THREE LOT PARTITION AT
10510 SW 155TH AVE
T: 1S, R: 1W, SEC: 32BD, TL: 100
10510 SW 155TH AVE
BEAVERTON, OR 97007

Exhibit 6

Exhibit 6

DEVELOPER:

MIKE SAFSTROM
ADTM DEVELOPMENT LLC
32070 SW WILLAMETTE WAY EAST
WILLAMETTE, OR 97070
503-890-6884

CONTACT:

ENVIRONMENTAL MANAGEMENT SYSTEMS, INC.
4080 SE INTERNATIONAL WAY, SUITE B112
MILWAUKIE, OR 97222
503-353-9691

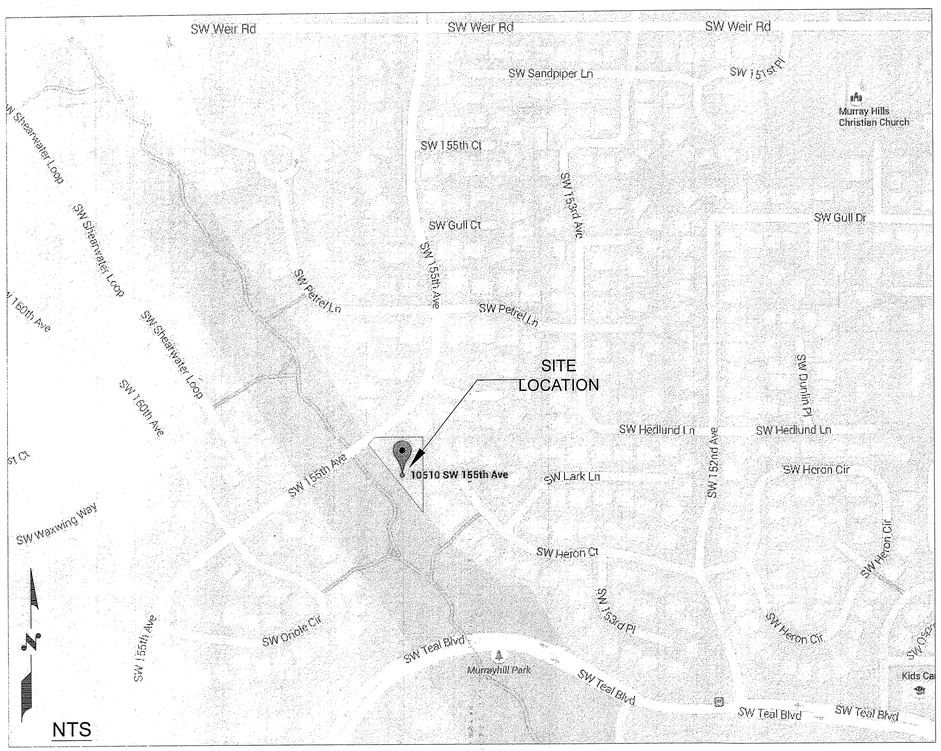
LEE R. BUCKLEY, P.E.
(503) 234-3252

SITE DATA:

ZONE: R5
LOT SIZE:
TL 100: 0.75 AC.
MINIMUM LOT SIZE: 5,000 SQFT (SITES < 2AC.)
MINIMUM SET BACKS:
FRONT: 15 FT
REAR: 20FT
SIDE: 5 FT
MAXIMUM BUILDING HEIGHT: 35FT

DATUM: MAG NAIL SET BY CMT
SURVEYING AND CONSULTING, ELEV = 500.00'

VICINITY MAP



GENERAL CONSTRUCTION NOTES:

1. All public improvements shall be constructed per the applicable sections of the City of Beaverton Engineering Design Manual (Ordinance 4417) and Clean Water Services District's Design and Construction Standards (Resolution and Order 2007-20).
2. Existing utility locations are approximate only. In order to protect existing underground utilities, contractors performing work shown on these plans must notify utilities and public agencies at least 48 business hours in advance of, and no more than 10 business days before, beginning excavation, in accordance with the provisions of OAR 952-001-0090. Limits of work shall be pre-marked for the utility locators. Pothole all crossings as necessary to prevent grade and alignment conflicts. Report all conflicts to the engineer immediately. Protect existing utilities at all times during construction. **Call the One Call Utility Notification Center at 503-246-6699 for utility locates**. Any damage to existing utilities, whether they're shown on these drawings or not, will be repaired or replaced at the contractor's expense.
ATTENTION: Oregon law requires all excavators to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 through OAR 952-001-0090. You may obtain copies of the rules by calling the center. (Note: The telephone number of the administration office for the Oregon Utility Notification Center is 503-232-1987).
3. The contractor shall exercise all due care in protecting property along the route of the improvements. This protection shall include, but not be limited to, trees, yards, fences, drainage lines, mail boxes, driveways, shrubs, lawns, irrigation systems, within any rights-of-ways and easements. If any of the above have been disturbed, they shall be restored as necessary to as near their original condition as possible or replaced in kind.
4. The contractor shall perform all the work shown on the drawings and all incidental work considered necessary to complete the project in an acceptable manner.
5. The contractor and/or each sub-contractor shall have a minimum of one set of City-approved construction plans on the job site at all times during each construction phase while work is being done.
6. All material suppliers shall submit to the engineer proof of material(s) tested in accordance with specifications. By acceptance of the contract with the owner/developer, the contractor certifies that all materials delivered to the job site will meet or exceed those specifications. Any material not conforming shall be removed from the site at no additional cost to the owner.
7. Following substantial completion, the developer's engineer shall provide three paper-copy, as-built and record drawing sets of all sheets in this plan set plus any approved revisions. After walk through and punch-list preparation by City crews, the City Inspector will request revisions to the as-builts and record drawings. The developer's engineer shall then provide one set of mylar as-builts and record drawings and an electronic copy in AutoCAD format (dxf or dwg files) on disk to the City Inspector, per City standards.
8. The contractor shall notify the City Inspector at least 48 hours (two full working days) prior to beginning the project. Connections between existing infrastructure and new work shall not be made until necessary inspections and tests have been completed on the new work and it is found to conform in all respects to the requirements of the plans and specifications.

SHEET INDEX

DESCRIPTION	SHEET NO.
COVER	1
3-LOT PARTITION PLAN	2
LOT 1 SHADOW PLAT	3
SITE GRADING/EROSION CONTROL	4
GRADING PROFILE - LOT 2	5
TREE PLAN	6
UTILITIES PLAN	7
STORMWATER SEWER PLAN	8
SANITARY SEWER & WATER PLAN	9
SEWER & DRIVEWAY PROFILES	10
CONSTRUCTION NOTES	11
CONSTRUCTION DETAILS	12
CONSTRUCTION DETAILS CONTINUED	13
PLANTER DETAILS	14
EROSION CONTROL DETAILS	15
EXISTING ABUTTING CONDITIONS	16
VEGETATED CORRIDOR ENHANCEMENT PLAN	17

RECEIVED
AUG 16 2016
City of Beaverton
Planning Services

REGISTERED PROFESSIONAL ENGINEER
9733
OREGON
JULY 17, 1970
L.R. BUCKLEY

EXPIRES: DEC. 31,

Page 1 of 17

08 Jul 2016

SCALE: NONE

Tract "A" & 3-Lot Partition-10510 SW 155th Ave

T: 1S, R: 1W, Sec: 32BD, TL: 100 (EMS 15-0057)

Cover

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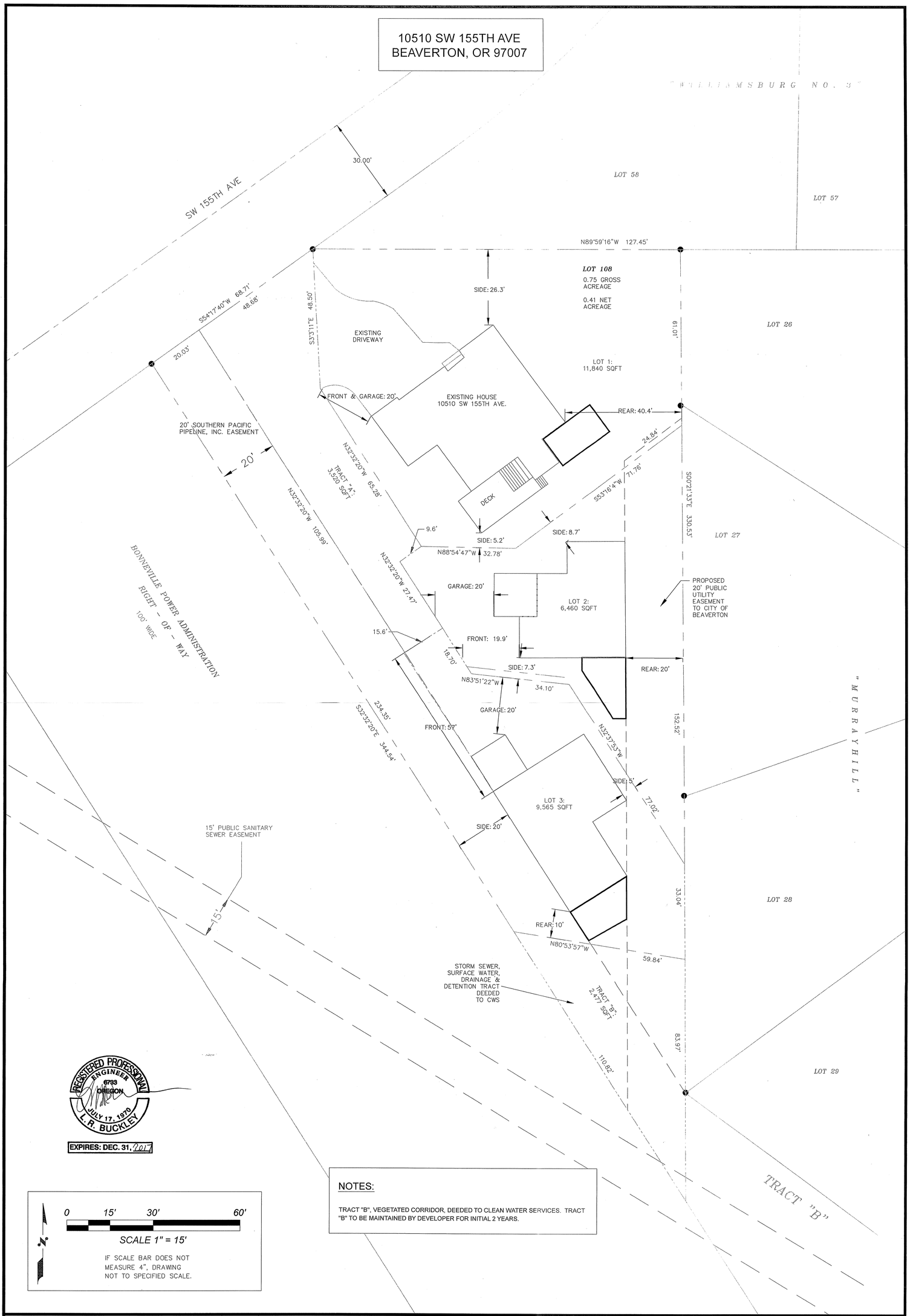

NOTES:

TRACT "B", VEGETATED CORRIDOR, DEEDED TO CLEAN WATER SERVICES. TRACT "B" TO BE MAINTAINED BY DEVELOPER FOR INITIAL 2 YEARS.

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3-Lot Partition Plan

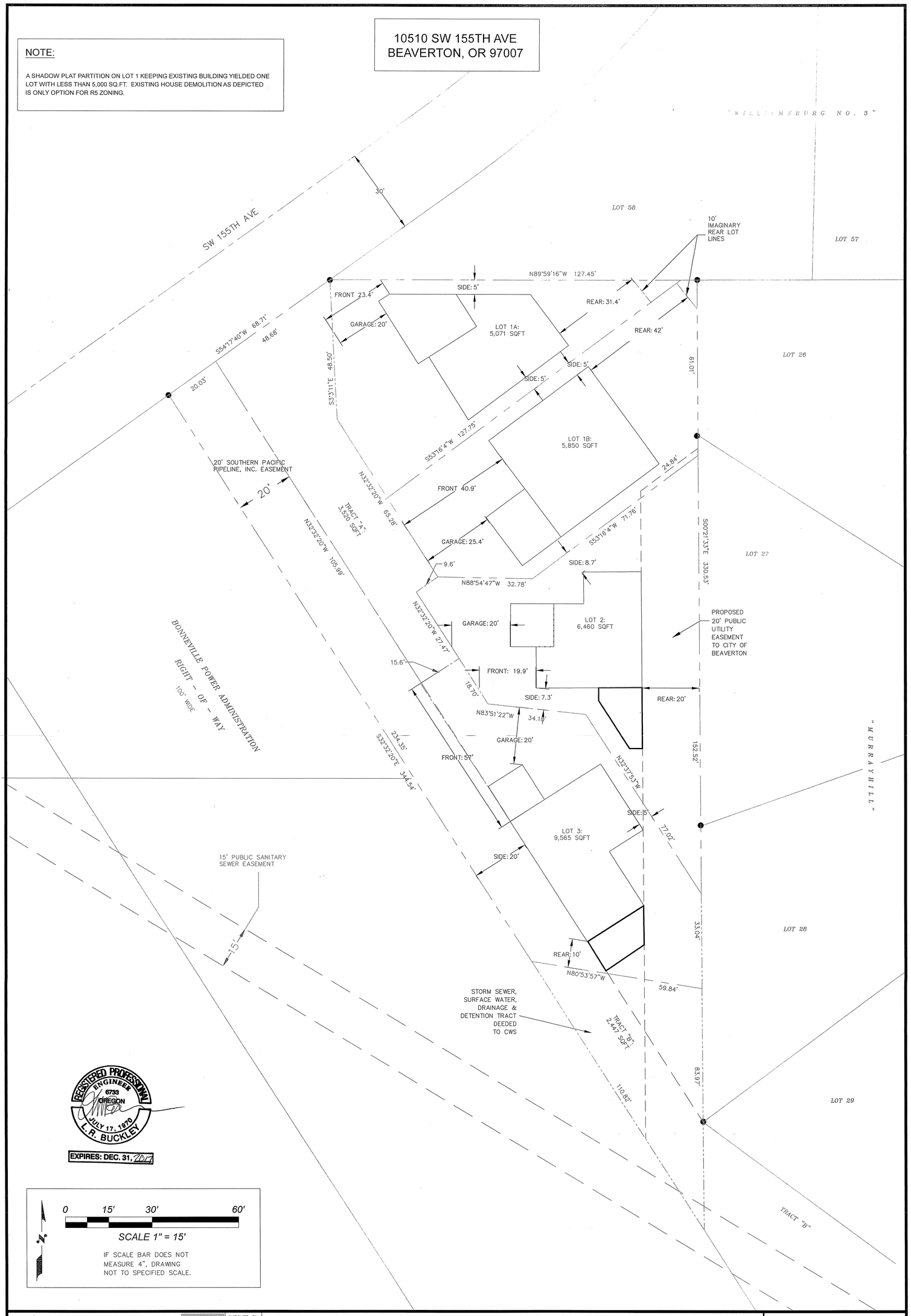
13 Jul 2016

SCALE: 1"=15'

NOTE:

A SHADOW PLAT PARTITION ON LOT 1 KEEPING EXISTING BUILDING YIELDED ONE LOT WITH LESS THAN 5,000 SQ.FT. EXISTING HOUSE DEMOLITION AS DEPICTED IS ONLY OPTION FOR R5 ZONING.

