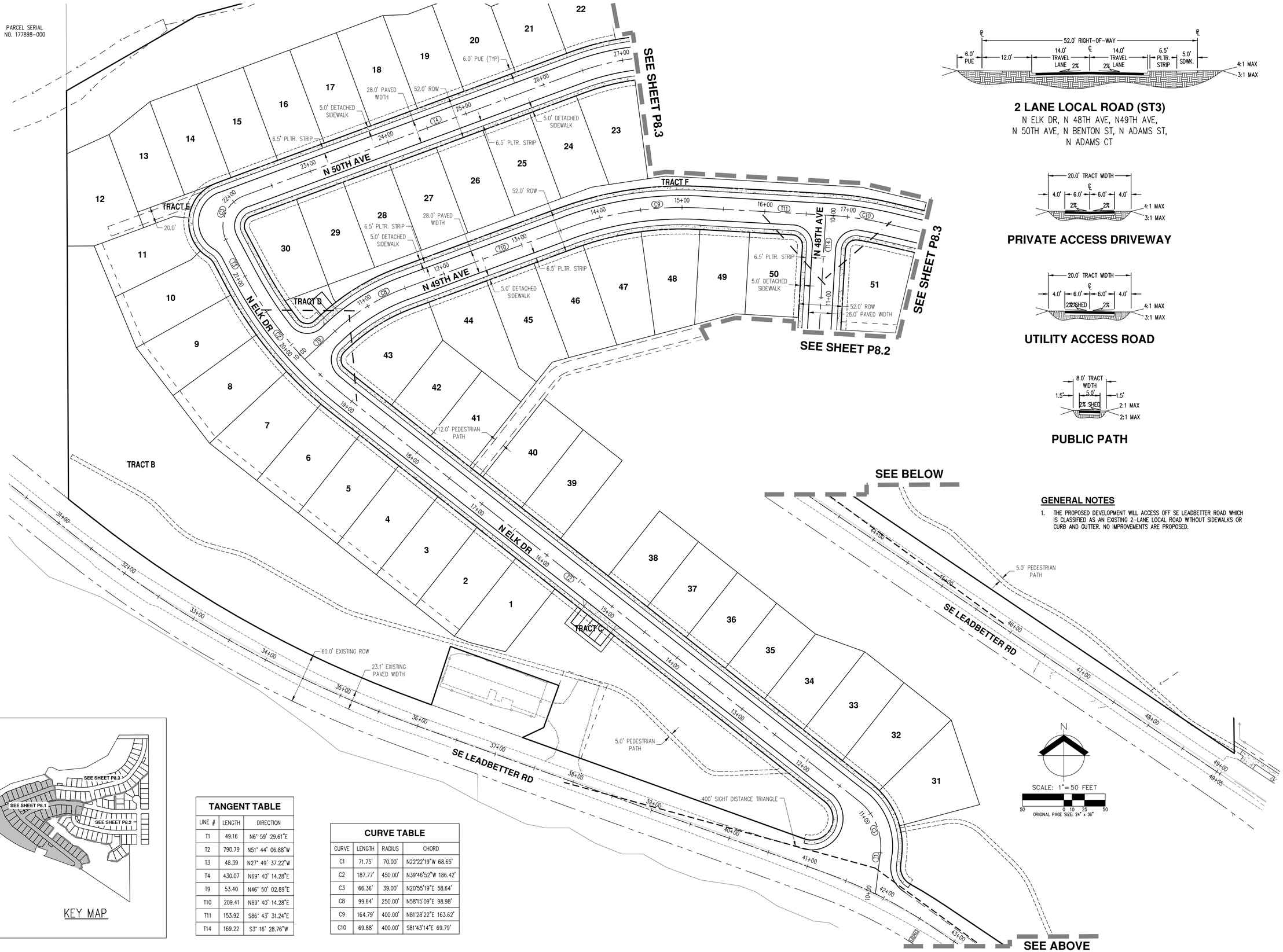
PRELIMINARY STREET PLAN
CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

PRELIMINARY NOT FOR CONSTRUCTION

JOB NUMBER:	5504
DATE:	11/24/2020
DESIGNED BY:	CJS
DRAWN BY:	NAL
CHECKED BY:	JMM

P8.0

AKS DRAWING FILE: 5504 P8.0 STR.DWG | LAYOUT: P8.0



2 LANE LOCAL ROAD (ST3)

N ELK DR, N 48TH AVE, N49TH AVE, N 50TH AVE, N BENTON ST, N ADAMS ST, N ADAMS CT

PRIVATE ACCESS DRIVEWAY

UTILITY ACCESS ROAD

PUBLIC PATH

GENERAL NOTES

1. THE PROPOSED DEVELOPMENT WILL ACCESS OFF SE LEADBETTER ROAD WHICH IS CLASSIFIED AS AN EXISTING 2-LANE LOCAL ROAD WITHOUT SIDEWALKS OR CURB AND GUTTER. NO IMPROVEMENTS ARE PROPOSED.

