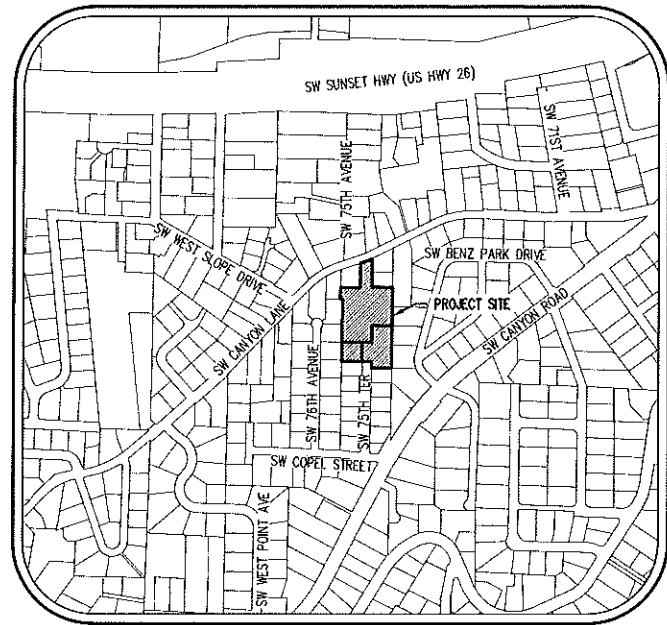
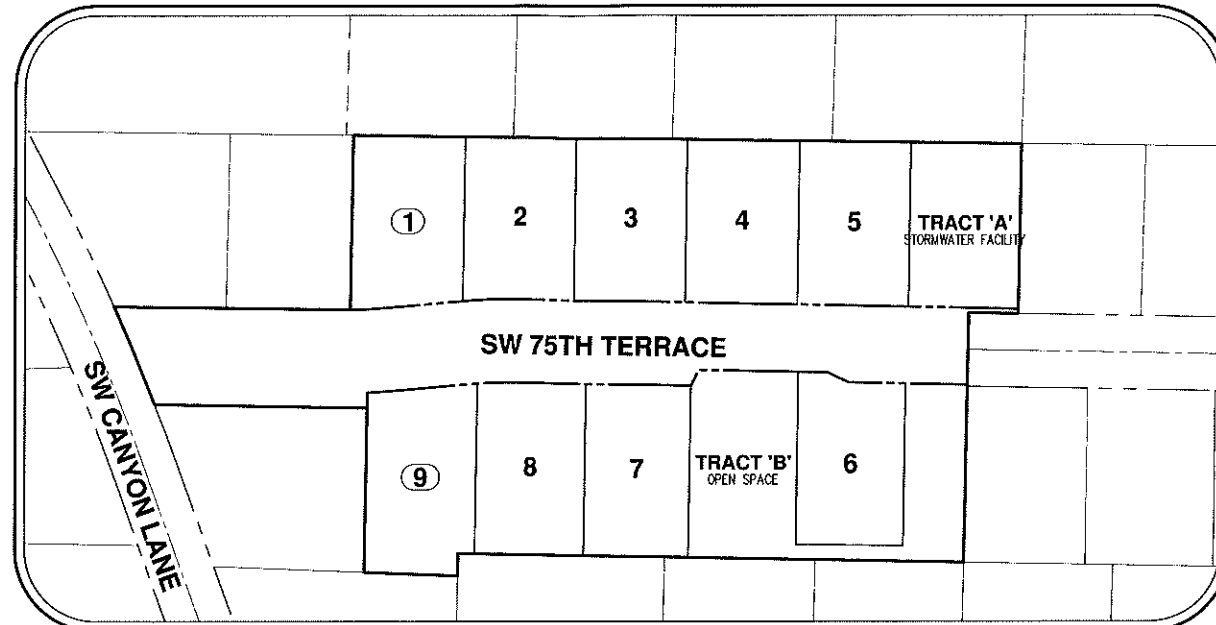


# SW 75TH TERRACE SUBDIVISION

## LAND DIVISION APPLICATION



VICINITY MAP  
1"=500'



SITE MAP  
1"=60'

### APPLICANT

MIKE BIGGI  
9790 SW NIMBUS AVENUE  
BEAVERTON, OR 97008

### CIVIL ENGINEERING/SURVEYING/ PLANNING/LANDSCAPE ARCHITECTURE FIRM

AKS ENGINEERING & FORESTRY, LLC.  
CONTACT: MIMI DOUKAS, AICP, RLA  
12965 SW HERMAN ROAD, SUITE 100  
TUALATIN, OR 97062  
PH: 503-563-6151  
FAX: 503-563-6152

### LEGEND

|                          | EXISTING | PROPOSED |                             | EXISTING | PROPOSED |
|--------------------------|----------|----------|-----------------------------|----------|----------|
| DECIDUOUS TREE           |          |          | STORM SEWER CLEAN OUT       |          |          |
| CONIFEROUS TREE          |          |          | STORM SEWER CATCH BASIN     |          |          |
| FIRE HYDRANT             |          |          | STORM SEWER AREA DRAIN      |          |          |
| WATER BLOWOFF            |          |          | STORM SEWER MANHOLE         |          |          |
| WATER METER              |          |          | GAS METER                   |          |          |
| WATER VALVE              |          |          | GAS VALVE                   |          |          |
| DOUBLE CHECK VALVE       |          |          | GUY WIRE ANCHOR             |          |          |
| AIR RELEASE VALVE        |          |          | POWER 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          |          |          |
| GRAVEL EDGE         |          |          |
| POWER LINE          |          |          |
| OVERHEAD WIRE       |          |          |
| COMMUNICATIONS LINE |          |          |
| FIBER OPTIC LINE    |          |          |
| GAS LINE            |          |          |
| STORM SEWER LINE    |          |          |
| SANITARY SEWER LINE |          |          |
| WATER LINE          |          |          |

## SHEET INDEX

- P01 - COVER SHEET WITH VICINITY AND SITE MAPS
- P02 - EXISTING CONDITIONS PLAN
- P03 - PRELIMINARY SUBDIVISION PLAT
- P04 - PRELIMINARY SETBACK PLAN
- P05 - PRELIMINARY TREE PRESERVATION AND REMOVAL PLAN
- P06 - PRELIMINARY DETAILED TREE INVENTORY TABLE
- P07 - PRELIMINARY DETAILED TREE INVENTORY TABLE
- P08 - PRELIMINARY GRADING AND EROSION & SEDIMENT CONTROL PLAN
- P09 - PRELIMINARY STREET PLAN
- P10 - PRELIMINARY STREET PROFILE
- P11 - PRELIMINARY STREET CROSS SECTIONS
- P12 - PRELIMINARY COMPOSITE UTILITY PLAN
- P13 - PRELIMINARY LANDSCAPE PLAN
- P14 - PRELIMINARY STORMWATER FACILITY PLANTING PLAN
- P15 - PRELIMINARY CIRCULATION PLAN

### PROJECT LOCATION:

LOCATED WEST OF SW CANYON ROAD AT COPEL STREET INTERSECTION, NORTH OF COPEL STREET AS AN EXTENSION OF SW 75TH TERRACE CONNECTING TO THE EXISTING SW CANYON ROAD.

### PROPERTY DESCRIPTION:

TAX LOTS 4300, 4500, 4703 (WASHINGTON COUNTY ASSESSOR'S MAP 1S 1 12AB) LOCATED IN THE NW 1/4 NE 1/4 OF SECTION 12, TOWNSHIP 1 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON

### EXISTING LAND USE:

SINGLE FAMILY RESIDENCES

### PROJECT PURPOSE:

SINGLE FAMILY RESIDENTIAL LAND DIVISION, 9 LOT SUBDIVISION IN THE R-7 DISTRICT

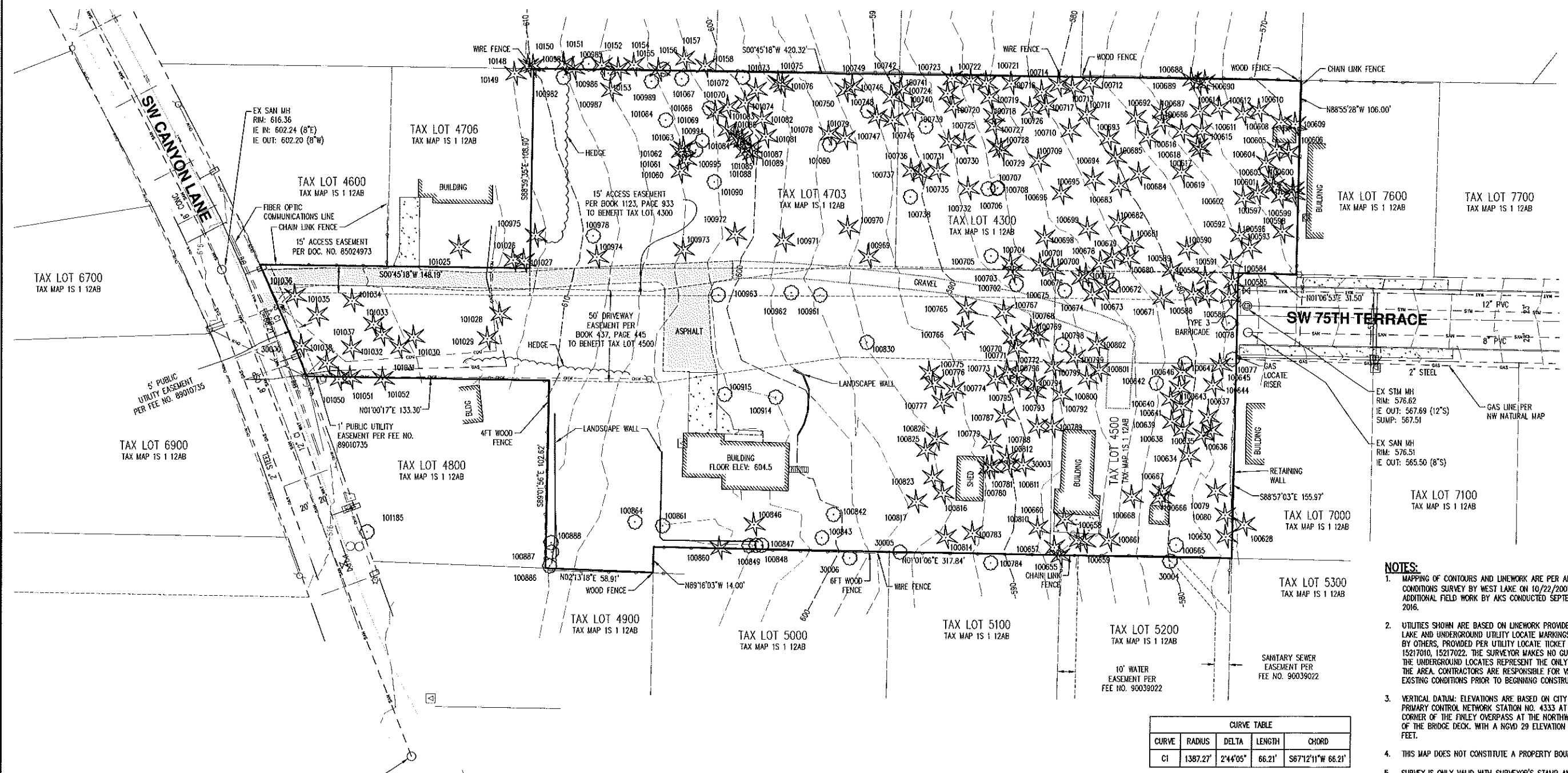
### DATUM:

VERTICAL DATUM: ELEVATIONS ARE BASED ON CITY OF BEAVERTON PRIMARY CONTROL NETWORK STATION NO. 4333 AT THE NW CORNER OF THE FINLEY OVERPASS AT THE NORTHWEST CORNER OF THE BRIDGE DECK. WITH A NGVD 29 ELEVATION OF 697.672 FEET.