10510 SW 155TH AVE
BEAVERTON, OR 97007



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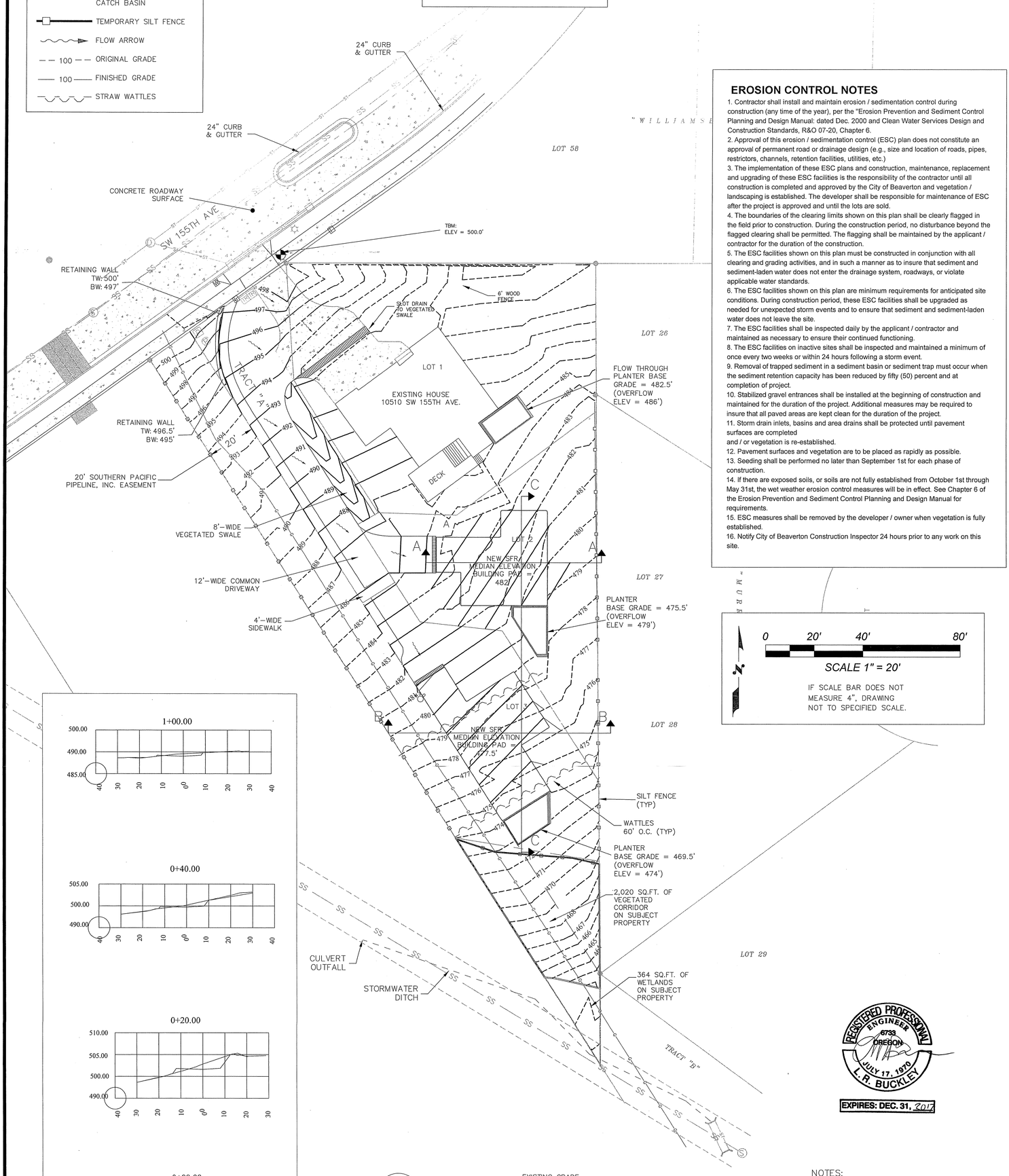
	Lot 1 Shadow Plat	SCALE: 1"=15'

10510 SW 155TH AVE
BEAVERTON, OR 97007

LEGEND:

- STORM SEWER MANHOLE
- CATCH BASIN
- TEMPORARY SILT FENCE
- FLOW ARROW
- 100 — ORIGINAL GRADE
- 100 — FINISHED GRADE
- STRAW WATTLES



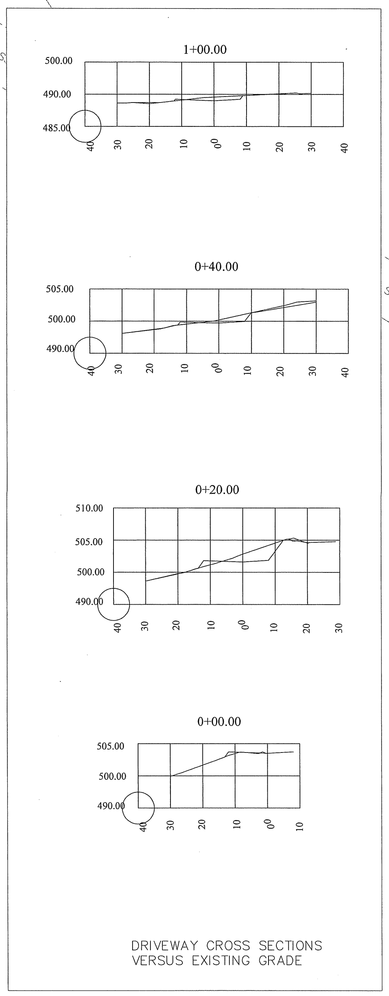
EROSION CONTROL NOTES

1. Contractor shall install and maintain erosion / sedimentation control during construction (any time of the year), per the "Erosion Prevention and Sediment Control Planning and Design Manual: dated Dec. 2000 and Clean Water Services Design and Construction Standards, R&O 07-20, Chapter 6.
2. Approval of this erosion / sedimentation control (ESC) plan does not constitute an approval of permanent road or drainage design (e.g., size and location of roads, pipes, restrictors, channels, retention facilities, utilities, etc.)
3. The implementation of these ESC plans and construction, maintenance, replacement and upgrading of these ESC facilities is the responsibility of the contractor until all construction is completed and approved by the City of Beaverton and vegetation / landscaping is established. The developer shall be responsible for maintenance of ESC after the project is approved and until the lots are sold.
4. The boundaries of the clearing limits shown on this plan shall be clearly flagged in the field prior to construction. During the construction period, no disturbance beyond the flagged clearing shall be permitted. The flagging shall be maintained by the applicant / contractor for the duration of the construction.
5. The ESC facilities shown on this plan must be constructed in conjunction with all clearing and grading activities, and in such a manner as to insure that sediment and sediment-laden water does not enter the drainage system, roadways, or violate applicable water standards.
6. The ESC facilities shown on this plan are minimum requirements for anticipated site conditions. During construction period, these ESC facilities shall be upgraded as needed for unexpected storm events and to ensure that sediment and sediment-laden water does not leave the site.
7. The ESC facilities shall be inspected daily by the applicant / contractor and maintained as necessary to ensure their continued functioning.
8. The ESC facilities on inactive sites shall be inspected and maintained a minimum of once every two weeks or within 24 hours following a storm event.
9. Removal of trapped sediment in a sediment basin or sediment trap must occur when the sediment retention capacity has been reduced by fifty (50) percent and at completion of project.
10. Stabilized gravel entrances shall be installed at the beginning of construction and maintained for the duration of the project. Additional measures may be required to insure that all paved areas are kept clean for the duration of the project.
11. Storm drain inlets, basins and area drains shall be protected until pavement surfaces are completed and / or vegetation is re-established.
12. Pavement surfaces and vegetation are to be placed as rapidly as possible.
13. Seeding shall be performed no later than September 1st for each phase of construction.
14. If there are exposed soils, or soils are not fully established from October 1st through May 31st, the wet weather erosion control measures will be in effect. See Chapter 6 of the Erosion Prevention and Sediment Control Planning and Design Manual for requirements.
15. ESC measures shall be removed by the developer / owner when vegetation is fully established.
16. Notify City of Beaverton Construction Inspector 24 hours prior to any work on this site.

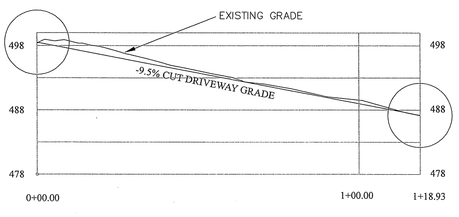
0 20' 40' 80'

SCALE 1" = 20'

IF SCALE BAR DOES NOT MEASURE 4", DRAWING NOT TO SPECIFIED SCALE.

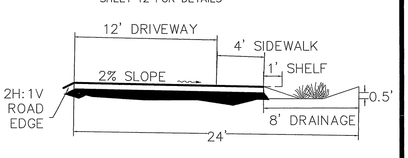


DRIVEWAY CROSS SECTIONS VERSUS EXISTING GRADE



DRIVEWAY LONGITUDINAL GRADE

NOTES:
-SEE CITY OF BEAVERTON ENGINEERING DESIGN MANUAL 210.13.N.3.C.i FOR DRIVEWAY REQUIRED 'PAVEMENT AND SUBGRADE CHARACTERISTICS
-CWS UDA DRAINAGE SWALE - SEE SHEET 12 FOR DETAILS



DRIVEWAY CROSS-SECTION

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OREGON
JULY 17, 1970
I. R. BUCKLEY
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Tract "A" & 3-Lot Partition-10510 SW 155th Ave

T: 1S, R: 1W, Sec: 32BD, TL: 100 (EMS 15-0057)

Site Grading/Erosion Control

PAGE 4 of 17

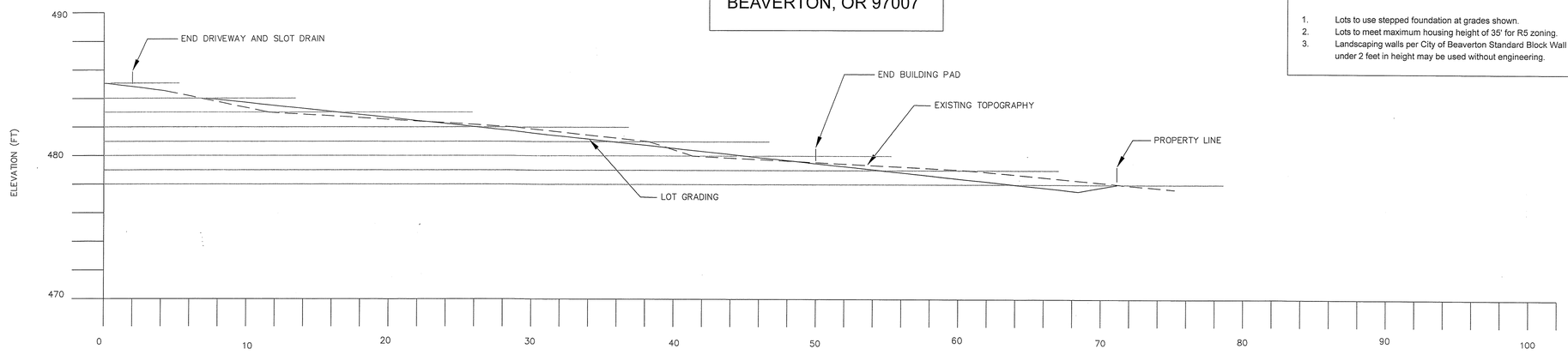
13 Jul 2016

SCALE: 1"=20'

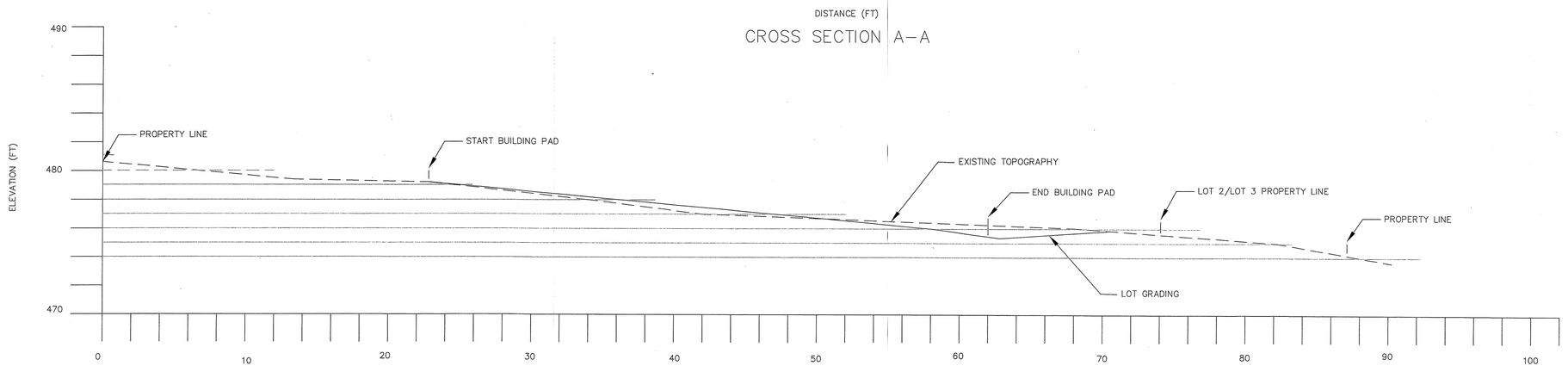
10510 SW 155TH AVE
BEAVERTON, OR 97007

GRADING NOTES

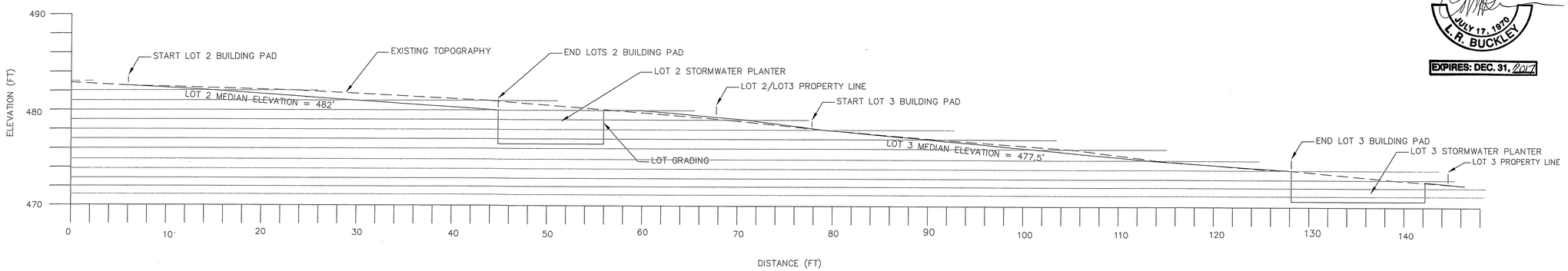
1. Lots to use stepped foundation at grades shown.
2. Lots to meet maximum housing height of 35' for R5 zoning.
3. Landscaping walls per City of Beaverton Standard Block Wall Drawing No. 270. under 2 feet in height may be used without engineering.



