



REQUEST FOR UTILITY REVIEW – WATER AVAILABILITY  
P. O. Box 8900 (8600 N.E. 117 Ave) Vancouver, WA 98668  
(360) 992-8022 Email: wateradmin@clarkpud.com

### APPLICANT INFORMATION

DATE: 2/10/2025

NAME	Daniel Korpela – TD West		
ADDRESS	5900 NE 152 <sup>nd</sup> Ave, Suite 120		
CITY	Vancouver	STATE	WA ZIP 98682
TELEPHONE	(360) 921-7991	EMAIL	dan@4kequipment.com

Notification Method: Email                      Type of Development: Subdivision  
Number of Units: 26 Lots

### **Property Location**

Serial Acct. No	258945-000 and 258944-000		
Property Address	34011 NW 9 <sup>th</sup> Ave, La Center	(or nearest cross street)	
Property Size	25 ACRES	Requested Fire Flow	Not listed GPM

### GENERAL CONDITIONS FOR SERVICE (CPU Staff Only)

Clark Public Utilities (CPU) is the water purveyor for this site. CPU Water distribution maps indicate that there is an existing 8" water main within NW 9<sup>th</sup> Ave and an 8" water main within W F Place connecting to a 12" water main within NW Pacific Hwy. There is a nearby fire hydrant located near the intersection of W F Place and W 14<sup>th</sup> Way. See attached CPU water distribution map for reference. Utility drawings have not been field verified and are for reference only. The project engineer should verify existing conditions in the field prior to final design.

The fire flow at FH – 1541, located near the intersection of NW 9<sup>th</sup> Avenue and NW Pacific Hwy was previously calculated at 3,169 gpm at 20 psi. Static water pressure was measured at 147 psi. Static pressure at this site is expected to vary depending on site elevation, system demand and reservoir levels (HGL = 485-ft).

For this development, depending on site access and layout, plan to connect to the existing 8" water main within W F Place. Install proper fire protection (i.e. hydrants and building sprinkler systems) as required by the Fire Marshal. Plan to extend a minimum 8" water main within the public access through the site and connecting to the 8" water main within NW 9<sup>th</sup> Ave. The water system shall be sized depending on the anticipated fire protection and domestic demand requirements. The Engineer shall certify that the proposed water distribution design adequately provides proper domestic and fire protection services.

Any existing, unused services shall be properly capped and abandoned. All water mains and services (up to the meter) located within private property, shall be included in an easement granted to Clark Public Utilities. Proper state approved backflow devices will be required for all domestic, fire and landscape water services. All hot taps shall be performed by a Utility approved contractor. The Developer is responsible for costs associated with the service and fire protection installation, right-of-way permitting, and any other needed water improvements.

Submit full engineering plan set for further requirements and comments.

- ☒ Licensed Civil Eng. Drawing Required for Clark Public Utilities approval prior to construction
- ☒ Easement Required
- ☒ Clark Public Utilities has the capacity to serve, if the above conditions are met
- ☒ Developer/Owner shall pay County Right-of-Way fees based on off-site improvements

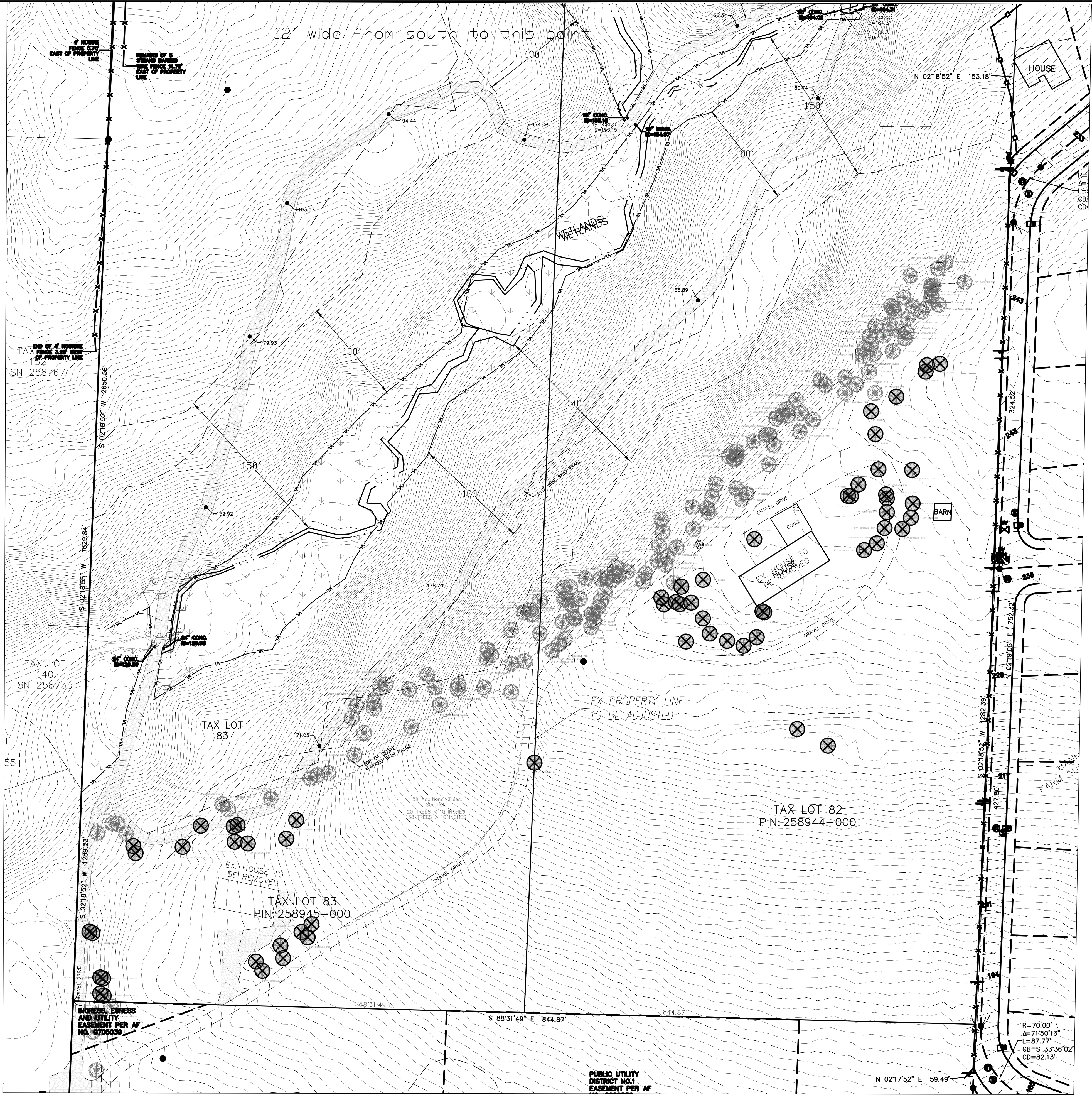
Review comments are subject to modification during detailed plan check and review.

**This utility review is valid for six months after the date of signature below.**

REVIEWED BY Jordan Handley                      DATE 2-10-2025  
Jordan Handley



© SGA ENGINEERING PLLC - DATE PLOTTED: Jan. 30, 2025 - 4:12 PM SGA DRAWING FILE: W:\DWG\2406- JUNIPER RIDGE\DRAWINGS\2-PRELIM SHEET SET\PRE1.0 - EXISTING CONDITIONS.DWG



JUNIPER RIDGE SUBDIVISION

BEING A PORTION OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 5 NORTH, RANGE 1  
EAST OF THE WILLAMETTE MERIDIAN CLARK COUNTY, WASHINGTON

PRELIMINARY APPLICATION  
DECEMBER 2024

OWNER/APPLICANT:

TD WEST, LLC  
ATTN: DAN KORPELA  
5900 NE 152ND AVENUE, SUITE 120  
VANCOUVER, WA 98682  
PH: (360) 977-7495  
EM: info@tdwestllc.com

PARCEL # & PROPERTY ADDRESS:

258945-000 & 258944-000  
34011 & 34017 NW 9TH AVE.  
LA CENTER, WA 98629

CONTACT PERSON:

SGA ENGINEERING, PLLC  
ATTN: SCOTT TAYLOR  
2005 BROADWAY STREET  
VANCOUVER, WA 98663  
PH: 360.993.0911  
FX: 360.993.0912  
EM: STAYLOR@SGAENGINEERING.COM

EXISTING SITE INFORMATION

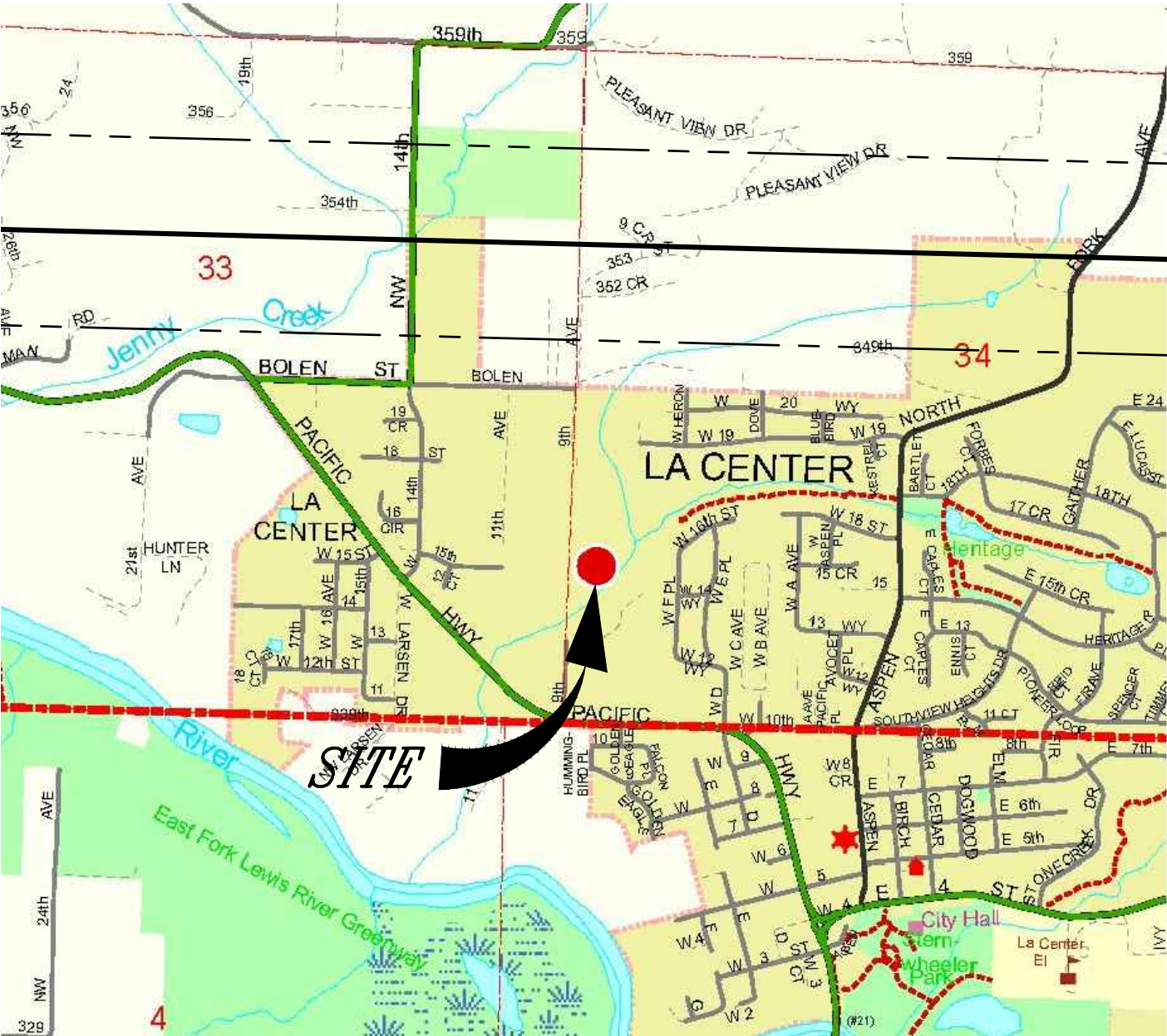
EXISTING PARCEL NUMBERS	258945-000 & 258944-000
CURRENT USE	TWO EXISTING SINGLE-FAMILY RESIDENCES
ZONING DESIGNATION	LDR-7.5
GROSS SITE AREA	24.94 ACRES 1,086,226 S.F.
TRANSIT ROUTES	NO KNOWN C-TRAN ROUTES WITHIN 1 MILE OF THE SITE.
EXISTING WATER AND SEWER	SEWER SERVICE WILL BE PROVIDED BY THE CITY OF LA CENTER. PUBLIC WATER SERVICE WILL BE PROVIDED BY THE CLARK PUBLIC UTILITIES. THERE ARE TWO SEPTIC SYSTEMS ON SITE. ONE WELL IS KNOWN TO EXIST ON-SITE.

ENVIRONMENTAL CONDITIONS

THE SITE CONTAINS SOME OF THE SIGNIFICANT ENVIRONMENTAL CONDITIONS LISTED IN THE APPLICATION CHECKLIST. THE SITE IS LOCATED IN THE EAST FORK LEWIS RIVER WATERSHED. THE SITE IS MAPPED AS HAVING A MODERATE-HIGH PROBABILITY FOR ARCHAEOLOGICAL.

EXISTING CONDITIONS DISCLAIMER

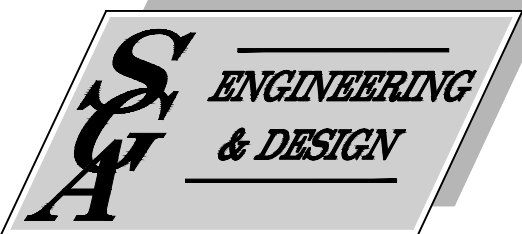
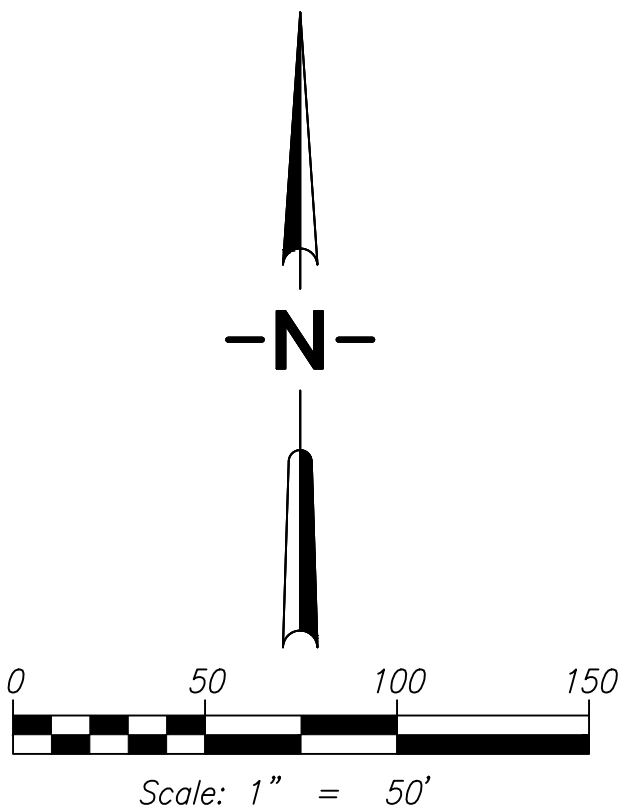
THE EXISTING CONDITIONS SHOWN ON THIS PLAN WERE OBTAINED FROM INFORMATION PROVIDED BY PUBLIC RESOURCES. SGA ENGINEERING, PLLC DOES NOT GUARANTEE THE ACCURACY OF THIS INFORMATION.



VICINITY MAP

NTS

- ⊗ TREES TO BE REMOVED > 10" (180 TREES)  
⊗ TREES TO BE REMOVED < 10" (40 TREES)



CIVIL ENGINEERING ~ LAND PLANNING  
DEVELOPMENT SERVICES  
LANDSCAPE ARCHITECTURE

2005 BROADWAY  
VANCOUVER, WA 98663  
PHONE (360)993-0911  
FAX (360)993-0912



EXISTING CONDITIONS

JUNIPER RIDGE  
SUBDIVISION

CITY OF LA CENTER

WASHINGTON

PRELIMINARY

REVISIONS

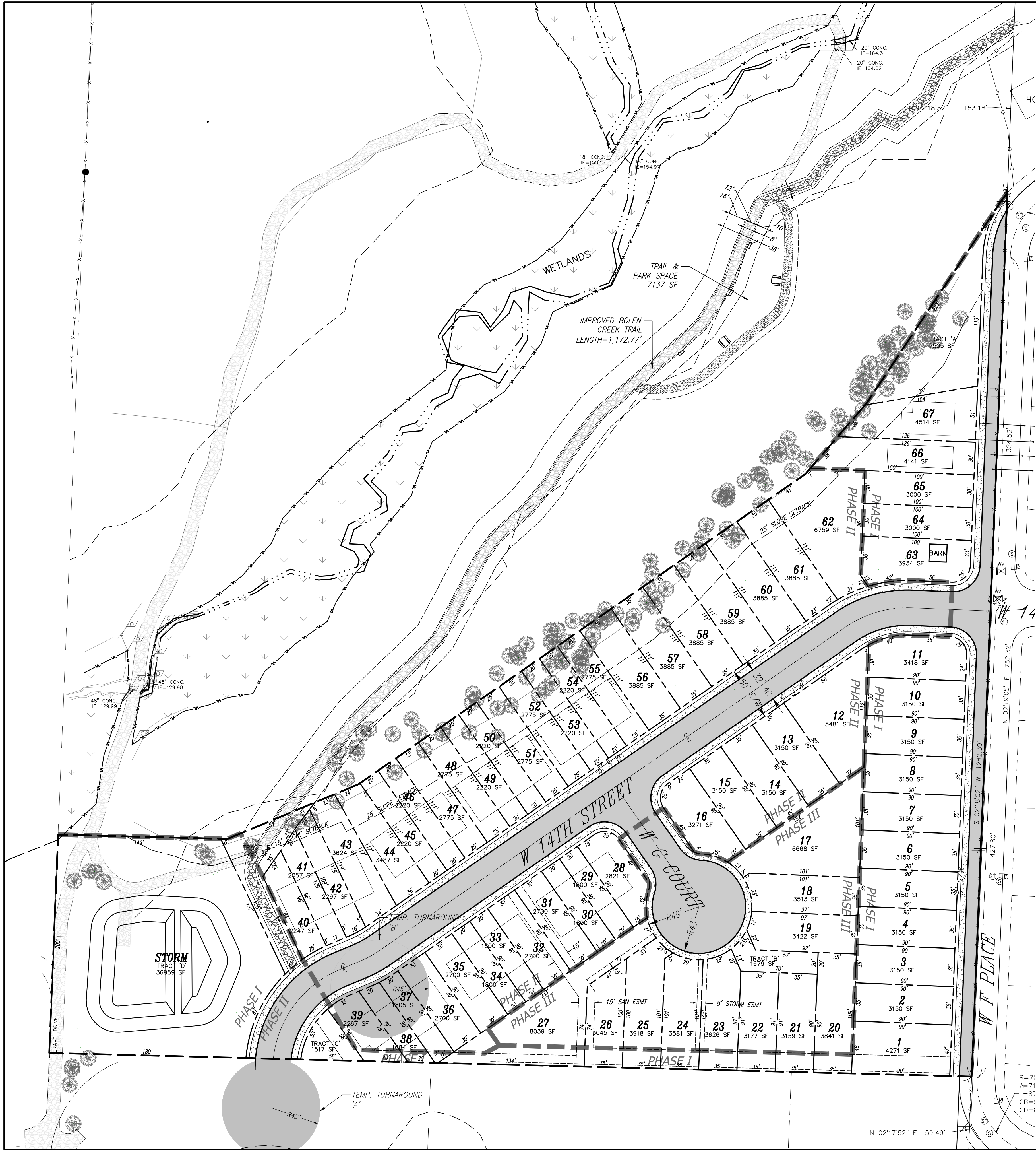
DESIGNED BY: NDM/JAI  
DRAWN BY: NDM  
CHECKED BY: JAI  
SCALE: 1" = 50'