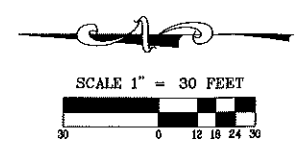
**SW 75TH TERRACE  
 SUBDIVISION**

**BEAVERTON OREGON**  
 WASHINGTON COUNTY TAX MAP IS 1 12AB  
 TAX LOTS 4300, 4500, AND 4703

**EXISTING CONDITIONS  
 PLAN**



| CURVE TABLE |          |          |        |                    |
|-------------|----------|----------|--------|--------------------|
| CURVE       | RADIUS   | DELTA    | LENGTH | CHORD              |
| C1          | 1387.27' | 2°44'05" | 66.21' | S67°12'11"W 66.21' |



- NOTES:**
- MAPPING OF CONTOURS AND LINWORK ARE PER AN EXISTING CONDITIONS SURVEY BY WEST LAKE ON 10/22/2007 AND ADDITIONAL FIELD WORK BY AKS CONDUCTED SEPTEMBER 16-19, 2016.
  - UTILITIES SHOWN ARE BASED ON LINWORK PROVIDED BY WEST LAKE AND UNDERGROUND UTILITY LOCATE MARKINGS AS PROVIDED BY OTHERS, PROVIDED PER UTILITY LOCATE TICKET NUMBER 15217010, 15217022. 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.
  - VERTICAL DATUM: ELEVATIONS ARE BASED ON CITY OF BEAVERTON PRIMARY CONTROL NETWORK STATION NO. 4333 AT THE NW CORNER OF THE FINLEY OVERPASS AT THE NORTHWEST CORNER OF THE BRIDGE DECK. WITH A NGVD 29 ELEVATION OF 697.672 FEET.
  - THIS MAP DOES NOT CONSTITUTE A PROPERTY BOUNDARY SURVEY.
  - SURVEY IS ONLY VALID WITH SURVEYOR'S STAMP AND SIGNATURE.
  - BUILDING FOOTPRINTS ARE MEASURED TO SOING UNLESS NOTED OTHERWISE. CONTACT SURVEYOR WITH QUESTIONS REGARDING BUILDING TIES.
  - CONTOUR INTERVAL IS 1 FOOT.
  - TREES WITH DIAMETER OF 6" AND GREATER ARE SHOWN. TREE DIAMETERS WERE MEASURED UTILIZING A DIAMETER TAPE AT BREAST HEIGHT.
  - TITLE REPORT NO. 7019-2529180 LISTS AN ADDITIONAL EASEMENT FROM BOOK 127, PAGE 502, WASHINGTON COUNTY DEED RECORDS, IN FAVOR OF PACIFIC TELEPHONE AND TELEGRAPH CO. AFFECTING SUBJECT PROPERTY. LOCATION IS UNDETERMINED.
  - HORIZONTAL DATUM: A LOCAL DATUM PLANE SCALED FROM OREGON STATE PLANE NORTH 3601 NAD83(1991) BY HOLDING A PROJECT MEAN GROUND COMBINED SCALE FACTOR OF 1.0001344517 AT A CALCULATED CENTRAL PROJECT POINT WITH INTERNATIONAL FOOT GRID VALUES OF (N 677549.581, E 7624439.778). THE CONVERGENCE ANGLE BETWEEN GRID NORTH AND GEODETIC NORTH AT THE CALCULATED CENTRAL POINT IS -1'35"53". THE STATE PLANE COORDINATES WERE ESTABLISHED BY GPS OBSERVATIONS AND HOLDING THE NAD83(1991) CONTROL VALUES PER CITY OF BEAVERTON PRIMARY CONTROL NETWORK GC-42, STATIONS 4333 AND NELSON.

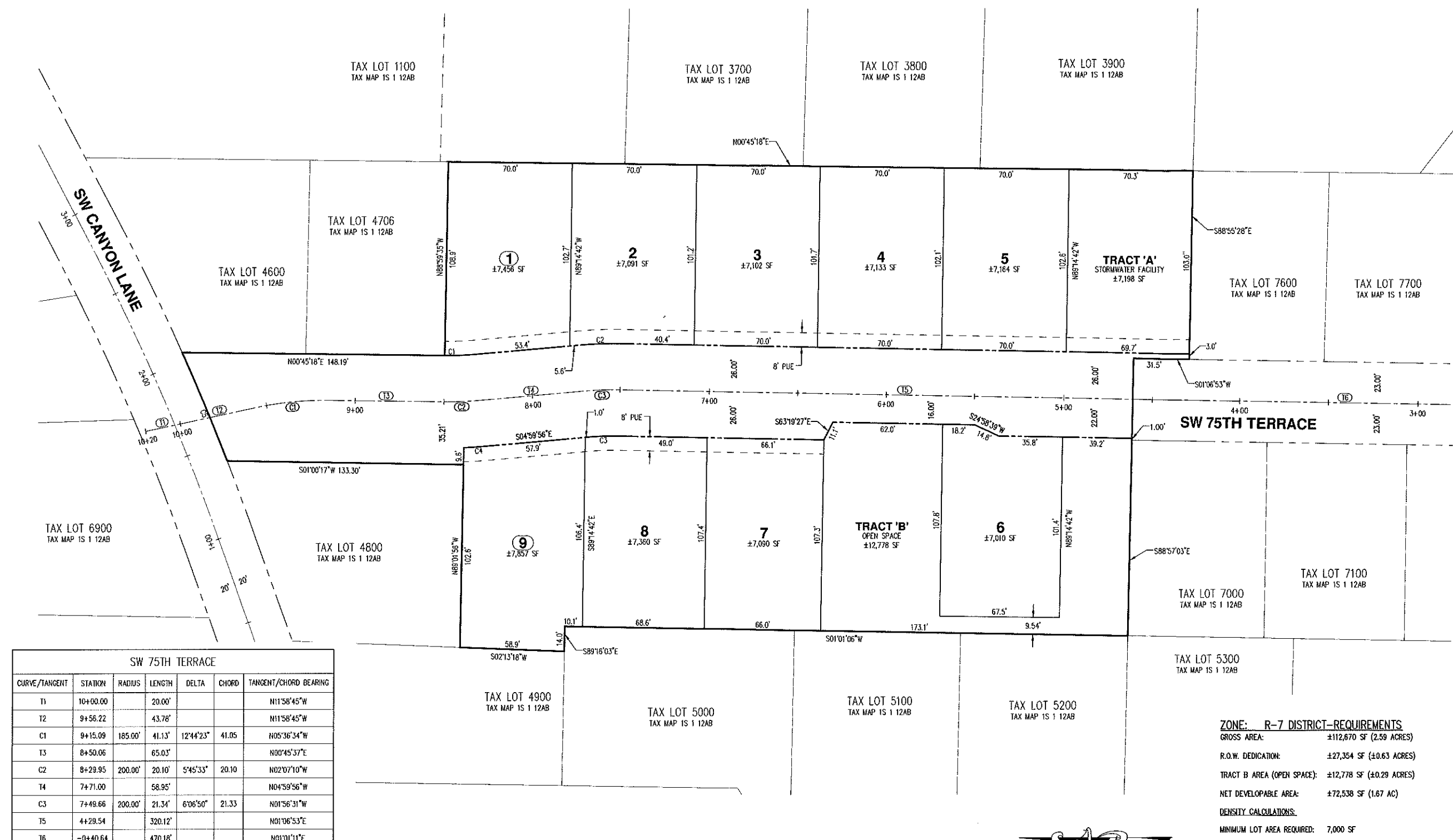
DESIGNED BY: \_\_\_\_\_  
 DRAWN BY: BSH  
 CHECKED BY: NSW  
 SCALE: AS NOTED  
 DATE: 09-29-2016

REGISTERED PROFESSIONAL LAND SURVEYOR  
 PRELIMINARY FOR CONSTRUCTION  
 OREGON  
 JANUARY 6, 2007  
 H. WHITE  
 005215  
 CREWNO: 6730/18

REVISIONS: \_\_\_\_\_

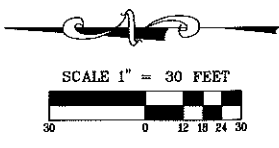
JOB NUMBER  
**4654**

SHEET  
**P02**



| SW 75TH TERRACE |          |         |         |           |        |                       |
|-----------------|----------|---------|---------|-----------|--------|-----------------------|
| CURVE/TANGENT   | STATION  | RADIUS  | LENGTH  | DELTA     | CHORD  | TANGENT/CHORD BEARING |
| T1              | 10+00.00 |         | 20.00'  |           |        | N11°58'45"W           |
| T2              | 9+56.22  |         | 43.78'  |           |        | N11°58'45"W           |
| C1              | 9+15.09  | 185.00' | 41.13'  | 12°44'23" | 41.05' | N05°36'34"W           |
| T3              | 8+50.06  |         | 65.03'  |           |        | N00°45'37"E           |
| C2              | 8+29.95  | 200.00' | 20.10'  | 5°45'33"  | 20.10' | N02°07'10"W           |
| T4              | 7+71.00  |         | 58.95'  |           |        | N04°59'56"W           |
| C3              | 7+49.66  | 200.00' | 21.34'  | 6°06'50"  | 21.33' | N01°56'31"W           |
| T5              | 4+29.54  |         | 320.12' |           |        | N01°06'53"E           |
| T6              | -0+40.64 |         | 470.18' |           |        | N01°01'11"E           |

| CURVE TABLE |          |          |        |                    |
|-------------|----------|----------|--------|--------------------|
| CURVE       | RADIUS   | DELTA    | LENGTH | CHORD              |
| C1          | 174.00'  | 5°43'40" | 17.39' | N2°08'06"W 17.39'  |
| C2          | 240.14'  | 5°45'14" | 24.12' | N1°56'32"W 24.11'  |
| C3          | 174.00'  | 6°06'52" | 18.57' | S1°56'32"E 18.56'  |
| C4          | 226.00'  | 2°47'26" | 11.01' | S3°36'12"E 11.01'  |
| C5          | 1387.27' | 2°44'05" | 66.21' | S67°12'11"W 66.21' |



**ZONE: R-7 DISTRICT-REQUIREMENTS**

GROSS AREA: ±112,670 SF (2.59 ACRES)

R.O.W. DEDICATION: ±27,354 SF (±0.63 ACRES)

TRACT B AREA (OPEN SPACE): ±12,778 SF (±0.29 ACRES)

NET DEVELOPABLE AREA: ±72,538 SF (1.67 AC)

**DENSITY CALCULATIONS:**

MINIMUM LOT AREA REQUIRED: 7,000 SF

MAXIMUM DENSITY: 112,670 SF / 7,000 SF = 16.10 = 16 LOTS

MINIMUM DENSITY: ((72,538 SF) \* (0.80)) / (7,000 SF) = 8.29 = 8 LOTS

LOTS PROVIDED: 9 LOTS

AVERAGE LOT AREA: 65,340 SF/9 = ±7,260 SF

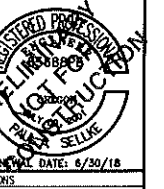
DESIGNED BY: AJW  
 DRAWN BY: AJW  
 CHECKED BY: PAS  
 SCALE: AS NOTED  
 DATE: 9/29/2016

REGISTERED PROFESSIONAL LAND SURVEYOR  
 PRELIMINARY FOR CONSTRUCTION  
 ALEXANDER H. HURLEY  
 00033915  
 REVISED: 6/30/17

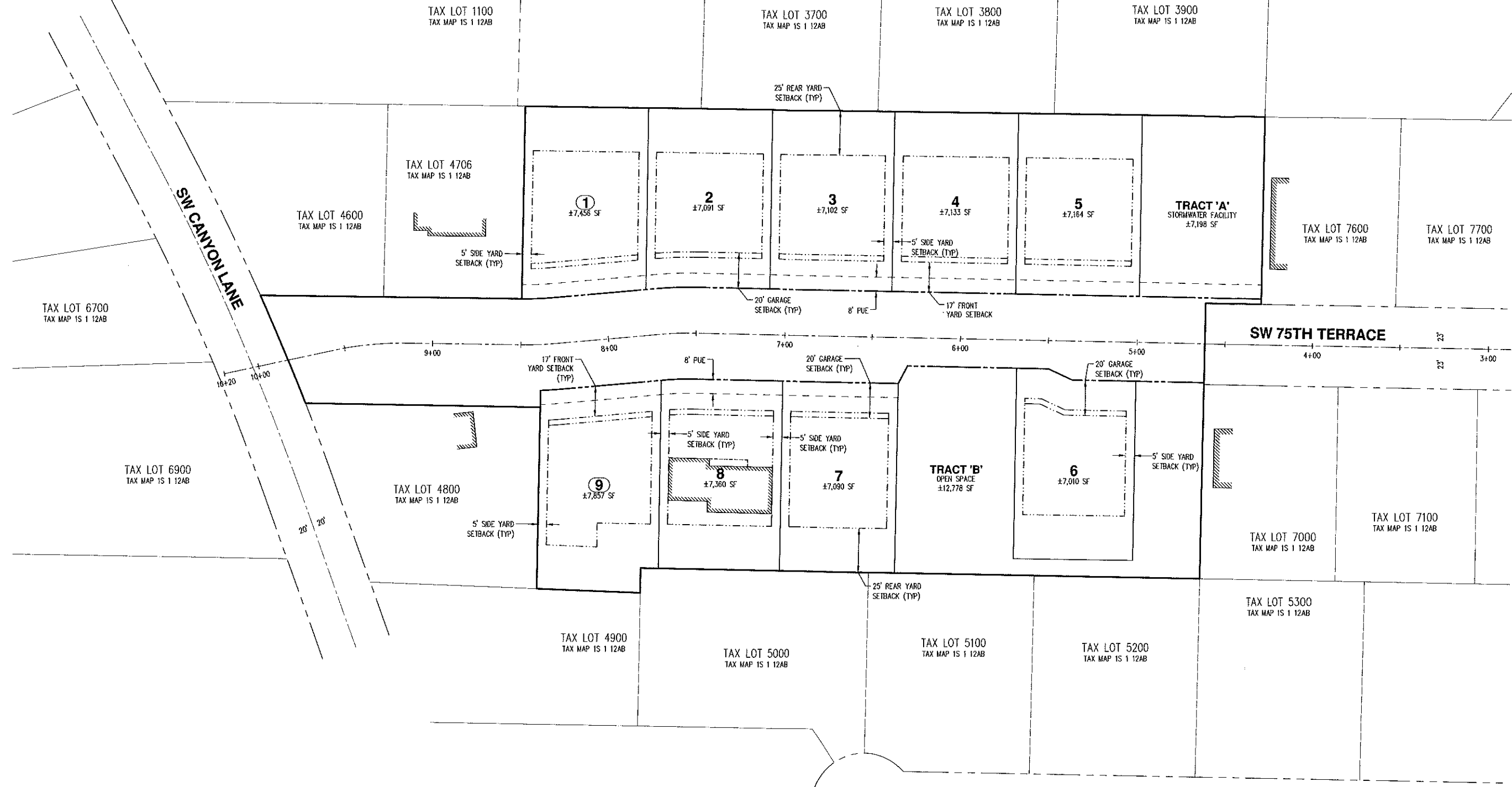
JOB NUMBER  
**4654**

SHEET  
**P03**

DESIGNED BY: AJW  
 DRAWN BY: AJW  
 CHECKED BY: PAS  
 SCALE: AS NOTED  
 DATE: 9/29/2016



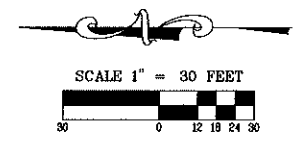
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 SHEET  
**P04**

