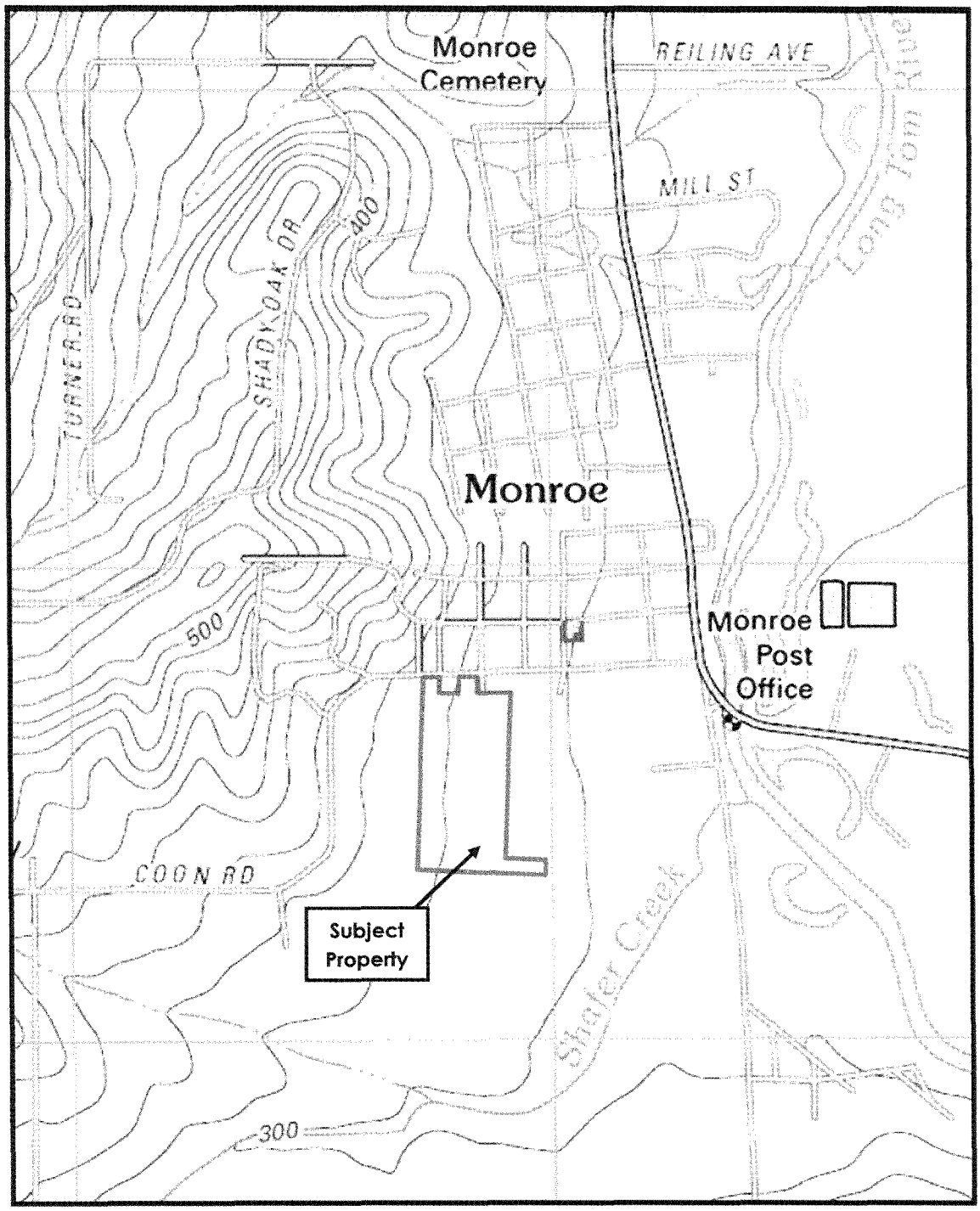
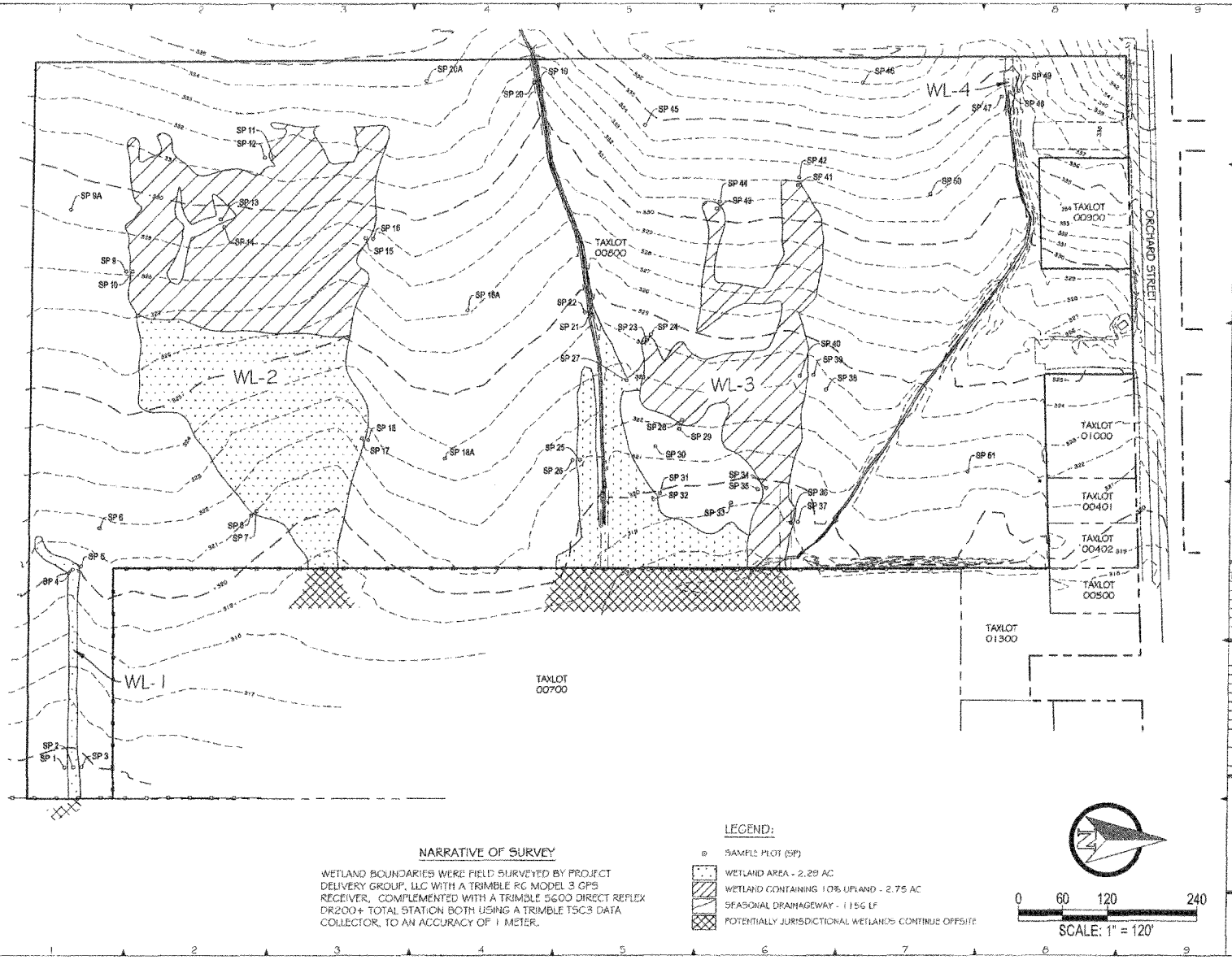


