



KAYSVILLE CITY PLANNING COMMISSION NOTICE AND AGENDA

Notice is hereby given that the Kaysville City Planning Commission will hold their regular meeting on Thursday, October 14th starting at 7:00 p.m. at the Kaysville City Municipal Building located at 23 East Center Street. The public is encouraged to attend in person or may view the meeting online via www.Kaysvillelive.com.

The agenda shall be as follows:

1. Opening and approval of the minutes from the September 23, 2021 meeting.
2. Conditional Use Permit for a Major B Home Occupation for Ava Flooring at 309 E. Shepard Lane.
3. Conditional Use Permit for a Major B Home Occupation for Burke McMillian at 1841 Carriage Lane.
4. Conditional Use Permit for a model home for Perry Homes located at 212 West Gate Lane.
5. Final Plat approval for The Heritage Square Phase 2 Subdivision for Justin Bennett.
6. Final Plat approval for the Mutton Hollow Townhomes Subdivision for Destination Homes.
7. Public Hearing for the Kaysville City General Plan Amendment.
8. Public Hearing for an amendment to various chapters of Title 18, Building Regulations, and Title 19, Subdivisions, of the Kaysville City Ordinances updating storm water requirements.
9. Other matters that properly come before the Planning Commission:
 - a. Reports
 - b. Correspondence

c. Calendar

I hereby certify that I posted a copy of the foregoing Notice and Agenda at the Kaysville Municipal Center and mailed copies to the media representatives on Friday October 8, 2021.

A handwritten signature in blue ink, appearing to read 'Lyle Gibson', with a long horizontal flourish extending to the right.

Lyle Gibson – Community Development Director



Planning Commission Staff Report

Conditional Use Permit for a Major Home Occupation 'B', Flooring Installation/Contractor

Applicant/Owner: Adam Andreason
Location: 309 East Shepard Lane
Zone: R-A

Description:

Mr. Andreason is requesting a Conditional Use Permit for a Major Home Occupation "B" flooring installation at the address listed above. Mr. Andreason will not have any employees. He will not have materials delivered to the residence nor will he display any company signage outside his home.

Mr. Andreason has a truck which will be used to pick up materials on his way to job sites. His truck will be stored nightly in his driveway.

Recommendation:

Staff is recommending approval of the proposed conditional use permits for a Major Home Occupation "B", Flooring installation, at the above listed address.

Attachment 1: Area Map

309 East Shepard Lane





Planning Commission Staff Report

Conditional Use Permit for a Major Home Occupation 'B', Landscaping, Yard Care, Lighting, and Snow Removal

Applicant/Owner: Burke McMillian
Location: 1841 Carriage Lane
Zone: R-1-20

Description:

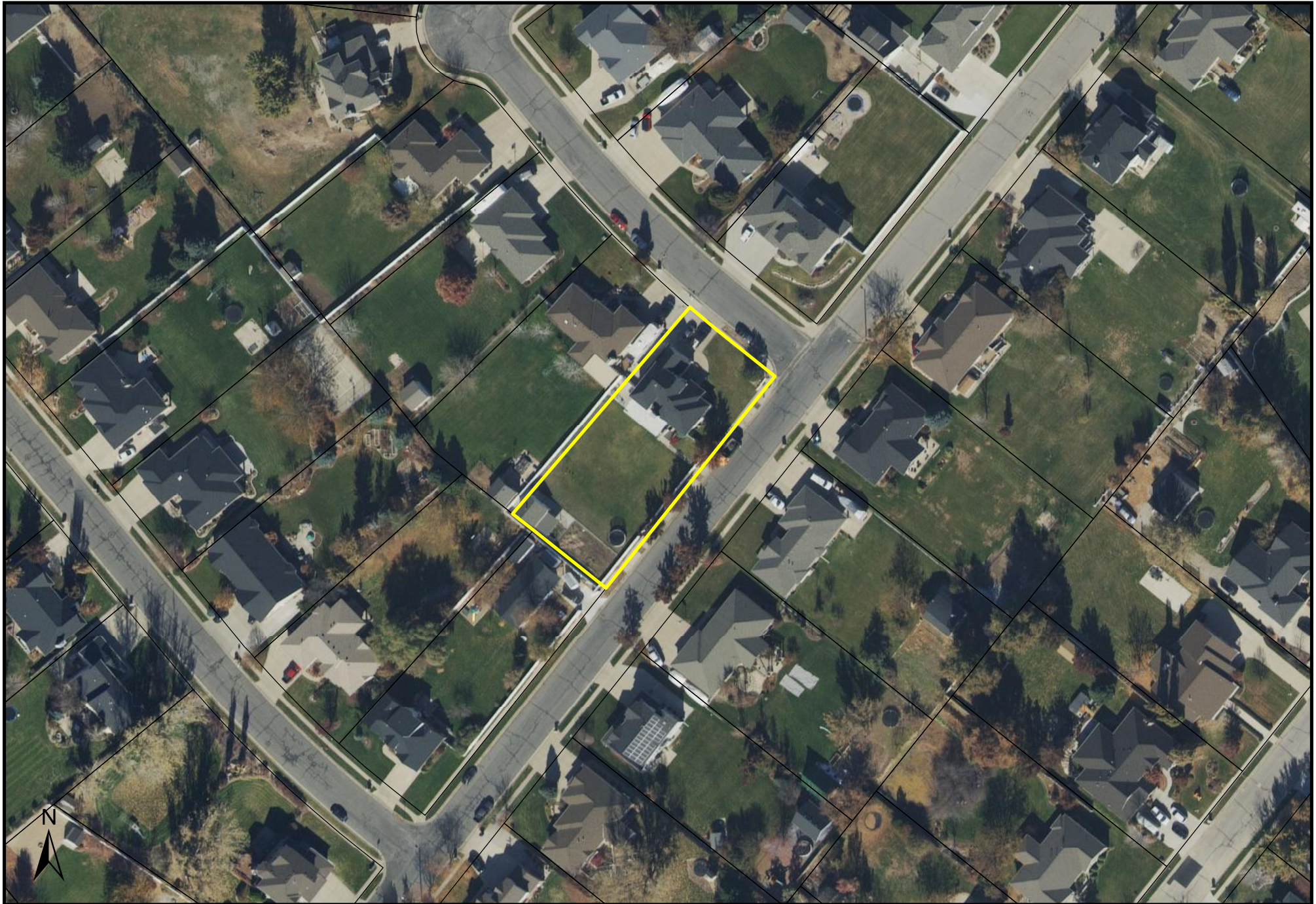
Mr. McMillian is requesting a Conditional Use Permit for a Major Home Occupation "B" Landscaping, Yard Care, Lighting, and Snow Removal at the address listed above. Mr. McMillian is the main employee and has youth hired as 1099 on an as needed basis. He will have one truck, one trailer, and one loader for his business which will all be stored on the property.

Recommendation:

Staff is recommending approval of the proposed conditional use permits for a Major Home Occupation "B", Timber Cuts business.

Attachment 1: Area Map

1841 Carriage Lane





Planning Commission Staff Report

Conditional Use Permit for Model Home. October 14, 2021

Applicant/Owner: Perry Homes
Location: 212 N. Westgate Lane

Zone: R-A (Single Family Residential)

Description:

Perry Homes is requesting a Conditional Use Permit for a model home located at the above address. They plan on being open Monday through Saturday 11:00 AM to 7:00 PM. They will have a three car wide drive for off street parking. They anticipate it will be used for the next 3-5 years or until the 122 lots are completed. They would also like to include the standard allowed construction signs allowed by ordinance on site.

Historically the City has approved CUPs for model homes to last the anticipated duration of the subdivision development as opposed to bringing it back to Planning Commission meeting annually for re approval.

Title 17-12-4 (4) and (5) allow for temporary buildings and tract offices with new development subject to: 17-30-7 Temporary Uses. A Conditional Use Permit for uses which are of a temporary nature only may be issued for the intended duration of the temporary use or for one (1) year, whichever period of time is shorter. The Planning Commission may grant extensions of six (6) months each under exceptional circumstances.

Recommendation:

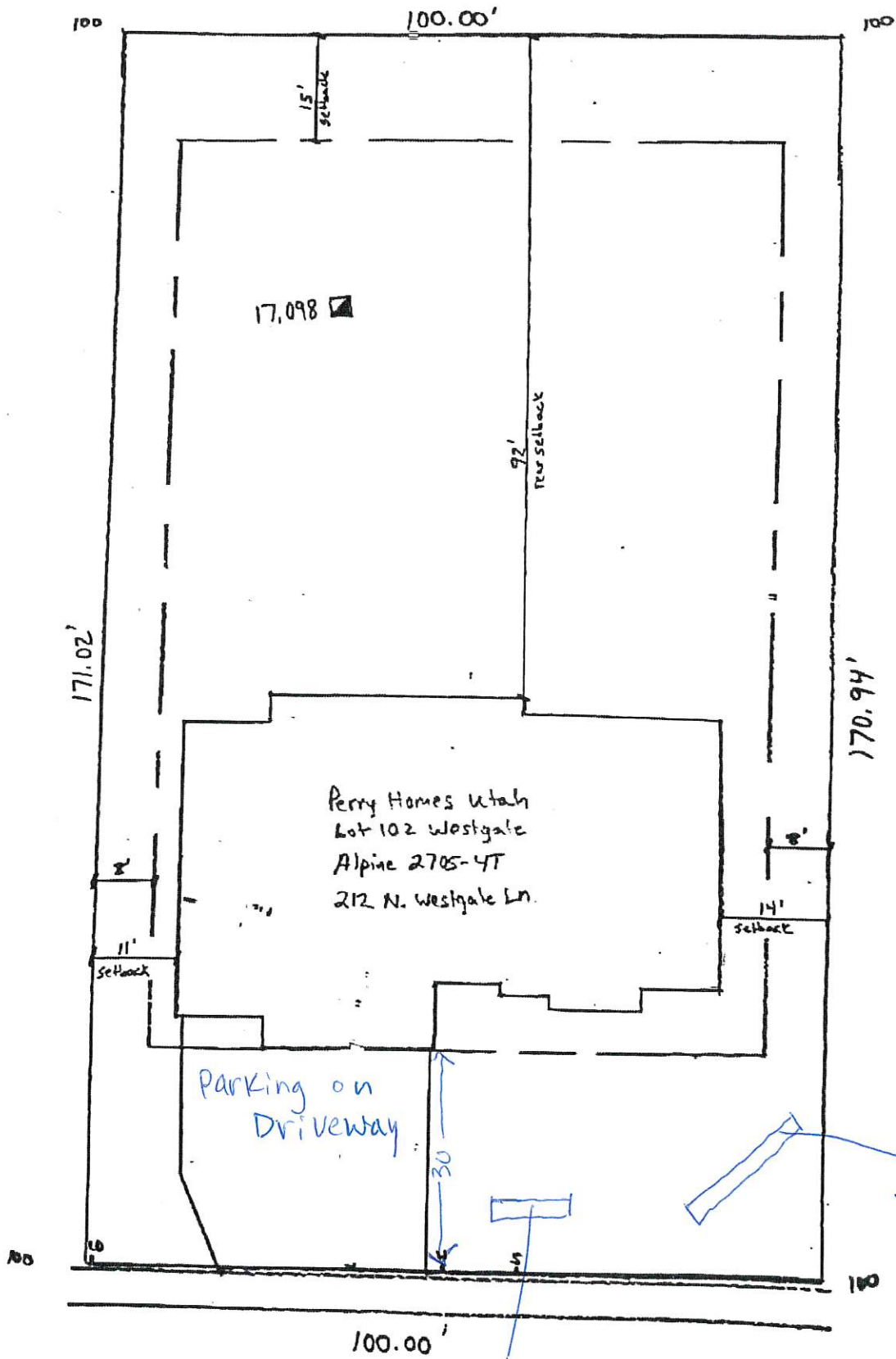
- Rather than revisit this annually because it is a large development, staff is recommending approval for the conditional use permit at 212 N Westgate for a model home for the temporary use for up to 5 years or until all lots are sold, whichever comes first.

Reasoning:

The existing conditions on site, the restrictions of the ordinance, the city's experience with model homes and staff's understanding of the proposed use indicate that the requested uses can function without the need for additional conditions.

212 North Westgate Lane





4x8 or 8x8
Sign showing
Perry Homes
Westgate
and website

4x3- Sign showing Hours of operation



Conditional Use Permit For Model Home

212 N. Westgate Lane

We are requesting approval of a Conditional Use Permit for a model home at 212 N. Westgate Lane in Kaysville.

We plan on holding the model home open Monday through Saturday from 11:00 AM to 7:00 PM.

I have attached a site plan which shows where parking will be allowed as well as where signage will be placed on the lot.

We are in the first of 5 phases for this location. We anticipate it will take 3-5 years to complete all 5 phases (122 lots). *3-5 years*

Thank you for your consideration.



Planning Commission Staff Report

Final Plat for Phase 2 of the Heritage Square Subdivision. October 14, 2021

Applicant/Owner: Justin Bennett
Location: Approximately 575 West Mutton Hollow Road
Zone: R-2 PRUD

Description:

The Heritage Square property at the above address was approved for a rezone and development in 2014. The project was originally approved, and built with four units.

The property owner and original developer has been working with the council and neighboring residents over the past several months to consider allowing more than the original four units. The council has since approved an amended development agreement allowing 2 additional units in addition to approving the preliminary plat for this project based on the recommendation of the Planning Commission.

The proposed Final plat has been put together based on comments from neighboring residents, City Council, and has a total of two additional units from the original four making a total of six units which conform to the R-2 zoning with .37 acre parcel. The final plat complies with the provisions of the applicable development agreement.

Recommendation:

The staff recommends approval to the City Planning Commission regarding the proposed Final Plat for Heritage Square subdivision.

Reasoning:

The Final Plat meets the general provisions of the R-2 zoning district, PRUD overlay, Kaysville City parking standards, and the provisions of the applicable development agreement.

Attachment 1: Location Map
Attachment 2: Development Agreement
Attachment 3: Concept Plans and Preliminary Plat
Attachment 4: Final Plat

Development Agreement Properties



Exhibit A



Plan Details

Square Footage Breakdown

Total Heated Area:
3,070 sq. ft.

1st Floor:
1,372 sq. ft.

2nd Floor:
1,698 sq. ft.

Porch, Combined:
210 sq. ft.

Beds/Baths

Bedrooms:
6

Full bathrooms:
4

Half bathrooms:
2

Foundation Type

Standard
Foundations:
Crawl

Exterior Walls

Standard Type(s):
2x6

Dimensions

Width:
67' 0"

Depth:
50' 0"

Max ridge height:
28' 0"

Garage

Type:
Attached

Area:
523 sq. ft.

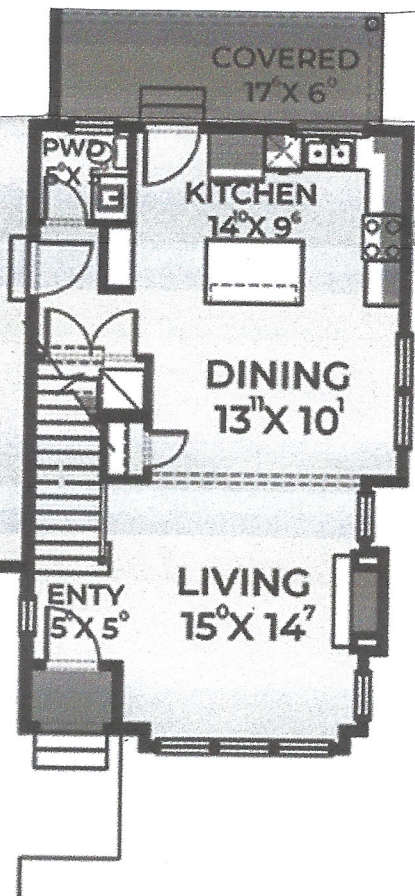
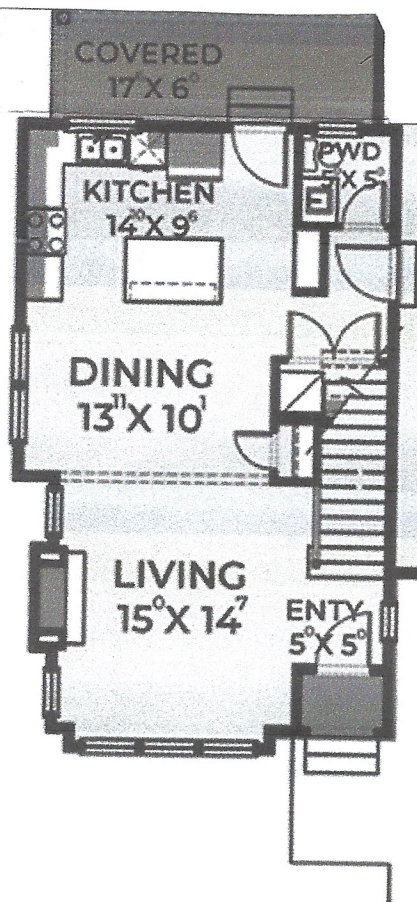
Count:
4 Cars

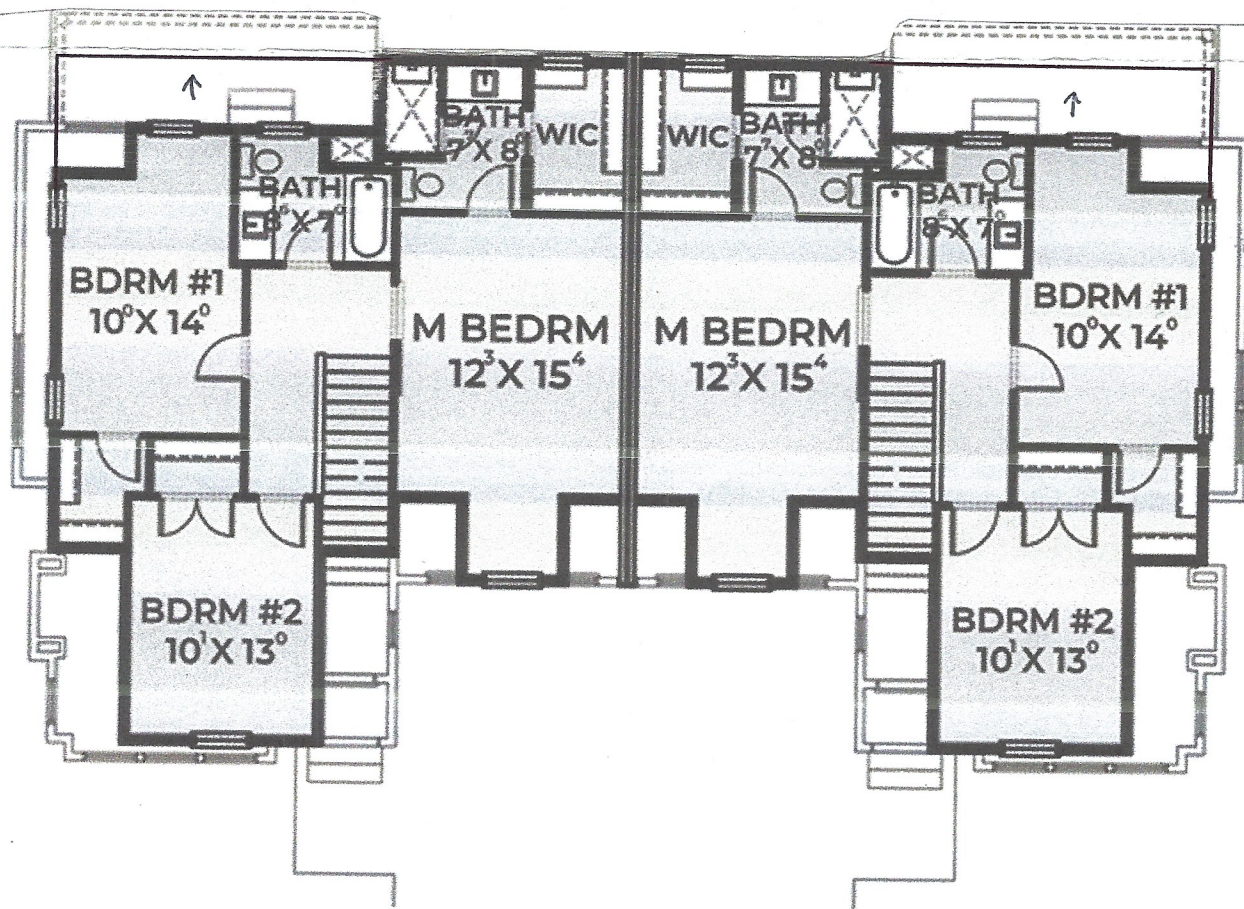
Entry Location:
Rear, Front

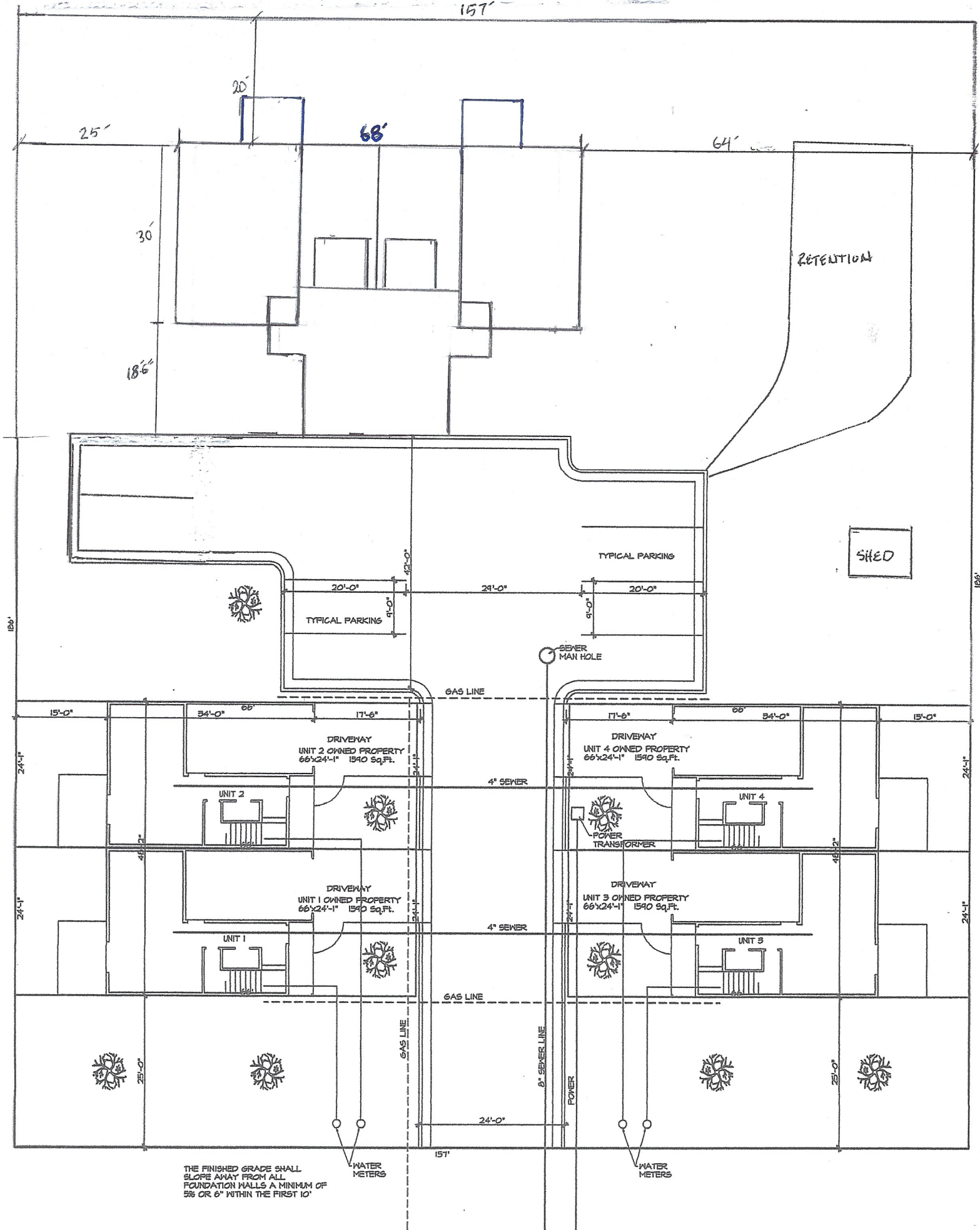
Ceiling Heights

Floor / Height:
First Floor / 9' 0"
Second Floor / 8' 0"

Roof



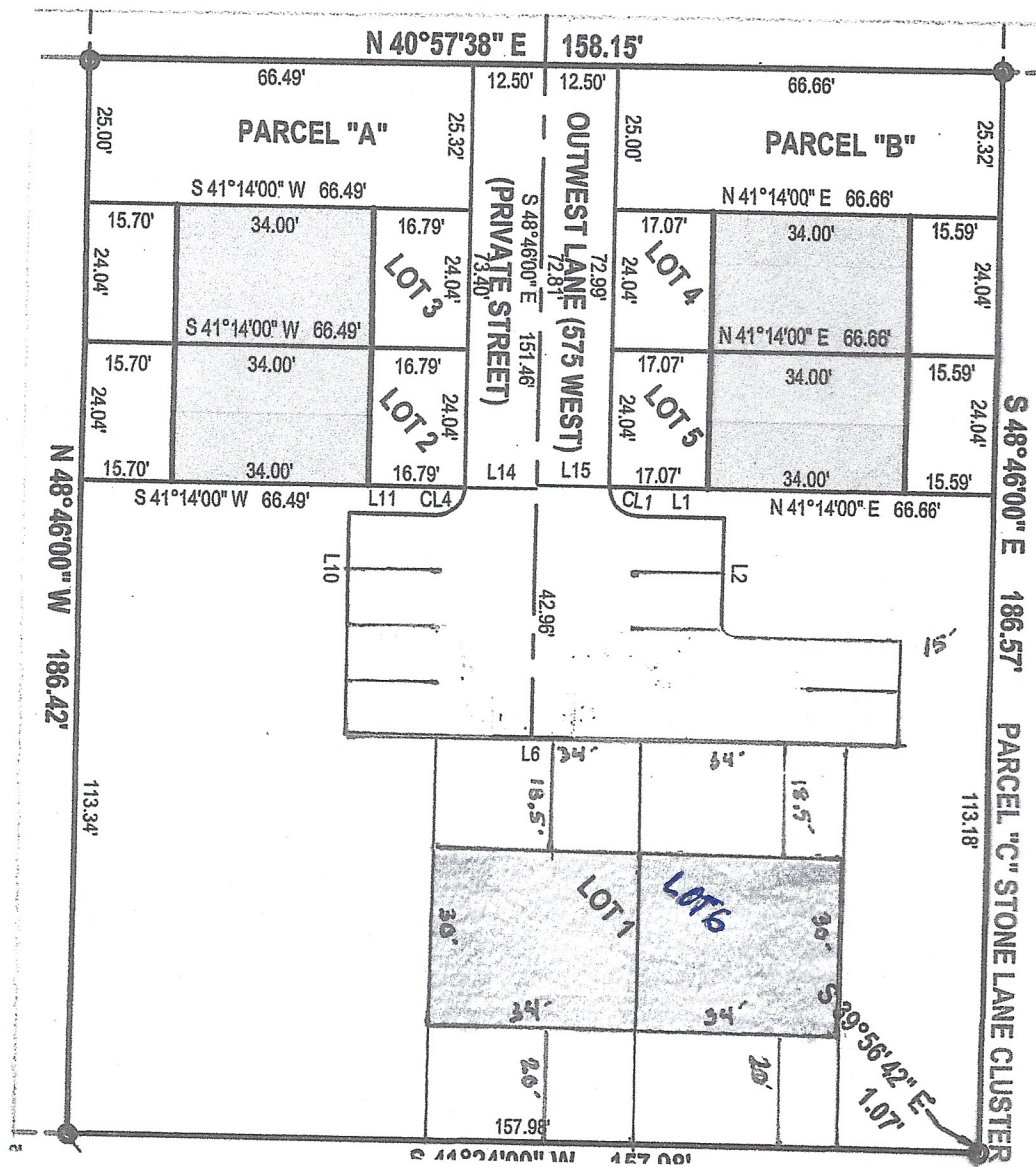




Mutton Hollow Road

Preliminary Plat

Land use Table		
Parcel A	Open Space	1649 SQFT
Parcel B	Open Space	1651 SQFT
Parcel C	Open Space	2919.24 SQFT
Parcel D	Open Space	6721.76 SQFT
Lot 1	Private Lot	2329 SQFT
Lot 2	Private Lot	1582 SQFT
Lot 3	Private Lot	1584 SQFT
Lot 4	Private Lot	1589 SQFT
Lot 5	Private Lot	1591 SQFT
Lot 6	Private Lot	2329 SQFT
Heritage Lane	Private Street	5350 SQFT
Total		29295 SQFT



HERITAGE SQUARE TOWNHOMES - FIRST AMENDED, A PLANNED UNIT DEVELOPMENT (P.U.D.)