CROSS SECTION A–A



CROSS SECTION B–B



CROSS SECTION C–C

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L.R. BUCKLEY
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PAGE 5 of 17

13 Jul 2016

SCALE: Non-Std.

Tract "A" & 3-Lot Partition-10510 SW 155th Ave

T: 1S, R: 1W, Sec: 32BD, TL: 100 (EMS 15-0057)

Grading Profiles - Lots 2 & 3

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	Tree Species	DBH (Inches)	Dripline Radius (Feet)	Root Zone Radius (Feet)
1	Pseudotsuga menziesii (Douglas fir)	12.61	11.5	16.5
2	Street tree			
3	Tree did not meet DBH Requirments			
4	Tree did not meet DBH Requirments			
5	Jacquemontii birc (Betula jacquemontii)	10.89	10.5	15.5
6	Tree did not meet DBH Requirments			
7	Cedrus deodara (Deodar cedar)	16.04	16.7	21.7
8	Cedrus deodara (Deodar cedar)	23.30	18.0	23.0
9	Cedrus deodara (Deodar cedar)	21.77	20.9	25.9
10	Pseudotsuga menziesii (Douglas fir)	9.93	9.4	14.4
11	Pseudotsuga menziesii (Douglas fir)	24.06	18.0	23.0
12	Pseudotsuga menziesii (Douglas fir)	14.13	10.6	15.6
13	Pseudotsuga menziesii (Douglas fir)	19.86	16.8	21.8
14	Pseudotsuga menziesii (Douglas fir)	22.15	13.9	18.9
15	Pseudotsuga menziesii (Douglas fir)	28.65	17.2	22.2
16	Pseudotsuga menziesii (Douglas fir)	20.63	17.9	22.9
17	Acer macrophyllum (Big leaf maple)	20.63	15.9	20.9
18	Pseudotsuga menziesii (Douglas fir)	24.83	18.0	23.0
19	Pseudotsuga menziesii (Douglas fir)	27.12	18.1	23.1
20	Pseudotsuga menziesii (Douglas fir)	33.61	26.4	31.4
21	Pseudotsuga menziesii (Douglas fir)	17.19	14.7	19.7
22	Pseudotsuga menziesii (Douglas fir)	21.39	19.9	24.9
23	Pseudotsuga menziesii (Douglas fir)	32.85	22.4	27.4
24	Thuja Plicata (Western red cedar)	16.81	9.7	14.7
25	Thuja Plicata (Western red cedar)	15.28	10.6	15.6
26	Pseudotsuga menziesii (Douglas fir)	19.86	20.8	25.8
27	Pseudotsuga menziesii (Douglas fir)	21.01	22.9	27.9
28	Pseudotsuga menziesii (Douglas fir)	19.10	18.8	23.8

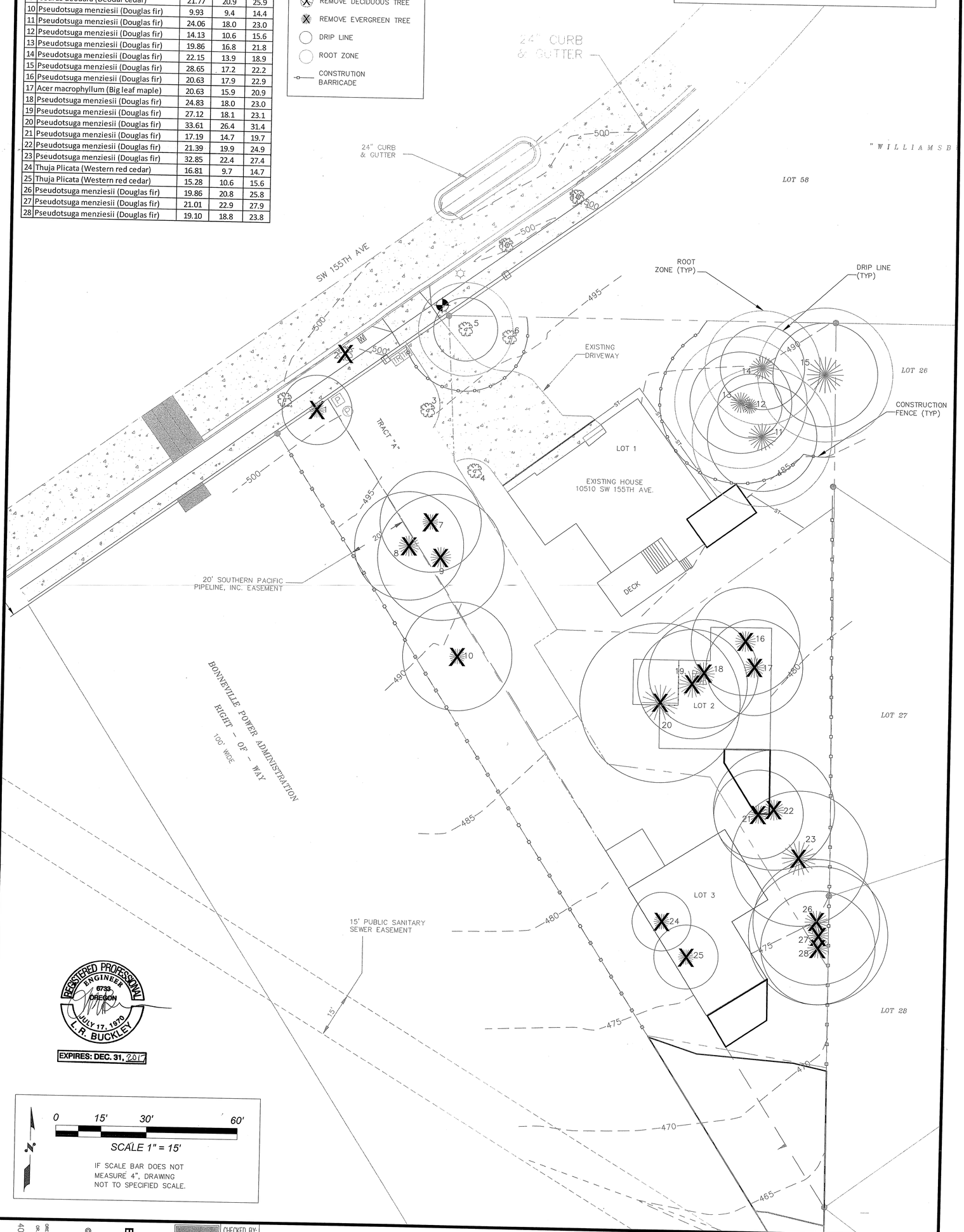
10510 SW 155TH AVE
BEAVERTON, OR 97007

LEGEND:

- DECIDUOUS TREE
- EVERGREEN TREE
- REMOVE DECIDUOUS TREE
- REMOVE EVERGREEN TREE
- DRIP LINE
- ROOT ZONE
- CONSTRUTION BARRICADE

NOTES:

1. EIGHTEEN COMMUNITY TREES TO BE REMOVED.
2. DEVELOPMENT MEETS THRESHOLD FOR TYPE 2 TREE PLAN.
3. ORANGE CONSTRUCTION FENCE TO BE PLACED 5 FT BEYOND ROOT ZONE OF PROTECTED TREE OR AS INDICATED BY PLAN. FENCE SHALL BE 4 FT TALL AND SECURED WITH 6 FT METAL POSTS DRIVEN 2 FT INTO GROUND.
4. COLORED FLAGGING TO BE PLACED ON METAL POSTS EVERY 5 FT TO INDICATE TREE PROTECTION ZONE.



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OREGON
JULY 17, 1970
L.R. BUCKLEY
EXPIRES: DEC. 31, 2017

0 15' 30' 60'
SCALE 1" = 15'
IF SCALE BAR DOES NOT MEASURE 4", DRAWING NOT TO SPECIFIED SCALE.

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DRAWN BY: Amp

Tract "A" & 3-Lot Partition-10510 SW 155th Ave

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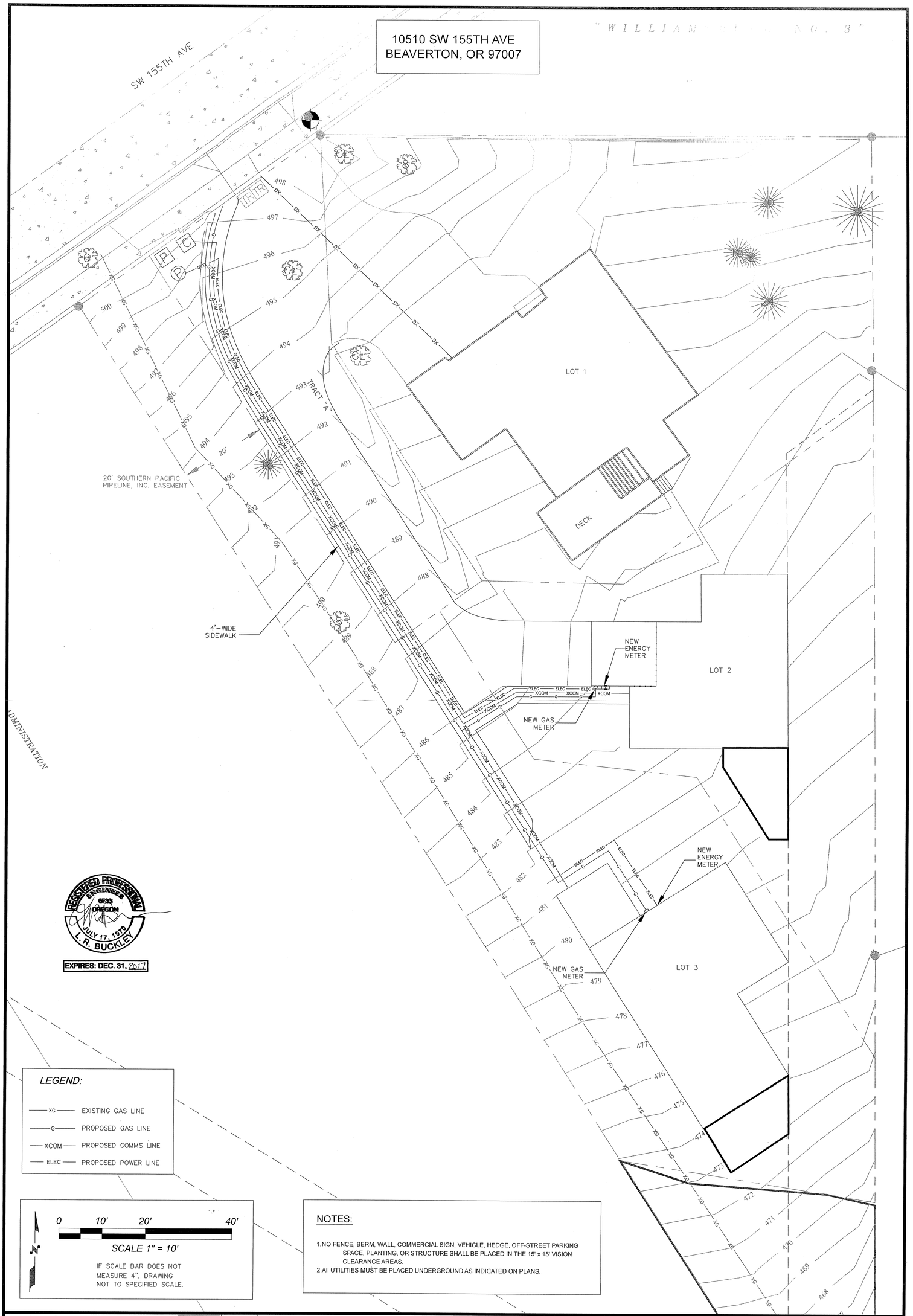
Tree Plan

PAGE 6 of 17

13 Jul 2016

SCALE: 1"=15'

10510 SW 155TH AVE
BEAVERTON, OR 97007



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OREGON
JULY 17, 1979
L.R. BUCKLEY
EXPIRES: DEC. 31, 2017

LEGEND:

- XG — EXISTING GAS LINE
- G — PROPOSED GAS LINE
- XCOM — PROPOSED COMMS LINE
- ELEC — PROPOSED POWER LINE

0 10' 20' 40'
SCALE 1" = 10'
IF SCALE BAR DOES NOT MEASURE 4", DRAWING NOT TO SPECIFIED SCALE.

