

MEMORANDUM

Date: March 5, 2016

To: Jacob Ballstaedt

From: Hales Engineering

Subject: Salt Lake City - McClelland Street Subdivision Trip Generation Study
UT15-742

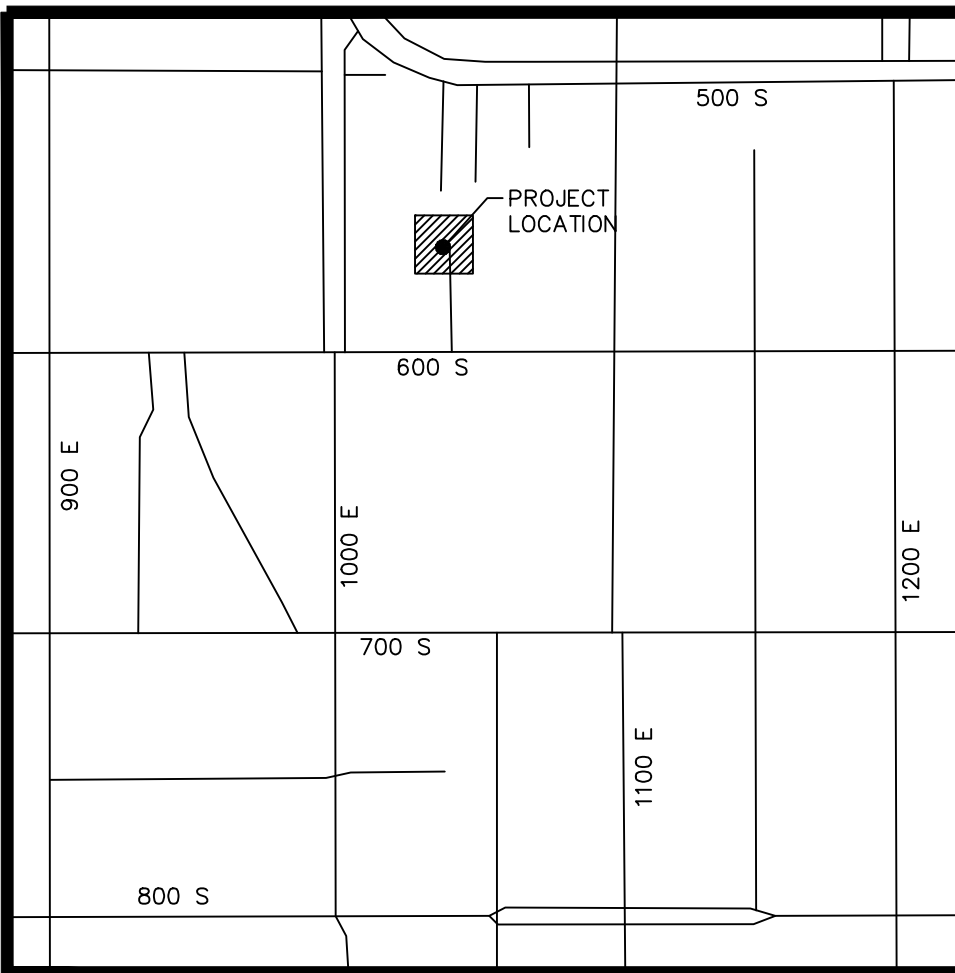
Purpose

The purpose of this memorandum is to report on a trip generation study completed for the proposed McClelland Street Subdivision in Salt Lake City, Utah. The proposed subdivision is planned to have seven single family homes, replacing the three existing homes on the property. A vicinity map of the proposed project is provided in Figure 1. A site layout of the proposed development is included in the Appendix of this memorandum.

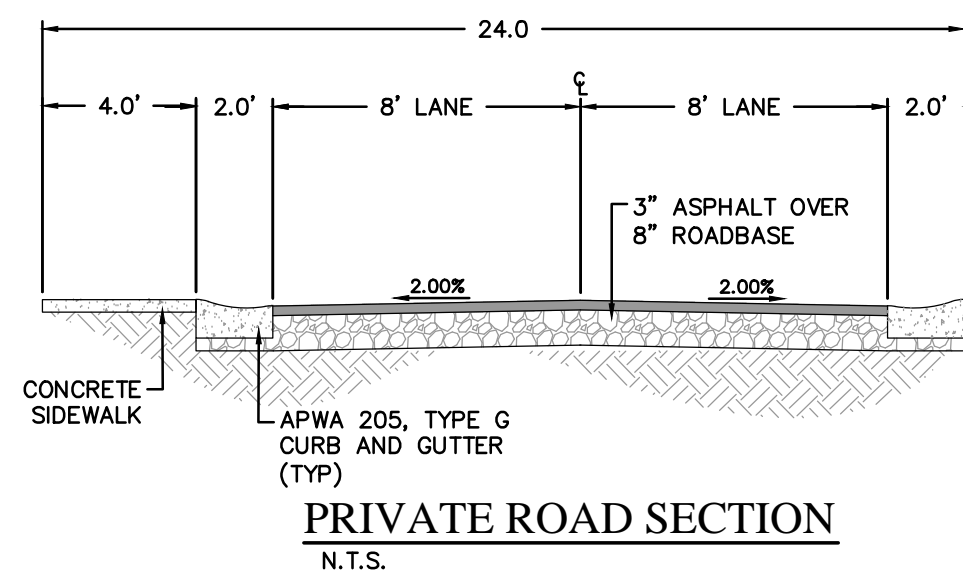


Figure 1. Vicinity Map for the Proposed Subdivision

Project Conditions

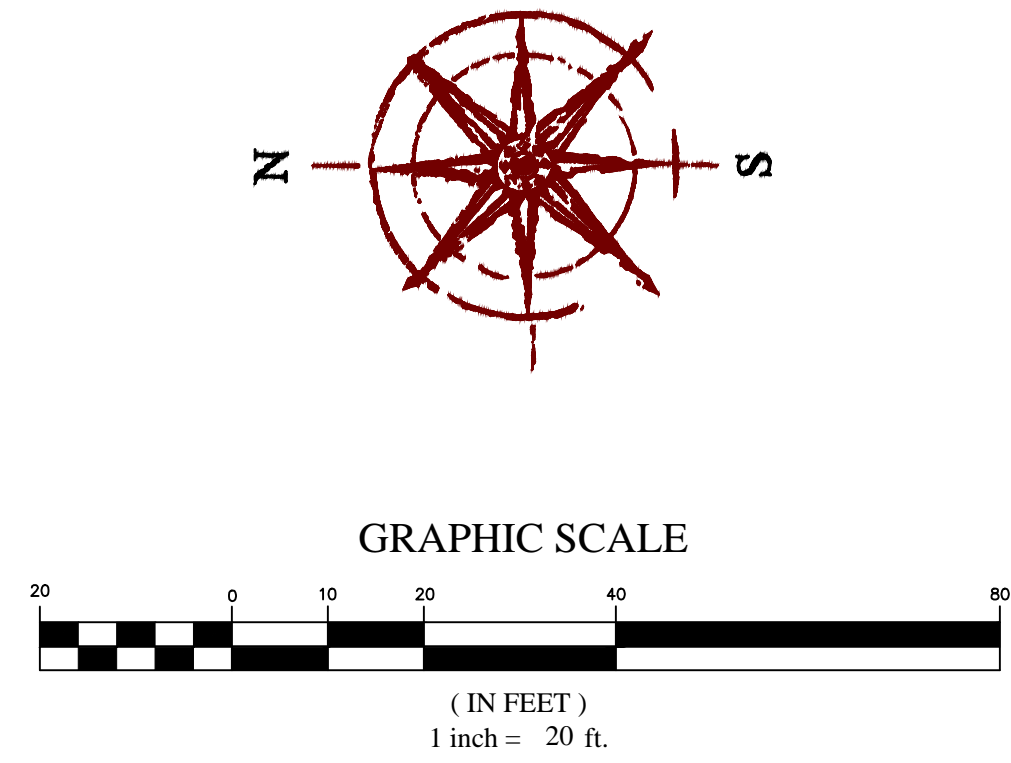


BENCHMARK
BRASS CAP AND LID MONUMENT AT THE INTERSECTION OF 700 EAST AND 600 SOUTH PUBLISHED BY THE SALT LAKE COUNTY SURVEYOR
ELEV: 4299.19



SITE NOTES

1. ALL EXISTING BUILDINGS AND HARDSCAPE FEATURES LOCATED ON THE EXISTING PROPERTY ARE TO BE REMOVED. A SEPARATE DEMOLITION PERMIT MAY BE REQUIRED FROM THE CITY PRIOR TO DEMOLITION.
2. A PORTION OF THE EXISTING SEWER IS TO BE REMOVED AS INDICATED ON PLANS. ALL SEWER MANHOLES TO REMAIN AND BE USED TO CONNECT PROPOSED SEWER LINES AS SHOWN ON PLANS.
3. THE EXISTING CULINARY WATER LINE LOCATED ON McCLELLAND STREET IS TO BE CONNECTED TO THE PROPOSED CULINARY WATER LINE TO SERVICE THE SUBDIVISION. EXISTING WATER SERVICE METER LOCATED WITHIN LOT 7 IS TO BE REMOVED.