JOB NUMBER  
2406

SHEET  
PRE1.0



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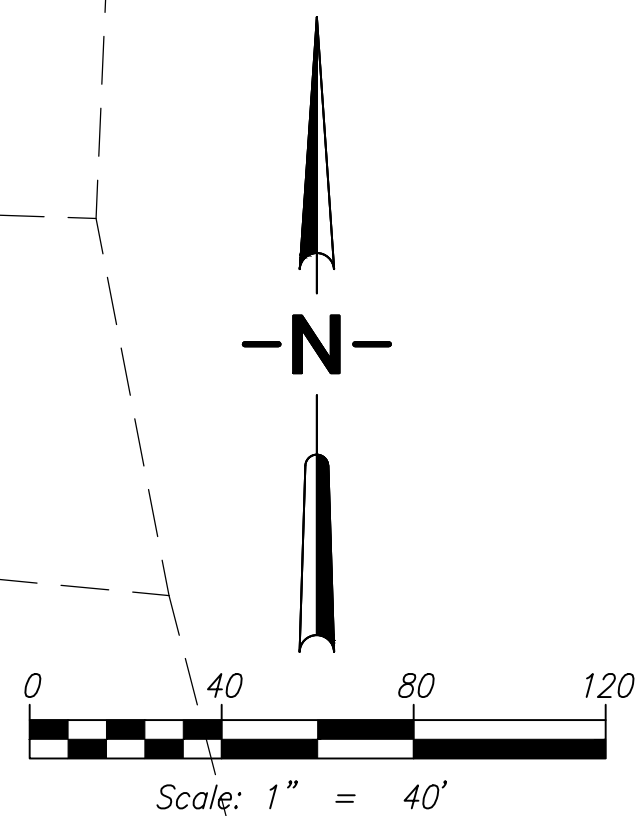








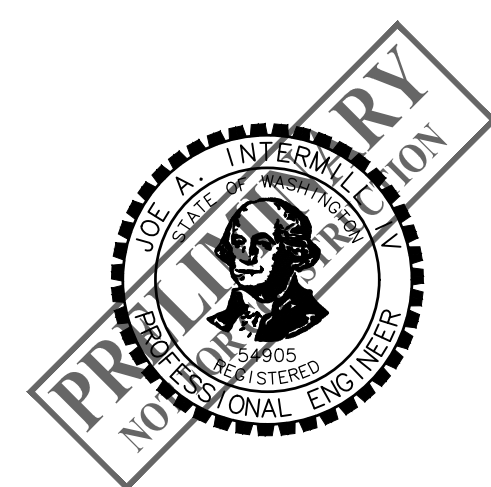
© SGA ENGINEERING PLLC - DATE PLOTTED: Jan. 30, 2025 - 4:12 PM SGA DRAWING FILE: W:\DWG\2406- JUNIPER RIDGE\DRAWINGS\2-PRELIM SHEET SET\PRE4.0 - PRELIMINARY SANITARY & WATER PLANNING





CIVIL ENGINEERING ~ LAND PLANNING  
DEVELOPMENT SERVICES  
LANDSCAPE ARCHITECTURE

2005 BROADWAY  
VANCOUVER, WA 98663  
PHONE (360)993-0911  
FAX (360)993-0912



PRELIMINARY WATER & SANITARY PLAN

**JUNIPER RIDGE  
SUBDIVISION**

WASHINGTON  
  
CITY OF LA CENTER

PRELIMINARY
REVISIONS

DESIGNED BY:	NDM/JAI
DRAWN BY:	NDM
CHECKED BY:	JAI
SCALE:	1" = 40'

JOB NUMBER	SHEET
2406	PRE4.0



© SCA ENGINEERING PLLC - DATE PLOTTED: Jan. 30, 2025 - 4:13 PM SCA DRAWING FILE: W:\DWG\2406- JUNIPER RIDGE\DRAWINGS\2-PRELIM SHEET SET\PRE5.0 - PRELIMINARY LANDSCAPE PLANNING

### PLANTING LEGEND

	SIZE	SPACING	QUANTITY
CORNUS KOUSA x FLORIDA 'STELLAR PINK DOGWOOD' 2" CAL. or approved equal.	2" CAL.	30' O.C.	72
ACER RUBRUM 'OCTOBER GLORY MAPLE' or approved equal.	2" CAL.	30' O.C.	63
CHAMACYPARIS NOOTKATENSIS 'GREEN ARROW' or approved equal.	6' TALL	AS SHOWN	31
GINKGO BILOBA 'GOLDEN' or approved equal.	2" CAL.	AS SHOWN	14

### TIMELINE & NARRATIVE

TREES IN THE PUBLIC RIGHT OF WAY SHALL BE INSTALLED BY DEVELOPER OR BUILDER PRIOR TO ISSUING OF OCCUPANCY PERMIT FOR LOT ADJACENT TO RIGHT OF WAY IN QUESTION.

TREES ON INDIVIDUAL LOTS SHALL BE INSTALLED BY DEVELOPER OR BUILDER PRIOR TO ISSUING OF OCCUPANCY PERMIT FOR SAID LOT. TREES ARE EASILY DAMAGED DURING CONSTRUCTION AND SHOULD NOT BE INSTALLED UNTIL AFTER ALL DRIVEWAYS, SIDEWALKS AND HEAVY CONSTRUCTION ACTIVITIES ARE COMPLETED.

TREES SHALL BE WATERED AND MAINTAINED IN A HEALTHY CONDITION YEAR ROUND. EXISTING TREES SHALL BE PROTECTED FROM DAMAGE DURING AND FOLLOWING CONSTRUCTION. PRUNING AND OTHER MAINTENANCE SHALL BE PERFORMED BY INDIVIDUAL HOMEOWNERS OR THE HOMEOWNER'S ASSOCIATION.

### NOTES:

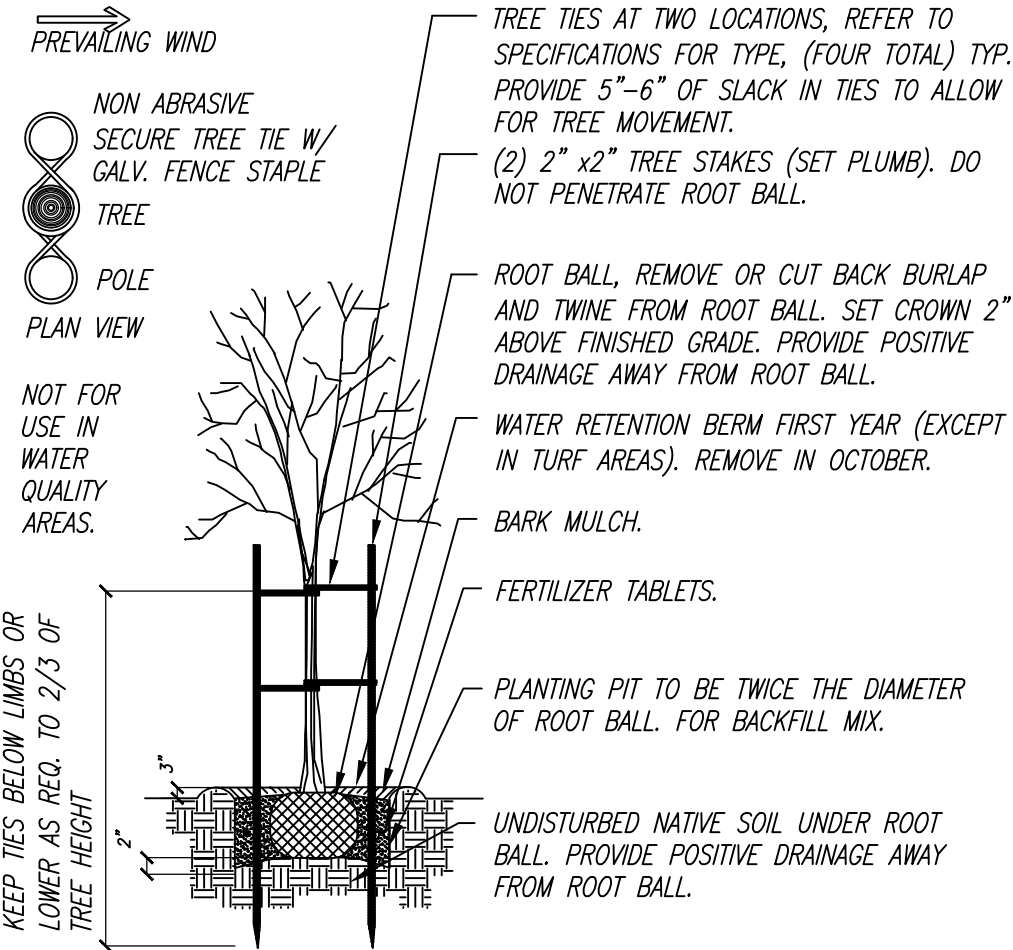
ALL GROUND COVER SHALL BE PLANTED AT EQUAL TRIANGULAR SPACING AS SPECIFIED IN PLANTING LEGEND.  
GROUND COVER TO BE LOCATED ONE HALF OF SPECIFIED SPACING DISTANCE FROM ANY HARD SURFACE, UNLESS OTHERWISE SPECIFIED.  
SPECIFICATIONS ARE INCLUDED WITHIN PLAN SHEETS, LANDSCAPE NOTES AND SPECIFICATIONS. REFER TO ALL PRIOR TO BIDDING AND CONSTRUCTION.

### LANDSCAPE NOTES

LANDSCAPING SHALL BE WATERED WITH AN IRRIGATION SYSTEM CAPABLE OF SUSTAINING THE PLANTINGS IN A HEALTHY CONDITION YEAR AROUND.

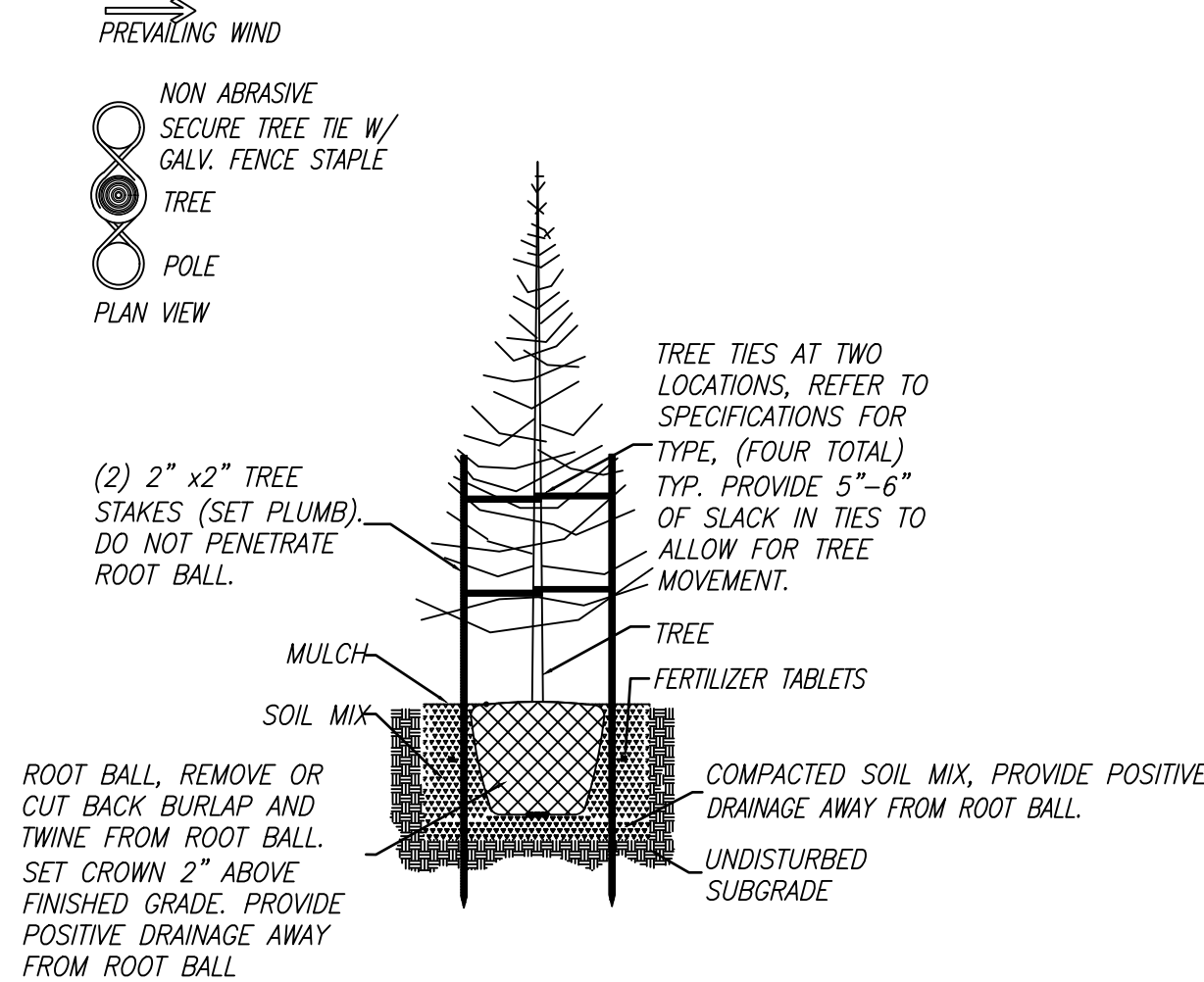
TREES AND OTHER PLANTINGS SHALL BE PRUNED, WATERED, FERTILIZED AND MAINTAINED IN A HEALTHY CONDITION.

APPROXIMATE LOCATIONS FOR TREES ARE SHOWN ON THE PLAN. EXACT LOCATIONS TO BE DETERMINED BY DEVELOPER OR BUILDER AFTER CONSTRUCTION OF DRIVEWAYS, SIDEWALKS AND BUILDINGS.



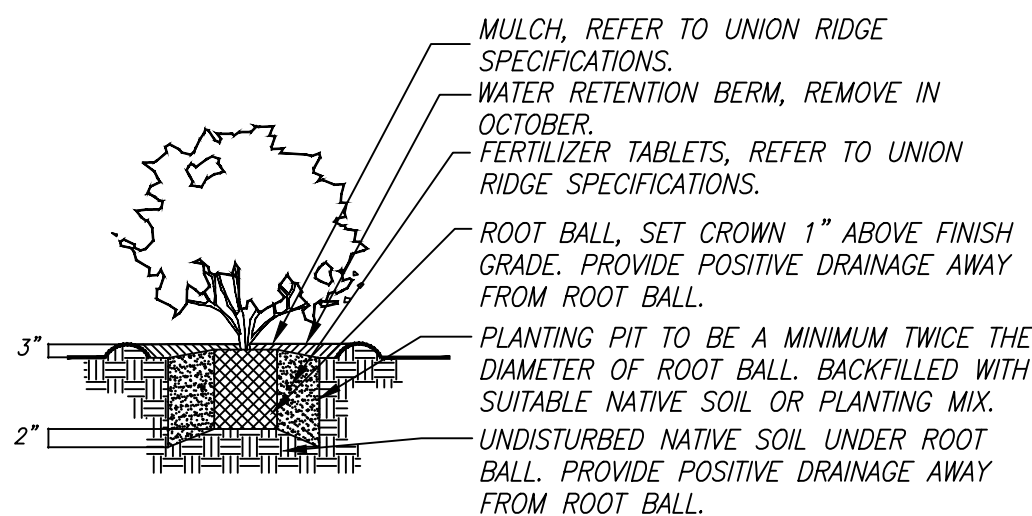
B&B Deciduous Tree Planting Details

NO SCALE



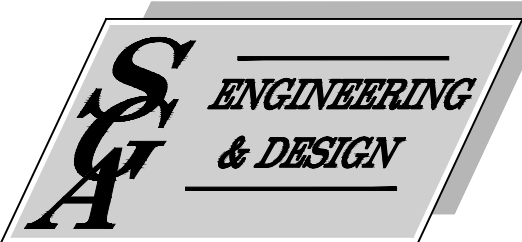
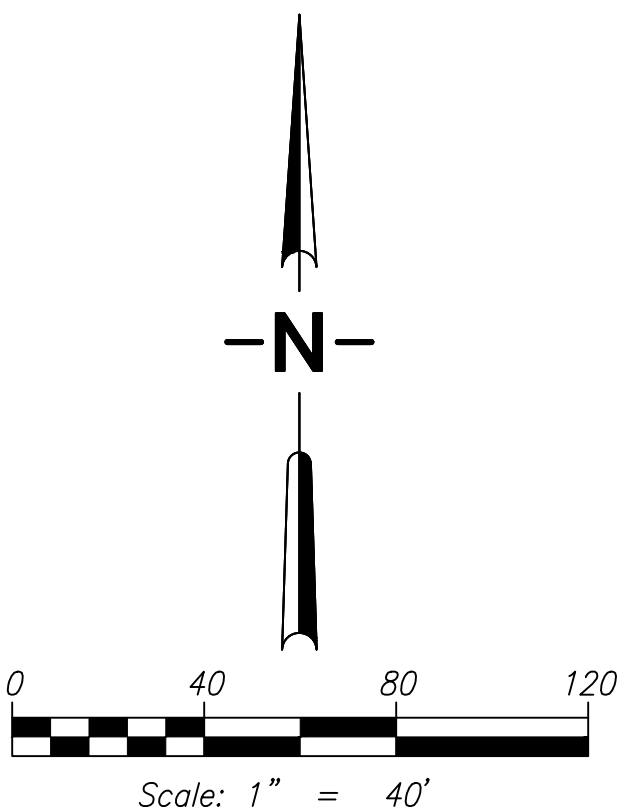
Evergreen Tree Planting Details