NOTES:

1. NO FENCE, BERM, WALL, COMMERCIAL SIGN, VEHICLE, HEDGE, OFF-STREET PARKING SPACE, PLANTING, OR STRUCTURE SHALL BE PLACED IN THE 15' x 15' VISION CLEARANCE AREAS.
2. All UTILITIES MUST BE PLACED UNDERGROUND AS INDICATED ON PLANS.

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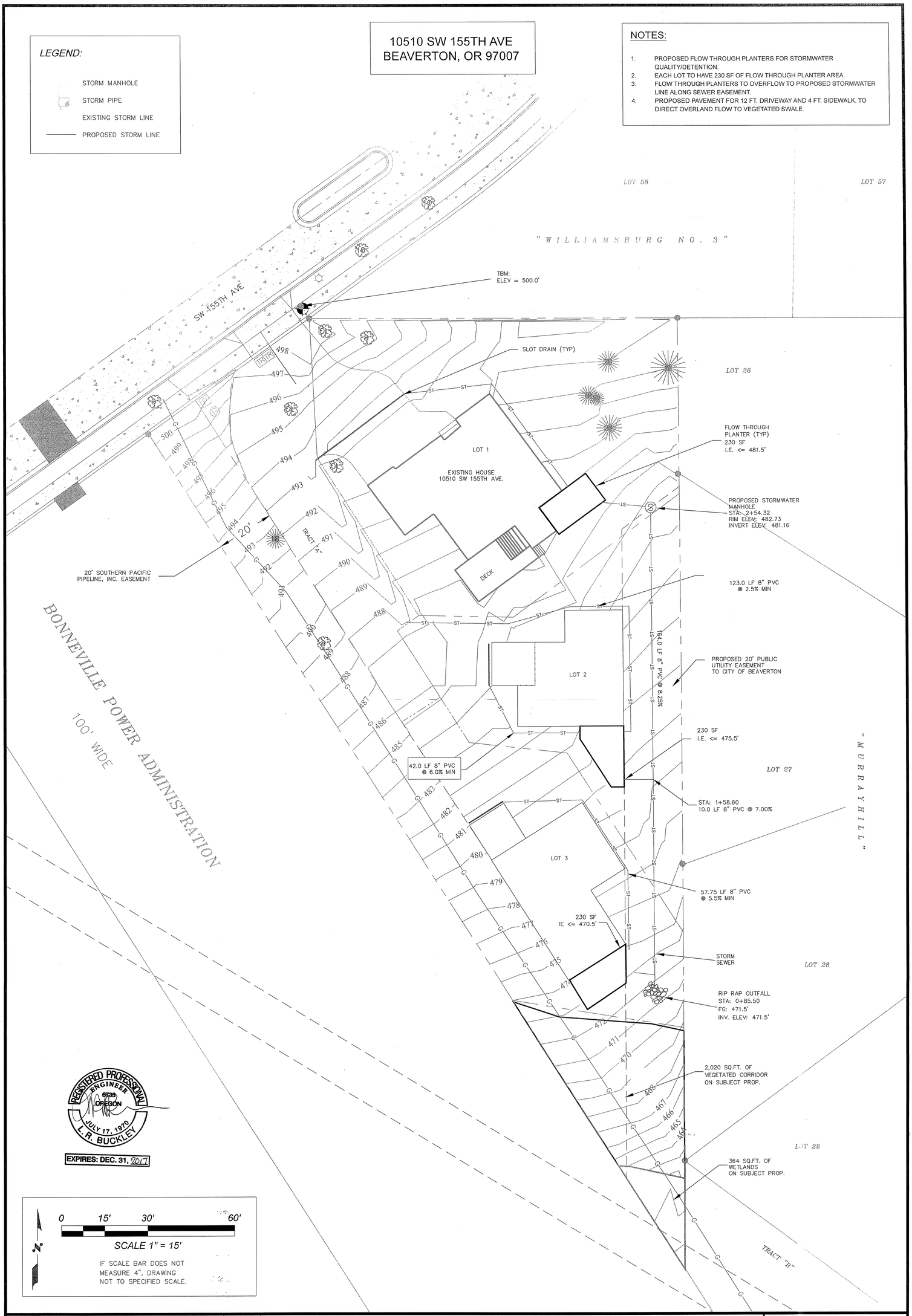
Utilities Plan (Rev. 5/27/16)

13 Jul 2016

SCALE: 1"=10'



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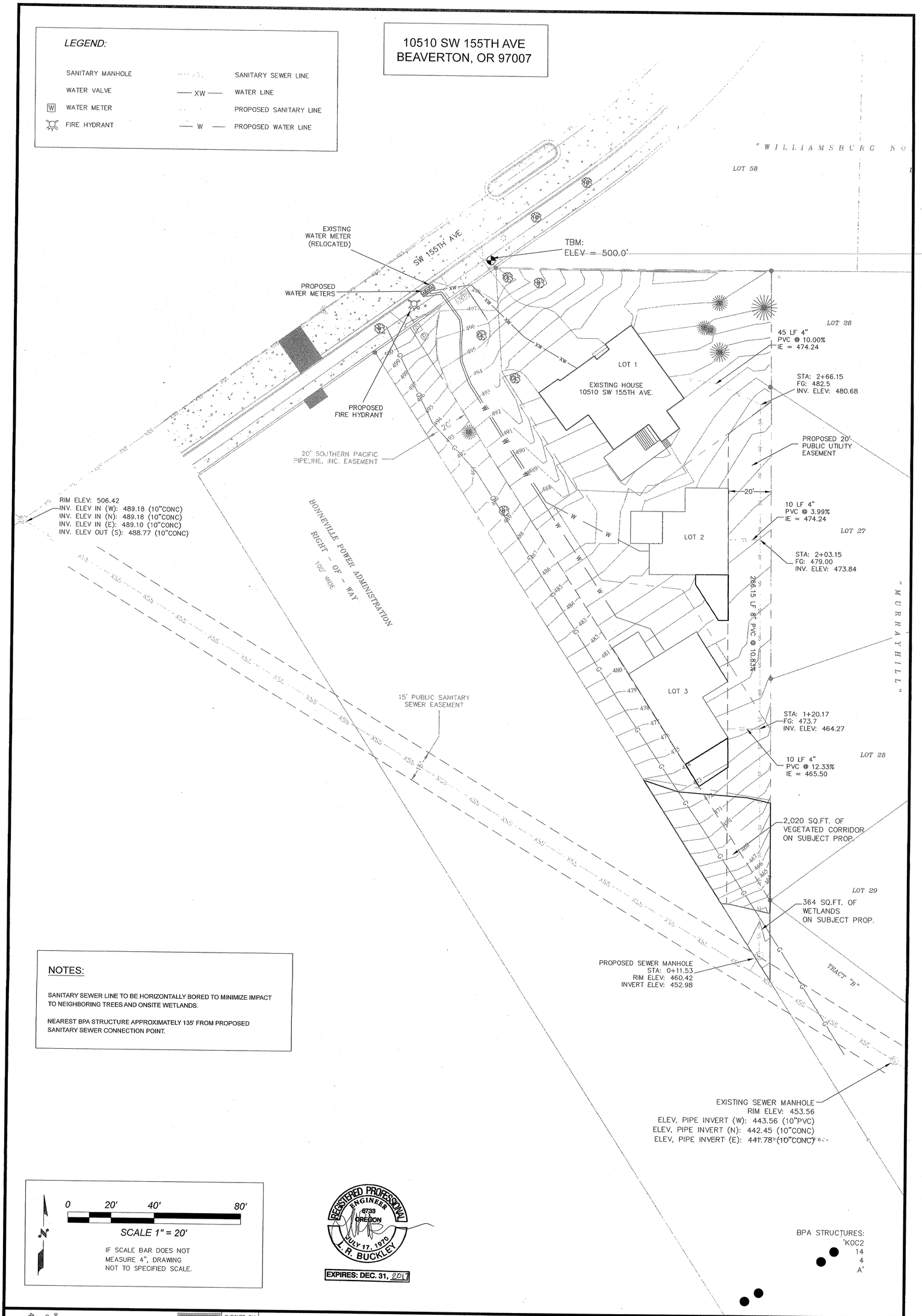
Stormwater Sewer Plan

13 Jul 2016

SCALE: 1"=15'



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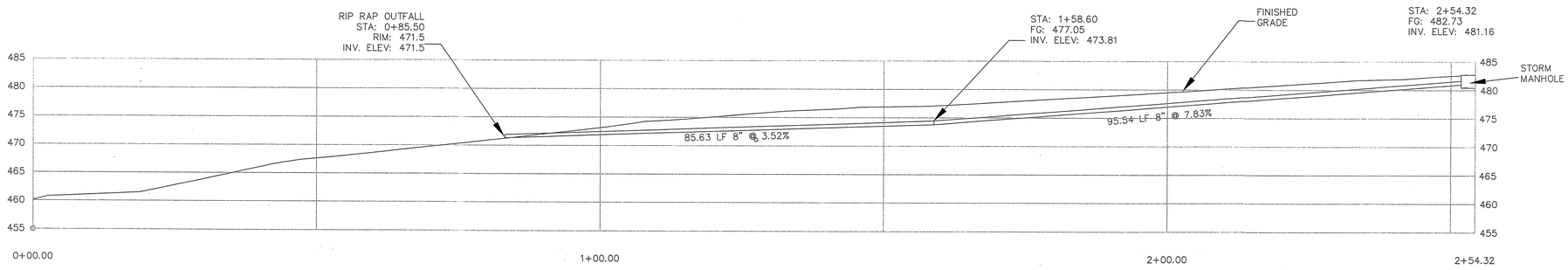
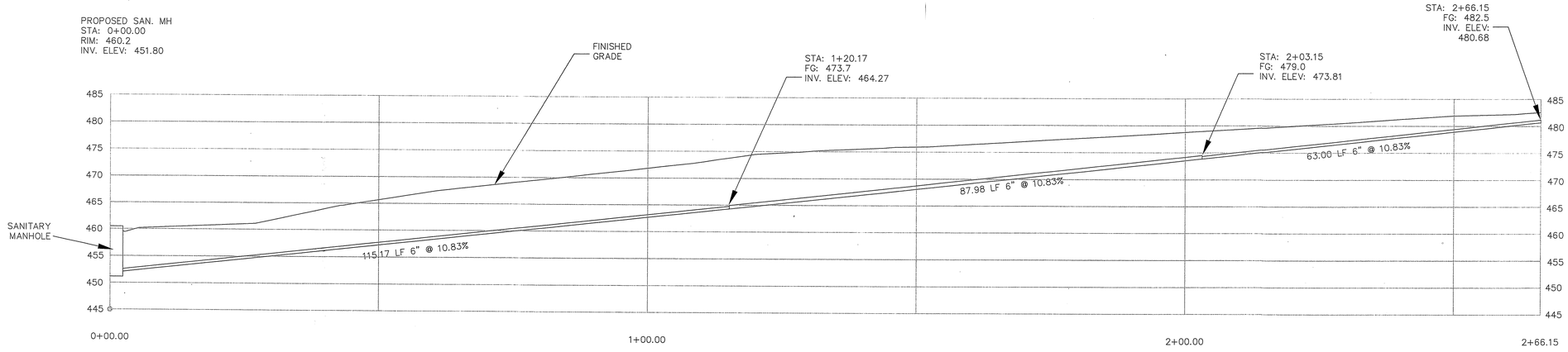
Sanitary Sewer & Water Plan

13 Jul 2016

SCALE: 1"=20'



STORM SEWER PROFILE (COLLECTOR)
NTS



SANITARY SEWER PROFILE (COLLECTOR)
NTS

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6733
OREGON
JULY 17, 1970
L. R. BUCKLEY

EXPIRES: DEC. 31, 2017

PAGE 10 of 17

13 Jul 2016

SCALE: Non-Std.

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Sewer & Storm Profiles

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CITY OF BEAVERTON
GENERAL CONSTRUCTION NOTES

GENERAL:
1. All public improvements shall be constructed per the applicable sections of the City of Beaverton Engineering Design Manual (Ordinance 4417) and Clean Water Services District's Design and Construction Standards (Resolution and Order 2007-20).
2. Existing utility locations are approximate only. In order to protect existing underground utilities, contractors performing work shown on these plans must notify utilities and public agencies at least 48 business hours in advance of, and no more than 10 business days before, beginning excavation, in accordance with the provisions of OAR 952-001-0090. Limits of work shall be pre-marked for the utility locators. Pothole all crossings as necessary to prevent grade and alignment conflicts. Report all conflicts to the engineer immediately. Protect existing utilities at all times during construction. **Call the One Call Utility Notification Center at 503-246-6699 for utility locates**. Any damage to existing utilities, whether they're shown on these drawings or not, will be repaired or replaced at the contractor's expense.
ATTENTION: Oregon law requires all excavators to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 through OAR 952-001-0090. You may obtain copies of the rules by calling the center. (Note: The telephone number of the administration office for the Oregon Utility Notification Center is 503-232-1987).
3. The contractor shall exercise all due care in protecting property along the route of the improvements. This protection shall include, but not be limited to, trees, yards, fences, drainage lines, mail boxes, driveways, shrubs, lawns, irrigation systems, within any rights-of-ways and easements. If any of the above have been disturbed, they shall be restored as necessary to as near their original condition as possible or replaced in kind.
4. The contractor shall perform all the work shown on the drawings and all incidental work considered necessary to complete the project in an acceptable manner.
5. The contractor and/or each sub-contractor shall have a minimum of one set of City-approved construction plans on the job site at all times during each construction phase while work is being done.
6. All material suppliers shall submit to the engineer proof of material(s) tested in accordance with specifications. By acceptance of the contract with the owner/developer, the contractor certifies that all materials delivered to the job site will meet or exceed those specifications. Any material not conforming shall be removed from the site at no additional cost to the owner.
7. Following substantial completion, the developer's engineer shall provide three paper-copy, as-built and record drawing sets of all sheets in this plan set plus any approved revisions. After walk through and punch-list preparation by City crews, the City Inspector will request revisions to the as-builts and record drawings. The developer's engineer shall then provide one set of mylar as-builts and record drawings and an electronic copy in AutoCAD format (dxf or dwg files) on disk to the City Inspector, per City standards.
8. The contractor shall notify the City Inspector at least 48 hours (two full working days) prior to beginning the project. Connections between existing infrastructure and new work shall not be made until necessary inspections and tests have been completed on the new work and it is found to conform in all respects to the requirements of the plans and specifications.