FOCUS
ENGINEERING AND SURVEYING, LLC
502 WEST 8360 SOUTH
SANDY, UTAH 84070 PH: (801) 352-0075
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PROFESSIONAL ENGINEER
No. 343833-2202
RONOLD A. PAUL
STATE OF UTAH

VICINITY MAP
N.T.S.

GENERAL NOTES

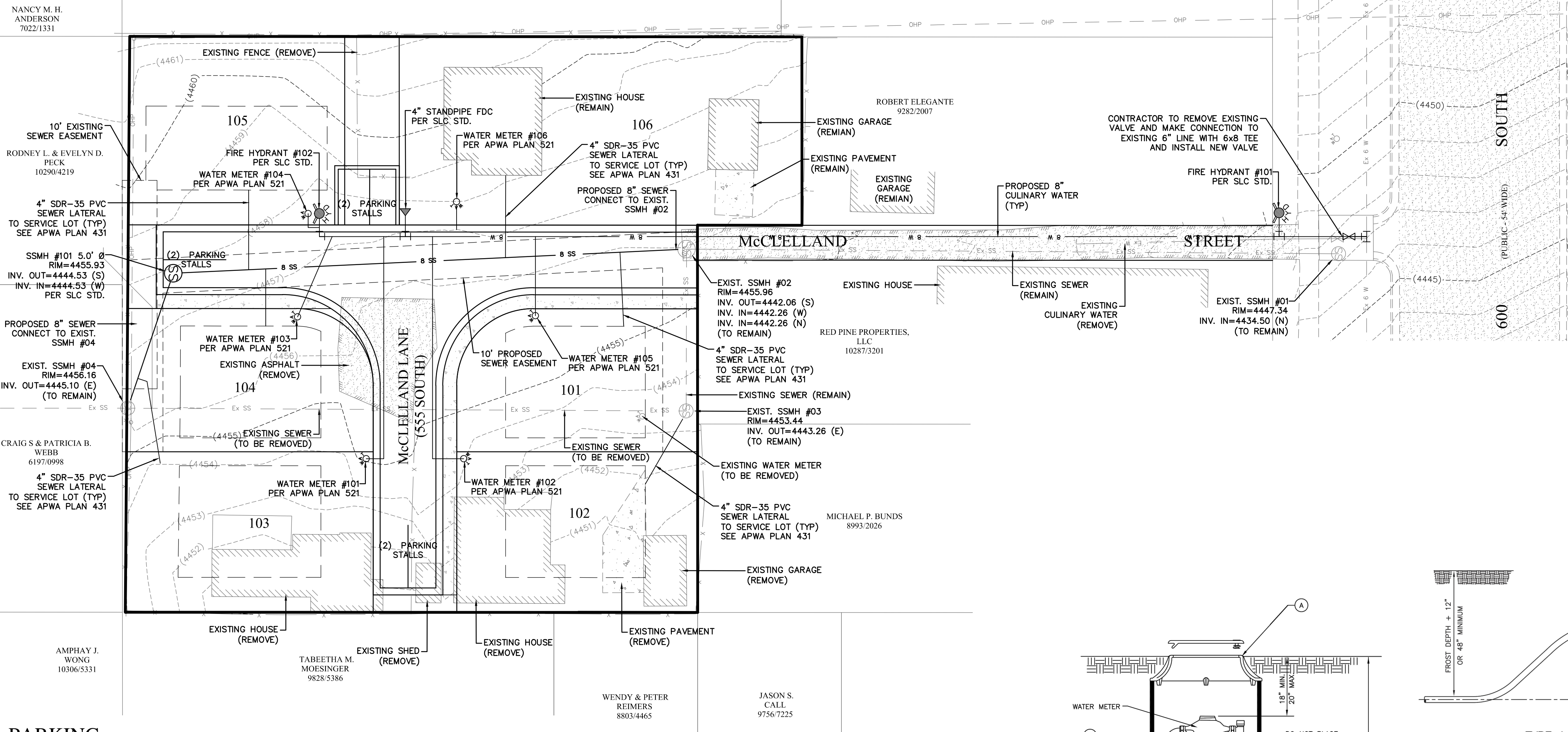
1. CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION, AND REPORT ANY DISCREPANCIES TO THE ENGINEER.
2. ANY AND ALL DISCREPANCIES IN THESE PLANS ARE TO BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3. ALL CONSTRUCTION SHALL ADHERE TO APWA STANDARD PLANS AND SALT LAKE CITY STANDARDS AND SPECIFICATIONS
4. ALL SANITARY SEWER CONSTRUCTION SHALL ADHERE TO SALT LAKE PUBLIC UTILITIES STANDARDS AND SPECIFICATIONS
5. ALL UTILITIES AND ROAD IMPROVEMENTS SHOWN ON THE PLANS HEREIN SHALL BE CONSTRUCTED USING REFERENCE TO SURVEY CONSTRUCTION STAKES PLACED UNDER THE SUPERVISION OF A PROFESSIONAL LICENSED SURVEYOR WITH A CURRENT LICENSE ISSUED BY THE STATE OF UTAH. ANY IMPROVEMENTS INSTALLED BY ANY OTHER VERTICAL OR HORIZONTAL REFERENCE WILL NOT BE ACCEPTED OR CERTIFIED BY THE ENGINEER OF RECORD.

NOTICE

BEFORE PROCEEDING WITH THIS WORK, THE CONTRACTOR SHALL CAREFULLY CHECK AND VERIFY ALL CONDITIONS, QUANTITIES, DIMENSIONS, AND GRADE ELEVATIONS, AND SHALL REPORT ALL DISCREPANCIES TO THE ENGINEER.

