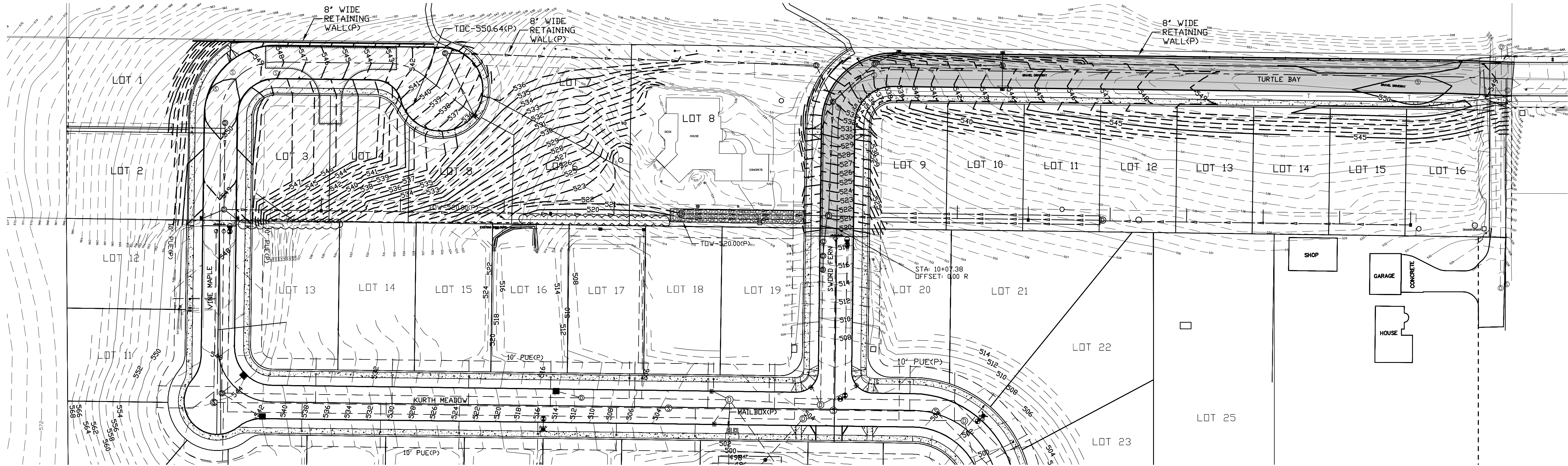


DESIGNED BY:	GPH
DRAWN BY:	RW
DATE:	03-10-21
JOB NO.	2020-21
CLIENT NO.	
DRAWING NO.	REV



GRADING PLAN

SCALE: 1"=50'

GENERAL EARTHWORK SPECIFICATIONS:

- ALL AREAS WHERE STRUCTURAL FILLS, FILL SLOPES, STRUCTURES OR ROADWAYS ARE TO BE CONSTRUCTED SHALL BE STRIPPED OF ORGANIC TOPSOIL AND CLEARED OF SURFACE AND SUBSURFACE DELETERIOUS MATERIAL, INCLUDING BUT NOT LIMITED TO VEGETATION, ROOTS, OR OTHER ORGANIC MATERIAL, UNDOCUMENTED FILL, CONSTRUCTION DEBRIS, SOFT OR UNSUITABLE SOILS AS DIRECTED BY THE GEOTECHNICAL ENGINEER OF RECORD. THESE MATERIALS SHALL BE REMOVED FROM THE SITE OR STOCKPILED IN A DESIGNATED LOCATION FOR REUSE IN LANDSCAPE AREAS IF SUITABLE FOR THAT PURPOSE. EXISTING UTILITIES AND STRUCTURES THAT ARE NOT TO BE USED AS PART OF THE PROJECT DESIGN OR BY NEIGHBORING FACILITIES, SHALL BE REMOVED OR PROPERLY ABANDONED, AND THE ASSOCIATED DEBRIS REMOVED FROM THE SITE.
- UPON COMPLETION OF SITE STRIPPING AND CLEARING, THE EXPOSED SOIL AND/OR ROCK SHALL BE OBSERVED BY THE GEOTECHNICAL ENGINEER OF RECORD OR A DESIGNATED REPRESENTATIVE TO ASSESS THE SUBGRADE CONDITION FOR THE INTENDED OVERLYING USE. PITS, DEPRESSIONS, OR HOLES CREATED BY THE REMOVAL OF ROOT WADS, UTILITIES, STRUCTURES, OR DELETERIOUS MATERIAL SHALL BE PROPERLY CLEARED OF LOOSE MATERIAL, BENCHED AND BACKFILLED WITH FILL MATERIAL APPROVED BY THE GEOTECHNICAL ENGINEER OF RECORD COMPACTED TO THE PROJECT SPECIFICATIONS.
- IN STRUCTURAL FILL AREAS, THE SUBGRADE SOIL SHALL BE SCARIFIED TO A DEPTH OF 4-INCHES, IF SOIL FILL IS USED, MOISTURE CONDITIONED TO WITHIN 2% OF THE MATERIALS OPTIMUM MOISTURE FOR COMPACTING, AND BLENDED WITH THE FIRST LIFT OF FILL MATERIAL. THE FILL PAVEMENT AND COMPACTION EQUIPMENT SHALL BE APPROPRIATE FOR FILL MATERIAL TYPE, REQUIRED DEGREE OF BLENDING, AND UNCOMPACTED LIFT THICKNESS. ASSUMING PROPER EQUIPMENT SELECTION, THE TOTAL UNCOMPACTED THICKNESS OF THE SCARIFIED SUBGRADE AND FIRST FILL LIFT SHALL NOT EXCEED 8-INCHES, SUBSEQUENT LIFTS OF UNCOMPACTED FILL SHALL NOT EXCEED 8-INCHES UNLESS OTHERWISE APPROVED BY THE GEOTECHNICAL ENGINEER OF RECORD. THE UNCOMPACTED LIFT THICKNESS SHALL BE ASSESSED BASED ON THE TYPE OF COMPACTION EQUIPMENT USED AND RESULTS OF INITIAL COMPACTION TESTING. FINE-GRAINED SOIL FILL IS GENERALLY MOST EFFECTIVELY COMPACTED USING A KNEADING STYLE COMPACTOR, SUCH AS A SHEEPS-FOOT ROLLER, WHERE AS GRANULAR MATERIALS ARE MORE EFFECTIVELY COMPACTED USING A SMOOTH, VIBRATORY ROLLER OR IMPACT STYLE COMPACTOR.
- ALL STRUCTURAL SOIL FILL SHALL BE WELL BLENDED, MOISTURE CONDITIONED TO WITHIN 2% OF THE MATERIAL'S OPTIMUM MOISTURE CONTENT FOR COMPACTION AND COMPACTED TO AT LEAST 90% OF THE MATERIAL'S MAXIMUM DRY DENSITY AS DETERMINED BY ASTM METHOD D-1557, OR AN EQUIVALENT METHOD. SOIL FILL SHALL NOT CONTAIN MORE THAN 10% ROCK MATERIAL AND NO SOLID MATERIAL OVER 3-INCHES IN DIAMETER UNLESS APPROVED BY THE GEOTECHNICAL ENGINEER OF RECORD. ROCKS SHALL BE EVENLY DISTRIBUTED THROUGHOUT EACH LIFT OF FILL THAT THEY ARE CONTAINED WITHIN AND SHALL NOT BE CLUMPED TOGETHER IN SUCH A WAY THAT VOIDS CAN OCCUR.
- ALL STRUCTURAL GRANULAR FILL SHALL BE WELL BLENDED, MOISTURE CONDITIONED AT OR UP TO 3% ABOVE OF THE MATERIAL'S OPTIMUM MOISTURE CONTENT FOR COMPACTION AND COMPACTED TO AT LEAST 95% OF THE MATERIAL'S MAXIMUM DRY DENSITY AS DETERMINED BY ASTM METHOD D-1557 OR AN EQUIVALENT METHOD. THE GRANULAR FILL SHALL NOT CONTAIN SOLID PARTICLES OVER 2-INCHES IN DIAMETER UNLESS SPECIAL DENSITY TESTING METHODS OR PROOF-ROLLING IS APPROVED BY THE GEOTECHNICAL ENGINEER OF RECORD. GRANULAR FILL IS GENERALLY CONSIDERED TO BE A CRUSHED AGGREGATE WITH A FRACTURE SURFACE OF AT LEAST 70% AND A MAXIMUM SIZE NOT EXCEEDING 1.5 INCHES IN DIAMETER, WELL-GRADED WITH LESS THAN 10%, BY WEIGHT, PASSING THE NO. 200 SIEVE.
- STRUCTURAL FILL SHALL BE FIELD TESTED FOR COMPLIANCE WITH PROJECT SPECIFICATIONS FOR EVERY 2-FEET IN VERTICAL RISE OR 500 CUBIC YARD PLACED, WHICHEVER IS LESS. IN-PLACE FILL DENSITY TESTING SHALL BE PERFORMED BY A COMPETENT INDIVIDUAL TRAINED IN THE TESTING AND PLACEMENT OF SOIL AND AGGREGATE FILL PLACEMENT, USING EITHER ASTM METHOD D-1556/4959/4944 (SAND CONE), D-6938 (NUCLEAR DENSOMETER), OR D-2937/4959/4944 (DRIVE CYLINDER). SHOULD THE FILL MATERIALS NOT BE SUITABLE FOR TESTING BY THE ABOVE METHODS, THEN OBSERVATION OF PLACEMENT, COMPACTION AND PROOF-ROLLING WITH A LOADED 10 CUBIC YARDS DUMP TRUCK, OR EQUIVALENT GROUND PRESSURE EQUIPMENT, BY A TRAINED INDIVIDUAL MAY BE USED TO ASSESS AND DOCUMENT THE COMPLIANCE WITH STRUCTURAL FILL SPECIFICATIONS.