GENERAL NOTES:

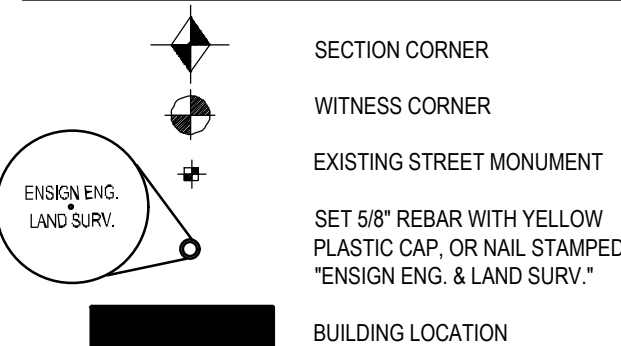
- A PUBLIC UTILITY AND DRAINAGE EASEMENT (PU & DE) IS GRANTED UPON THE RECORDING OF THIS PLAT UPON AND OVER THE PRIVATE STREET (HERITAGE LANE) PARCEL "1" AND PARCEL "2" (OPEN SPACE PARCELS) AND ALL PRIVATE PROPERTY (ALL LOTS) ON THIS PLAT, EXCEPT THE BUILDING FOOTPRINT ON EACH LOT. (SEE NOTE 4 BELOW.)
- OPEN SPACE PARCEL "1" AND OPEN SPACE PARCEL "2" ARE TO BE OWNED AND MAINTAINED BY THE HERITAGE SQUARE TOWNHOMES, HOME OWNERS ASSOCIATION.
- OPEN SPACE PARCEL 3 IS THE PRIVATE ROAD AND PARKING LOT KNOWN AS HERITAGE LANE AND IS TO BE OWNED AND MAINTAINED BY THE HERITAGE SQUARE TOWNHOMES, HOME OWNERS ASSOCIATION.
- KAYSVILLE CITY AND ALL PUBLIC UTILITY COMPANIES ARE GRANTED AN EASEMENT OVER OPEN SPACE PARCEL 3 - HERITAGE LANE (PRIVATE STREET) OPEN SPACE PARCEL "1" AND OPEN SPACE PARCEL "2", AND THE PRIVATE PROPERTY, (LOTS 6 AND 7) DEFINED IN NOTE NO. 1 ABOVE EXCEPT THE BUILDING FOOTPRINT ON EACH PRIVATE LOT.
- THE SHADING ON LOT 6 AND LOT 7 REPRESENTS THE BUILDING FOOTPRINT. THE OUTER BUILDING DIMENSIONS ARE SHOWN ON THE PLAT.

NOTE:
UTILITIES SHALL HAVE THE RIGHT TO INSTALL, MAINTAIN, AND OPERATE THEIR EQUIPMENT ABOVE AND BELOW GROUND AND ALL OTHER RELATED FACILITIES WITHIN THE PUBLIC UTILITY EASEMENTS IDENTIFIED ON THIS PLAT MAP AS MAY BE NECESSARY OR DESIRABLE IN PROVIDING UTILITY SERVICES WITHIN AND WITHOUT THE LOTS IDENTIFIED HEREIN, INCLUDING THE RIGHT OF ACCESS TO SUCH FACILITIES AND THE RIGHT TO REQUIRE REMOVAL OF ANY OBSTRUCTIONS INCLUDING STRUCTURES, TREES AND VEGETATION THAT MAY BE PLACED WITHIN THE P.U.E. THE UTILITY MAY REQUIRE THE LOT OWNER TO REMOVE ALL STRUCTURES WITHIN THE P.U.E. AT THE LOT OWNER'S EXPENSE, OR THE UTILITY MAY REMOVE SUCH STRUCTURES AT THE LOT OWNER'S EXPENSE. AT NO TIME MAY ANY PERMANENT STRUCTURES BE PLACED WITHIN THE P.U.E. OR ANY OTHER OBSTRUCTION WHICH INTERFERES WITH THE USE OF THE P.U.E. WITHOUT THE PRIOR WRITTEN APPROVAL OF THE UTILITIES WITH FACILITIES IN THE P.U.E.

LINE TABLE		
LINE	BEARING	LENGTH
L1	S41°14'00"W	15.00'
L2	N48°46'00"W	18.00'
L3	S41°14'00"W	21.12'
L4	N48°46'00"W	18.94'
L5	S41°14'00"W	23.87'
L6	S41°14'00"W	10.87'
L7	S41°14'00"W	13.00'
L8	S48°46'00"E	0.50'
L9	N41°14'00"E	16.13'
L10	N41°14'00"E	16.13'
L11	N41°14'00"E	24.76'
L12	N41°14'00"E	7.50'
L13	S48°46'00"E	0.50'
L14	S41°14'00"W	13.00'
L15	S41°14'00"W	7.00'
L16	S41°14'00"W	20.00'
L17	N48°46'00"W	37.00'
L18	S41°14'00"W	15.50'
PL19	S48°46'00"E	0.44'

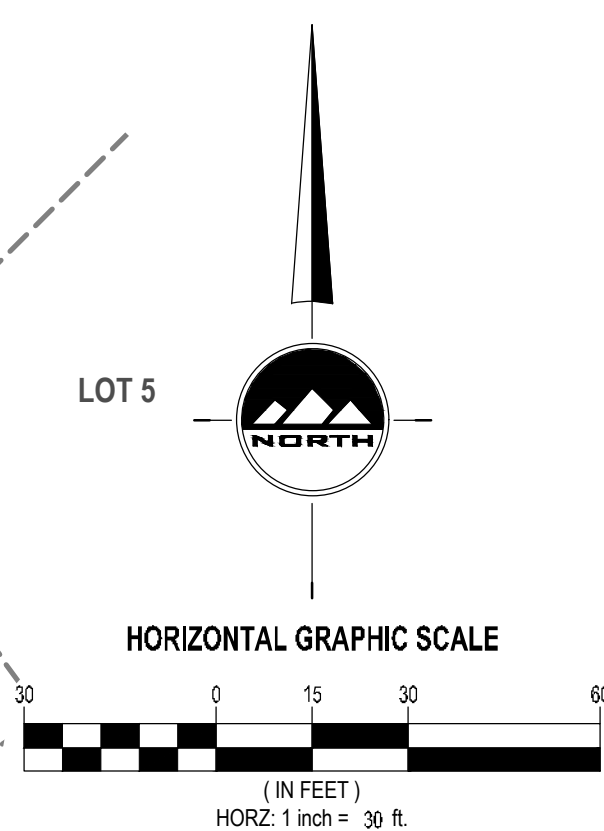
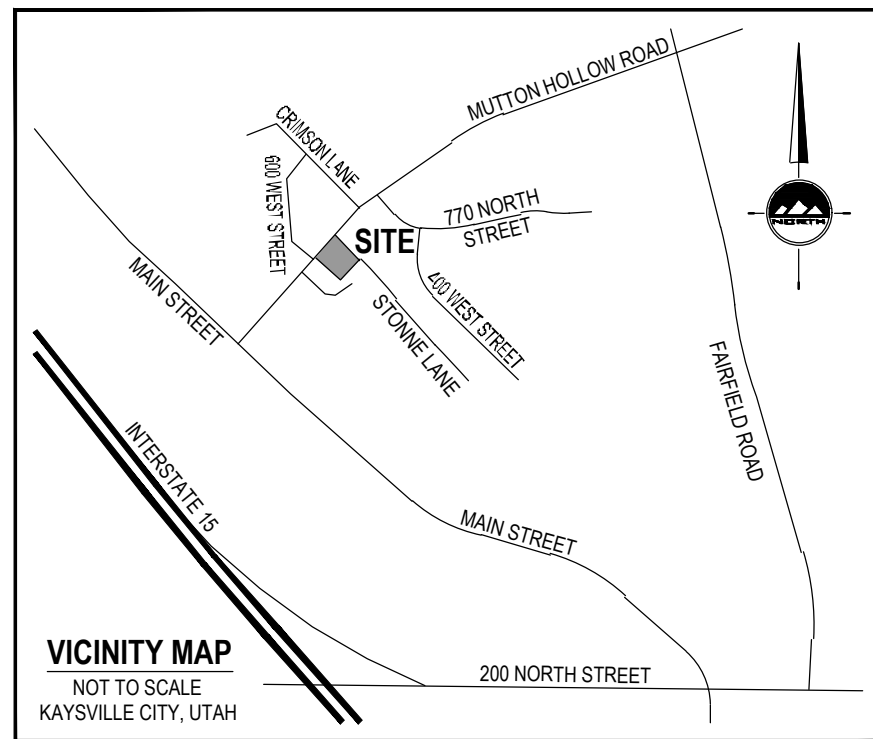
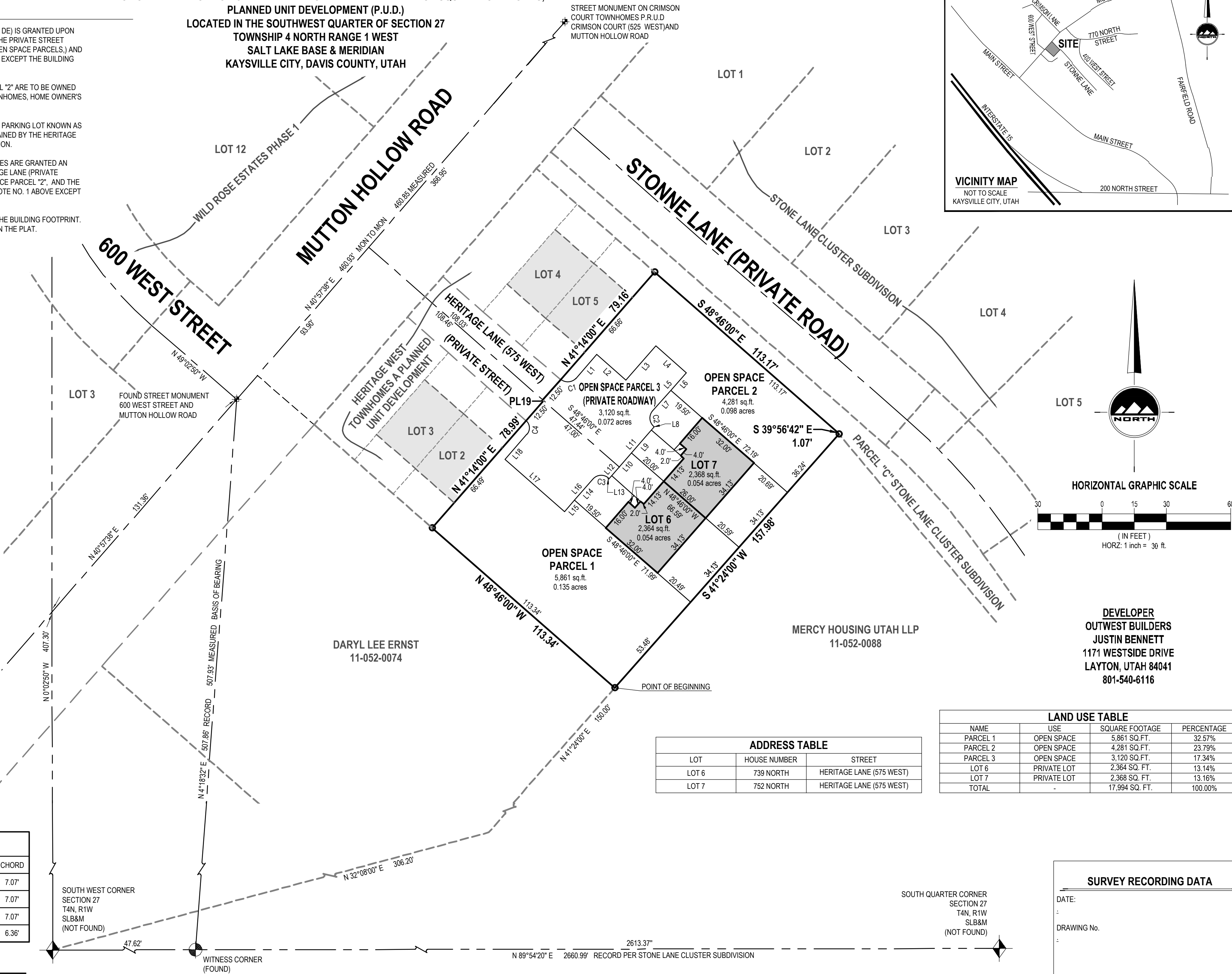
CURVE TABLE					
CURVE	RADIUS	LENGTH	DELTA	BEARING	CHORD
C1	5.00'	7.85'	90°00'00"	S86°12'37"W	7.07'
C2	5.00'	7.85'	90°00'00"	S3°46'00"E	7.07'
C3	5.00'	7.85'	90°00'00"	S86°14'00"W	7.07'
C4	4.50'	7.07'	90°00'00"	S3°46'00"E	6.36'

LEGEND



AMENDING LOT 1 AND A PORTION OF THE PRIVATE STREET WITHIN HERITAGE SQUARE TOWNHOMES, A PLANNED UNIT DEVELOPMENT (P.U.D.)

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 27
TOWNSHIP 4 NORTH RANGE 1 WEST
SALT LAKE BASE & MERIDIAN
KAYSVILLE CITY, DAVIS COUNTY, UTAH



DEVELOPER
OUTWEST BUILDERS
JUSTIN BENNETT
1171 WESTSIDE DRIVE
LAYTON, UTAH 84041
801-540-6116

ADDRESS TABLE		
LOT	HOUSE NUMBER	STREET
LOT 6	739 NORTH	HERITAGE LANE (575 WEST)
LOT 7	752 NORTH	HERITAGE LANE (575 WEST)

LAND USE TABLE			
NAME	USE	SQUARE FOOTAGE	PERCENTAGE
PARCEL 1	OPEN SPACE	5,861 SQ. FT.	32.57%
PARCEL 2	OPEN SPACE	4,281 SQ. FT.	23.79%
PARCEL 3	OPEN SPACE	3,120 SQ. FT.	17.34%
LOT 6	PRIVATE LOT	2,364 SQ. FT.	13.14%
LOT 7	PRIVATE LOT	2,368 SQ. FT.	13.16%
TOTAL		17,994 SQ. FT.	100.00%

SURVEY RECORDING DATA

DATE: _____
DRAWING NO: _____

HERITAGE SQUARE TOWNHOMES - FIRST AMENDED A PLANNED UNIT DEVELOPMENT, (P.U.D.)

LOCATED IN THE SOUTHWEST QUARTER
OF SECTION 27
TOWNSHIP 4 NORTH RANGE 1 WEST
SALT LAKE BASE & MERIDIAN
KAYSVILLE CITY, DAVIS COUNTY, UTAH

DAVIS COUNTY RECORDER

ENTRY NO. _____ FEE
PAID _____ FILED FOR RECORD AND
RECORDED THIS _____ DAY OF _____ 20____
AT _____ IN BOOK _____ OF OFFICIAL RECORDS

DAVIS COUNTY RECORDER

BY _____ DEPUTY RECORDER

SHEET 1 OF 1

PROJECT NUMBER : L2181
MANAGER : K.RUSSELL
DRAWN BY : A.SHELBY
CHECKED BY : K.RUSSELL
DATE : 9/1/21

CITY COUNCIL APPROVAL

APPROVED THIS _____ DAY OF _____, 20____
BY THE KAYSVILLE CITY COUNCIL

CITY RECORDER CITY MAYOR

CITY ENGINEER'S APPROVAL

APPROVED THIS _____ DAY OF _____, 20____
BY THE KAYSVILLE CITY ENGINEER

KAYSVILLE CITY ENGINEER

PLANNING COMMISSION APPROVAL

APPROVED THIS _____ DAY OF _____, 20____
BY THE CITY PLANNING COMMISSION APPROVAL

CHAIRMAN, KAYSVILLE CITY PLANNING COMMISSION

CITY ATTORNEY'S APPROVAL

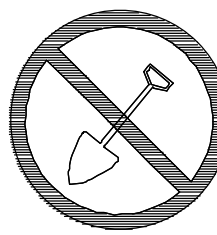
APPROVED THIS _____ DAY OF _____, 20____
BY THE KAYSVILLE CITY ATTORNEY

KAYSVILLE CITY ATTORNEY



LAYTON
1485 West Hillfield Rd. Suite 204
Layton UT 84041
Phone: 801.547.1100
Fax: 801.593.6315
www.ENSIGNUTAH.COM

SALT LAKE CITY
Phone: 801.255.0529
PLEASANT GROVE
Phone: 801.796.8145
TOOELE
Phone: 435.843.3590



CALL BLUESTAKES
@ 1-800-662-4111
AT LEAST 48 HOURS PRIOR TO
THE COMMENCEMENT OF ANY
CONSTRUCTION.

BENCHMARK

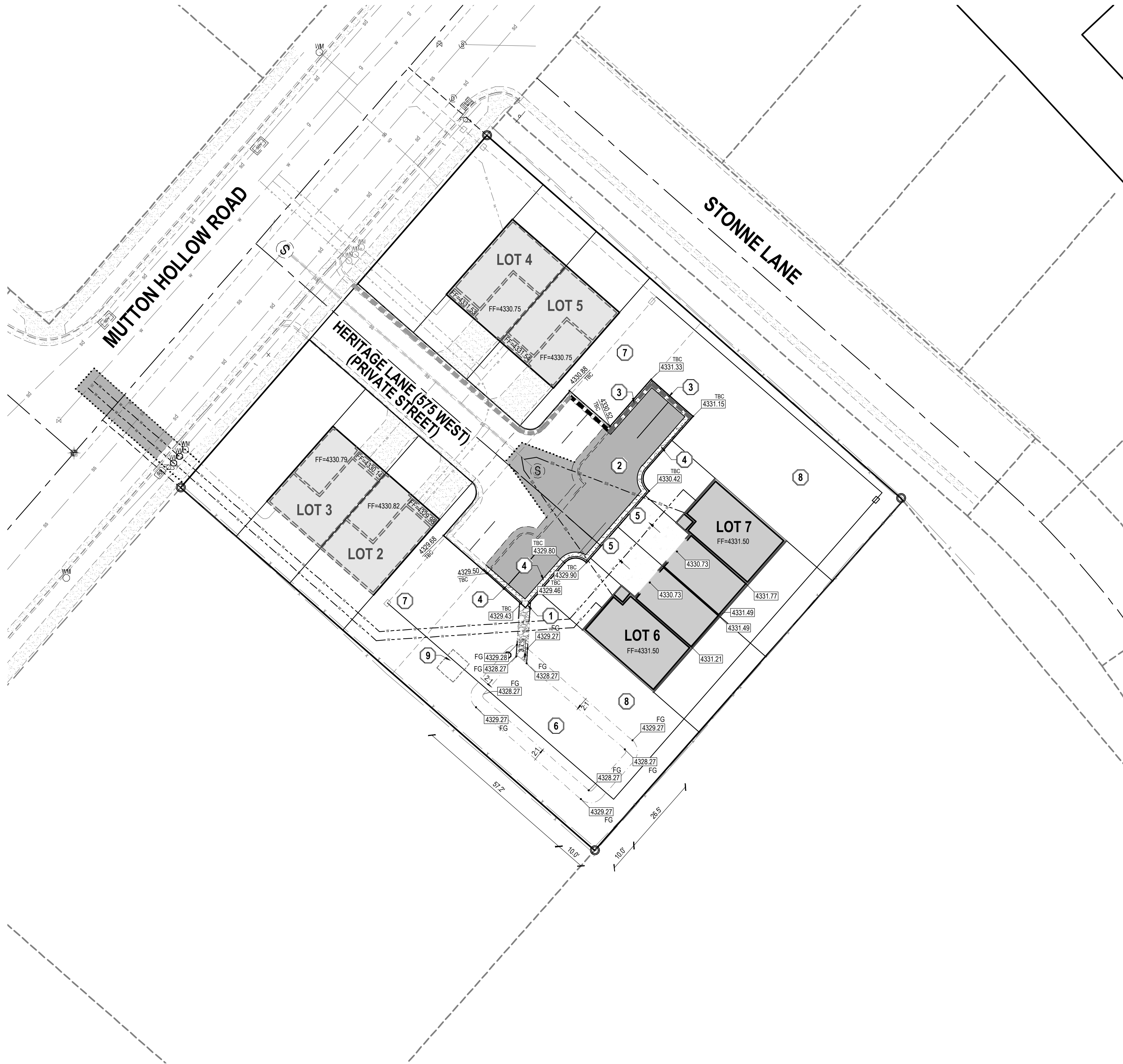
WITNESS CORNER 47.62 FEET EAST OF THE
SOUTHWEST CORNER OF SECTION 27
ELEV. = 4326.59 (DAVIS COUNTY SURVEYOR)

GENERAL NOTES

- ALL WORK TO COMPLY WITH THE GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
- ALL IMPROVEMENTS MUST COMPLY WITH ADA STANDARDS AND RECOMMENDATIONS.
- ALL WORK SHALL COMPLY WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER POSSIBLY INCLUDING, BUT NOT LIMITED TO, REMOVAL OF UNCONSOLIDATED FILL, ORGANICS, AND DEBRIS, PLACEMENT OF SUBSURFACE DRAIN LINES AND GEOTEXTILE, AND OVEREXCAVATION OF UNSUITABLE BEARING MATERIALS AND PLACEMENT OF ACCEPTABLE FILL MATERIAL.
- THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE EXISTING SOIL CONDITIONS.
- ELEVATIONS HAVE BEEN TRUNCATED FOR CLARITY. XX.XX REPRESENTS AN ELEVATION OF 43XX.XX ON THESE PLANS.
- LANDSCAPED AREAS REQUIRE SUBGRADE TO BE MAINTAINED AT A SPECIFIC ELEVATION BELOW FINISHED GRADE AND REQUIRE SUBGRADE TO BE PROPERLY PREPARED AND SCARIFIED. SEE LANDSCAPE PLANS FOR ADDITIONAL INFORMATION.
- SLOPE ALL LANDSCAPED AREAS AWAY FROM BUILDING FOUNDATIONS TOWARD CURB AND GUTTER OR STORM DRAIN INLETS.
- EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO VERIFY THE LOCATIONS OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT. THE CONTRACTOR IS TO VERIFY ALL CONNECTION POINTS WITH THE EXISTING UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE EXISTING UTILITIES AND UTILITY STRUCTURES THAT ARE TO REMAIN. IF CONFLICTS WITH EXISTING UTILITIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE.
- ALL STORM DRAIN INFRASTRUCTURE TO BE INSTALLED PER GOVERNING AGENCY OR APWA STANDARD PLANS AND SPECIFICATIONS.
- ENSURE MINIMUM COVER OVER ALL STORM DRAIN PIPES PER MANUFACTURER'S RECOMMENDATIONS. NOTIFY ENGINEER IF MINIMUM COVER CANNOT BE ATTAINED.
- ALL FACILITIES WITH DOWNSPOUTS/ROOF DRAINS SHALL BE CONNECTED TO THE STORM DRAIN SYSTEM. SEE PLUMBING PLANS FOR DOWNSPOUT/ROOF DRAIN LOCATIONS AND SIZES. ALL ROOF DRAINS TO HAVE MINIMUM 1% SLOPE.
- THE CONTRACTOR SHALL ADJUST TO GRADE ALL EXISTING UTILITIES AS NEEDED PER LOCAL GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
- NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING CONCRETE, ASPHALT, OR STORM DRAIN STRUCTURES OR PIPES.
- THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.

LANDSCAPE NOTES

- PRESERVE EXISTING GRASS SOUTH OF EXISTING BUILDINGS.
- INSTALL NEW GRASS AFTER BUILDING AND PARKING LOT IS INSTALLED FROM THE EDGE OF THE EXISTING GRASS ON THE ENTIRE PROJECT THAT IS NOT ASPHALT PARKING, CONCRETE DRIVEWAY, BUILDING OR BACK YARD PATIO AREA. GRASS RETENTION POND WITH SIDE SLOPES AND CENTER GRASS BOTTOM OF RETENTION BASIN OR GRAVEL BOTTOM OF RETENTION BASIN.



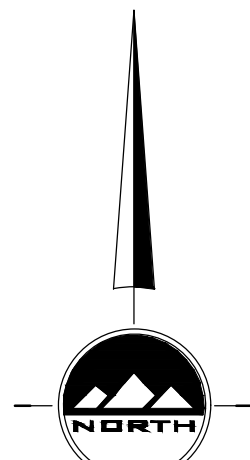
Lot Retention Calculations (10-year storm)

	C	Area ft ²
Hardscape	0.9	11640
Landscape	0.15	17937
Total Area		29577
Runoff coefficient C:		0.45
1 hr Intensity:		0.96

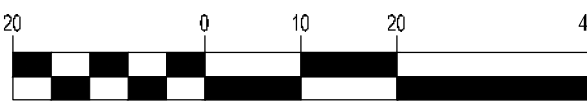
Lot	Area (ft ²)	Required Storage (ft ³)	Storage Provided (ft ³)
Heritage Square	29577	1,045	1309

KEY NOTES

- DEPRESS CURB AND GUTTER FOR SURFACE DRAINAGE OF SURFACE PARKING AREA INTO DETENTION POND WITH A GRAVEL WATERWAY, 18 LINEAR FEET AT 3.7% SLOPE.
- PROPOSED ASPHALT (SHADED AREA) 3" ASPHALT PAVING OVER 12" ROAD BASE.
- PROPOSED REVERSE FLOW CURB AND GUTTER
- PROPOSED STANDARD CURB AND GUTTER
- PROPOSED CURB AND GUTTER DRIVEWAY ACCESS (DEPRESSED)
- CONSTRUCT RETENTION POND UNTIL 6" GRAVEL BOTTOM OVER GEOTECH STYLE FABRIC. SEE DETAIL 7 ON SHEET C-500
- EXISTING GRASS
- PROPOSED GRASS
- EXISTING SHED TO REMAIN



HORIZONTAL GRAPHIC SCALE



LAYTON

919 North 400 West
Layton, UT 84041
Phone: 801.547.1100

SALT LAKE CITY

Phone: 801.255.0529

TOOELE

Phone: 435.843.3590

CEDAR CITY

Phone: 435.865.1453

RICHFIELD

Phone: 435.896.2983

WWW.ENSIGNENG.COM

FOR:

OUTWEST BUILDERS
1171 WESTSIDE DRIVE
LAYTON, UTAH 84041

CONTACT:

JUSTIN BENNETT
PHONE: 801-549-6116

HERITAGE SQUARE TOWNHOMES

PHASE 2

HERITAGE LANE (575 WEST)

KAYSVILLE, UTAH



GRADING AND
DRAINAGE PLAN

LANDSCAPE PLAN

PROJECT NUMBER
L2181

PRINT DATE
9/1/21

DRAWN BY
A. SHELBY

CHECKED BY
K. RUSSELL

PROJECT MANAGER
K. RUSSELL

C-300



Planning Commission Staff Report

Mutton Hollow Townhomes Final Plat October 14, 2021

Applicant/Owner: Amy Roskelly with Destination Homes
Location: 67 S. Main St. Suite 300 Layton, UT
Existing Zone: R-M

Description:

Recently this property, located on Mutton Hollow and Main Street, was rezoned to the R-M zone with the PRUD overlay. Along with the zoning, the preliminary plat was approved.

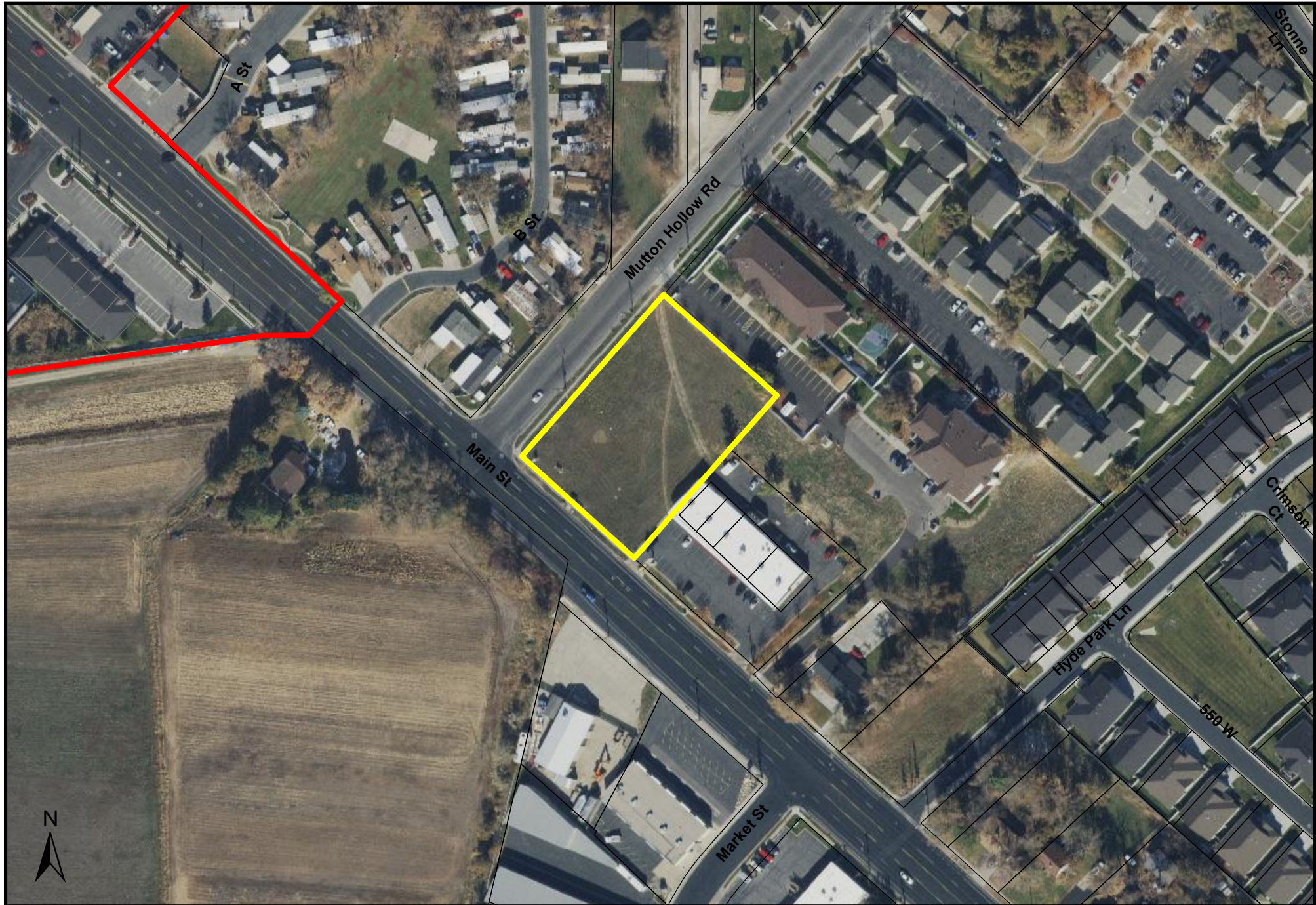
The applicant has now completed the engineering and is requesting final plat approval. The plat consists of sixteen townhomes on a 1.1 acre parcel.