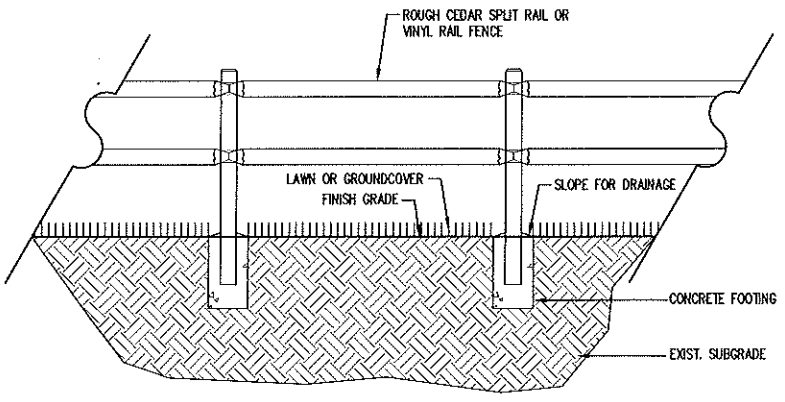
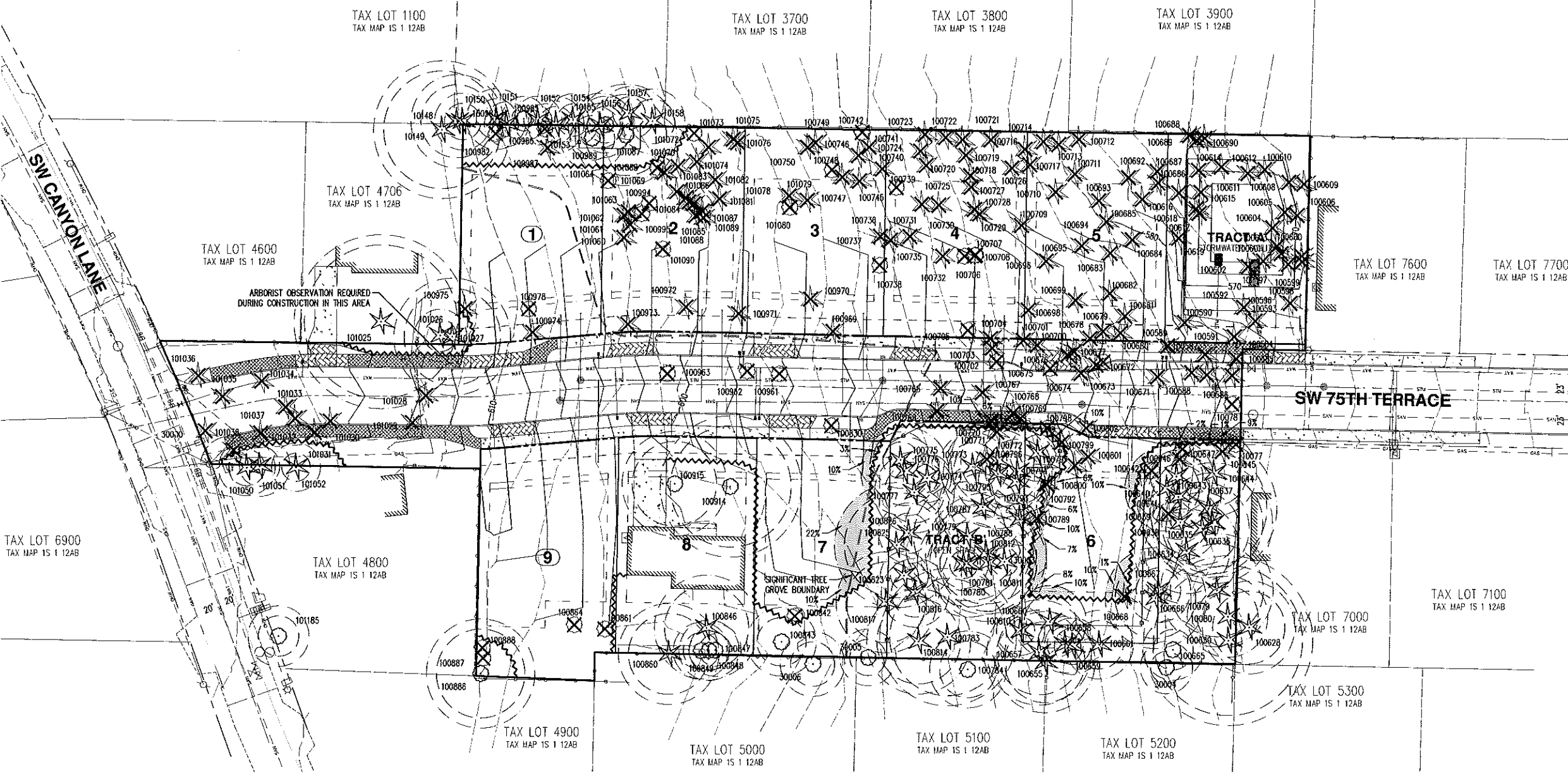


**REQUIRED SETBACKS**

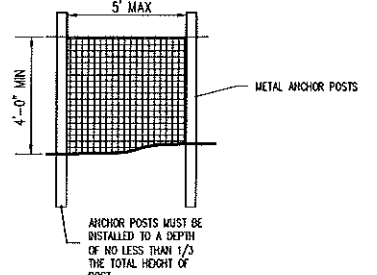
**R-7 ZONE**

|                        |       |
|------------------------|-------|
| FRONT YARD:            | 17 FT |
| FRONT GARAGE:          | 20 FT |
| SIDE YARD:             | 5 FT  |
| REAR YARD:             | 25 FT |
| MIN. BETWEEN BUILDINGS | 6 FT  |





**PERMANENT TREE PROTECTION FENCE DETAIL**  
 NTS

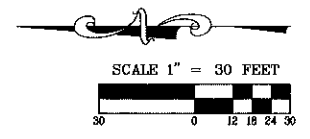


THE FENCE SHALL BE A FOUR FOOT (4') TALL ORANGE PLASTIC OR SNOW FENCE, SECURED TO SIX FOOT (6') TALL METAL POSTS, DRIVEN TWO FEET (2') INTO THE GROUND. HEAVY 12 GAUGE WIRE SHALL BE STRUNG BETWEEN EACH POST AND ATTACHED TO THE TOP AND MIDPOINT OF EACH POST. COLORED TREE FLAGGING INDICATING THAT THIS AREA IS A TREE PROTECTION ZONE IS TO BE PLACED EVERY FIVE (5) LINEAR FEET ON THE FENCE TO ALERT CONSTRUCTION CREWS OF THE SENSITIVE NATURE OF THE AREA.  
**TREE PROTECTION FENCE DETAIL**

**LEGEND**

|   |                         |
|---|-------------------------|
| EXISTING GROUND CONTOUR (2 FT)  | ---                     |
| EXISTING GROUND CONTOUR (10 FT)   | --- 400 ---             |
| FINISHED GRADE CONTOUR (2 FT)   | ---                     |
| FINISHED GRADE CONTOUR (10 FT)  | --- 400 ---             |
| EXISTING CONIFEROUS TREE  | ★                       |
| EXISTING DECIDUOUS TREE   | ○                       |
| TREE REMOVAL  | ✕                       |
| TREE DRIP LINE (1" RADIUS PER 1" DBH OR AS OTHERWISE FIELD VERIFIED)                | ---                     |
| TREE ROOT ZONE (5' BEYOND TREE DRIP LINE)   | ---                     |
| TREE PROTECTION FENCE (4' ORANGE PLASTIC FENCE)                                     | ~~~~~                   |
| PERCENTAGE OF ROOT ZONE OUTSIDE OF TREE PROTECTION FENCE                            | 10% [diagonal hatching] |
| PERMANENT TREE PROTECTION FENCE FOR TREE GROVE (TO BE INSTALLED AFTER CONSTRUCTION) | ---○---                 |

NOTE: SEE COVER SHEET FOR GENERAL PLAN LEGEND



- NOTE:**
- ARBORIST OBSERVATION REQUIRED DURING ALL TREE REMOVAL AND CONSTRUCTION ACTIVITIES BEHIND TREE PROTECTION FENCING.
  - THIS PLAN INCLUDES ONSITE TREES AS WELL AS OFFSITE TREES WITHIN AT LEAST 5' OF THE PROPERTY LINE.

Detailed Tree Inventory for SW 75th Terrace Subdivision

AKS Job No. 4654

Table with 11 columns: Tree ID, Tag #, DBH (in.), Equivalent DBH (in.), Tree Species, Condition/Comments, Hazard Rating (1-4), Wind-throw Rating, Remove/Preserve, Mitigation Required? Contains 101 trees.

Total # of Onsite Trees Outside of Significant Tree Grove Boundary & Offsite Trees Being Preserved = 59
Total # of Onsite Community Trees = 28
Total # of Exempt Onsite Trees Outside of Significant Tree Grove = 4
Total # of Offsite Trees = 27

\*Equivalent DBH is determined by summing the basal area of each individual stem of a dominant tree, and then relating the summed basal area to the closest corresponding basal area of a single-stemmed tree.

\*\*\*Hazard Rating: 1 = Low Risk, 2 = Moderate Risk, 3 = High Risk, 4 = Extreme Risk. \*\*\*Wind-throw Rating: A = Most Wind-throw Resistant, B = Moderate Wind-throw Resistant, C = Least Wind-throw Resistant.

\*\*\*\*Exempt From Onsite Community Tree Totals: Community Tree [ORD 424; September 2003] A healthy tree of at least ten inches (10") DBH located on developed, partially developed, or undeveloped land.

Detailed Tree Inventory for SW 75th Terrace Subdivision

AKS Job No. 4654

Table with 11 columns: Tree ID, Tag #, DBH (in.), Equivalent DBH (in.), Tree Species, Condition/Comments, Hazard Rating (1-4), Wind-throw Rating, Remove/Preserve, Mitigation Required? Contains 58 trees.

Total # of Deciduous Trees inventoried within Tree Grove = 28
Total # of Non-Exempt Deciduous Trees inventoried within Tree Grove = 24

\*Equivalent DBH is determined by summing the basal area of each individual stem of a dominant tree, and then relating the summed basal area to the closest corresponding basal area of a single-stemmed tree.

\*\*Hazard Rating: 1 = Low Risk, 2 = Moderate Risk, 3 = High Risk, 4 = Extreme Risk. \*\*\*Wind-throw Rating: A = Most Wind-throw Resistant, B = Moderate Wind-throw Resistant, C = Least Wind-throw Resistant.

\*\*\*\*Exempt from Deciduous Tree Grove Inventory: Per the City of Beaverton's Tree Plan 2 Dimensioned Site Plan requirement - Trees within Significant Natural Resource Areas and Significant Groves are trees greater than 6" DBH for western hemlock (Tsuga heterophylla), mountain hemlock (Tsuga menziesiana), Pacific madrone (Arbutus andrachne) and big-leaf maple (Acer macrophyllum).

Detailed Tree Inventory for SW 75th Terrace Subdivision

AKS Job No. 4654

Table with 11 columns: Tree ID, Tag #, DBH (in.), Equivalent DBH (in.), Tree Species, Condition/Comments, Hazard Rating (1-4), Wind-throw Rating, Remove/Preserve, Mitigation Required? Contains 58 trees.

Total # of Onsite Community Trees = 28

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.

AT THE COMPLETION OF CONSTRUCTION, ALL TREES SHOULD BE EXAMINED 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.

AKS ENGINEERING & FORESTRY, LLC logo and address: 12965 SW HERMAN RD, SUITE 100, TUALATIN, OR 97062. Includes text: SW 75TH TERRACE SUBDIVISION BEAVERTON OREGON.

PRELIMINARY DETAILED TREE INVENTORY TABLE logo and text: PRELIMINARY NOT FOR CONSTRUCTION.

DESIGNED BY: BJS, DRAWN BY: BJS, CHECKED BY: BRB, SCALE: AS NOTED, DATE: 9/29/2016. JOB NUMBER: 4654, SHEET: P06.