NO SCALE



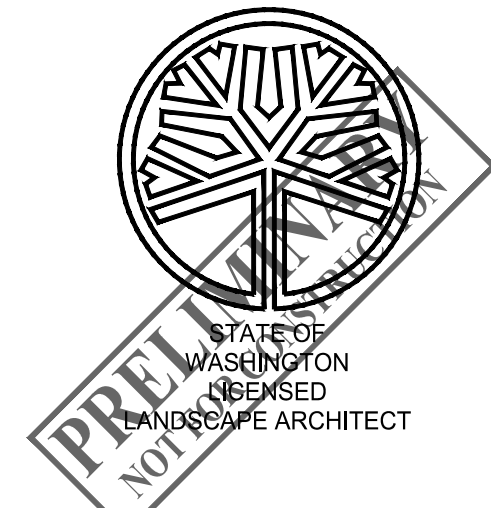
Shrub Planting Details

NO SCALE



CIVIL ENGINEERING ~ LAND PLANNING  
DEVELOPMENT SERVICES  
LANDSCAPE ARCHITECTURE

2005 BROADWAY  
VANCOUVER, WA 98663  
PHONE (360)993-0911  
FAX (360)993-0912



SCOTT A. TAYLOR  
LICENSE NO. 1247  
EXPIRES ON

PRELIMINARY LANDSCAPE PLAN

## JUNIPER RIDGE SUBDIVISION

WASHINGTON

CITY OF LA CENTER

### PRELIMINARY

#### REVISIONS

DESIGNED BY: SAT  
DRAWN BY: SAT  
CHECKED BY: SAT  
SCALE: #####

JOB NUMBER  
2406

SHEET  
PRE5.0







# PROJECT INFORMATION

NW PACIFIC HWY  
CLARK COUNTY  
LA CENTER, WA

SE 1/4 OF SEC 34, T5N R1E W.M.  
PARCEL #: 258905-000, 258924-000,  
062965-040  
ZONING: R1-7.5  
AREA OF PARCELS: 16.8 AC

CONTACT PERSON:  
SAMUEL E. MOSS  
MOSS & ASSOCIATES, INC.  
717 NE 61ST ST. SUITE 202  
VANCOUVER, WA 98665  
360-260-9400, x39

OWNER:  
SUN COUNTRY HOMES  
2401 W MAIN ST.  
BATTLE GROUND, WA 98604

## ZONING INFORMATION:

ZONING DESIGNATION = R1-7.5  
COMP. PLAN DESIGNATION = URBAN LOW DENSITY

## SETBACKS:

MIN. FRONT YARD = 20 FEET  
MIN. INTERIOR SIDE YARD = 7.5 FEET  
MIN. STREET SIDE = 10 FEET  
MIN. REAR YARD = 20 FEET  
LOT DIMENSIONS:  
MIN. AVE. LOT DEPTH = 90 FEET  
MIN. AVE. LOT WIDTH = 60 FEET  
MIN. LOT SIZE = 7500 SQFT  
MAX. LOT SIZE = 15000 SQFT

\*MIN. LOT SIZE FOR 5 PERCENT  
OF LOTS IS 6000 SQFT  
PURSUANT TO LCMC 17.25.070

## EROSION CONTROL NOTES

THE SITE GRADING SHALL BE DONE DURING THE DRY WEATHER SEASON AND COMPLETED EARLY ENOUGH  
IN THE YEAR TO ALLOW SUFFICIENT TIME FOR SEEDING AND PLANTING TO BECOME ESTABLISHED BEFORE  
THE ONSET OF WET WEATHER.

WHILE THESE NOTES SHOULD BE FOLLOWED WHEN APPLICABLE, THE GEOTECHNICAL ENGINEER  
SHALL BE INSPECT AND MAKE RECOMMENDATIONS DURING EXTENDED PERIODS OF RAINFALL OR  
AFTER A HEAVY STORM EVENT. IN ADDITION, THESE NOTES ARE NOT INTENDED TO COVER ALL  
POSSIBLE GRADING AND EROSION CONTROL MEASURES--STANDARD EROSION CONTROL NOTES  
ARE ATTACHED TO THESE PLANS TO COVER TYPICAL PRACTICES. THE CONTRACTOR IS  
RESPONSIBLE TO FOLLOW BEST MANAGEMENT PRACTICES TO ENSURE ADEQUATE EROSION CONTROL.

1. GRANULAR BLANKETS MAY BE REQUIRED TO PROVIDE A FIRM SUPPORT BASE AND  
SUSTAIN CONSTRUCTION EQUIPMENT. THESE GRANULAR BLANKETS SHALL CONSIST  
OF BANK RUN GRAVEL, PIT RUN QUARRY ROCK, OR OTHER SIMILAR MATERIAL (6" MAX  
SIZE WITH LESS THAN 5% PASSING THE NO. 200 SIEVE).
2. CONSTRUCTION EQUIPMENT TRAFFIC ACROSS EXPOSED NATIVE SOIL SHOULD BE MINIMIZED.
3. ROAD CONSTRUCTION DURING WET WEATHER CONDITIONS MAY REQUIRE INCREASED  
BASE THICKNESS. THE GEOTECHNICAL ENGINEER SHALL DETERMINE IF SUCH INCREASE  
IS NECESSARY AND TO WHAT EXTENT.
4. DURING EXTENDED WET PERIODS, STRIPPING ACTIVITIES MAY ALSO NEED TO BE CONDUCTED  
FROM AN ADVANCING PAD OF GRANULAR FILL. ONCE INSTALLED, THE CRUSHED AGGREGATE  
BASE SHOULD BE COMPACTED WITH SEVERAL PASSES BY A MODERATELY HEAVY STATIC  
DRUM OR GRID ROLLER.
5. THE SEDIMENTATION PONDS SHOULD BE FREQUENTLY INSPECTED AND MAINTAINED. REPAIR  
AS NECESSARY. SILT SHOULD BE REMOVED WHEN IT HAS FILLED ONE-HALF OF THE POND'S  
TOTAL SEDIMENT STORAGE AREA. THE POND'S EFFECTIVENESS IS BASED LESS ON THE SIZE  
THAN ON REGULAR SEDIMENT REMOVAL.
6. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER  
FINAL SITE STABILIZATION IS ACHIEVED OR AFTER TEMPORARY BARRIERS ARE NO LONGER  
NECESSARY. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED IN SITE. DISTURBED  
SOIL AREAS RESULTING FROM REMOVAL SHALL BE PERMANENTLY STABILIZED.
7. CONTRACTOR TO SCARIFY UNVEGETATED SLOPES WITH HEAVY EQUIPMENT TO MINIMIZE  
RUNOFF VELOCITIES. GROOVES TO BE PERPENDICULAR TO SLOPE DIRECTION.

## ABBREVIATIONS

### LEGEND:

AC	Asphaltic Concrete	N	North
AGG	Aggregate	PC	Point of Curvature
ARV	Air Release Valve	PL	Property Line
ATB	Asphalt Treated Base	PT	Point of Tangency
BC	Top Back of Curb	PP	Power Pole
BGS	Below Ground Surface	PVC	Polyvinyl Chloride
BLK	Blocking	PVI	Point of Vertical Intersection
BO	Blowoff Assembly	R	Radius
BOM	Bottom of Wall Elevation	RCC	Reinforced Concrete Pipe
BMP	Best Management Practice	RD	Roof Drain
BVC	Begin Vertical Curve	RIM	Rim Elevation
CB	Catchbasin	RT	Right
CCC	Clark County Code	R/W	Right-of-way
C	Class	S	South
CMP	Corrugated Metal Pipe	S	Slope
CO	Cleanout	STM	Storm Sewer
CONC	Concrete	STMCO	Storm Sewer Cleanout
CONTR	Contractor	STMH	Storm Sewer Manhole
CULV	Culvert	SAN	Sanitary Sewer
DIV	Driveway	SANCO	Sanitary Sewer Cleanout
DIP	Ductile Iron Pipe	SANMH	Sanitary Sewer Manhole
DIA	Diameter	STA	Station
DWL	Design Water Level	ST	Street
E	East	T	Tangent
EG	Existing Grade	TC	Top Face of Curb Elevation
ELEC	Electrical	TOW	Top of Wall Elevation
ELEV	Elevation	TW	Top of Sidewalk Elevation
EDG	Edge of Gravel	TEL	Telephone
EOP	Edge of Pavement	TEMP	Temporary
EC	Erosion and Silt Control	THU	Through
EX	Existing	TYP	Typical
FG	Finish Grade	VC	Vertical Curve
FGC	Finish Grade at Centerline	W	West
FL	Finish Grade at Left	WSDOT	Washington State Department of Transportation
FLR	Finish Grade at Right	WAT	Water
FL	Flow Line Elevation	WV	Water Valve
FLG	Flange	WM	Water Meter
FT	Feet		
GB	Grade Break		
GV	Gate Valve		
HDPE	High Density Poly Ethylene		
HYD	Fire Hydrant		
IE	Invert Elevation		
JB	Junction Box		
L	Length		
LF	Linear Feet		
LT	Left		
LS	Lump Sum		
MH	Manhole		
MJ	Mechanical Joint Restraint		
MSL	Mean Sea Level		
MUCD	Manual on Uniform Traffic Control Devices		

## SIGNING CONSTRUCTION NOTES

- STOP SIGN - INSTALL STOP SIGN PER MUTCD & STREET NAME SIGN  
SPEED LIMIT SIGN - INSTALL SPEED LIMIT, 25 MPH, SIGN  
BARRICADE - INSTALL STREET BARRICADE WITH EXTENSION SIGN (DETAIL SHEET 4)  
NO PARKING - INSTALL "NO PARKING" SIGN

## CLARK PUBLIC UTILITIES - WATER

SIGNED BY \_\_\_\_\_ DATE \_\_\_\_\_

RIO # 249038

## CLARK PUBLIC UTILITIES - SEWER

SIGNED BY \_\_\_\_\_ DATE \_\_\_\_\_

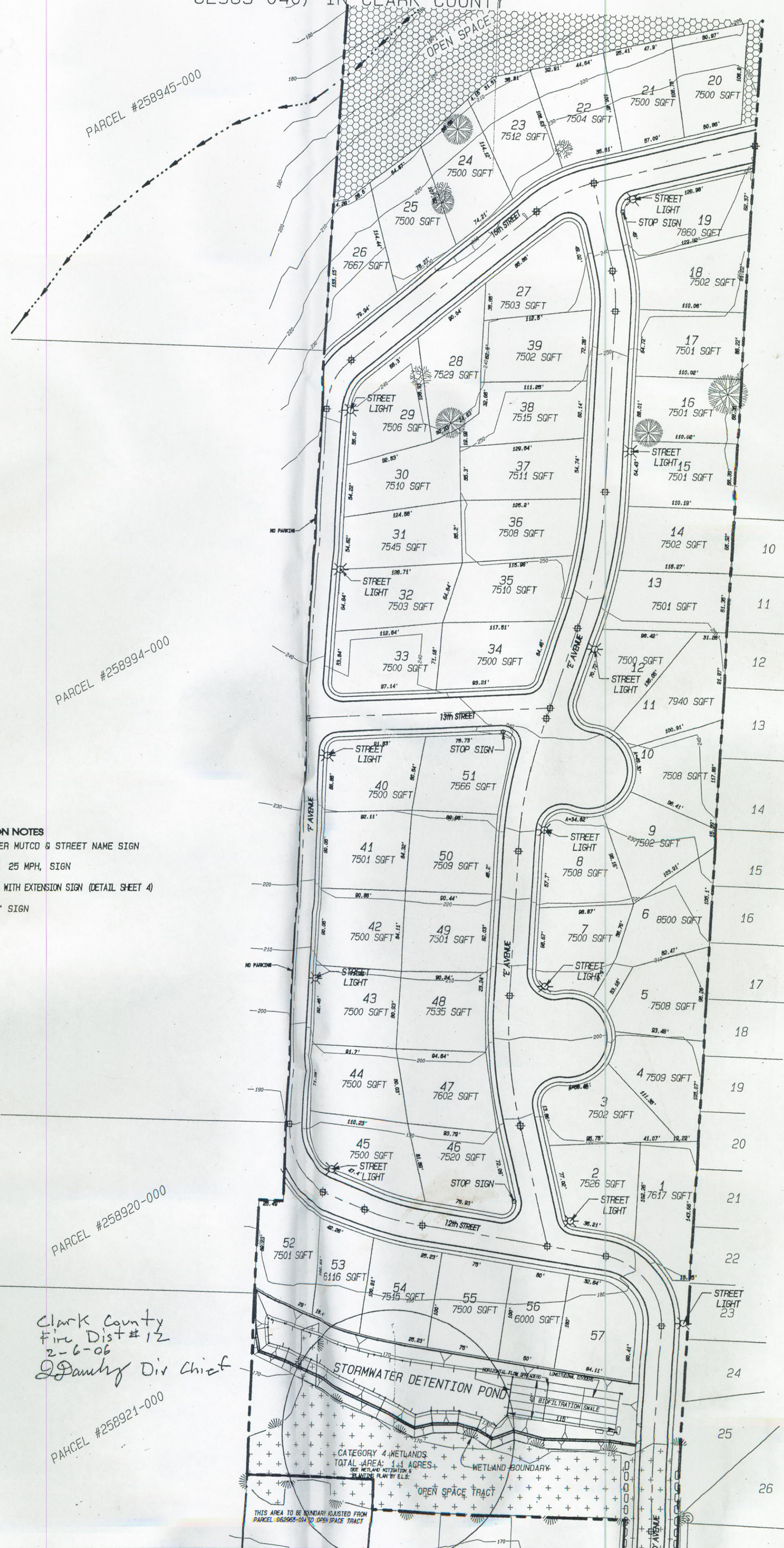
RIO # 254663

## CLARK PUBLIC UTILITIES WATER SERVICES RIO #240724

CPU INITIAL	DATE	(PRIOR TO FINAL ACCEPTANCE)
_____	_____	SATISFACTORY BACTERIA AND PRESSURE TEST ON THE WATER LINE PERFORMED BY CPU WATER SERVICES INSPECTOR
_____	_____	STATE APPROVED BACKFLOW ASSEMBLY INSTALLED AND APPROVED TEST REPORT SUBMITTED TO CPU WATER SERVICES
_____	_____	NECESSARY EASEMENTS TO CPU WATER SERVICES, SIGNED AND RECORDED.

# HANNA'S FARM SUBDIVISION

PRELIMINARY PLAT FOR A SUBDIVISION OF THREE PARCELS (16.80 ACRES) LOCATED IN  
THE SW 1/4 OF SECTION 34, T5N, R1E, W.M. (PARCEL #258905-000, 258924-000,  
62965-040) IN CLARK COUNTY



City of La Center  
DEPARTMENT OF COMMUNITY DEVELOPMENT  
ENGINEERING SERVICES

Recommended For Approval

Signature Public Works Director \_\_\_\_\_ Date \_\_\_\_\_

Signature City Engineer \_\_\_\_\_ Date \_\_\_\_\_

Signature Fire District \_\_\_\_\_ Date \_\_\_\_\_

## NOTES:

## SHT No.

## SHEET DESCRIPTION

- 1 COVER SHEET & SIGNING/STRIPING
- 2 D AVENUE & 12th STREET PLAN & PROFILE
- 3 F AVENUE PLAN & PROFILE
- 4 15th STREET PLAN & PROFILE
- 5 E AVENUE PLAN & PROFILE
- 6 E AVENUE & 13th STREET PLAN & PROFILE
- 7 NORTH COMPOSITE STREET & UTILITY SHEET
- 8 SOUTH COMPOSITE STREET & UTILITY SHEET
- 9 STORMWATER FACILITY
- 10 POND & SWALE PROFILES
- 11 GRADING & EROSION CONTROL 1
- 12 GRADING & EROSION CONTROL 2
- 13 CONSTRUCTION NOTES
- 14 DETAIL SHEET
- 15 CPU DETAIL SHEET
- 16 GRINDER PUMP DETAIL SHEET
- 17 EXISTING CONDITIONS SURVEY

## EXISTING PROPOSED

---	W	---	W	WATER LINE
○	N/A	○	N/A	WATER VALVE
N/A	○	N/A	○	WATER METER
○	N/A	○	N/A	FIRE HYDRANT
N/A	---	N/A	---	STORM LINE
N/A	○	N/A	○	STORM MANHOLE
N/A	■	N/A	■	STORM CATCH BASIN
SAN	SAN	SAN	SAN	SANITARY LINE
○	○	○	○	SANITARY MANHOLE
○	N/A	○	N/A	ELECTRIC POWER POLE
N/A	☀	N/A	☀	APPROXIMATE STREET LIGHT LOCATION TO BE FINALIZED AND APPROVED BY CPU

☀ = SURVEYOR TO INSTALL STREET MONUMENTATION  
WITH CAST IRON CASE AT STREET CL INTERSECTIONS.  
PI'S OR PC'S, PT'S & PLAT BOUNDARY/CL INTERSECTIONS.



GRAPHIC SCALE 1"=100'

DEVELOPER:

SUN COUNTRY HOMES  
2401 W MAIN ST.  
BATTLE GROUND, WA 98604

DATE:

REVISION

DATE: 1 Feb 2006

CONTACT PERSON: Samuel E. Moss  
REG. NO. 30528  
DRAWN BY: Samuel E. Moss, AB  
CHECKED BY: Lomie E. Moss  
REG. NO. 9579

PROJECT MANAGER: Samuel E. Moss  
ENGR. OF RECORD: Lomie E. Moss  
REG. NO. 30528  
SPRNG. OF RECORD: Regardom, Inc.  
REG. NO. 9579

SHEET 1/17



# PROJECT INFORMATION

NW PACIFIC HWY  
CLARK COUNTY  
LA CENTER, WA

SE 1/4 OF SEC 34, T5N R1E W.M.  
PARCEL #: 258905-000, 258924-000,  
062965-040  
ZONING: R1-7.5  
AREA OF PARCELS: 16.8 AC

CONTACT PERSON:  
SAMUEL E. MOSS  
MOSS & ASSOCIATES, INC.  
717 NE 61ST ST. SUITE 202  
VANCOUVER, WA 98665  
360-260-9400, x39

OWNER:  
SUN COUNTRY HOMES  
2401 W MAIN ST.  
BATTLE GROUND, WA 98604

## ZONING INFORMATION:

ZONING DESIGNATION = R1-7.5  
COMP. PLAN DESIGNATION = URBAN LOW DENSITY

## SETBACKS:

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MAX. LOT SIZE = 15000 SQFT

\*MIN. LOT SIZE FOR 5 PERCENT  
OF LOTS IS 6000 SQFT  
PURSUANT TO LCMC 17.25.070

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WHILE THESE NOTES SHOULD BE FOLLOWED WHEN APPLICABLE, THE GEOTECHNICAL ENGINEER  
SHALL BE INSPECT AND MAKE RECOMMENDATIONS DURING EXTENDED PERIODS OF RAINFALL OR  
AFTER A HEAVY STORM EVENT. IN ADDITION, THESE NOTES ARE NO INTENDED TO COVER ALL  
POSSIBLE GRADING AND EROSION CONTROL MEASURES--STANDARD EROSION CONTROL NOTES  
ARE ATTACHED TO THESE PLANS TO COVER TYPICAL PRACTICES. THE CONTRACTOR IS  
RESPONSIBLE TO FOLLOW BEST MANAGEMENT PRACTICES TO ENSURE ADEQUATE EROSION CONTROL.