Recommendation:

The plat is in compliance with the preliminary plat, the approved zoning, and the engineering is in good order. Therefore, staff recommends that the Planning Commission grant approval for the final plat of the Mutton Hollow Townhomes Subdivision.

Attachment 1: Location Map
Attachment 2: Preliminary Plat and rendering
Attachment 3: Final Plat, Site Plan, and Landscaping

Rezone of 650 North Main Street from GC to R-M PRUD

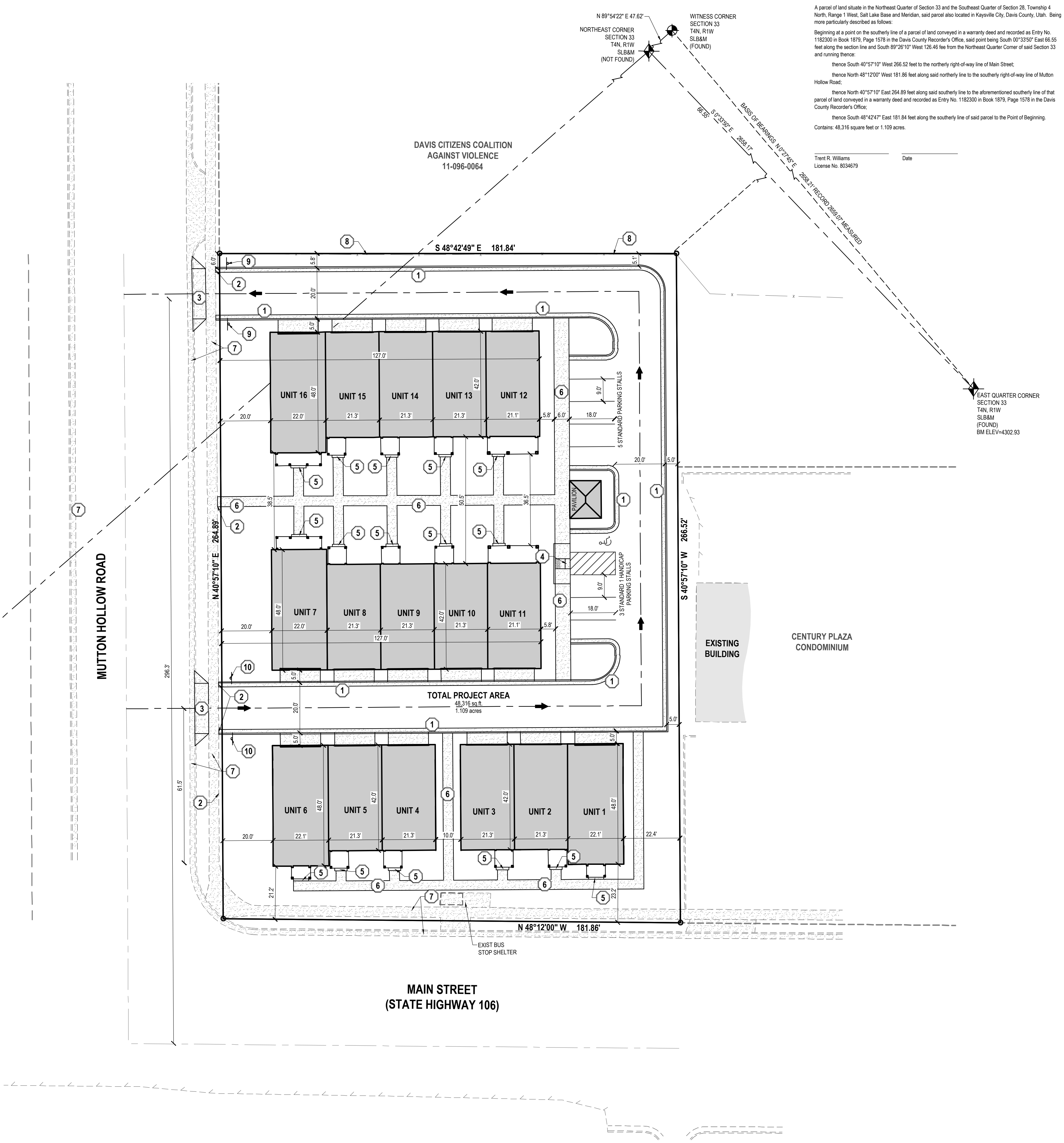


811

CALL BLUESTAKES
@ 811 AT LEAST 48 HOURS
PRIOR TO THE
COMMENCEMENT OF ANY
CONSTRUCTION.
Call before you dig.

BENCHMARK

EAST QUARTER CORNER OF SECTION 33,
TOWNSHIP 4 NORTH, RANGE 1 WEST
SALT LAKE BASE AND MERIDIAN
ELEV = 4302.93'



DESCRIPTION

A parcel of land situate in the Northeast Quarter of Section 33 and the Southeast Quarter of Section 28, Township 4 North, Range 1 West, Salt Lake Base and Meridian, said parcel also located in Kaysville City, Davis County, Utah. Being more particularly described as follows:

Beginning at a point on the southerly line of a parcel of land conveyed in a warranty deed and recorded as Entry No. 1182300 in Book 1879, Page 1578 in the Davis County Recorder's Office, said point being South 00°33'50" East 66.55 feet along the section line and South 89°26'10" West 126.46 feet from the Northeast Quarter Corner of said Section 33 and running thence:

thence South 40°57'10" West 266.52 feet to the northerly right-of-way line of Main Street;

thence North 48°12'00" West 181.86 feet along said northerly line to the southerly right-of-way line of Mutton Hollow Road;

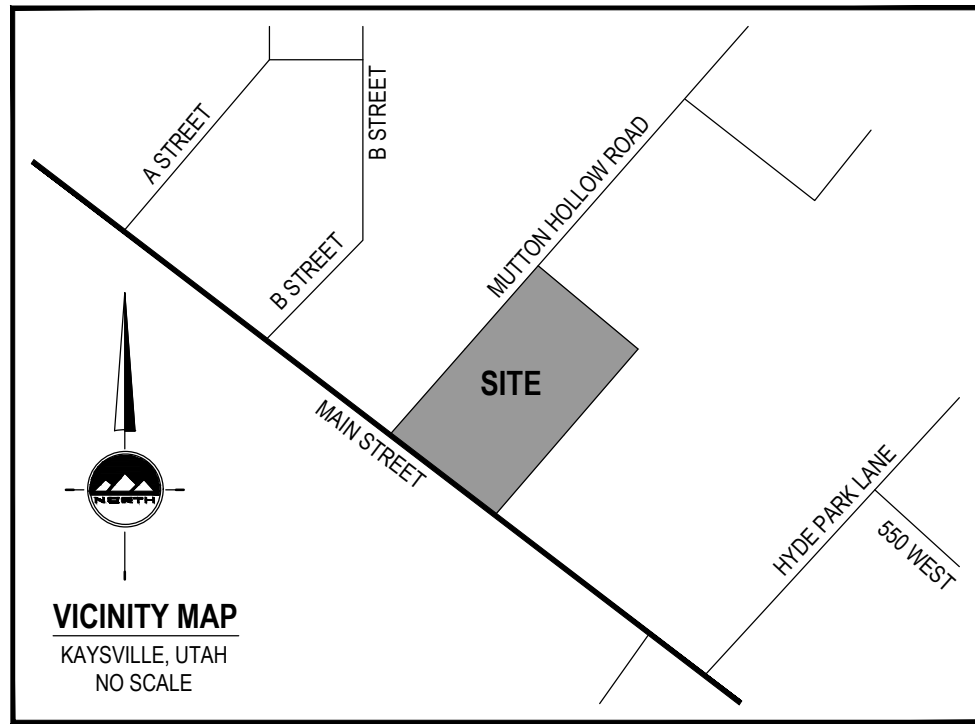
thence North 40°57'10" East 264.89 feet along said southerly line to the aforementioned southerly line of that parcel of land conveyed in a warranty deed and recorded as Entry No. 1182300 in Book 1879, Page 1578 in the Davis County Recorder's Office;

thence South 48°42'47" East 181.84 feet along the southerly line of said parcel to the Point of Beginning.

Contains: 48,316 square feet or 1.109 acres.

Trent R. Williams
License No. 8034679

Date

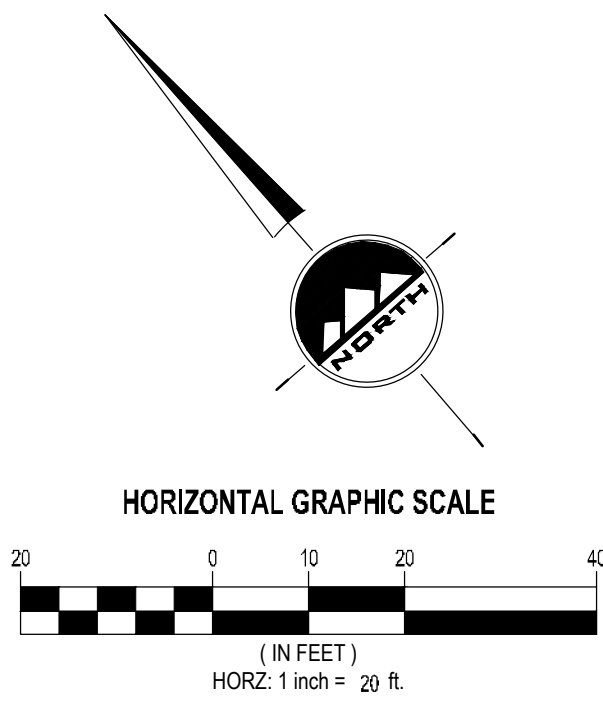


- GENERAL NOTES**
- ALL WORK TO COMPLY WITH THE GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
 - ALL IMPROVEMENTS MUST COMPLY WITH ADA STANDARDS AND RECOMMENDATIONS.
 - SEE LANDSCAPE/ARCHITECTURAL PLANS FOR CONCRETE MATERIAL, COLOR, FINISH, AND SCORE PATTERNS THROUGHOUT SITE.
 - ALL PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST EDITION OF THE M.U.T.C.D. (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES).
 - ALL SURFACE IMPROVEMENTS DISTURBED BY CONSTRUCTION SHALL BE RESTORED OR REPLACED, INCLUDING TREES AND DECORATIVE SHRUBS, SO, FENCES, WALLS AND STRUCTURES, WHETHER OR NOT THEY ARE SPECIFICALLY SHOWN ON THE CONTRACT DOCUMENTS.
 - NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING CONCRETE OR ASPHALT.
 - THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.
- SCOPE OF WORK:**
- PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

- 24" COLLECTION CURB AND GUTTER PER DETAIL 6/C-500
- MATCH EXISTING IMPROVEMENTS
- INSTALL DRIVE APPROACH PER KAYSVILLE CITY STANDARDS
- INSTALL HANDICAP ACCESSIBLE RAMP PER ADA STANDARDS AND SPECIFICATIONS
- INSTALL STAIR(S)
- INSTALL SIDEWALK
- EXISTING CURB, GUTTER AND SIDEWALK
- EXISTING VINYL FENCE ALONG PROPERTY LINE
- INSTALL "EXIT ONLY" SIGN
- INSTALL "ENTRANCE ONLY- NOT AN EXIT" SIGN

SITE SUMMARY TABLE		
DESCRIPTION	AREA (SF)	PERCENTAGE
PAVEMENT	18,744 sq. ft.	38.8%
ROOF	15,152 sq. ft.	31.4%
LANDSCAPING	14,420 sq. ft.	29.8%
TOTAL SITE	48,316 sq. ft.	100%
OPEN SPACE	14,460 sq. ft.	30.0%

PARKING DATA TABLE	
STANDARD STALLS	8
ADA - ACCESSIBLE STALLS	1
TOTAL STALLS	9



LOCATED IN THE NORTHEAST QUARTER
OF SECTION 33
TOWNSHIP 4 NORTH, RANGE 1 WEST
SALT LAKE BASE AND MERIDIAN
KAYSVILLE CITY, DAVIS COUNTY, UTAH

EN SIGN

THE STANDARD IN ENGINEERING

LAYTON

919 North 400 West
Layton, UT 84041
Phone: 801.547.1100

SALT LAKE CITY

Phone: 801.255.0529

TOOELE

Phone: 435.843.3590

CEDAR CITY

Phone: 435.865.1453

RICHFIELD

Phone: 435.896.2983

WWW.ENSIGNENG.COM

FOR:
DESTINATION HOMES
87 SOUTH MAIN STREET, SUITE 300
LAYTON, UTAH 84041

CONTACT:
JOHN WARNICK
PHONE: 801-593-6993

MUTTON HOLLOW TOWNHOMES

598 NORTH MAIN STREET
KAYSVILLE, UTAH

PROFESSIONAL ENGINEER

5-21-21

CHADRON HESS PRESTON

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

FOR REVIEW

FOR REVIEW

FOR REVIEW

FOR REVIEW

FOR REVIEW

FOR REVIEW

FOR REVIEW

FOR REVIEW

PRELIMINARY
SITE PLAN

PROJECT NUMBER
9994

PRINT DATE
5/27/21

DRAWN BY
J.MOSS

CHECKED BY
C.PRESTON

PROJECT MANAGER
C.PRESTON

1 OF 3

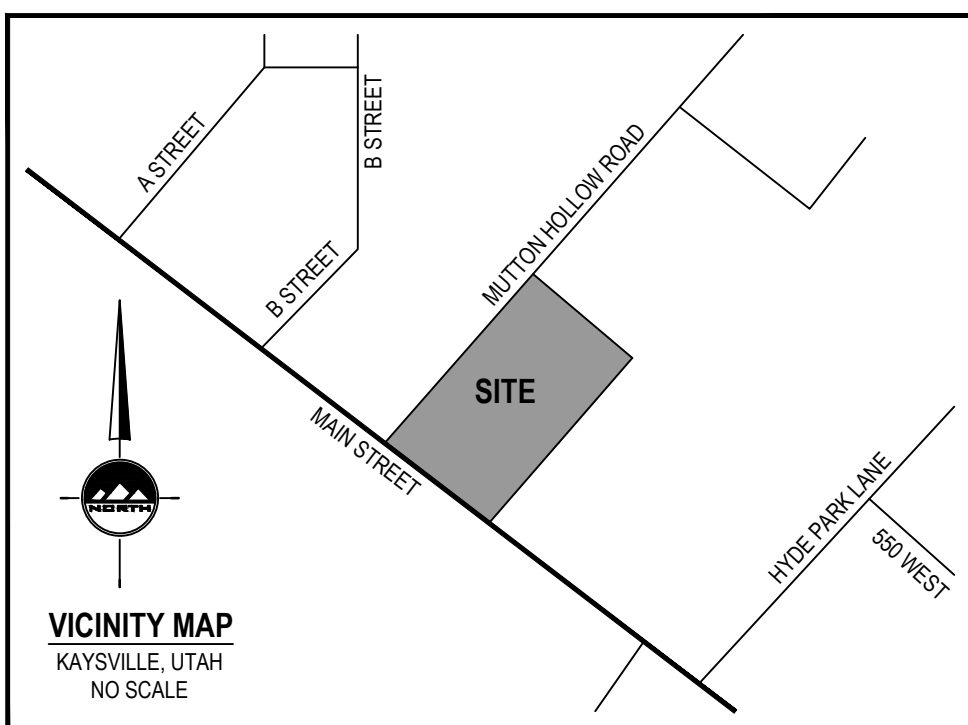


AERIAL VIEW

MUTTON HOLLOW TOWNHOUSES / KAYSVILLE, UTAH / 2 JUNE 2021

1. UTILITIES SHALL HAVE THE RIGHT TO INSTALL, MAINTAIN, AND OPERATE THEIR EQUIPMENT ABOVE AND BELOW GROUND AND ALL OTHER RELATED FACILITIES WITHIN THE PUBLIC UTILITY EASEMENTS IDENTIFIED ON THIS PLAT MAP AS MAY BE NECESSARY OR DESIRABLE IN PROVIDING UTILITY SERVICES WITHIN AND WITHOUT THE LOTS IDENTIFIED HEREIN, INCLUDING THE RIGHT OF ACCESS TO SUCH FACILITIES AND THE RIGHT TO THE REMOVAL OF ANY OBSTRUCTIONS INCLUDING STRUCTURES, TREES AND VEGETATION THAT MAY BE PLACED WITHIN THE PUDE; THE UTILITY MAY REQUIRE THE LOT OWNER TO REMOVE ALL STRUCTURES WITHIN THE PUDE AT THE LOT OWNER'S EXPENSE, OR THE UTILITY MAY REMOVE SUCH STRUCTURES AT THE LOT OWNER'S EXPENSE. AT NO TIME MAY ANY PERMANENT STRUCTURES BE PLACED WITHIN THE PUDE, OR ANY OTHER OBSTRUCTION WHICH INTERFERES WITH THE USE OF THE PUDE WITHOUT THE PRIOR WRITTEN APPROVAL OF THE UTILITIES WITH FACILITIES IN THE PUDE.
2. 58" X 24" REBAR AND CAP WILL BE PLACED AT ALL REAR LOT CORNERS AND FRONT CORNERS WILL BE MARKED WITH A NAIL OR RIVET AT THE EXTENSION IN THE CURB.
3. PROTECT ALL EXISTING SECTION CORNERS AND STREET MONUMENTS, COORDINATE ALL SURVEY STATION MONUMENT INSTALLATION, GRADE ADJUSTMENT, AND ALL REQUIRED FEEDS AND TIES WITH THE COUNTY ENGINEER PRIOR TO THE START OF CONSTRUCTION AND IMPROVEMENTS.

LOCATED IN THE NORTHEAST QUARTER
OF SECTION 33 AND THE
SOUTHEAST QUARTER OF SECTION 28
TOWNSHIP 4 NORTH RANGE 1 WEST
SALT LAKE BASE & MERIDIAN
KAYSVILLE CITY, DAVIS COUNTY, UTAH
AUGUST 2021



I, TRENT R. WILLIAMS do hereby certify that I am a Licensed Land Surveyor, and that I hold certificate No. 8034679 as prescribed under laws of the State of Utah. I further certify that by 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 MUTTON HOLLOW TOWNHOMES, and that the same has been correctly surveyed and staked on the ground as shown on this plat. I further certify that all lots meet frontage width and area re-quirements of the applicable zoning ordinances.

A parcel of land situated in the Northeast Quarter of Section 33 and the Southeast Quarter of Section 28, Township 4 North, Range 1 West, Salt Lake Base and Meridian, said parcels also located in Kaysville City, Davis County, Utah. Being more particularly described as follows:

Beginning at a point on the southerly line of a parcel of land conveyed in and recorded as Entry No. 1183200 in Book 1879, Page 1578 in the Davis County Recorder's Office; thence North 40° 45' 00" East 65 feet along the section line; NAD 83 bearing being South 01° 13' 00" East from the Northeast corner of said section 33, per the Davis County Township Reference Plat and South 89° 26' 00" West 126.64 feet from the Northeast Quarter corner of said Section 33 and running thence:

thence South 40° 57' 00" West 265.52 feet to the northerly right-of-way line of Main Street;

thence North 48° 12' 00" West 181.86 feet along said northerly line to the southerly right-of-way line of Mutton Hollow Lane;

thence North 40° 45' 00" East 268.69 feet along said southerly line to the aforementioned southerly line of that parcel of land conveyed in and recorded as Entry No. 1183200 in Book 1879, Page 1578 in the Davis County Recorder's Office;

thence North 48° 42' 47" East 181.84 feet along the southerly line of said parcel to the Point of Beginning.

Contains: 48.316 square acre & 1.109 acres.

Known all men by these presents that I/we, the under- signed owner (s) of the above described tract of land, having caused same to be subdivided, hereafter known as the

Dedicate to public use all those parts or portions of said tract of land designated as streets, the same to be used as public thoroughfares drive public or private.

Dedicate and reserve unto themselves, their heirs, their grantees and assigns, a right-of-way to be used in common with all others within said subdivision (and those adjoining subdivisions that may be subdivided by the undersigned owners, their successors, or assigns) on, over and across all those portions or parts of said tract of land designated on this plat as private streets (private rights-of-way) as access to the individual lots, to be maintained by a home owners association whose membership consists of said owners, their grantees, successors or assigns.

Grant and convey to the subdivision home owners association, all those part or portions of said tract of land designated as open space parcels to be used for recreational and open space purposes for the benefit of each home owners association member in common with others in the subdivision and grant and dedicate to the city a perpetual open space right and easement on and over the common areas to guarantee to Kaysville City that the common areas remain open and undeveloped except for approved recreational, parking and open space purposes.

Grant and dedicate a perpetual right and easement over, upon and under the lands designated heron as public utility and drainage easements and storm water detention ponds with no buildings or structures being erected within such easements.

In witness whereof We(I) have hereto set our hands(s) this _____ day of _____ A.D., 20____

By: _____, By: _____

By: _____ By: _____

STATE OF UTAH
County of Davis J.S.S.

On the _____ day of _____, A.D., 20_____,
I, _____, a Notary Public in and for the State of
Utah, who after being duly sworn, acknowledged to me that He/She is the _____,
a Limited Liability Company and that He/She signed the Owner's Dedication freely and voluntarily for and in behalf of said Limited Liability Company for
the purposes therein mentioned and acknowledged to me that said Corporation executed the same.

MY COMMISSION EXPIRES: _____,
_____, RESIDING IN _____ COUNTY.
NOTARY PUBLIC

LOCATED IN THE NORTHEAST QUARTER OF SECTION 33 TOWNSHIP 4 NORTH RANGE 1 WEST SALT LAKE BASE & MERIDIAN KAYSVILLE CITY, DAVIS COUNTY, UTAH	DAVIS COUNTY RECORDER	
	ENTRY NO. _____	FEE _____
	PAID _____ FILED FOR RECORD AND RECORDED THIS _____ DAY OF _____, 20____	
	AT _____ IN BOOK _____ OF OFFICIAL RECORDS PAGE _____	
SHEET 1 OF 2		
PROJECT NUMBER : 9594		
MANAGER : C.PRESTON		
DRAWN BY : J.MOSS		
CHECKED BY : T.WILLIAMS		
DATE : 8/27/21		
BY _____ DEPUTY RECORDER		



SALT LAKE CITY
Phone: 801.255.0529

TOOELE
Phone: 435.843.3590

CEDAR CITY
Phone: 435.865.1453

RICHFIELD
Phone: 435.896.2983

APPROVED THIS _____ DAY OF _____, 20____

BY THE KAYSVILLE CITY ATTORNEY

KAYSVILLE CITY ATTORNEY

APPROVED THIS _____ DAY OF _____, 20____

BY THE CITY PLANNING COMMISSION APPROVAL

CHAIRMAN, KAYSVILLE CITY PLANNING COMMISSION

APPROVED THIS _____ DAY OF _____, 20____

BY THE RAYSVILLE CITY ENGINEER

KAYSVILLE CITY ENGINEER

APPROVED THIS _____ DAY OF _____, 20____

BY THE RAYSVILLE CITY COUNCIL

CITY RECORDER CITY MAYOR

PROJECT NUMBER: 0504

PROJECT NUMBER : 9594

MANAGER : C.PRESTON

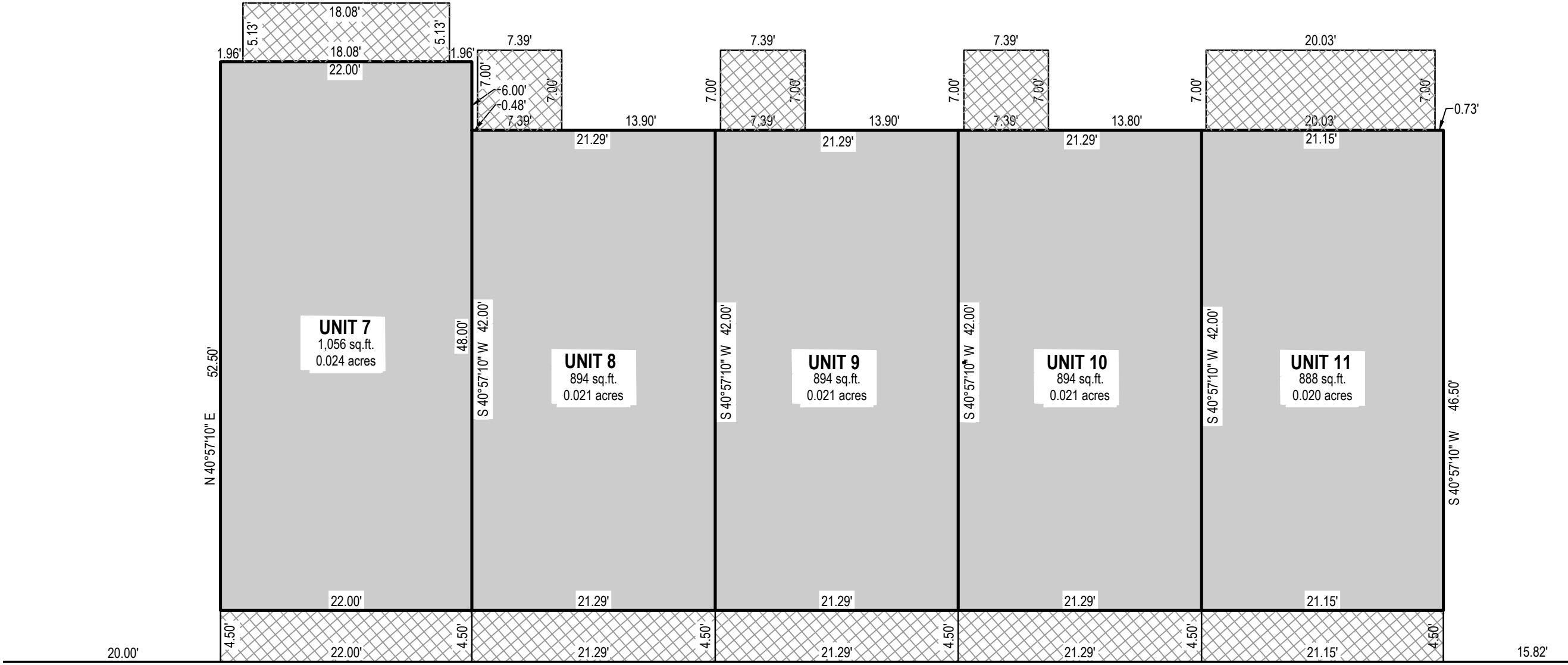
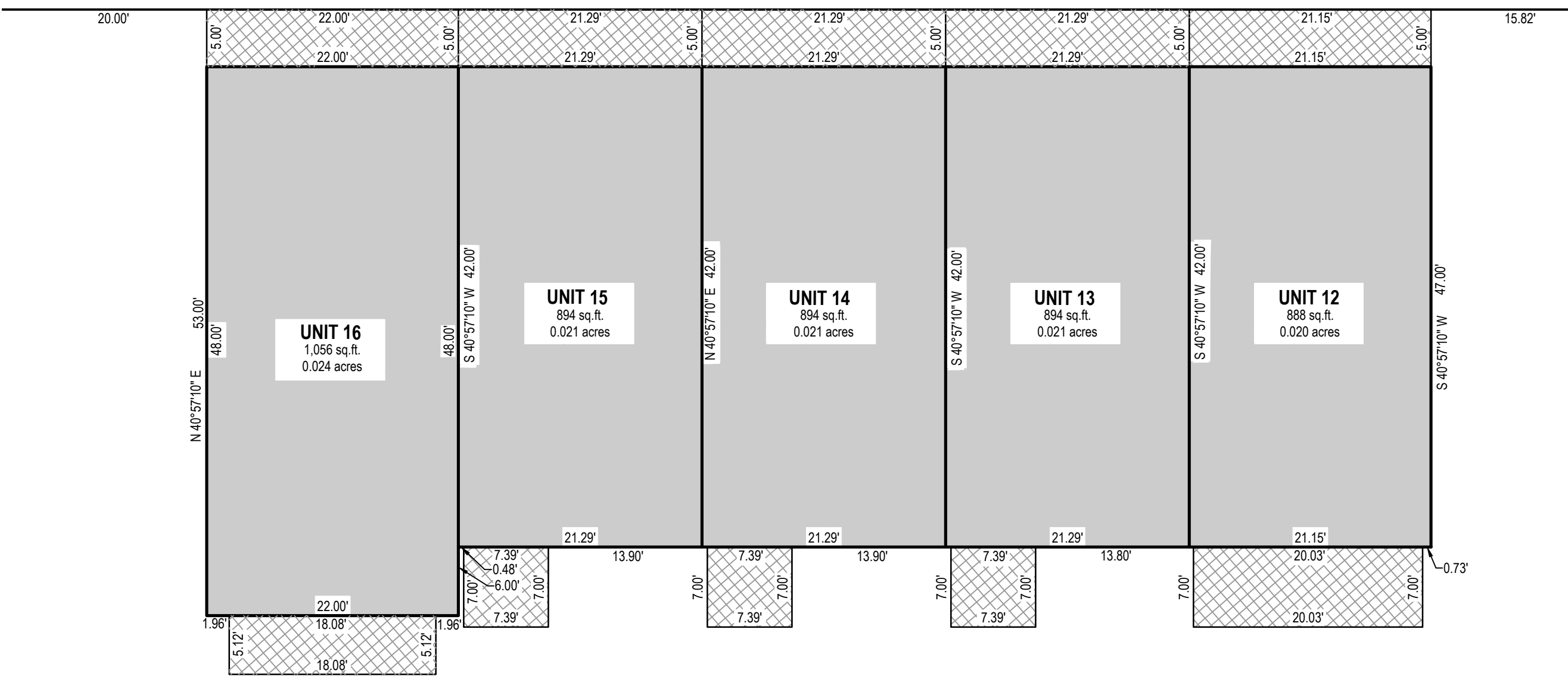
DRAWN BY : J.MOSS