ZION
Natural Resources Consulting

FIGURE 2

USGS Topographic Map

N
W E
S



NARRATIVE OF SURVEY

WETLAND BOUNDARIES WERE FIELD SURVEYED BY PROJECT DELIVERY GROUP, LLC WITH A TRIMBLE RG MODEL 3 GPS RECEIVER, COMPLEMENTED WITH A TRIMBLE 5600 DIRECT REFLEX DR200+ TOTAL STATION BOTH USING A TRIMBLE TSC3 DATA COLLECTOR, TO AN ACCURACY OF 1 METER.

LEGEND:

- SAMPLE PLOT (SP)
- WETLAND AREA - 2.29 AC
- WETLAND CONTAINING 10% UPLAND - 2.75 AC
- SEASONAL DRAINAGEWAY - 1156 LF
- POTENTIALLY JURISDICTIONAL WETLANDS CONTINUE OFFSITE

0 60 120 240

SCALE: 1" = 120'

PREPARED BY:

PROJECT DELIVERY GROUP

Engineers | Land Surveyors | Project Managers

REGISTERED PROFESSIONAL LAND SURVEYOR

Brenda J. James

OREGON
MAY 15, 2012
BRENDA J. JAMES
77593

RENEWAL DATE 06/30/15

DATE SIGNED: June 25, 2014

KENT ALDRICH & JAMES MONAGHAN

SALEM, OR

REVISIONS

NO.	DESCRIPTION	DATE	BY

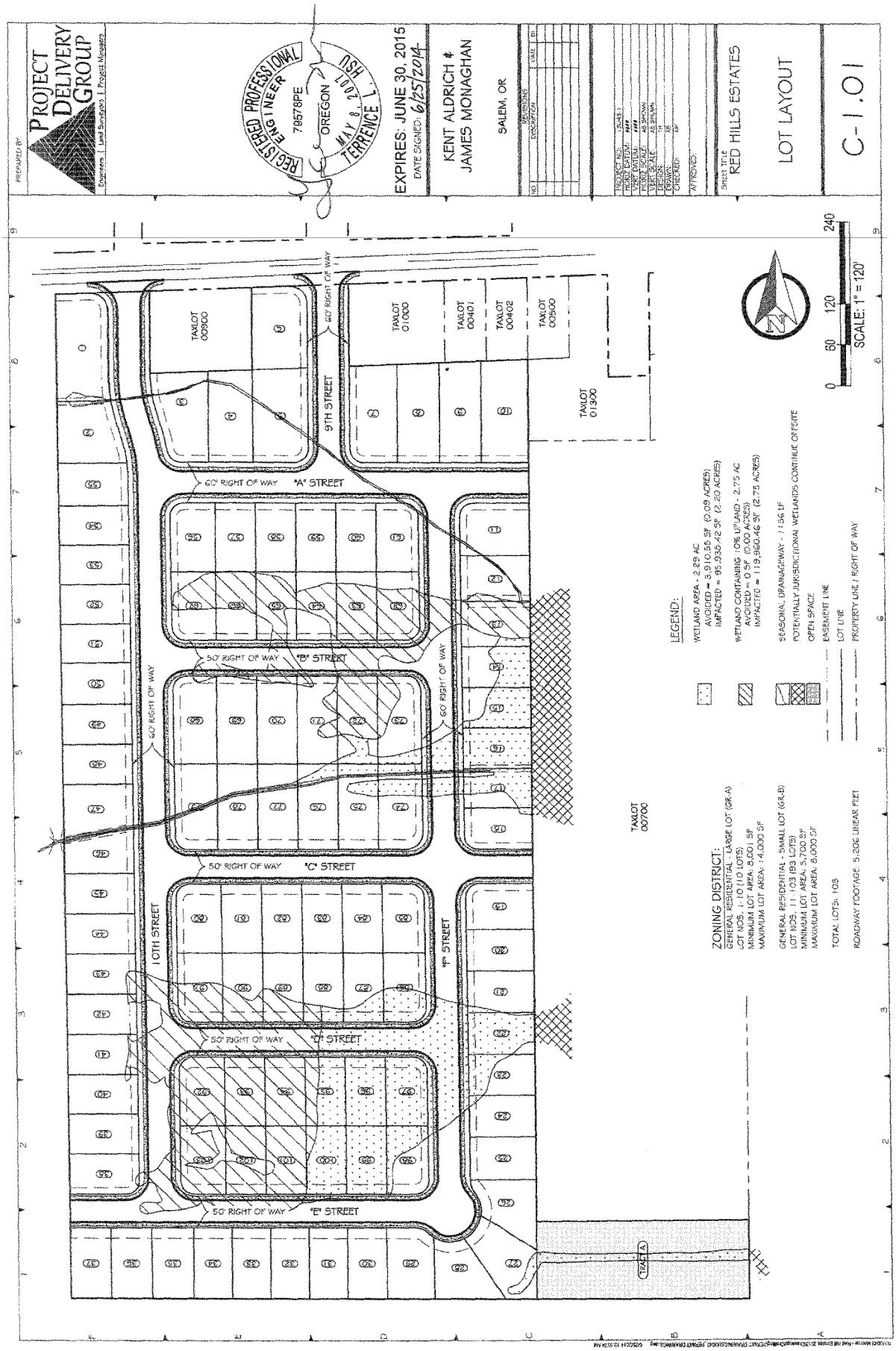
PROJECT NO.	13043-1
HORIZ DATUM:	####
VERT DATUM:	####
HORIZ SCALE:	AS SHOWN
VERT SCALE:	AS SHOWN
DESIGN:	TH
DRAWN:	SB
CHECKED:	KW
APPROVED:	