STREETS AND STRUCTURAL FILLS:
1. All trees, brush and debris within the limits of the right-of-way and on the areas to be filled shall be removed and disposed of by the contractor unless otherwise noted on the plans or flagged in the field.
2. All areas of construction shall be stripped. Stripping shall consist of removing the topsoil humus. Stripping materials shall be placed or stockpiled by the contractor on site as shown on the plans and per instruction by the Inspector, or hauled off site to an approved location.
3. Embankments and structural fills for roadway construction or fills to be constructed on buildable areas shall be constructed from excavated materials acceptable to the soils engineer and shall be brought to grade in lifts not to exceed 8" loose measure. Each lift shall be compacted to 95 percent of maximum density as obtained by AASHTO T-99 compaction test. Combination test results shall be submitted to the City Inspector.
4. Fills shall not be constructed on natural slopes steeper than 2 horizontal to 1 vertical. All fill slopes shall not exceed 2 horizontal to 1 vertical. No rock or similar irreducible material with a minimum dimension greater than 12 inches shall be buried or placed in the fills.
5. If springs or ground water are encountered during construction, the contractor shall advise the soils and civil engineers of the condition found and coordinate activities in a manner that will allow the engineer(s) time to review the situation and prepare a plan to properly dispose of the water encountered for City approval and per Clean Water Services requirements.
6. Rock base, asphaltic concrete pavement, concrete pavement curb and sidewalk construction shall be as shown on the typical sections and detail sheet and in accordance with the above referenced specifications.
7. The contractor shall clean all spilled dirt, gravel or other foreign material caused by the construction operations from all streets and roads at the conclusion of each day or operation. Cleaning shall be by grader and front-end loader, supplemented by power brushing and hand labor unless otherwise approved by the City. The contractor shall follow City and CWS erosion control procedures.
8. As soon as practical after completion of all paving and gravel shoulder resurfacing, the contractor shall remove all dirt, mud, rock gravel and other foreign material from the paved surface and storm drainage system.

STORM SEWER:
1. All storm sewer construction and all materials shall conform to the applicable sections of the City Engineering Design Manual & CWS Design and Construction Standards.
2. All service laterals to be constructed at a minimum slope of one-quarter inch per linear foot unless otherwise shown on plans or approved by the City Building Division.
3. All existing storm systems shall be cleaned and flushed and original drainage restored. Sediment, rock and other debris shall be collected and disposed of in a proper manner. In no case shall debris be flushed down a storm or sanitary sewer for disposal. All damaged irrigation and house drainage pipe, drain tiles, sewer laterals and culverts shall be repaired expeditiously. Debris collected shall be disposed in a commercial landfill or other approved location.
4. Storm sewer pipe shall be of the size and type noted on the plans. Concrete reinforced pipe shall be bell & spigot pipe and shall conform to ASTM C76-CL 4 (unless otherwise shown). Catch basins and curb inlets shall be the type shown on the detail sheet.
5. Installation of the storm sewer shall be performed according to the standard practice. Pipe lines shall be laid on a straight alignment and uniform grade between structures. Pipe bedding shall be placed to form a continuous and uniform bearing support for the pipe at every point between joints; pipe zone material shall be first placed up to the spring line of the pipe and material uniformly compacted by hand to insure proper support within the pipe haunches. All backfill in public right of way and other traffic areas shall be ¾"-0" compacted crushed rock, compacted to 95% percent of maximum density as obtained by AASHTO T-99 compaction test.
6. Storm sewer stubs and service laterals shall be marked with 2"x4", minimum 8 foot posts (with at least 3 feet exposed above ground) painted white with thick, black pen or black lumber crayon indicating depth of pipe, lot # (if applicable), and stationing. PVC pipe used for storm service laterals shall be white in color.
7. Prior to acceptance, all public storm sewer shall be thoroughly cleaned and, as appropriate, mandrelled and TV-scanned in accordance with the City of Beaverton's requirements for such tests.

SANITARY SEWERS:
1. All sanitary sewer construction and all materials shall conform to the applicable sections of the City Engineering Design Manual & CWS Design and Construction Standards.
2. All service laterals to be constructed at a minimum slope of one-quarter inch per linear foot unless otherwise shown on plans or approved by the City Building Division.
3. Installation of the sanitary sewer shall be performed according to the standard practice. Pipe lines shall be laid on a straight alignment and uniform grade between structures. Pipe bedding shall be placed to form a continuous and uniform bearing support for the pipe at every point between joints; pipe zone material shall be first placed up to the spring line of the pipe and material uniformly compacted by hand to insure proper support within the pipe haunches. All backfill in public right of way and other traffic areas shall be ¾"-0" compacted crushed rock compacted to 95% of maximum density as obtained by AASHTO T-99 compaction test.
4. Sanitary sewer stubs and service laterals shall be marked with 2"x4", minimum 8 foot posts (with at least 3 feet exposed above ground) painted green or red with thick, black pen or black lumber crayon indicating depth of pipe, lot # (if applicable), and stationing. PVC pipe used for sanitary service laterals shall be green in color.
5. Prior to acceptance, all public sanitary sewers shall be thoroughly cleaned and, as appropriate, mandrelled and air tested and TV scanned in accordance with the City of Beaverton's requirements for such tests.

WATER LINES (City Water Service Area ONLY):
1. Operation of existing valves shall be performed only by authorized City staff.
2. All materials and workmanship shall comply with AWWA, City of Beaverton, and the Uniform Plumbing Code as applicable. All material shall be of new manufacture. No rebuilt or used materials will be allowed.
3. All mainline pipes shall be push-on, cement-lined ductile iron, Class #52 with Tyton joints. All fitting shall be mechanical joints conforming to ANSI A-21.11.
4. Fire hydrant assemblies shall conform to the City of Beaverton's accepted brands and models.
5. All pipes shall have 30" minimum cover measured from finish grade unless specifically noted for less cover with mitigating measures. In the absence of restrained joints, all tees, bends, crosses, elbows and changes in direction of 11.25 degrees or greater shall be securely thrust blocked using minimum 3,000 PSI concrete poured against undisturbed ground as shown per City Standards.
6. All backfill in the right of way or other traffic areas shall be ¾"-0" compacted crushed rock, compacted to 95 percent of maximum density as obtained by AASTO T-99 compaction test. Pipe bedding shall be placed to form a continuous and uniform bearing support for the pipe at every point between joints; pipe zone material shall be first placed up to the spring line of the pipe and material uniformly compacted by hand to insure proper support within the pipe haunches.
7. Water line construction shall comply with regulations of the Oregon Department of Human Services (DHS, formerly Oregon Health Division - rules accessed at www.ohd.hr.state.or.us/dwp/rules.cfm) regarding the location and separation of water lines and sanitary sewer lines -- (specifically, separation requirements can be accessed at http://oregon.gov/DHS/ph/dwp/docs/pwsrules/61-0020.pdf)
8. Upon completion of installation of the water system, all lines shall be flushed and disinfected in conformance with DHS guidelines and the requirements of the Oregon Department of Environmental Quality. Waterlines shall be pressure tested following completion. The minimum test pressure shall be 150 PSI. For lines working with operation pressures greater than 100 PSI, the minimum test pressure shall be one and one-half times the operation pressure. The duration of the test shall be 1 hour, unless otherwise directed by the City Inspector. Allowable leakage is in accordance to City Standards.
9. All water service laterals are to be installed by the developer in accordance with the City Standards.
10. Fire hydrants shall be located to allow a minimum of 36" clear space surrounding all portions of the hydrant. There shall also be no obstructions directly in line with any of the ports of the hydrant for a distance of 6 feet.
11. All waterline taps 4" or greater shall use an all stainless steel tapping sleeve (JCM 432 or approved equal).
12. Cross Connection Control and Backflow Assemblies shall be as per City of Beaverton Engineering Design Manual, Sections 617 through 619 and detail drawings 660 through 672. When required, backflow prevention assemblies for the protection of the public water system shall meet the requirements set forth in the current Oregon Administrative Rules Chapter 333-061-0070, Uniform Plumbing Code, and City of Beaverton Code 4.02.160 and 4.02.165. Contact the City Backflow Specialist for more information at 503-526-2208.

TRAFFIC CONTROL:
1. Traffic control to be performed in accordance with the Manual for Uniform Traffic Control Devices and Oregon amendments as required. The City can require additional traffic control measures as needed to provide for public safety.
2. On residential local streets, the contractor shall be responsible to provide all required traffic control when work is being done in the right of way.
3. All existing streets with a greater classification than a residential local street shall require a traffic control plan prepared by a professional engineer for both construction operations and after-hour situations.
4. All traffic control measures need to be submitted to the City of Beaverton for review prior to construction.

APPROVALS AND MODIFICATIONS:
1. Any revision to approved plans must be under the direction of the Engineer of Record (or Coordinating Design Professional). It shall be at the discretion of the City's Project Inspector as to whether the revision is significant enough to warrant review by the City Engineering Plan Review staff. If so, the Engineer shall submit five (5) copies of the proposed revision; no work affected by the revision shall be done until approved by the City Site Development Engineer. The City Inspector and the Engineer of Record must approve all other changes prior to implementation of the change.

EXPIRES: DEC. 31, 2017

REGISTERED PROFESSIONAL ENGINEER
OREGON
JULY 17, 1979
R. R. BUCKLEY
9733

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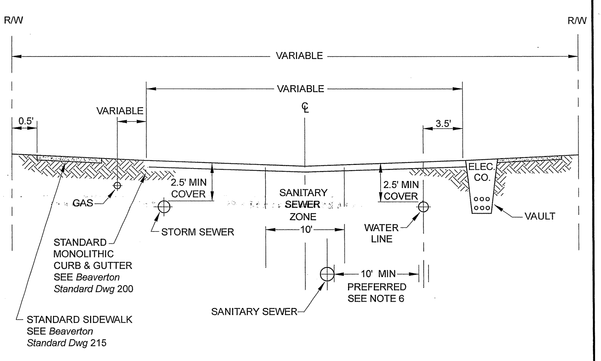
CHECKED BY: [illegible]
DRAWN BY: AWP

Tract "A" & 3-Lot Partition-10510 SW 155th Ave
T: 1S, R: 1W, Sec: 32BD, TL: 100 (EMS 15-0057)
Construction Notes

PAGE 11 of 17
13 Jul 2016
SCALE: NONE

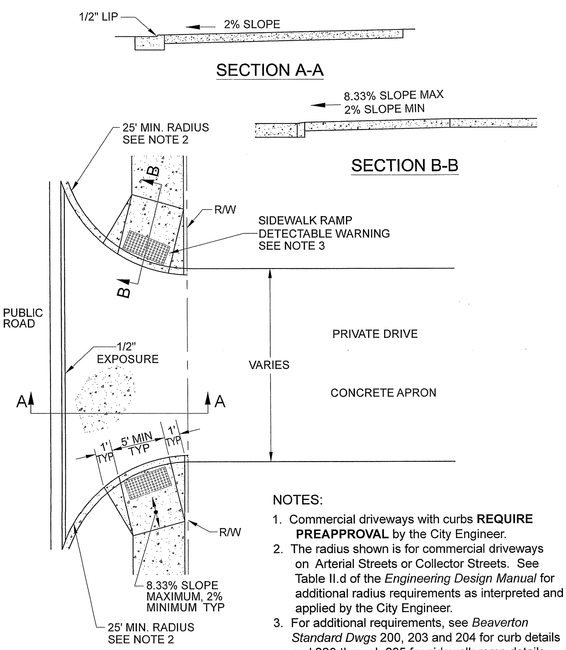


NOTES:

1. Utilities shall be located as shown unless otherwise approved by the City Engineer.
2. The SANITARY SEWER ZONE shown above is the preferred corridor in which sewers are to be located, unless otherwise approved by the City Engineer.
3. Storm sewer and gas are to be located on the south or west side of the street.
4. Water, communications, and power are to be located on the north or east side of the street.
5. Install sanitary and storm sewer to *Clean Water Services Design & Construction Standards.*
6. The separation between water lines and sewer lines, subject to approval by the City Engineer, may be less than 10 feet, as per *Oregon Dept. of Human Services Rules,* Chapter 6, *Public Water Systems.*

City Of Beaverton

PUBLIC WORKS DEPARTMENT		STANDARD UTILITY DETAILS	
CITY ENGINEER: Terry Waldele, P.E.	DATE: 6 - 10 - 04	DRAWN BY: JR - CPD	DRAWING NO.: 125

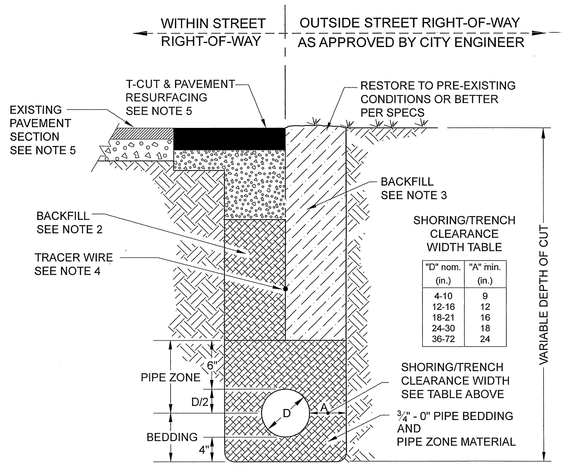


NOTES:

1. Commercial driveways with curbs **REQUIRE PREAPPROVAL** by the City Engineer.
2. The radius shown is for commercial driveways on Arterial Streets or Collector Streets. See Table II.d of the *Engineering Design Manual* for additional radius requirements as interpreted and applied by the City Engineer.
3. For additional requirements, see *Beaverton Standard Dwgs* 200, 203 and 204 for curb details and 220 through 235 for sidewalk ramp details.
4. Concrete apron structural section to conform to *Beaverton Standard Dwg* 210.