1. GRANULAR BLANKETS MAY BE REQUIRED TO PROVIDE A FIRM SUPPORT BASE AND  
SUSTAIN CONSTRUCTION EQUIPMENT. THESE GRANULAR BLANKETS SHALL CONSIST  
OF BANK RUN GRAVEL, PIT RUN QUARRY ROCK, OR OTHER SIMILAR MATERIAL (6" MAX  
SIZE WITH LESS THAN 5% PASSING THE NO. 200 SIEVE).
2. CONSTRUCTION EQUIPMENT TRAFFIC ACROSS EXPOSED NATIVE SOIL SHOULD BE MINIMIZED.
3. ROAD CONSTRUCTION DURING WET WEATHER CONDITIONS MAY REQUIRE INCREASED  
BASE THICKNESS. THE GEOTECHNICAL ENGINEER SHALL DETERMINE IF SUCH INCREASE  
IS NECESSARY AND TO WHAT EXTENT.
4. DURING EXTENDED WET PERIODS, STRIPPING ACTIVITIES MAY ALSO NEED TO BE CONDUCTED  
FROM AN ADVANCING PAD OF GRANULAR FILL. ONCE INSTALLED, THE CRUSHED AGGREGATE  
BASE SHOULD BE COMPACTED WITH SEVERAL PASSES BY A MODERATELY HEAVY STATIC  
DRUM OR GRID ROLLER.
5. THE SEDIMENTATION PONDS SHOULD BE FREQUENTLY INSPECTED AND MAINTAINED. REPAIR  
AS NECESSARY. SILT SHOULD BE REMOVED WHEN IT HAS FILLED ONE-HALF OF THE POND'S  
TOTAL SEDIMENT STORAGE AREA. THE POND'S EFFECTIVENESS IS BASED LESS ON THE SIZE  
THAN ON REGULAR SEDIMENT REMOVAL.
6. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER  
FINAL SITE STABILIZATION IS ACHIEVED OR AFTER TEMPORARY BMPs ARE NO LONGER  
NECESSARY. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED  
SOIL AREAS RESULTING FROM REMOVAL SHALL BE PERMANENTLY STABILIZED.
7. CONTRACTOR TO SCARIFY UNVEGETATED SLOPES WITH HEAVY EQUIPMENT TO MINIMIZE  
RUNOFF VELOCITIES. GROOVES TO BE PERPENDICULAR TO SLOPE DIRECTION.

## ABBREVIATIONS

LEGEND:	
AC Asphaltic Concrete	N North
AGG Aggregate	PC Point of Curvature
ARV Air Release Valve	PL Property Line
ATB Asphalt Treated Base	PT Point of Tangency
BC Top Back of Curb	PP Power Pole
BGS Below Ground Surface	PVC Polyvinyl Chloride
BLK Blocking	PVI Point of Vertical Intersection
BO Blowingoff Assembly	R Radius
BOW Bottom of Wall Elevation	RCC Reinforced Concrete Pipe
BMP Best Management Practice	RD Roof Drain
BVC Begin Vertical Curve	RIM Rim Elevation
CB Catchbasin	RT Right
CCC Clark County Code	R/W or ROW Right-of-way
CL Class	S South
CMP Corrugated Metal Pipe	S Slope
CO Cleanout	STM Storm Sewer
CONC Concrete	STMCO Storm Sewer Cleanout
CONTR Contractor	STMH Storm Sewer Manhole
OLV Culvert	SAN Sanitary Sewer
DWY Driveway	SANCO Sanitary Sewer Cleanout
DIP Ductile Iron Pipe	SANMH Sanitary Sewer Manhole
DIA Diameter	STA Station
DWL Design Water Level	ST Street
E Existing Grade	T Tangent
ELEC Electrical	TC Top of Curb Elevation
ELEV Elevation	TOW Top of Wall Elevation
EOG Edge of Gravel	TW Top of Sidewalk Elevation
EOP Edge of Pavement	TEL Telephone
EC Erosion and Silt Control	TEMP Temporary
EX Existing	THRU Through
FG Finish Grade	TYP Typical
FGL Finish Grade at Centerline	VC Vertical Curve
FGR Finish Grade at Right	W West
FL Flow Line Elevation	WSDOT Washington State
FLG Flange	DOT Department of Transportation
FT Feet	WAT Water
GB Grade Break	WV Water Valve
GV Gate Valve	WM Water Meter
HDPE High Density Poly Ethylene	
HYD Fire Hydrant	
IE Invert Elevation	
JB Junction Box	
L Length	
LF Lineal Feet	
LS Left	
LS Lump Sum	
MH Manhole	
MJ Mechanical Joint Restraint	
MSL Mean Sea Level	
MUTCD Manual on Uniform	
Traffic Control Devices	

CLARK PUBLIC UTILITIES - WATER  
SIGNED BY *[Signature]* DATE 3-31-06  
RIO # 249038

CLARK PUBLIC UTILITIES - SEWER  
SIGNED BY *[Signature]* DATE 3-31-06  
RIO # 254663

## CLARK PUBLIC UTILITIES WATER SERVICES RIO #240724

CPU INITIAL	DATE	(PRIOR TO FINAL ACCEPTANCE)
		SATISFACTORY BACTERIA AND PRESSURE TEST ON THE WATER LINE PERFORMED BY CPU WATER SERVICES INSPECTOR
		STATE APPROVED BACKFLOW ASSEMBLY INSTALLED AND APPROVED TEST REPORT SUBMITTED TO CPU WATER SERVICES
		NECESSARY EASEMENTS TO CPU WATER SERVICES, SIGNED AND RECORDED.

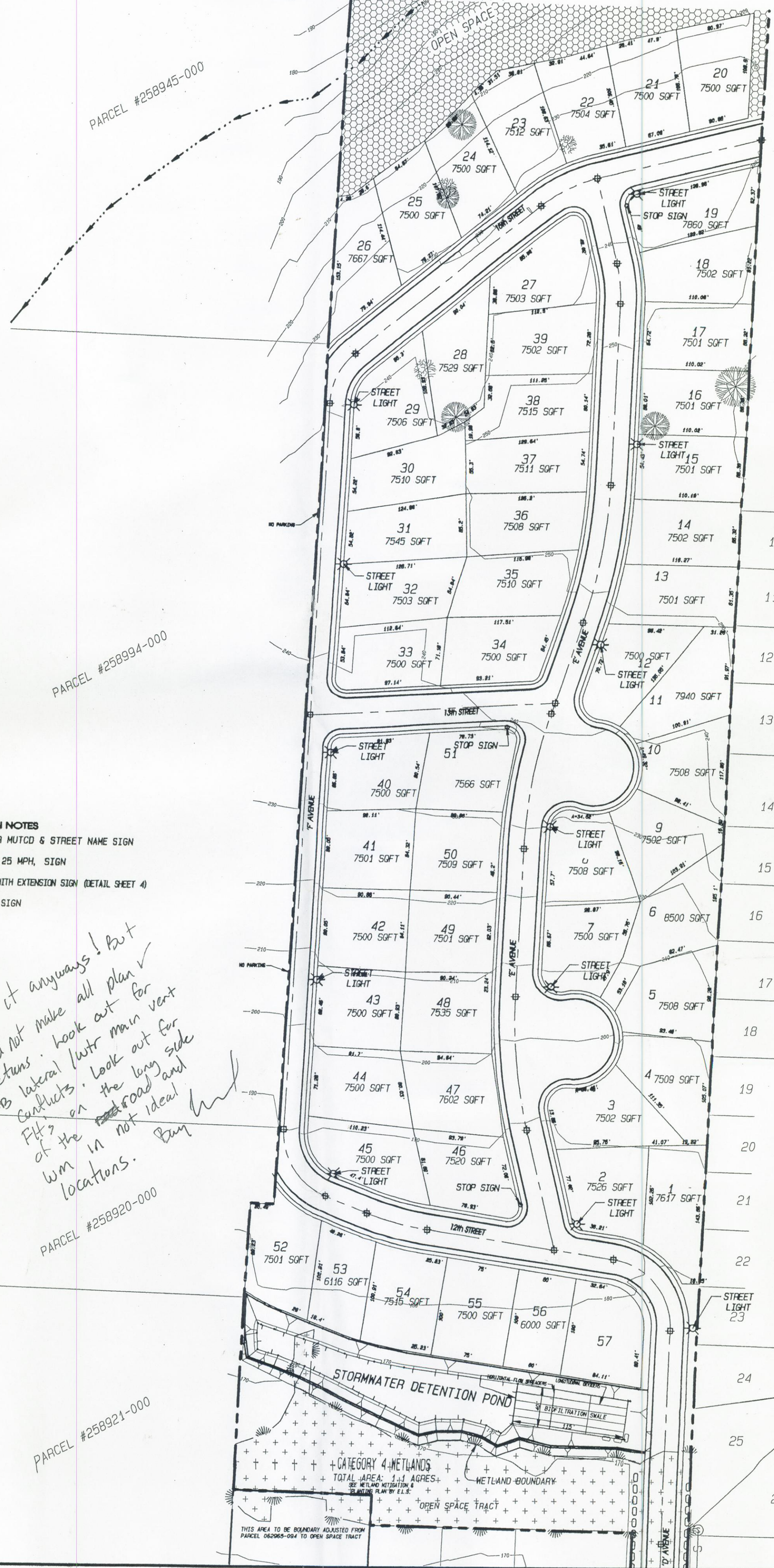
## SIGNING CONSTRUCTION NOTES

- STOP SIGN - INSTALL STOP SIGN PER MUTCD & STREET NAME SIGN  
SPEED LIMIT SIGN - INSTALL SPEED LIMIT, 25 MPH, SIGN  
BARRICADE - INSTALL STREET BARRICADE WITH EXTENSION SIGN (DETAIL SHEET 4)  
NO PARKING - INSTALL "NO PARKING" SIGN

*Signed it anyways! But  
they did not make all plan v  
corrections. Look out for  
CB lateral but main vent  
conflicts. Look out for  
fit's on the long side  
of the road and  
w/m in not ideal  
locations. Buy*

# HANNA'S FARM SUBDIVISION

PRELIMINARY PLAT FOR A SUBDIVISION OF THREE PARCELS (16.80 ACRES) LOCATED IN  
THE SW 1/4 OF SECTION 34, T5N, R1E, W.M. (PARCEL #258905-000, 258924-000,  
62965-040) IN CLARK COUNTY



City of La Center  
DEPARTMENT OF COMMUNITY DEVELOPMENT  
ENGINEERING SERVICES

Recommended For Approval

Signature Public Works Director \_\_\_\_\_ Date \_\_\_\_\_  
Signature City Engineer \_\_\_\_\_ Date \_\_\_\_\_  
Signature Fire District \_\_\_\_\_ Date \_\_\_\_\_

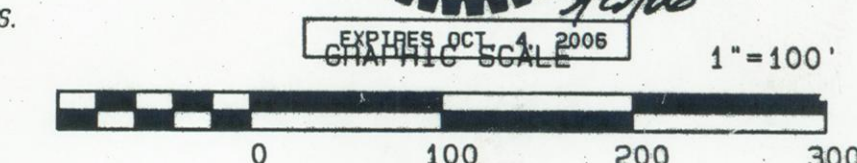
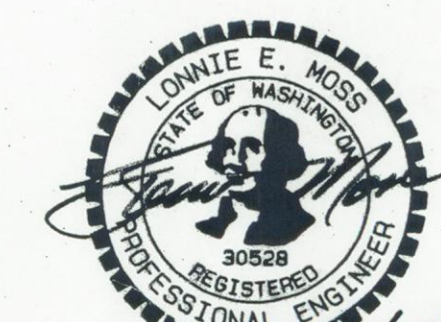
## NOTES:

## SHT No. SHEET DESCRIPTION

- 1 COVER SHEET & SIGNING/STRIPING
- 2 D AVENUE & 12th STREET PLAN & PROFILE
- 3 F AVENUE PLAN & PROFILE
- 4 15th STREET PLAN & PROFILE
- 5 E AVENUE PLAN & PROFILE
- 6 E AVENUE & 13th STREET PLAN & PROFILE
- 7 NORTH COMPOSITE STREET & UTILITY SHEET
- 8 SOUTH COMPOSITE STREET & UTILITY SHEET
- 9 STORMWATER FACILITY
- 10 POND & SWALE PROFILES
- 11 GRADING & EROSION CONTROL 1
- 12 GRADING & EROSION CONTROL 2
- 13 CONSTRUCTION NOTES
- 14 DETAIL SHEET
- 15 CPU WATER DETAIL SHEET
- 16 GRINDER PUMP DETAIL SHEET
- 17 STORMFILTER DETAIL SHEET
- 18 CPU SEWER DETAIL SHEET
- 19 CPU SEWER DETAIL SHEET
- 208 EXISTING CONDITIONS SURVEY

EXISTING	PROPOSED	
W	W	WATER LINE
N/A	N/A	WATER VALVE
N/A	N/A	WATER METER
N/A	N/A	FIRE HYDRANT
N/A	N/A	STORM LINE
N/A	N/A	STORM MANHOLE
N/A	N/A	STORM CATCH BASIN
SAN	SAN	SANITARY LINE
N/A	N/A	SANITARY MANHOLE
N/A	N/A	ELECTRIC POWER POLE
N/A	N/A	APPROXIMATE STREET LIGHT LOCATION TO BE FINALIZED AND APPROVED BY CPU

APPROVED FOR CONSTRUCTION  
DATE: 3-31-06



DEVELOPER:  
SUN COUNTRY HOMES  
2401 W MAIN ST.  
BATTLE GROUND, WA 98604

HANNA'S FARM  
COVER SHEET & SIGNING/STRIPING

DATE: 29 Mar 2006  
REVISION

PROJECT MANAGER: Samuel E. Moss  
ENR. of RECORD: Louie E. Moss  
DESIGN BY: Samuel E. Moss, AB  
CHECKED BY: Louie E. Moss  
SYNTH of RECORD: Margaret, INC.  
REG. NO. 9579

MOSS & ASSOCIATES, INC.  
717 NE 61ST STREET, SUITE 202  
VANCOUVER, WA 98665  
(360) 260-9400 FAX (360) 260-3509

SHEET  
1/20



# D AVENUE & 12th STREET PROFILE

## SANITARY SEWER CONSTRUCTION NOTES

- 8" SAN - INSTALL 8" PVC SANITARY SEWER LINE
- 4" SAN GRINDER LAT - INSTALL 4" PVC SANITARY SEWER LINE FOR GRINDER PUMPS PER DETAIL 8-GP SHEET 16
- SAN MH - INSTALL STANDARD SEWER MANHOLE-EXTERNALLY SEAL ALL MANHOLES
- - INSTALL STANDARD SANITARY SEWER CLEANOUT
- S — INSTALL STANDARD 4" SANITARY SEWER LATERAL 5' MIN. FROM P.L.
- EX SAN MH - COPE NEW HOLE & CONNECT NEW SEWER MAIN TO EXISTING MANHOLE
- SEE COMPOSITE STREET AND UTILITY PLAN FOR SANITARY SEWER LATERAL TABLE
- (300) - COPE DRILL EX SANH AND USE A BOOTED CONNECTION SUCH AS "KORN-W-S", BOTTOM OF MANHOLE SHALL BE RE-CHANNELLED

## GENERAL CONSTRUCTION NOTES

- 32" WIDE ST - CONSTRUCT 32" WIDE ASPHALT PAVEMENT STREET (SEE TYPICAL SECTION)
- 32" SHED ST - CONSTRUCT 32" WIDE ASPHALT PAVEMENT SHED STREET (SEE TYPICAL SECTION)
- 5' SIDEWALK - CONSTRUCT 5' WIDE ATTACHED SIDEWALK WHERE HATCHED (SEE TYP. ST. SECTION)
- HALF-WIDTH ST - CONSTRUCT HALF-WIDTH (20' MIN) W/ CURB & GUTTER (SEE TYPICAL STREET SECTION)
- F-1 RAMP - INSTALL TYPE F-1 RAMP (DETAIL SHEET 14)
- F-3 RAMP - INSTALL TYPE F-3 RAMP (DETAIL SHEET 14)

## STORMWATER CONSTRUCTION NOTES

- 12" STM - INSTALL 12" STORM LINE
- 18" STM - INSTALL 18" STORM LINE
- STM MH - INSTALL STANDARD 48" STORM MANHOLE (DETAIL SHEET 14)
- CB - INSTALL STD CATCH BASIN-COMBINATION CURB/GRATE (DETAIL SHEET 14)
- FLOW SPREADERS - INSTALL FLOW SPREADER (DETAIL SHEET 14)
- SCALE - INSTALL 40" WIDE BIOFILTRATION SCALE WITH 3:1 SIDE SLOPES PER TYPICAL ON SHEET 10
- S — INSTALL 4" STORM LATERAL (TYPICAL) ON EACH LOT WITH 2' X 4" BOARD AND TRACING WIRE (CONSTRUCTION NOTE NOT SHOWN FOR EACH LATERAL)
- TRAP - INSTALL BIOSHALE SEDIMENTATION TRAP (DETAIL SHEET 9)
- FLAT TOP MH - INSTALL STANDARD FLAT TOP MANHOLE (DETAIL SHEET 14)