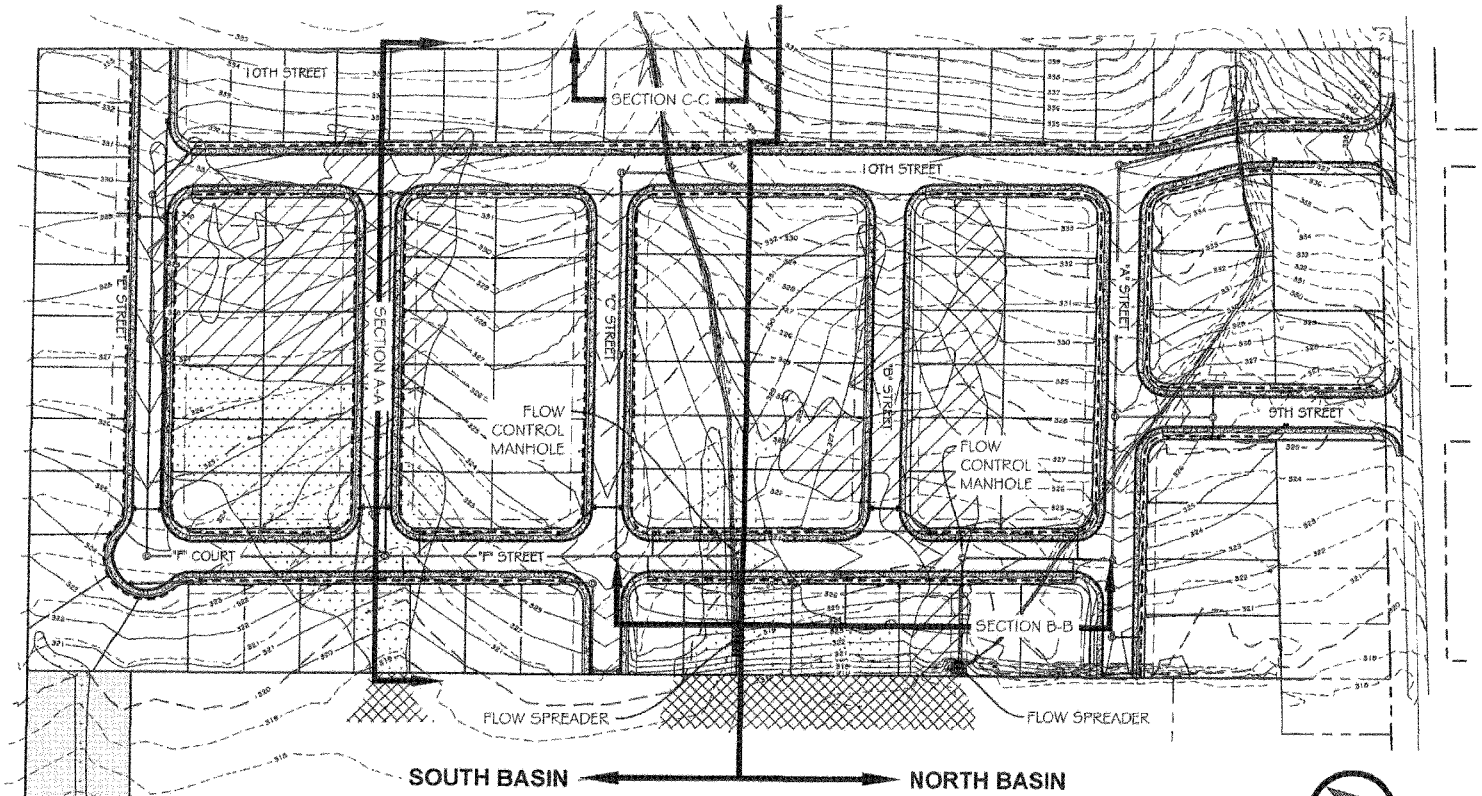
SHEET TITLE

RED HILLS ESTATES

WETLAND EXHIBIT

C-0.03


PROJECT DELIVERY GROUP
REGISTERED PROFESSIONAL ENGINEER
79578PE
OREGON
MAY 8, 2001
TERRENCE L. HSU
EXPIRES: JUNE 30, 2015
DATE SIGNED: 6/25/2014
KENT ALDRICH & JAMES MONAGHAN
SALEM, OR
RED HILLS ESTATES
LOT LAYOUT
C-1.01
SCALE: 1" = 120'
TAXLOT 00900
TAXLOT 01000
TAXLOT 00401
TAXLOT 00402
TAXLOT 00500
TAXLOT 01300
TAXLOT 00700
9TH STREET
10TH STREET
"A" STREET
"B" STREET
"C" STREET
"D" STREET
"E" STREET
"F" STREET
60' RIGHT OF WAY
50' RIGHT OF WAY
LEGEND:
WETLAND AREA - 2.29 AC
AVOIDED = 5,910.55 SF (0.09 ACRES)
IMPACTED = 95,938.42 SF (2.20 ACRES)
WETLAND CONTAINING 10% UPLAND - 2.75 AC
AVOIDED = 0 SF (0.00 ACRES)
IMPACTED = 119,960.46 SF (2.75 ACRES)
SEASONAL DRAINAGEWAY - 1156 LF
POTENTIALLY JURISDICTIONAL WETLANDS CONTINUE OFFSITE
OPEN SPACE
EASEMENT LINE
LOT LINE
PROPERTY LINE / RIGHT OF WAY
ZONING DISTRICT:
GENERAL RESIDENTIAL - LARGE LOT (GR-A)
LOT NOS. 1-10 (10 LOTS)
MINIMUM LOT AREA: 8,001 SF
MAXIMUM LOT AREA: 14,000 SF
GENERAL RESIDENTIAL - SMALL LOT (GR-B)