CHECKED BY : T.WILLIAMS

DATE : 8/27/21

MUTTON HOLLOW TOWNHOMES

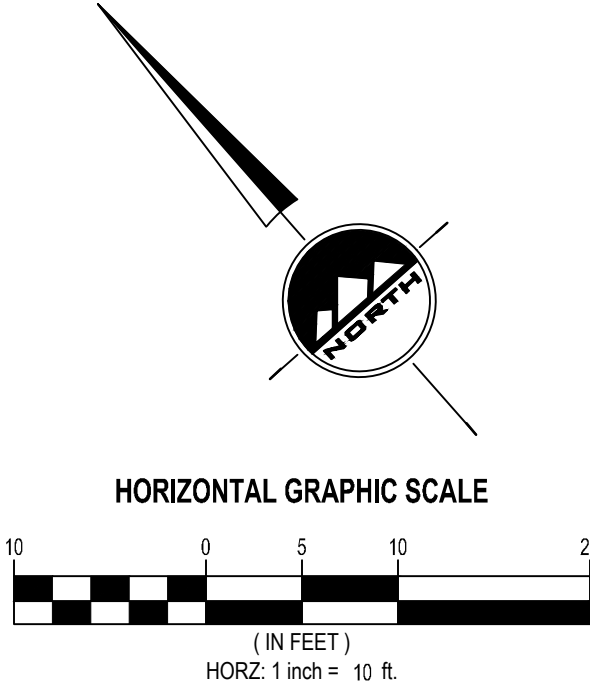
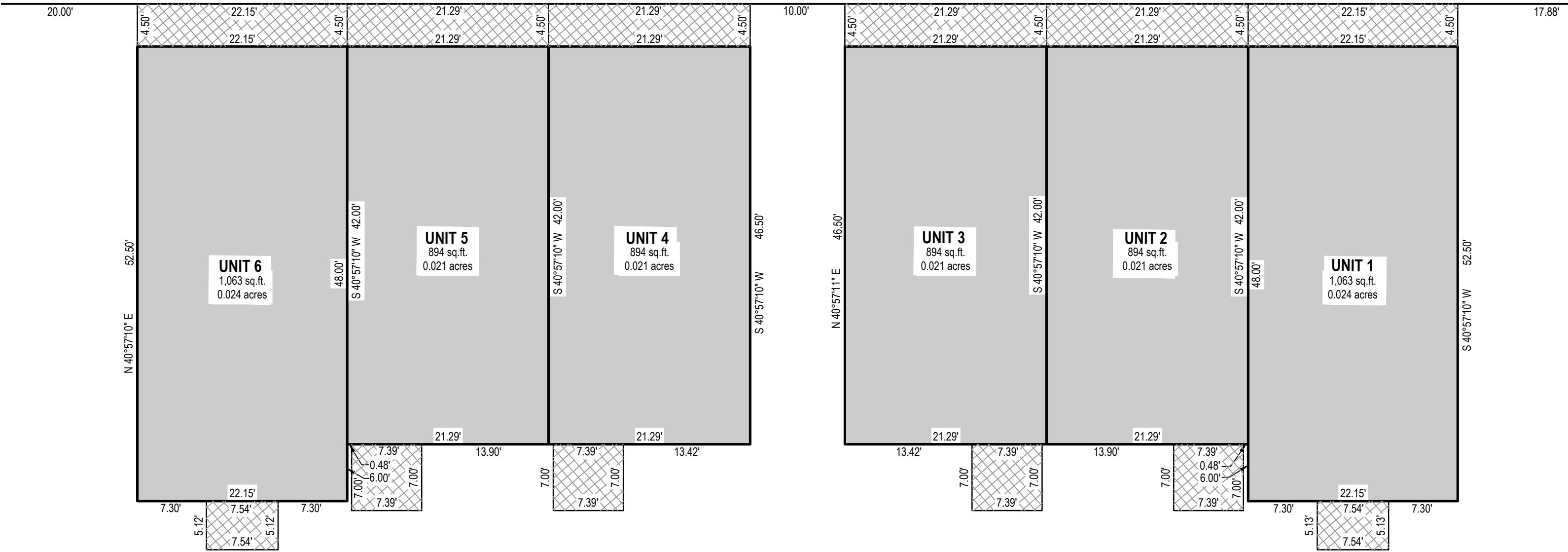
LOCATED IN THE NORTHEAST QUARTER
OF SECTION 33
TOWNSHIP 4 NORTH RANGE 1 WEST
SALT LAKE BASE & MERIDIAN
KAYSVILLE CITY, DAVIS COUNTY, UTAH



LINE TABLE		
LINE	BEARING	LENGTH
L1	N40°57'10"E	10.50'
L2	N49°02'50"W	10.50'
L3	S49°02'50"E	7.82'
L4	S49°02'50"E	7.82'
L5	N49°02'50"W	20.00'
L6	S40°57'11"W	30.50'
L7	N49°02'50"W	20.00'
L8	N49°02'50"W	20.00'
L9	S41°48'00"W	14.71'
L10	S41°48'00"W	21.67'
L11	S49°02'50"E	10.00'
L12	S41°48'00"W	21.82'
L13	S41°48'00"W	16.78'
L14	S49°02'50"E	22.38'

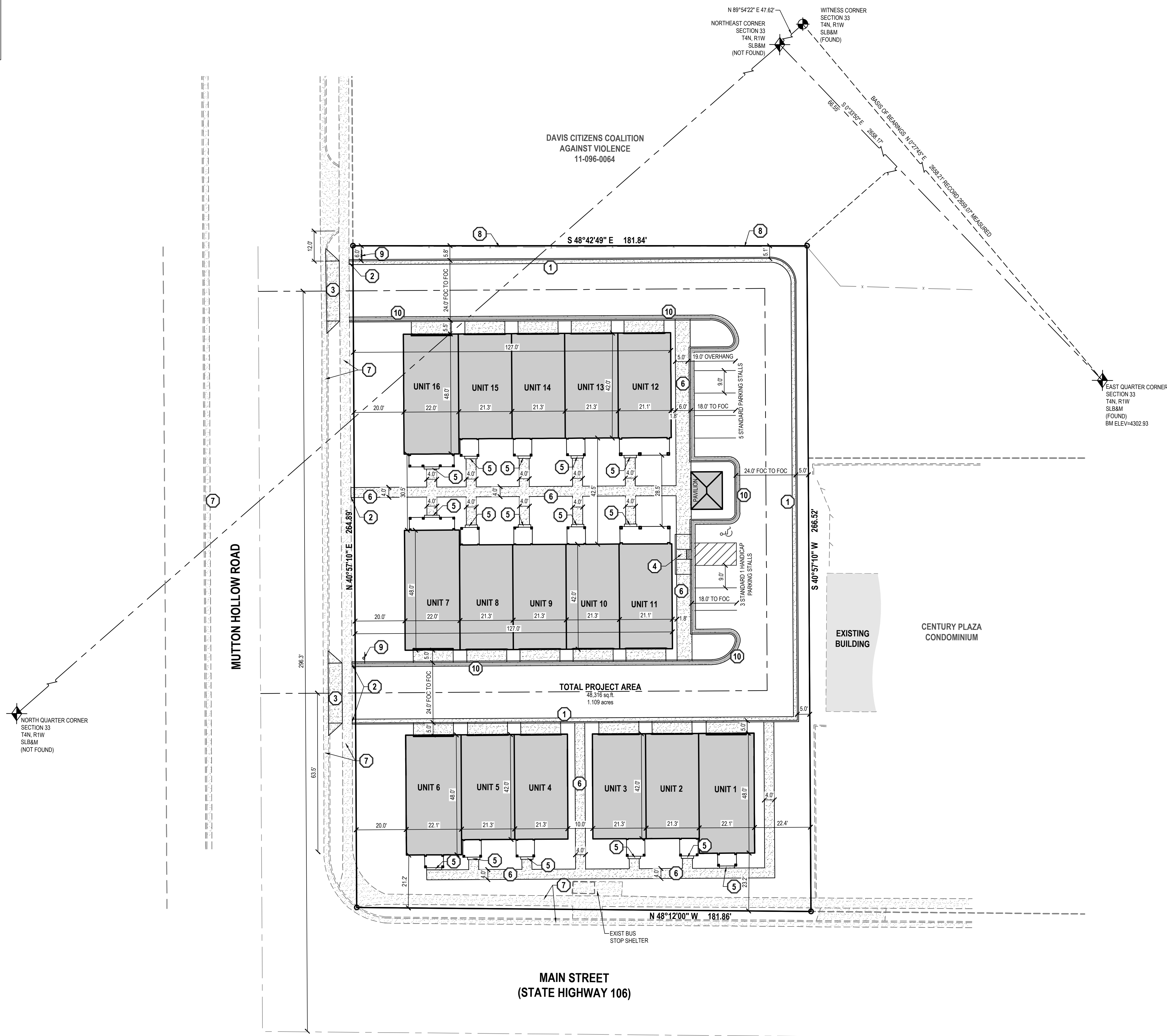
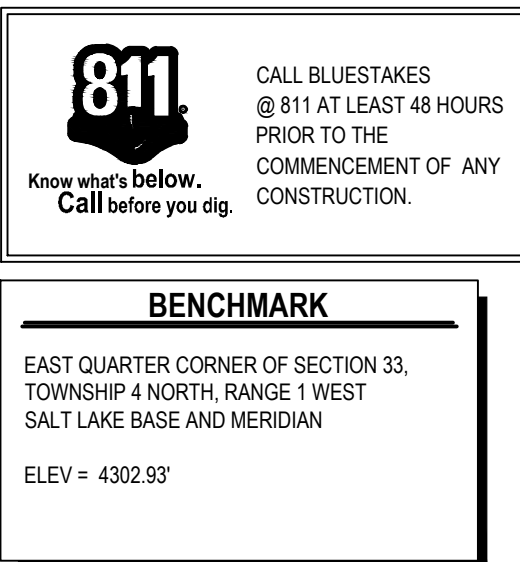
NOTE: ALL DISTANCES ARE PARALLEL OR
PERPENDICULAR UNLESS OTHERWISE NOTED

CURVE TABLE					
CURVE	RADIUS	LENGTH	DELTA	BEARING	CHORD
C1	10.50'	16.49'	90°00'00"	S4°02'50"E	14.85'
C2	9.50'	13.22'	79°42'48"	S9°11'26"E	12.18'
C3	2.50'	4.38'	100°17'12"	N80°48'34"E	3.84'
C4	2.50'	3.93'	90°00'00"	N4°02'50"W	3.54'
C6	2.50'	4.56'	104°28'39"	N3°11'30"E	3.95'
C7	9.50'	12.52'	75°31'21"	S86°48'30"E	11.64'



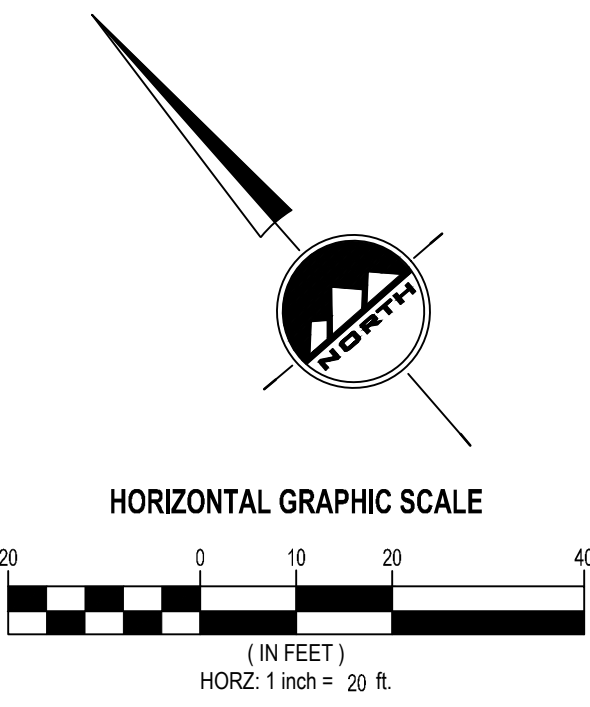
MUTTON HOLLOW TOWNHOMES

LOCATED IN THE NORTHEAST QUARTER OF SECTION 33 TOWNSHIP 4 NORTH RANGE 1 WEST SALT LAKE BASE & MERIDIAN KAYSVILLE CITY, DAVIS COUNTY, UTAH	DAVIS COUNTY RECORDER ENTRY NO. _____ FEE _____ PAID _____ FILED FOR RECORD AND RECORDED THIS _____ DAY OF _____ 20____ AT _____ IN BOOK _____ OF OFFICIAL RECORDS _____ DAVIS COUNTY RECORDER BY _____ DEPUTY RECORDER
SHEET 2 OF 2 PROJECT NUMBER : 9594 MANAGER : C PRESTON DRAWN BY : J MOSS CHECKED BY : T WILLIAMS DATE : 8/27/21	



DESCRIPTION	AREA (SF)	PERCENTAGE
PAVEMENT	20,206 sq.ft.	41.8%
ROOF	15,152 sq.ft.	31.4%
LANDSCAPING	12,958 sq.ft.	26.8%
TOTAL SITE	48,316 sq.ft. 1.109 ACRES	100%
OPEN SPACE	15,152 sq.ft.	31.3%

STANDARD STALLS	8
ADA - ACCESSIBLE STALLS	1
TOTAL STALLS	9



LOCATED IN THE NORTHEAST QUARTER
OF SECTION 33
TOWNSHIP 4 NORTH, RANGE 1 WEST
SALT LAKE BASE AND MERIDIAN
KAYSVILLE CITY, DAVIS COUNTY, UTAH

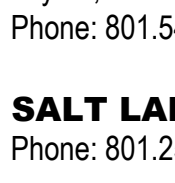
GENERAL NOTES

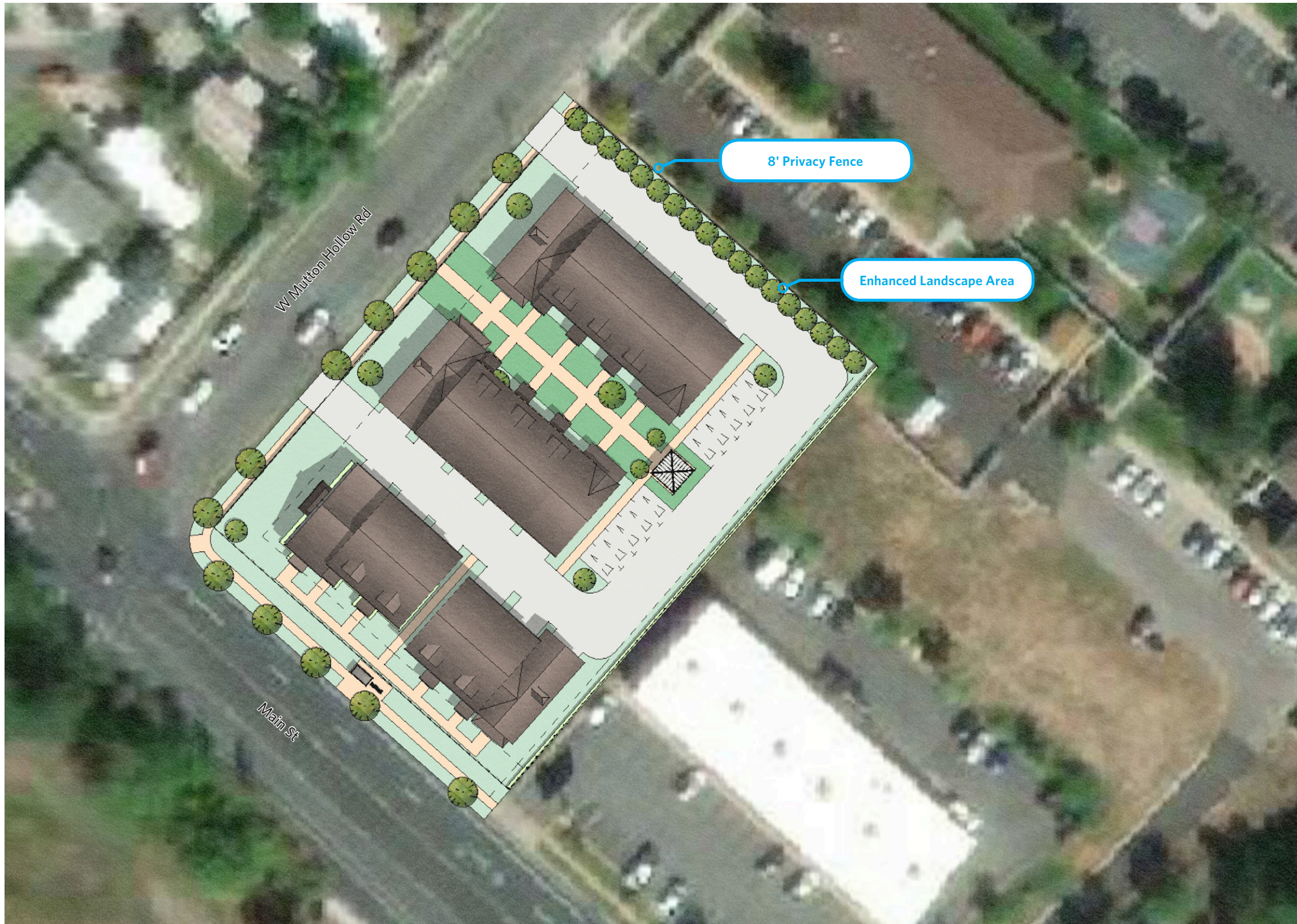
1. ALL WORK TO COMPLY WITH THE GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
2. ALL IMPROVEMENTS MUST COMPLY WITH ADA STANDARDS AND RECOMMENDATIONS.
3. SEE LANDSCAPE/ARCHITECTURAL PLANS FOR CONCRETE MATERIAL, COLOR, FINISH, AND SCORE PATTERNS THROUGHOUT SITE.
4. ALL PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST EDITION OF THE M.U.T.C.D. (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES).
5. ALL SURFACE IMPROVEMENTS DISTURBED BY CONSTRUCTION SHALL BE RESTORED OR REPLACED, INCLUDING TREES AND DECORATIVE SHRUBS, SOD, FENCES, WALLS AND STRUCTURES, WHETHER OR NOT THEY ARE SPECIFICALLY SHOWN ON THE CONTRACT DOCUMENTS.
6. NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING CONCRETE OR ASPHALT.
7. THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.

SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

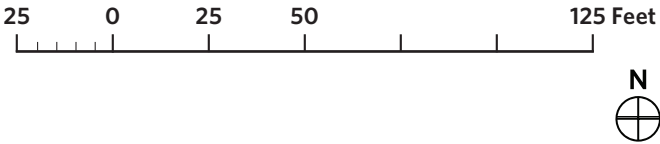
- 1 24" COLLECTION CURB AND GUTTER PER DETAIL 6/C-500
- 2 MATCH EXISTING IMPROVEMENTS
- 3 INSTALL DRIVE APPROACH PER KAYSVILLE CITY STANDARDS
- 4 INSTALL HANDICAP ACCESSIBLE RAMP PER ADA STANDARDS AND SPECIFICATIONS
- 5 INSTALL STAIR(S)
- 6 INSTALL SIDEWALK
- 7 EXISTING CURB, GUTTER AND SIDEWALK
- 8 EXISTING VINYL FENCE ALONG PROPERTY LINE
- 9 INSTALL "STOP" SIGN
- 10 24" REVERSE PAN CURB AND GUTTER PER DETAIL 9/C-500

																																							
LAYTON 919 North 400 West Layton, UT 84041 Phone: 801.547.1100																																							
SALT LAKE CITY Phone: 801.255.0529																																							
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CONTACT: JOHN WARNICK PHONE: 801-593-4993																																							
MUTTON HOLLOW TOWNHOMES 598 NORTH MAIN STREET KAYSVILLE, UTAH																																							
																																							
<table border="0"><thead><tr><th>NO.</th><th>DATE</th><th>REVISION</th><th>BY</th></tr></thead><tbody><tr><td>1</td><td></td><td>FOR REVIEW</td><td></td></tr><tr><td>2</td><td></td><td></td><td></td></tr><tr><td>3</td><td></td><td></td><td></td></tr><tr><td>4</td><td></td><td></td><td></td></tr><tr><td>5</td><td></td><td></td><td></td></tr><tr><td>6</td><td></td><td></td><td></td></tr><tr><td>7</td><td></td><td></td><td></td></tr><tr><td>8</td><td></td><td></td><td></td></tr></tbody></table>				NO.	DATE	REVISION	BY	1		FOR REVIEW		2				3				4				5				6				7				8			
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PROJECT NUMBER S094		PRINT DATE 8/30/21																																					
DRAWN BY J.MOSS		CHECKED BY C.PRESTON																																					
PROJECT MANAGER C.PRESTON																																							
C-100																																							



ILLUSTRATIVE PLAN

MUTTON HOLLOW TOWNHOUSES / KAYSVILLE, UTAH / 2 JUNE 2021





Planning Commission Staff Report

Public Hearing for an Amendment to the Kaysville City General Plan.

October 14, 2021

Description:

Kaysville City has been working for many months with consultants on collecting input from the community to update the city's general plan.

Based on the input received from primarily from an online workshop and a community survey a draft plan has been created that attempts to reflect the input received to date from that process. It is the Planning Commission's responsibility to prepare and recommend the general plan to the city council. Part of this preparation is the consideration of input from the general public which has begun with online comments, an open house, and now the public hearing.

In the opinion of city staff, this meeting should be used to receive input from the public and foster additional conversation amongst the commission. The input received will give the consultant and staff direction to make changes and corrections to the draft to be brought back before the Planning Commission at a future meeting for consideration.

Recommendation:

Staff recommends that the Planning Commission receive input from the public and give direction to staff and the consultant team regarding changes that they believe should be made to the current plan draft to be brought back before the commission at their next meeting.

Links to General Plan draft documents: <https://www.kaysvillecity.com/814/General-Plan-2021>



Planning Commission Staff Report

An amendment to various chapters of Title 18, Building Regulations, and Title 19, Subdivisions, of the Kaysville City Ordinances updating storm water requirements.

October 14, 2021

Description:

The EPA is mandating that states implement new standards for development dealing with LID (Low Impact Development) as part of the MS4 permit process. The MS4 permit requires municipalities to reduce polluted storm water runoff by implementing storm water management programs with best management practices.

The proposed ordinance changes will require that new development implement design techniques that will help clean storm water before it enters into the ground water system or the city's storm water system. Kaysville City staff has worked for many months together with a consultant to learn about and create the ordinances related to this as well as a manual to share with developers and builders with the picklist of items that can be utilized and worksheets to demonstrate their compliance with the requirements.

In addition to the LID practices that the ordinance implements, updated standard drawings are also prepared to adapt as part of city ordinance. The city's standard drawings have not been updated for many years and have not yet been adopted by ordinance. These details indicate to engineers and builders where utility lines belong together with specifications on how utilities and right of way improvements such as roads and sidewalks are to be constructed. Many of the details are the same as the existing standard drawings with some updates to include fiber infrastructure and tweaks to other utility standards.

Recommendation:

Staff recommends that the Planning Commission forward a favorable recommendation for the changes to title 18 and 19 as proposed together with the adoption of the standard drawings.

Attachment 1:	Ordinance Changes to Title 18 and 19
Attachment 2:	Standard Drawings
Attachment 3:	Low Impact Development Manual

18-1-4 Performance Deposit

1. A performance deposit is hereby established. Said deposit shall be cash for each permit as follows:
 - a. One Thousand, Five Hundred Dollars (\$~~31,950~~00) for each new structure.
 - b. Five Hundred Dollars (\$500.00) for each remodel or addition to a structure.
 - c. Two Hundred Dollars (\$200.00) for each demolition of a structure or manufactured home set in a manufactured home park.
2. Performance deposits shall guarantee performance and pay costs incurred by the City if not otherwise paid, to include but not be limited to:
 - a. Damages to curb and gutter, driveway approaches, sidewalk, pavement and other street improvements.
 - b. Damages to utility systems.
 - c. Utility charges.
 - d. Storm water violations
 - e. Construction pollution or illicit discharges
 - f. Cleanup costs.
 - g. Re-inspection fees.
3. When all or any part of the performance deposit is used by the City, the deposit shall be replenished up to the required amount before work continues.
4. The performance deposit shall be made as a condition precedent to the issuance of any permit. The performance deposit may be waived on certain permits at the discretion of the Building Official.
5. The performance deposit is for use of the City and not intended to be used to provide funds for correction of any defects in construction in or pertaining to buildings or structures on the property for which the permit is used.
6. It shall be the responsibility and duty of the person or entity making the performance deposit to apply to and receive from the Building Official a final inspection of the property within 180 days after the last inspection or suspension of work.
7. Upon satisfactory completion of final inspection, the performance deposit shall be released to the depositor.
8. In the event any depositor fails within 180 days after the last inspection or suspension of work on such property to request and receive a final inspection for the property for which the performance deposit was made and request that the deposit be released, such depositor shall thereby be deemed to have waived, relinquished and forfeited all right to claim the performance deposit. The City may thereafter transfer the available funds from the deposit to the general fund of the City or any other fund of the City.

18-3-2 Plot Plan

The building site shall be planned. The Owner shall prepare a plot plan to adequately develop and use the site.

1. The plot plan for a lot within a subdivision shall contain:
 - a. A scale of at least 1"=20' with the scale shown on the plan.
 - b. North arrow.
 - c. Address and lot number.
 - d. Subdivision title and lot number.
 - e. Lot dimensions (all sides).
 - f. Size and location of all easements.
 - g. Name or number of all frontage streets.
 - h. Location of the building on the lot and location of existing buildings.
 - i. Front setback dimension.
 - ii. Both side setback dimensions.
 - iii. Rear setback dimension.

NOTE: All setback dimensions shall be taken perpendicular to the property lines.
 - i. Outside dimensions of the building.
 - j. Location and width of driveway and off-street parking.
 - k. Location of flood hazard zone.
 - l. Existing and proposed grades.
 - m. Elevation of all floors, including basement.
 - n. Location, engineer design and elevation of all retaining walls.
2. The plot plan for a parcel that is not within a recorded subdivision shall contain:
 - a. Items in Subsection (1) above.
 - b. Parcel identification number and legal description along with proof that the parcel to be developed is in compliance with Kaysville City's subdivision ordinance and state law as not being created through a lot or parcel split.
 - c. Location and size of existing culinary water, secondary water, and sanitary sewer mains.
 - d. Location and size of existing storm drainage and Low Impact Development (LID) facilities.
 - e. Location and type (underground or overhead) of electrical power facilities.
 - f. Location of nearest fire hydrant.
 - g. Location and size of other existing public utilities such as natural gas, telephone, and cable TV.
 - h. Location of any ditches, pipes, culverts, land drains, etc. and written approval by affected entities where alterations are required.
 - i. Location of proposed curb, gutter and sidewalk. Detailed plan and profile information is required. If a state highway is involved, evidence of approval of access, curbs, gutters and sidewalks by the Utah Department of Transportation is required.
 - j. Location and edge of existing street surfacing.

18-3-8 Drainage

Residential building sites shall be adequately drained.

1. The Owner shall make site improvements to protect the structures and provide adequate site drainage.
2. The Owner shall pay the sites proportional share of the cost of the regional detention facility and conveyance to the main channel. If the building site is within a subdivision that has fulfilled the controlled release requirements, this site participation is waived.
3. If the building site is within one hundred feet (100') of a main channel, the Owner shall comply with all Davis County Flood Control requirements as approved by Davis County.
4. The Owner shall evaluate options for constructing LID facilities that infiltrate, evapotranspire, ~~harvest~~ or naturally filter. The City's LID manual shall be used to guide this evaluation.
5. A Water Quality Volume (WQV) shall be calculated per requirements in the City's LID manual. The WQV shall be retained as if feasible, ~~with~~ and any portion of the WQV that is not able to be retained being treated before leaving the site if not instead. Feasible is defined in the LID manual.

18-4-2 Site Plan Requirements

The following steps are required:

1. The Developer contacts the City Engineer for information concerning the City requirements and compatibility with the General Plan, and discusses with staff members the proposed plan of development.
2. The Developer submits the following to the City Engineer:
 - a. Six (6) copies of the preliminary site plan. The preliminary site plan shall include the following minimum requirements.
 - i. Title of development.
 - ii. Name, address, and telephone number of owner, developer, and engineer.
 - iii. North arrow, drawing scale of at least one inch equals fifty feet (1"=50') or larger, and date.
 - iv. Vicinity map showing abutting properties and owners uses of abutting properties, and City streets.
 - v. Dimensions of property and all lots (including area in square feet), drawn accurately to scale.
 - vi. Dimensions of existing and proposed buildings (including area in square feet), drawn accurately to scale and showing uses and type of construction.
 - vii. Adjoining buildings and uses.
 - viii. Layout of street system, including designations.
 - ix. Location of existing and proposed curb, gutter and sidewalk. If property abuts a State Highway, approval of the State Right-of-Way Engineer must be obtained for location of curb, gutter and sidewalk. Location and number of curb entrances must be approved by UDOT. On City streets the location and number of curb entrances must be approved by the City Engineer.