## WATER CONSTRUCTION NOTES

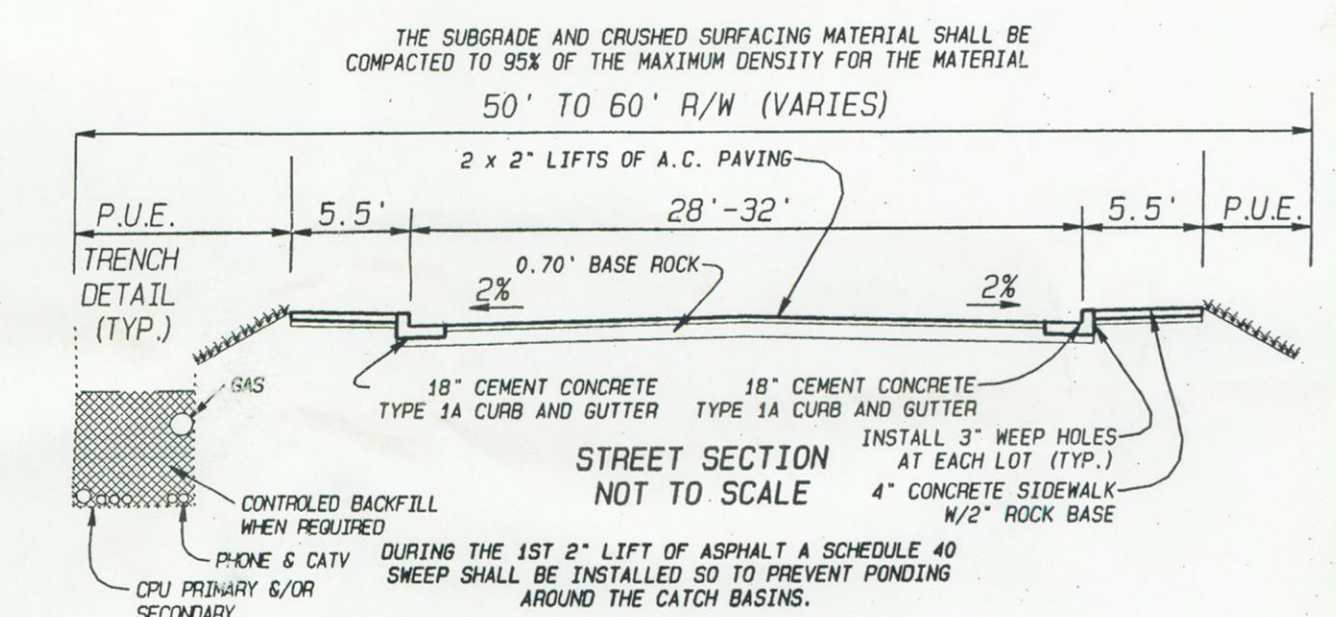
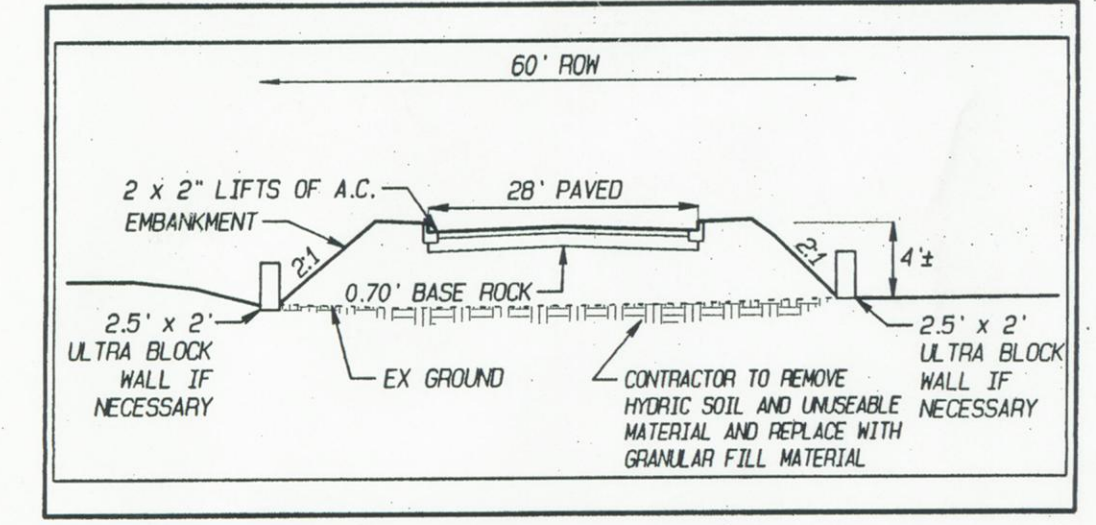
- 8" WATER - INSTALL 8" WATER MAIN (C-900 P.C. 150 PVC OR DI C350 OR EQUIV)
- 12" WATER - INSTALL 12" WATER MAIN (C-900 P.C. 150 PVC OR DI C350 OR EQUIV)
- B.O. - INSTALL STD BLOW-OFF ASSEMBLY W/ PRE-CAST T.B.

## SIGNING CONSTRUCTION NOTES

- STOP SIGN - INSTALL STOP SIGN PER MUTCD & STREET NAME SIGN
- SPEED LIMIT SIGN - INSTALL SPEED LIMIT, 25 MPH, SIGN
- BARRICADE - INSTALL STREET BARRICADE WITH EXTENSION SIGN (DETAIL SHEET 4)
- NO PARKING - INSTALL "NO PARKING" SIGN

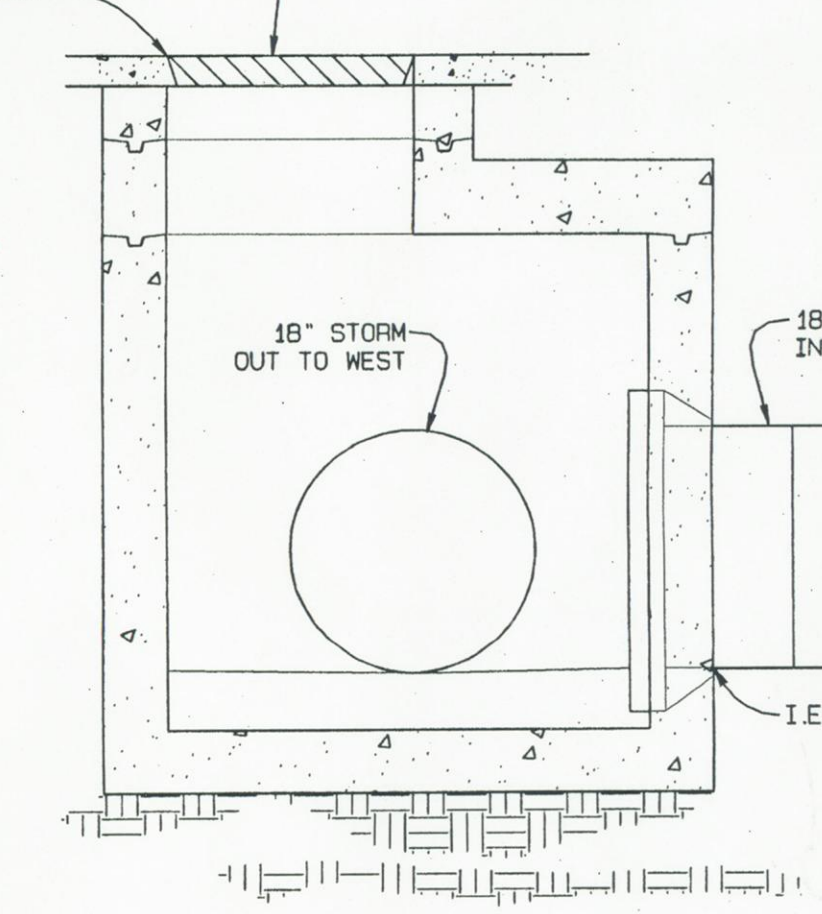
## SECTION Y-Y

SCALE  
HORIZ: 1" = 40'  
VERT: 1" = 10'



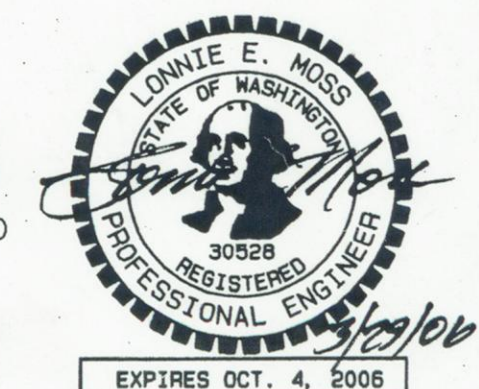
## STORM MANHOLE #10 DETAIL

NO SCALE



## APPROVED FOR CONSTRUCTION

Clark Public Utilities - Water  
Signature: [Signature] Date: 3-21-06



DEVELOPER: HANNA'S FARM  
2401 W MAIN ST.  
BATTLE GROUND, WA 98604

DATE: 29 Mar 2006  
PROJECT MANAGER: Samuel E. Moss  
ENGR. OF RECORD: Lorraine E. Moss  
DRAWN BY: Samuel E. Moss, AB  
CHECKED BY: Lorraine E. Moss, RES. INC. 9870

MOSS & ASSOCIATES, INC.  
717 NE 61ST STREET, SUITE 202  
VANCOUVER, WA 98665  
(360) 260-9400 FAX (360) 260-3509

SHEET 20

CURB RETURN (I)			
R =	20.00		
A =	95°26'38"		
L =	33.43'		
PC	STA 0+24.88	OFF 36.01 LL	D' STREET FL=174.66
PT	STA 0+28.59	OFF 37.76 LL	D' STREET FL=174.64
1/4	STA 0+26.40	OFF 22.24 LL	D' STREET FL=174.45
MID	STA 0+23.74	OFF 20.99 LL	D' STREET FL=174.41
PAC 2	STA 0+31.16	OFF 19.17 LL	D' STREET FL=174.37
3/4	STA 0+36.46	OFF 16.72 LL	D' STREET FL=174.29
PT	STA 0+44.58	OFF 14.00 LL	D' STREET FL=174.16

NOTE: MEASUREMENTS INDICATED ARE TO CURB FLOWLINE.

CURB RETURN (II)			
R =	20.00		
A =	79°12'52"		
L =	27.65'		
PC	STA 0+36.42	OFF 14.00 RL	D' STREET FL=174.06
PT	STA 0+28.64	OFF 15.19 RL	D' STREET FL=173.91
1/4	STA 0+24.36	OFF 12.34 RL	D' STREET FL=173.71
MID	STA 0+20.82	OFF 10.69 RL	D' STREET FL=173.56
PAC 2	STA 0+21.40	OFF 20.03 RL	D' STREET FL=173.79
3/4	STA 0+18.20	OFF 23.82 RL	D' STREET FL=173.92
PT	STA 0+14.47	OFF 37.08 RL	D' STREET FL=173.44

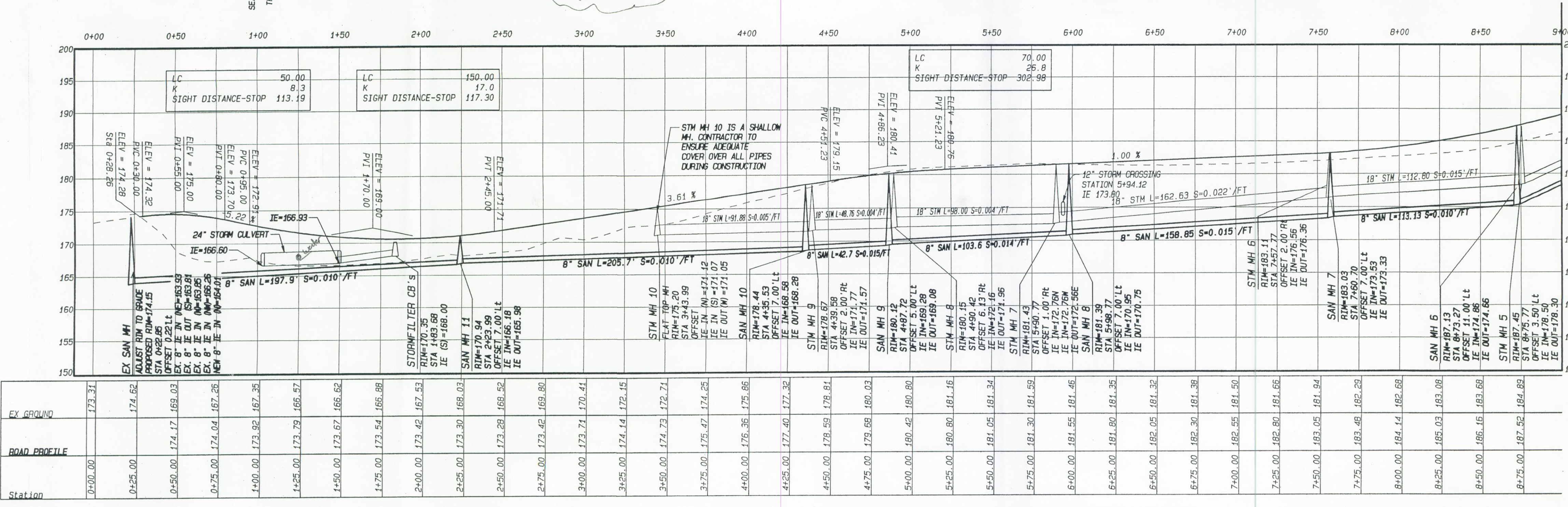
NOTE: MEASUREMENTS INDICATED ARE TO CURB FLOWLINE.

CURB RETURN (B)			
R =	20.00		
A =	112°07'18"		
L =	39.14'		
PC	STA 30+24.93	OFF 49.53 LL	E' STREET FL=181.59
PT	STA 30+18.38	OFF 16.97 RL	E' STREET FL=180.67
1/4	STA 30+14.78	OFF 19.37 RL	E' STREET FL=180.71
MID	STA 30+13.06	OFF 19.41 RL	E' STREET FL=180.75
PAC 2	STA 30+11.46	OFF 20.61 RL	E' STREET FL=180.79
3/4	STA 30+08.10	OFF 23.58 RL	E' STREET FL=180.83
PT	STA 30+05.70	OFF 28.47 RL	E' STREET FL=180.81

NOTE: MEASUREMENTS INDICATED ARE TO CURB FLOWLINE.

CURB RETURN (A)			
R =	20.00		
A =	112°07'18"		
L =	39.14'		
PC	STA 30+24.93	OFF 49.53 LL	E' STREET FL=181.59
PT	STA 30+18.38	OFF 16.97 RL	E' STREET FL=180.67
1/4	STA 30+14.78	OFF 19.37 RL	E' STREET FL=180.71
MID	STA 30+13.06	OFF 19.41 RL	E' STREET FL=180.75
PAC 2	STA 30+11.46	OFF 20.61 RL	E' STREET FL=180.79
3/4	STA 30+08.10	OFF 23.58 RL	E' STREET FL=180.83
PT	STA 30+05.70	OFF 28.47 RL	E' STREET FL=180.81

NOTE: MEASUREMENTS INDICATED ARE TO CURB FLOWLINE.





# F AVENUE PROFILE

**WATER NOTES:**  
 1. 6" DIP WATER MAINS LEADING TO FIRE HYDRANTS LONGER THAN 1' STICK OF PIPE SHALL HAVE ALL PIPE JOINTS MECHANICALLY RESTRAINED WITH "FIELD LOK" GASKETS OR OTHER CPU APPROVED RESTRAINTS.  
 2. NO PIPE JOINTS WITHIN 10' OF ANY MEGA LUG RESTRAINTS

**SIGNING CONSTRUCTION NOTES**  
 STOP SIGN - INSTALL STOP SIGN PER MUTCD & STREET NAME SIGN  
 SPEED LIMIT SIGN - INSTALL SPEED LIMIT, 25 MPH. SIGN  
 BARRICADE - INSTALL STREET BARRICADE WITH EXTENSION SIGN (DETAIL SHEET 4)  
 NO PARKING - INSTALL "NO PARKING" SIGN

## WATER CONSTRUCTION NOTES

8" WATER - INSTALL 8" WATER MAIN (C-900 P.C. 150 PVC OR DI PC350 OR EQUIV.)  
 12" WATER - INSTALL 12" WATER MAIN (C-900 P.C. 150 PVC OR DI PC350 OR EQUIV.)  
 B.O. - INSTALL STD BLOW-OFF ASSEMBLY W/ PRE-CAST T.B.

11.25' - INSTALL 8" 11.25' MJ BEND W/ MEGA LUG RESTRAINT & T.B.  
 22.5' - INSTALL 8" 22.5' MJ BEND W/ MEGA LUG RESTRAINT & T.B.  
 45' - INSTALL 8" 45' MJ BEND W/ MEGA LUG RESTRAINT & T.B.  
 90' - INSTALL 8" 90' MJ BEND W/ MEGA LUG RESTRAINT & T.B.

INSTALL 4" STANDARD WATER SERVICE CONNECTION-TYPICAL (CONSTRUCTION NOTE NOT CALLED OUT FOR EVERY LOT)  
 FIRE HYDRANT - INSTALL 8" MJ X 6" FLS TEE W/ MEGA LUG RESTRAINTS, 6" FLS X MJ VALVE W/ MEGA LUG RESTRAINTS & T.B. STD FIRE HYDRANT ASSEMBLY WITH T.B. (ALSO SEE WATER NOTE 1)

## STORMWATER CONSTRUCTION NOTES

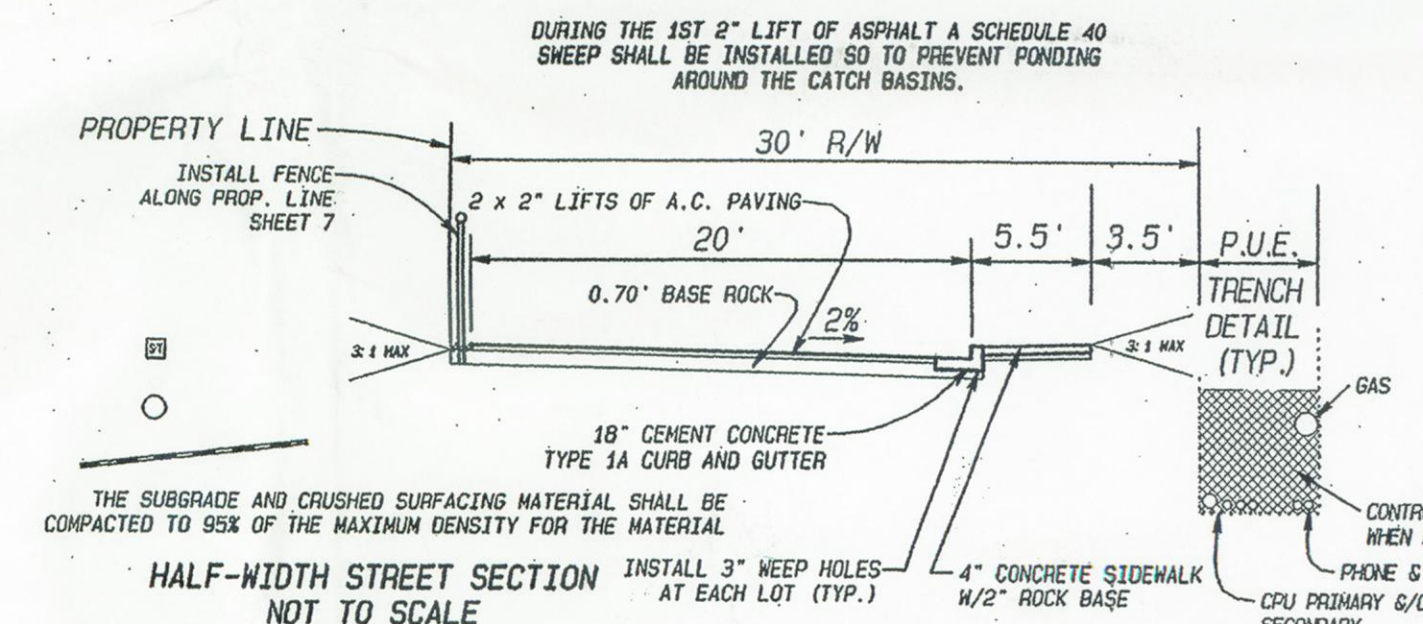
12" STM - INSTALL 12" STORM LINE  
 18" STM - INSTALL 18" STORM LINE  
 STM MH - INSTALL STANDARD 48" STORM MANHOLE (DETAIL SHEET 14)  
 CPT - INSTALL STD CATCH BASIN-CONCRETE CURB/GRADE (DETAIL SHEET 14)  
 FLOW SPREADERS - INSTALL FLOW SPREADER (DETAIL SHEET 14)  
 SWALE - INSTALL 40" WIDE BIOFILTRATION SWALE WITH 3:1 SIDE SLOPES PER TYPICAL ON SHEET 10  
 S - INSTALL 4" STORM LATERAL (TYPICAL) ON EACH LOT WITH 2" X 4" BOARD AND TRACING WIRE (CONSTRUCTION NOTE NOT SHOWN FOR EACH LATERAL)  
 TRAP - INSTALL BIOSWALE SEDIMENTATION TRAP (DETAIL SHEET 9)  
 FLAT TOP MH - INSTALL STANDARD FLAT TOP MAN HOLE (DETAIL SHEET 14)