TANGENT TABLE

LINE #	LENGTH	DIRECTION
T1	49.16	N6° 59' 29.61"E
T2	790.79	N51° 44' 06.88"W
T3	48.39	N27° 49' 37.22"W
T4	430.07	N69° 40' 14.28"E
T9	53.40	N46° 50' 02.89"E
T10	209.41	N69° 40' 14.28"E
T11	153.92	S86° 43' 31.24"E
T14	169.22	S3° 16' 28.76"W

CURVE TABLE

CURVE	LENGTH	RADIUS	CHORD
C1	71.75'	70.00'	N22°22'19"W 68.65'
C2	187.77'	450.00'	N39°46'52"W 186.42'
C3	66.36'	39.00'	N20°55'19"E 58.64'
C8	99.64'	250.00'	N58°15'09"E 98.98'
C9	164.79'	400.00'	N81°28'22"E 163.62'
C10	69.88'	400.00'	S81°43'14"E 69.79'

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PRELIMINARY STREET PLAN - PHASE 1
CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

PRELIMINARY NOT FOR CONSTRUCTION

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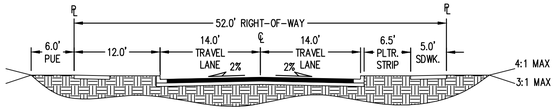
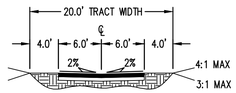
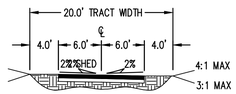


2 LANE LOCAL ROAD (ST3)

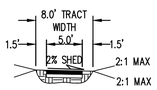
N ELK DR, N 48TH AVE, N49TH AVE, N 50TH AVE, N BENTON ST, N ADAMS ST, N ADAMS CT