- x. Location of existing edge of asphalt surfacing.
 - xi. Location of proposed paved areas, including entrances and exists, and walkways.
 - xii. Location of proposed LID and/or water quality treatment facilities.
 - xiii. Location and number of parking stalls, loading areas, and docks.
 - xiv. Easements.
 - xv. The flood hazard zone(s) if the development is in an area of special flood hazard.
- b. Conditional Use Permit application if the development includes a conditional use (see [KCC 17-30](#)).
- 3. The City staff will review the documents and approve, modify, or disapprove the preliminary site plan. Ten (10) working days are allowed for completion of the staff review for each submittal or resubmittal. If a conditional use is included, the preliminary site plan approval is contingent upon and in conformity to the preliminary conditional use approval by the Planning Commission.
- 4. The Developer pays the site plan review fee at the City Office.
- 5. The Developer submits the following to the City Engineer or their designee:
 - a. Three (3) copies of the final site plan. The final site plan shall include the following minimum requirements.
 - i. All items required for a preliminary site plan.
 - ii. Location and size of existing and proposed culinary water, sanitary sewer, storm sewers, and electric power utilities.
 - iii. Calculations for and location of storm water detention facilities.
 - iv. Calculations for and locations of storm water quality facilities.
 - v. Location of nearest existing and proposed fire hydrants.
 - vi. Location of any existing irrigation systems including open ditches, pipe culverts, diversion boxes and clean outs.
 - vii. Landscaping plan.
 - viii. Location of all fences, lighting, signs, refuse collection areas and other items to be included on site.
 - ix. Drawings, sketches or perspectives of proposed buildings.
 - x. The flood hazard zone(s) and the items listed in [KCC 8-5-18](#), if the development is in an area of special flood hazard.
 - b. Utility service (load) information.
 - i. Electrical power.
 - ii. Culinary water and fire protection pressure and flow requirements.
 - iii. Sanitary sewer quantity and quality parameters.
 - c. Building plans sufficient to meet the requirements for building permits.
 - d. A copy of the site plan review fee receipt.
- 6. As applicable, the Utah State Department of Transportation, Sewer District, irrigation provider, Davis County Flood Control, or other agencies will review the submitted items for compliance.
- 7. The City staff will review the documents and approve, modify, or disapprove the final site plan. Ten (10) working days are allowed for completion of staff review for each submittal or resubmittal.
- 8. The Developer does the following at the City Office:
 - a. Furnishes proof of compliance with all the requirements of the pressure irrigation provider.
 - b. Applies for a building permit(s) and pays the required fees to include:
 - i. Impact fees.
 - ii. Utility extension fees.

- iii. Plan checking fee(s).
 - iv. Building permit fee(s).
9. The Developer and contractors and other representatives meet with City representatives in a preconstruction conference and then the Developer constructs the on-site and off-site improvements in accordance with the approved Plan and the City Subdivision Ordinance, Specifications, and Standard Drawings, with inspection by the City.
 10. When the site improvements are completed, the Developer submits As-Built Drawings to the City Engineer who will then have the site inspected for Construction and certify completion.
 11. The Developer provides the improvement warranty and cash deposit in an amount of ten percent (10%) of the actual cost of the improvements installed as in [KCC 19-2-4](#) of the Subdivision Ordinance.
 12. When structures are completed, with required inspection, the Developer notifies the Building Official.
 13. The Building Official will conduct a final inspection of the structure(s) and issue the Certificate(s) of Occupancy upon finding all in compliance.
 14. Near the end of the Warranty Period, the City inspects the improvements and the developer corrects deficiencies.
 15. When the improvements comply with City standards, the developer has a Slurry Seal Type III applied to all new asphalt pavement in streets, then the improvement warranty and cash deposit are released.

18-4-3 Roadway Improvements

1. Whenever a new structure is built, a structure existing on the effective date of this chapter is modified, renovated or improved (where the combined value of such modifications, renovations or improvements undertaken exceed 50% of the current market value of the structure), or where any site development increases the use of public streets, the owner of the property shall place curb, gutter and sidewalk at the proper location along the frontage of the property for the road width as determined by the City Engineer. If the development abuts a State Highway, the developer must obtain approval for the location of curb, gutter and sidewalk from the State Highway Right-of-Way Engineer. The owner of the property shall also modify the existing street improvements and install road base and asphalt surfacing to drain and function properly. ~~Any pavement removed from existing streets shall be replaced within eight (8) working days of such removal.~~ The owner shall dedicate the widened portion to the City. The dedication of property shall not alter zoning limitation or zoning privileges.
2. Roadway improvements to be built by the developer which will be dedicated to the City shall conform to the following:
 - a. The developer will provide an improvement warranty and cash deposit as in [KCC 19-2-4](#) of the Subdivision Ordinance and be responsible for maintenance of the improvements during the warranty period. ~~Any impact to or work on existing public streets will require an approved excavation permit, and shall be subject to the requirements and additional cash deposit bond and fee amounts described therein.~~
 - b. Total Width shall be the standard fifty-five foot (55') right-of-way from property line to property line, with a pavement width from back of curb to back of curb of thirty-five feet (35'). Major road widths of sixty-six feet (66'), seventy feet (70'), eighty feet (80'), or one hundred feet (100') will be required when designated in the Major Street Plan.
 - c. Grades of Roads shall be minimum of 0.5% and maximum of 10.0% for local and collector streets and 8.0% maximum for arterial streets.

- d. Asphalt Surfacing, including a preventative maintenance surface treatment as approved by the City Slurry Seal Type III applied on all new asphalt pavement in streets, shall be provided on all roads in conformance with all standards and specifications as determined by the City.
- e. Sidewalks shall be provided in all developments in the General Commercial (GC), Central Commercial (CC) and Health Care (HC) Zones and as specified by the City Engineer in all developments in the Light Industrial (LI), Public Use (PU) and Professional Business (PB) Zones. Sidewalks shall be four feet (4') wide or five feet (5') wide as determined by the City Engineer and four inches (4") thick except at driveways, where the thickness shall be increased to six inches (6"). Sidewalks shall have four inches (4") of gravel base course for foundations.
- f. Concrete curb and gutter shall be required in all developments. The curb and gutter shall be thirty inches (30") wide and of standard high back style, or standard roll curb if recommended by the City Engineer and approved by the Planning Commission, with six inches (6") of gravel base course for foundations.
- g. Parkstrips.
 - i. In the Professional Business (PB), General Commercial (GC) and Central Commercial (CC) Zones, all parkstrips shall be improved with grass and sprinkling systems; efficiently sprinkled low water consumption landscapes including bark, ground covers, grasses, and plants as provided in the Kaysville City Plant List; or stamped concrete as approved by the Planning Commission.
 - ii. When LID facilities are to be located in parkstrips, the requirement for grass and irrigation systems may be waved, depending on the proposed LID technique. When the requirement for grass is waved it shall be replaced with a requirement for landscaping materials and plants that enhance and support the type of LID technique being proposed.
 - iii. On the west side of Main Street in the Central Commercial (CC) Zone, the parkstrip shall be concrete that is five feet (5') wide and four inches (4") thick except at driveways, where the thickness shall be increased to six inches (6"). The concrete within these parkstrips must have four inches (4") of gravel base course for foundations. Street furniture, planter boxes, and landscaping shall be installed within the parkstrip as required by the City.
- h. Installation of all other roadway improvements shall comply with the Specifications and Standard Drawings.

18-4-8 Storm Water

A storm drainage plan has been prepared and is maintained by Kaysville City and Davis County. The developer shall implement the portion of that plan applicable to the development by:

1. Preparing a detailed drainage plan for the development which is acceptable to the City.
2. Making sufficient improvements, such as storm drains, cross gutters, catch basins, inlets, and other appurtenant structures, to adequately dispose of 10-year frequency storm runoff within the development and from adjacent properties. Said disposal system shall include the retention or treatment of the WQV, as detailed in the City's LID Manual. Storm drains shall be not less than fifteen inches (15") in diameter and meet City standards and specifications.

3. Providing for restriction of the runoff from the development to 0.20 cubic feet per second per acre per 10-year frequency rainfall event through one or more of the following, at the direction of the City:
 - a. Conveyance (including easements) of the runoff to a regional ~~detention/retention/treatment detention~~ site and paying the ~~developments~~ ~~developments~~ proportional share of the cost of the regional detention facility and conveyance to the main channel; or
 - b. Dedicating land and constructing regional ~~detention/retention/treatment detention~~ ~~and/or retention~~ within the development and conveyance to a main channel if said development contains a proposed ~~detention/retention/treatment detention~~ site. The developer may be compensated for the portion of the cost of the detention and conveyance to a main channel for that which is not the proportional share for the development; or
 - c. If the development is within a subdivision that has fulfilled the controlled release requirements, complying with the storm drainage requirements of the subdivision; or
 - d. Conveyance of the runoff to a site within the development dedicated and constructed for ~~detention/retention/treatment detention and/or retention~~.
4. If the development is within one hundred feet (100') of a main channel, complying with all Davis County Flood Control requirements and being approved by Davis County.
5. Unless otherwise directed or agreed to by the City Engineer, any infrastructure not located in a City right of way ~~or on City owned property~~ that is installed or used for the conveyance/treatment/detention/retention of storm water shall require a Storm Water Maintenance Agreement to be approved by the Storm Water Official and shall be recorded with the Davis County Recorder's Office, as per KCC 9-3d-8.

19-2-1 Subdivision Development Process

The following steps are required:

1. The Subdivider contacts the City Engineer for information concerning the City subdivision requirements and compatibility with the General Plan, and discusses the proposed plan of development prior to preparing any plats, plans or charts.
2. The Subdivider pays the preliminary plat fee at the City Office.
3. The Subdivider submits the following to the City Engineer:
 1. Three (3) copies of the preliminary plat prepared by a registered engineer or surveyor and supporting documents as specified in [KCC 19-3-3](#).
 2. A copy of the preliminary plat fee receipt.
4. The Subdivider submits copies of the preliminary plat and any applicable utility load information to agencies and service providers as needed. If a State highway is involved, the Subdivider provides evidence of approval of access, curbs, gutters, and sidewalks by the Utah Department of Transportation to the City Engineer.

5. The City staff will review the documents and make recommendations. Ten (10) working days are allowed for completion of staff review for each submittal or re-submittal.
6. Upon completion of the staff review, the City Engineer will place the item on the Planning Commission agenda and notify the Subdivider.
7. The Planning Commission will meet and review the preliminary plat and take action. The Subdivider or agent must attend and present the plat. The Planning Commission then forwards the plat to the City Council, with its recommendations and conditions thereon.
8. The City Council will meet and review the plat. The Subdivider or agent must meet with the Council and discuss the plat. (Refer to [KCC 19-3-5\(2\)](#).)
9. The Subdivider pays the final plat fee at the City Office.
10. The Subdivider submits six (6) copies of the tentative final plat to the City Engineer.
11. The City Engineer checks the tentative final plat for compliance with conditions and returns one copy to the Subdivider.
12. The Subdivider submits the final plat and irrigation system drawings to any irrigation providers involved and obtains approval.
13. The Subdivider submits the following to the City Engineer:
 1. Original and two (2) copies of the final plat prepared by a registered engineer or land surveyor in accordance with [KCC 19-4-3](#).
 2. Cross sections and profiles of the streets and all other construction drawings related to all of the improvements to be constructed within the subdivision. All such drawings and materials must be signed and stamped by a registered professional engineer.
 3. Open space improvement drawings if applicable.
 4. [Low Impact Development \(LID\) and/or storm water facility details.](#)
 5. Copy of final plat fee receipt.
14. The City staff will review the documents and make recommendations. Ten (10) working days are allowed for completion of staff review for each submittal or re-submittal.
15. Upon completion of staff review, the City Engineer will place the item on the Planning Commission agenda and notify the Subdivider.
16. The Planning Commission will meet and review the final plat and take action. The Subdivider or agent must attend and present the plat.
17. The Subdivider submits the following to the City Engineer.
 1. Preliminary Title Report.
 2. Written results of a test for suspect soil in the area upon which public improvements will be constructed.
 3. [Depending on site conditions or complicating factors, the City may require a written geotechnical report supporting assumptions made when calculating the Water Quality Volume \(WQV\), as defined in the City's LID manual, and any subsequent calculations on infiltration and LID facility sizing.](#)
 4. Agreements if applicable.
18. The City Attorney will review the documents submitted to insure adequacy and sign the plat when approved.
19. The Subdivider must then pay the following fees at the City Office:
 1. Development fees.
 2. Recording fees.
 3. Inspection fees.
 4. Utility extension fees.
20. The Subdivider submits the Storm Water Pollution Prevention Plan (SWPPP) [and Notice of Intent \(NOI\)](#) for the subdivision to the [Storm Water Official](#) or their designee.

21. The Subdivider and contractors and other representatives meet with City representatives in a preconstruction conference.
22. The Subdivider submits an Excavation Permit application for work within City streets and/or right of way (KCC 9-2-9) and pays the necessary cash deposit and fee amounts.
23. The Subdivider constructs and installs all improvements, except the preventative maintenance seal coat surface treatment, with inspection by the City. In the event the Subdivider has constructed and installed all improvements except sidewalks and asphalt pavement in a subdivision phase and desires to begin construction of residential buildings before the sidewalks and asphalt pavement are installed in the subdivision phase, the City may accept building permit applications upon compliance with all other requirements, including recording the plat, plus the following:
 1. The Subdivider shall guarantee the proper installation of the sidewalks and asphalt pavement in accordance with Kaysville City standards and specifications, by cash deposit furnished and filed with Kaysville City in an amount equal to one hundred fifteen percent (115%) of the cost of the installation of the sidewalks and asphalt as determined by licensed contractor quote.
 2. All building lots within the subdivision phase shall be owned by the Subdivider and remain owned by the Subdivider until the sidewalks and asphalt are installed in the subdivision phase and the improvements are completed and certified.
 3. No final building inspection will be scheduled nor conducted and no occupancy allowed until all subdivision phase improvements have been completed and certified.
24. The Subdivider has as-built drawings prepared and submits them, the Improvement Completion Assurance and Improvement Warranty to the City Engineer.
25. The Public Works Superintendent certifies that the improvements are completed.
26. The City Engineer addresses the lots on the plat and has the final plat recorded at the office of the Davis County Recorder and then building permit applications will be accepted.
27. The City Council accepts the improvements and the Improvement Warranty Period begins, when determined to be ready by the public works inspector.
28. Near the end of the warranty period, the Subdivider requests a City inspection of the improvements and the Subdivider corrects all deficiencies identified in the punch list.
29. When the improvements comply with City standards as certified by the Public Works Superintendent, the Subdivider applies a preventative maintenance seal coat on all asphalt pavement in streets, then the Improvement Warranty Period ends and the Improvement Completion Assurance and Improvement Warranty are released.

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19-2-2 Improvement Completion Assurance

The Subdivider shall guarantee the proper completion of a preventative maintenance seal coat surface treatment (type to be approved by the City) on all asphalt pavement in streets in accordance with Kaysville City standards and specifications, by cash deposit furnished and filed with Kaysville City in an amount equal to one hundred fifteen percent (115%) of the cost of a preventative maintenance surface treatment preventative maintenance seal coat on all asphalt in streets as determined by a licensed contractor quote.

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19-2-4 Improvement Warranty

1. The City Council will accept the improvements, when they are complete, subject to receiving the Improvement Warranty and cash deposit. The Subdivider shall provide to the City an Improvement Warranty and cash deposit in an amount of ten percent (10%) of the actual costs of the improvements less ~~the preventative maintenance surface treatment preventative maintenance seal coat or approved equivalent~~ on all asphalt pavement in streets.
2. Before the end of the Improvement Warranty Period, the City will determine if the improvements (not including landscaping) have failed in any material respect. If the City determines that the improvements have failed, the City shall list the failures. The Subdivider shall thereafter cause the improvements to comply with Kaysville City's Standards for Design, Materials, and Workmanship, as determined by the City. If the Subdivider refuses or neglects to do the listed warranty work within thirty (30) days of notice by the City, the City may order the work done using the proceeds from the cash deposit to defray expenses.

19-2-4(b) Performance Deposit

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1. A performance deposit is hereby established for subdivision development. Said deposit shall be cash for each approved subdivision as follows:
 - a. ~~Three Thousand Dollars (\$3,000.00) for each subdivision of 10 lots or more.~~
 - b. ~~One Thousand Five Hundred Dollars (\$1,500.00) for each subdivision with less than 10 lots.~~
2. Performance deposits shall guarantee performance and pay costs incurred by the City which are not covered by the Improvement Warranty if not otherwise paid, to include but not be limited to:
 - a. ~~Damages to pre-existing curb and gutter, driveway approaches, sidewalk, pavement and other street improvements.~~
 - b. ~~Damages to utility systems.~~
 - c. ~~Storm water violations~~
 - d. ~~Construction pollution or illicit discharges~~
 - e. ~~Cleanup costs.~~
 - f. ~~Re-inspection fees.~~
3. When all or any part of the performance deposit is used by the City, the deposit shall be replenished up to the required amount before work continues.
4. The performance deposit shall be made as a condition precedent to the issuance of any permit. The performance deposit may be waived on certain permits at the discretion of Kaysville City.
5. The performance deposit is for use of the City and not intended to be used to provide funds for correction of any defects in construction in or pertaining to buildings or structures on the property for which the permit is used.
6. It shall be the responsibility and duty of the person or entity making the performance deposit to apply to and receive from the Public Works department an inspection of the property upon completion of improvements or suspension of work.
7. Upon satisfactory completion of improvements, the performance deposit shall be released to the depositor.
8. In the event any depositor fails within 180 days after the last inspection or suspension of work on such property to request and receive a final inspection for the property for which the performance deposit was made and request that the deposit be released, such depositor shall thereby be deemed to have waived, relinquished and forfeited all right to claim the

performance deposit. The City may thereafter transfer the available funds from the deposit to the general fund of the City or any other fund of the City.

19-3-3 Preliminary Plat Requirements

The preliminary plat shall be drawn to a scale not smaller than 100 feet to the inch. The plat and attached documentation may require, at the City's discretion shall show:

1. The proposed name of the subdivision (there shall be no duplication of subdivision names within Kaysville City).
2. The subdivision location as forming a part of a larger tract or parcel, where the plat submitted covers only a part of the Subdivider's tract or only a part of a larger vacant area. In such case, a sketch of the prospective future street system of the part submitted shall be considered in light of adjustments and connections with the future street system of the larger area. The preliminary plat shall show all property owned or optioned by the Subdivider pertaining to the proposed subdivision at hand. This information may be required as a separate drawing.
3. Sufficient information to locate accurately the property shown on the plat, including a clearly defined basis of bearing for the survey as well as the date of the survey. The nearest section corner tie must be shown.
4. The names and addresses of the Subdivider, the engineer or surveyor of the subdivision, and the names of the owners of the land immediately adjoining the land to be subdivided shall be shown on the preliminary plat.
5. Contours at two-foot intervals to show the topography of the land shall be shown.
6. The boundary lines of the tract to be subdivided, including total acreage proposed for subdivision.
7. The locations, horizontal alignments, vertical alignments, widths, and other dimensions of all existing or platted streets and other important features such as easements, railroad lines, water courses (including irrigation canals and ditches), exceptional topography, bridges and buildings within and in the vicinity of the tract to be subdivided.
8. Existing power lines, sanitary sewer, storm drains, water supply mains, and culverts within the tract and immediately adjacent thereto.
9. The flood hazard boundaries, if applicable.
10. The locations, widths, and other dimensions of proposed public streets, private streets, utility easements, parks, other open spaces and lots, with proper labeling of spaces dedicated to the public, or designated as private streets.
11. Buffer zones where non-compatible uses adjoin a proposed subdivision.
12. North point, scale, and date.
13. The proposed layout, dimension, and number of each lot.
14. Proposed construction and permanent fencing along appropriate subdivision boundaries as determined by the Planning Commission. The fencing shall be as indicated in the Subdivision Standards.
15. A review copy of proposed protective covenants, if applicable.
16. A statement of the existing zoning and conformance with the General Plan.
17. A preliminary storm drainage study, with schematic solutions and the associated calculations.

18. Storm water quality infrastructure and facilities, including LID facilities and/or storm water treatment facilities as described in the City's LID manual with associated calculations. Calculations shall include a Water Quality Report (WQR), as described in the City's LID Manual.

18.

19. Depending on site conditions or complicating factors, the City may require a written geotechnical report for the proposed development site that addresses includes (but is not limited to) general soils classifications, depth to seasonally high groundwater, assessment of the capability of the existing soils to allow infiltration and potential for geological hazards if water is infiltrated at the site.

20. A storm water proposed maintenance agreement for all storm drainage or conveyance/retention/treatment/detention facilities owned and maintained privately (outside of City right of way or City owned property) between the City and the facility owner(s). Said agreement shall be recorded with the plat and transfer to subsequent owners of said property and/or facilities.

21. A proposed maintenance agreement for all storm water quality infrastructure that is to be owned and maintained privately (outside of City right of way) between the City and the facility owner(s). Said agreement shall be recorded with the plat and transfer to subsequent owners of said property and/or facilities.

22. Plans or written statements regarding the proposed storm water drainage facilities and other proposed special improvements such as sidewalks, planting and parks, and any grading of individual lots.

23. Plans and written statements regarding the proposed groundwater drainage facilities. If groundwater drainage systems are required, LID infiltration facilities may not be required. The City's LID Manual will guide and/or dictate the approach if infiltration shall not or cannot be utilized.

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19-5-1 Arrangement Of Streets

The arrangement of streets shall provide for access to and circulation within the vicinity of the subdivision and the continuation of streets in lands adjoining the subdivision, as determined by the City Engineer. The street arrangement shall not cause unnecessary hardship for maintenance crews or owners of adjoining property when they plat their own land and seek to provide for convenient access to it. Half streets along the boundary of land proposed for subdivision or within any part of a subdivision will not be permitted.

19-5-2 Streets

1. **Major Streets.** Arterial, collector, and significant local streets shall conform to the width designated on the Major Street Plan wherever a subdivision falls in an area for which a Major Street Plan has been adopted. For areas where the street plan has not been completed at the time the preliminary plat is submitted to the Planning Commission, arterial, collector, or significant local streets shall be provided as required by the Planning Commission.
2. **Local Streets.** Local streets shall have a minimum width of fifty-five feet (55') with sixty-six feet (66') required for streets that will have greater use as determined by the City Engineer.

3. **Cul-de-sac Streets.** Cul-de-sacs shall not be longer than six hundred feet (600') from the centerline of the adjoining street to the center of the cul-de-sac. Each cul-de-sac must be terminated by a turnaround of not less than 100 feet in diameter. If surface water drains into the turnaround due to the grade of the street, necessary catch basins and drainage systems and easements shall be provided. Cul-de-sacs shall be limited to a length of five hundred feet (500') from the centerline of the adjoining street to the center of the cul-de-sac and contain no more than fifteen (15) lots (for this subsection, a lot is defined as a parcel being accessed by the cul-de-sac that contains no more than one City culinary water service connection). If a proposed cul-de-sac is designed greater than two hundred feet in length (200') and within five hundred feet (500'), measured from any point along the centerline, of another proposed cul-de-sac greater than two hundred feet (200') in length, then those two streets must instead be connected to each other. Each cul-de-sac must be terminated by a turnaround of not less than 100 feet in diameter. If surface water drains into the turnaround due to the grade of the street, necessary catch basins and drainage systems and easements shall be provided.
4. **Temporary dead-ends and turning area.** Where a street longer than one lot is designed to remain only temporarily as a dead-end street, the following shall apply:
 - a. The continuation of that street to another public street connection shall be started within one year of the City accepting the improvements of the temporary dead-end. Otherwise, the temporary dead-end will be subject to the requirements of subsection (3) of this chapter.
 - b. Where the street dead-ends into a subsequent phase of the same subdivision, a temporary, graveled 80-foot diameter turnaround and a permanent easement of right-of-way on the subsequent phase property shall be provided. However, if the subsequent subdivision phase is not recorded at the time of roadway paving in the preceding phase, an 80-foot diameter asphalt-surfaced turnaround shall be placed on the subsequent phase property.
 - c. Where the street dead-ends against property which is not part of a subsequent subdivision phase, either a bubble inside the subdivision as shown in the Standard Drawings, or an asphalted 80-foot diameter turnaround, along with a permanent easement of right-of-way from the adjacent property owner, shall be placed. If a bubble inside the subdivision is provided, the Subdivider shall pay to the City an amount equal to the cost of removing the bubble and installing standard street improvements and landscaping.
5. **Intersections.** The intersection of more than two streets at one point shall not be allowed. Streets shall intersect at a ninety degree (90°) angle. Street intersections shall be rounded with a minimum radius of twenty-five feet (25') measured at the back of curbs.
6. **Standard Street Sections.** All streets, whether existing or proposed, shall be made to conform to the City Street Cross Section Standards as adopted by the City. Existing streets shall be profiled and redesigned to full street width far enough beyond the subdivision boundaries to drain and function properly.

7. **Street Grades.** Street grades shall not exceed the following percentages: on arterial streets eight percent (8%); on local and collector streets ten percent (10%). Street grades near intersections shall be designed for adequate stopping and starting by adjusting grades on both sides of the intersection. Grades on all cul-de-sac streets shall be a minimum of 1.0% and on all other streets shall be a minimum of 0.5% unless specifically authorized by the City Engineer. The cross slope of the street cross section is defined on the standard drawings. The maximum difference in curb elevations shall not exceed one foot (1'), and then only with the approval of the City Engineer.
8. **Alleys.** Alleys shall have a minimum width of twenty-six feet (26'). Alleys may be required in the rear of business lots, but will not be accepted in residential blocks except under unusual conditions where such alleys are considered necessary by the Planning Commission.
9. **Bridges.** Design and construction of new bridges, whether essential for the overall circulation plan of the City or required only to serve a subdivision, shall be approved in advance by the City.
10. **Protection Strips.** Where subdivision streets parallel contiguous property of other owners, the Subdivider may retain a protection strip of not less than one foot (1') in width between the street and adjacent property. Protection strips will be allowed only at the discretion of the City Council, after recommendation of the Planning Commission, and in accordance with all City ordinances. An agreement with the City, approved by the City Attorney, shall be made by the Subdivider, contracting to dedicate the one foot or larger protection strip free of charge to the City for street purposes upon payment by the present owners of the contiguous property to the Subdivider of a consideration named in the agreement. Such consideration is to be equal to the cost, at the time of the agreement, of the street improvements properly chargeable to the contiguous property, plus the value of the land from the right-of-way line to the centerline of the street at the time of the agreement, together with interest at a fair rate from the time of agreement until the time of subdivision of such contiguous property. All charges to be associated with the protection strip, as well as the interest rate, shall be recorded as part of the aforementioned agreement. All property owned by the Subdivider shall be included on both the preliminary and final plat.
11. **Excavations and Fills.** Subdivision development adjacent to the Great Salt Lake or its natural drainage channels, or within any marsh or wetlands which will result in any discharge of excavated or fill materials, may require obtaining a permit from the U.S. Army Corps of Engineers prior to the issuance of local permits for the deposition of fill material into any wetland or stream channel. This determination shall be made a part of the preliminary plat staff review.
12. **Names and Numbers.** Names of new streets shall not duplicate existing or planned street names unless a new street is a continuation of, or in the alignment with, the existing or platted street. House numbers shall be assigned in accordance with the House Numbering System in effect in the City. All new streets shall be numbered if they are in alignment with the grid. They shall be named if not in alignment with the grid.

19-6-2 Improvements Made Prior To Recording Final Plat

The improvements required by the City, including the improvements in each and every open space in the subdivision, shall be constructed and installed by the Subdivider and thereafter maintained by the Subdivider until after the warranty period and acceptance by the City. Improvements shall not be installed or constructed until their location and specifications have been approved by the City Engineer. In cases where a pioneer developer or the City has already acquired easements or rights-of-way or installed improvements subject to the Fee for Project Improvements provisions of KCC 19-6-4, no recording of the final plat or issuance of building permits shall be permitted or allowed until the Fee for Project Improvements provisions of said Section have been satisfied.

19-6-3 Improvements Required

The improvements shall include all street improvements in front of all lots and along all dedicated streets to a connection with existing improvements of the same kind or to the boundary of the development nearest existing improvements. Layout must provide for further extension to adjacent development and to be compatible with the contour of the ground for proper drainage. All water lines, sewer lines, and any other buried conduit shall be installed to the boundary lines of the development. The owner of any land located in or platted as a subdivision shall install the following improvements in compliance with the specifications contained in the Specifications and Standard Drawings:

1. Sewage Collection

- a. The Subdivider shall connect to the sanitary sewer and provide adequate lateral lines to the property line of each lot. Such sewer connections and subdivision sewer systems shall comply with the regulations and specifications of, and shall be approved by, the applicable Sewer District and Kaysville City. All sewer lines must be extended across the entire frontage of all existing streets and to the boundary of the subdivision on all existing or proposed City streets.
- b. Subdivisions using individual wastewater disposal systems are allowed in the area of Kaysville City which is three hundred feet (300') or more west of and at an elevation that cannot flow to the western most sewer main of the Central Davis Sewer District, if after review of all alternatives, the City Engineer determines that other alternatives are not reasonably available. Such subdivisions shall comply with the following:
 - i. The Utah Department of Health Regulations for Individual wastewater Disposal Systems including a feasibility review and certification by the Davis County Health Department.
 - ii. All lots shall be a minimum of two hundred ten thousand (210,000) square feet, be in the A-5 Heavy Agricultural District and comply with the provisions of that zone district.
 - iii. All systems shall be installed to accommodate and facilitate connection to public sanitary sewer facilities when they become available (i.e., structure plumbing oriented to connect to sewer mains, street oriented to facilitate sewage flow).
 - iv. Execution and recording of an agreement and lien upon the property, in form and substance satisfactory to the City, that the owners will pay their pro rata share of the costs of public sewer facilities to serve the property, when installed at the discretion of the City, including development fees and street repairs.