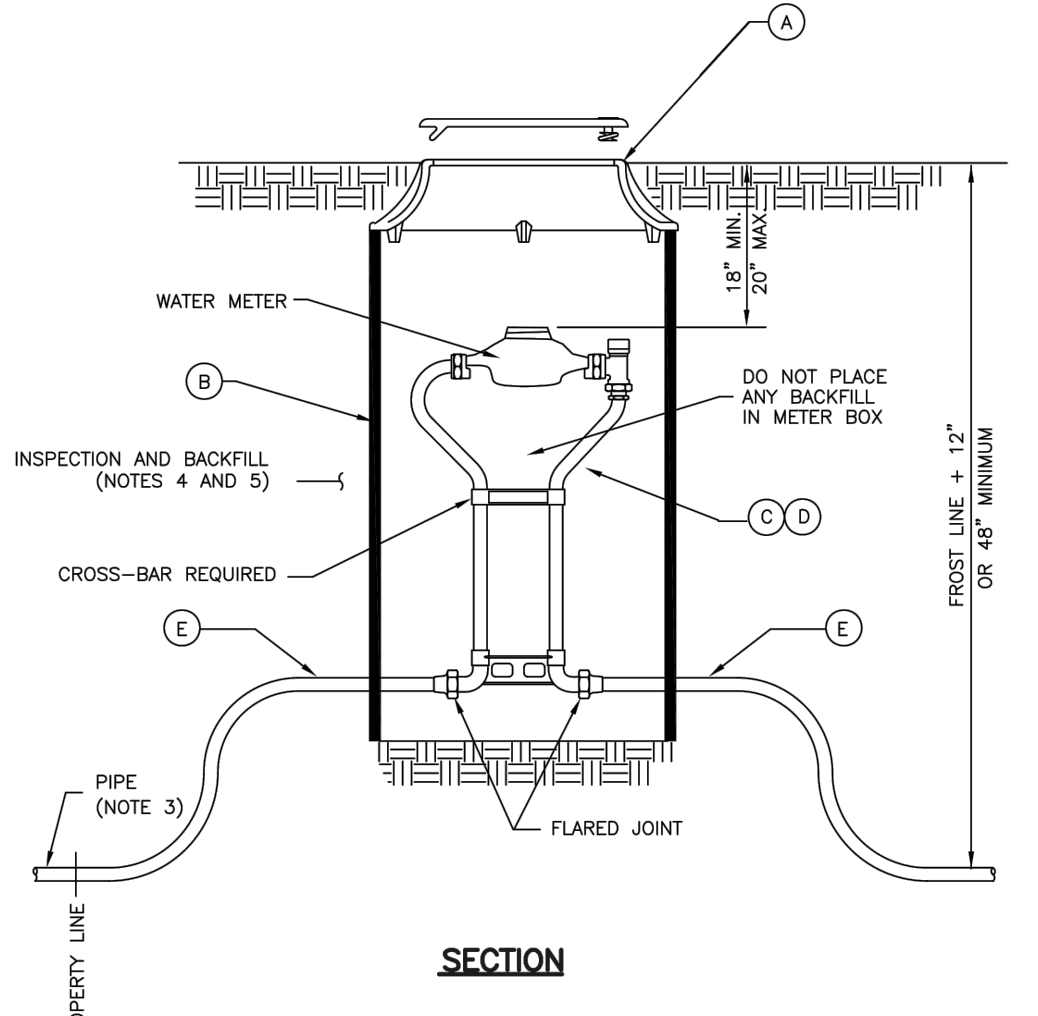
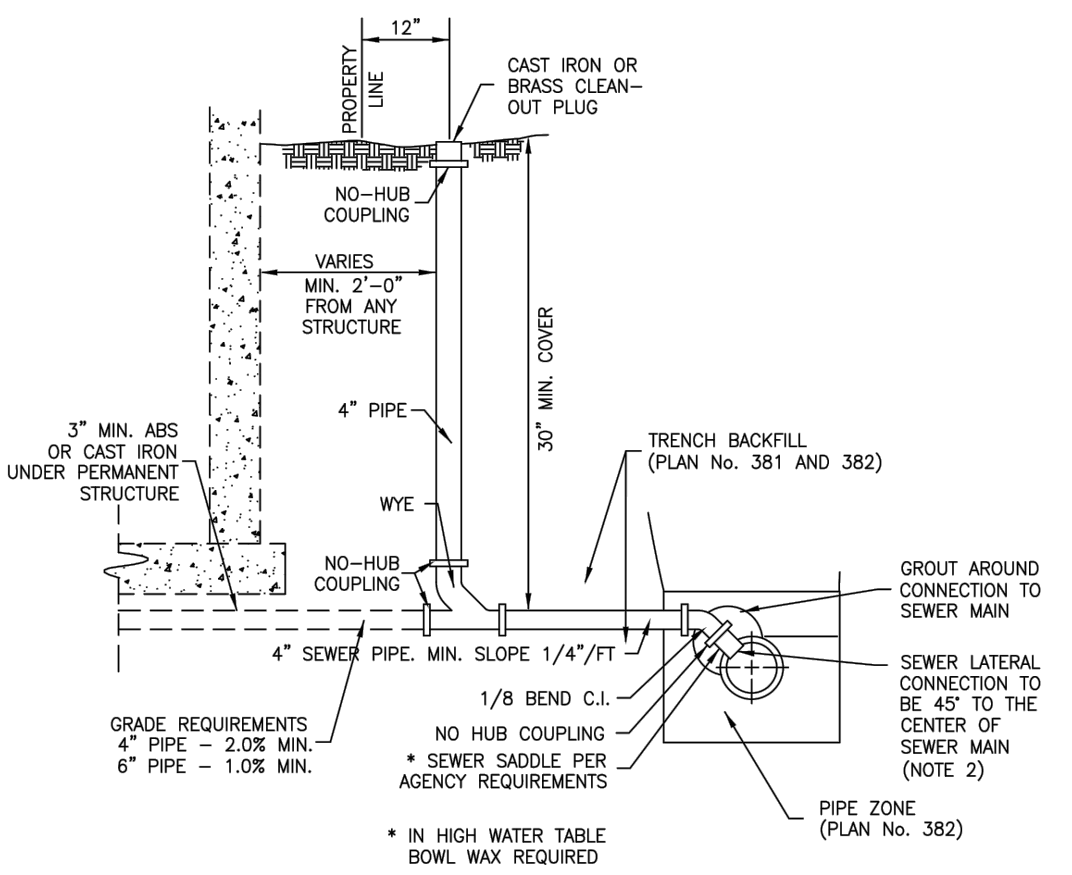
ENGINEER'S NOTES TO CONTRACTOR

1. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN OR NOT SHOWN ON THESE DRAWINGS. IF UTILITY LINES ARE ENCOUNTERED DURING CONSTRUCTION THAT ARE NOT IDENTIFIED BY THESE PLANS, CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY.
2. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE CITY, THE OWNER, AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
3. UNAUTHORIZED CHANGES & USES: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.
4. ALL CONTOUR LINES SHOWN ON THE PLANS ARE AN INTERPRETATION BY CAD SOFTWARE OF FIELD SURVEY WORK PERFORMED BY A LICENSED SURVEYOR. DUE TO THE POTENTIAL DIFFERENCES IN INTERPRETATION OF CONTOURS BY VARIOUS TYPES OF GRADING SOFTWARE BY OTHER ENGINEERS OR CONTRACTORS, FOCUS DOES NOT GUARANTEE OR WARRANT THE ACCURACY OF SUCH LINENWORK. FOR THIS REASON, FOCUS WILL NOT PROVIDE ANY GRADING CONTOURS IN CAD FOR ANY TYPE OF USE BY THE CONTRACTOR. SPOT ELEVATIONS AND PROFILE ELEVATIONS SHOWN IN THE DESIGN DRAWINGS GOVERN ALL DESIGN INFORMATION ILLUSTRATED ON THE APPROVED CONSTRUCTION SET. CONSTRUCTION EXPERTISE AND JUDGMENT BY THE CONTRACTOR IS ANTICIPATED BY THE ENGINEER TO COMPLETE BUILD-OUT OF THE INTENDED IMPROVEMENTS.



PARKING

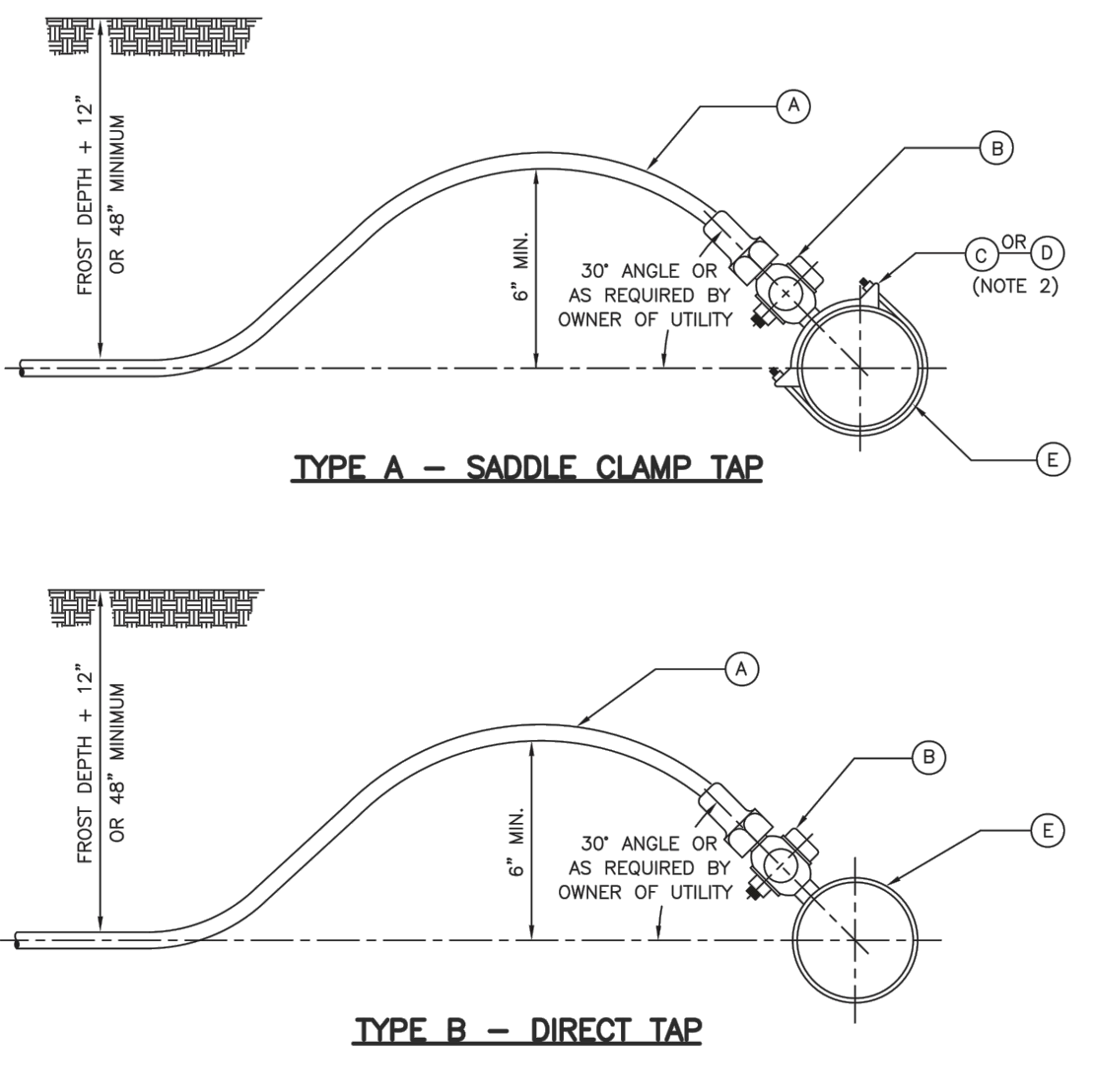
HOUSES:	6
TWO-CAR GARAGES:	6
OFF STREET PARKING SPACES:	12
ON STREET PARKING SPACES:	6
TOTAL PARKING SPACES:	18