LOT NOS. 11-103 (93 LOTS)
MINIMUM LOT AREA: 5,700 SF
MAXIMUM LOT AREA: 8,000 SF
TOTAL LOTS: 103
ROADWAY FOOTAGE: 5,206 LINEAR FEET
TRACT A



LEGEND:

- WETLAND AREA - 2.29 AC
  AVOIDED = 3,910.55 SF (0.09 ACRES)
  IMPACTED = 95,938.42 SF (2.20 ACRES)
- WETLAND CONTAINING 10% UPLAND - 2.75 AC
  AVOIDED = 0 SF (0.00 ACRES)
  IMPACTED = 119,960.46 SF (2.75 ACRES)
- SEASONAL DRAINAGEWAY - 1156 LF
- POTENTIALLY JURISDICTIONAL WETLANDS CONTINUE OFFSITE
- OPEN SPACE
- STORM DRAIN MANHOLE
- FLOW CONTROL MANHOLE
- CATCH BASIN
- STORM DRAIN PIPE
- RAIN GARDEN

NOTES:

1. FOR TYPICAL SECTIONS, REFERENCE DRAWING C-3.01.
2. FOR SITE SECTIONS, REFERENCE DRAWING C-3.03.

CUT / FILL VOLUMES

PROJECT AREA	CUT (CU. YD.)	FILL (CU. YD.)	NET VOLUME (CU. YD.)
OVERALL SITE	7,046.20	41,529.70	34,483.50 (FILL)
WETLAND AREA WL-1	0.00	4.80	4.80 (FILL)
WETLAND AREA WL-2	2,396.90	347.30	2,049.60 (CUT)
WETLAND AREA WL-3	33.50	11,017.50	10,984.00 (FILL)
WETLAND AREA WL-4	0.70	6.60	5.90 (FILL)

0 60 120 240
SCALE: 1" = 120'

PREPARED BY:
PROJECT DELIVERY GROUP
Engineers | Land Surveyors | Project Managers