City Of Beaverton

PUBLIC WORKS DEPARTMENT		COMMERCIAL DRIVEWAY WITH CURBS	
CITY ENGINEER: Terry Waldele, P.E.	DATE: 2 - 07 - 07	DRAWN BY: JR - CPD	DRAWING NO.: 205

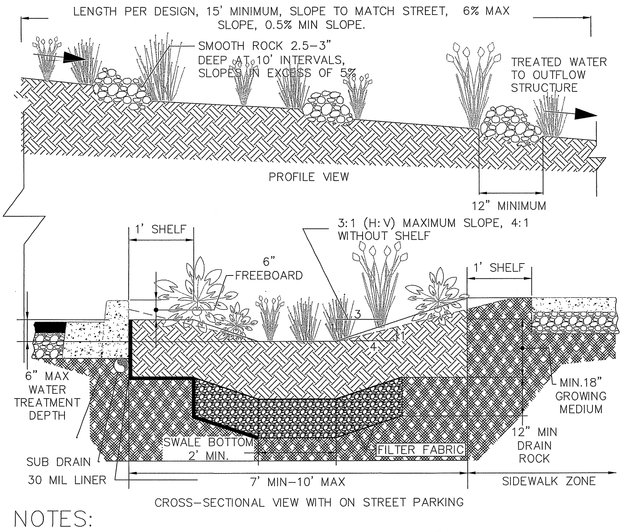


NOTES:

1. These trench backfill requirements apply to all public utility pipes. For additional requirements, see *CWS Design and Construction Standards* and City's *Engineering Design Manual* sections 210.18 & 210.19.
2. For trenches 12" wide or less in streets with classifications higher than Residential, use controlled density fill (CDF) as per sec 210.19. For all other trenches, use 3/4" - 0" aggregate compacted to 95% of max density per *AASHTO* t-99 and *ODOT/APWA spec* 00405.
3. Use class 'A' backfill compacted to 90% of max density per *AASHTO* t-99 and *ODOT/APWA spec* 00405.
4. Tracer wire shall be placed above non-metalic pipe and 2 feet below finished grade. See *Oregon State Plumbing Code* and City's *Engineering Design Manual* section 210.18.D.1.
5. Restore to original conditions or better. See specs and *Beaverton Standard Dwg* 302.
6. For conduit trench requirements see *Beaverton Standard Dwg* 301.

City Of Beaverton

PUBLIC WORKS DEPARTMENT		PIPE TRENCH BACKFILL	
CITY ENGINEER: Terry Waldele, P.E.	DATE: 2 - 22 - 07	DRAWN BY: JR - ED	DRAWING NO.: 300



NOTES:

1. PUBLIC WATER QUALITY SYSTEM. 1' SHELVES REQUIRED BY COUNTY.
2. SEE CWS STANDARD DETAIL 390 FOR OUTFLOW STRUCTURE.
3. INFLOW STRUCTURE PER LOCAL JURISDICTION.
   a. INFLOW STRUCTURE – CURB CUTOUT, SEE CURB CUT–OUT DETAIL.
   b. INFLOW STRUCTURE – CURB INLET, SEE CWS STANDARD DETAIL 340.
4. FLOW DISSIPATERS SHALL BE PLACED ACCORDING TO FACILITY DESIGN OTHERWISE: 12" IN LENGTH, EQUAL TO THE WIDTH OF THE SWALE BOTTOM AND LOWER SWALE SIDES, 3"–5" IN HEIGHT, AND PLACED EVERY 10' WHERE THE SWALE BOTTOM SLOPE EXCEEDS 5%.
5. VEGETATION TO BE USED IN THE SWALE BOTTOM CONFORMS TO PLANTINGS APPROVED FOR THE WET MOISTURE REGIME. VEGETATION TO BE USED ALONG THE SWALE SIDE CONFORMS TO PLANTINGS APPROVED FOR THE MOIST MOISTURE REGIMES.
6. 30 MIL IMPERMEABLE LINER, OR APPROVED EQUIVALENT PER JURISDICTIONAL ROAD AUTHORITY. SUBDRAIN CONNECTS WITH STORM SEWER SYSTEM. DRAIN ROCK LAYER NOT RECOMMENDED FOR LONGITUDINAL SLOPES OF GREATER THAN 2%.

LIDA HANDBOOK | **LIDA SWALE**

Clean Water Services — Our commitment is clear
2550 SW Hillsboro Hwy, Hillsboro, OR 97123, (503) 681-3600, www.cleanwaterservices.org

DRAWING NUMBER 795

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CHECKED BY: JRR
DRAWN BY: AWP

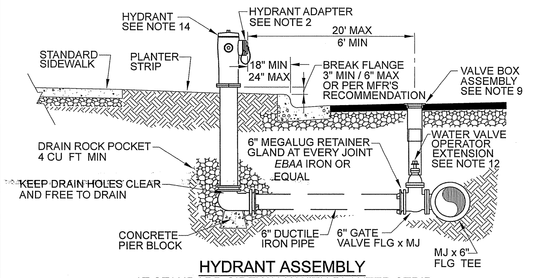
Tract "A" & 3-Lot Partition-10510 SW 155th Ave

T: 1S, R: 1W, Sec: 32BD, TL: 100 (EMS 15-0057)

Construction Details

13 Jul 2016

SCALE: NONE



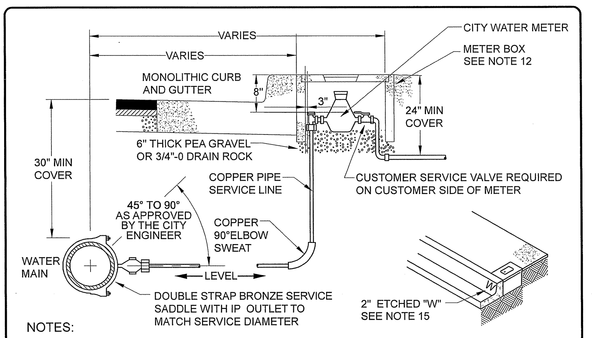
HYDRANT ASSEMBLY
AT STANDARD SIDEWALK WITH PLANTER STRIP

NOTES:

1. Hydrants are to have two 2½ inch and one 4½ inch ports.
2. Install a *Storz* HPHA50 - 45NH Permanent Hydrant Adapter on the 4½ inch port.
3. The minimum main - to - hydrant pipe size is 6 inches.
4. Hydrants to be: *Mueller* (Super Centurion 200), *Waterous* (Pacer WB67-250), *Clow* (Medallion F-2545), *Kennedy* (Guardian K-81D) or *M&H* (Regent style 129) with the following specifications:
   a. 5¼ inch main valve (barrel)
   b. Oil reservoir
   c. Bronze actuating nut
   d. Bronze seat ring
   e. Weather shield cap
   f. Safety sleeve coupling
   g. Threaded nozzles with "O" rings
   h. National standard threads
5. Hydrants are to be painted using R-1317 Safety Yellow paint or an alternate approved by the *TVF&R* Fire Marshall.
6. Safety chains are to be removed.
7. Hydrants are to be installed plumb.
8. Protective post is to be provided and installed, per *UFC Standards*, if hydrant is subject to vehicular damage.
9. Valve box assembly is to be in accordance *Beaverton Standard Dwg* 615 or as approved by the City Engineer.
10. No obstructions are allowed within 3 feet of Hydrant.
11. See *Beaverton Standard Dwg* 215 for sidewalk standards.
12. Add water valve operator extension when required. See *Beaverton Standard Dwg* 620.
13. Pipe bends are not allowed without permission of the City Engineer.
14. Hydrants may be located at varying distances from curb or in sidewalk only with prior approval of the City Engineer. If hydrant is located in sidewalk, sidewalk's clear width shall meet *ADA* clearance width requirements.

City Of Beaverton

PUBLIC WORKS DEPARTMENT		STANDARD FIRE HYDRANT ASSEMBLY	
UTILITIES ENGINEER David A. Winship, P.E.	DATE 5 - 3 - 05	DRAWN BY JR - CPD	DRAWING NO. 625

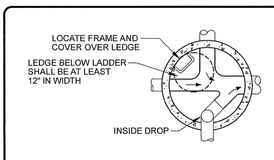


NOTES:

1. Water service to be installed by developer.
2. Water meter to be provided by City after payment of all applicable fees.
3. Wherever possible, service line to extend perpendicular from the water main to the meter stop.
4. Corporation and curb stops to be *Mueller* 300 ball valves, 300 psi rated, with *Mueller* 110 compression joints and padlock wings, *Ford Meter Box Co. Ballcorp* 300 psi rated ball valve with "Quick Joint" connections and padlock wings, or identical equal. Corporation stop to be installed with key sideways in open position.
5. Copper pipe to be American or Canadian made type K.
6. Tapped couplings shall not be permitted. Service saddle to be installed no less than 18 inches from pipe joint, fitting, coupling or valve.
7. All taps shall be made with machine guide or pilot tap.
8. All splices of copper tubing shall be silver solder connections.
9. All sweat joints shall be silver solder.
10. Bronze strainer to be used for 2 inch turbo meters.
11. On compression connections, cut the pipe end straight, chamfer and clean prior to inserting into the fitting; tighten the compression nut until it makes metal-to-metal contact with the machine shoulder of the stop or fitting.
12. A 1-inch bypass line with locking curb stop may be required for continuous service installations.
13. Meter box shall be *Armorcast* 17"x30"x12" polymer concrete #A6001640PCX12 without mousehole. Lid shall be 2" thick #A6001947TDZ 20k load rated RPM cover with #A6000482T RPM 20k drop-in cover.
14. Top of meter box to be set flush with sidewalk or top of curb.
15. All meter boxes located in driveways and sidewalks shall have traffic covers.
16. Etch a 2 inch "W" on the existing curb face or stamp a 2 inch "W" on top of wet new curbing to identify potable water service location.

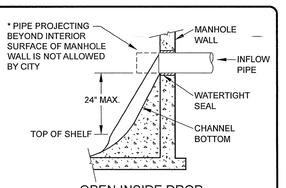
City Of Beaverton

PUBLIC WORKS DEPARTMENT		1-1/2" OR 2" COPPER SERVICE INSTALLATION	
UTILITIES ENGINEER David A. Winship, P.E.	DATE 3 - 4 - 14	DRAWN BY AL	DRAWING NO. 641



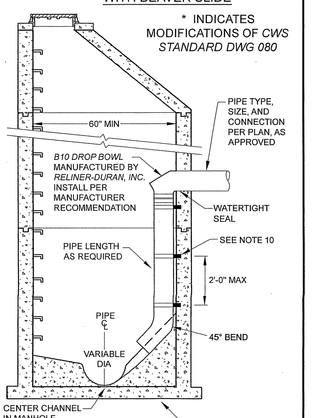
NOTES:

1. This drawing replaces *CWS Standard Dwg 070 & 080* and has been modified for use by *City of Beaverton Ordinance # 4303.*
2. Unless otherwise shown or noted on this drawing, all sanitary sewer inside drop manhole construction shall conform to the requirements of *ASTM C 478* and *Beaverton Standard Dwg* 304.
3. A single "open" (unenclosed) inside drop with a "BEAVER SLIDE" may be allowed with prior written approval of the City Engineer.
4. The City does not allow outside drops, "open" (unenclosed) inside drops over 2 feet high, or partitioned inside drops.
5. Pipe and fittings for drop assembly shall be same size as inflow pipe to manhole.
6. Pipe and fittings for drop assembly shall be: ductile iron *ANSI A21.50-1, AWWA C150-1, AWWA C-900 or PVC ASTM 3034 SDR 35.*
7. Pipe connections of four or more mainlines shall require a manhole connection and channel detail.
8. Provide a minimum of 8 inches of intact (undisturbed) manhole wall between pipe breakouts as measured on the inside face of the manhole.
9. Minimum fall between inlet and outlet to be not less than 0.10 feet.
10. See *Clean Water Services Standard Dwg 080* for clamp detail.
11. The City reserves the right to deviate from this drawing and related requirements in the *Engineering Design Manual* as dictated by project design parameters, and as approved by the City Engineer.



OPEN INSIDE DROP
WITH BEAVER SLIDE

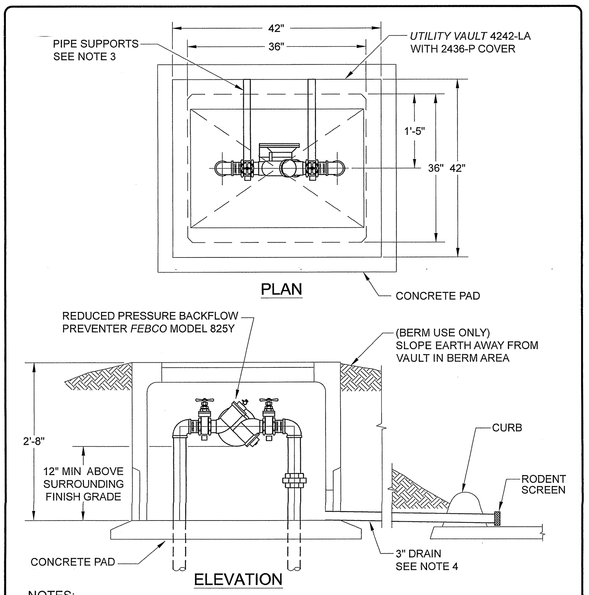
* INDICATES MODIFICATIONS OF *CWS STANDARD DWG 080*



MECHANICAL
INSIDE DROP

City Of Beaverton

PUBLIC WORKS DEPARTMENT		SANITARY SEWER INSIDE DROP MANHOLE	
CITY ENGINEER Terry Waldele, P.E.	DATE 5 - 09 - 06	DRAWN BY JCH - CPD	DRAWING NO. 331



ELEVATION

NOTES:

1. This is an above ground installation. Drawing depicts installation in a berm.
2. This is to be a private facility, governed by *UPC* and *Oregon Dept. of Human Services*, as applicable.
3. Device is to be supported by substantial material, resistant to rust and decay. Supports are to be installed to prevent undue stress or strain to the device and its service piping.
4. Install a 3 inch drain with a minimum 1/8 inch per foot slope away from vault to daylight.