AKS DRAWING FILE: 4654-P06\_TREEING\_LAYOUT\_P06

Detailed Tree Inventory for SW 75th Terrace Subdivision  
AKS Job No. 4654

CONIFEROUS TREES WITHIN TREE GROVE

Table with 11 columns: Tree ID, Tag #, DBH (in.), Equivalent DBH (in.), Tree Species, Common Name, Condition/Comments, Hazard Rating, Wind-throw Rating, Remove/Preserve, Mitigation Required. Lists 100 trees with detailed data.

Detailed Tree Inventory for SW 75th Terrace Subdivision  
AKS Job No. 4654

CONIFEROUS TREES WITHIN TREE GROVE

Table with 11 columns: Tree ID, Tag #, DBH (in.), Equivalent DBH (in.), Tree Species, Common Name, Condition/Comments, Hazard Rating, Wind-throw Rating, Remove/Preserve, Mitigation Required. Lists 100 trees with detailed data.

Total # of Coniferous Trees inventoried within Tree Grove = 184  
- Total # of Coniferous Trees within Tree Grove Being Preserved = 45  
- Total # of Coniferous Trees within Tree Grove Being Removed = 139

Total # of Non-Exempt Coniferous Trees inventoried within Tree Grove = 169  
- Total # of Non-Exempt Coniferous Trees within Tree Grove Being Preserved = 42  
- Total # of Non-Exempt Coniferous Trees within Tree Grove Being Removed = 127

\*Equivalent DBH is determined by summing the basal area of each individual stem of a dominant tree, and then relating the summed basal area to the closest corresponding basal area of a single-stemmed tree.

\*\*Hazard Rating:  
1 - Low Risk  
2 - Moderate Risk  
3 - High Risk  
4 - Extreme Risk

\*\*\*Wind-throw Rating:  
A - Most Wind-throw Resistant  
B - Moderate Wind-throw Resistant  
C - Least Wind-throw Resistant

\*\*\*\*Exempt from Coniferous Tree Grove Inventory:  
Per the City of Beaverton's Tree Plan 2 Dimensioned Site Plan requirement - Trees within Significant Natural Resource Areas and Significant Groves are trees greater than 6" DBH for western hemlock (Tsuga heterophylla), mountain hemlock (Tsuga menziesii), Pacific madrone (Arbutus menziesii) and big leaf maple (Acer macrophyllum). All other trees measuring at least 10" DBH shall be shown on the site plan. Community Trees measure at least 10" DBH and are not trees that are grown for the purpose of bearing edible fruits or nuts for human consumption.

Detailed Tree Inventory for SW 75th Terrace Subdivision  
AKS Job No. 4654

TREE GROVE MITIGATION TABLE

Summary table with 2 columns: Description and Value. Rows include: Total Onsite DBH inches of Surveyed Trees = 4,360; Onsite DBH inches Proposed for Removal (MAXIMUM removal allowed is 75% of Surveyed Tree DBH inches) = 3,242; Percentage of Onsite DBH inches to be removed = 74.4%; Mitigation Threshold (50% of Onsite DBH inches of Surveyed Trees) = 2,180; Mitigation required if planted Onsite (50% of the DBH inches to be Mitigated) = 531; Mitigation required if planted Offsite OR Partial Offsite Mitigation (100% of the DBH inches to be Mitigated) = 1,062.

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. NEITHER THIS AUTHOR NOR AKS ENGINEERING & FORESTRY, LLC HAVE ASSUMED ANY RESPONSIBILITY FOR LIABILITY ASSOCIATED WITH THE TREES ON OR ADJACENT TO THIS SITE.

AT THE COMPLETION OF CONSTRUCTION, ALL TREES SHOULD BE REHEWED TO EVALUATE THEIR HAZARD RATINGS, LAND CLEARING AND REMOVAL OF ADJACENT TREES CAN EXPOSE PREVIOUSLY UNSEEN DEFECTS AND OTHERWISE HEALTHY TREES CAN BE DAMAGED DURING CONSTRUCTION.

PRELIMINARY  
DETAILED TREE  
INVENTORY TABLE

AKS ENGINEERING & FORESTRY, LLC  
12365 SW HERMAN RD. STE. 100  
TUALATIN, OR 97062  
P: 503.563.6151  
F: 503.563.6152  
aks-eng.com

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

WASHINGTON COUNTY TAX MAP IS 1 129B

BEAVERTON OREGON  
TRF LOTS 4500, 4501, AND 4703

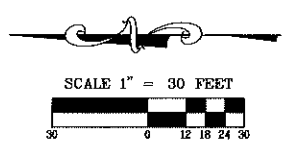
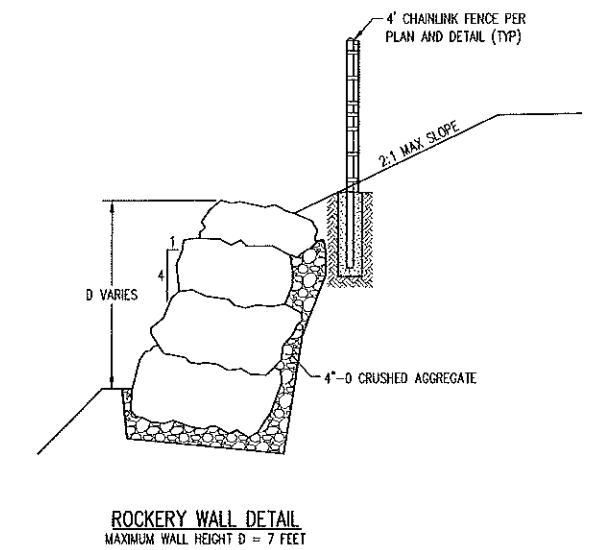
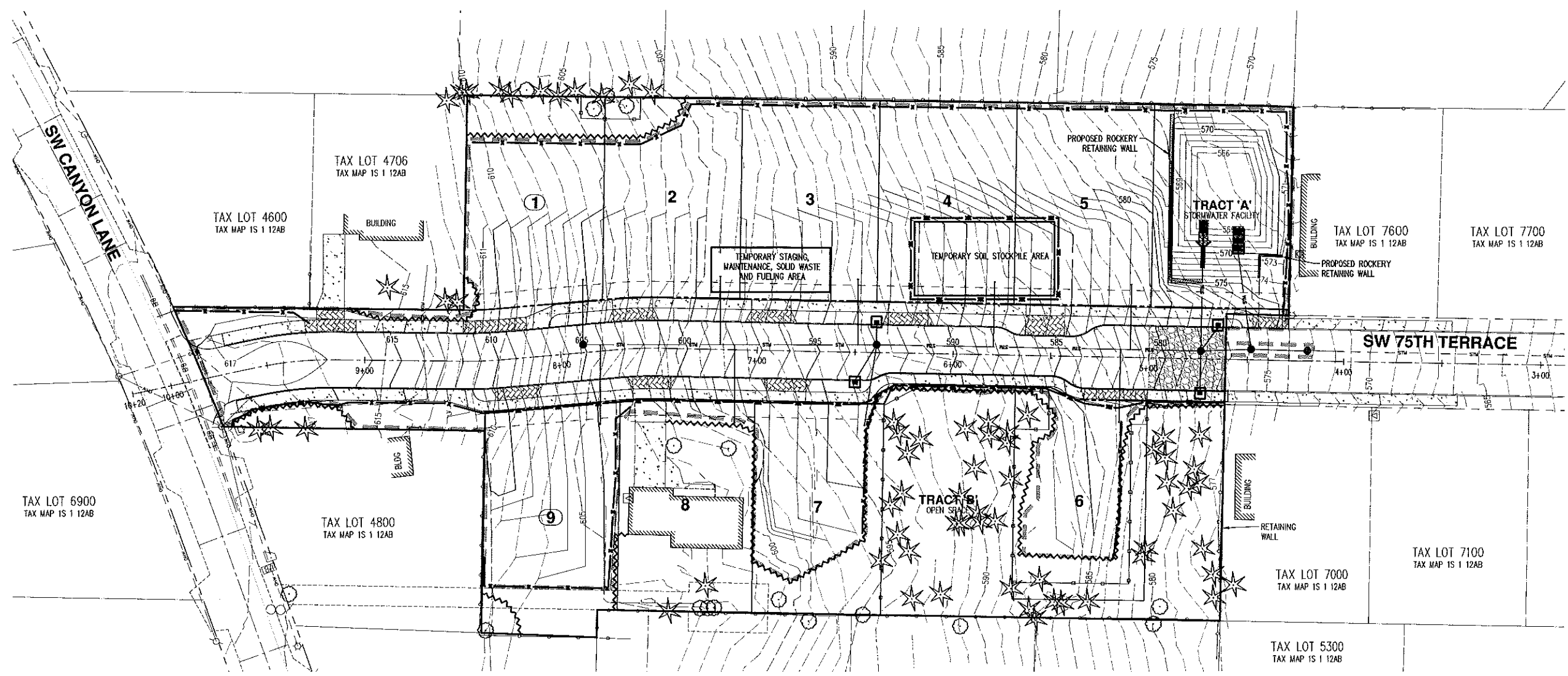
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DRAWN BY: BJS  
CHECKED BY: BRB  
SCALE: AS NOTED  
DATE: 9/29/2016

REVISIONS  
PRELIMINARY  
NOT FOR  
CONSTRUCTION

JOB NUMBER  
4654  
SHEET  
P07



BRUCE R. BALDWIN  
CERTIFIED ARBORIST  
Oregon State Board of Forestry  
License # 2241  
12/20/17



| LEGEND  |   |
|---|---|
| EXISTING GROUND CONTOUR (1 FT)                    | --- --- --- --- --- --- --- --- --- --- |
| EXISTING GROUND CONTOUR (5 FT)                    | --- --- --- --- --- --- --- --- --- --- |
| FINISHED GRADE CONTOUR (1 FT)                     | --- --- --- --- --- --- --- --- --- --- |
| FINISHED GRADE CONTOUR (5 FT)                     | --- --- --- --- --- --- --- --- --- --- |
| EXISTING CONIFEROUS TREE                          | ★                                       |
| EXISTING DECIDUOUS TREE                           | ○                                       |
| DISTURBANCE BOUNDARY                              | --- --- --- --- --- --- --- --- --- --- |
| RESIDENTIAL DRIVEWAY CONSTRUCTED BY HOME BUILDER  | ▨                                       |
| CONCRETE SIDEWALK CONSTRUCTED BY HOME BUILDER     | ▩                                       |
| SEDIMENT FENCE (TO BE INSTALLED PRIOR TO GRADING) | --- --- --- --- --- --- --- --- --- --- |
| SEDIMENT FENCE (TO BE INSTALLED AFTER GRADING)    | --- --- --- --- --- --- --- --- --- --- |
| INLET PROTECTION                                  | □                                       |
| OUTLET PROTECTION                                 | ▬                                       |
| GRAVEL CONSTRUCTION ENTRANCE                      | ▨                                       |
| TREE PROTECTION FENCE (4' ORANGE PLASTIC FENCE)   | ~ ~ ~ ~ ~ ~ ~ ~ ~ ~                     |
| SPLIT RAIL FENCE FOR GROVE PROTECTION             | --- --- --- --- --- --- --- --- --- --- |

**AKS**  
AKS ENGINEERING & FORESTRY, LLC  
12985 SW HERMAN RD STE 100  
TUALATIN, OR 97062  
P: 503.583.6151  
F: 503.583.6152  
aks-eng.com

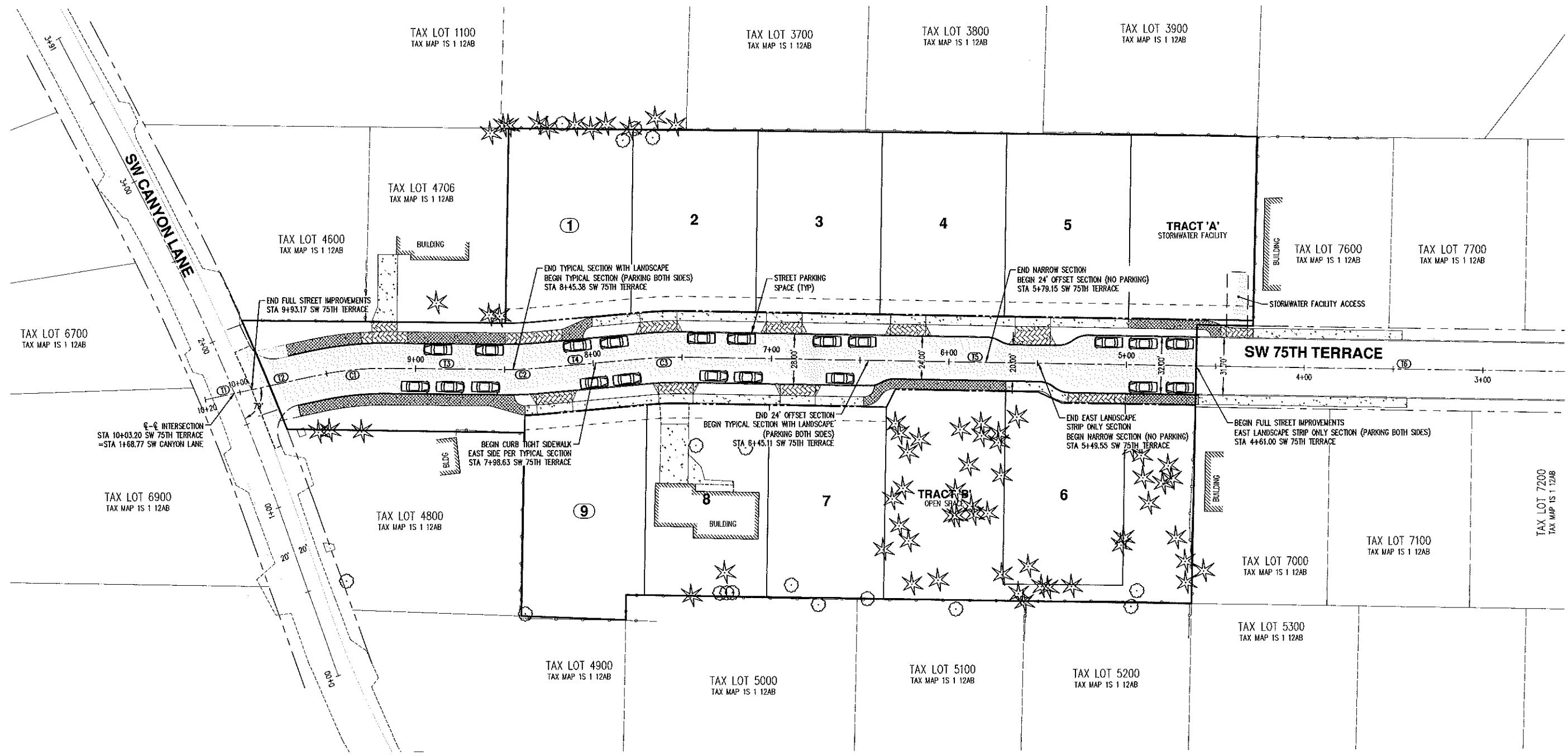
**SW 75TH TERRACE SUBDIVISION**  
BEAVERTON OREGON  
WASHINGTON COUNTY TAX MAP IS 1 12AB  
TAX LOTS 4300, 4500, AND 4703