## SANITARY SEWER CONSTRUCTION NOTES

8" SAN - INSTALL 8" PVC SANITARY SEWER LINE  
 4" SAN GRINDER LAT - INSTALL 4" PVC SANITARY SEWER LINE FOR GRINDER PUMPS PER DETAIL 8-SP SHEET 16  
 SAN MH - INSTALL STANDARD SEWER MANHOLE-EXTERNALLY SEAL ALL MANHOLES  
 S - INSTALL STANDARD SANITARY SEWER CLEAOUT  
 S - INSTALL STANDARD 4" SANITARY SEWER LATERAL 5' MIN. FROM P.L.  
 EX SAN MH - CORE NEW HOLE & CONNECT NEW SEWER MAIN TO EXISTING MANHOLE  
 SEE COMPOSITE STREET AND UTILITY PLAN FOR SANITARY SEWER LATERAL TABLE

## GENERAL CONSTRUCTION NOTES

32" WIDE ST - CONSTRUCT 32" WIDE ASPHALT PAVEMENT STREET (SEE TYPICAL SECTION)  
 32" SHED ST - CONSTRUCT 32" WIDE ASPHALT PAVEMENT SHED STREET (SEE TYPICAL SECTION)  
 5' SIDEWALK - CONSTRUCT 5' WIDE ATTACHED SIDEWALK WHERE NOTED (SEE TYP. ST. SECTION)  
 HALF-WIDTH ST - CONSTRUCT HALF-WIDTH (20' MIN) W/ CURB & GUTTER (SEE TYPICAL STREET SECTION)  
 F-1 RAMP - INSTALL TYPE F-1 RAMP (DETAIL SHEET 14)  
 F-3 RAMP - INSTALL TYPE F-3 RAMP (DETAIL SHEET 14)



**CURB RETURN (B)**

R	A	L	STA	OFF	FL
20.00'	83°58'27"	35.31'	STA 13410.78	OFF 16.00 RL	FL-234.95
			STA 13417.50	OFF 17.33 RL	FL-235.02
			STA 13422.61	OFF 19.87 RL	FL-235.30
			STA 13424.35	OFF 21.43 RL	FL-235.34
			STA 13425.49	OFF 22.55 RL	FL-235.38
			STA 13426.60	OFF 23.91 RL	FL-235.40
			STA 13430.67	OFF 33.90 RL	FL-235.57
			STA 13431.22	OFF 43.85 RL	FL-235.49

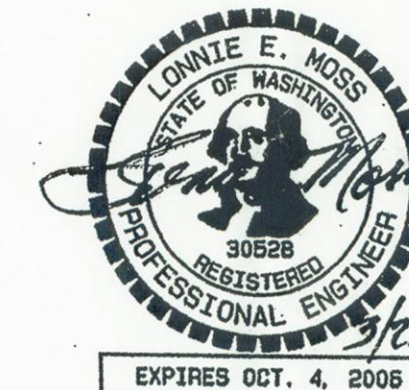
NOTE: MEASUREMENTS INDICATED ARE TO CURB FLOWLINE.

**CURB RETURN (B)**

R	A	L	STA	OFF	FL
20.00'	95°01'33"	35.52'	STA 13463.40	OFF 16.00 RL	FL-236.61
			STA 13470.24	OFF 17.73 RL	FL-236.16
			STA 13469.73	OFF 21.20 RL	FL-237.80
			STA 13468.32	OFF 22.82 RL	FL-237.76
			STA 13467.63	OFF 24.17 RL	FL-237.72
			STA 13464.16	OFF 29.83 RL	FL-237.30
			STA 13463.20	OFF 36.10 RL	FL-237.10
			STA 13464.34	OFF 48.04 RL	FL-236.87
			STA 13465.31	OFF 57.90 RL	FL-236.76
			STA 13465.32	OFF 62.95 RL	FL-236.74

NOTE: MEASUREMENTS INDICATED ARE TO CURB FLOWLINE.

APPROVED FOR CONSTRUCTION  
 Clark Public Utilities - Water  
 Signature: [Signature] Date: 2-2-20



SCALE  
 HORIZ: 1" = 40'  
 VERT: 1" = 10'

DEVELOPER:  
 SUN COUNTRY HOMES  
 2401 N MAIN ST.  
 BATTLE GROUND, WA 98604

HANNA'S FARM  
 F AVENUE PLAN & PROFILE

DATE: 29 Mar 2006  
 CONTACT PERSON: Sami E. Moss  
 DRAWN BY: Sami E. Moss  
 CHECKED BY: Lowrie E. Moss

PROJECT MANAGER: Sami E. Moss  
 ENGR. OF RECORD: Lowrie E. Moss  
 REG. NO: 30528  
 SIGNATURE: [Signature]  
 REG. NO: 8579

MOSS & ASSOCIATES, INC.  
 717 NE 61ST STREET, SUITE 202  
 VANCOUVER, WA 98665  
 (360) 260-9400 FAX (360) 260-3509

SHEET  
 3  
 20





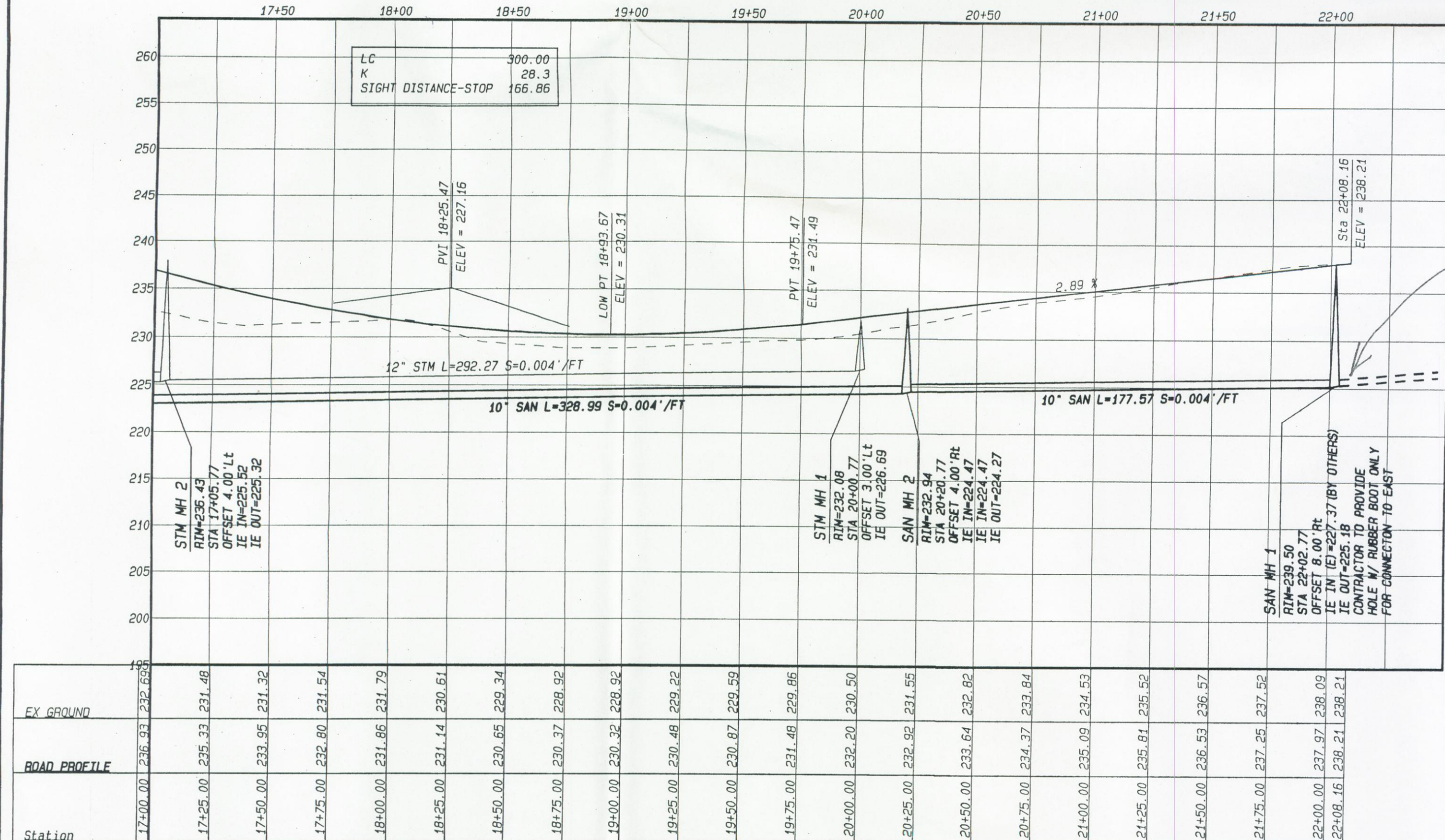
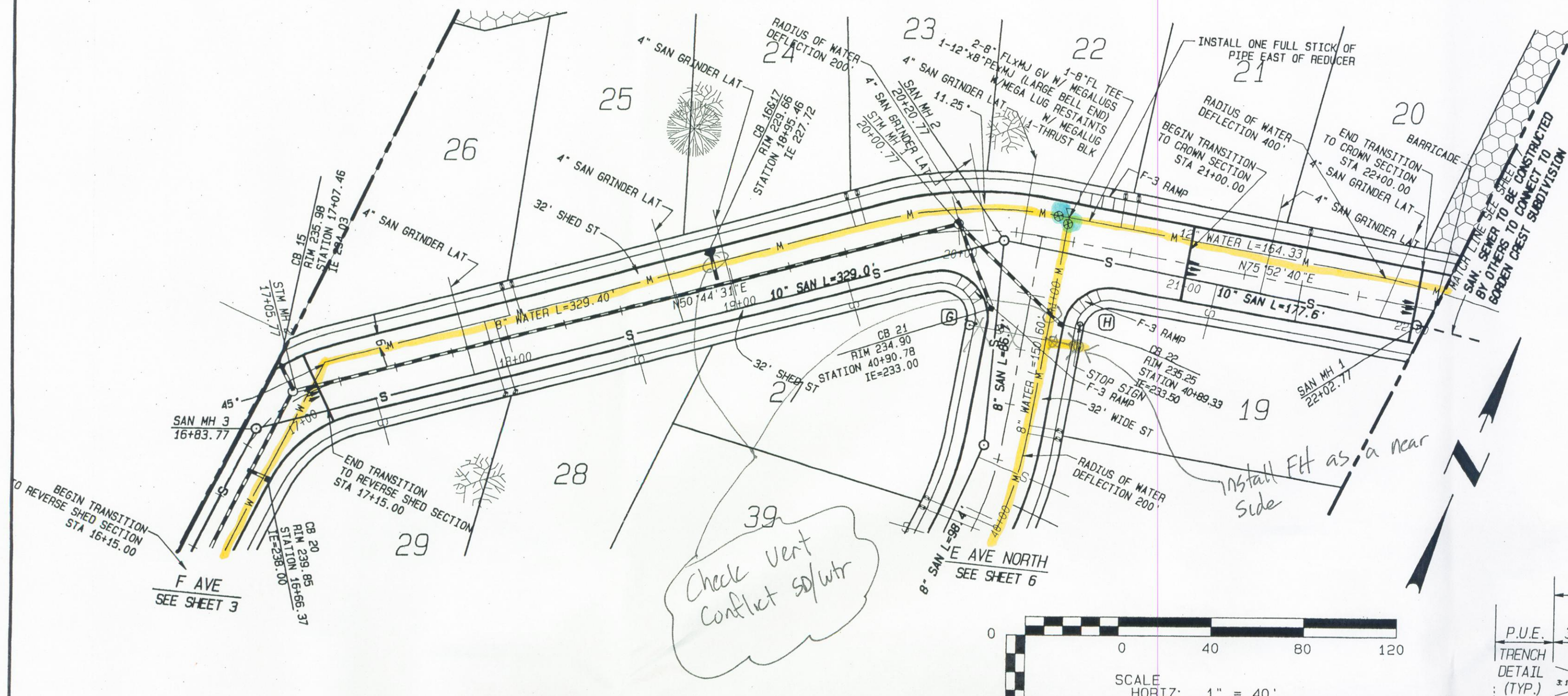


CURB RETURN (B)			
R =	20.00		
A =	108°24'31"		
L =	37.84		
PVC	STA 40+90.51	OFF 69.87 LL	E STREET FL=231.64
PVI	STA 40+94.06	OFF 69.81 LL	E STREET FL=231.67
PT	STA 40+97.51	OFF 51.70 LL	E STREET FL=232.10
PVC	STA 41+02.51	OFF 42.32 LL	E STREET FL=232.49
PVI	STA 41+05.51	OFF 32.98 LL	E STREET FL=233.06
PT	STA 41+08.51	OFF 28.81 LL	E STREET FL=233.61
PVC	STA 40+90.76	OFF 24.30 LL	E STREET FL=233.86
PVI	STA 40+93.76	OFF 22.74 LL	E STREET FL=233.89
PT	STA 40+96.76	OFF 18.20 LL	E STREET FL=234.23
PVC	STA 40+83.54	OFF 16.00 LL	E STREET FL=236.01

CURB RETURN (B)			
R =	20.00		
A =	90°00'00"		
L =	31.42		
PVC	STA 40+89.37	OFF 16.00 RL	E STREET FL=236.25
PVI	STA 40+92.37	OFF 17.32 RL	E STREET FL=234.57
PT	STA 41+02.03	OFF 20.51 RL	E STREET FL=234.43
PVC	STA 41+03.51	OFF 21.86 RL	E STREET FL=234.47
PVI	STA 41+06.51	OFF 23.34 RL	E STREET FL=234.51
PT	STA 41+07.88	OFF 28.35 RL	E STREET FL=234.69
PVC	STA 41+09.37	OFF 35.00 RL	E STREET FL=234.92

NOTE: MEASUREMENTS INDICATED ARE TO CURB FLOWLINE.

# 15th STREET PROFILE



- SANITARY SEWER CONSTRUCTION NOTES**
- 8" SAN - INSTALL 8" PVC SANITARY SEWER LINE
  - 4" SAN GRINDER LAT - INSTALL 4" PVC SANITARY SEWER LINE FOR GRINDER PUMPS PER DETAIL 8-SP SHEET 16
  - SAN MH - INSTALL STANDARD SEWER MANHOLE-EXTERNALLY SEAL ALL MANHOLES
  - INSTALL STANDARD SANITARY SEWER CLEANOUT
  - INSTALL STANDARD 4" SANITARY SEWER LATERAL 5' MIN. FROM P.L.
  - EX SAN MH - CORE NEW HOLE & CONNECT NEW SEWER MAIN TO EXISTING MANHOLE
  - SEE COMPOSITE STREET AND UTILITY PLAN FOR SANITARY SEWER LATERAL TABLE

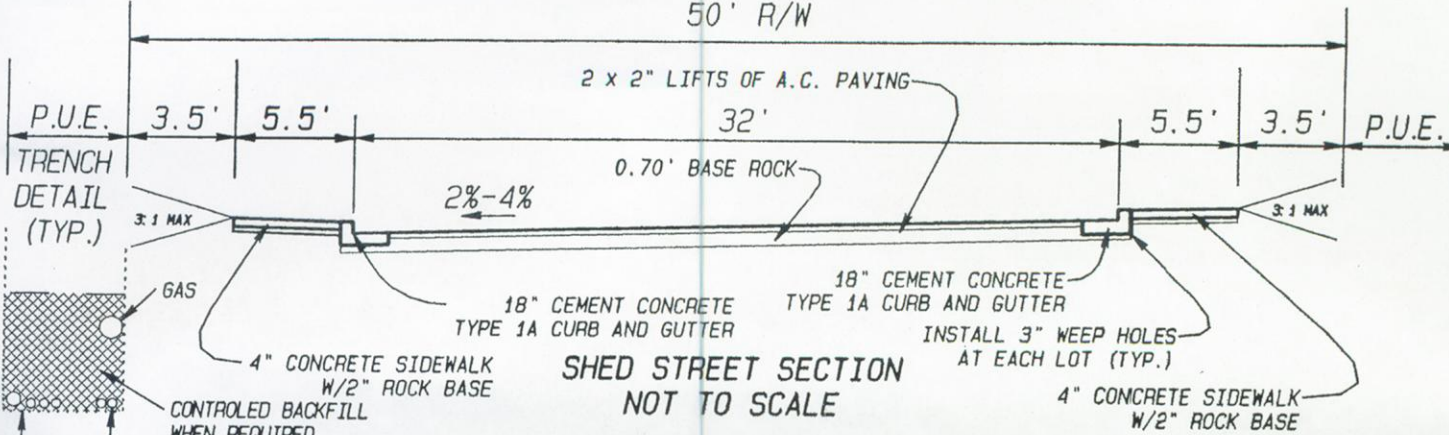
- WATER CONSTRUCTION NOTES**
- 8" WATER - INSTALL 8" WATER MAIN (C-900 P.C. 150 PVC OR DI PC350 OR EQUIV.)
  - 12" WATER - INSTALL 12" WATER MAIN (C-900 P.C. 150 PVC OR DI PC350 OR EQUIV.)
  - B.O. - INSTALL STD BLOW-OFF ASSEMBLY W/ PRE-CAST T.B.
  - 11.25" - INSTALL 8" 11.25" MJ BEND W/ MEGA LUG RESTRAINT & T.B.
  - 22.5" - INSTALL 8" 22.5" MJ BEND W/ MEGA LUG RESTRAINT & T.B.
  - 45" - INSTALL 8" 45" MJ BEND W/ MEGA LUG RESTRAINT & T.B.
  - 90" - INSTALL 8" 90" MJ BEND W/ MEGA LUG RESTRAINT & T.B.
  - INSTALL 1" STANDARD WATER SERVICE CONNECTION-TYPICAL (CONSTRUCTION NOTE NOT CALLED OUT FOR EVERY LOT)
  - FIRE HYDRANT - INSTALL 8" MJ X 6" FLG TEE W/ MEGA LUG RESTRAINTS, 6" FLG X MJ VALVE W/ MEGA LUG RESTRAINTS & T.B. STUD FIRE HYDRANT ASSEMBLY WITH T.B. (ALSO SEE WATER NOTE 1)