REGISTERED PROFESSIONAL ENGINEER 79578PE OREGON MAY 8, 2001 TERRENCE L. HSU

EXPIRES: JUNE 30, 2015
DATE SIGNED: 6/25/2014

KENT ALDRICH & JAMES MONAGHAN

SALEM, OR

REVISIONS

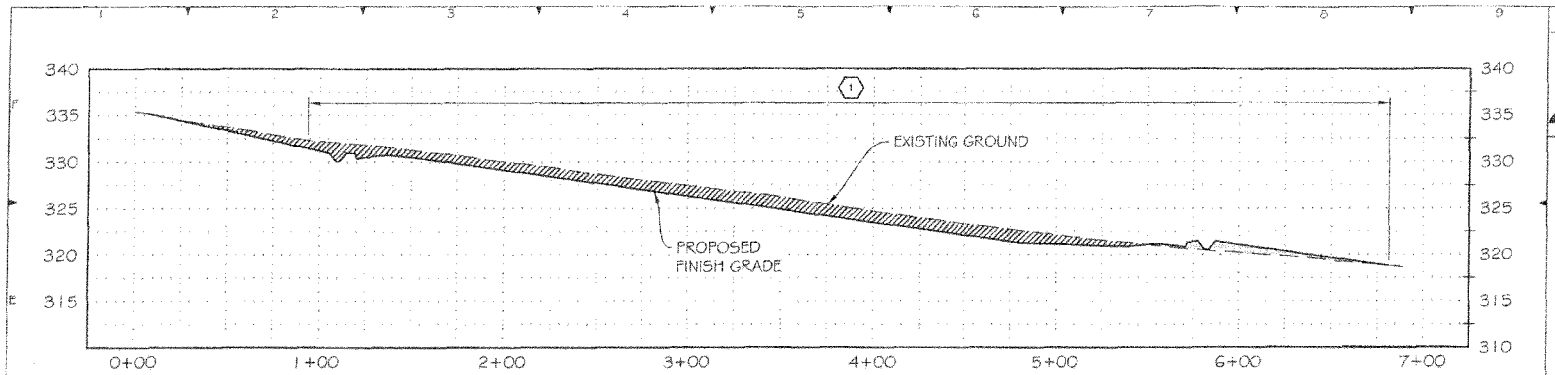
NO.	DESCRIPTION	DATE	BY

PROJECT NO: 13043-1
HORIZ DATUM: ####
VERT DATUM: ####
HORIZ SCALE: AS SHOWN
VERT SCALE: AS SHOWN
DESIGN: TH
DRAWN: RS
CHECKED: KW
APPROVED:

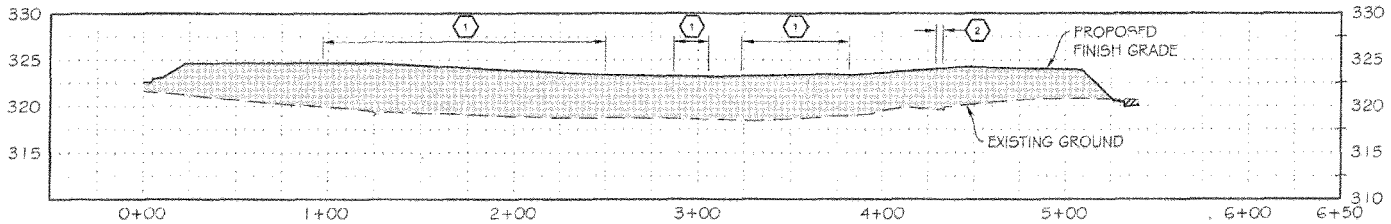
SHEET TITLE
RED HILLS ESTATES

GRADING & DRAINAGE PLAN

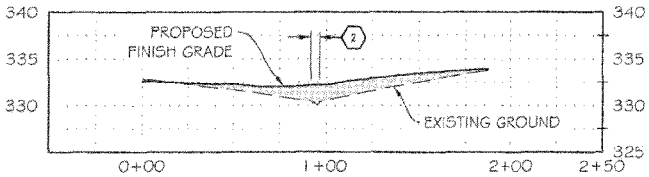
C-1.03



SECTION A-A



SECTION B-B



SECTION C-C

LEGEND:

1 EXISTING WETLAND EXTENTS

2 EXISTING SEASONAL DRAINAGEWAY

LEGEND:

FILL AREA

CUT AREA

PREPARED BY:

PROJECT DELIVERY GROUP

Engineers | Land Surveyors | Project Managers

REGISTERED PROFESSIONAL ENGINEER
79578PE
OREGON
MAY 8, 2001
TERRENCE L. HSU

EXPIRES: JUNE 30, 2015

DATE SIGNED: 6/30/2014

KENT ALDRICH &
JAMES MONAGHAN

SALEM, OR

REVISIONS

NO.	DESCRIPTION	DATE	BY

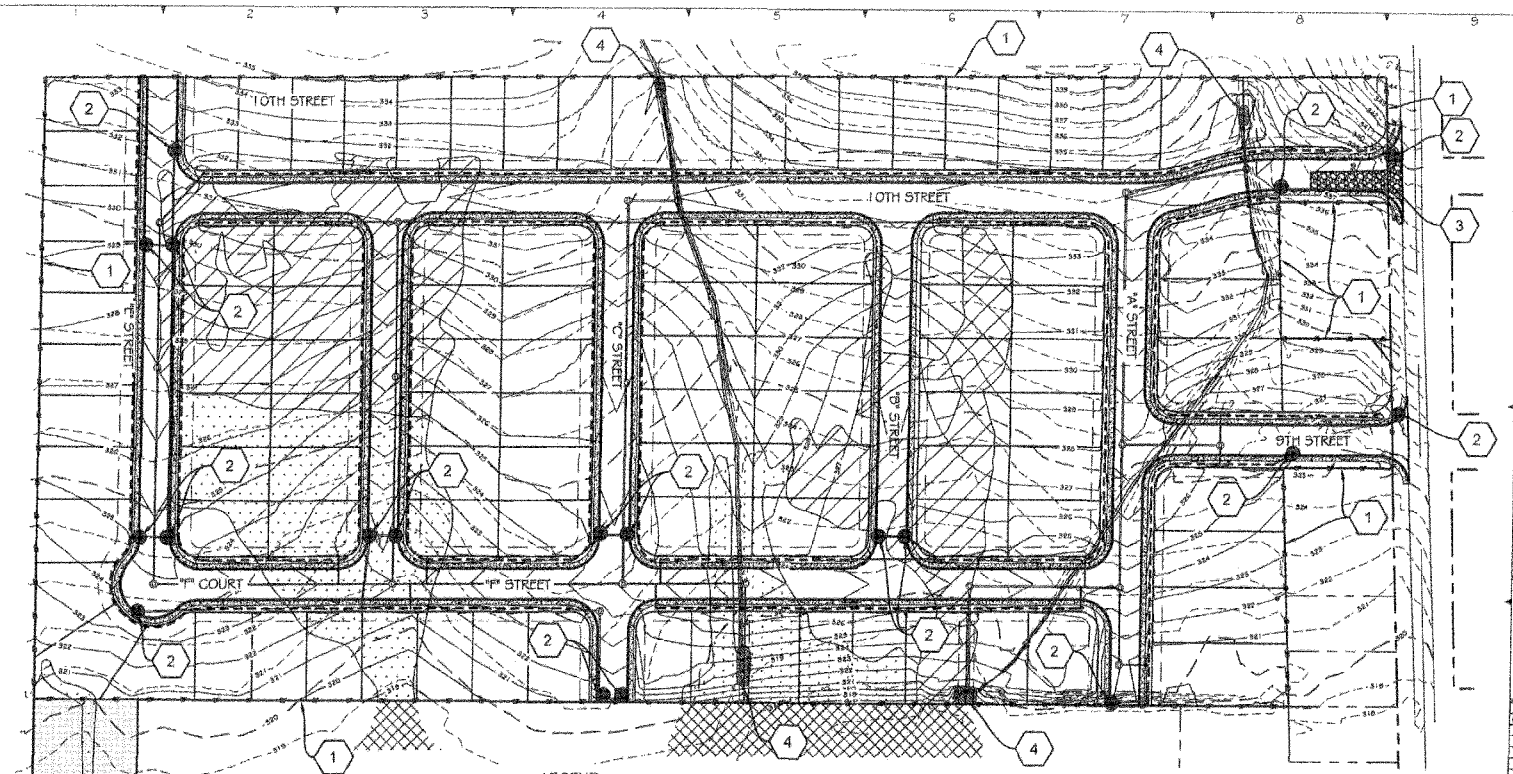
PROJECT NO:	13048-1
HORIZ DATUM:	####
VERT DATUM:	####
HORIZ SCALE:	AS SHOWN
VERT SCALE:	AS SHOWN
DESIGN:	TH
DRAWN:	RD
CHECKED:	KW
APPROVED:	

SHEET TITLE

RED HILLS ESTATES

SITE SECTIONS

C-3.03



LEGEND:

- WETLAND AREA - 2.29 AC
  AVOIDED = 3,910.55 SF (0.09 ACRES)
  IMPACTED = 95,938.42 SF (2.20 ACRES)
- WETLAND CONTAINING 10% UPLAND - 2.75 AC
  AVOIDED = 0 SF (0.00 ACRES)
  IMPACTED = 119,900.40 SF (2.75 ACRES)
- SEASONAL DRAINAGEWAY - 1156 LF
- POTENTIALLY JURISDICTIONAL WETLANDS CONTINUE OFFSITE
- OPEN SPACE
- STRAW MULCH
- 3"-6" OPEN GRADED ANGULAR AGGREGATE
- STORM DRAIN MANHOLE
- FLOW CONTROL MANHOLE
- CATCH BASIN
- STORM DRAIN PIPE
- RAIN GARDEN
- SILT FENCE
- INLET PROTECTION

NOTES:

1. EROSION CONTROL MEASURES SHOWN ARE MINIMUM REQUIRED. CONTRACTOR SHALL INSTALL ADDITIONAL MEASURES AS NEEDED.
2. IT IS THE INTENT OF THESE PLANS TO ENSURE SEDIMENT LADEN WATER DOES NOT LEAVE THE PROJECT SITE. CONTRACTOR SHALL USE ALL AVAILABLE MEANS TO ACHIEVE THIS RESULT.
3. EROSION AND SEDIMENT CONTROL FEATURES SHALL BE INSPECTED DAILY AND STEPS TAKEN TO ENSURE THEIR CONTINUED INTENDED FUNCTIONALITY.
4. EROSION CONTROL MEASURES SHALL REMAIN IN PLACE FOR THE DURATION OF CONSTRUCTION.