City Of Beaverton

PUBLIC WORKS DEPARTMENT		PRIVATE 1-1/2" & 2" REDUCED PRESSURE BACKFLOW PREVENTER	
UTILITIES ENGINEER David A. Winship, P.E.	DATE 2 - 05 - 07	DRAWN BY CDH - WD	DRAWING NO. 661

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OR. 503-353-9691

CHECKED BY:

DRAWN BY: AMP

Tract "A" & 3-Lot Partition-10510 SW 155th Ave

T: 1S, R: 1W, Sec: 32BD, TL: 100 (EMS 15-0057)

Construction Details Continued

13 Jul 2016

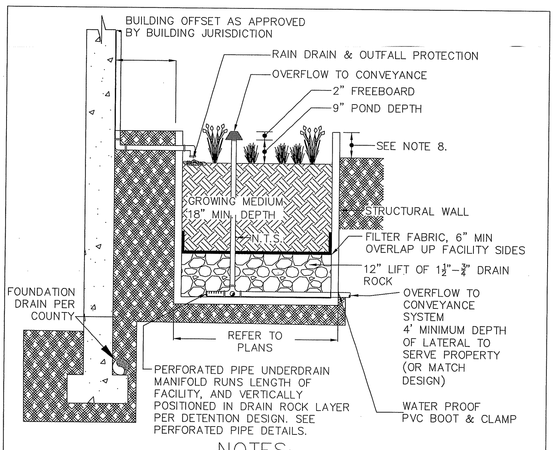
SCALE: NONE

Common Name	Scientific Name	Plant Category	Water Requirements	Light Requirements	Minimum Rooting Size	Minimum Plant Height	Spacing Format
Nodding beggartick	Bidens cernua	Herb	Wet	Sun	1 gal	1.5'	2'
Spreading rush	Juncus patens	Herb	Moist	Part	plugs	6"	1'
Small-fruited bulrush	Scirpus microcarpus	Herb	Wet	Sun	plugs	6"	1'
Slough Sedge	Carex obnupta	Herb	Moist	Part	plugs	6"	1'
Toad rush	Juncus bufonius	Herb	Dry	Sun	seed, plugs	4"	6"
Rossi Sedge	Carex rossii	Herb	Moist	Sun	plugs	4"	6"
Oregon bentgrass	Agrostis oregonensis	Grass	Dry	Sun	seed	n/a	Mass

NOTES:

THE GROWING MEDIUM SHALL BE ONE THIRD ORGANIC COMPOST, ONE THIRD GRAVELY SAND AND ONE THIRD TOP SOIL.

1. ORGANIC COMPOST SHALL BE THE RESULT OF BIOLOGICAL DEGRADATION AND TRANSFORMATION OF PLANT DERIVED MATERIALS UNDER CONDITIONS DESIGNED TO PROMOTE AEROBIC DECOMPOSITION, FREE OF VIABLE WEED SEEDS AND STABLE WITH REGARD TO OXYGEN CONSUMPTION AND CARBON DIOXIDE GENERATION, AND OTHERWISE CONFORMING TO THE US COMPOSTING COUNCIL STA COMPOST TECHNICAL DATA SHEET; www.compostingcouncil.org .
2. GRAVELY SAND SHALL BE 1" MINUS IN CONFORMANCE WITH ASTM C117/C136 (AASHTO T11/T27) STANDARDS WITH A COEFFICIENT OF UNIFORMITY (D60/D10) EQUAL TO OR GREATER THAN 6.
3. TOP SOIL SHALL BE FREE OF WOOD PIECES, PLASTIC, AND OTHER FOREIGN MATTER, CHEMICAL AND BIOLOGICAL POLLUTANTS, AND CONTAIN NO VISIBLE FREE WATER.



NOTES:

1. PRIVATE WATER QUALITY TREATMENT
2. 30" MIN WIDTH – FACILITY LENGTH TO BE CALCULATED BASED ON INCOMING FLOWS.
3. VEGETATION: TREATMENT PLANTINGS; RUSH GRASSES, SEE NATIVE PLANTS LIST.
4. NO TREES OR DEEP ROOTED VEGETATION OVER PIPING.
5. RAIN DRAINS AND OVERFLOW TO MAINTAIN MAXIMUM LINEAR SEPARATION.
6. NO BARK DUST TO BE USED WITHIN FACILITY.
7. OUTFALL PROTECTION SIZED PER FLOW CALCULATIONS.
8. PLANTER HEIGHT ABOVE GROUND AND DEPTH BELOW GROUND PER OTHERS. 2" MINIMUM ABOVE OVERFLOW OR BY DESIGN.
9. BUILDING JURISDICTION APPROVAL REQUIRED WHEN DEPTH OF FACILITY IS BELOW BUILDING FOOTING.

BOX SIZE (SF.) 230

OF PLANTS 160

TYPE OF PLANTS:

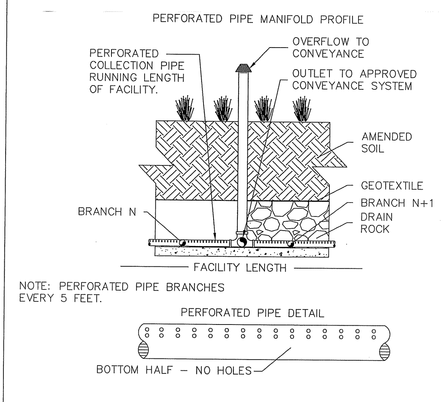
SEE NATIVE PLANTS LIST

SIZE OF PLANTS:

SEE NATIVE PLANTS LIST

(MIN. 1" X 6" PLUGS)

LIDA HANDBOOK STANDARD DETAILS | FLOW-THROUGH PLANTER W/ BLDG. OFFSET | Clean Water Services Our commitment is clear | DRAWING NUMBER 794



NOTE: PERFORATED PIPE BRANCHES EVERY 5 FEET.

NOTES:

1. BRANCH SPACING AND NUMBER OF BRANCHES TO BE CALCULATED BASED ON STORM FLOWS FROM IMPERVIOUS AREA BEING TREATED.
2. WRAP PERFORATED PIPE WITH GEOTEXTILE TO PREVENT INFILTRATION OF FINES.
3. NO TREES OR DEEP ROOTED VEGETATION OVER PIPING.
4. GRADE SUBGRADE TO PROVIDE MANIFOLD WITH POSITIVE DRAINAGE.
5. CONVEYANCE SIZED AT MINIMUM FOR 25 YEAR EVENT STORM FLOWS.
6. DETENTION (IF REQUIRED) VOLUME BASED ON DEPTH OF DRAIN ROCK RESERVOIR LAYER AND POSITION OF MANIFOLD WITHIN THE DRAIN ROCK LAYER.
7. FITTINGS TO BE SAME MATERIAL AS PERFORATED PIPE.
8. PIPE SECTIONS EXPOSED TO SUNLIGHT SHALL BE OF MATERIAL NOT SUBJECT TO DEGRADATION FROM THE EFFECTS OF SUNLIGHT.

LIDA HANDBOOK | PERFORATED PIPE DETAILS | Clean Water Services Our commitment is clear | DRAWING NUMBER 402

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Tract "A" & 3-Lot Partition-10510 SW 155th Ave

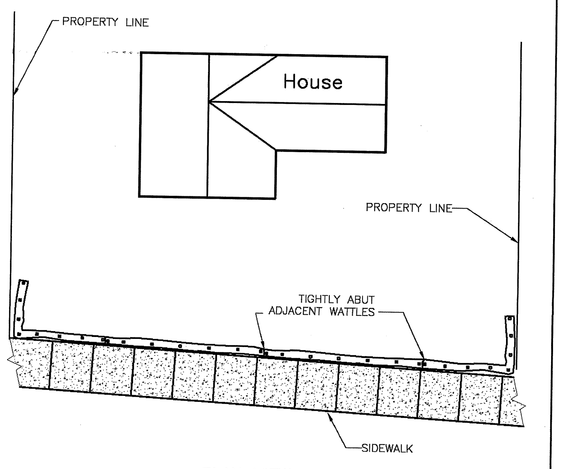
T: 1S, R: 1W, Sec: 32BD, TL: 100 (EMS 15-0057)

Planter Details

13 Jul 2016

SCALE: NONE

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.



PLAN VIEW
NTS

NOTE:
1. STAKING OF WATTLES REQUIRED 4' ON CENTER USING 1"x2" WOOD STAKES OR APPROVED EQUAL PER WATTLE.
2. WATTLES ARE USED AS ALTERNATE FOR SEDIMENT FENCE FOLLOWING INSTALLATION OF SIDEWALK ON SINGLE FAMILY CONSTRUCTION ONLY.
3. ALTERNATE MATERIALS MAY BE USE AS APPROVED BY DISTRICT OR CITY.

WATTLES
SINGLE FAMILY
APPLICATION

DRAWING NO. 885 REVISED 12-06

CleanWater Services
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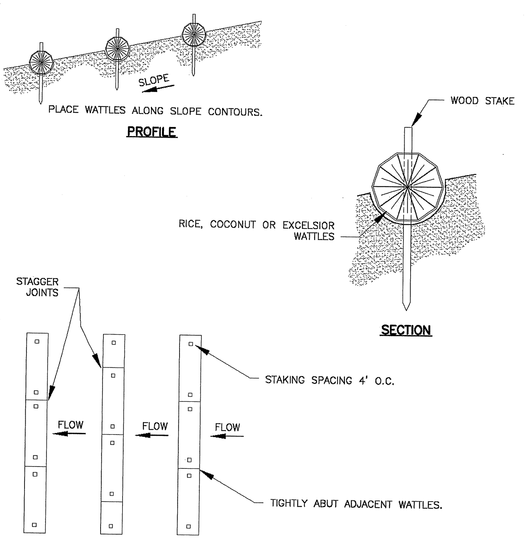

PLAN VIEW

NOTES:
1. STAKING SPECIFICATIONS:
   a. 1"X2" WOODEN STAKES
   b. ADDITIONAL STAKES MAY BE INSTALLED ON DOWNHILL SIDE OF WATTLES, ON STEEP SLOPE OR HIGHLY EROSIVE SOILS.
2. SPACING IN ACCORDANCE WITH DETAIL 940.

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

WATTLES

DRAWING NO. 880 REVISED 12-06

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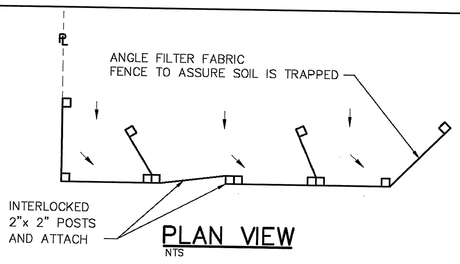
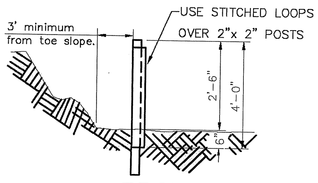
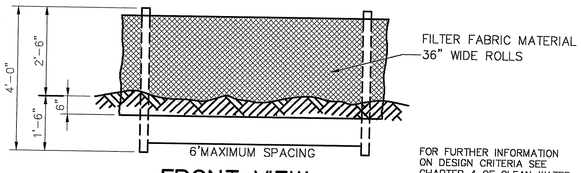


PLAN VIEW
NTS



PROFILE
NTS

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 ON DETAIL NO.940



FRONT VIEW
NTS

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

SEDIMENT FENCE

DRAWING NO. 875 REVISED 12-06

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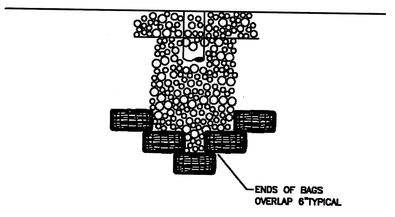
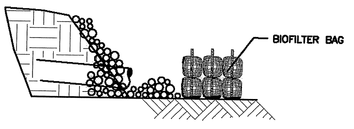


PLAN VIEW
NTS



PROFILE

NOTE:
1. BIO BAGS ONLY REQUIRED WHEN DISCHARGING SEDIMENT LADEN WATER.
2. STAKING OF BAGS REQUIRED WITH EITHER METHOD USING (2) 1"x 2" WOOD STAKES OR APPROVED EQUAL PER BAG.

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

OUTLET PROTECTION
RIP RAP

Detail Drawing 820 REVISED 12-06

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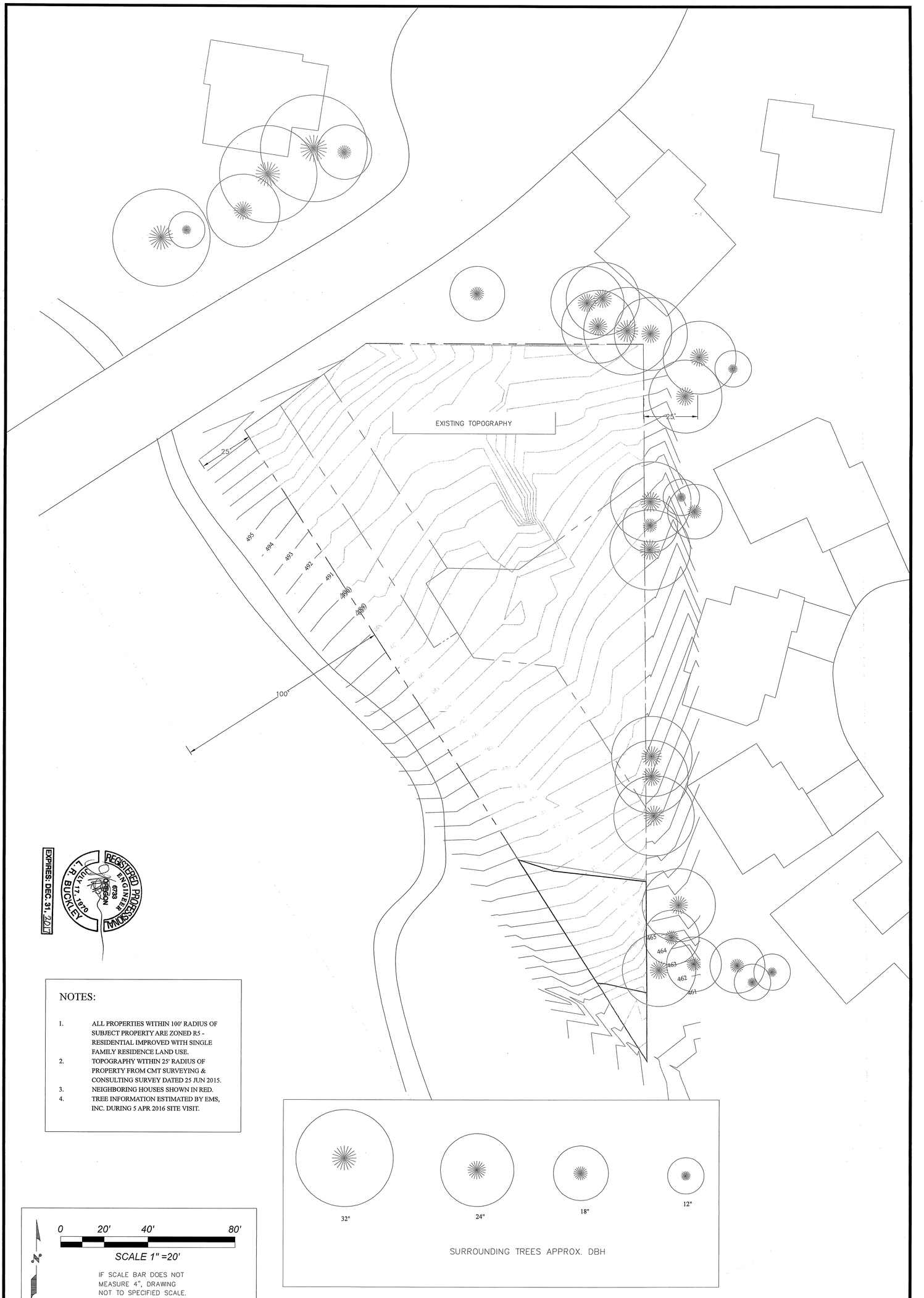
EMS