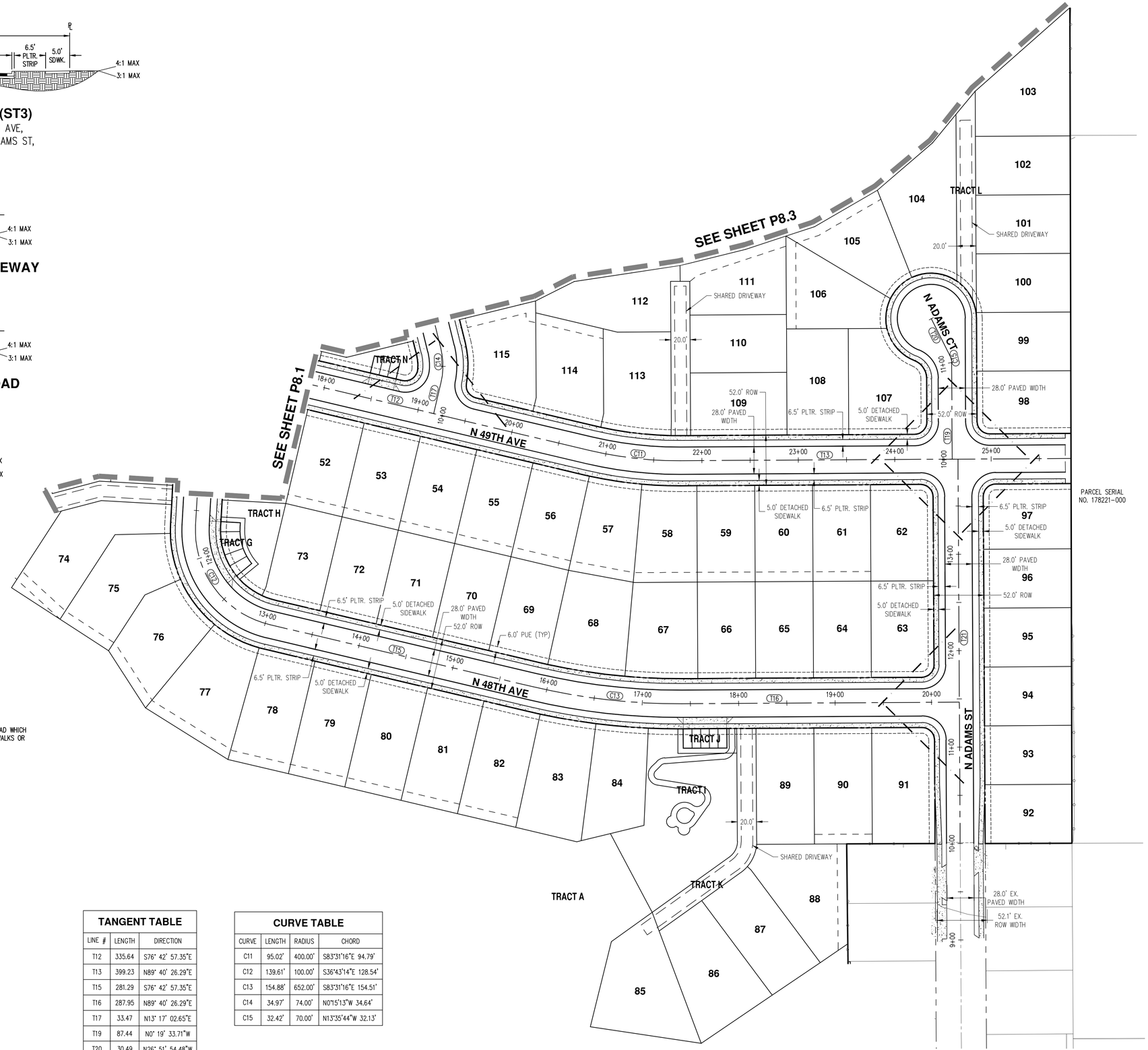
PRIVATE ACCESS DRIVEWAY



UTILITY ACCESS ROAD



PUBLIC PATH



GENERAL NOTES

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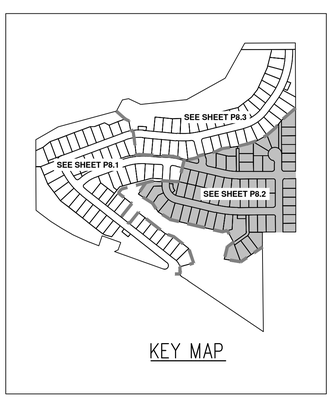

KEY MAP

TANGENT TABLE

LINE #	LENGTH	DIRECTION
T12	335.64	S76° 42' 57.35"E
T13	399.23	N89° 40' 26.29"E
T15	281.29	S76° 42' 57.35"E
T16	287.95	N89° 40' 26.29"E
T17	33.47	N13° 17' 02.65"E
T19	87.44	N0° 19' 33.71"W
T20	30.49	N26° 51' 54.48"W
T21	398.61	S0° 19' 33.71"E

CURVE TABLE

CURVE	LENGTH	RADIUS	CHORD
C11	95.02'	400.00'	S83°31'16"E 94.79'
C12	139.61'	100.00'	S36°43'14"E 128.54'
C13	154.88'	652.00'	S83°31'16"E 154.51'
C14	34.97'	74.00'	N0°15'13"W 34.64'
C15	32.42'	70.00'	N13°35'44"W 32.13'

SCALE: 1"=50 FEET

ORIGINAL PAGE SIZE: 24" x 36"

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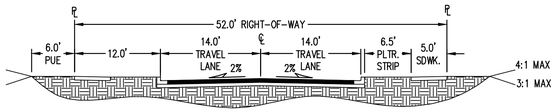
PRELIMINARY STREET PLAN - PHASE 2
CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

PRELIMINARY NOT FOR CONSTRUCTION

JOB NUMBER:	5504
DATE:	11/24/2020
DESIGNED BY:	CJS
DRAWN BY:	NAL
CHECKED BY:	JMM

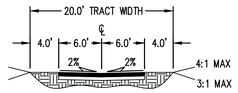
P8.2

AKS DRAWING FILE: 5504 P8.0 STR.DWG | LAYOUT: P8.2

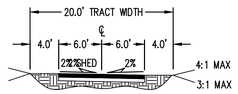


2 LANE LOCAL ROAD (ST3)

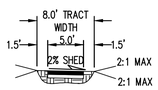
N ELK DR, N 48TH AVE, N49TH AVE, N 50TH AVE, N BENTON ST, N ADAMS ST, N ADAMS CT