2. **Groundwater.** The Subdivider shall protect the structures from groundwater by:

- a. Digging at least one test hole per acre or part thereof, at locations approved by the City Engineer, and determining the depth of the groundwater table and the permeability and percolation rate of the soils. These tests shall be performed by a qualified soils engineer at the Subdivider's expense. If a groundwater drainage system is installed to City standards, with a lateral provided to each lot for a footing drain, this testing is not required.
 - b. Preparing a detailed groundwater plan for the subdivision showing the minimum level of all floors and crawl spaces. If any floor or crawl space is to be installed within one foot or below the groundwater table or where the permeability and percolation rate of the soil is not adequate, the Subdivider shall install a groundwater drainage system to City standards, with a lateral provided to each lot for a footing drain.
 - c. Making improvements to adequately remove groundwater and prevent groundwater entry into buildings, including crawl spaces.
 - d. Preventing the discharge of surface water drainage into the groundwater drainage system.
 - e. Following the requirements set forth in the City's LID manual.
3. **Storm Water.** A storm drainage plan has been prepared and is maintained by Kaysville City and Davis County. The Subdivider shall implement the portion of that plan applicable to the subdivision by:
- a. Preparing a detailed drainage plan for the subdivision which is acceptable to the City.
 - b. Making sufficient improvements, such as storm drains, cross gutters, catch basins, inlets, detention basins, LID facilities and other appurtenant structures, to adequately address the WQV and ~~for~~ dispose of 10-year frequency storm runoff within the subdivision and from adjacent properties. Said disposal system shall include the retention or treatment of the WQV, as detailed in the City's LID Manual. Storm drains shall be not less than fifteen inches (15") in diameter and meet City standards and specifications.
 - c. Providing for restriction of the runoff from the subdivision to 0.20 cubic feet per second per acre per 10-year frequency rainfall event through one or more of the following, at the direction of the City:
 - i. Conveyance (including easements) of the runoff to a regional detention/retention/treatment site and paying the subdivisions proportional share of the cost of the regional detention facility and conveyance to the main channel; or
 - ii. Dedicating land and constructing regional detention/retention/treatment within the subdivision and conveyance to the main channel, if said subdivision contains a proposed detention site. The Subdivider may be compensated for a portion of the cost of the regional detention and conveyance to the main channel for that which is not the proportional share for the subdivision; or
 - iii. Conveyance of the runoff to a site within the subdivision dedicated and constructed for detention and/or retention.
 - d. If the subdivision is within one hundred feet (100') of a main channel, complying with all Davis County Flood Control requirements and being approved by Davis County.
 - e. The storm drainage plan is not intended to and may not eliminate periodic accumulation of standing water on various lots in the subdivision during periods of heavy rainfall or runoff.
 - f. Unless otherwise directed or agreed to by the City Engineer, any infrastructure not located in a City right of way that is installed or used for the conveyance/treatment/detention of storm water shall require a Storm Water Maintenance Agreement to be approved by the

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Storm Water Official and shall be recorded with the Davis County Recorder's Office, as per KCC 9-3d-8.

4. **Culinary Water.** The Subdivider shall install water lines to make the water supply available to each lot within the subdivision, including laterals to the property line of each lot. The location and size of water mains shall be approved by the City Engineer. Unless otherwise directed by the City Engineer, subdivision water lines shall be a minimum of eight inches (8") in diameter and service laterals shall be a minimum of 3/4-inch in diameter. All water lines must be extended across the entire frontage of all existing streets and to the boundary of the subdivision on all existing or proposed City streets.
5. **Fire Hydrants.** Fire hydrants shall be installed as required. Such fire hydrants shall be of the type, size, and number as directed by the City, and installed in such locations as approved by the City. A fire hydrant shall also be placed at the end of every dead-end water line, including the end of cul-de-sacs.
6. **Irrigation Water.** Unless located east of U.S. 89, pressure irrigation shall be provided to each lot in residential subdivisions.
 - a. All gravity flow ditches through which water will continue to flow within a subdivision after its completion, whether to serve as irrigation water and/or waste flow to go from any adjacent property, shall remain in use and be piped with a minimum pipe size of at least 15 inches and shall be approved by the City Engineer and irrigation provider. Irrigation ditches which will not carry irrigation water and/or waste flow shall be removed.
 - b. The Subdivider shall install pressure irrigation lines to make pressure irrigation available to each lot within the subdivision including laterals to the property line of each lot. All plans and specifications for pressure irrigation systems shall be submitted to the City Engineer and irrigation provider. Such system must be approved by the City and irrigation provider. It shall be illegal for any person to connect together a culinary water system and a non-potable water system by any method.
 - c. The Subdivider shall comply with all the requirements of the pressure-irrigation provider and furnish proof thereof to the City.
 - d. Unless otherwise directed by the City, irrigation water and infrastructure shall remain isolated from and independent of storm water infrastructure, unless otherwise directed by the City.
7. **Street Grading and Surfacing.** All streets whether existing or proposed, shall be graded and surfaced, including a preventative maintenance seal coat, as directed by the City Engineer, applied on all new asphalt pavement in streets, in accordance with the standards and specifications of Kaysville City and the design for each street. Existing streets shall be modified to drain and function properly. Any pavement removed from existing streets shall be replaced within eight (8) working days of such removal.
8. **Curbs and Gutters.** Curbs and gutters shall be installed by the Subdivider on existing and proposed streets in accordance with all the appropriate specifications of Kaysville City. Curb and gutter shall be thirty inches (30") wide standard high back style, and shall be placed on twelve six inches (126") of compacted untreated base course as foundation materials.
9. **Street Drainage.** Street drainage and drainage structures shall be required where deemed necessary by the City Engineer. Drainage facilities and structures shall address storm water

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quality to comply with State and EPA regulations and ~~requirements~~, as outlined in the City's LID Manual.

10. **Sidewalks.** Sidewalks shall be installed ~~according to the specifications of Kaysville City along existing and proposed public streets~~ according to the specifications of Kaysville City. Sidewalks shall be at least four feet (4') wide with four inches (4") of compacted untreated base course material as foundation materials. Depth of sidewalks shall be four inches (4"), except at driveways, which shall be six inches (6").
11. **Active Transportation Improvements.** Subdivisions which include or are adjacent to an element of the Kaysville City Active Transportation Plan shall account for and install the applicable improvements including off street shared use paths and street improvements such as striping.
12. **Telecommunications Conduit.** ~~Unless otherwise directed by the City Engineer, C~~conduit for the purpose of housing telecommunications and internet infrastructure shall be installed in accordance with the Kaysville City Standard Drawings.
13. **Driveway Approaches.** All driveway approaches shall meet the following specifications:

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Specification	Residential	Type Commercial, Industrial, and Institutional
Minimum width	10 feet	10 feet
Maximum width	40 feet	40 feet
Minimum concrete thickness	6 inches	8 inches
Minimum base course thickness	12 inches	12 inches
Minimum distance between driveways	12 feet	12 feet
Minimum distance to the point of intersection of two property lines at any street intersection	20 feet	40 feet

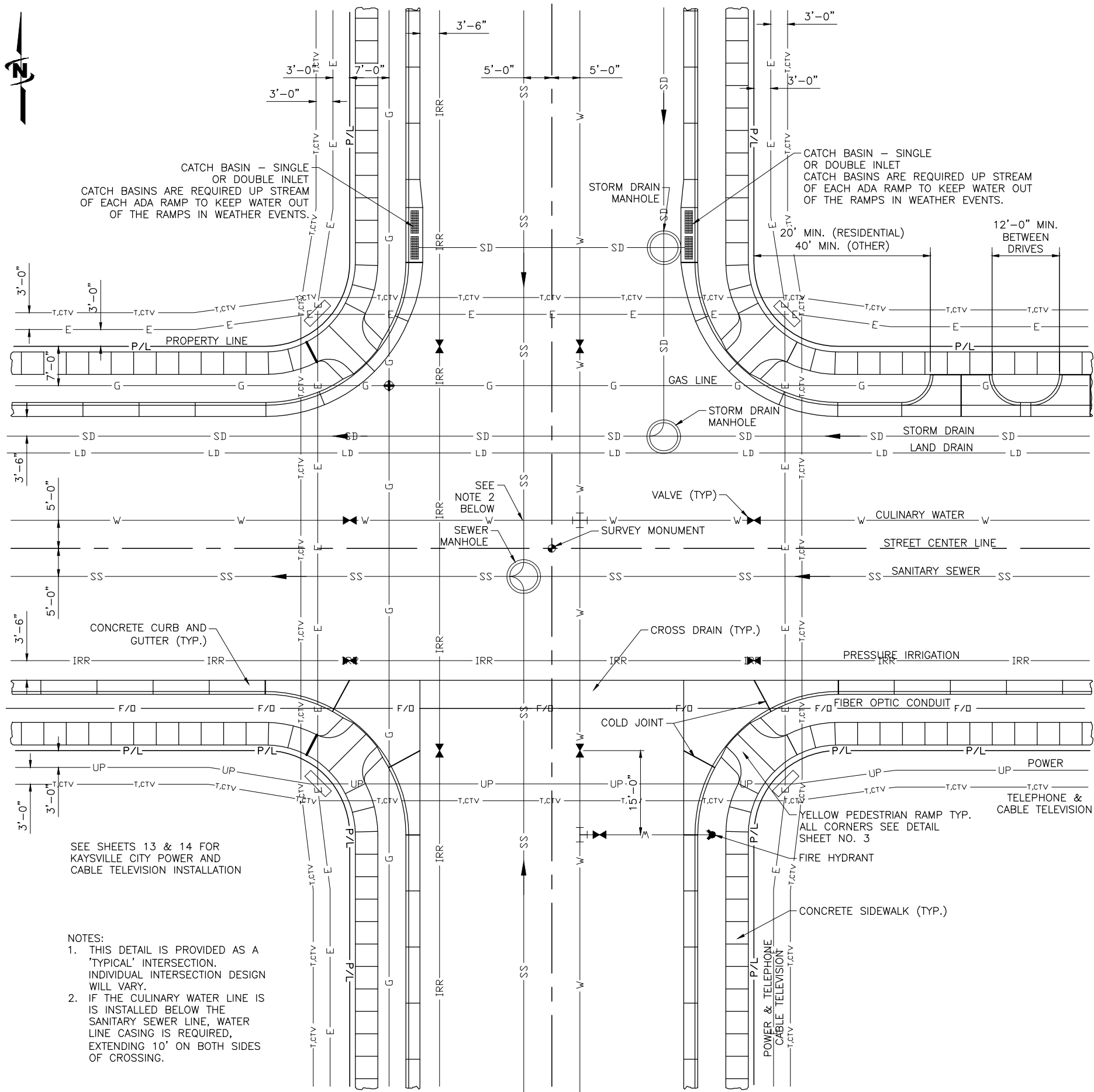
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14. **Monuments.** Permanent survey monuments shall be accurately set and established at the intersections of centerlines of streets within the subdivision and intersections with centerlines of existing streets and the beginning and ends of curves on centerlines or points of curvature or tangents. All permanent survey monuments shall remain in place, or be reset at the Subdivider's expense, after curbs, gutter, and sidewalks are installed. Monuments shall be of a type specified in City standards, and all subdivision plats shall be tied to a section corner or monument of record, as established by the Davis County Surveyor.
15. **Electric Power System.**
 - a. The Subdivider shall pay the cost of electric S)'stem extensions and street lights, installed by the City, to service the subdivision.
 - b. The Subdivider shall be responsible to facilitate the extension of electrical distribution lines by:
 - i. Planning the installation of utilities to each lot or site to be served to preclude conflict between other utilities and the electrical distribution lines.

- ii. Scheduling and coordinating the actual installation of improvements to allow adequate time for construction of electrical distribution lines.
 - iii. Notifying the Kaysville City Power Superintendent upon completion of adequate site preparation to allow installation of electrical distribution lines.
 - c. The Subdivider shall prepare the site for electrical distribution line installation before notifying Kaysville City to install said lines. Site preparation shall include but not be limited to:
 - i. Installation of curb and gutter indicating permanent grade.
 - ii. Markers installed on curb indicating property lines.
 - iii. The area extending from property side of sidewalk away from the street for ten (10) feet leveled to final grade.
 - iv. Utilities installed less than four feet (4') below final grade not extending beyond the property line more than twelve inches (12").
 - d. The Subdivider shall provide the trenching and excavations for installation of underground facilities unless waived by the City.
 - e. The Subdivider shall back fill, compact, test, and guarantee the back fill of excavations for underground facilities installed.
- 16. Street Signs.** The Subdivider shall pay the cost of traffic control, street identification, and other street signs, installed by the City, in accordance with City standards. The cost will be charged to the Subdivider and shall be paid before the plat is recorded. The improvement assurance in the subdivision will not be released until after payment of the costs incurred to install the necessary street signs has been made.
- 17. Fencing of Subdivision.** A permanent solid board, metal chain link (with opaque slats if required), masonry, or other similar fence not less than six feet (6') in height shall be installed prior to the start of building construction along all boundaries with properties adjacent to the subdivision where adjacent uses are found to be non-compatible by the Planning Commission. In addition, temporary construction fencing shall be installed along appropriate boundaries or where required to contain blowing refuse prior to the start of building construction, as recommended by the City Engineer. The construction fence shall remain in place until 90% of the lots are built on. The construction fence shall be type "D" field fence as given in the specifications. Upon installation of the permanent fence by the Subdivider, and approval by Kaysville City, individual property owners shall assume full responsibility for maintenance of fences or portions of fences constructed upon their property and shall not hold Kaysville City responsible for any and all defects of workmanship, maintenance, repair, and liabilities of any nature arising from the construction or intended use of said fences. In situations where a temporary construction fence and a non-climbable permanent fence coincide, the non-climbable permanent fence shall take the place of the temporary construction fence and shall be constructed prior to the beginning of construction within the subdivision.
- 18. Marking of Lots.** Survey markers shall be placed at all lot corners and at lot boundary locations to completely identify the lot boundaries on the ground. Lot corners shall be identified with permanent plugs in the sidewalk or back of the curb or with a metal pipe or rod driven into the ground if sidewalks or curbs are not next to the lot boundary. All lot corners and lot boundaries shall be marked prior to the issuance of building permits, after the completion of all subdivision improvements and during building construction and inspections. It shall be the responsibility of

the lot owner to insure that all lot corner and boundary markers are in place. The City is not responsible to replace survey stakes or markers.

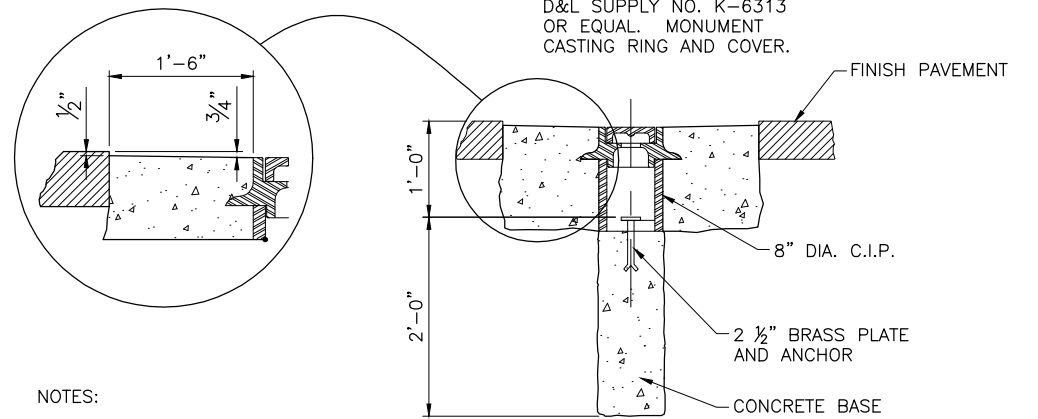
19. **Highway Noise Abatement.** Highway noise abatement, as determined through environmental studies and engineering analysis and approved by the Planning Commission, shall be provided in all residential subdivisions within three hundred feet (300') of a freeway or principal arterial. Noise abatement may include distance of noise sensitive uses from noise sources, landscaping, earth berms, and other mitigation. The Subdivider shall pay the entire cost of any noise abatement studies and noise abatement facilities.



SEE SHEETS 13 & 14 FOR
KAYSVILLE CITY POWER AND
CABLE TELEVISION INSTALLATION

- NOTES:
1. THIS DETAIL IS PROVIDED AS A 'TYPICAL' INTERSECTION. INDIVIDUAL INTERSECTION DESIGN WILL VARY.
 2. IF THE CULINARY WATER LINE IS INSTALLED BELOW THE SANITARY SEWER LINE, WATER LINE CASING IS REQUIRED, EXTENDING 10' ON BOTH SIDES OF CROSSING.

TYPICAL STREET IMPROVEMENT PLAN
SCALE: N.T.S.



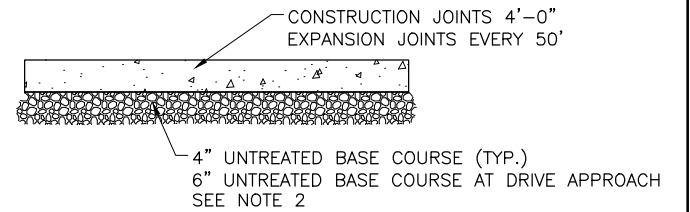
NOTES:

1. CONCRETE COLLAR TO HAVE 12" MIN. THICKNESS.
2. CONCRETE TO BE CLASS A 5 1/2 OR 6 BAG MIX.

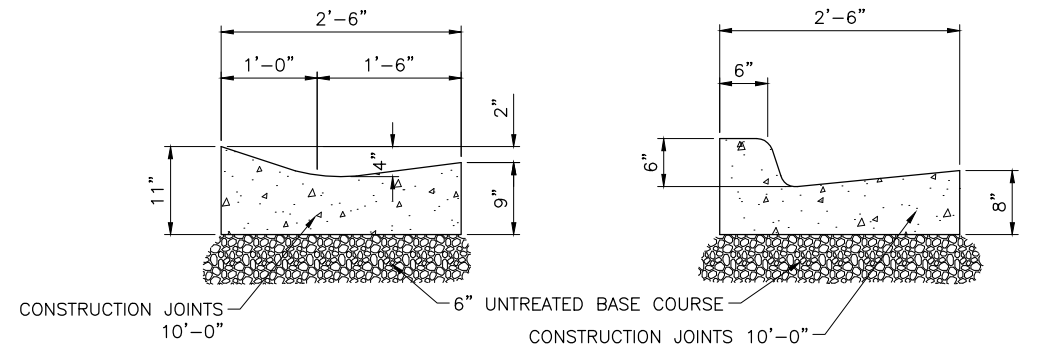
1 SURVEY MONUMENT SECTION
SCALE: N.T.S.

NOTES:

1. SIDEWALK TO BE 6" THICK OVER 6" BASE IN RESIDENTIAL AND COMMERCIAL DRIVE APPROACHES
2. 1" MINUS WASHED ROCK WHEN REQ'D BY KAYSVILLE CITY (WET CONDITIONS).
3. BASE COURSE TO BE AT 96% COMPACTION (TYP).
4. IF CRACKS ARE 1/8" OR LARGER, SIDEWALK OR CURB AND GUTTER WILL NEED TO BE REPLACED.

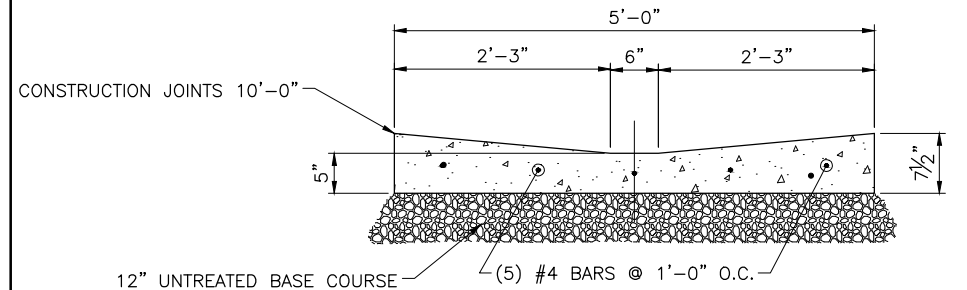


2 SIDEWALK SECTION
SCALE: N.T.S.



3 STANDARD ROLLED GUTTER*
SCALE: N.T.S.
*USE OF ROLLED GUTTER MUST BE APPROVED BY ENGINEER

4 STANDARD CURB
SCALE: N.T.S.



5 CROSS DRAIN SECTION
SCALE: N.T.S.

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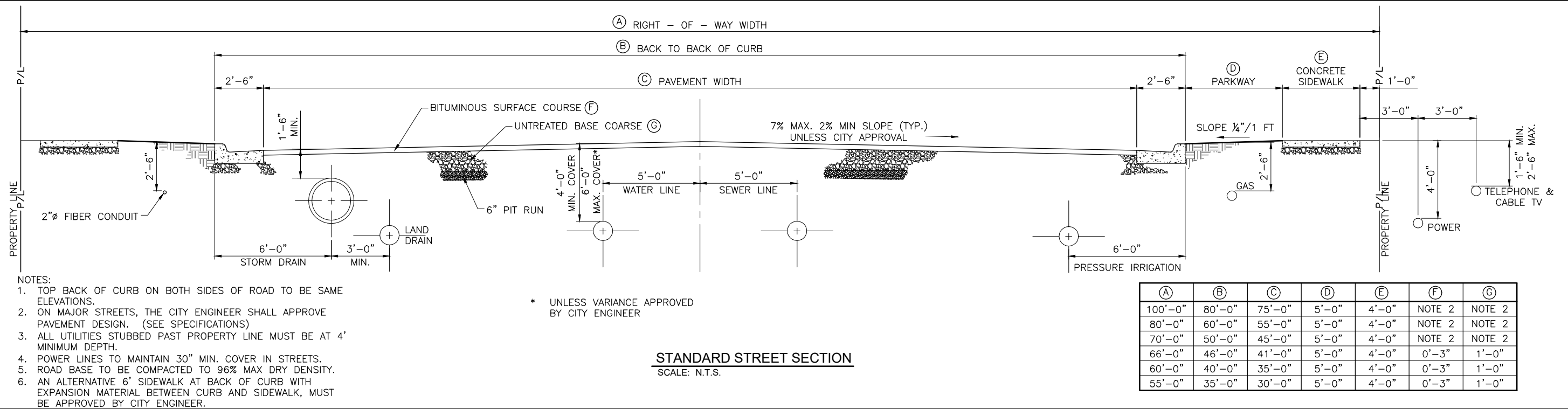
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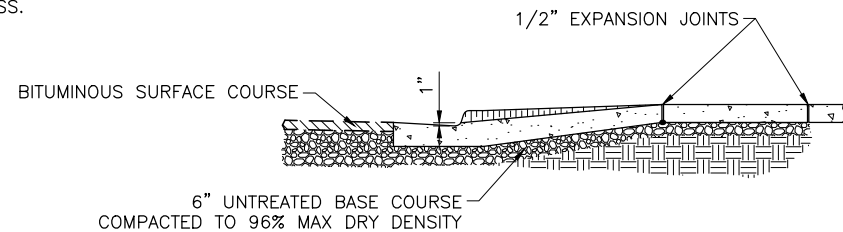
**KAYSVILLE CITY CORPORATION
DEVELOPMENT STANDARDS**

STANDARD STREET
IMPROVEMENTS

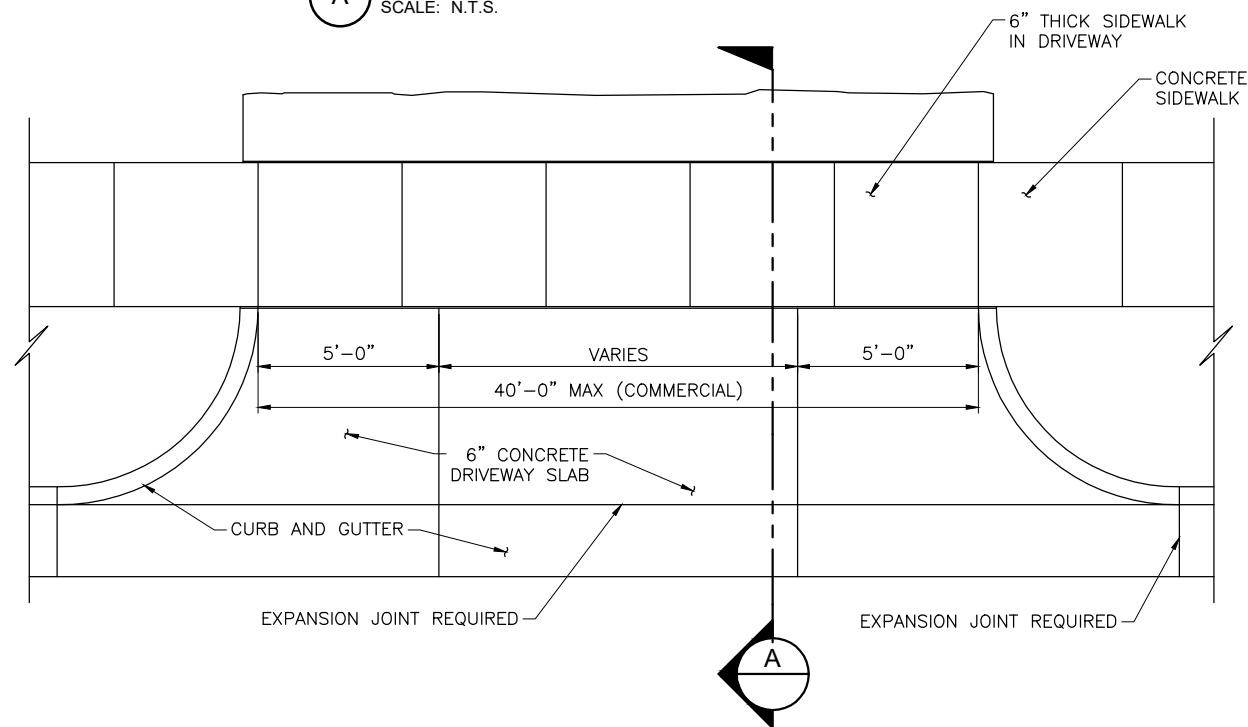
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Data Created: 1/19/2021 1:04:58 PM Project: 210101 KAYSVILLE STANDARD STREET SECTION DRIVEWAY DETAILS.DWG



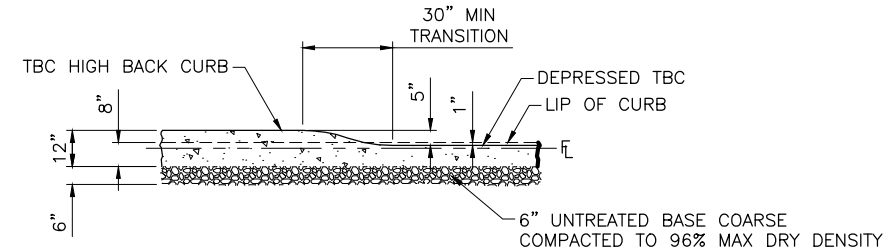
- NOTES:
1. SCRIBE SIDEWALK 1/2" DEPTH AT EACH 4'-0"
 2. EXPANSION JOINT REQ'D AT NEW AND OLD INTERFACE AND/OR AT CHANGE IN CONC. THICKNESS.



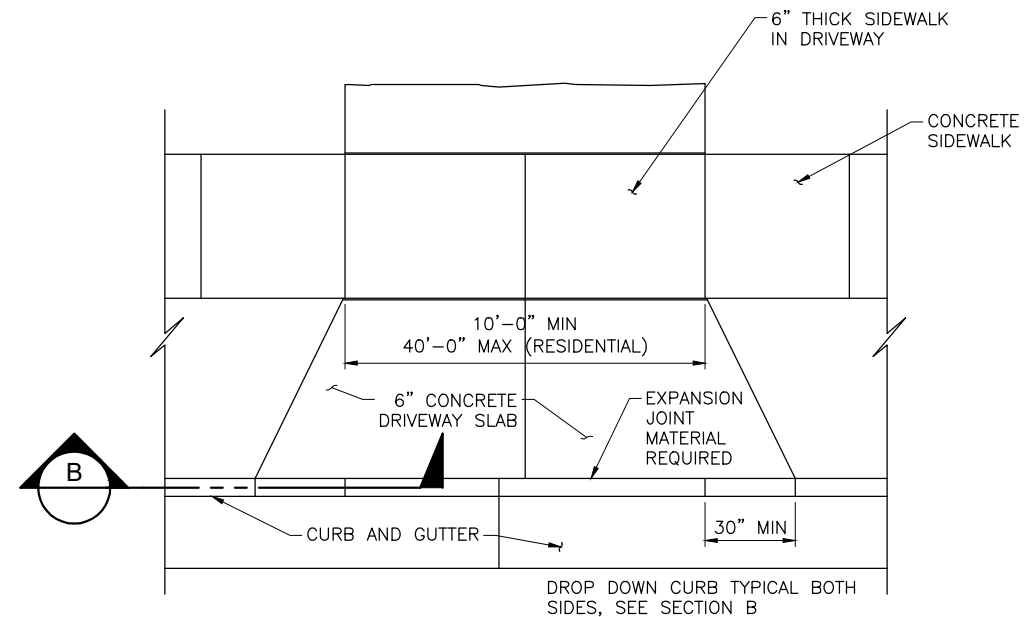
A DRIVE APPROACH SECTION
SCALE: N.T.S.



1 TYPE 1 - COMMERCIAL DRIVEWAY APPROACH
SCALE: N.T.S.



B CURB SECTION
SCALE: N.T.S.