LEGEND

No.	ITEM	DESCRIPTION
(A)	FRAME AND COVER	CAST IRON COVER (gross) DUCTILE IRON COVER (greyway)
(B)	METER BOX (18" TO 21" DIAMETER) (30" TO 36" DEEP)	CORRUGATED PE, PVC, CMP OR MATERIAL ACCEPTABLE TO AGENCY
(C)	3/4" METER YOKE	OPTIONAL BACKFLOW PROTECTION PER AGENCY REQUIREMENTS
(D)	1" METER YOKE	OPTIONAL BACKFLOW PROTECTION PER AGENCY REQUIREMENTS
(E)	COPPER PIPE	TYPE K (SOFT)

* FURNISHED BY UTILITY AGENCY
** FURNISHED BY UTILITY AGENCY



LEGEND

No.	ITEM	DESCRIPTION
(A)	COPPER PIPE	TYPE K - SOFT
(B)	CORPORATION STOP	BRASS
(C)	SERVICE SADDLE CLAMP	(D.I., C.I., A.C.) **
(D)	SERVICE SADDLE CLAMP	(P.V.C.)
(E)	WATER MAIN PIPE	(D.I., C.I., A.C., P.V.C.)

* FURNISHED BY UTILITY AGENCY
** DI & CI PIPE MAY BE DIRECT TAPPED

STATEMENT OF ACCURACY

Vertical data (contour lines and/or spot elevations, etc.) shown hereon is based on the NAVD88 'foot equivalent' elevation of 4299.19 published by the Salt Lake County Surveyor on a brass cap ring & lid monument at the intersection of 700 East & 600 South.

CONTACTS

ENGINEER & SURVEYOR
FOCUS ENGINEERING & SURVEYING
502 WEST 8360 SOUTH
SANDY, UTAH 84070
(801) 352-0075
CONTACT: JASON BARKER

OWNER/DEVELOPER
GARRETT HOMES
273 NORTH EAST CAPITOL STREET
SALT LAKE CITY, UTAH 84103
(801) 456-2430
CONTACT: XXXX XXXXX



APWA DETAIL
SEWER LATERAL CONNECTION
PLAN NO. 431

APWA DETAIL
1" WATER SERVICE
PLAN NO. 521

APWA DETAIL
1" WATER TAP
PLAN NO. 551

McCLELLAND ENCLAVE
SALT LAKE CITY, UT
SITE PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		

SITE PLAN

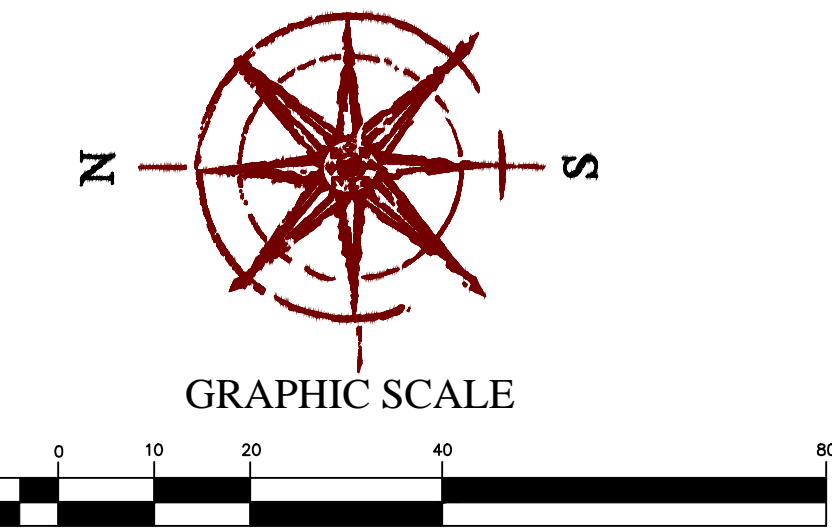
Scale: 1"=20'
Date: 2/8/2016
Sheet: C1

Drawn: JSB
Job #: 15-071

2/8/2016 15-071 Gorbatt-Homes-554-S McClelland Street\Design 15-071.dwg\ahmet's C1 - Site Plan.dwg

McCLELLAND ENCLAVE

(A PLANNED DEVELOPMENT SUBDIVISION)
A PORTION OF LOT 3, BLOCK 13, PLAT "F", SALT LAKE CITY SURVEY
SALT LAKE CITY, UTAH
SE 1/4 SECTION 5, T1S, R1E, SLB&M



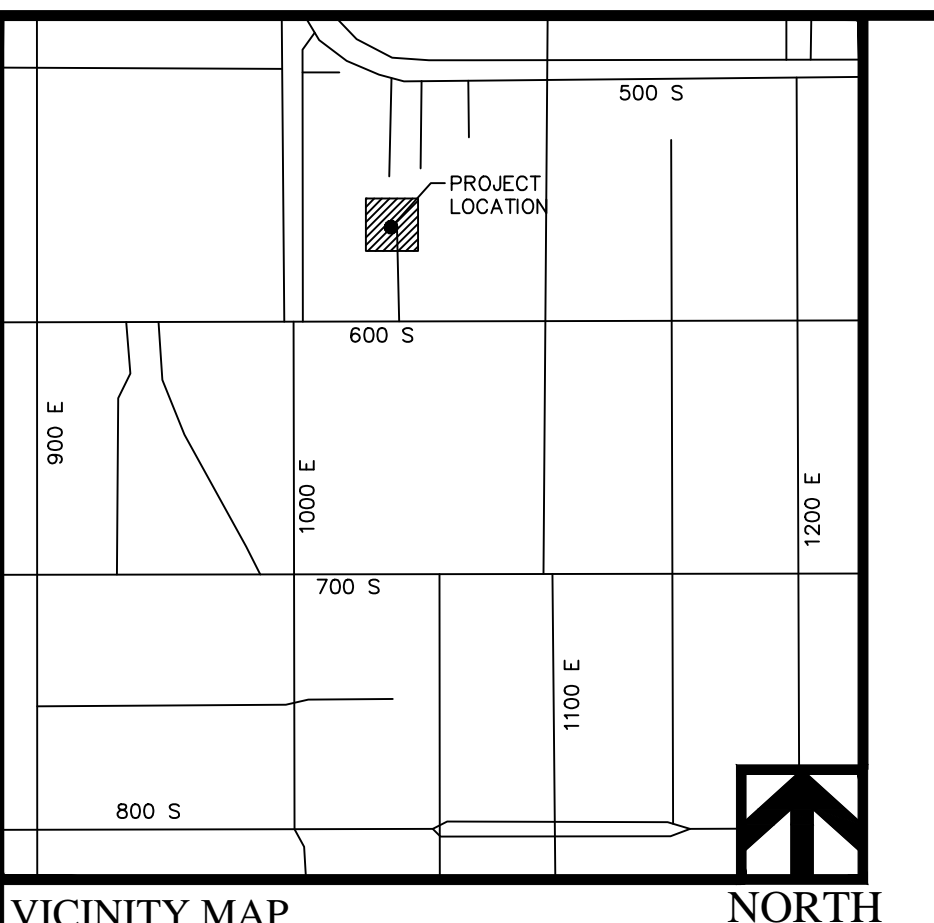
SURVEYOR'S CERTIFICATE

I, _____ DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR, AND THAT I HOLD CERTIFICATE NUMBER _____ AS PRESCRIBED UNDER THE LAWS OF THE STATE OF UTAH. I FURTHER CERTIFY THAT BY THE AUTHORITY OF THE OWNERS, I HAVE MADE A SURVEY OF THE TRACT OF LAND SHOWN ON THIS PLAT AND DESCRIBED BELOW, AND HAVE SUBDIVIDED SAID TRACT OF LAND INTO LOTS AND STREETS, HEREAFTER TO BE KNOWN AS:

McCLELLAND ENCLAVE

AND THAT THE SAME HAS BEEN CORRECTLY SURVEYED AND STAKED ON THE GROUND AS SHOWN ON THIS PLAT.