PRIVATE ACCESS DRIVEWAY



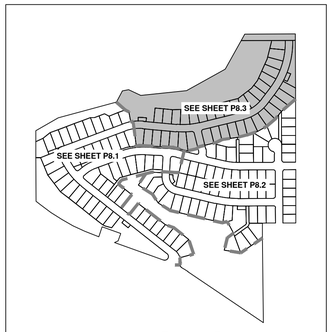
UTILITY ACCESS ROAD



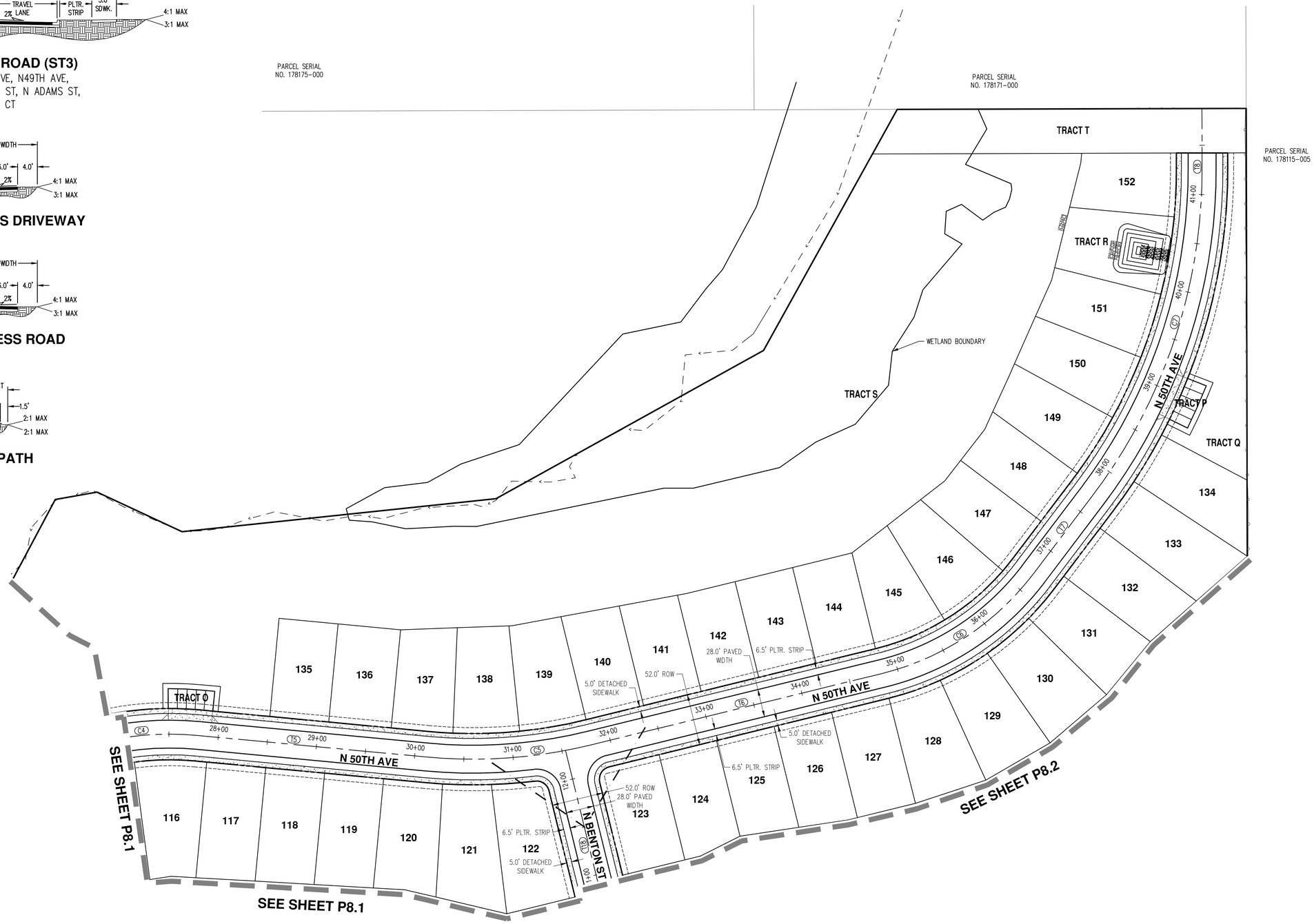
PUBLIC PATH

TANGENT TABLE		
LINE #	LENGTH	DIRECTION
T5	233.27	S84° 36' 43.29"E
T6	303.65	N76° 12' 30.70"E
T7	98.78	N37° 07' 34.55"E
T8	14.76	N0° 07' 57.00"W
T18	161.43	N13° 47' 29.30"W

CURVE TABLE			
CURVE	LENGTH	RADIUS	CHORD
C4	134.66'	300.00'	N82°31'45"E 133.53'
C5	167.37'	500.00'	N85°47'54"E 166.59'
C6	187.58'	275.00'	N56°40'03"E 183.97'
C7	357.66'	550.00'	N18°29'49"E 351.39'



KEY MAP



GENERAL NOTES

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SCALE: 1" = 50 FEET

50 0 10 25 50

ORIGINAL PAGE SIZE: 24" x 36"

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PRELIMINARY STREET PLAN - PHASE 3
CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