SEE DETAIL SHEET FOR GRINDER PUMP DETAILS

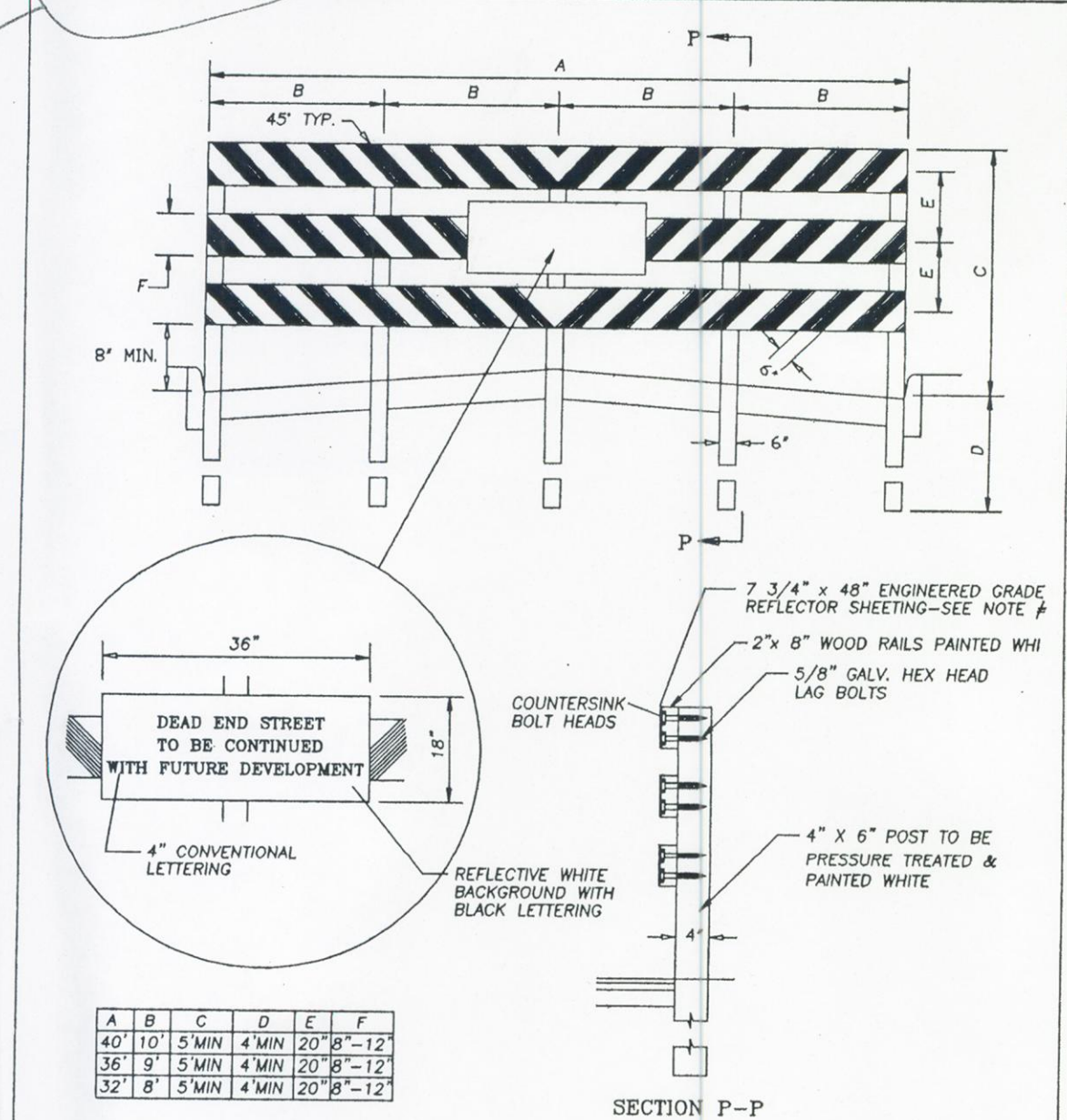
- GENERAL CONSTRUCTION NOTES**
- 32" WIDE ST - CONSTRUCT 32" WIDE ASPHALT PAVEMENT STREET (SEE TYPICAL SECTION)
  - 32" SHED ST - CONSTRUCT 32" WIDE ASPHALT PAVEMENT SHED STREET (SEE TYPICAL SECTION)
  - 5' SIDEWALK - CONSTRUCT 5' WIDE ATTACHED SIDEWALK WHERE HATCHED (SEE TYP. ST. SECTION)
  - HALF-WIDTH ST - CONSTRUCT HALF-WIDTH (20' MIN) W/ CURB & GUTTER (SEE TYPICAL STREET SECTION)
  - F-1 RAMP - INSTALL TYPE F-1 RAMP (DETAIL SHEET 14)
  - F-3 RAMP - INSTALL TYPE F-3 RAMP (DETAIL SHEET 14)

- SIGNING CONSTRUCTION NOTES**
- STOP SIGN - INSTALL STOP SIGN PER MUTCD & STREET NAME SIGN
  - SPEED LIMIT SIGN - INSTALL SPEED LIMIT, 25 MPH, SIGN
  - BARRICADE - INSTALL STREET BARRICADE WITH EXTENSION SIGN (DETAIL SHEET 4)
  - NO PARKING - INSTALL "NO PARKING" SIGN

- STORMWATER CONSTRUCTION NOTES**
- 12" STM - INSTALL 12" STORM LINE
  - 18" STM - INSTALL 18" STORM LINE
  - STM MH - INSTALL STANDARD 48" STORM MANHOLE (DETAIL SHEET 14)
  - CB - INSTALL STD CATCH BASIN-COMBINATION CURB/GRATE (DETAIL SHEET 14)
  - FLOW SPREADERS - INSTALL FLOW SPREADER (DETAIL SHEET 14)
  - SWALE - INSTALL 40" WIDE BIOFILTRATION SWALE WITH 3:1 SIDE SLOPES PER TYPICAL ON SHEET 10
  - INSTALL 4" STORM LATERAL (TYPICAL) ON EACH LOT WITH 2" X 4" BOARD AND TRACING WIDE (CONSTRUCTION NOTE NOT SHOWN FOR EACH LATERAL)
  - TRAP - INSTALL BIOSWALE SEDIMENTATION TRAP (DETAIL SHEET 9)
  - FLAT TOP MH - INSTALL STANDARD FLAT TOP MAN HOLE (DETAIL SHEET 14)



Need to plug east core hole until Gordon Crest connects

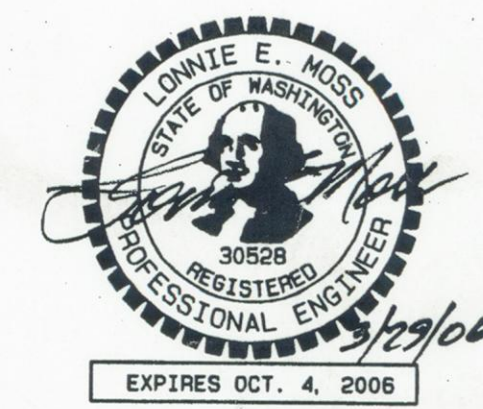


NOTES:

- ENGINEERED GRADE REFLECTOR SHEETING TO BE 340 GAUGE H38 ALLOY WITH ALUMINE 1200 CONVERSION COATING. STRIPING SHALL BE ALTERNATING ORANGE AND WHITE STRIPES 6" IN WIDTH AT A 45° ANGLE. REFLECTIVE SHEETING MUST BE SECURELY FASTENED TO THE 2x8 PLANKS USING GALVANIZED NAILS OR SCREWS.
- THIS BARRICADE SHALL CONFORM TO SECTION 6F-60, MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

NO.	REVISIONS	DATE	BY
1	STREET BARRICADE		

**APPROVED FOR CONSTRUCTION**  
Clark Public Utilities - Water  
Signature: [Signature] Date: 3/21/06



DATE: 29 Mar 2006  
PROJECT MANAGER: Samuel E. Moss  
ENGR. OF RECORD: LONNIE E. MOSS  
CONTACT PERSON: Samuel E. Moss  
DRAWN BY: Samuel E. Moss, AB  
CHECKED BY: LONNIE E. MOSS  
MOSS & ASSOCIATES, INC.  
717 NE 61ST STREET, SUITE 202  
VANCOUVER, WA 98665  
(360) 260-9400 FAX (360) 260-3509  
SHEET 4/20

HANNA'S FARM  
15th STREET PLAN & PROFILE

DEVELOPER:  
SUN COUNTRY HOMES  
2401 W MAIN ST.  
BATTLE GROUND, WA 98604



# E AVENUE PROFILE

## GENERAL CONSTRUCTION NOTES

- 32' WIDE ST - CONSTRUCT 32' WIDE ASPHALT PAVEMENT STREET (SEE TYPICAL SECTION)
- 32' SHED ST - CONSTRUCT 32' WIDE ASPHALT PAVEMENT SHED STREET (SEE TYPICAL SECTION)
- 5' SIDEWALK - CONSTRUCT 5' WIDE ATTACHED SIDEWALK WHERE HATCHED (SEE TYP. ST. SECTION)
- HALF-WIDTH ST - CONSTRUCT HALF-WIDTH (20' MIN) W/ CURB & GUTTER (SEE TYPICAL STREET SECTION)
- F-1 RAMP - INSTALL TYPE F-1 RAMP (DETAIL SHEET 14)
- F-3 RAMP - INSTALL TYPE F-3 RAMP (DETAIL SHEET 14)

## WATER CONSTRUCTION NOTES

- 8" WATER - INSTALL 8" WATER MAIN (C-900 P.C. 150 PVC OR DI PC350 OR EQUIV.)
- 12" WATER - INSTALL 12" WATER MAIN (C-900 P.C. 150 PVC OR DI PC350 OR EQUIV.)
- B.O. - INSTALL STD BLOW-OFF ASSEMBLY W/ PRE-CAST T.B.
- 11.25' - INSTALL 8" 11.25' MJ BEND W/ MEGA LUG RESTRAINT & T.B.
- 22.5' - INSTALL 8" 22.5' MJ BEND W/ MEGA LUG RESTRAINT & T.B.
- 45' - INSTALL 8" 45' MJ BEND W/ MEGA LUG RESTRAINT & T.B.
- 90' - INSTALL 8" 90' MJ BEND W/ MEGA LUG RESTRAINT & T.B.
- INSTALL 1" STANDARD WATER SERVICE CONNECTION-TYPICAL (CONSTRUCTION NOTE NOT CALLED OUT FOR EVERY LOT)
- FIRE HYDRANT - INSTALL 8" MJ X 6" FLG TEE W/ MEGA LUG RESTRAINTS, 6" FLG X MJ VALVE W/ MEGA LUG RESTRAINTS & T.B. STUD FIRE HYDRANT ASSEMBLY WITH T.B. (ALSO SEE WATER NOTE 1)

## STORMWATER CONSTRUCTION NOTES

- 12" STM - INSTALL 12" STORM LINE
- 18" STM - INSTALL 18" STORM LINE
- STM MH - INSTALL STANDARD 48" STORM MANHOLE (DETAIL SHEET 14)
- CB - INSTALL STD CATCH BASIN-COMBINATION CURB/GATE (DETAIL SHEET 14)
- FLOW SPREADERS - INSTALL FLOW SPREADER (DETAIL SHEET 14)
- SWALE - INSTALL 40" WIDE BIOFILTRATION SWALE WITH 3:1 SIDE SLOPES PER TYPICAL ON SHEET 10
- S - INSTALL 4" STORM LATERAL (TYPICAL) ON EACH LOT WITH 2" X 4" BOARD AND TRACING WIRE (CONSTRUCTION NOTE NOT SHOWN FOR EACH LATERAL)
- TRAP - INSTALL BIOSWALE SEDIMENTATION TRAP (DETAIL SHEET 9)
- FLAT TOP MH - INSTALL STANDARD FLAT TOP MAN HOLE (DETAIL SHEET 14)

## SIGNING CONSTRUCTION NOTES

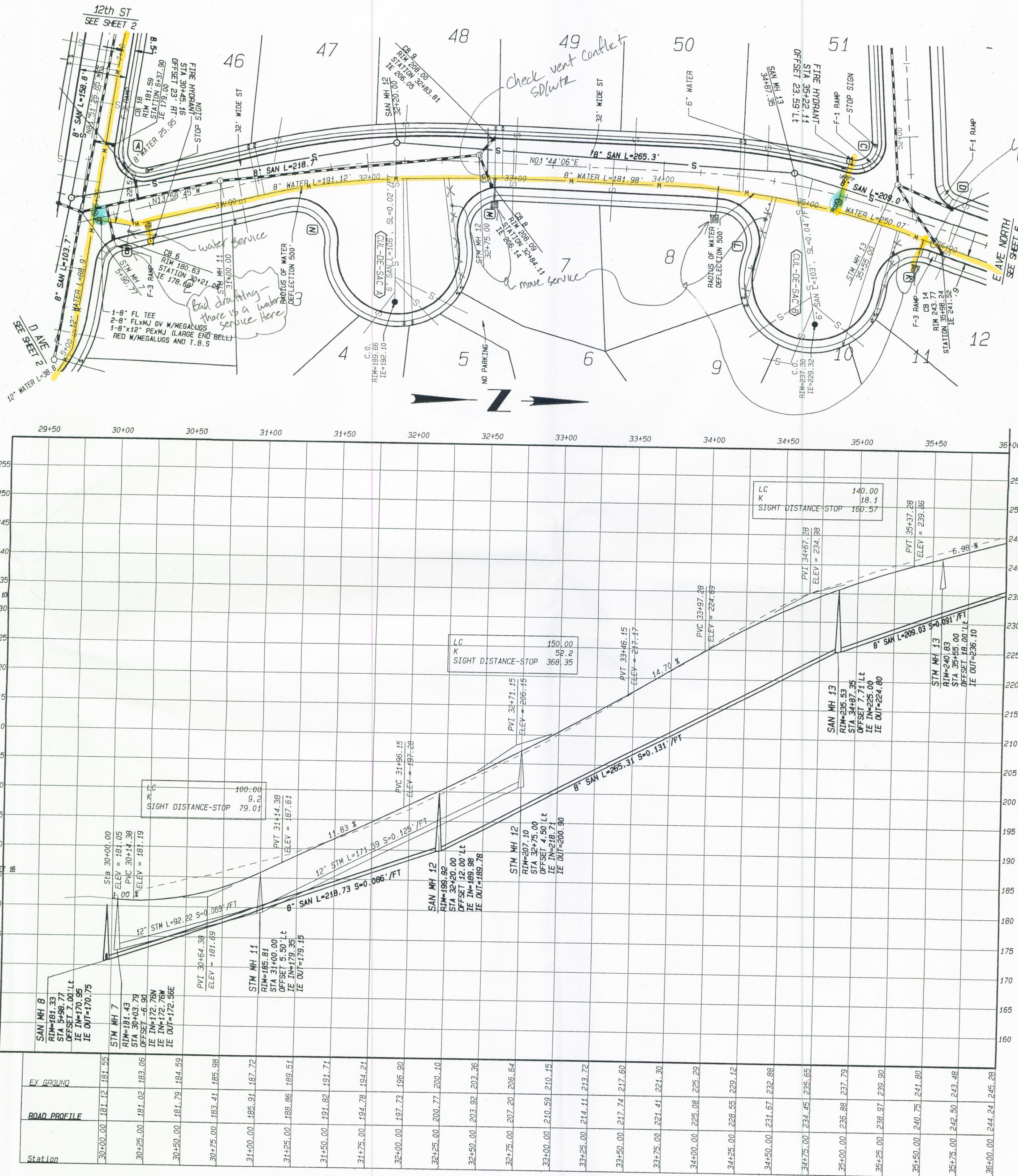
- STOP SIGN - INSTALL STOP SIGN PER MUTCD & STREET NAME SIGN
- SPEED LIMIT SIGN - INSTALL SPEED LIMIT, 25 MPH, SIGN
- BARRICADE - INSTALL STREET BARRICADE WITH EXTENSION SIGN (DETAIL SHEET 4)
- NO PARKING - INSTALL "NO PARKING" SIGN

## SANITARY SEWER CONSTRUCTION NOTES

- 8" SAN - INSTALL 8" PVC SANITARY SEWER LINE
- 4" SAN GRINDER LAT - INSTALL 4" PVC SANITARY SEWER LINE FOR GRINDER PUMPS PER DETAIL 8-GP
- SAN MH - INSTALL STANDARD SEWER MANHOLE-EXTERNALLY SEAL ALL MANHOLES
- INSTALL STANDARD SANITARY SEWER CLEANOUT
- INSTALL STANDARD 4" SANITARY SEWER LATERAL 5' MIN. FROM P.L.
- EX SAN MH - CORE NEW HOLE & CONNECT NEW SEWER MAIN TO EXISTING MANHOLE
- SEE COMPOSITE STREET AND UTILITY PLAN FOR SANITARY SEWER LATERAL TABLE

## WATER NOTES:

- 6" DIP WATER MAINS LEADING TO FIRE HYDRANTS LONGER THAN 1' STOCK OF PIPE SHALL HAVE ALL PIPE JOINTS MECHANICALLY RESTRAINED WITH "FIELD LOK" GASKETS OR OTHER CPU APPROVED RESTRAINTS.
- NO PIPE JOINTS WITHIN 10' OF ANY MEGA LUG RESTRAINTS



## CUL-DE-SAC POINT TABLE FOR 'E' STREET

CUL-DE-SAC POINT	STATION	OFFSET	FL ELEV.
A	32+64.76	61.77' Rt	204.54
B	32+51.26	90.97' Rt	202.08
C	32+14.86	102.05' Rt	199.74
D	31+80.81	87.12' Rt	197.31
E	31+71.84	56.70' Rt	194.92
CENTER	32+18.06	61.14' Rt	200.22

## CUL-DE-SAC POINT TABLE FOR 'E' STREET

CUL-DE-SAC POINT	STATION	OFFSET	FL ELEV.
A	35+57.72	80.83' Rt	238.97
B	35+29.08	98.88' Rt	237.36
C	34+90.81	93.44' Rt	235.58
D	34+71.17	66.74' Rt	233.94
CENTER	35+17.27	59.10' Rt	236.92

## CURB RETURN (K)

R = 29.00'	PC STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23
A = 102'59"18"	PT STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23
L = 52.13'	PC STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23
PC STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23	PT STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23
PT STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23	PC STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23