Professional Land Surveyor _____ Date _____



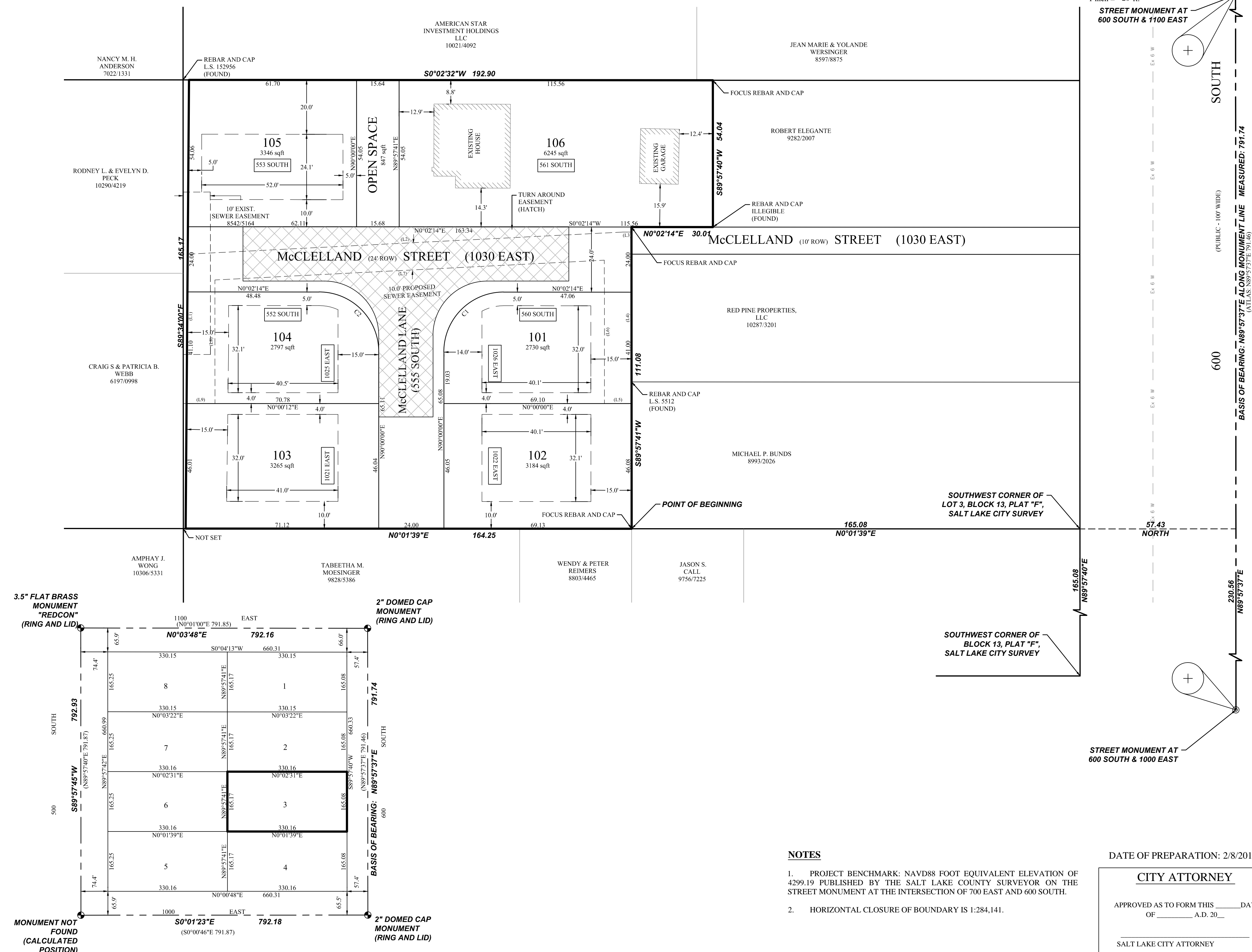
VICINITY MAP
N.T.S.

Curve Table

CURVE	RADIUS	DELTA	LENGTH	CHORD DIRECTION	CHORD LENGTH
C1	22.00	90°02'14"	34.57	N44°58'53"W	31.12
C2	22.00	89°57'46"	34.54	N45°01'07"E	31.10

Easement Line Table

LINE	DIRECTION	LENGTH
(L1)	S89°34'00"E	55.00
(L2)	S02°54'31"E	160.41
(L3)	S00°24'35"W	3.22
(L4)	S89°57'37"W	63.12
(L5)	S00°00'00"E	10.00
(L6)	S89°57'40"W	52.78
(L7)	S02°54'31"E	143.60
(L8)	S89°58'13"W	45.50
(L9)	S00°01'21"W	10.45



BOUNDARY DESCRIPTION

A portion of Lot 3, Block 13, Plat "F", Salt Lake City Survey, more particularly described as follows:

Beginning at a point on the west line of Lot 3, Block 13, Plat "F", Salt Lake City Survey located N0°01'39"E along the lot line 165.08 feet from the Southwest Corner of said lot. Said lot corner is also located N89°57'37"E along the monument line of 600 South Street 230.56 feet and North 57.43 feet from a Salt Lake City Monument at the intersection of 600 South and 1000 East; thence N0°01'39"E along the lot line 164.25 feet to a fence corner; thence S89°34'00"E along a fence line and extension thereof 165.17 to the east line of said lot thence S0°02'31"W along the lot line 192.90 feet to the northeast corner of that Real Property described in Deed Book 9282 Page 2007 of the Official Records of Salt Lake County; thence S89°57'40"W along said deed 54.0 feet to the easterly line of McClelland Street; thence N0°02'14"E along said Street 30.01 feet; thence S89°57'41"W 111.08 feet to the point of beginning.

Contains: 0.66 +/- acres or 28,636 +/- s.f.

OWNER'S DEDICATION

KNOW ALL BY THESE PRESENTS THAT WE THE UNDERSIGNED OWNERS OF THE DESCRIBED TRACT OF LAND ABOVE, HAVING CAUSED THE SAME TO BE SUBDIVIDED INTO LOTS AND STREETS TO HEREAFTER BE KNOWN AS

McCLELLAND ENCLAVE

DO HEREBY DEDICATE FOR THE PERPETUAL USE OF THE PUBLIC ALL PARCELS OF LAND SHOWN ON THIS PLAT AS INTENDED FOR PUBLIC USE, AND WARRANT, DEFEND, AND SAVE THE CITY HARMLESS AGAINST ANY EASEMENTS OR OTHER ENCUMBRANCES ON THE DEDICATED STREETS WHICH WILL INTERFERE WITH THE CITY'S USE, OPERATION, AND MAINTENANCE OF THE STREETS AND DO FURTHER DEDICATE THE EASEMENTS AS SHOWN FOR THE USE BY ALL SUPPLIERS OF UTILITY OR OTHER NECESSARY SERVICES.

IN WITNESS WHEREOF, WE HAVE HEREUNTO SET OUR HANDS THIS _____ DAY OF _____ A.D. 20____

BY: _____
GARBETT HOMES

LIMITED LIABILITY ACKNOWLEDGMENT

ON THE _____ DAY OF _____ A.D. 20____ PERSONALLY APPEARED BEFORE ME THE UNDERSIGNED NOTARY PUBLIC, IN AN FOR THE COUNTY OF SALT LAKE, IN SA STATE OF UTAH, _____ WHO AFTER BEING DULY SWORN, ACKNOWLEDGED TO ME THAT HE IS THE _____ L.L.C. A UTAH L.L.C. AN THAT HE SIGNED THE OWNERS DEDICATION FREELY AND VOLUNTARILY FOR AND I BEHALF OF SAID LIMITED LIABILITY COMPANY FOR THE PURPOSES THERE MENTIONED.