KEYNOTES - EROSION CONTROL

1. INSTALL SEDIMENT FENCE
2. INSTALL INLET PROTECTION
3. CONSTRUCTION ENTRANCE (20' WIDE x 100' LONG)
4. PLACE STRAW MULCH

0 60 120 240
SCALE: 1" = 120'

PREPARED BY:
PROJECT DELIVERY GROUP
Engineers | Land Surveyors | Project Managers

REGISTERED PROFESSIONAL ENGINEER 79578PE OREGON MAY 8, 2007 TERRENCE L. HSU

EXPIRES: JUNE 30, 2015
DATE SIGNED: 6/25/2014

KENT ALDRICH & JAMES MONAGHAN

SALEM, OR

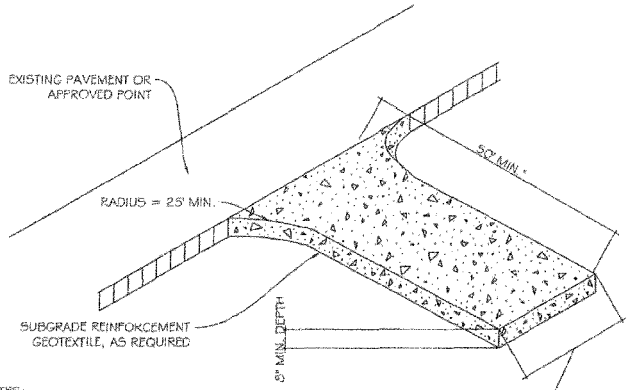
REVISIONS

NO.	DESCRIPTION	DATE	BY

PROJECT NO:	(5045.)
HORIZ DATUM:	####
VERT DATUM:	####
HORIZ SCALE:	AS SHOWN
VERT SCALE:	AS SHOWN
DESIGN:	TH
DRAWN:	RB
CHECKED:	RW
APPROVED:	

SHEET TITLE
RED HILLS ESTATES
TEMP. EROSION & SEDIMENTATION CONTROL

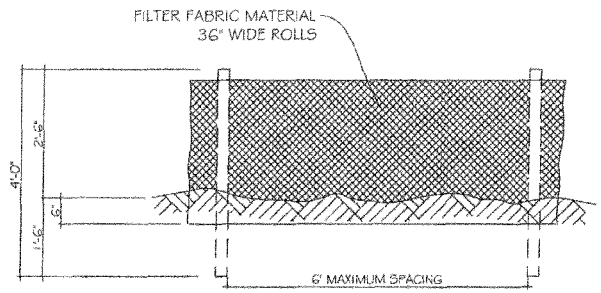
C-1.11



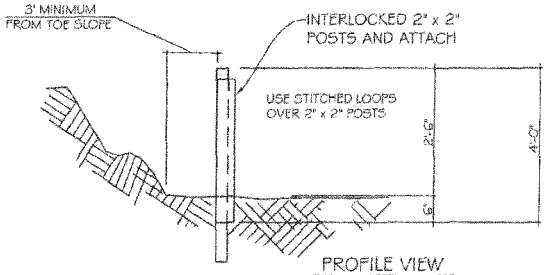
NOTES;
DIMENSIONS SINGLE FAMILY
20' LONG BY 20' WIDE 6" DEEP OF 3/4" MINUS CLEAN ROCK

COMMERCIAL
50' LONG BY 20' WIDE 3-6" CLEAN ROCK, GOVERNING AUTHORITY MAY REQUIRE GEOTEXTILE FABRIC TO PREVENT SUB SOIL PUMPING

1 CONSTRUCTION ENTRANCE
SCALE: NTS

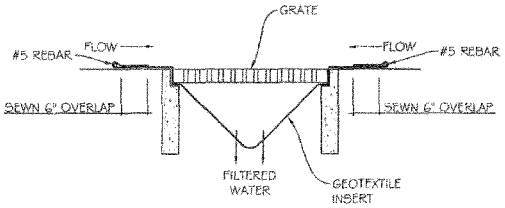


FRONT VIEW

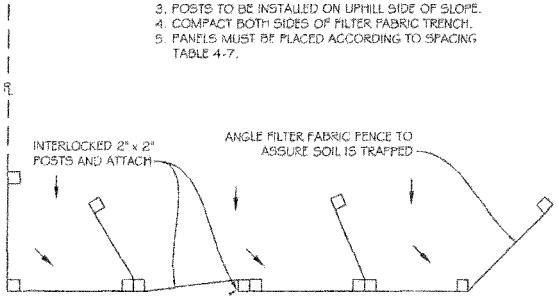


PROFILE VIEW

NOTES:
1. BURY BOTTOM OF FILTER FABRIC 6" VERTICALLY BELOW FINISHED GRADE.
2. 2" X 2" FIR, PINE OR STEEL FENCE POSTS.
3. POSTS TO BE INSTALLED ON UPHILL SIDE OF SLOPE.
4. COMPACT BOTH SIDES OF FILTER FABRIC TRENCH.
5. PANELS MUST BE PLACED ACCORDING TO SPACING TABLE 4-7.



PREFABRICATED FILTER INSERT
3 INLET PROTECTION
SCALE: NTS



PLAN VIEW

2 SILT FENCE
SCALE: NTS

PREPARED BY:
PROJECT DELIVERY GROUP
Engineers | Land Surveyors | Project Managers

REGISTERED PROFESSIONAL ENGINEER
79578PE
OREGON
MAY 8, 2007
TERRENCE L. HSU

EXPIRES: JUNE 30, 2015
DATE SIGNED: 6/25/2014

KENT ALDRICH & JAMES MONAGHAN

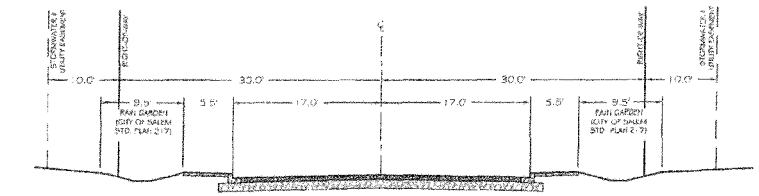
SALEM, OR

REVISIONS			
NO.	DESCRIPTION	DATE	BY

PROJECT NO:	13043.1
HORIZ. DATUM:	####
VERT. DATUM:	####
HORIZ. SCALE:	AS SHOWN
VERT. SCALE:	AS SHOWN
DESIGN:	TH
DRAWN:	RG
CHECKED:	KW
APPROVED:	