ROOF DRAIN LEGEND:

- INDICATES 3" PVC SLEEVE THROUGH CURB FOR HOUSE ROOF DRAIN, ONE PER HOUSE LOTS 1, 10-19, & 20-23. ALL SLEEVES.

22x34 SCALE: 1"=40'

11x17 SCALE: 1"=80'



EXPIRES: JUNE 30, 2021

FOR APPLICATION
NOT FOR CONSTRUCTION

REV.	DATE	BY	DESCRIPTION
0	03-10-21	GPH	ISSUED FOR SUBDIVISION APPLICATION

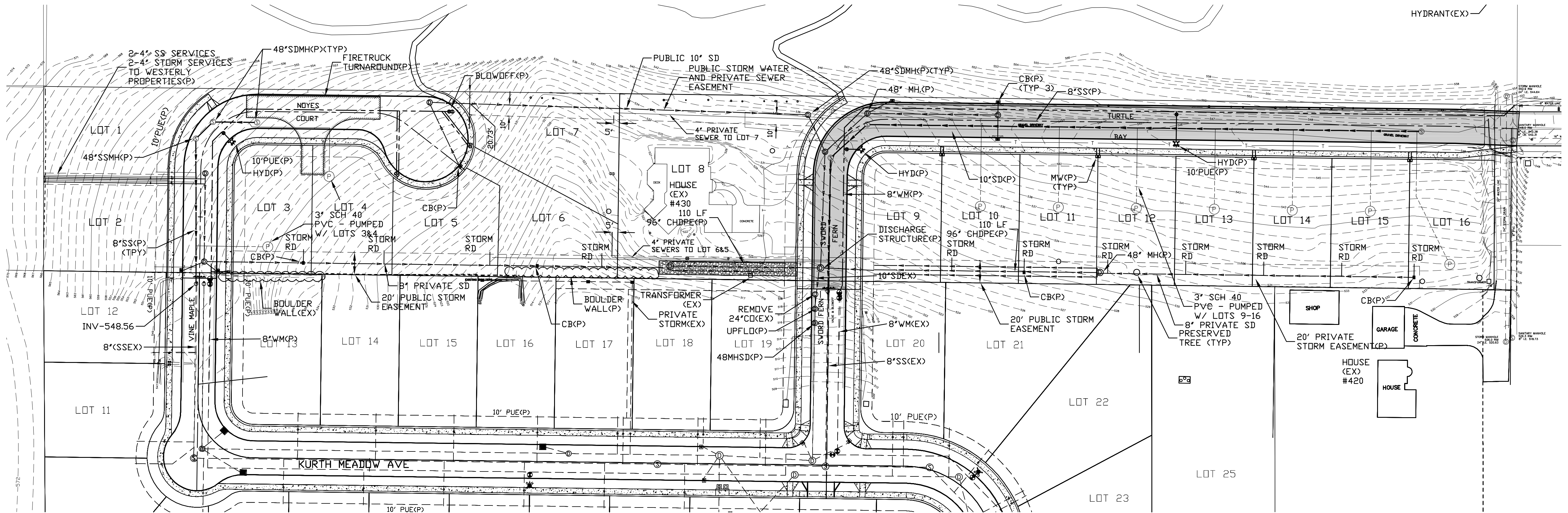
GRADING PLAN

QUAIL SPRING VILLAGE
SUBDIVISION

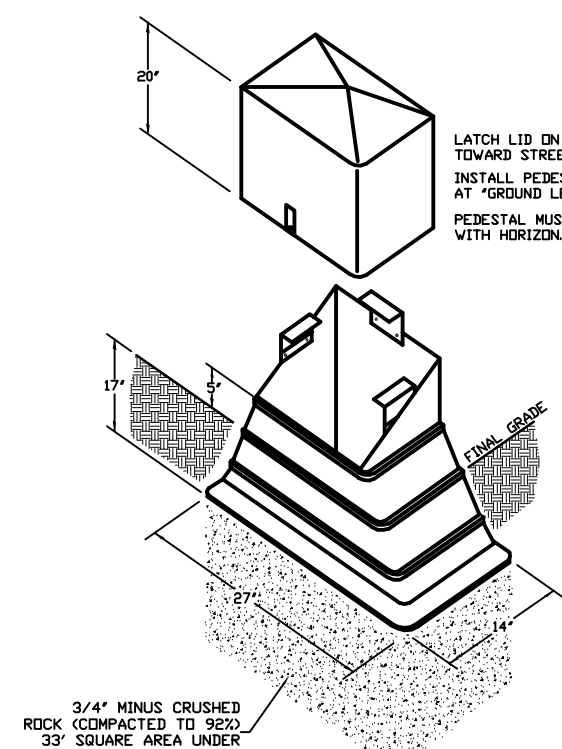
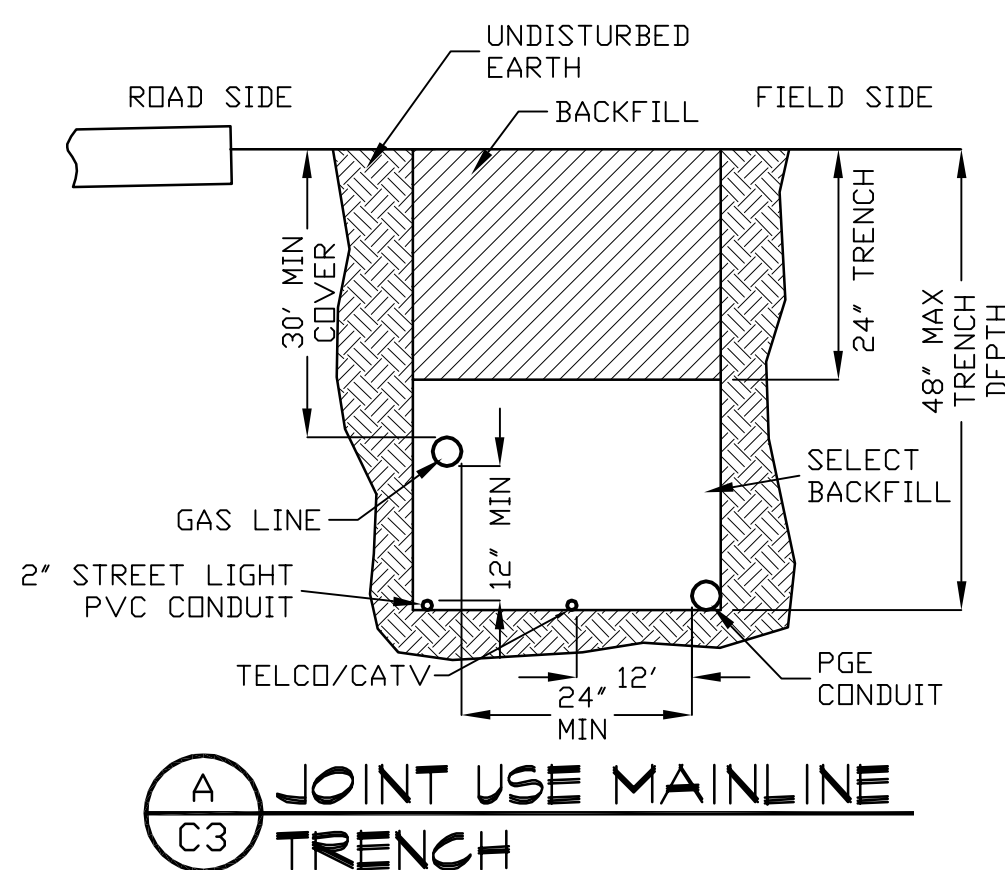
430 TURTLE BAY CT SE
SALEM, OREGON 97306

ENGINEER:
WILLAMETTE ENGINEERING INC.
P.O. BOX 9032
SALEM, OREGON 97305
PH: 503-304-0905