MY COMMISSION EXPIRES _____ NOTARY PUBLIC
RESIDING IN SALT LAKE COUNTY

LIMITED LIABILITY ACKNOWLEDGMENT

ON THE _____ DAY OF _____ A.D. 20____ PERSONALLY APPEARED BEFORE ME THE UNDERSIGNED NOTARY PUBLIC, IN AN FOR THE COUNTY OF SALT LAKE, IN SA STATE OF UTAH, _____ WHO AFTER BEING DULY SWORN, ACKNOWLEDGED TO ME THAT HE IS THE _____ L.L.C. A UTAH L.L.C. AN THAT HE SIGNED THE OWNERS DEDICATION FREELY AND VOLUNTARILY FOR AND I BEHALF OF SAID LIMITED LIABILITY COMPANY FOR THE PURPOSES THERE MENTIONED.

MY COMMISSION EXPIRES _____ NOTARY PUBLIC
RESIDING IN SALT LAKE COUNTY

PREPARED FOR:

GARBETT HOMES

273 NORTH EAST CAPITOL STREET
SALT LAKE CITY, UTAH
84103, PH: 456-2430

PREPARED BY:

FOCUS

ENGINEERING AND SURVEYING, LLC
502 WEST 8360 SOUTH
SANDY, UTAH 84070 PH: (801) 352-0075
www.focusutah.com

- NOTES**
- PROJECT BENCHMARK: NAVD88 FOOT EQUIVALENT ELEVATION OF 4299.19 PUBLISHED BY THE SALT LAKE COUNTY SURVEYOR ON THE STREET MONUMENT AT THE INTERSECTION OF 700 EAST AND 600 SOUTH.
 - HORIZONTAL CLOSURE OF BOUNDARY IS 1:284,141.

DATE OF PREPARATION: 2/8/2016

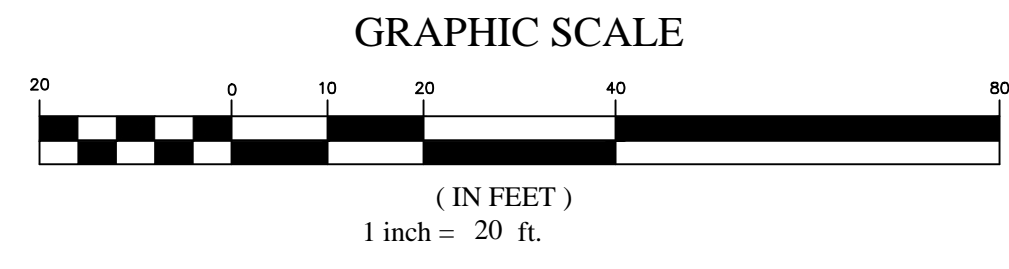
CITY ATTORNEY

APPROVED AS TO FORM THIS _____ DAY OF _____ A.D. 20____

SALT LAKE CITY ATTORNEY

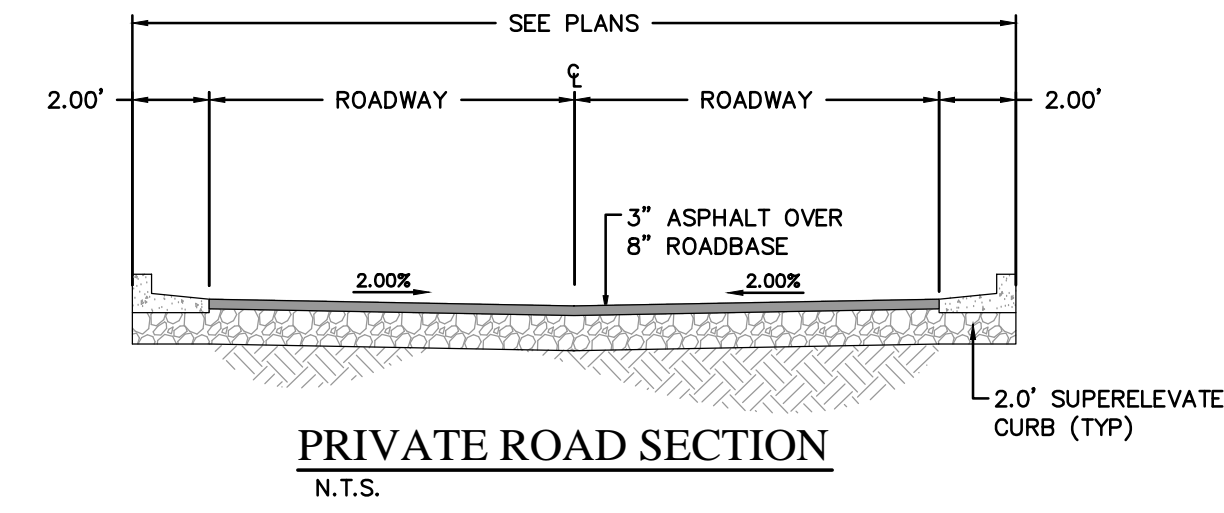
McCLELLAND ENCLAVE
(A PLANNED DEVELOPMENT SUBDIVISION)

<p>NUMBER _____</p> <p>ACCOUNT _____</p> <p>SHEET _____</p> <p>OF _____ SHEETS</p>	<p>PUBLIC UTILITIES DEPT.</p> <p>APPROVED AS TO SANITARY SEWER, STORM DRAINAGE AND WATER UTILITY DETAIL THIS _____ DAY OF _____ A.D. 20____ BY THE SALT LAKE COUNTY PLANNING COMMISSION</p> <p>_____ SALT LAKE PUBLIC UTILITIES DIRECTOR</p>	<p>SALT LAKE VALLEY HEALTH DEPARTMENT</p> <p>APPROVED THIS _____ DAY OF _____ A.D. 20____</p> <p>_____ SALT LAKE VALLEY HEALTH DEPT.</p>	<p>CITY PLANNING DIRECTOR</p> <p>APPROVED THIS _____ DAY OF _____ A.D. 20____</p> <p>_____ SALT LAKE CITY PLANNING DIRECTOR</p>	<p>CITY ENGINEERING DIVISION</p> <p>I HEREBY CERTIFY THAT THIS OFFICE HAS EXAMINED THIS PLAT AND IT IS CORRECT IN ACCORDANCE WITH INFORMATION ON FILE IN THIS OFFICE</p> <p>DATE _____ CITY ENGINEER</p> <p>DATE _____ CITY SURVEYOR</p>	<p>CITY APPROVAL</p> <p>PRESENTED TO SALT LAKE CITY THIS _____ DAY OF _____ A.D. 20____ AT WHICH TIME THIS SUBDIVISION WAS APPROVED AND ACCEPTED.</p> <p>_____ SALT LAKE CITY MAYOR</p> <p>_____ SALT LAKE CITY DEPUTY RECORDER</p>	<p>SALT LAKE COUNTY RECORDER</p> <p>STATE OF UTAH, COUNTY OF SALT LAKE, RECORDED AND FILED AT THE REQUEST OF:</p> <p>DATE: _____ TIME: _____ BOOK: _____ PAGE: _____</p> <p>FEE \$ _____</p> <p>_____ SALT LAKE COUNTY RECORDER</p>	<p>NUMBER _____</p> <p>ACCOUNT _____</p> <p>SHEET _____</p> <p>OF _____ SHEETS</p>
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VERTICAL STATEMENT OF ACCURACY