**PRELIMINARY GRADING AND EROSION & SEDIMENT CONTROL PLAN**

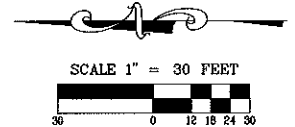
DESIGNED BY: AJW  
DRAWN BY: AJW  
CHECKED BY: PAS  
SCALE: AS NOTED  
DATE: 9/29/2016

REGISTERED PROFESSIONAL ENGINEER  
PAUL J. WILSON  
P.E. No. 12345  
EXPIRES 12/31/2020  
REVISIONS:  
JOB NUMBER: 4654  
SHEET: P08





| SW 75TH TERRACE |          |         |         |           |       |                       |
|-----------------|----------|---------|---------|-----------|-------|-----------------------|
| CURVE/TANGENT   | STATION  | RADIUS  | LENGTH  | DELTA     | CHORD | TANGENT/CHORD BEARING |
| T1              | 10+00.00 |         | 20.00'  |           |       | N11°56'45"W           |
| T2              | 94+56.22 |         | 43.78'  |           |       | N11°56'45"W           |
| C1              | 94+15.09 | 185.00' | 41.13'  | 12°44'23" | 41.05 | N05°36'34.18"W        |
| T3              | 84+50.06 |         | 65.03'  |           |       | N00°45'37"E           |
| C2              | 84+29.95 | 200.00' | 20.10'  | 5°45'33"  | 20.10 | N02°07'09.57"W        |
| T4              | 74+71.00 |         | 58.95'  |           |       | N04°59'56"W           |
| C3              | 74+49.66 | 200.00' | 21.34'  | 6°06'50"  | 21.33 | N01°56'31.47"W        |
| T5              | 44+29.54 |         | 320.12' |           |       | N01°06'53"E           |
| T6              | -0+40.64 |         | 470.18' |           |       | N01°01'11"E           |



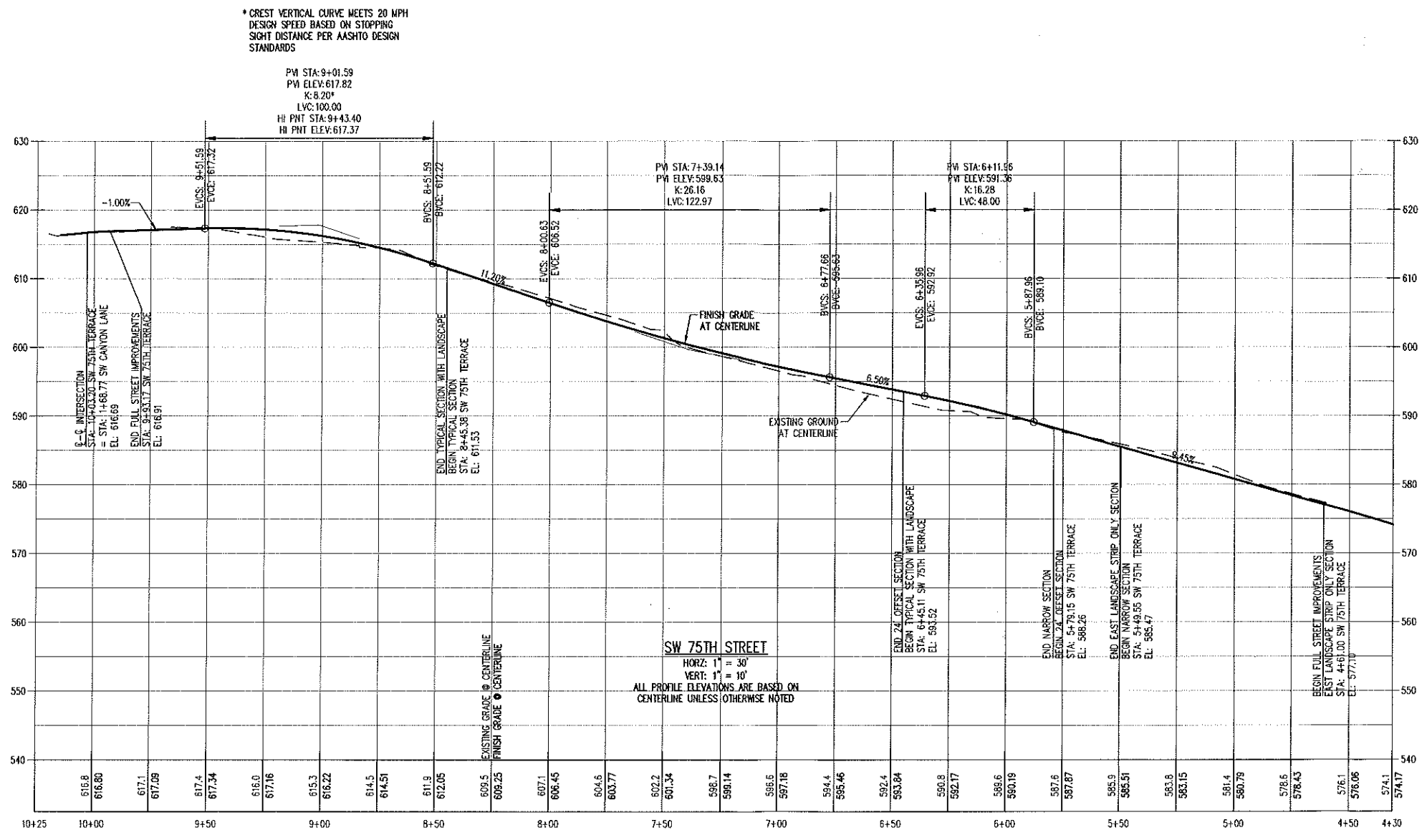
**LEGEND**

- CONCRETE SIDEWALK CONSTRUCTED BY CONTRACTOR.
- RESIDENTIAL DRIVEWAY CONSTRUCTED BY HOME BUILDER.
- CONCRETE SIDEWALK CONSTRUCTED BY HOME BUILDER.
- NEW AC PAVEMENT, PER TYPICAL SECTIONS.

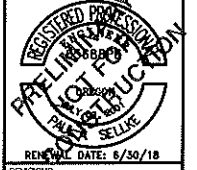
**SW 75TH TERRACE  
 SUBDIVISION**

**BEAVERTON**  
 OREGON  
 WASHINGTON COUNTY TAX MAP 1S 1E 28B  
 TAX LOTS 4300, 4500, AND 4703

**PRELIMINARY STREET  
 PROFILE**



DESIGNED BY: AJW  
 DRAWN BY: AJW  
 CHECKED BY: PAS  
 SCALE: AS NOTED  
 DATE: 9/29/2016



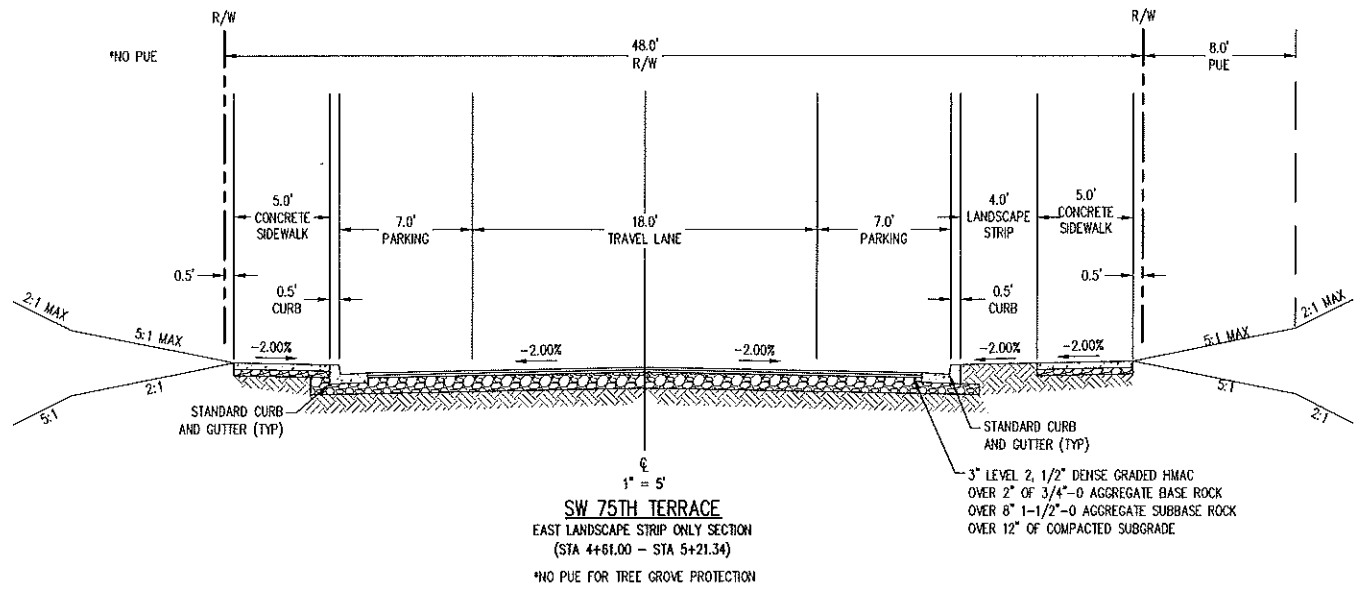
REVISIONS  
 DATE: 8/30/18

JOB NUMBER  
**4654**

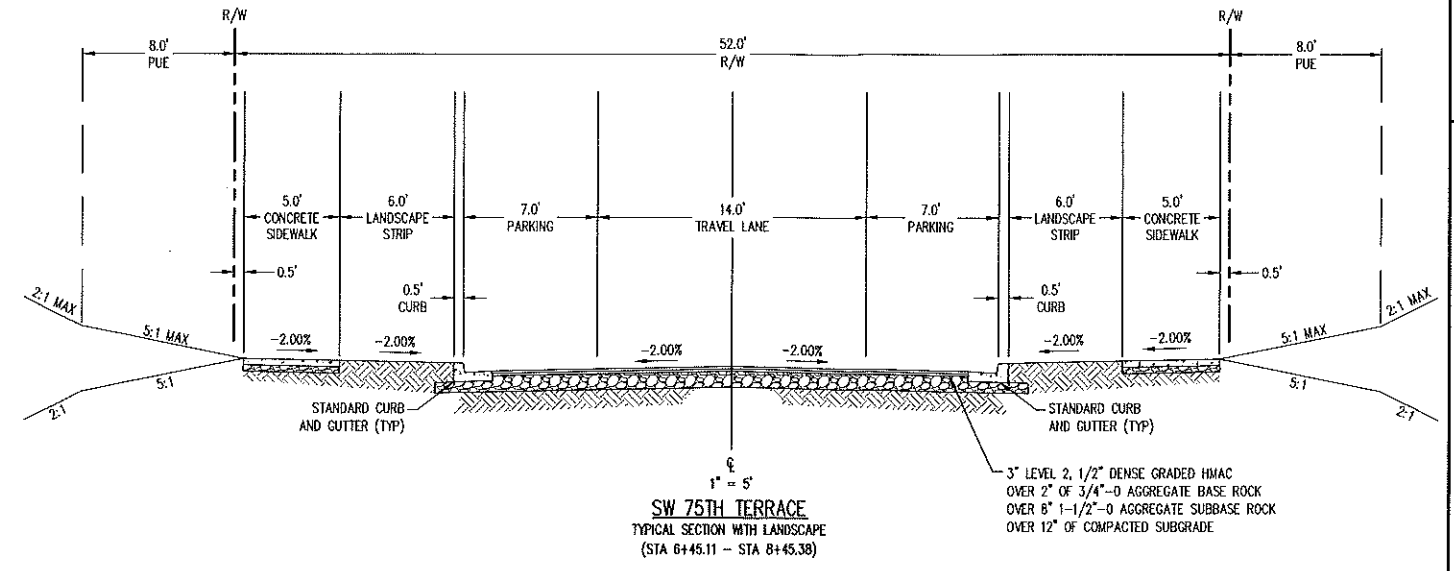
SHEET  
**P10**

|              |           |
|--------------|-----------|
| DESIGNED BY: | AJW       |
| DRAWN BY:    | AJW       |
| CHECKED BY:  | PAS       |
| SCALE:       | AS NOTED  |
| DATE:        | 9/29/2016 |
| REVISIONS:   |           |