FAX: 503-304-9512

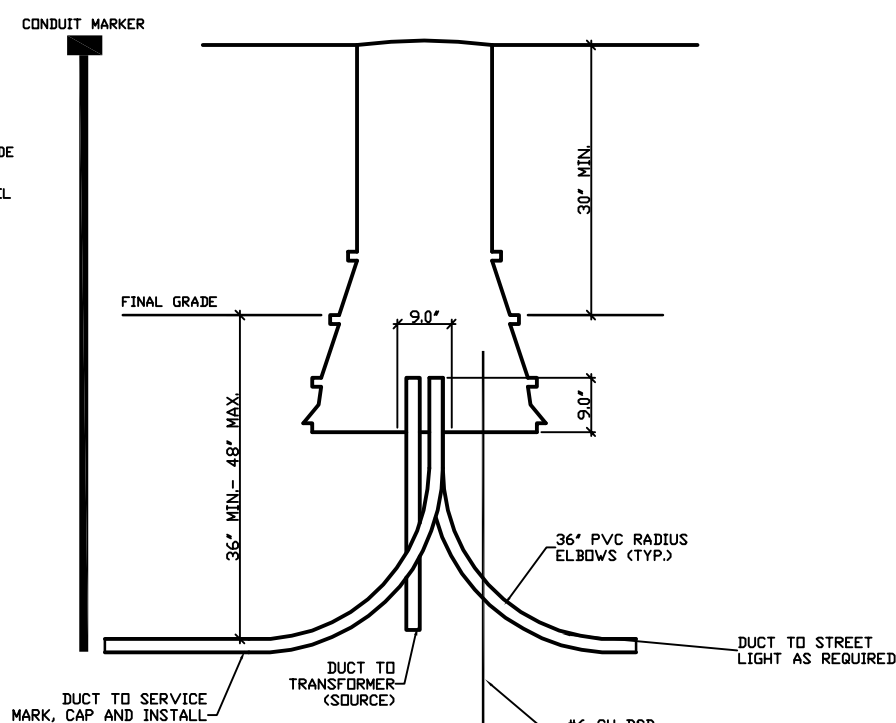
DESIGNED BY: GPH
DRAWN BY: RW
DATE: 03-10-21
JOB NO: 2020-21
CLIENT NO:
DRAWING NO: 020



UTILITY PLAN
SCALE: 22x34 1"=50', 11x17 1"=100'



SECONDARY SPLICE PEDESTAL
SCALE: 1" = 1'-0"



SECTION
SCALE: 1" = 1'-0"

NG NORTHWEST NATURAL GAS
CL CENTURY LINK
COM COMCAST
PGE PORTLAND GENERAL ELECTRIC
L STREET LIGHT (CITY OF SALEM)

SHEET NOTES

- CONTRACTOR SHALL INSTALL STREET CROSSINGS.
- ALL CROSSINGS MUST BE INSPECTED BEFORE COVERING. CONTRACTOR SHALL CONTACT CITY OF SALEM FOR STREETLIGHT CROSSING AND ALL PRIVATE UTILITY COMPANIES FOR THEIR CONDUITS.