PRELIMINARY NOT FOR CONSTRUCTION

JOB NUMBER:	5504
DATE:	11/24/2020
DESIGNED BY:	CJS
DRAWN BY:	NAL
CHECKED BY:	JMM

P8.3

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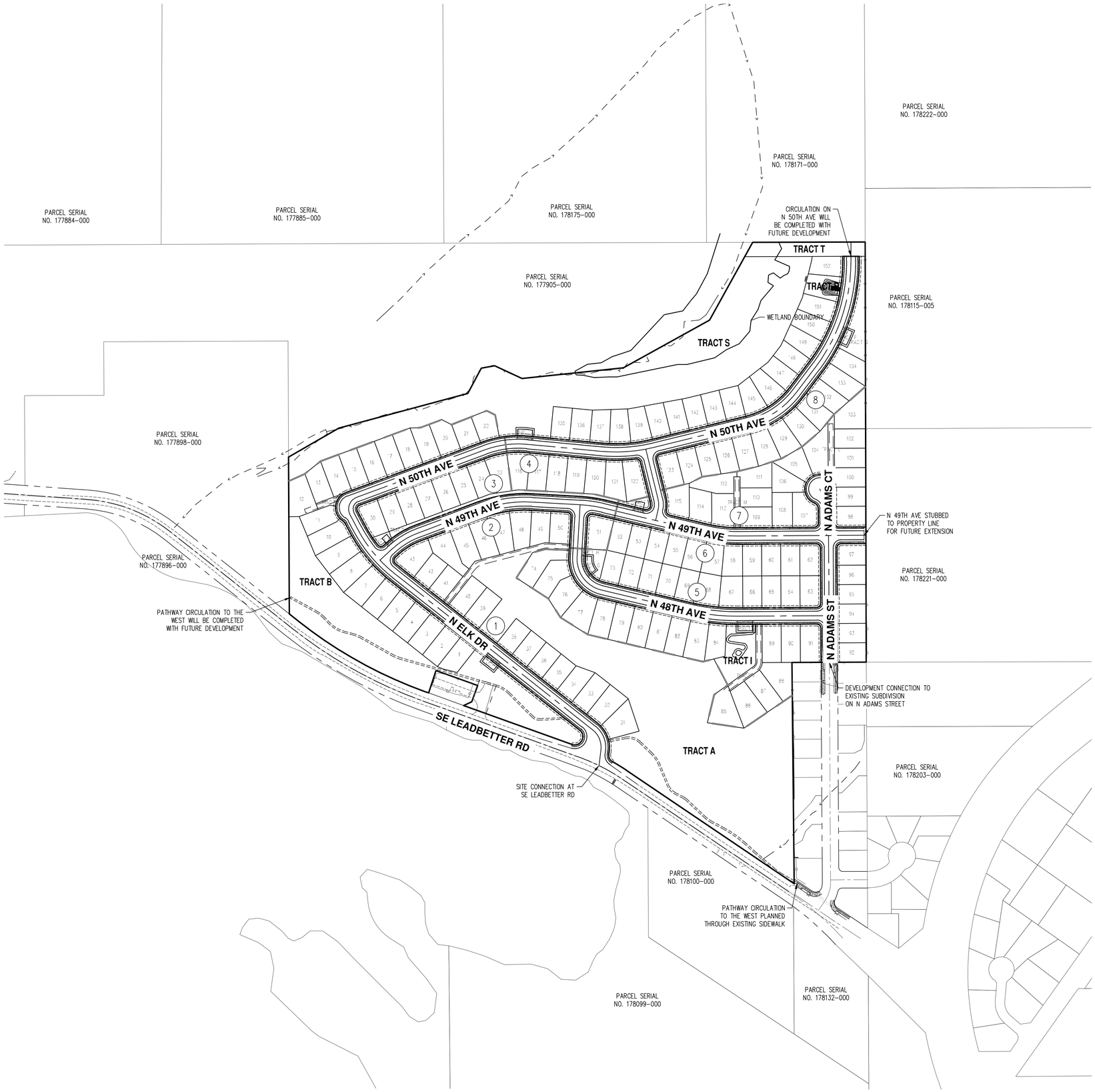

KEYED NOTES

1. 951.82' MEASURED ROW TO ROW SPACING
2. 582.83' MEASURED ROW TO ROW SPACING
3. 883.12 MEASURED ROW TO ROW SPACING
4. 911.65' MEASURED ROW TO ROW SPACING
5. 911.55' MEASURED ROW TO ROW SPACING
6. 729.84' MEASURED ROW TO ROW SPACING
7. 471.45' MEASURED ROW TO ROW SPACING
8. 999.29' MEASURED ROW TO ROW SPACING

N

SCALE: 1"=150 FEET

150 0 30 75 150

ORIGINAL PAGE SIZE: 24" x 36"