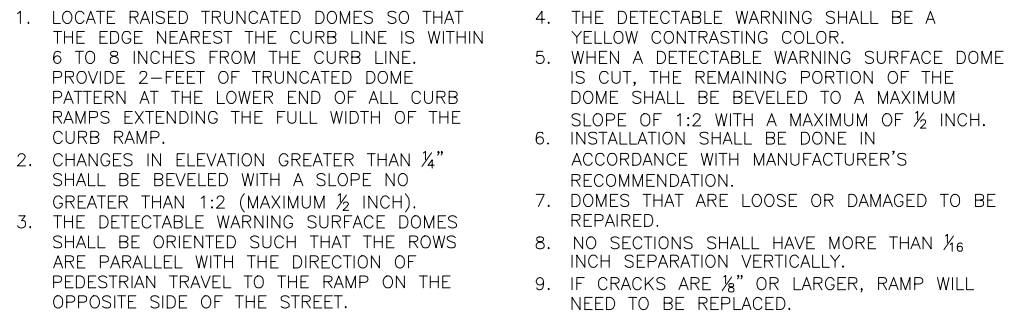
2 TYPE 2 - RESIDENTIAL DRIVEWAY APPROACH
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NO.	REVISION DESCRIPTION	BY	DATE		

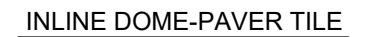


KAYSVILLE CITY CORPORATION
DEVELOPMENT STANDARDS
STANDARD STREET SECTIONS
AND DRIVEWAY DETAILS

1. 600'-0" MAX DISTANCE FROM CENTERLINE OF ADJOINING STREET TO RADIUS OF CUL-DE-SAC.
2. CUL-DE-SAC SHOULD BE USED ONLY WHERE UNUSUAL CONDITIONS EXIST.



TYPICAL RAMP PLAN
SCALE: N.T.S.

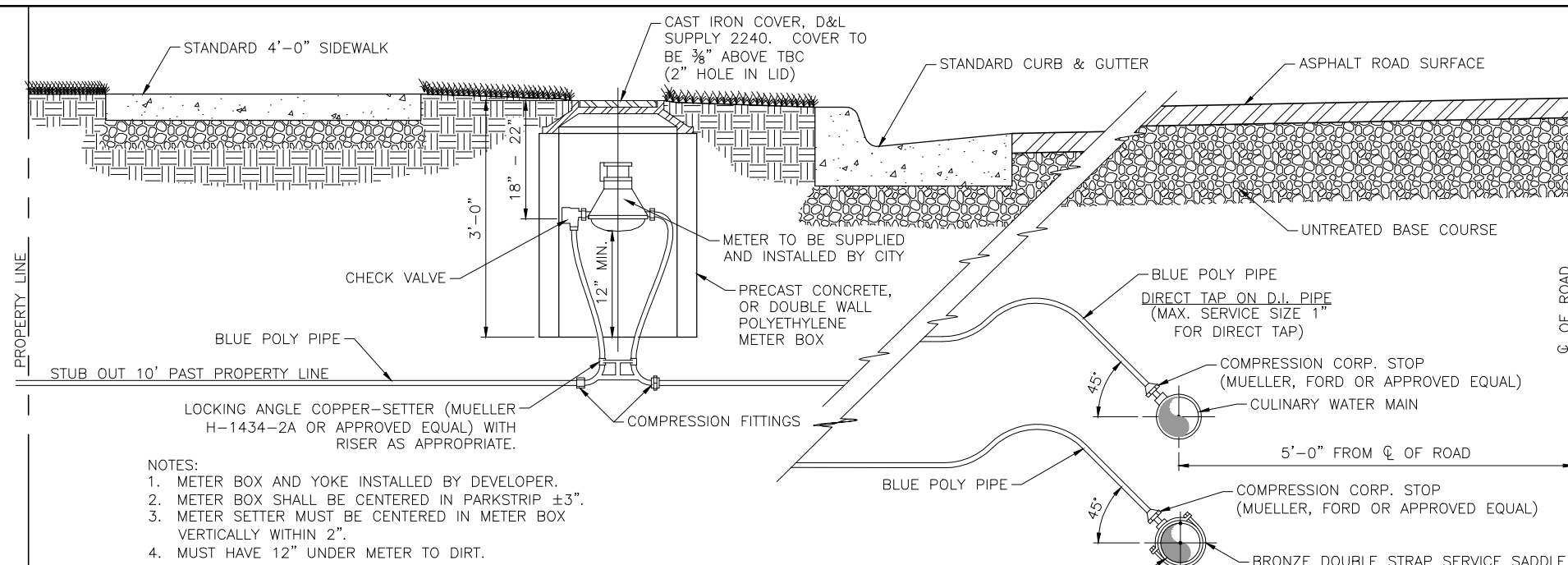


1 DETECTABLE WARNING SYSTEM DETAIL
SCALE: N.T.S.

KAYSVILLE CITY CORPORATION
DEVELOPMENT STANDARDS

TYPICAL CUL-DE-SAC AND
PEDESTRIAN RAMP

SHEET
3

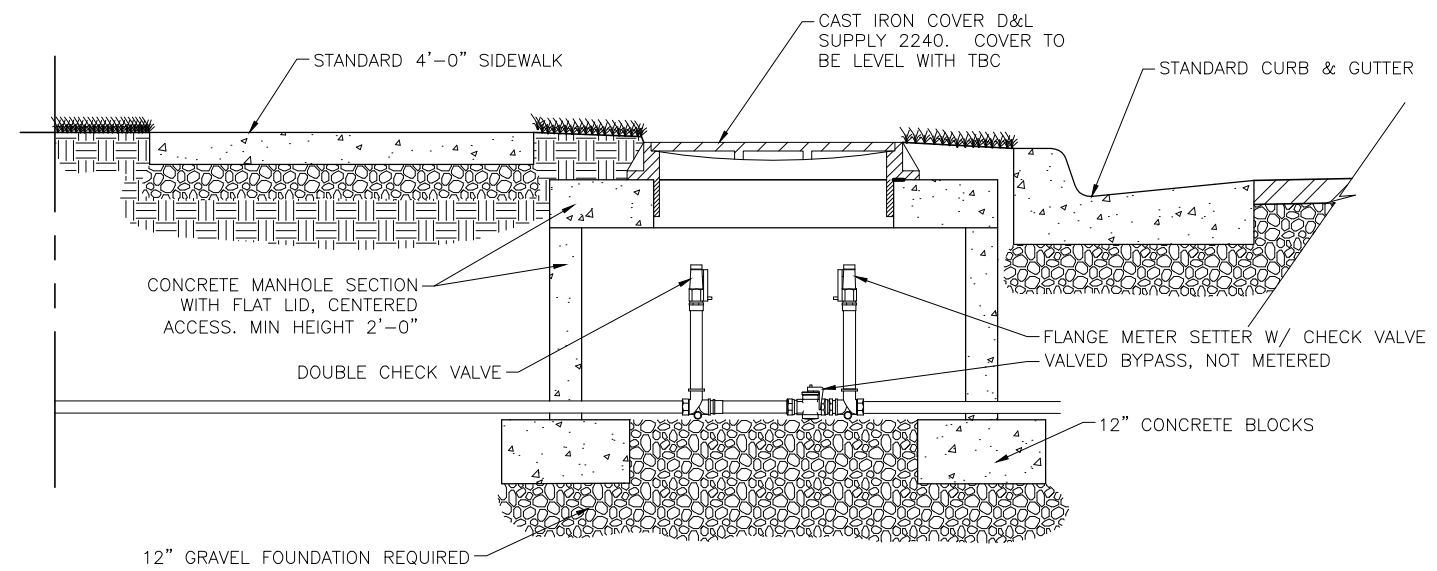


- NOTES:
1. METER BOX AND YOKE INSTALLED BY DEVELOPER.
 2. METER BOX SHALL BE CENTERED IN PARKSTRIP ±3".
 3. METER SETTER MUST BE CENTERED IN METER BOX VERTICALLY WITHIN 2".
 4. MUST HAVE 12" UNDER METER TO DIRT.

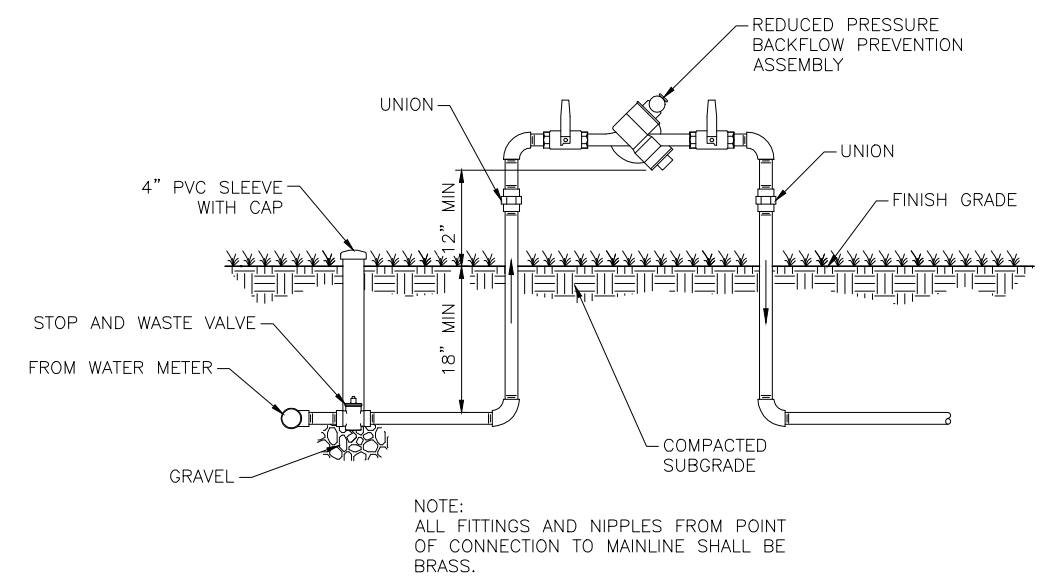
KAYSVILLE CITY CORPORATION WATER SERVICE INFORMATION						
SERVICE SIZE	METER BOX SIZE	TYPE OF MATERIAL FOR METER BOX	WATER METER	CONNECTION TYPE	BYPASS	DIST. BETWEEN FLANGE
3/4"	18" DIA	CONCRETE, GALVANIZED, POLYETHYLENE	BY CITY	NPT	NO	---
1"	24" DIA	CONCRETE, GALVANIZED, POLYETHYLENE	BY CITY	NPT	NO	---
2"	48" DIA	CONCRETE	OCTAVE (TURBINE METER)	FLANGE	1"	15 1/4"
3"	60" DIA	CONCRETE	OCTAVE (TURBINE METER)	FLANGE	1"	*
4"	4'X6' BOX	CONCRETE	OCTAVE (TURBINE METER)	FLANGE	2"	*

*CONTACT KAYSVILLE CITY

3 TYPICAL WATER CONNECTION
SCALE: N.T.S.



1 TYPICAL FLANGED METER SETTER WATER CONNECTION
SCALE: N.T.S.



2 REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY
SCALE: N.T.S.

Plot Date: 1/20/2021 4:21 PM Plotted By: Mark Jenkins
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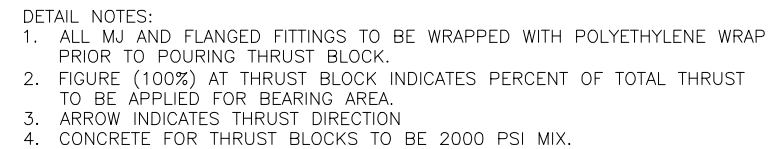


**KAYSVILLE CITY CORPORATION
DEVELOPMENT STANDARDS**
TYPICAL WATER SERVICE CONNECTION
DETAILS



EXAMPLE THRUST BLOCK CALCULATION:

- | | | | | |
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| NO. | REVISION DESCRIPTION | BY | APR | DATE |
| | | | | CHECKED BY: |

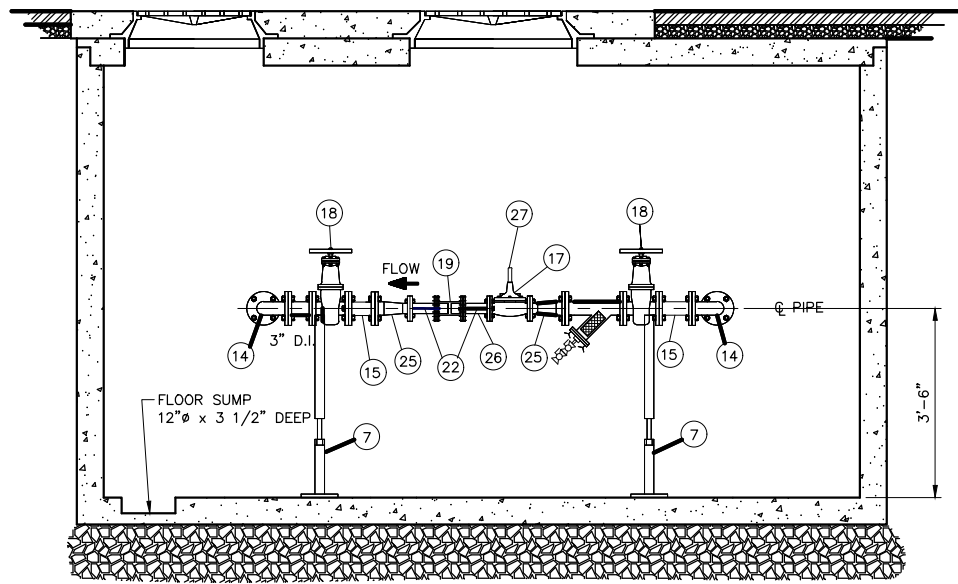


NOTE: MULTIPLY THRUST BY DEGREE OF DEFLECTION TO OBTAIN TOTAL THRUST

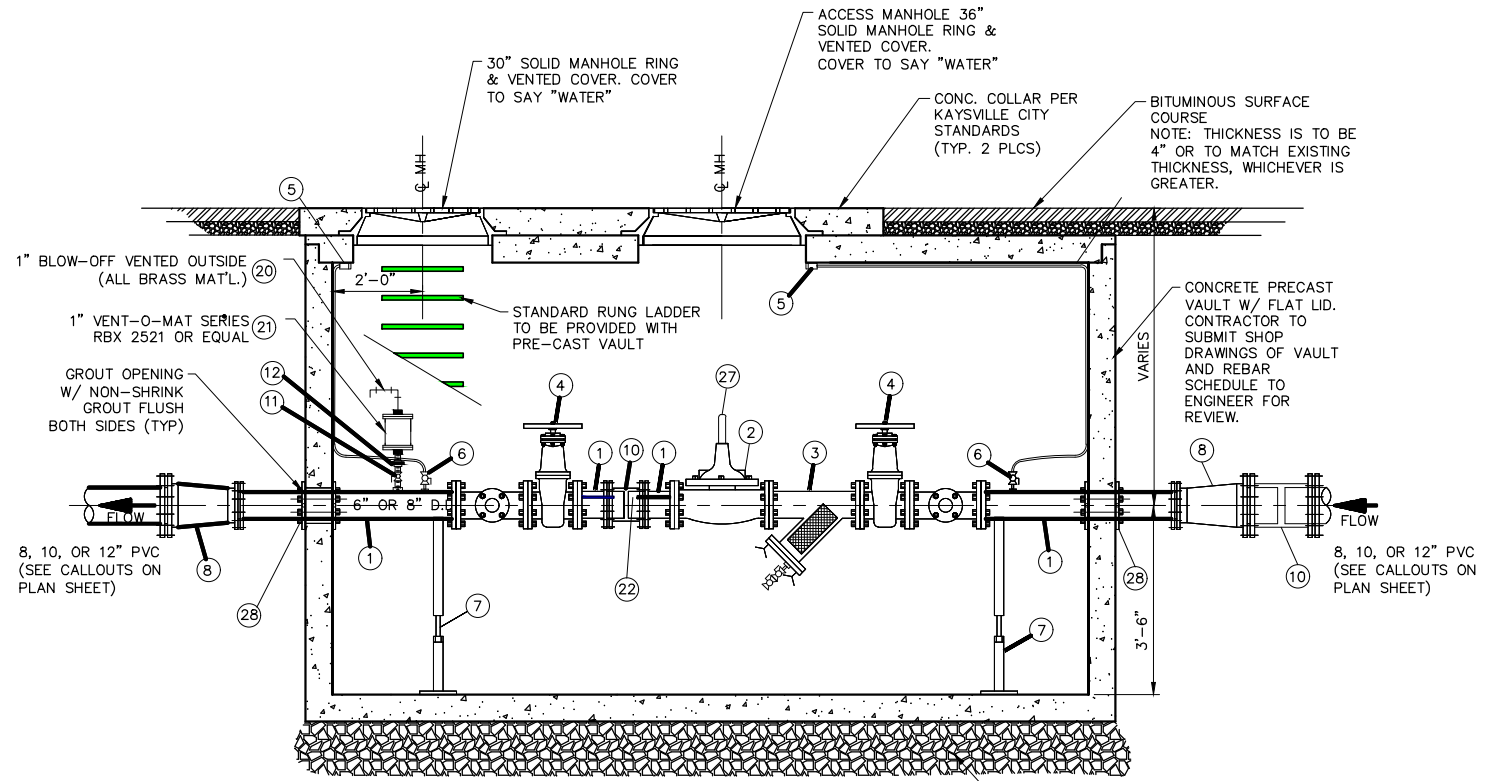
TABLE NOTES:

- 

HEET
5



3" BYPASS ELEVATION VIEW

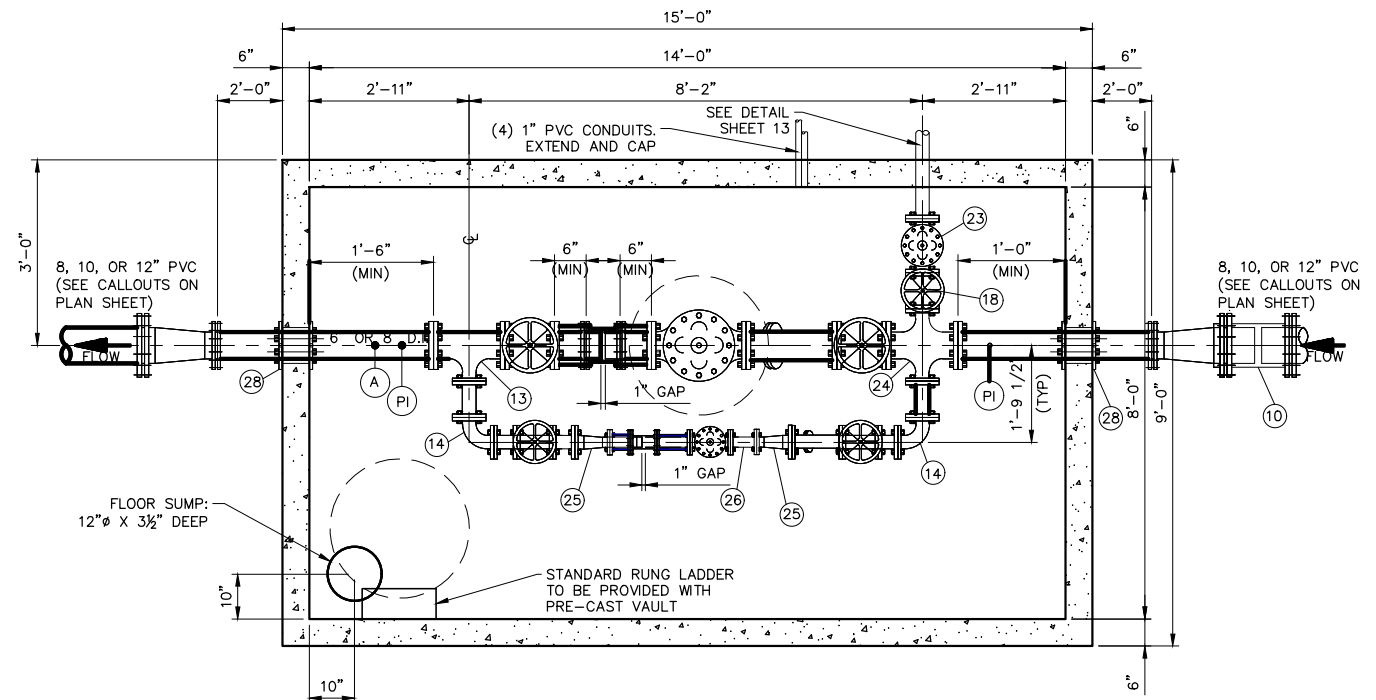


ELEVATION VIEW

MATERIAL LIST

MARK	DESCRIPTION	JOINT	SIZE IN INCHES	QUANTITY
1	DUCTILE IRON PIPE	FLxPE	6" OR 8"	AS REQ'D.
2	PRESSURE REDUCING VALVE [CLA-VAL #90-01]	FL	6" OR 8"	1
3	CAST IRON "Y" STRAINER – MUELLER STEAM SPECIALTY #752 WITH BALL VALVE & FAUCET/HOSE BIB TO FLUSH OUT SYSTEM	FL	6" OR 8"	1
4	GATE VALVE	FLG	6" OR 8"	2
5	ANCHOR FEMALE AIR HOSE QUICK CONNECT TO CEILING WITH ACCESS NEAR LID	SCR	–	2
6	BALL VALVE; CONNECT TO 1/4" AIR HOSE	SCR	f"	2
7	PIPE SUPPORT	N/A	N/A	4
8	DUCTILE IRON REDUCER	MJ/MJ	8,10, OR 12" X 6, OR 8"	2
9	BOLTS, NUTS, GASKETS, FOLLOWERS	AS REQ'D.	PER PLANS	AS REQ'D.
10	SLEEVE	MJ/MJ	6,8,10, OR 12"	2
11	BALL VALVE	SCR	1"	1
12	UNION	SCR	1"	1
13	REDUCING TEE	FL	6" OR 8" X 3"	1
14	90° ELBOW	FL	3"	2
15	DUCTILE IRON PIPE	FLxPE	3"	AS REQ'D.
16	CAST IRON "Y" STRAINER – MUELLER STEAM SPECIALTY #752 WITH BALL VALVE & FAUCET/HOSE BIB TO FLUSH OUT SYSTEM	FL	3"	1
17	PRESSURE REDUCING VALVE [CLA-VAL #90-01]	FL	2"	1
18	GATE VALVE	FLG	3"	3
19	SLEEVE	MJ/MJ	2"	1
20	BLOW-OFF (ALL BRASS MATERIAL)		1"	1
21	COMBINATION AIR VALVE, VENT-O-MAT SERIES RBX 2521 OR EQUAL		1"	1
22	RESTRAINING BOLT (TYP. 2 180° OFFSET)		3"	8
23	PRESSURE RELIEF VALVE [CLA-VAL #50-01]		3"	1
24	REDUCING CROSS		6" OR 8" X 3"	1
25	DUCTILE IRON REDUCER		3" X 2"	2
26	DUCTILE IRON PIPE		2"	AS REQ'D.
27	VALVE POSITION INDICATOR [CLA-VAL #X101]		FIT A 2", 6" OR 8" VALVE	2
28	MEGA LUG FOLLOWERS W/1/4" STEEL PLATES ON BOTH SIDES OF WALL		6" OR 8"	4

TYPICAL NOTE: ALL SMALL PIPE FITTINGS AT INSTRUMENTS AND AIR-VAC, ETC. NEED TO BE BRASS OR BRONZE



PLAN VIEW

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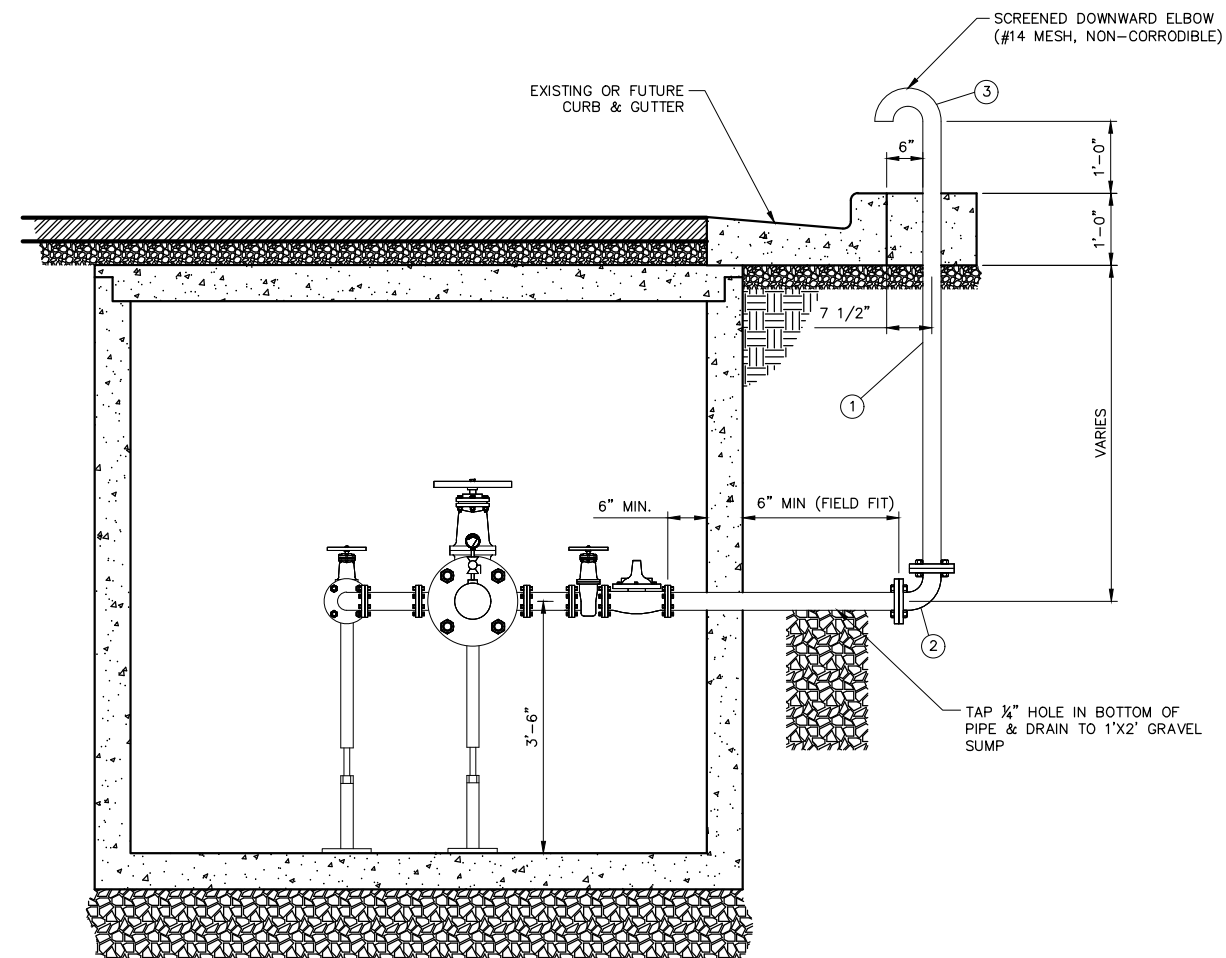


KAYSVILLE CITY CORPORATION
DEVELOPMENT STANDARDS
TYPICAL PRESSURE RELIEF VAVLE

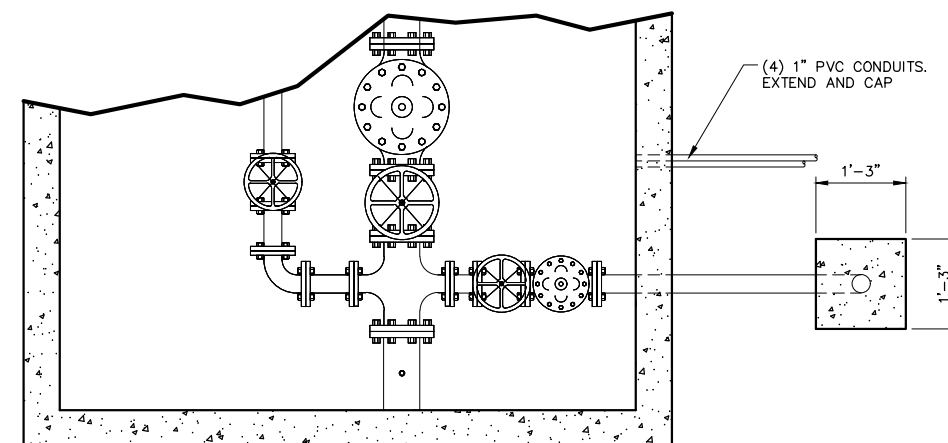
SHEET

7

Plot Date: 2/11/2021 3:37 PM Plotted By: Mark Jenkins
Data Created: 2/11/2021 UKAYS\PUBLIC\PROJECTS\B\KAYSVILLE\STANDARD\SCAD\08-PRESSURE RELIEF VALVE DETAILS.DWG



3" PRESSURE RELIEF ELEVATION VIEW



PLAN VIEW

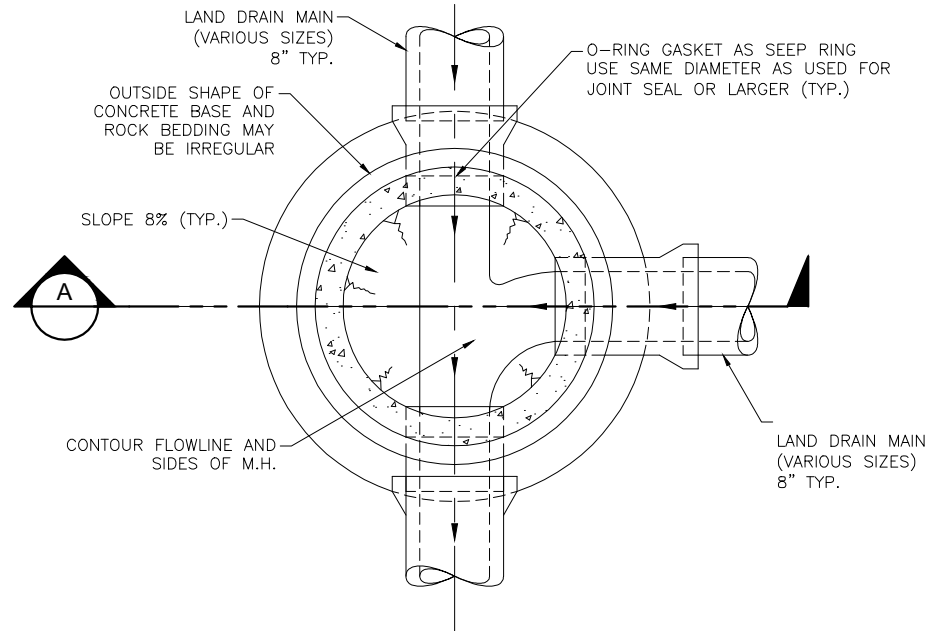
MATERIAL LIST

MARK	DESCRIPTION	JOINT	SIZE	QUANTITY
			IN INCHES	
1	DUCTILE IRON PIPE	FLxPE	3"	AS REQ'D.
2	90° ELBOW	FL	3"	1
3	SCREENED DOWNWARD (180°) ELBOW (#14 MESH, NON-CORRODIBLE)	FL	3"	1
4	BOLTS, NUTS, GASKETS, FOLLOWERS	AS REQ'D.	PER PLANS	AS REQ'D.