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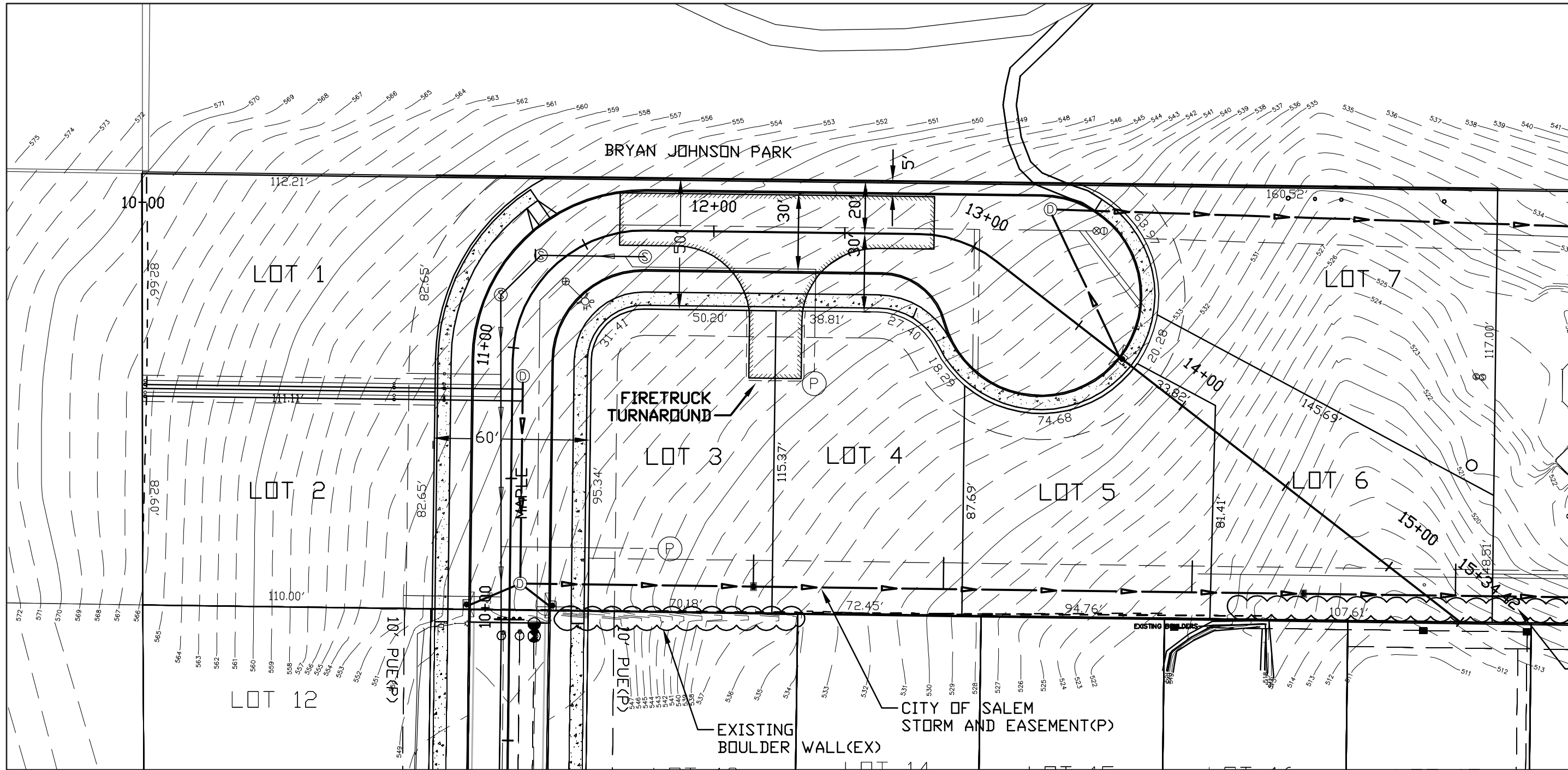
COMPOSITE
UTILITY PLAN
AND DETAILS

QUAIL SPRING VILLAGE
SUBDIVISION

430 TURTLE BAY CT SE
SALEM, OREGON 97306

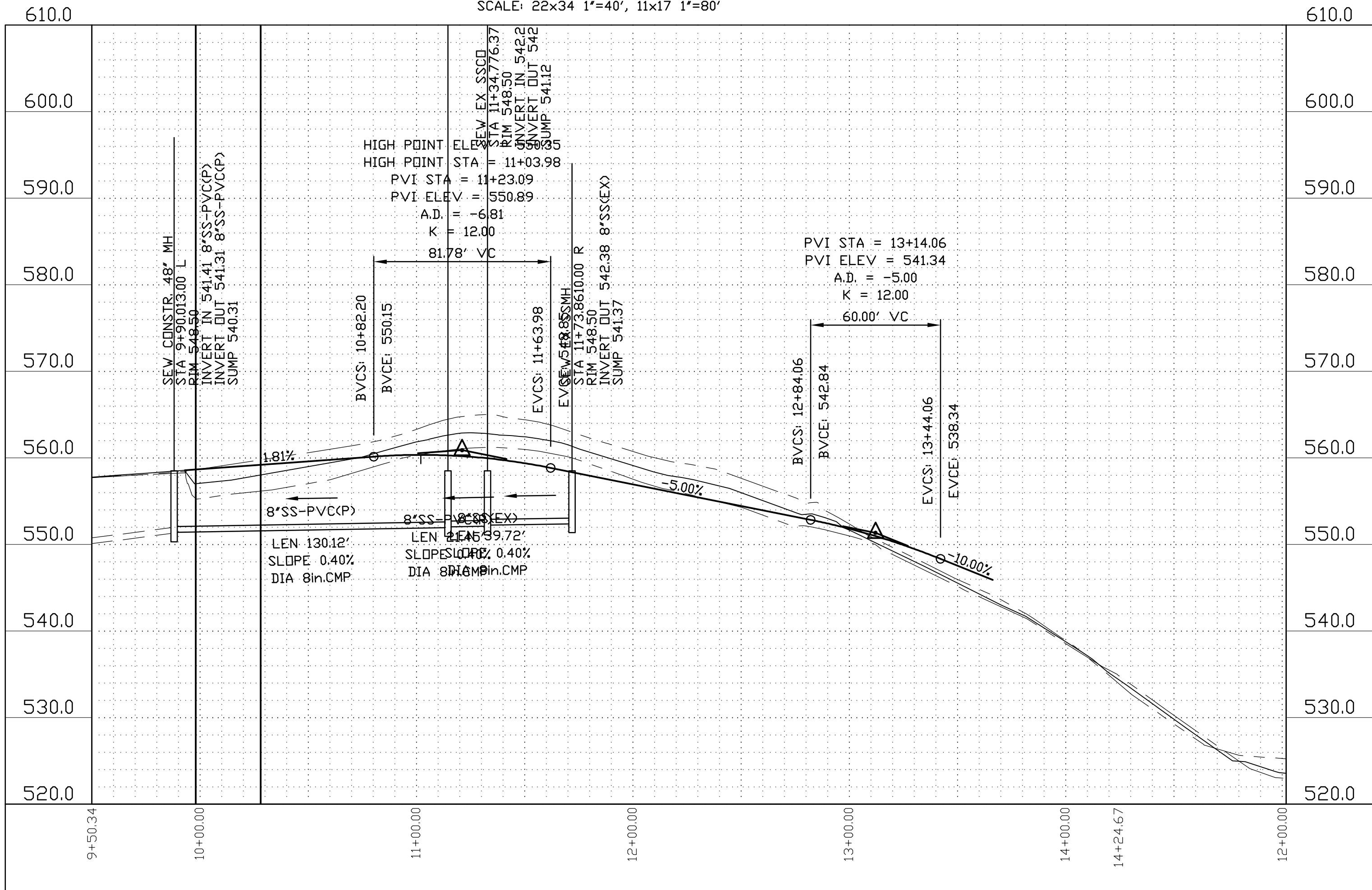
ENGINEER:
WILLAMETTE ENGINEERING INC.
P.O. BOX 9032
SALEM, OREGON 97305
PH: 503-304-0905
FAX: 503-304-9512