CHECKED BY:

DRAWN BY: AWP

Tract "A" & 3-Lot Partition-10510 SW 155th Ave	PAGE 15 of 17
T: 1S, R: 1W, Sec: 32BD, TL: 100 (EMS 15-0057)	13 Jul 2016
Erosion Control Details	SCALE: NONE



REGISTERED PROFESSIONAL ENGINEER
OREGON
6728
JULY 17, 1979
TIMOTHY R. BUCKLEY
EXPIRES: DEC. 31, 2017

NOTES:

1. ALL PROPERTIES WITHIN 100' RADIUS OF SUBJECT PROPERTY ARE ZONED R5 - RESIDENTIAL IMPROVED WITH SINGLE FAMILY RESIDENCE LAND USE.
2. TOPOGRAPHY WITHIN 25' RADIUS OF PROPERTY FROM CMT SURVEYING & CONSULTING SURVEY DATED 25 JUN 2015.
3. NEIGHBORING HOUSES SHOWN IN RED.
4. TREE INFORMATION ESTIMATED BY EMS, INC. DURING 5 APR 2016 SITE VISIT.

0 20' 40' 80'

SCALE 1" =20'

IF SCALE BAR DOES NOT MEASURE 4", DRAWING NOT TO SPECIFIED SCALE.

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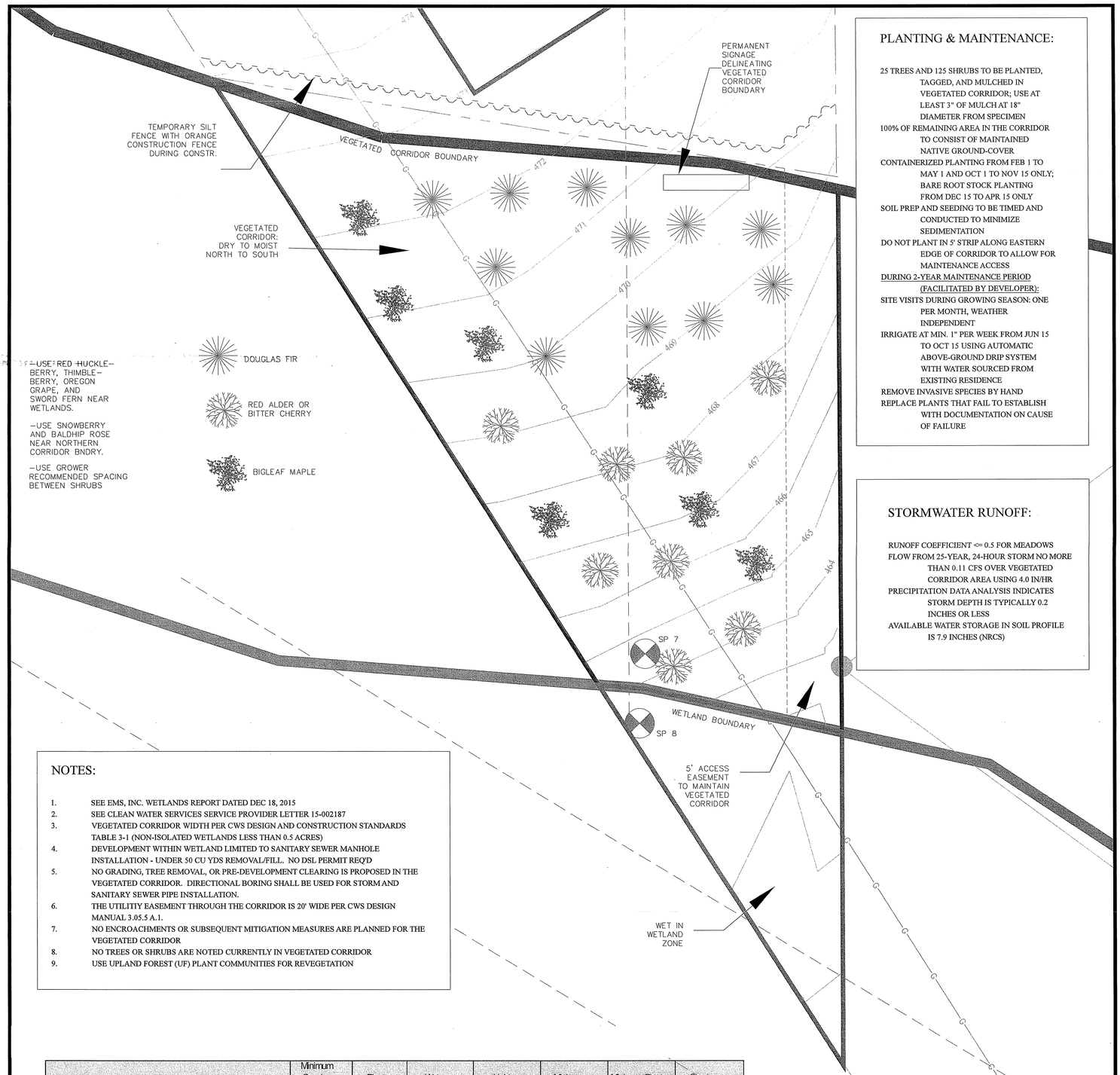
Tract "A" & 3-Lot Partition-10510 SW 155th Ave

T: 1S, R: 1W, Sec: 32BD, TL: 100 (EMS 15-0057)

Existing Abutting Conditions

13 Jul 2016

SCALE: 1"=20'



PLANTING & MAINTENANCE:

25 TREES AND 125 SHRUBS TO BE PLANTED, TAGGED, AND MULCHED IN VEGETATED CORRIDOR; USE AT LEAST 3" OF MULCH AT 18" DIAMETER FROM SPECIMEN

100% OF REMAINING AREA IN THE CORRIDOR TO CONSIST OF MAINTAINED NATIVE GROUND-COVER

CONTAINERIZED PLANTING FROM FEB 1 TO MAY 1 AND OCT 1 TO NOV 15 ONLY; BARE ROOT STOCK PLANTING FROM DEC 15 TO APR 15 ONLY

SOIL PREP AND SEEDING TO BE TIMED AND CONDUCTED TO MINIMIZE SEDIMENTATION

DO NOT PLANT IN 5' STRIP ALONG EASTERN EDGE OF CORRIDOR TO ALLOW FOR MAINTENANCE ACCESS

DURING 2-YEAR MAINTENANCE PERIOD (FACILITATED BY DEVELOPER):

SITE VISITS DURING GROWING SEASON: ONE PER MONTH, WEATHER INDEPENDENT

IRRIGATE AT MIN. 1" PER WEEK FROM JUN 15 TO OCT 15 USING AUTOMATIC ABOVE-GROUND DRIP SYSTEM WITH WATER SOURCED FROM EXISTING RESIDENCE

REMOVE INVASIVE SPECIES BY HAND

REPLACE PLANTS THAT FAIL TO ESTABLISH WITH DOCUMENTATION ON CAUSE OF FAILURE

STORMWATER RUNOFF:

RUNOFF COEFFICIENT <= 0.5 FOR MEADOWS

FLOW FROM 25-YEAR, 24-HOUR STORM NO MORE THAN 0.11 CFS OVER VEGETATED CORRIDOR AREA USING 4.0 IN/HR

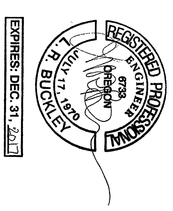
PRECIPITATION DATA ANALYSIS INDICATES STORM DEPTH IS TYPICALLY 0.2 INCHES OR LESS

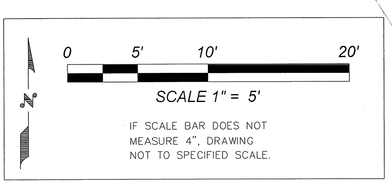
AVAILABLE WATER STORAGE IN SOIL PROFILE IS 7.9 INCHES (NRCS)

NOTES:

1. SEE EMS, INC. WETLANDS REPORT DATED DEC 18, 2015
2. SEE CLEAN WATER SERVICES SERVICE PROVIDER LETTER 15-002187
3. VEGETATED CORRIDOR WIDTH PER CWS DESIGN AND CONSTRUCTION STANDARDS TABLE 3-1 (NON-ISOLATED WETLANDS LESS THAN 0.5 ACRES)
4. DEVELOPMENT WITHIN WETLAND LIMITED TO SANITARY SEWER MANHOLE INSTALLATION - UNDER 50 CU YDS REMOVAL/FILL. NO DSL PERMIT REQ'D
5. NO GRADING, TREE REMOVAL, OR PRE-DEVELOPMENT CLEARING IS PROPOSED IN THE VEGETATED CORRIDOR. DIRECTIONAL BORING SHALL BE USED FOR STORM AND SANITARY SEWER PIPE INSTALLATION.
6. THE UTILITIY EASEMENT THROUGH THE CORRIDOR IS 20' WIDE PER CWS DESIGN MANUAL 3.05.5 A.1.
7. NO ENCROACHMENTS OR SUBSEQUENT MITIGATION MEASURES ARE PLANNED FOR THE VEGETATED CORRIDOR
8. NO TREES OR SHRUBS ARE NOTED CURRENTLY IN VEGETATED CORRIDOR
9. USE UPLAND FOREST (UF) PLANT COMMUNITIES FOR REVEGETATION

Plant Communities	Minimum Species Composition	Plant Category	Water Requirements	Light Requirements	Minimum Rooting Size	Minimum Plant Height	Spacing Format
Upland Forest (UF)							
Red alder (Alnus rubra)	X	Tree	Moist	Sun	1 gal	3'	Single
Big leaf maple (Acer macrophyllum)	X	Tree	Dry	Sun	2gal	3'	Single
Douglas Fir (Pseudotsuga menziesii)	X	Tree	Dry	Sun	2gal	3'	Single
Grand fir (Abies grandis)	X	Tree	Dry	Sun	2 gal	2'	Single
Pacific yew (Taxus brevifolia)		Tree	Moist	Shade	2 gal	2'	Single
Cascara (Rhamnus purshiana)		Tree	Dry	Part	2 gal	2'	Single
Pacific dogwood (Cornus nuttallii)		Tree	Moist	Shade	1 gal	2'	Single
Bitter cherry (Prunus emarginata)		Tree	Moist	Part	2 gal	2'	Single
Vine Maple (Acer circinatum)	X	Tree	Moist	Part	2 gal	2'	Single
Oceanspray (Holodiscus discolor)	X	Shrub	Dry	Sun	1 gal	1.5'	Single
Red elderberry (Sambucus racemosa)	X	Shrub	Moist	Part	1 gal	1.5'	Single
Red flowering currant (Ribes sanguineum)	X	Shrub	Dry	Sun	1 gal	1.5'	Cluster
Cascade Oregon grape (Mahonia nervosa)		Shrub	Moist	Part	1 gal	4"	Cluster
Tall Oregon grape (Mahonia aquifolium)		Shrub	Dry	Sun	1 gal	6"	Single
Red huckleberry (Vaccinium parvifolium)		Shrub	Moist	Shade	1 gal	1.5'	Cluster
Thimbleberry (Rubus parviflorus)		Shrub	Moist	Shade	1 gal	1.5'	Cluster
Snowberry (symphoricarpos albus)	X	Shrub	Dry	Part	1 gal	1.5'	Cluster
Baldhip Rose (Rosa gymnocarpa)	X	Shrub	Dry	Part	1 gal	1.5'	Cluster
Serviceberry (Almelanchier alnifolia)		Shrub	Dry	Part	2 gal	2'	Single
Sword fern (Polystichum munitum)		Shrub	Moist	Shade	2 gal	na	Cluster
Deer fern (Blechnum spicant)		Herb	Moist	Shade	1 gal	na	Cluster
Orange honeysuckle (Lonicera ciliosa)		Herb	Moist	Shade	2 gal	na	Single
Salal (Gaultheria shallon)		Herb	Moist	Part	1 gal	4"	Cluster
Wood strawberry (Fragaria vesca)		Herb	Moist	Shade	4"	na	Cluster
Western trillium (Trillium ovatum)		Herb	Moist	Shade	4"	na	Cluster
Five-stemmed mitrewort (Mitella pentandra)		Herb	Moist	Shade	1 gal	na	Cluster
Red columbine (Aquilegia formosa)		Herb	Dry	Part	4"	na	Cluster
False solomon's seal (Smilacina racemosa)		Herb	Moist	Shade	4"	na	Cluster
Native California brome (Bromus carinatus)	X	Grass	Dry	Sun	seed	na	Mass
Blue Wildrye (Elymus glaucus)	X	Grass	Dry	Part	seed	na	Mass





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Vegetated Corridor Enchancement Plan

13 Jul 2016

SCALE: 1"=5'