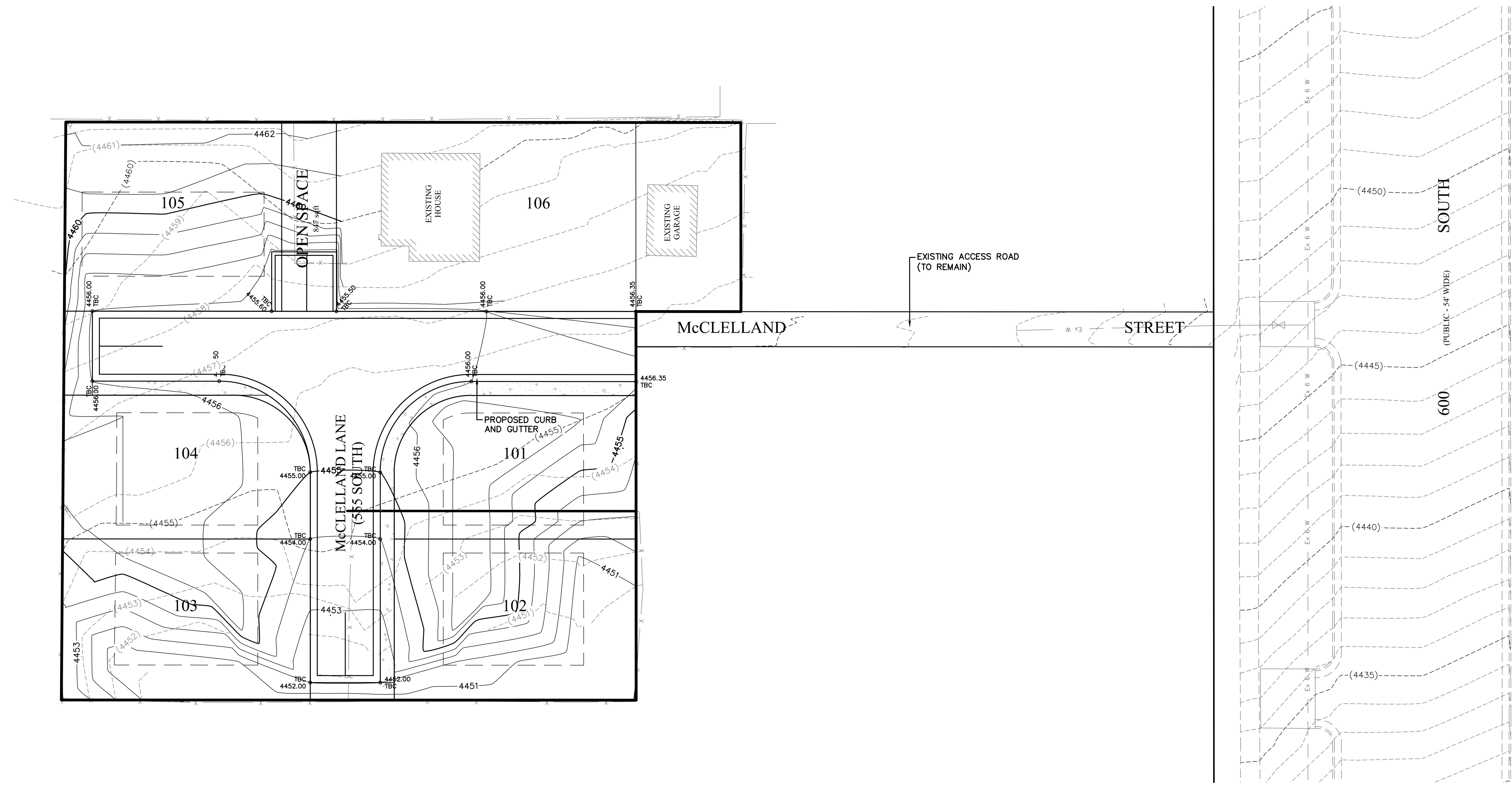
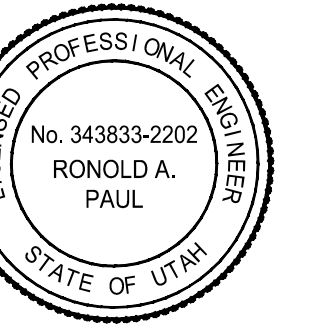
Vertical data (contour lines and/or spot elevations, etc.) shown hereon is based on the NAVD88 'foot equivalent' elevation of 4299.19 published by the Salt Lake County Surveyor on a brass cap ring & lid monument at the intersection of 700 East & 600 South.



BENCHMARK
BRASS CAP AND LID MONUMENT AT THE INTERSECTION OF 700 EAST AND 600 SOUTH PUBLISHED BY THE SALT LAKE COUNTY SURVEYOR
ELEV: 4299.19

GRADING / STORM DRAINAGE NOTES

1. ALL STORM DRAINAGE FOR THIS SITE IS TO BE RETAINED ON SITE IN SMALL LANDSCAPED RETENTION PONDS LOCATED ON THE LOTS.
2. GRADING SHOWN ON THIS PLAN IS PRELIMINARY. ACTUAL GRADING WILL BE COMPLETED AT FINAL.
3. SEE STORM DRAIN CALCULATIONS FOR ADDITIONAL INFORMATION.



McCLELLAND ENCLAVE SALT LAKE CITY, UT GRADING PLAN

#	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		

GRADING PLAN

Scale: 1"=20' Drawn: JSB
Date: 2/8/2016 Job #: 15-071
Sheet:

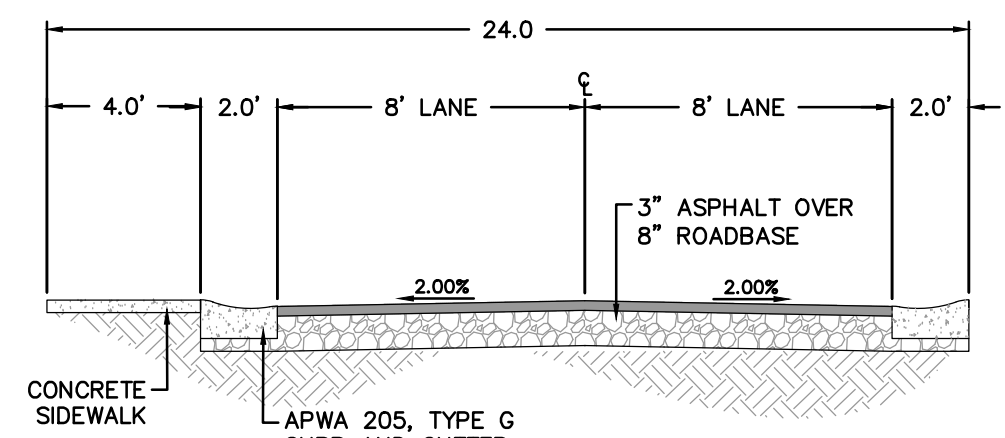


ALL INFORMATION ON THIS PLAN IS BASED ON THE RECORD PLANS AND SURVEY DATA PROVIDED BY THE CLIENT. THE ENGINEER HAS CONDUCTED A VISUAL GENERAL CHECK OF THE RECORD PLANS AND SURVEY DATA. THE ENGINEER HAS NOT CONDUCTED A FIELD SURVEY OF THE SITE. THE ENGINEER IS NOT RESPONSIBLE FOR THE ACCURACY OF THE RECORD PLANS AND SURVEY DATA. THE ENGINEER'S LIABILITY IS LIMITED TO THE PROFESSIONAL SERVICES PROVIDED. SEE THE PROFESSIONAL ENGINEER'S LICENSE FOR THE STATE OF UTAH FOR MORE INFORMATION.