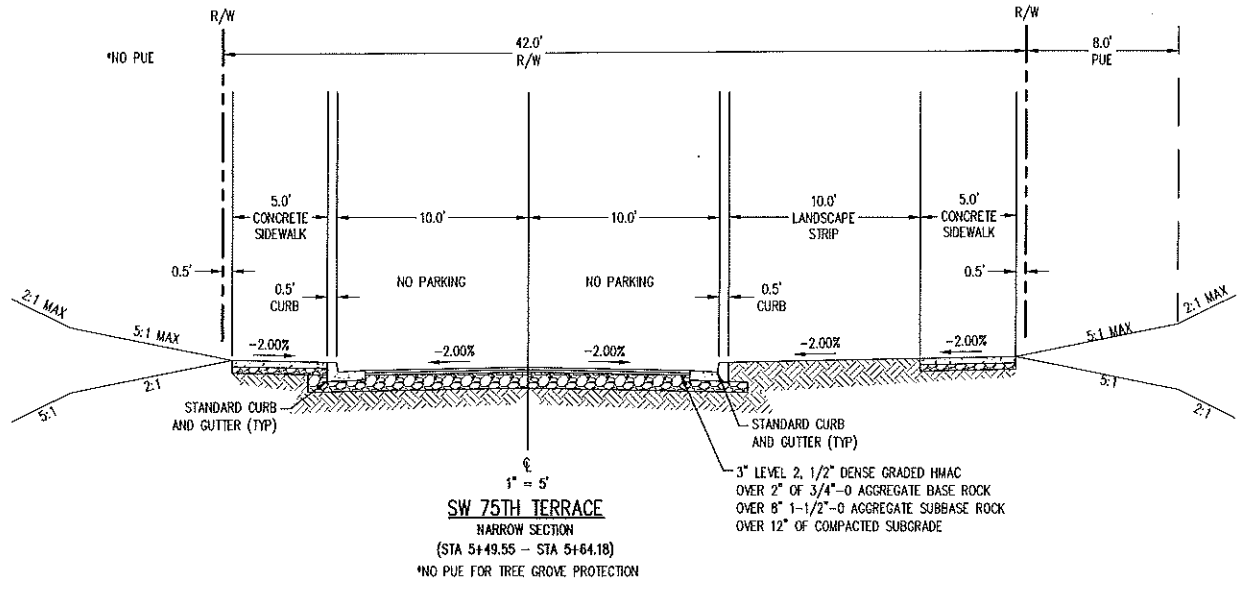
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| JOB NUMBER | 4654 |
| SHEET      | P11  |



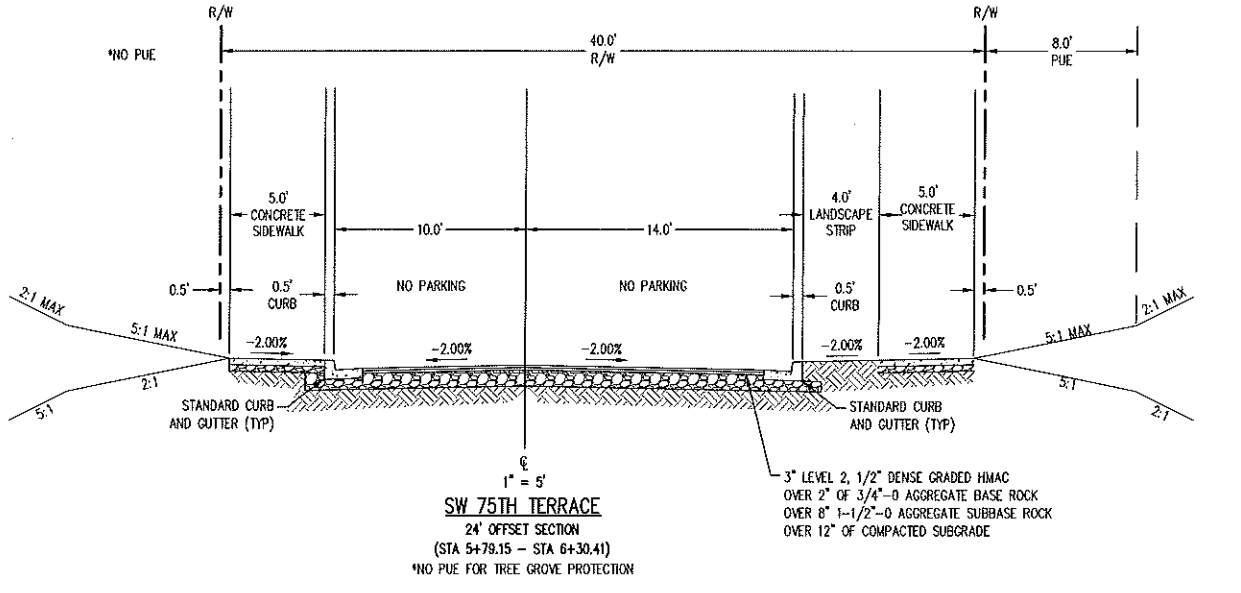
**SW 75TH TERRACE**  
 EAST LANDSCAPE STRIP ONLY SECTION  
 (STA 4+61.00 - STA 5+21.34)  
 \*NO PUE FOR TREE GROVE PROTECTION



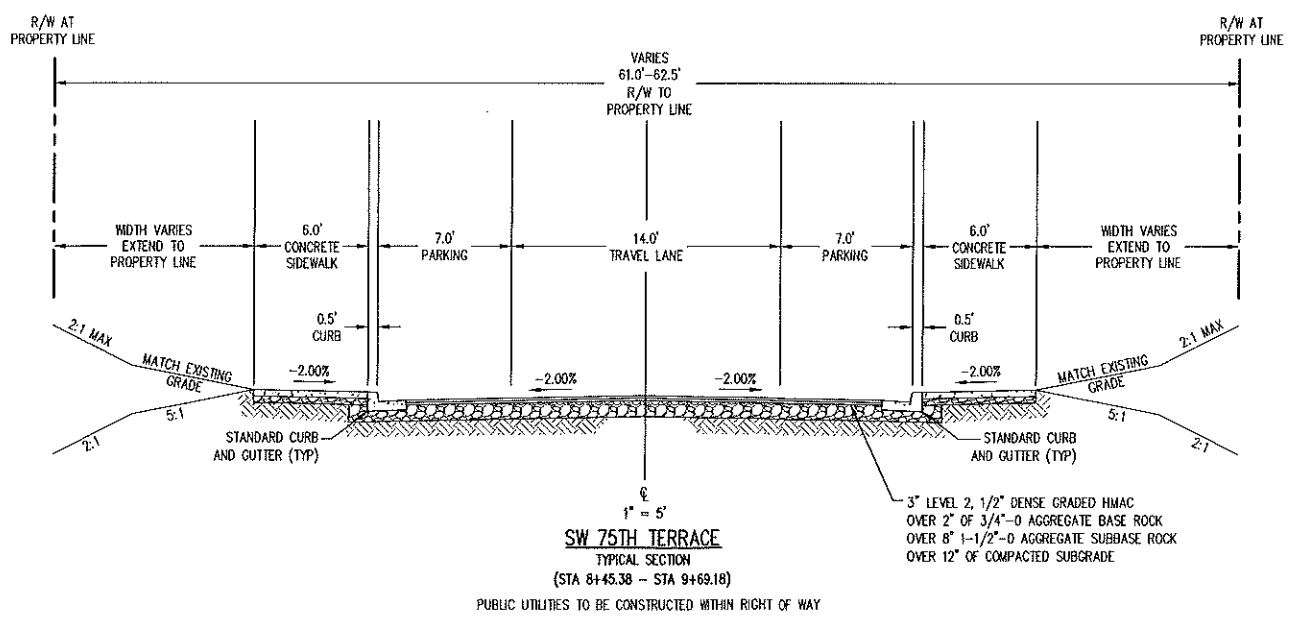
**SW 75TH TERRACE**  
 TYPICAL SECTION WITH LANDSCAPE  
 (STA 6+45.11 - STA 8+45.38)



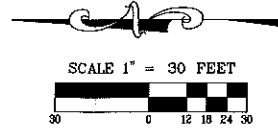
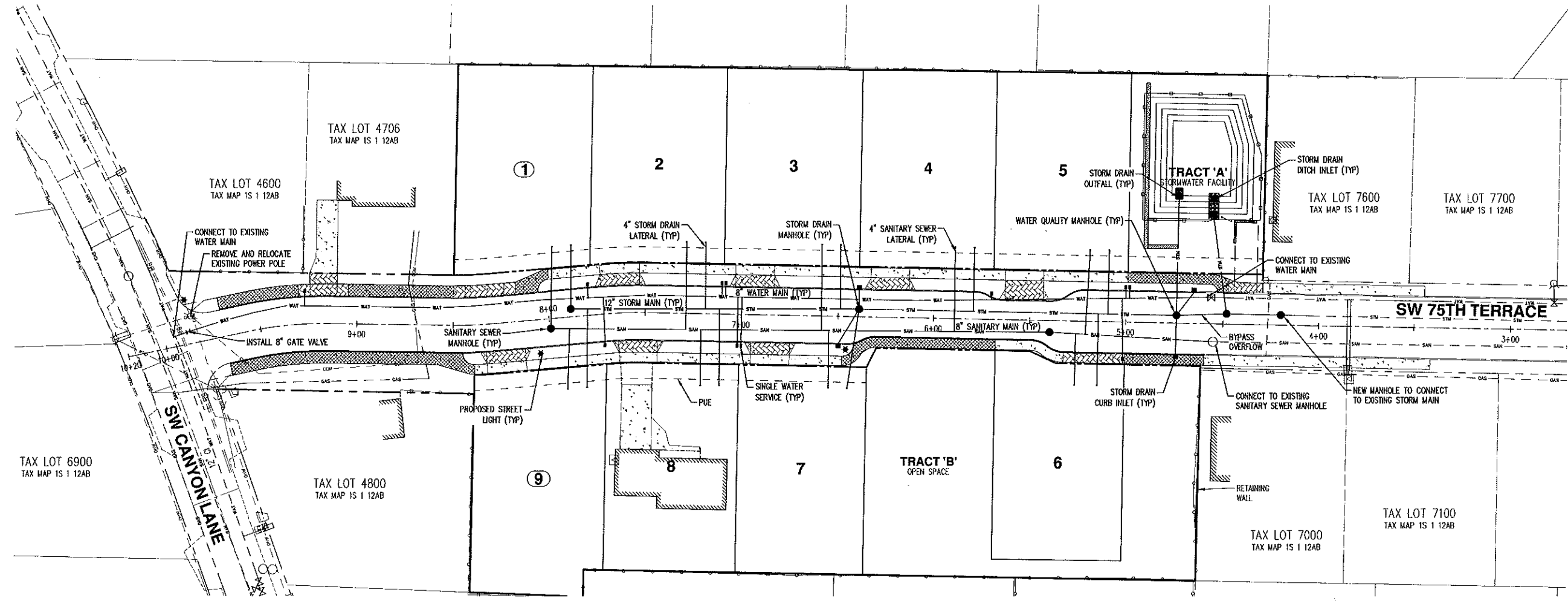
**SW 75TH TERRACE**  
 NARROW SECTION  
 (STA 5+49.55 - STA 5+64.18)  
 \*NO PUE FOR TREE GROVE PROTECTION



**SW 75TH TERRACE**  
 24' OFFSET SECTION  
 (STA 5+79.15 - STA 6+30.41)  
 \*NO PUE FOR TREE GROVE PROTECTION



**SW 75TH TERRACE**  
 TYPICAL SECTION  
 (STA 8+45.38 - STA 9+69.18)  
 PUBLIC UTILITIES TO BE CONSTRUCTED WITHIN RIGHT OF WAY