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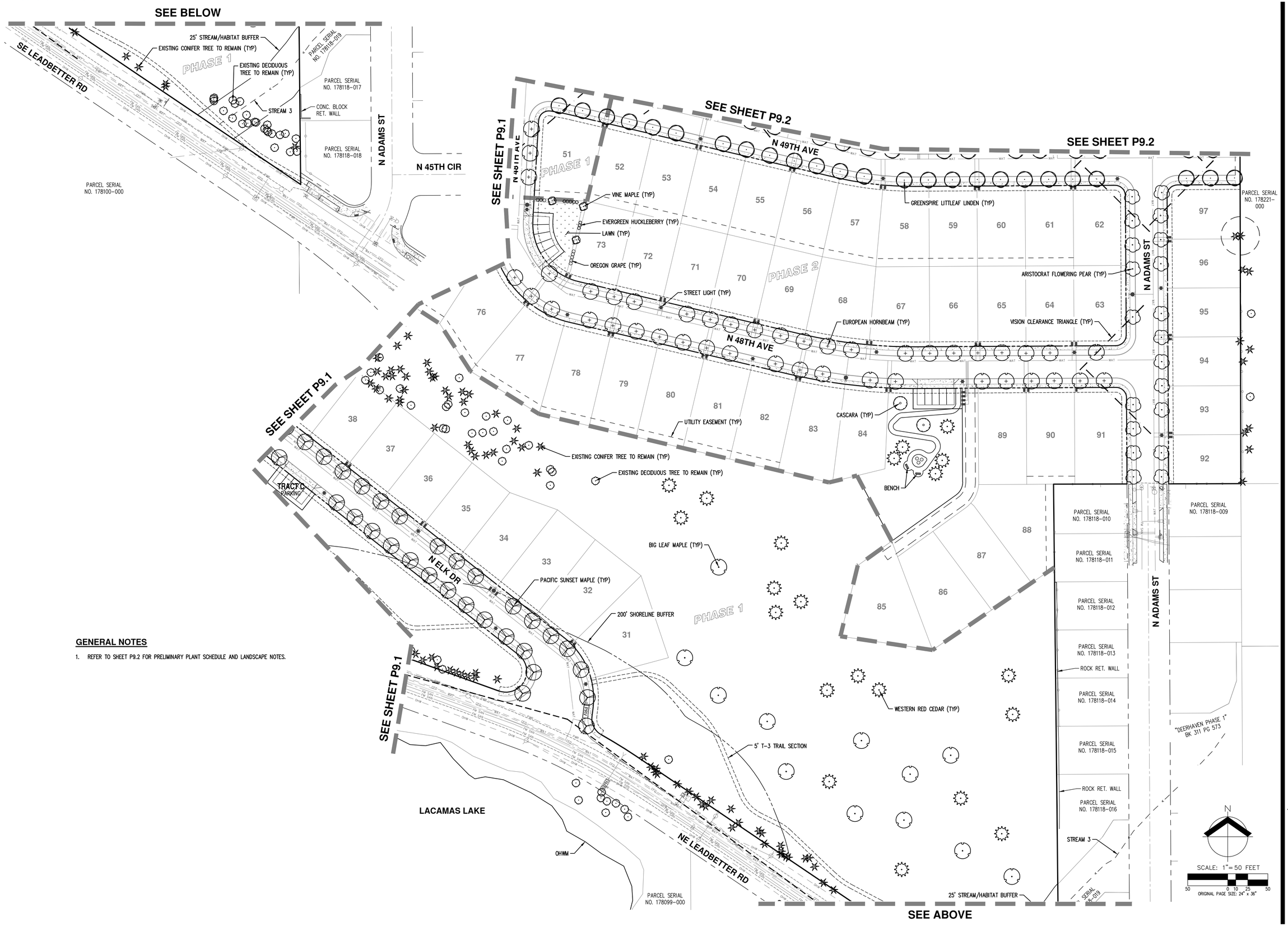
PRELIMINARY CIRCULATION PLAN
CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

PRELIMINARY NOT FOR CONSTRUCTION

JOB NUMBER:	5504
DATE:	11/24/2020
DESIGNED BY:	CJS
DRAWN BY:	NAL
CHECKED BY:	JMM

P8.4

AKS DRAWING FILE: 5504 P8.0 STR.DWG | LAYOUT: P8.4



GENERAL NOTES

1. REFER TO SHEET P9.2 FOR PRELIMINARY PLANT SCHEDULE AND LANDSCAPE NOTES.

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PRELIMINARY LANDSCAPE AND LIGHTING PLAN (SOUTH)

CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

STATE OF WASHINGTON
TIMOTHY E. BOLDT
REGISTERED
EXP. 12/12/2022
LANDSCAPE ARCHITECT
PRELIMINARY NOT FOR CONSTRUCTION

JOB NUMBER:	5504
DATE:	11/24/2020
DESIGNED BY:	TEB
DRAWN BY:	TEB
CHECKED BY:	JMM

P9.0

AKS DRAWING FILE: 5504 P9.0 LANDSCAPE.DWG | LAYOUT: P9.0

GENERAL NOTES

1. REFER TO SHEET P9.2 FOR PRELIMINARY PLANT SCHEDULE AND LANDSCAPE NOTES.

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PRELIMINARY LANDSCAPE AND LIGHTING PLAN (WEST)

CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

STATE OF WASHINGTON
TIMOTHY E. BOSTON
LANDSCAPE ARCHITECT
EXP. 12/17/2022
PRELIMINARY
NOT FOR CONSTRUCTION

JOB NUMBER:	5504
DATE:	11/24/2020
DESIGNED BY:	TEB
DRAWN BY:	TEB
CHECKED BY:	JMM

P9.1

AKS DRAWING FILE: 5504 P9.0 LANDSCAPE.DWG | LAYOUT: P9.1

PRELIMINARY PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE/CONTAINER	SPACING
	3	ACER CIRCINATUM	VINE MAPLE	6' HT. B&B	AS SHOWN
	15	ACER MACROPHYLLUM	BIG LEAF MAPLE	2" CAL. B&B	AS SHOWN
	30	ACER RUBRUM 'BOWHALL'	BOWHALL MAPLE	2" CAL. B&B	AS SHOWN
	4	RHAMNUS PURSHIANA	CASCARA	2" CAL. B&B	AS SHOWN
	28	THUJA PLICATA	WESTERN RED CEDAR	6' HT. B&B	AS SHOWN