## CURB RETURN (L)

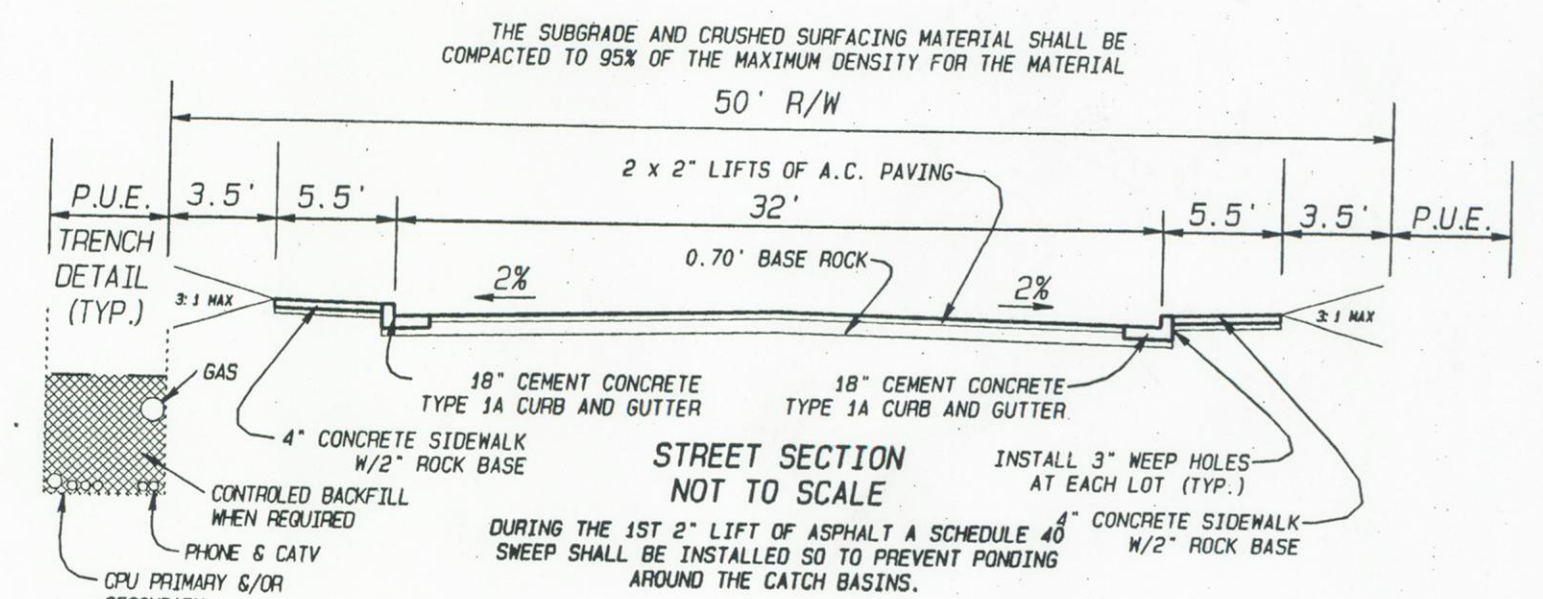
R = 29.00'	PC STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23
A = 102'59"18"	PT STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23
L = 52.13'	PC STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23
PC STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23	PT STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23
PT STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23	PC STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23

## CURB RETURN (M)

R = 29.00'	PC STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23
A = 102'59"18"	PT STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23
L = 52.13'	PC STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23
PC STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23	PT STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23
PT STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23	PC STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23

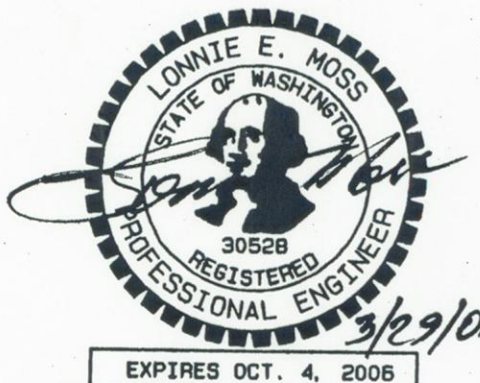
## CURB RETURN (N)

R = 29.00'	PC STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23
A = 102'59"18"	PT STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23
L = 52.13'	PC STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23
PC STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23	PT STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23
PT STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23	PC STA 34+40.61 OFF 16.00' RL E' STREET FL=230.23



## APPROVED FOR CONSTRUCTION

Signature: [Signature] Date: 3-31-06



DEVELOPER:  
SUN COUNTRY HOMES  
2401 W MAIN ST.  
BATTLE GROUND, WA 98604

HANNA'S FARM  
E AVENUE PLAN & PROFILE

DATE: 29 Mar 2006  
CONTACT PERSON: Samir E. Moss  
DRAWN BY: Samir E. Moss, AB  
CHECKED BY: Lennie E. Moss

PROJECT NUMBER: Samir E. Moss  
ENGR. OF RECORD: Lennie E. Moss  
REG. NO. 30528  
SYNTH. OF RECORD: Lennie E. Moss  
REG. NO. 30528

MOSS & ASSOCIATES, INC.  
717 NE 61ST STREET, SUITE 202  
VANCOUVER, WA 98665  
(360) 260-9400 FAX (360) 260-3509

SHEET  
5  
20



# E AVENUE PROFILE

## GENERAL CONSTRUCTION NOTES

- 32' WIDE ST - CONSTRUCT 32' WIDE ASPHALT PAVEMENT STREET (SEE TYPICAL SECTION)
- 32' SHED ST - CONSTRUCT 32' WIDE ASPHALT PAVEMENT SHED STREET (SEE TYPICAL SECTION)
- 5' SIDEWALK - CONSTRUCT 5' WIDE ATTACHED SIDEWALK W/ CURB & GUTTER (SEE TYPICAL STREET SECTION)
- HALF-WIDTH ST - CONSTRUCT HALF-WIDTH (20' MIN) W/ CURB & GUTTER (SEE TYPICAL STREET SECTION)
- F-1 RAMP - INSTALL TYPE F-1 RAMP (DETAIL SHEET 14)
- F-3 RAMP - INSTALL TYPE F-3 RAMP (DETAIL SHEET 14)

- ## SIGNING CONSTRUCTION NOTES
- STOP SIGN - INSTALL STOP SIGN PER MUTCD & STREET NAME SIGN
  - SPEED LIMIT SIGN - INSTALL SPEED LIMIT, 25 MPH SIGN
  - BARRICADE - INSTALL STREET BARRICADE WITH EXTENSION SIGN (DETAIL SHEET 4)
  - NO PARKING - INSTALL "NO PARKING" SIGN

## STORMWATER CONSTRUCTION NOTES

- 12" STM - INSTALL 12" STORM LINE
- 18" STM - INSTALL 18" STORM LINE
- STM MH - INSTALL STANDARD 48" STORM MANHOLE (DETAIL SHEET 14)
- CB - INSTALL STD CATCH BASIN-COMBINATION CURB/GRADE (DETAIL SHEET 14)
- FLOW SPREADERS - INSTALL FLOW SPREADER (DETAIL SHEET 14)
- SWALE - INSTALL 40" WIDE BIOFILTRATION SWALE WITH 3:1 SIDE SLOPES PER TYPICAL ON SHEET 10
- TRAP - INSTALL BIOSWALE SEDIMENTATION TRAP (DETAIL SHEET 9)
- FLAT TOP MH - INSTALL STANDARD FLAT TOP MANHOLE (DETAIL SHEET 14)

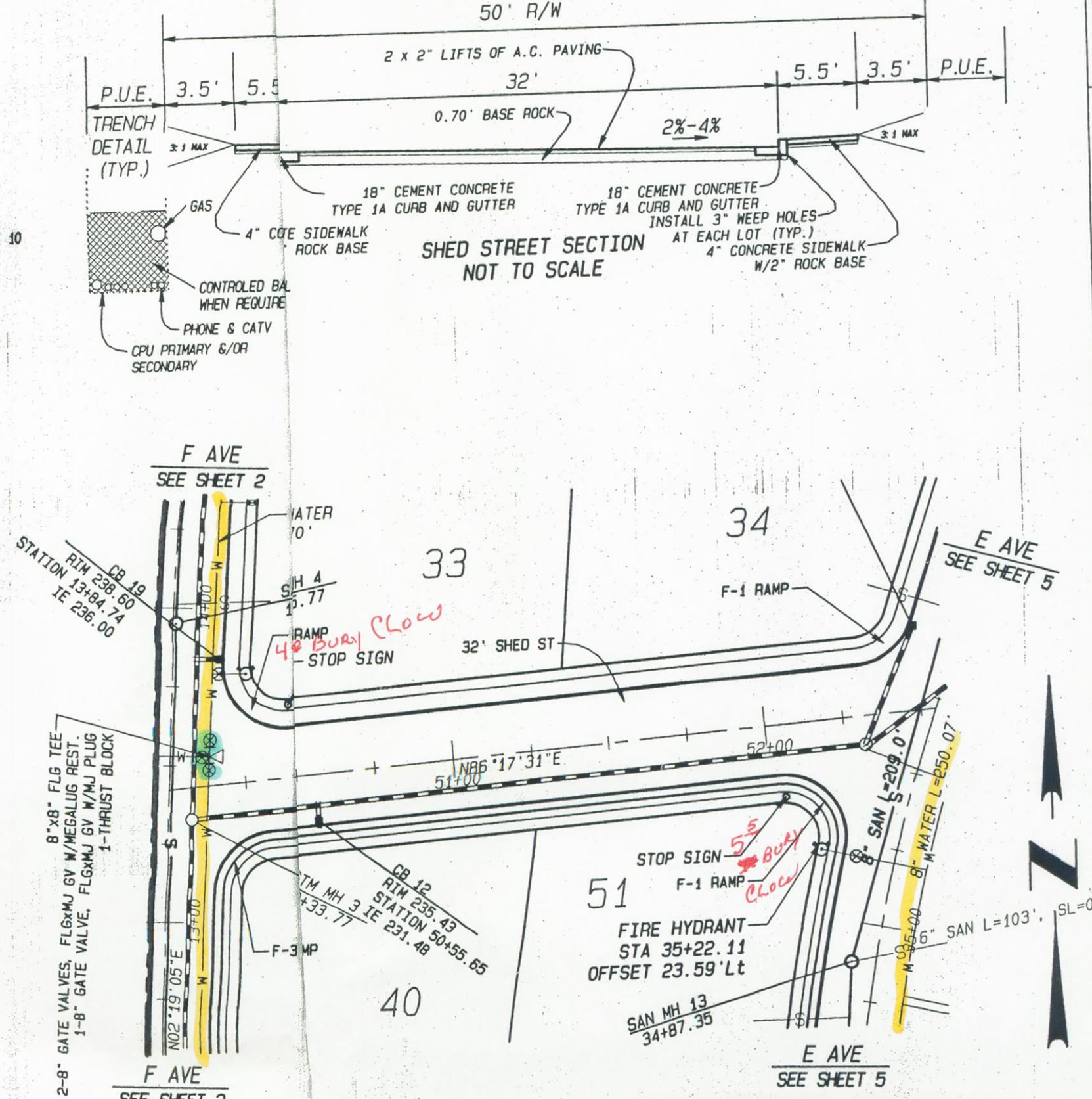
## WATER CONSTRUCTION NOTES

- 8" WATER - INSTALL 8" WATER MAIN (C-900 P.C. 150 PVC OR DI PC350 OR EQUIV.)
- 12" WATER - INSTALL 12" WATER MAIN (C-900 P.C. 150 PVC OR DI PC350 OR EQUIV.)
- B.O. - INSTALL STD BLOW-OFF ASSEMBLY W/ PRE-CAST T.B.
- 11.25' - INSTALL 8" 11.25' MJ BEND W/ MEGA LUG RESTRAINT & T.B.
- 22.5' - INSTALL 8" 22.5' MJ BEND W/ MEGA LUG RESTRAINT & T.B.
- 45' - INSTALL 8" 45' MJ BEND W/ MEGA LUG RESTRAINT & T.B.
- 90' - INSTALL 8" 90' MJ BEND W/ MEGA LUG RESTRAINT & T.B.
- INSTALL 1" STANDARD WATER SERVICE CONNECTION-TYPICAL (CONSTRUCTION NOTE NOT CALLED OUT FOR EVERY LOT)
- FIRE HYDRANT - INSTALL 8" MJ X 6" FLG TEE W/ MEGA LUG RESTRAINTS, 6" FLG X MJ VALVE W/ MEGA LUG RESTRAINTS & T.B. STD FIRE HYDRANT ASSEMBLY WITH T.B. (ALSO SEE WATER NOTE 1)

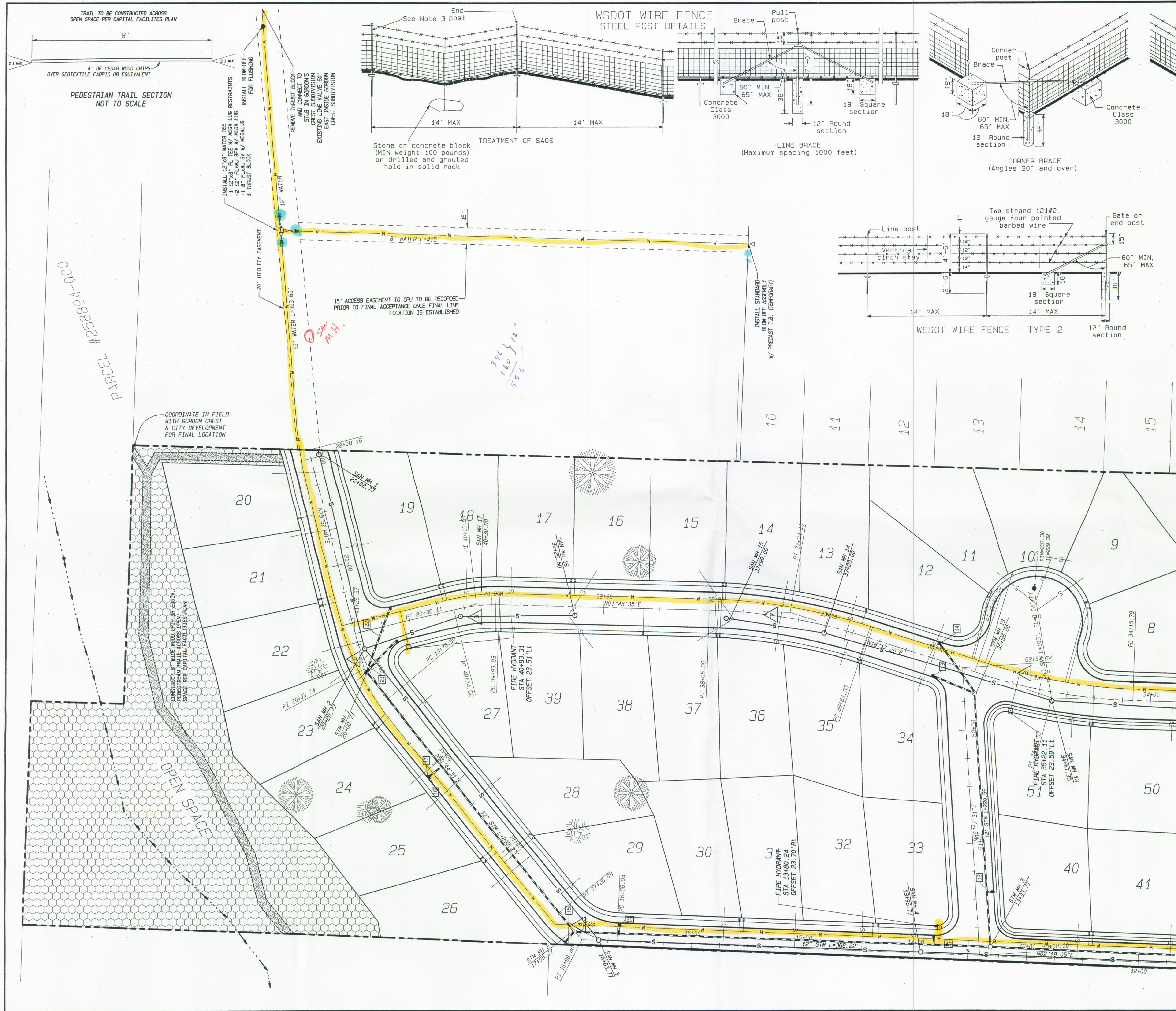
- ## WATER NOTES:
- 6" DIP WATER MAINS LEADING TO FIRE HYDRANTS LONGER THAN 1 STICK OF PIPE SHALL HAVE ALL PIPE JOINTS MECHANICALLY RESTRAINED WITH "FIELD LOK" GASKETS OR OTHER CPU APPROVED RESTRAINTS.
  - NO PIPE JOINTS WITHIN 10' OF ANY MEGA LUG RESTRAINTS

# 13th STREET PROFILE

DURING THE 1ST 2" LIFT OF ASPHALT A SCHEDULE 40 SNEEP SHALL BE INSTALLED SO TO PREVENT PONDING AROUND THE CATCH BASINS.  
THE SUBGRADE AND CRUSHED SURFACING MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY FOR THE MATERIAL







# CURVE TABLE

CURVE	RADIUS	ARC	DELTA
1	70.00ft	102.12ft	83°35'02"
2	300.00ft	64.60ft	12°20'19"
3	70.00ft	87.77ft	71°50'13"
4	70.00ft	59.16ft	48°25'26"
5	150.00ft	65.81ft	25°08'09"
6	150.00ft	41.49ft	15°50'55"
7	500.00ft	44.54ft	16°33'45"
8	500.00ft	44.46ft	16°33'44"
9	500.00ft	40.13ft	15°42'32"

CATCH BASIN LATERAL TABLE					
PIPE	SIZE & MAT.	LENGTH (FT)	MIN SLOPE	RIM	INV. OUT
1	10" D.I.P.	65'	0.01	170.35	168.00
2	10" D.I.P.	46'	0.01	170.35	168.00
3	10" D.I.P.	17'	0.005	175.56	172.72
4	10" D.I.P.	13'	0.005	175.56	172.71
5	10" D.I.P.	10'	0.005	181.13	179.18
6	10" D.I.P.	21.5'	0.005	180.63	178.68
7	10" D.I.P.	12'	0.005	181.35	179.74
8	10" D.I.P.	22'	0.005	208.09	206.14
9	10" D.I.P.	10'	0.005	208.00	206.05
10	10" D.I.P.	24'	0.005	188.10	185.14
11	10" D.I.P.	12'	0.005	209.86	207.91
12	10" D.I.P.	5.5'	0.005	235.43	231.48
13	10" D.I.P.	41'	0.005	243.55	241.60
14	10" D.I.P.	51.5'	0.005	243.77	241.52
15	10" D.I.P.	8'	0.005	235.98	234.03
16	10" D.I.P.	16'	0.005	229.71	227.71
17	10" D.I.P.	16'	0.005	229.66	227.71
18	10" D.I.P.	20'	0.005	181.59	179.00
19	10" D.I.P.	10'	0.005	238.60	236.00
20	10" D.I.P.	11'	0.005	239.85	238.00
21	10" D.I.P.	39'	0.005	234.90	233.00
22	10" D.I.P.	62'	0.005	235.25	233.50

APPROVED FOR CONSTRUCTION  
Clark Public Utilities - Water  
Signature: [Signature] Date: 5-31-06