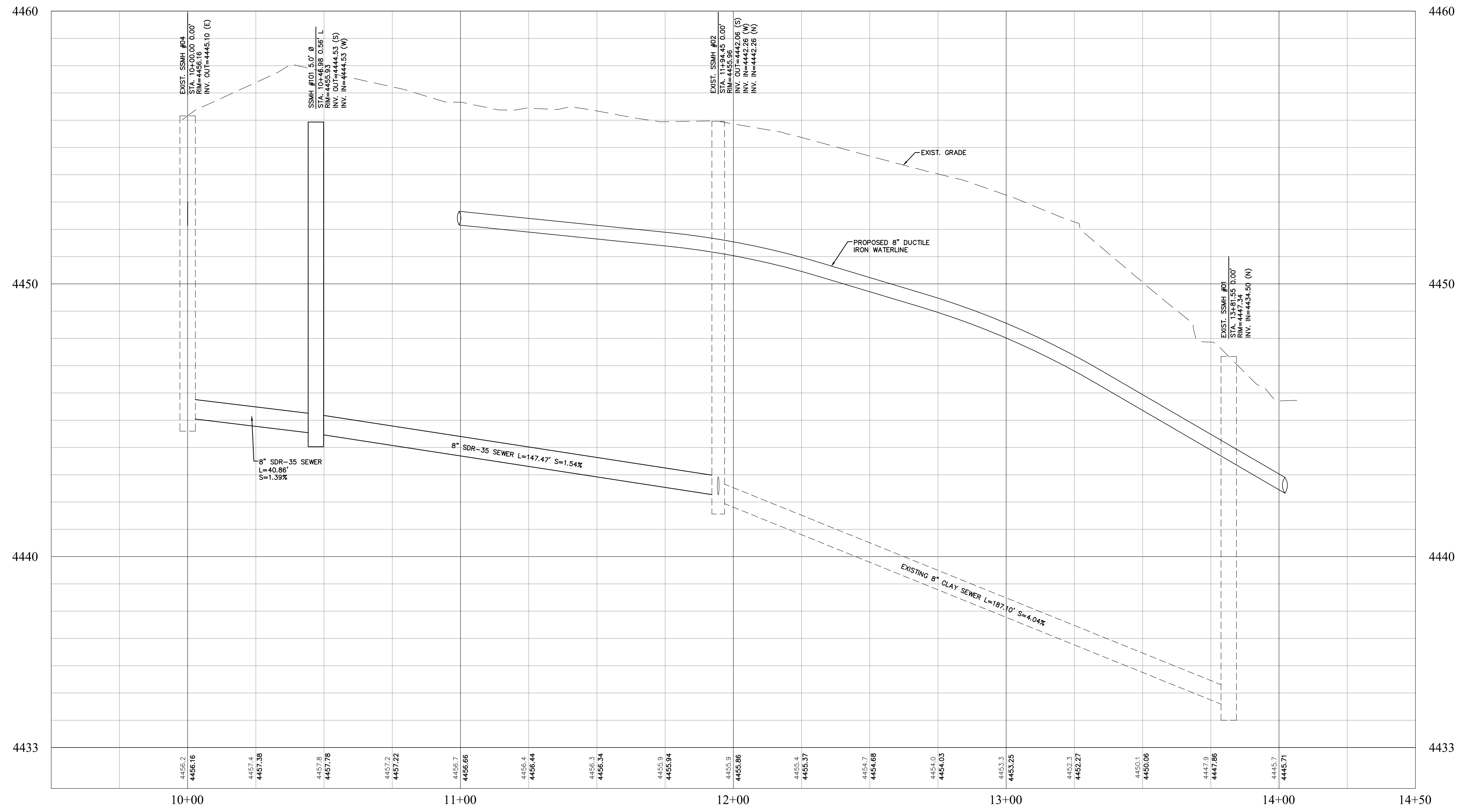
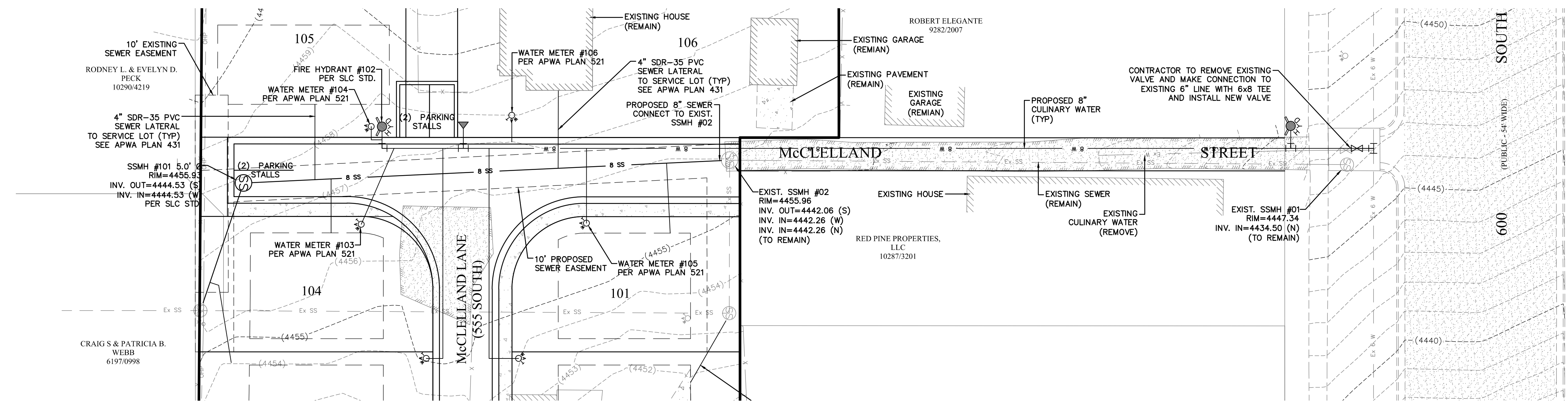


GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.



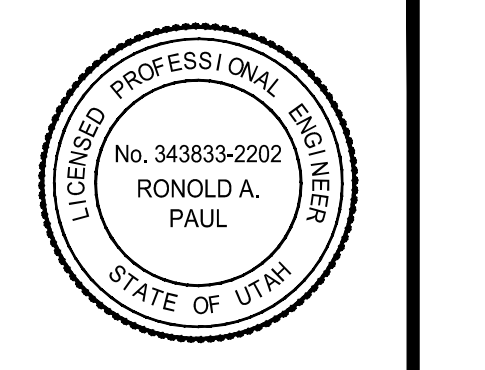
PRIVATE ROAD SECTION
N.T.S.



SEWER PROFILE



FOCUS
ENGINEERING AND SURVEYING, LLC
502 WEST 8360 SOUTH
SANDY, UTAH 84070 PH: (801) 352-0075
www.focus Utah.com



McCLELLAND ENCLAVE
SALT LAKE CITY, UT
P&P - McCLELLAND STREET

#	DATE	DESCRIPTION
1		
2		
3		
4		
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6		

P&P - McCLELLAND STREET

Scale: 1"=20' Drawn: JSB
Date: 2/8/2016 Job #: 15-071
Sheet: PP1

Z:\2015\15-071_Gorbatt_Home-554_S_McClelland_Street\Design_15-071.dwg\yahaeta\PP1 - McClelland.dwg



PLAN 'A'

PLAN 'C'

PLAN 'B'



HTC at McClelland St.

garbettHOMES.com
Now you're living.

Architecture+Planning
17922 Fitch
Irvine, CA 92614
949.851.2133
ktgy.com





PLAN 'A'



PLAN 'B'



PLAN 'C'

HTC at McClelland St.

garbettHOMES.com
Now you're living.

Architecture+Planning
17922 Fitch
Irvine, CA 92614
949.851.2133
ktgy.com



The proposed project will have an access onto 600 South via McClelland Street (1040 East). McClelland Street (1040 East) is a ten-foot-wide lane that currently provides access to five homes, one of which has been vacant for several years. As part of the proposed project, three of the existing homes will be removed (including the vacant home) and six new homes will be built. Hales Engineering used ITE *Trip Generation (9th Edition, 2012)* to calculate the number of trips that would be generated by the homes on McClelland Street (8 single-family homes) after the proposed project is completed. As shown in Table 1, the proposed development will generate 104 trips on an average weekday, 16 trips during the morning peak hour, and 12 trips during the evening peak hour.

Table 1								
Salt Lake City - McClelland Street Subdivision								
Trip Generation								
Weekday Daily	Number of	Unit	Trip	%	%	Trips	Trips	Total Daily
Land Use ¹	Units	Type	Generation	Entering	Exiting	Entering	Exiting	Trips
Single-Family Detached Housing (210)	8	Dwelling Units	104	50%	50%	52	52	104
Project Total Daily Trips						52	52	104
A.M. Peak Hour	Number of	Unit	Trip	%	%	Trips	Trips	Total a.m.
Land Use ¹	Units	Type	Generation	Entering	Exiting	Entering	Exiting	Trips
Single-Family Detached Housing (210)	8	Dwelling Units	16	25%	75%	4	12	16
Project Total a.m. Peak Hour Trips						4	12	16
P.M. Peak Hour	Number of	Unit	Trip	%	%	Trips	Trips	Total p.m.
Land Use ¹	Units	Type	Generation	Entering	Exiting	Entering	Exiting	Trips
Single-Family Detached Housing (210)	8	Dwelling Units	12	63%	37%	8	4	12
Project Total p.m. Peak Hour Trips						8	4	12
Saturday Daily	Number of	Unit	Trip	%	%	Trips	Trips	Total Sat. Daily
Land Use ¹	Units	Type	Generation	Entering	Exiting	Entering	Exiting	Trips
Single-Family Detached Housing (210)	8	Dwelling Units	98	50%	50%	49	49	98
Project Total Saturday Trips						49	49	98
Saturday Peak Hour	Number of	Unit	Trip	%	%	Trips	Trips	Total Sat Pk Hr
Land Use ¹	Units	Type	Generation	Entering	Exiting	Entering	Exiting	Trips
Single-Family Detached Housing (210)	8	Dwelling Units	16	54%	46%	9	7	16
Project Total Saturday Peak Hour Trips						9	7	16

1. Land Use Code from the Institute of Transportation Engineers Trip Generation Manual (9th Edition - 2012)

SOURCE: Hales Engineering, March 2016

Conclusions

As shown in Table 1, during the busiest hour of an average weekday day (a.m. peak hour) there will be 16 total trips (4 entering and 12 exiting) on McClelland Street. Even though these trips will be spread out over one hour, it is expected that there will be instances where vehicles traveling in opposite directions will need to pass each other. Despite the limited width of McClelland Street (10 feet), it is the opinion of Hales Engineering that these situations will be manageable due to the relatively low number of trips expected on this roadway. The capacity of a 10-foot drive is well above the 16 peak hour trips that are anticipated for this project. Because this situation has existed for many years and was acceptable, we believe that with a few additional homes, it would still be an acceptable condition.

If you have any questions regarding this trip generation study performed by Hales Engineering, please feel free to contact us.

APPENDIX