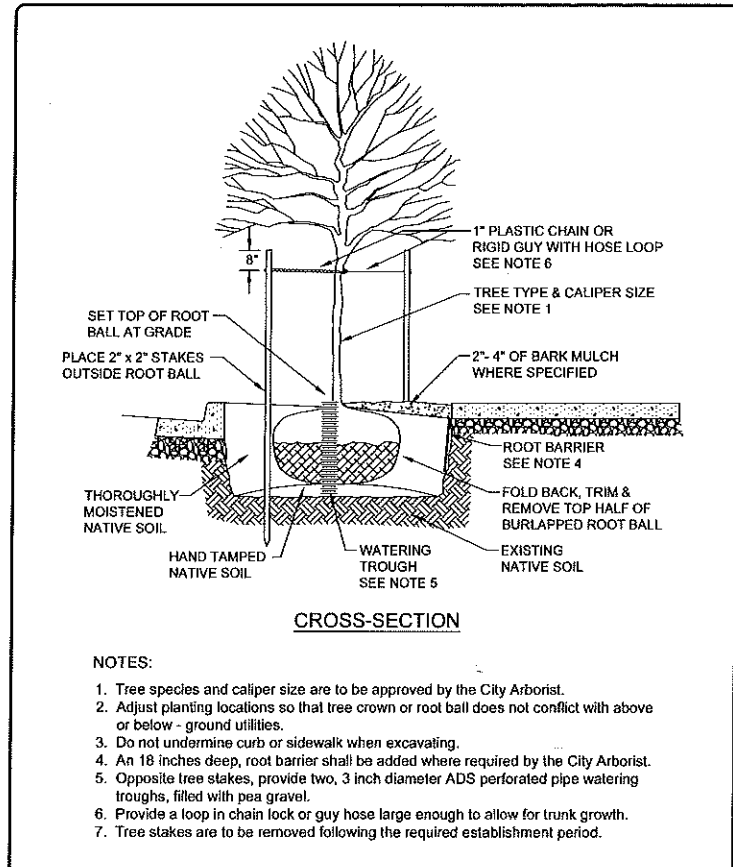
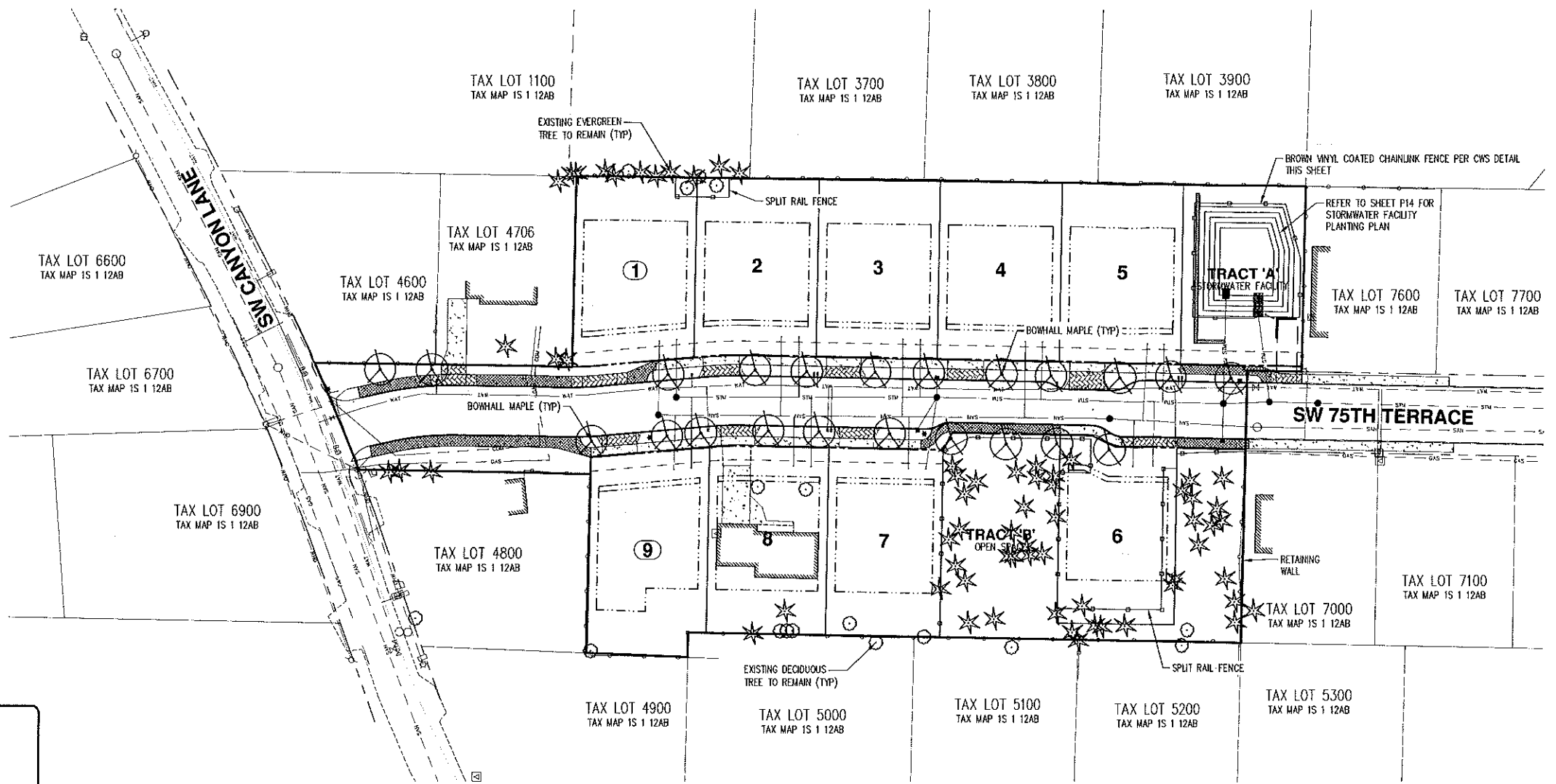


# PLANT SCHEDULE

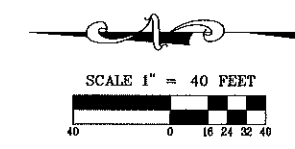
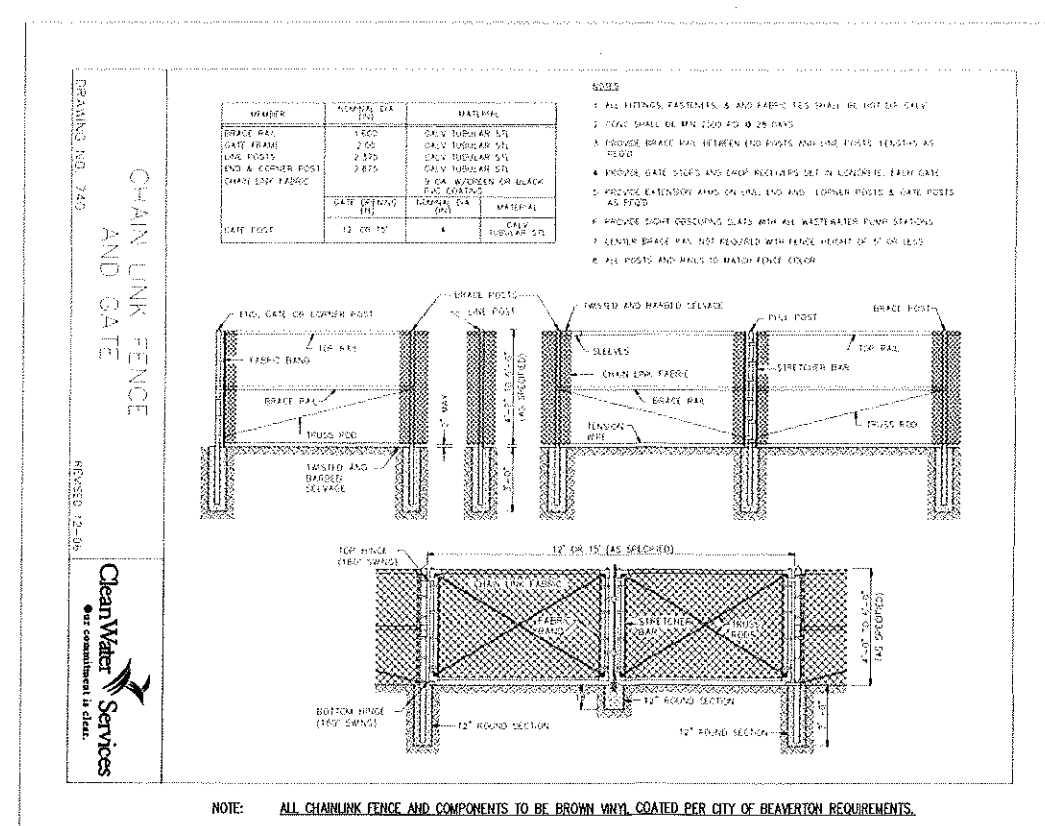
| TREES | QTY | BOTANICAL NAME        | COMMON NAME   | SIZE/CONTAINER | SPACING              |
|-------|-----|-----------------------|---------------|----------------|----------------------|
|       | 22  | ACER RUBRUM 'BOWHALL' | BOWHALL MAPLE | 2" CAL. B&B    | 30' O.C. OR AS SHOWN |

## GENERAL NOTES:

- CONTRACTOR IS RESPONSIBLE FOR VERIFYING PLANT QUANTITIES, DESIGN INTENT PREVAILS OVER QUANTITIES LISTED.
- PLANTING PLAN IS PRELIMINARY AND SHOWN TO PORTRAY THE CHARACTER OF THE SITE LANDSCAPING. REVISIONS, INCLUDING CHANGES TO PLANT SPECIES, SIZES, LOCATION, AND QUANTITIES, DUE TO SITE CONDITIONS, PLANT AVAILABILITY, ETC. MAY BE MADE BY THE LANDSCAPE ARCHITECT PRIOR TO FINAL SUBMITTAL WHERE ALLOWED BY CITY OF BEAVERTON DESIGN STANDARDS.
- ALL PLANTS AND PLANTING ACTIVITY SHALL CONFORM TO APPLICABLE CITY OF BEAVERTON DESIGN STANDARDS AND TO AMERICAN NURSERY STANDARDS ASN 1260.1. PLANT IN ACCORDANCE WITH GOOD PRACTICE INDUSTRY STANDARDS SUCH AS THOSE ADOPTED BY THE OREGON LANDSCAPE CONTRACTORS BOARD (OLCB).
- TREES TO BE PLANTED SHALL MEET THE REQUIREMENTS OF THE AMERICAN ASSOCIATION OF NURSERYMEN (AAN) STANDARDS FOR NURSERY STOCK (ANSI Z60.1) FOR GRADE NO. 1 OR BETTER. ALL TREES SHALL BE FREE OF INSECTS, DISEASES, AND MECHANICAL INJURY AND WITH A STRAIGHT TRUNK AND WELL DEVELOPED LEADER. REQUIRED TREES SHALL BE OF A TYPE IDENTIFIED ON THE CITY OF BEAVERTON APPROVED STREET TREE LIST OR AN ALTERNATIVE APPROVED BY THE CITY ARBORIST.
- FIELD ADJUST STREET TREES TO AVOID CONFLICTS WITH UTILITIES, DRIVEWAYS, AND LIGHT STANDARDS.
- LANDSCAPE AREAS SHALL BE IRRIGATED FOR ESTABLISHMENT AND HEALTH BY MEANS OF AN AUTOMATIC UNDERGROUND SYSTEM OR OTHER WATERING METHODS.
- TREES AND PLANTER STRIPS IN FRONT OF INDIVIDUAL LOTS SHALL BE INSTALLED AND MAINTAINED BY THE ADJACENT HOME OWNER/HOMEBUILDER AT TIME OF LOT DEVELOPMENT.
- PLANTER STRIPS SHALL HAVE LAWN OR OTHER VEGETATIVE COVER AS SELECTED BY THE ADJACENT HOMEOWNER/HOMEBUILDER AT TIME OF LOT DEVELOPMENT.
- MULCH: APPLY 3" DEEP MEDIUM GRIND OR SHREDDED DARK HEMLOCK BARK MULCH UNDER AND AROUND ALL TREES, SHRUBS, AND GROUND COVER.
- ALL PLANTER STRIPS SHALL HAVE A MINIMUM OF 12" OF CLEAN DEBRIS FREE, FREE DRAINING TOPSOIL, EITHER FROM SOURCES STOCKPILED ON SITE OR IMPORTED, PLUS AN ADDITIONAL 24" OF NON-COMPACTED NATIVE SOIL. PLANTER STRIP AREAS SHALL BE FREE OF ROCK, DEBRIS, WOODY MATERIAL, CONCRETE, AND OTHER CONSTRUCTION MATERIALS, AND SHALL BE THOROUGHLY WATER SETTLED PRIOR TO BEING PLANTED.



|  |                                      |                 |                            |                    |
|--|--------------------------------------|-----------------|----------------------------|--------------------|
|  | PUBLIC WORKS DEPARTMENT              |                 | STANDARD SIDEWALK TREEWELL |                    |
|  | CITY ENGINEER<br>Terry Waldels, P.E. | DATE<br>6-10-04 | DRAWN BY<br>JR - CPD       | DRAWING NO.<br>240 |



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SW 75TH TERRACE  
SUBDIVISION  
BEAVERTON  
TAX LOTS 4300, 4500, AND 4703

OREGON  
ENGINEERING - SURVEYING - NATURAL RESOURCES  
FORESTRY - PLANNING - LANDSCAPE ARCHITECTURE

PRELIMINARY  
LANDSCAPE PLAN

DESIGNED BY: TEB  
 DRAWN BY: TEB  
 CHECKED BY: KAH  
 SCALE: AS NOTED  
 DATE: 9/29/2016

REGISTERED  
LANDSCAPE ARCHITECT  
TERRY WALDELS  
NO. 12345  
STATE OF OREGON

REVISIONS:

JOB NUMBER  
4654

SHEET  
P13

AKS DRAWING FILE: 4654\_P09\_LANDSCAPING\_LAYOUT\_P13

**PLANT SCHEDULE**

TREATMENT AREA: 1,631 SF±; FREEBOARD AREA: 5,192 SF±

| TREES  | QTY | BOTANICAL NAME       | COMMON NAME            | SIZE/CONTAINER       | SPACING  |
|--------|-----|----------------------|------------------------|----------------------|----------|
|        | 10  | ACER CIRCINATUM      | VINE MAPLE             | 2 GAL. CONT./2' HT.  | AS SHOWN |
|        | 12  | RHAMNUS PURSHIANA    | CASCARA                | 1 GAL. CONT./2' HT.  | AS SHOWN |
| TOTAL: | 22  |                      |                        |                      |          |
| SHRUBS | QTY | BOTANICAL NAME       | COMMON NAME            | SIZE/CONTAINER       | SPACING  |
|        | 15  | CORNUS SERICEA       | RED TWIG DOGWOOD       | 1 GAL. CONT./2' HT.  | 48" o.c. |
|        | 30  | MAHONIA AQUIFOLIUM   | OREGON GRAPE           | 1 GAL. CONT./12" HT. | 36" o.c. |
|        | 14  | RIBES SANGUINEUM     | RED FLOWERING CURRANT  | 1 GAL. CONT./18" HT. | 48" o.c. |
|        | 15  | ROSA PISOCARPA       | CLUSTERED ROSE         | 1 GAL. CONT./18" HT. | 36" o.c. |
|        | 12  | SPIRAEA DOUGLASHI    | WESTERN SPIREA         | 1 GAL. CONT./18" HT. | 36" o.c. |
|        | 22  | SYMPHORICARPOS ALBUS | COMMON WHITE SNOWBERRY | 1 GAL. CONT./18" HT. | 36" o.c. |
| TOTAL: | 108 |                      |                        |                      |          |

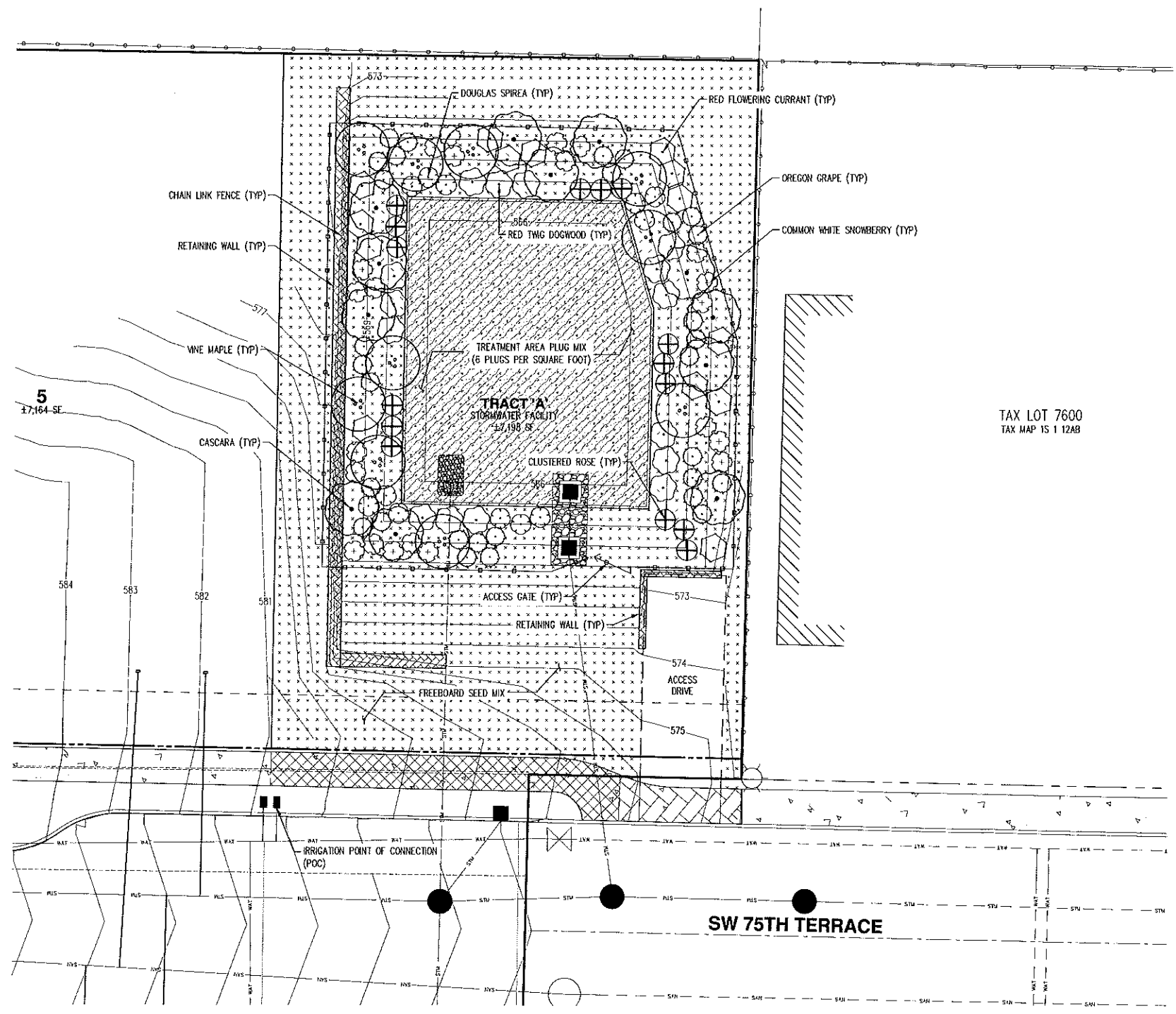
| HERBACEOUS PLANTS AND GROUNDCOVER | QTY       | DESCRIPTION  |
|-----------------------------------|-----------|--|
|                                   | 1,631 SF± | TREATMENT AREA PLUG MIX: PLUG MIX SHALL CONSIST OF THE FOLLOWING COMPOSITION OR APPROVED EQUAL. PLANT 6 PLUGS PER SQUARE FOOT IN MASSES OF THE SAME TYPE FOR NATURAL APPEARING GROUPINGS. AVOID EXCESSIVE DAMAGE TO PLUGS WHEN PLANTING.<br>3,262 (33.3%) SPREADING RUSH/JUNCUS PATENS, 1" DIA. X 6" HT. PLUGS, 6 PLUGS PER SF<br>3,262 (33.3%) SMALL-FRUITED BULRUSH/SCIRPUS MICROCARPUS, 1" DIA. X 6" HT. PLUGS, 6 PLUGS PER SF<br>3,262 (33.3%) SLOUGH SEDGE/CAREX OBNUPA, 1" DIA. X 6" HT. PLUGS, 6 PLUGS PER SF |
|                                   | 5,175 SF± | FREEBOARD SEED MIX PER CWS; SPREAD UNDER AND AROUND ALL BARE AREAS ABOVE STANDING WATER LEVEL AT A RATE OF 120 LBS PER ACRE. MIX SHALL CONSIST OF:<br>DWARF TALL FESCUE 40% BY WEIGHT<br>DWARF PERENNIAL RYE 30% BY WEIGHT<br>CREEPING RED FESCUE 25% BY WEIGHT<br>COLONIAL BENT GRASS 5% BY WEIGHT  |

**PLANTING NOTES (PER CWS DESIGN & CONSTRUCTION STANDARDS, APPENDIX A PLANTING REQUIREMENTS, JUNE 2007):**

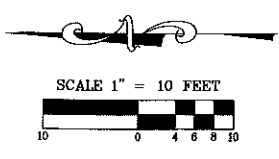
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING PLANT QUANTITIES, IF DISCREPANCIES OCCUR, DESIGN INTENT PREVAILS OVER QUANTITIES LISTED.
- ALL PLANTS AND PLANTINGS SHALL CONFORM TO CWS STANDARDS AND BE HEALTHY, VIGOROUS, SYMMETRICAL, AND WELL-ROOTED IN THE CONTAINERS IN WHICH THEY ARE PURCHASED. BARE ROOT MAY BE SUBSTITUTED FOR CONTAINERIZED PLANT MATERIAL AT MINIMUM HEIGHTS LISTED, HOWEVER THEY MAY ONLY BE INSTALLED DURING THE LATE WINTER/EARLY SPRING DORMANCY PERIOD (DECEMBER 15-APRIL 12). CONTAINERIZED STOCK AND SEEDING SHALL BE INSTALLED ONLY FROM FEBRUARY 1 THROUGH MAY 1 AND OCTOBER 1 THROUGH NOVEMBER 15 PER CWS STANDARDS. PLANTINGS OUTSIDE THESE TIMES MAY REQUIRE ADDITIONAL MEASURES AS APPROVED BY CWS (WATER RETAINING POLYMER ADDITIVE, SUPPLEMENTAL MULCHING, ETC.) TO ENSURE PLANT SURVIVAL.
- PLANTINGS SHALL BE MULCHED A MINIMUM OF THREE INCHES IN DEPTH AND 18 INCHES IN DIAMETER TO RETAIN MOISTURE AND DISCOURAGE WEED GROWTH AROUND NEWLY INSTALLED PLANT MATERIAL. MULCH SHALL BE OF A TYPE APPROVED BY CWS SUCH AS COMPOSTED BARK OR LEAVES THAT HAVE NOT BEEN CHEMICALLY TREATED. MULCH SHALL BE AVOIDED IN FREQUENTLY INUNDATED AREAS TO AVOID MIGRATION OF MULCH INTO WATER-WAYS AND LEACHING OF NUTRIENTS.
- APPROPRIATE MEASURES SHALL BE TAKEN TO LIMIT WILDLIFE-RELATED DAMAGE AS SITE CONDITIONS WARRANT. IF WILDLIFE DAMAGE BECOMES OBVIOUS DURING SITE MONITORING, TREE-PROTECTOR TUBES OR WIRE MESH CYLINDERS SHALL BE INSTALLED AROUND NEWLY INSTALLED PLANTINGS. REFER TO CWS IVAM GUIDANCE MANUAL.
- REMOVE ANY INVASIVE PLANT SPECIES, IF ENCOUNTERED, PRIOR TO INSTALLATION OF NEW PLANT MATERIAL. INVASIVE SPECIES REMOVAL AND CONTROL SHALL COMPLY WITH CWS IVAM GUIDANCE MANUAL.
- IRRIGATION: IRRIGATION FOR THE STORMWATER FACILITY SHALL CONSIST OF A TEMPORARY, ABOVE GROUND SYSTEM. CONTRACTOR SHALL PROVIDE A "DESIGN-BUILD" PLAN WITH HEAD, VALVE, AND PIPE LAYOUT, DISTRICT-APPROVED DOUBLE CHECK VALVE, AND BATTERY OPERATED ZONE CONTROLS. OBTAIN LANDSCAPE ARCHITECT AND CITY APPROVAL OF PLAN PRIOR TO CONSTRUCTION. REFER TO CLEAN WATER SERVICES (CWS) DESIGN AND CONSTRUCTION STANDARDS MANUAL AND MAINTENANCE NOTED THIS SHEET. IRRIGATION SYSTEM SHALL BE VACATED AND REMOVED AT THE END OF THE TWO-YEAR MAINTENANCE PERIOD IF ACCEPTED BY CWS. WATERING SHALL BE AT A MINIMUM RATE OF 1" PER WEEK FROM JUNE 1-OCTOBER 15 AND AS REQUIRED FOR PLANT ESTABLISHMENT.
- PLANT TAGGING FOR DORMANT SEASON IDENTIFICATION SHALL BE USED IF REQUIRED BY CWS.

**MAINTENANCE:**

- THE PERMITEE IS RESPONSIBLE FOR THE MAINTENANCE OF THIS FACILITY FOR A MINIMUM OF TWO YEARS FOLLOWING CONSTRUCTION AND ACCEPTANCE OF THIS FACILITY PER CHAPTER 2.
- ENGINEER AND OWNERS REPRESENTATIVE IS TO VISIT AND EVALUATE THE SITE A MINIMUM OF TWICE ANNUALLY (SPRING AND FALL). THE LANDSCAPING SHALL BE EVALUATED AND REPLANTED AS NECESSARY TO ENSURE A MINIMUM OF 80% SURVIVAL RATE OF THE REQUIRED VEGETATION AND 90% AERIAL COVERAGE. NON-NATIVE, INVASIVE PLANT SPECIES SHALL BE REMOVED WHEN OCCUPYING MORE THAN 20% OF THE SITE.
- THE FACILITY SHALL BE RE-EXCAVATED AND PLANTED IF SILTATION GREATER THAN 3 INCHES IN DEPTH OCCURS WITHIN THE TWO-YEAR MAINTENANCE PERIOD.



**TRACT A STORMWATER FACILITY DETAIL PLAN**





**LEGEND**

- EXISTING STREETS
- STREET IMPROVEMENTS INCLUDED IN PROJECT
- EXISTING PEDESTRIAN CONNECTIONS
- PROPOSED PEDESTRIAN IMPROVEMENTS INCLUDED IN PROJECT