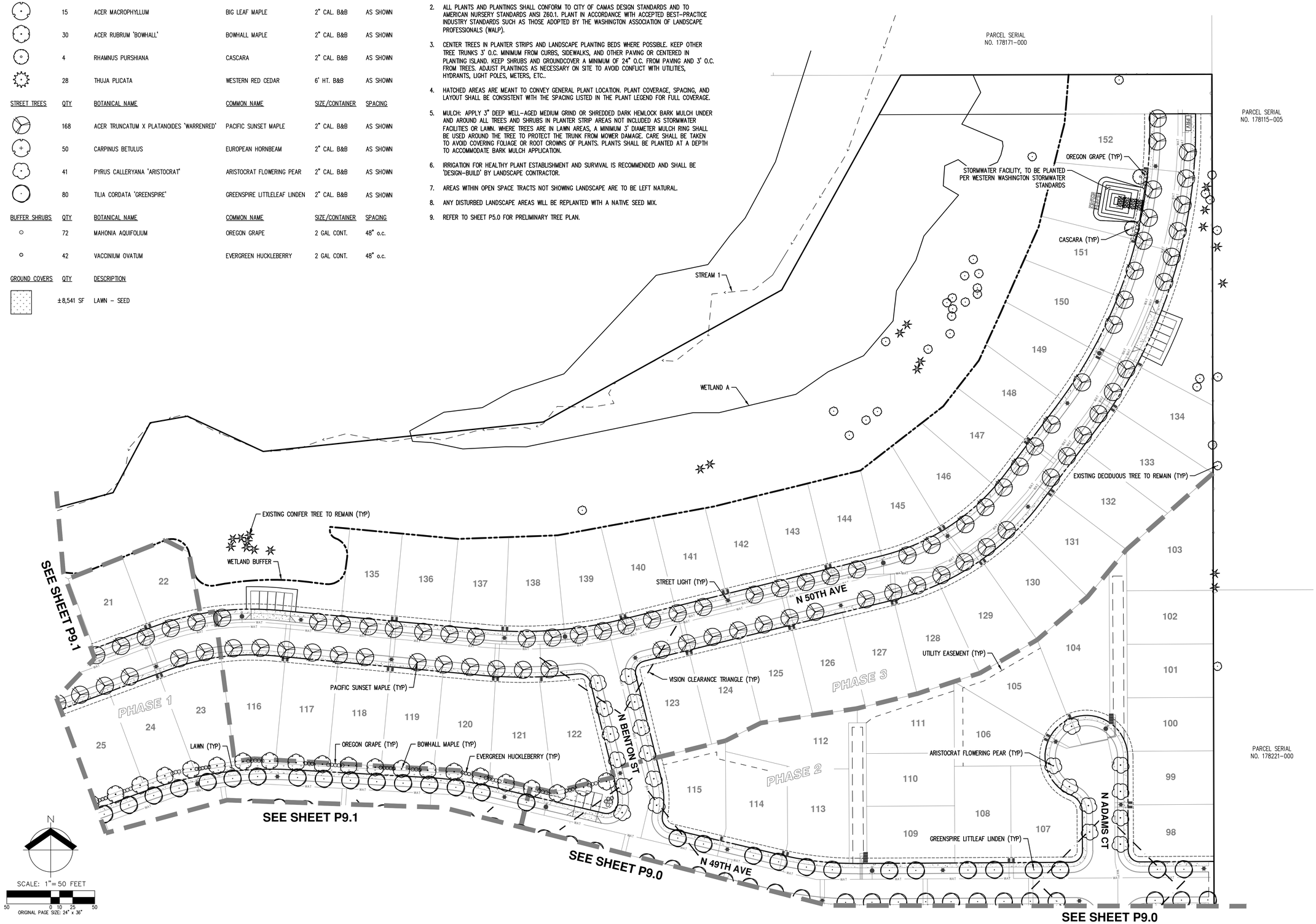
STREET TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE/CONTAINER	SPACING
	168	ACER TRUNCATUM X PLATANOIDES 'WARRENRED'	PACIFIC SUNSET MAPLE	2" CAL. B&B	AS SHOWN
	50	CARPINUS BETULUS	EUROPEAN HORNBEAM	2" CAL. B&B	AS SHOWN
	41	PYRUS CALLERYANA 'ARISTOCRAT'	ARISTOCRAT FLOWERING PEAR	2" CAL. B&B	AS SHOWN
	80	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LITTLELEAF LINDEN	2" CAL. B&B	AS SHOWN

BUFFER SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE/CONTAINER	SPACING
	72	MAHONIA AQUIFOLIUM	OREGON GRAPE	2 GAL CONT.	48" o.c.
	42	VACCINIUM OVATUM	EVERGREEN HUCKLEBERRY	2 GAL CONT.	48" o.c.