DESIGNED BY: GPH
DRAWN BY: RW
DATE: 03-11-21
JOB NO: 2020-21
CLIENT NO:
DRAWING NO: 30



NOYES COURT STREET PLAN

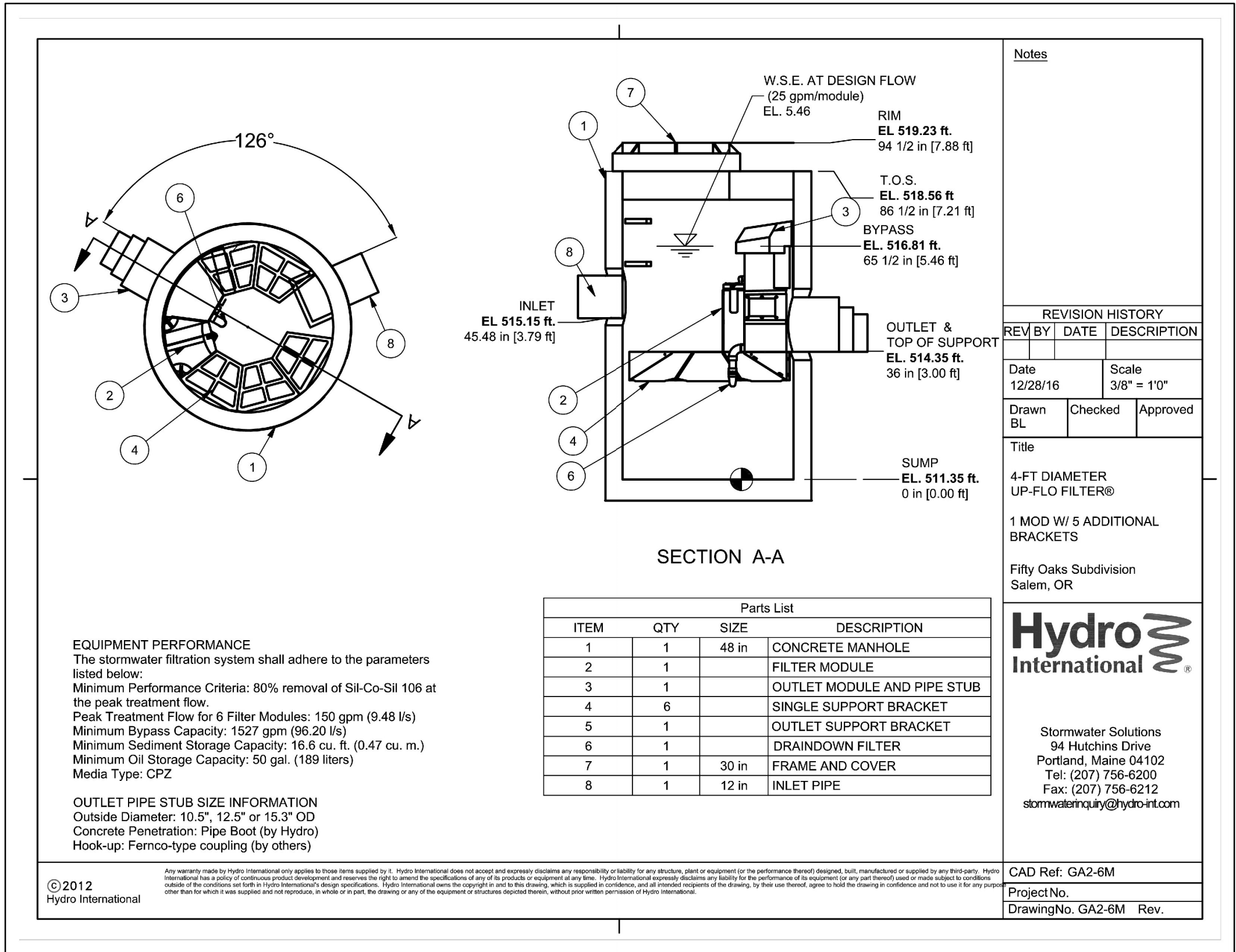
SCALE: 22x34 1"=40', 11x17 1"=80'



NOYES COURT STREET PROFILE

HOR SCALE: 22x34 1"=40', 11x17 1"=80'
VER SCALE: 22x34 1"=10', 11x17 1"=20'

FOR APPLICATION
NOT FOR CONSTRUCTION



SHEET NOTES:

- PROVIDE FIVE(5) "CPZ" 0.056 CFS (25 GPM) FILTER MODULES.



REV.	DATE	BY	DESCRIPTION
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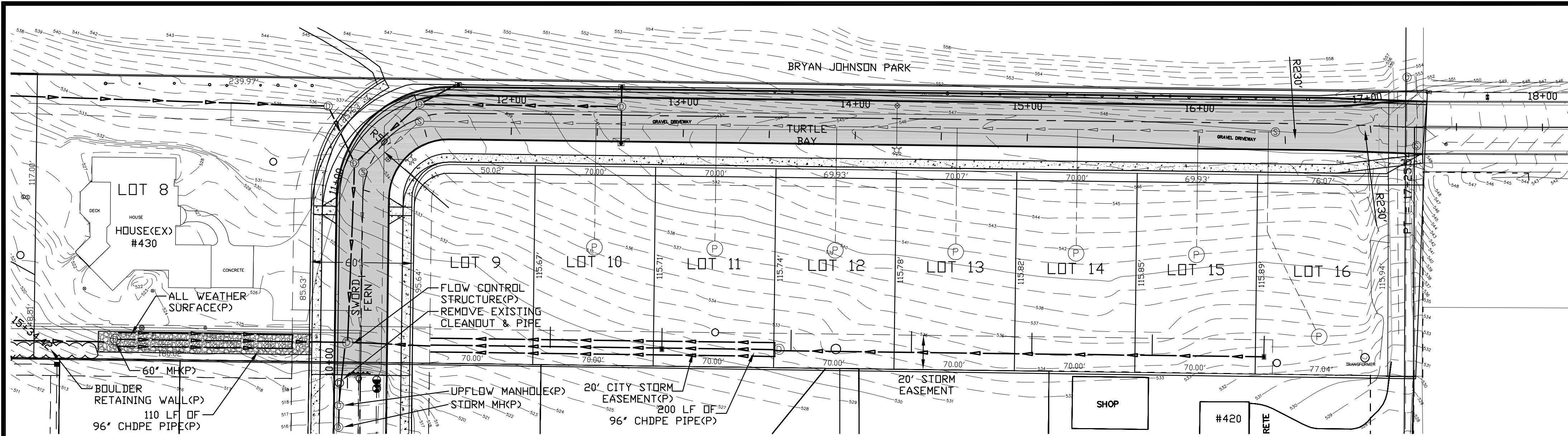
ENGINEER:
WILLAMETTE ENGINEERING INC.
P.O. BOX 9032
SALEM, OREGON 97305
PH: 503-304-0905
FAX: 503-304-9512