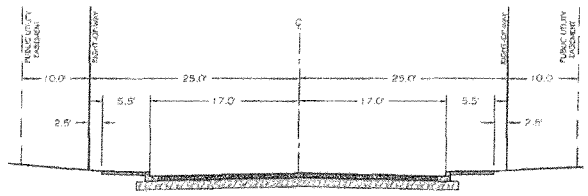
SHEET TITLE
RED HILLS ESTATES
EROSION CONTROL DETAILS

C-1.13



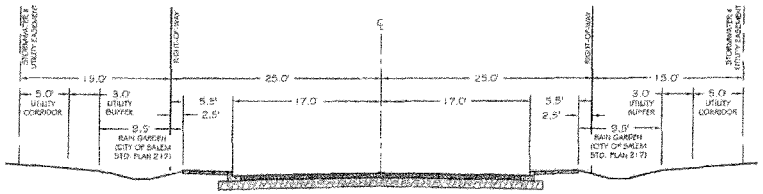
TYPICAL SECTION #1 (60' RIGHT-OF-WAY)

10TH STREET
9TH STREET
A STREET
F STREET



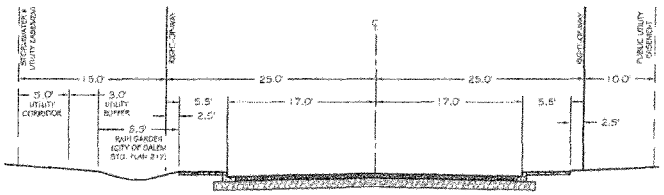
TYPICAL SECTION #2 (50' RIGHT-OF-WAY - NO RAIN GARDENS)

B STREET
C STREET (EAST)



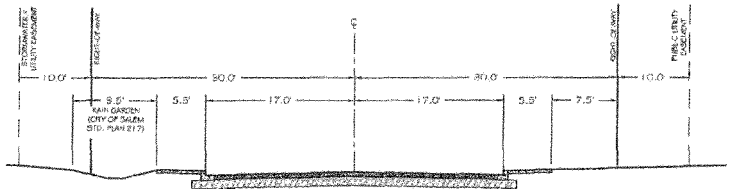
TYPICAL SECTION #3 (50' RIGHT-OF-WAY - WITH RAIN GARDENS)

C STREET
D STREET
E STREET



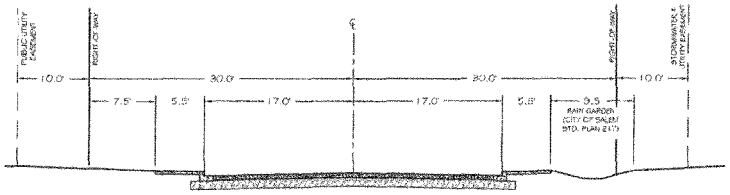
TYPICAL SECTION #4 (50' RIGHT-OF-WAY - LEFT RAIN GARDEN)

F STREET (WEST)



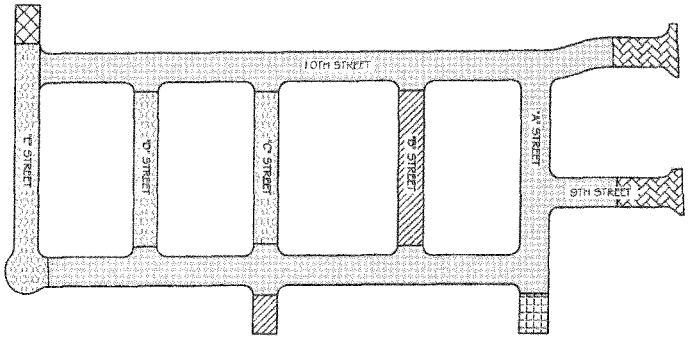
TYPICAL SECTION #5 (60' RIGHT-OF-WAY - LEFT RAIN GARDEN)

10TH STREET (NORTH)
9TH STREET (SOUTH)



TYPICAL SECTION #6 (60' RIGHT-OF-WAY - RIGHT RAIN GARDEN)

A STREET (EAST)



TYPICAL SECTION KEYMAP

SITE

TYPICAL SECTION #1
TYPICAL SECTION #2
TYPICAL SECTION #3
TYPICAL SECTION #4
TYPICAL SECTION #5
TYPICAL SECTION #6

PREPARED BY:

PROJECT DELIVERY GROUP

Engineers | Land Surveyors | Project Managers

REGISTERED PROFESSIONAL ENGINEER
79578PE
OREGON
MAY 8, 2001
TERRENCE L. HSU

EXPIRES: JUNE 30, 2015
DATE SIGNED: 6/25/2014

KENT ALDRICH & JAMES MONAGHAN

SALEM, OR

REVISIONS

NO	DESCRIPTION	DATE	BY

PROJECT NO:	J.0043-1
HORIZ DATUM:	####
VERT DATUM:	####
HORIZ SCALE:	AS SHOWN
VERT SCALE:	AS SHOWN
DESIGN:	TH
DRAWN:	RB
CHECKED:	KW
APPROVED:	

SHEET TITLE
RED HILLS ESTATES

TYPICAL SECTIONS

C-3.01