GROUND COVERS	QTY	DESCRIPTION
	±8,541 SF	LAWN – SEED

PRELIMINARY LANDSCAPE NOTES

1. LANDSCAPE PLAN IS PRELIMINARY AND INTENDED TO SHOW DESIGN INTENT ONLY. REVISIONS OR SUBSTITUTIONS, INCLUDING CHANGES TO PLANT LOCATION, QUANTITIES, TYPES, AND SIZES MAY BE NECESSARY PRIOR TO FINAL APPROVAL BASED ON PLANT AVAILABILITY, SITE CONDITIONS, UTILITY CONFLICTS, ETC. ALL SUBSTITUTIONS SHALL CONFORM TO CITY OF CAMAS LANDSCAPE DESIGN STANDARDS. STREET TREES WILL BE UPDATED TO AVOID FUTURE DRIVEWAY DROPS.
2. ALL PLANTS AND PLANTINGS SHALL CONFORM TO CITY OF CAMAS DESIGN STANDARDS AND TO AMERICAN NURSERY STANDARDS ANSI Z60.1. PLANT IN ACCORDANCE WITH ACCEPTED BEST-PRACTICE INDUSTRY STANDARDS SUCH AS THOSE ADOPTED BY THE WASHINGTON ASSOCIATION OF LANDSCAPE PROFESSIONALS (WALP).
3. CENTER TREES IN PLANTER STRIPS AND LANDSCAPE PLANTING BEDS WHERE POSSIBLE. KEEP OTHER TREE TRUNKS 3' O.C. MINIMUM FROM CURBS, SIDEWALKS, AND OTHER PAVING OR CENTERED IN PLANTING ISLAND. KEEP SHRUBS AND GROUNDCOVER A MINIMUM OF 24" O.C. FROM PAVING AND 3' O.C. FROM TREES. ADJUST PLANTINGS AS NECESSARY ON SITE TO AVOID CONFLICT WITH UTILITIES, HYDRANTS, LIGHT POLES, METERS, ETC..
4. HATCHED AREAS ARE MEANT TO CONVEY GENERAL PLANT LOCATION. PLANT COVERAGE, SPACING, AND LAYOUT SHALL BE CONSISTENT WITH THE SPACING LISTED IN THE PLANT LEGEND FOR FULL COVERAGE.
5. MULCH: APPLY 3" DEEP WELL-AGED MEDIUM GRIND OR SHREDDED DARK HEMLOCK BARK MULCH UNDER AND AROUND ALL TREES AND SHRUBS IN PLANTER STRIP AREAS NOT INCLUDED AS STORMWATER FACILITIES OR LAWN. WHERE TREES ARE IN LAWN AREAS, A MINIMUM 3' DIAMETER MULCH RING SHALL BE USED AROUND THE TREE TO PROTECT THE TRUNK FROM MOWER DAMAGE. CARE SHALL BE TAKEN TO AVOID COVERING FOLIAGE OR ROOT CROWNS OF PLANTS. PLANTS SHALL BE PLANTED AT A DEPTH TO ACCOMMODATE BARK MULCH APPLICATION.
6. IRRIGATION FOR HEALTHY PLANT ESTABLISHMENT AND SURVIVAL IS RECOMMENDED AND SHALL BE 'DESIGN-BUILD' BY LANDSCAPE CONTRACTOR.
7. AREAS WITHIN OPEN SPACE TRACTS NOT SHOWING LANDSCAPE ARE TO BE LEFT NATURAL.
8. ANY DISTURBED LANDSCAPE AREAS WILL BE REPLANTED WITH A NATIVE SEED MIX.
9. REFER TO SHEET P5.0 FOR PRELIMINARY TREE PLAN.



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ENGINEERING · SURVEYING · NATURAL RESOURCES
FORESTRY · PLANNING · LANDSCAPE ARCHITECTURE

PRELIMINARY LANDSCAPE AND LIGHTING PLAN (NORTH)

CJ DENS SUBDIVISION
CJ DENS LACAMAS II LLC
CAMAS, WASHINGTON

STATE OF WASHINGTON
TIMOTHY E. BOLTON
LANDSCAPE ARCHITECT
EXP. 12/21/2021
PRELIMINARY NOT FOR CONSTRUCTION

JOB NUMBER:	5504
DATE:	11/24/2020
DESIGNED BY:	TEB
DRAWN BY:	TEB
CHECKED BY:	JMM

P9.2

AKS DRAWING FILE: 5504 P9.0 LANDSCAPE.DWG | LAYOUT: P9.2