NOYES COURT AND
VINE MAPLE STREET
PLANS AND PROFILES
AND UPFLOW DETAIL

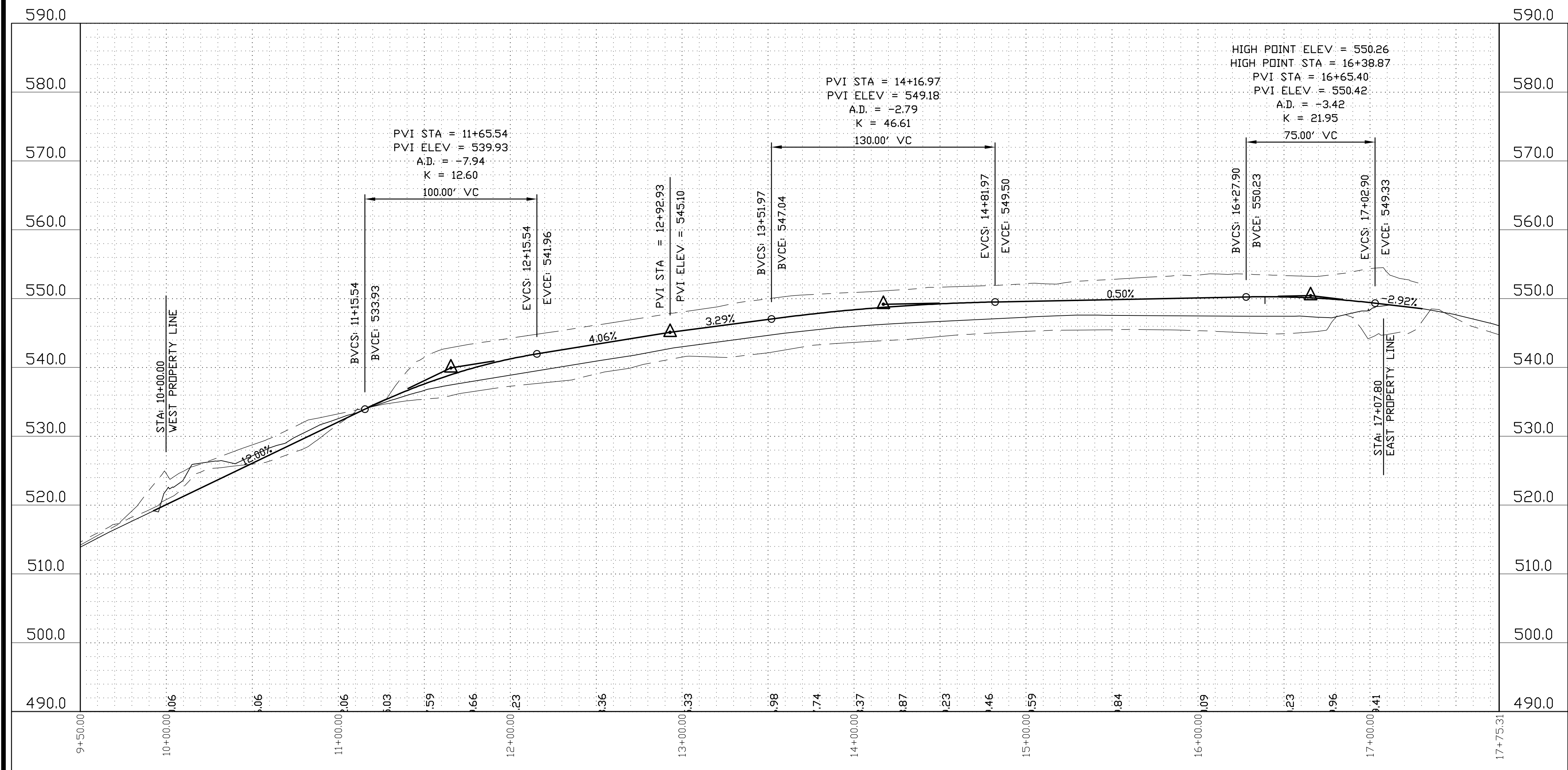
QUAIL SPRING VILLAGE
15-LOT SUBDIVISION
430 TURTLE BAY SE
SALEM, OREGON 97306

DESIGNED BY:	GPH
DRAWN BY:	RW
DATE:	03-10-21
JOB NO.	2020-21
CLIENT NO.	
DRAWING NO.	

C410



TURTLE BAY STREET PLAN
SCALE: 22x34 1"=40', 11x17 1"=80'



TURTLE BAY STREET PROFILE

HOR SCALE: 22x34 1"=40', 11x17 1"=80'
VER SCALE: 22x34 1"=10', 11x17 1"=20'

REV.	DATE	BY	DESCRIPTION
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ENGINEER:
WILLAMETTE ENGINEERING INC.
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SALEM, OREGON 97305
PH: 503-304-0905
FAX: 503-304-9512

TURTLE BAY STREET
PLAN AND PROFILE

QUAIL SPRING VILLAGE
15-LOT SUBDIVISION

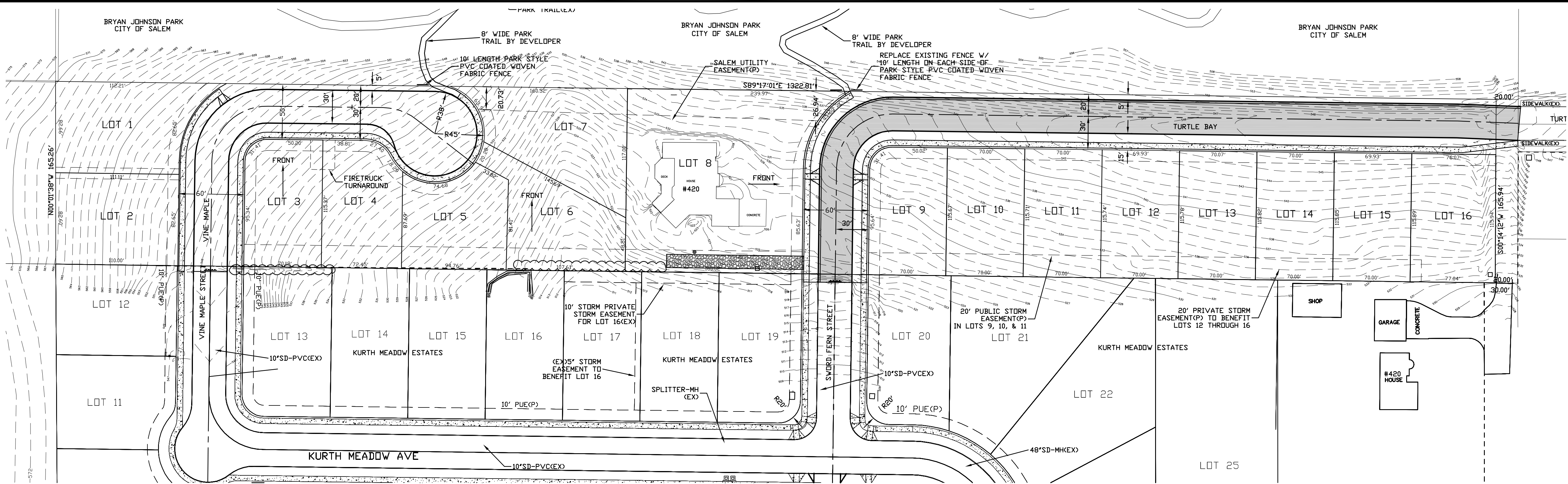
430 TURTLE BAY SE
SALEM, OREGON 97306



FOR APPLICATION
NOT FOR CONSTRUCTION

DESIGNED BY:	GPH
DRAWN BY:	RW
DATE:	09-11-20
JOB NO.	2020-21
CLIENT NO.	
DRAWING NO.	

CJ O



STORM WATER AREAS AND PRE-DEVELOPMENT TRAVEL TIME

SCALE: 1"=50'

SPRING QUAIL VILLAGE
PERVIOUS AND IMPERVIOUS AREAS

TOTAL SITE: 5.02 ACRES(218,881 SQUARE FEET)
EXISTING HOUSE AND APRONS: 4,700 SQUARE FEET
NEW STREETS: 27,750 SQUARE FEET
14 NEW HOUSES: 14 x 2,500 SQ. FEET 35,000 SQUARE FEET
14 NEW DRIVEWAYS: 14 x 30' x 25' 10,500 SQUARE FEET
14 NEW PATIOS: 14 x 20' x 20' 5,600 SQUARE FEET
SIDEWALKS: 7,250 SQUARE FEET

TRAVEL TIME ON WEST SIDE

$\frac{564' - 520'}{440'} = 10\%$
 $T = \frac{0.93(300^6)(.30^6)}{(0.82^4)(0.10^3)} = 30 \text{ MINUTES}$
 $I = 0.82" \text{ FOR } 30 \text{ MINUTES}$

NORTH OFFSITE
PERVIOUS AND IMPERVIOUS AREAS

TOTAL SITE: 11.90 ACRES(518,170 SQUARE FEET)
EXISTING HOUSE AND APRONS: 3,500 SQUARE FEET
261 SUMMERSIDE
BRUSH AND GRASS: 514,670 SQUARE FEET

TRAVEL TIME ON NORTH OFFSITE

$\frac{596' - 540'}{525'} = 10.7\%$
 $T = \frac{0.93(300^6)(.30^6)}{(0.82^4)(0.107^3)} = 30 \text{ MINUTES}$
 $I = 0.82" \text{ FOR } 30 \text{ MINUTES}$

SPRING QUAIL VILLAGE
TREES

THERE ARE 21 EXISTING TREES TO BE SAVED AND AT LEAST TWO(2) TREES PLANTED PER LOT. THIS AMOUNTS TO A TOTAL POTENTIAL REDUCTION IN IMPERVIOUS AREA OF 1,610 SQUARE FEET OR 0.058 ACRES

14 LOTS - 14 x 2 x 20 SQUARE FEET = 560 SQUARE FEET.
21 TREES x 50 SQUARE FEET PER TREE = 1,050 SQUARE FEET

FOR APPLICATION
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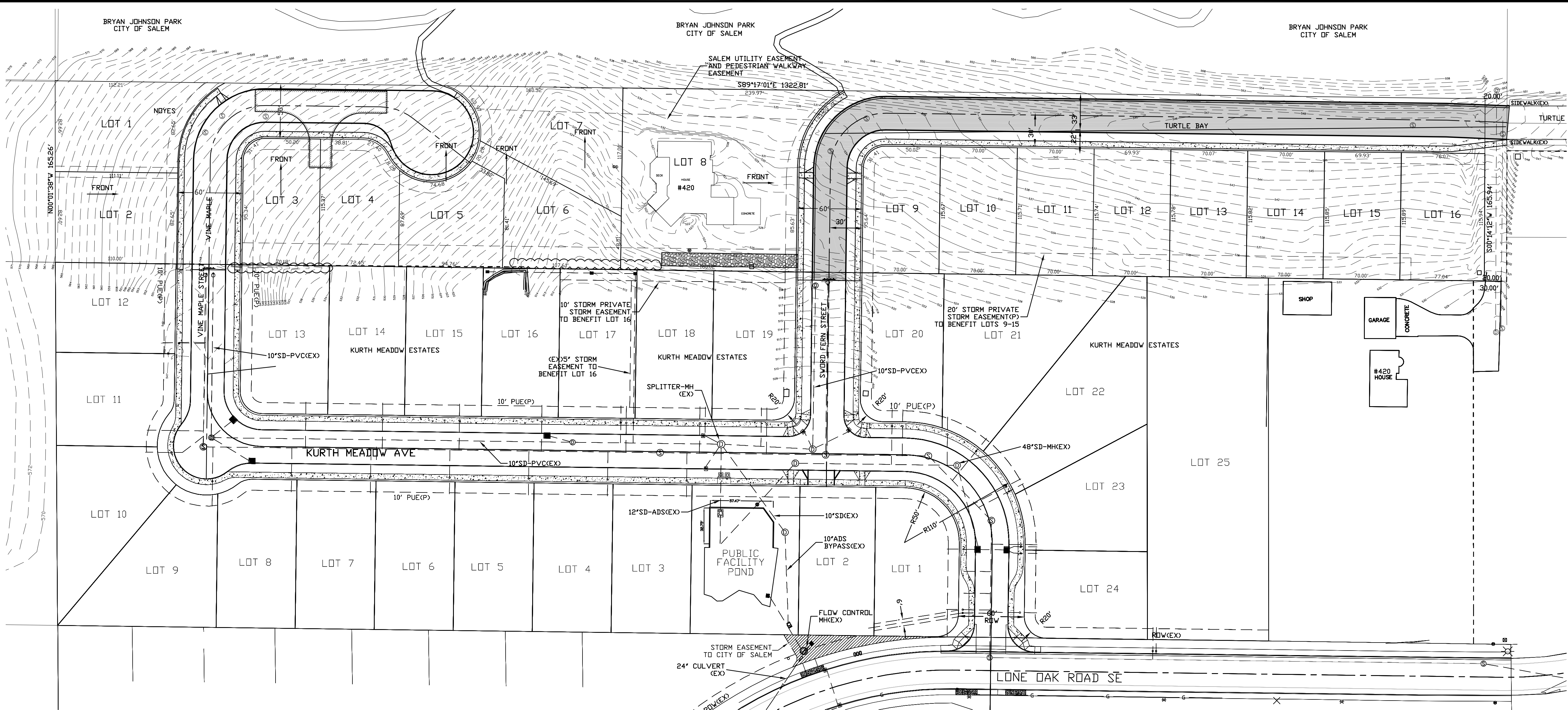
STORM WATER
AREAS AND PRE-
DEVELOPMENT TRAVEL
TIME

SPRING QUAIL VILLAGE
SUBDIVISION

430 TURTLE BAY CT SE
SALEM, OREGON 97306

DESIGNED BY:	GPH
DRAWN BY:	RW
DATE:	03-10-21
JOB NO.	2020-21
CLIENT NO.	
DRAWING NO.	REV.

C6 0



STORM WATER AREAS AND PRE-DEVELOPMENT TRAVEL TIME

SCALE: 1"=50'

SPRING QUAIL VILLAGE
PERVIOUS AND IMPERVIOUS AREAS

TOTAL SITE: 5.02 ACRES(218,881 SQUARE FEET)
EXISTING HOUSE AND APRONS: 4,700 SQUARE FEET
NEW STREETS: 32,350 SQUARE FEET
14 NEW HOUSES: 14 x 2,500 SQ. FEET 35,000 SQUARE FEET
14 NEW DRIVEWAYS: 14 x 30' x 25' 10,500 SQUARE FEET
14 NEW PATIOS: 14 x 20' x 20' 5,600 SQUARE FEET
SIDEWALKS: 14,000 SQUARE FEET

TRAVEL TIME ON WEST SIDE

$\frac{564' - 520'}{440'} = 10\%$
 $T = \frac{0.93(300^6)(.30^6)}{(0.82^4)(.010)^3} = 30 \text{ MINUTES}$
 $I = 0.82" \text{ FOR } 30 \text{ MINUTES}$

NORTH OFFSITE
PERVIOUS AND IMPERVIOUS AREAS

TOTAL SITE: 11.90 ACRES(518,170 SQUARE FEET)
EXISTING HOUSE AND APRONS: 3,500 SQUARE FEET
261 SUMMERSIDE BRUSH AND GRASS: 514,670 SQUARE FEET

TRAVEL TIME ON NORTH OFFSITE

$\frac{596' - 540'}{525'} = 10.7\%$
 $T = \frac{0.93(300^6)(.30^6)}{(0.82^4)(.0107)^3} = 30 \text{ MINUTES}$
 $I = 0.82" \text{ FOR } 30 \text{ MINUTES}$

SPRING QUAIL VILLAGE
TREES

THERE ARE 39 EXISTING TREES TO BE SAVED AND AT LEAST TWO(2) TREES PLANTED PER LOT. THIS AMOUNTS TO A TOTAL POTENTIAL REDUCTION IN IMPERVIOUS AREA OF 2,510 SQUARE FEET OR 0.058 ACRES
14 LOTS - 14 x 2 x 20 SQUARE FEET = 560 SQUARE FEET.
39 TREES x 50 SQUARE FEET PER TREE = 1,950 SQUARE FEET

FOR APPLICATION
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ENGINEER:
WILLAMETTE ENGINEERING INC.
P.O. BOX 9032
SALEM, OREGON 97305
PH: 503-304-0905
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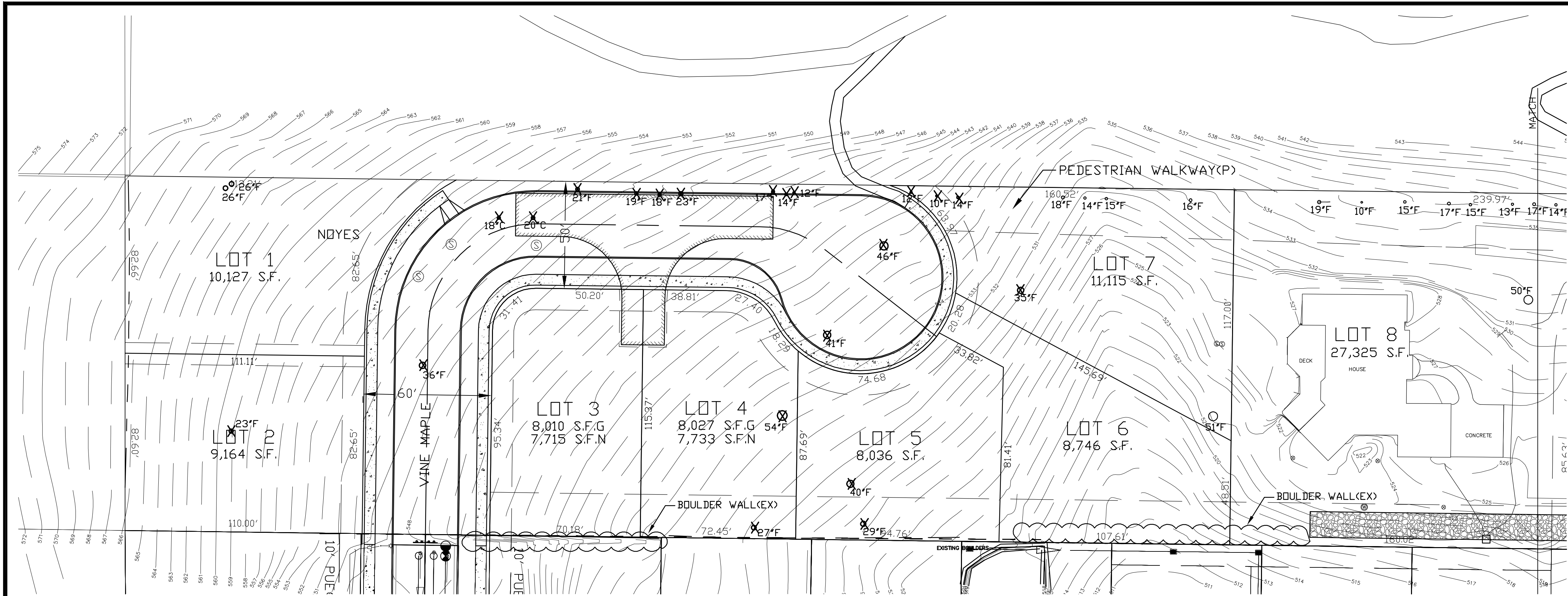
STORM WATER
AREAS AND PRE-
DEVELOPMENT TRAVEL
TIME

SPRING QUAIL VILLAGE
SUBDIVISION

430 TURTLE BAY CT SE
SALEM, OREGON 97306

DESIGNED BY:	GPH
DRAWN BY:	RW
DATE:	09-15-20
JOB NO.	2020-21
CLIENT NO.	
DRAWING NO.	

C710



OWNER/DEVELOPER

ROBERT & MARIA NOYES
430 TURTLE BAY CT SE
SALEM, OR 97306

TREE REMOVAL

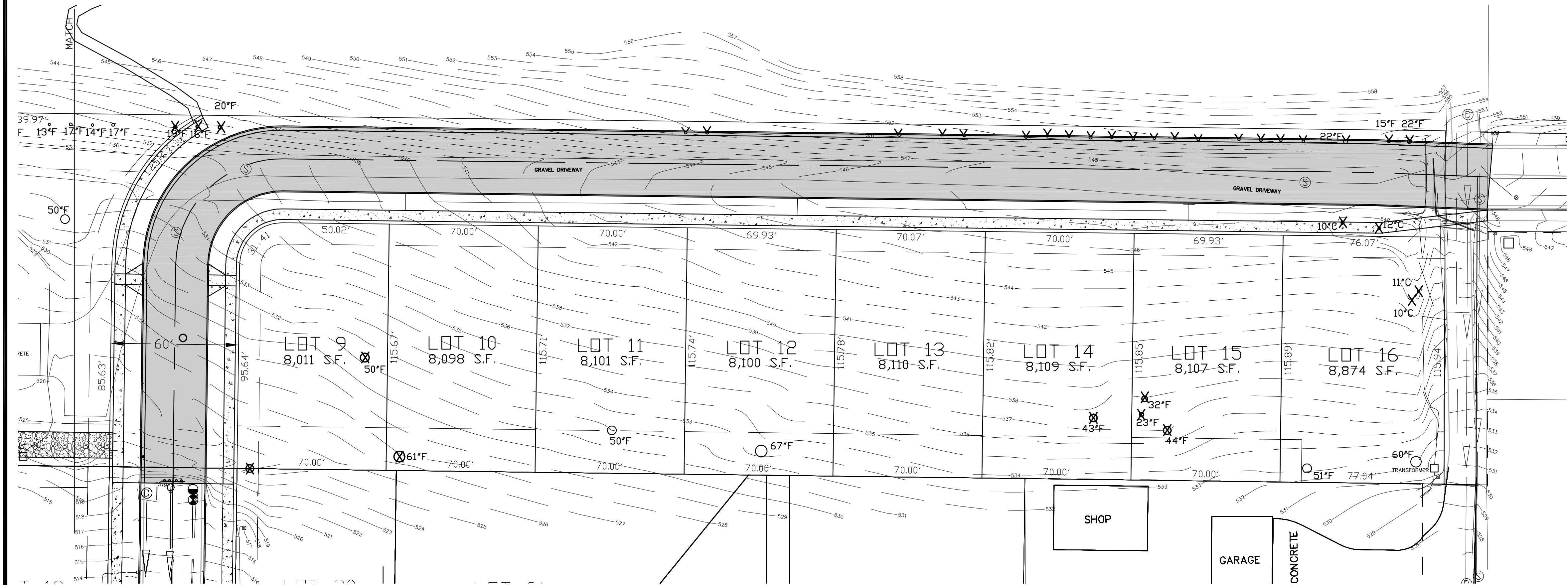
TOTAL SITE TREES	- 79
SIGNIFICANT TREES	- 0
SITE TREES TO BE REMOVED	- 58
SIGNIFICANT TREES TO BE REMOVED	- 0
REMAINING TREES	- 21
PERCENT TO REMAIN	- 26.6%
PERCENT TO BE REMOVED	- 73.4%

LEGEND

- C - CHERRY
- F - FIR
- X - INDICATES TREE TO BE REMOVED

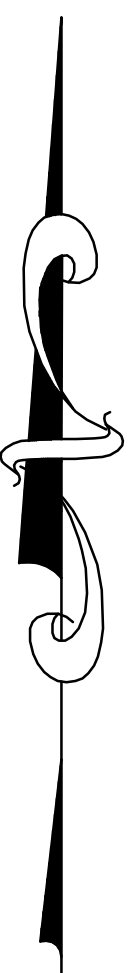
TREE REPLANTING

THREE 1 1/2' TREES TO BE
REPLANTED ON ALL LOTS
PRIOR TO FINAL OCCUPANCY.



TREE PRESERVATION PLAN

22x34 SCALE: 1"=30'
11x17 SCALE: 1"=60'



**FOR APPLICATION
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**TREE PRESERVATION
PLAN**

**QUAIL SPRING VILLAGE
SUBDIVISION**

430 TURTLE BAY CT SE
SALEM, OREGON 97306

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DATE:	03-11-21
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