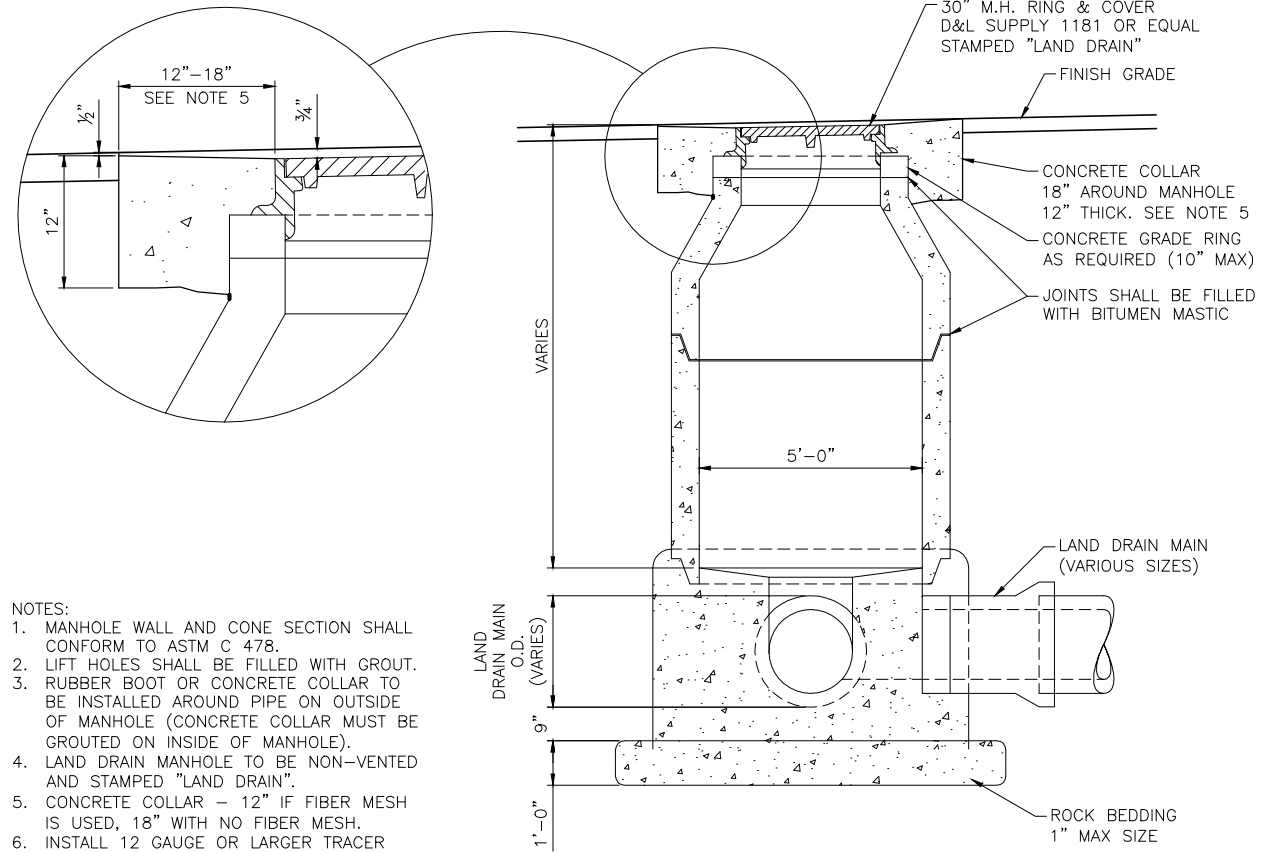
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				LAST UPDATED: 2/11/2021	
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KAYSVILLE CITY CORPORATION
DEVELOPMENT STANDARDS
TYPICAL PRESSURE RELIEF VALVE
DETAILS

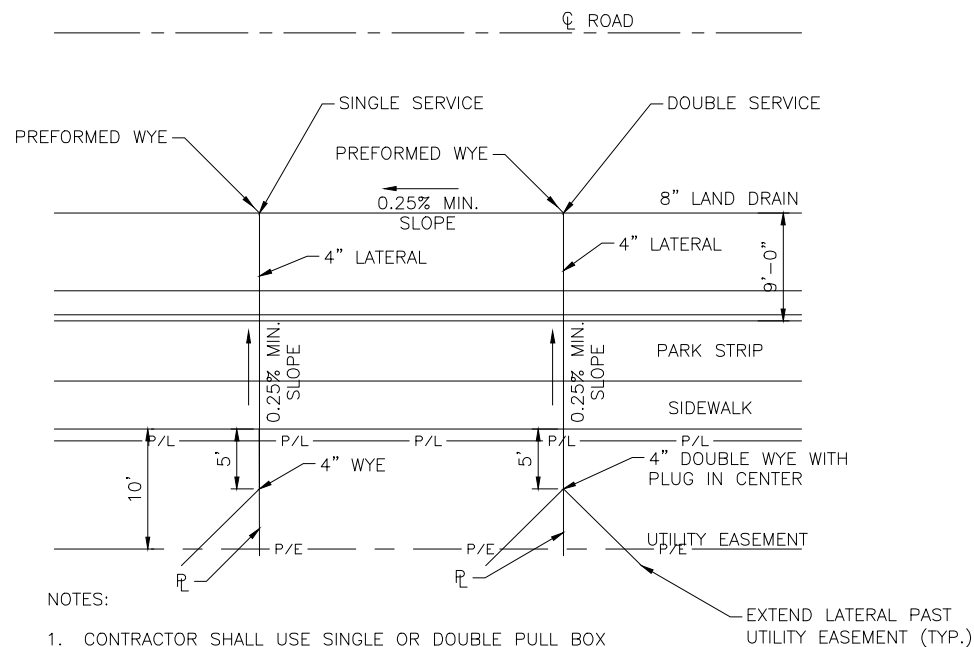


LAND DRAIN MANHOLE DETAIL
SCALE: N.T.S.

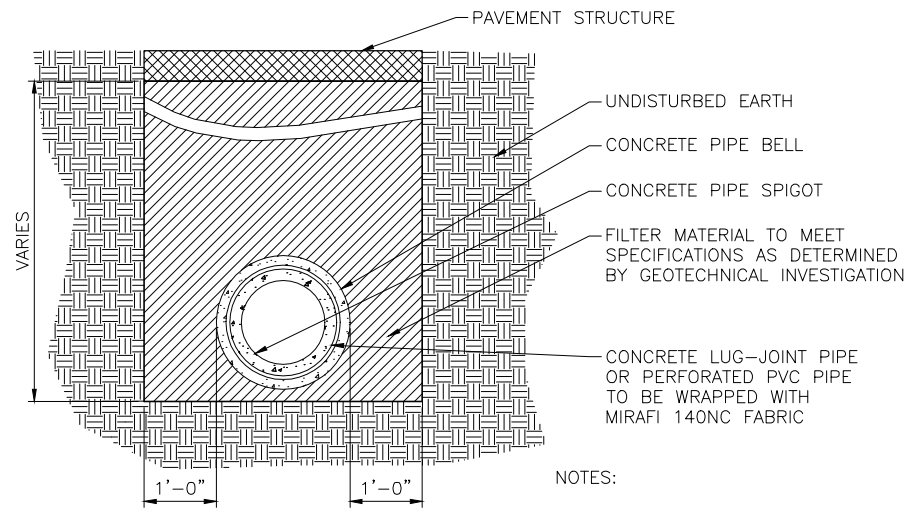


LAND DRAIN MANHOLE SECTION
SCALE: N.T.S.

- NOTES:
1. MANHOLE WALL AND CONE SECTION SHALL CONFORM TO ASTM C 478.
 2. LIFT HOLES SHALL BE FILLED WITH GROUT.
 3. RUBBER BOOT OR CONCRETE COLLAR TO BE INSTALLED AROUND PIPE ON OUTSIDE OF MANHOLE (CONCRETE COLLAR MUST BE GROUTED ON INSIDE OF MANHOLE).
 4. LAND DRAIN MANHOLE TO BE NON-VENTED AND STAMPED "LAND DRAIN".
 5. CONCRETE COLLAR - 12" IF FIBER MESH IS USED, 18" WITH NO FIBER MESH.
 6. INSTALL 12 GAUGE OR LARGER TRACER WIRE UP TO MANHOLE LID. NOTCH IN TOP OF CONE OR MANHOLE SECTION 1/4" WIDE x 1" DEEP SAWCUT FROM EXTERIOR TO INTERIOR OF MANHOLE

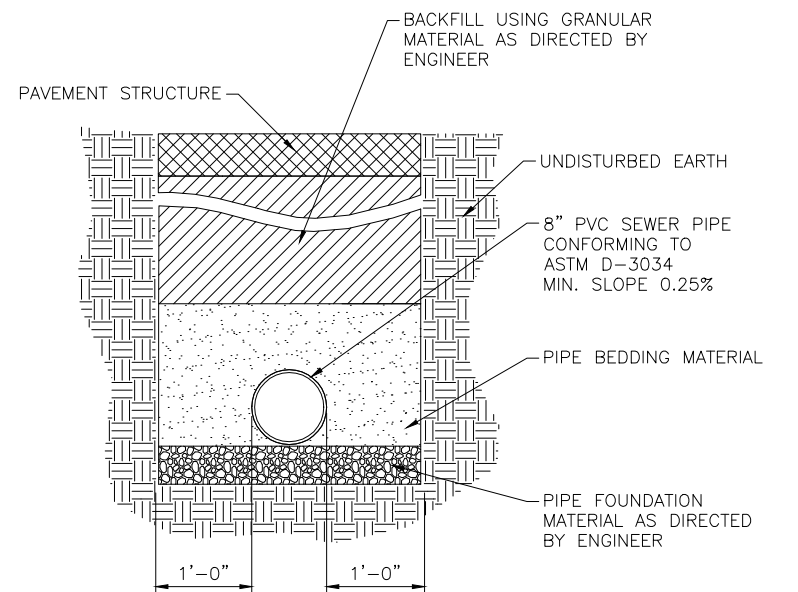


LAND DRAIN PLAN VIEW
SCALE: N.T.S.



LOOSE-JOINT LAND DRAIN SECTION
SCALE: N.T.S.

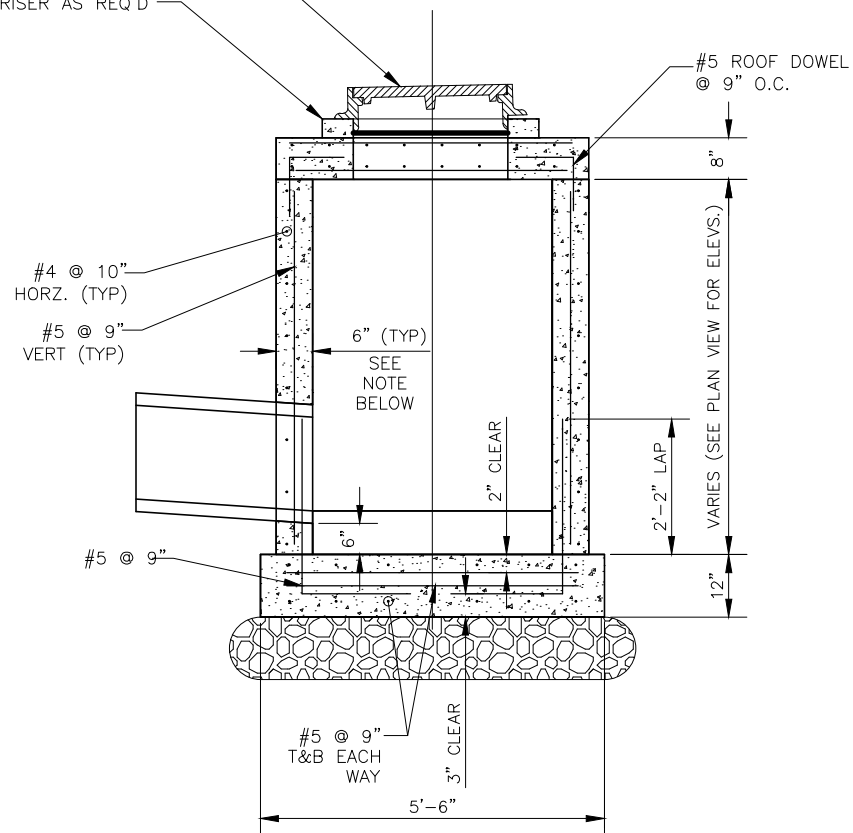
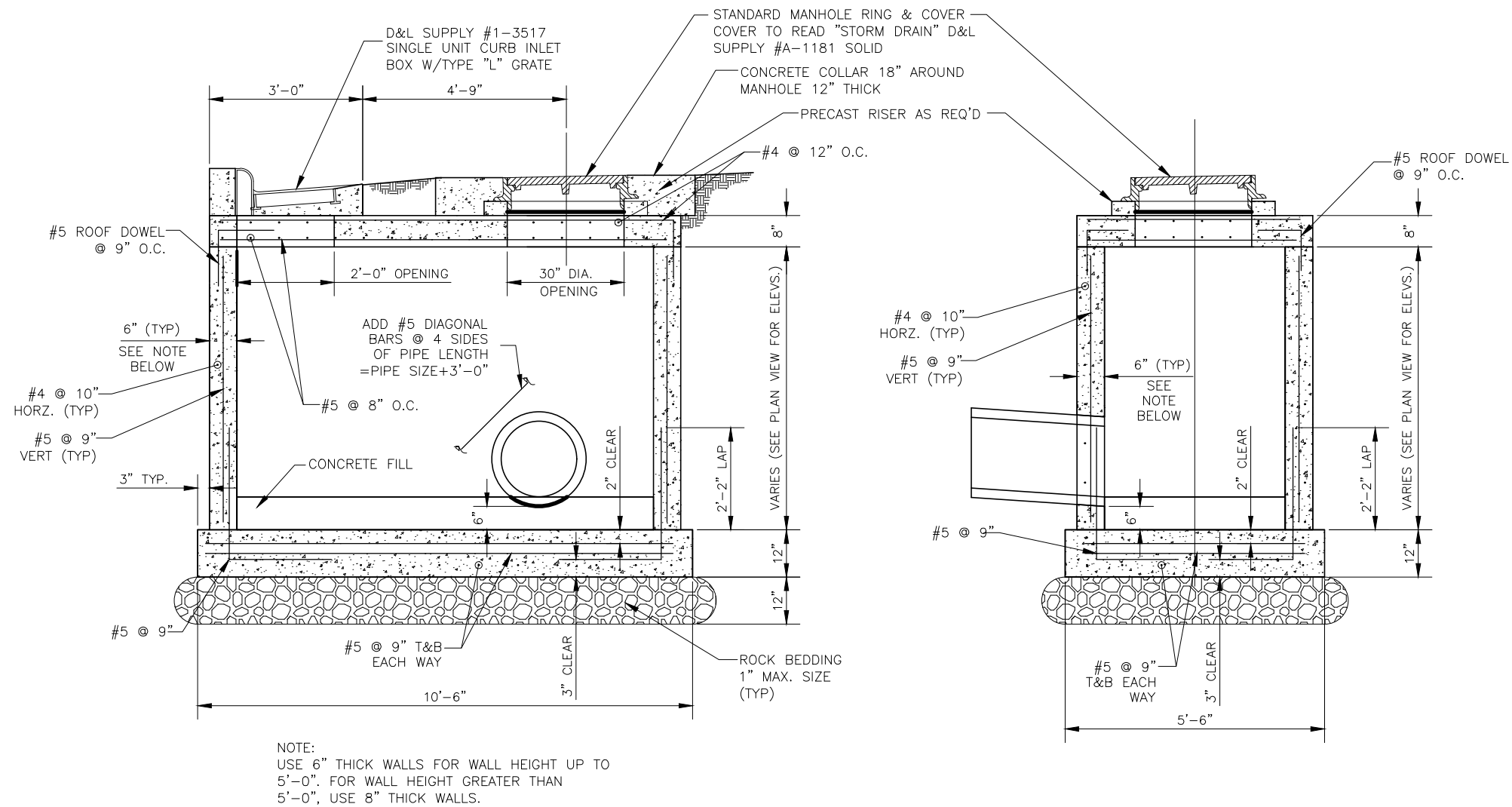
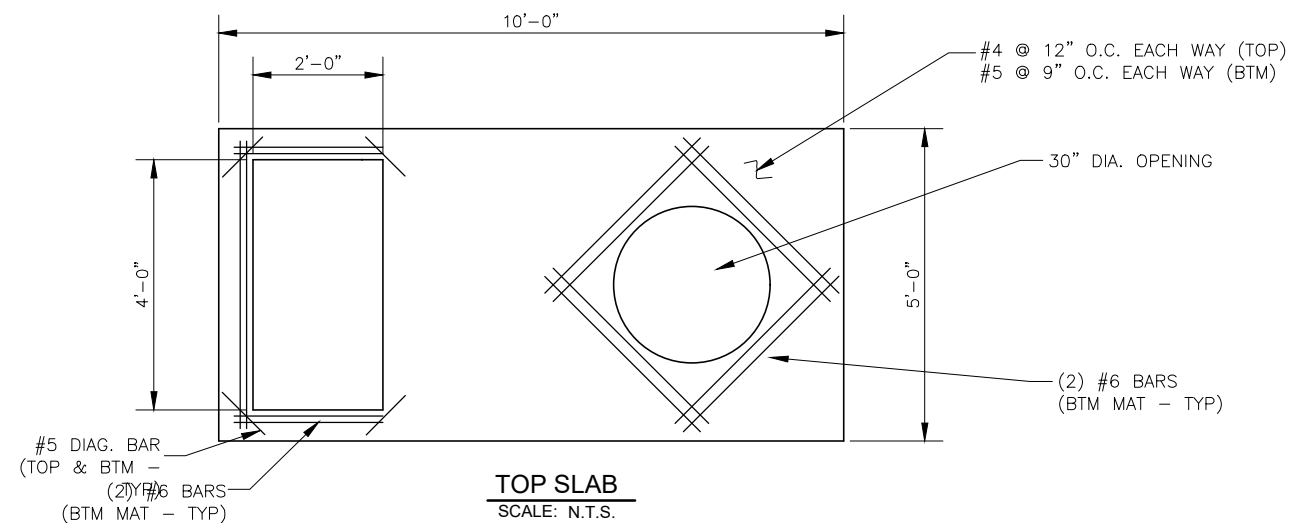
- NOTES:
1. CONTRACTOR SHALL USE SINGLE OR DOUBLE PULL BOX TO PROTECT WORKERS AND STABILIZE TRENCH SIDES.
 2. DEWATERING SHALL NOT ALLOW PIPING OF FINES.
 3. 500' MAX. MANHOLE SPACING
 4. BACKFILL USING GRANULAR FILTER MATERIAL TO MAXIMUM GROUNDWATER ELEVATION AS DIRECTED BY THE ENGINEER.



TIGHT-JOINT LAND DRAIN SECTION
SCALE: N.T.S.

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NO.	REVISION DESCRIPTION	BY	DATE	CHECKED BY:	



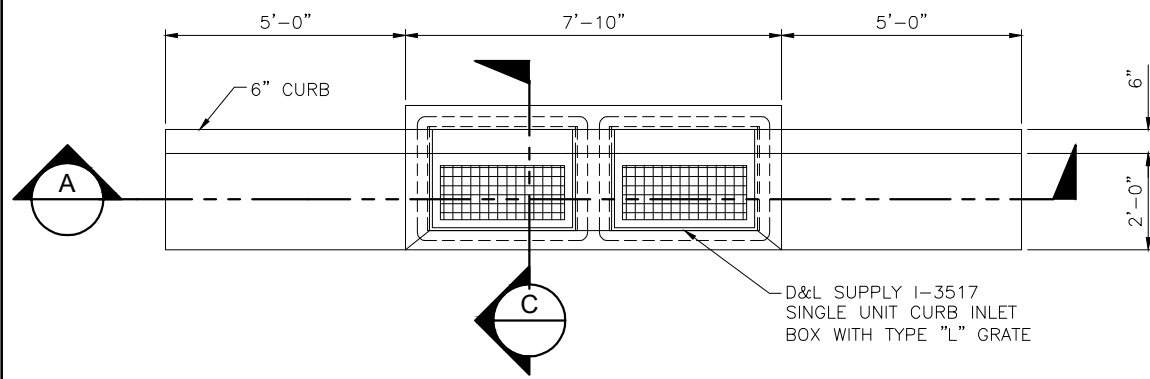


GENERAL NOTES:

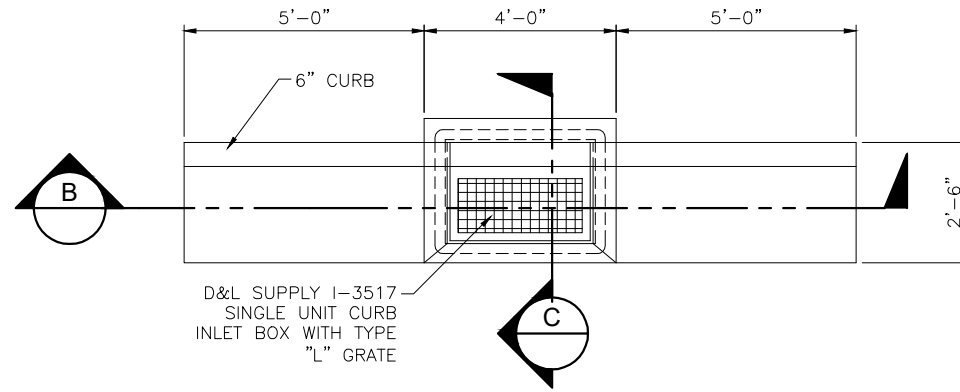
1. ALL STRUCTURAL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI IN 28 DAYS.
2. REINFORCEMENT STEEL SHALL BE DEFORMED BARS CONFORMING IN QUALITY TO THE REQUIREMENTS OF ASTM DESIGNATION A-615, GRADE 60, INCLUDING SUPPLEMENTARY REQUIREMENTS (S1).
3. ALL DETAILING, FABRICATION AND PLACING OF REINFORCING BARS SHALL BE IN ACCORDANCE WITH THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" ACI-315, LATEST EDITION.
4. TOLERANCES IN PLACING REINFORCEMENT SHALL BE:
 $\pm \frac{3}{8}$ INCH FOR MEMBERS WITH D < 8 INCHES
 $\pm \frac{1}{2}$ INCH FOR MEMBERS WITH D $\geq$ 8 INCHES
5. DOWELS, PIPES, WATERSTOPS AND OTHER INSTALLED MATERIALS AND ACCESSORIES SHALL BE HELD SECURELY IN POSITION WHILE CONCRETE IS BEING PLACED.
6. UNLESS OTHERWISE SHOWN, ASIDE FROM NORMAL ACCESSORIES USED TO HOLD REINFORCING BARS FIRMLY IN POSITION, THE FOLLOWING SHALL BE ADDED:
 - A) IN SLABS #5 RISER BARS AT 36 INCHES O.C. MAXIMUM TO SUPPORT TOP REINFORCING BARS.
 - B) IN WALLS WITH 2 CURTAINS #3 U OR Z SHAPE SPACES AT 6 FEET O.C. EACH WAY.
7. METAL CLIPS OR SUPPORTS SHALL NOT BE PLACED IN CONTACT WITH THE FORMS OR THE SUBGRADE. CONCRETE BLOCKS (OR DOBBIES) SUPPORTING BARS ON SUBGRADE SHALL BE IN SUFFICIENT NUMBERS TO SUPPORT THE BARS WITHOUT SETTLEMENT, BUT IN NO CASE SHALL SUCH SUPPORT BE CONTINUOUS.
8. DOWELS SHALL BE WIRED OR OTHERWISE HELD IN POSITION. THEY SHALL NOT BE SHOVED INTO FRESHLY PLACED CONCRETE.
9. REINFORCED BARS AND ACCESSORIES SHALL NOT BE IN CONTACT WITH ANY PIPE, PIPE FLANGE OR METAL PARTS EMBEDDED IN CONCRETE. A MINIMUM OF 2 INCHES CLEARANCE SHALL BE PROVIDED AT ALL TIMES.
10. STRUCTURES SHALL BE BACKFILLED WITH GRANULAR SOIL.
11. ALL CONSTRUCTION JOINTS SHALL BE ROUGHED AND CLEANED AND FREE OF LAITANCE.
12. STRUCTURES HAVE BEEN DESIGNED FOR THE FOLLOWING; IF CONDITIONS ARE EXCEEDED THE ENGINEER SHALL BE NOTIFIED.
 - A) AASHTO HS-20 TRUCK LOAD
 - B) 1'-6" MAX. SOIL ABOVE THE ROOF OF THE STRUCTURE
 - C) GROUND WATER TO TOP OF STRUCTURE
 - D) "AT-REST" LATERAL SOIL PRESSURE OF 60 PCF FOR DRY SOIL CONDITIONS AND 92.4 PCF WHEN GROUND WATER IS PRESENT.
13. A DOUBLE COMBINATION INLET/CLEANOUT BOX SHALL BE THE WIDTH OF THE DOUBLE CATCH BASIN, WITH ONE MANHOLE, RING & COVER. ALL OTHER APPLICABLE DETAILS ON THIS SHEET SHALL APPLY.

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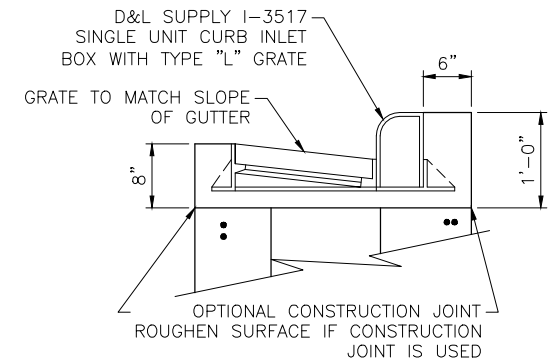




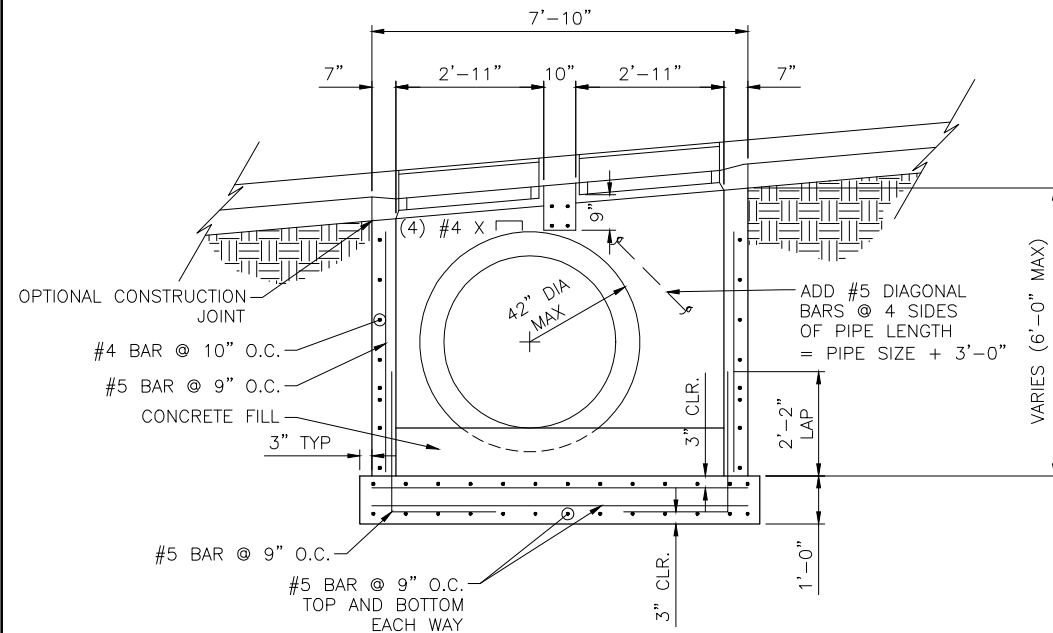
1 PLAN AT DOUBLE CATCH BASIN
SCALE: N.T.S.



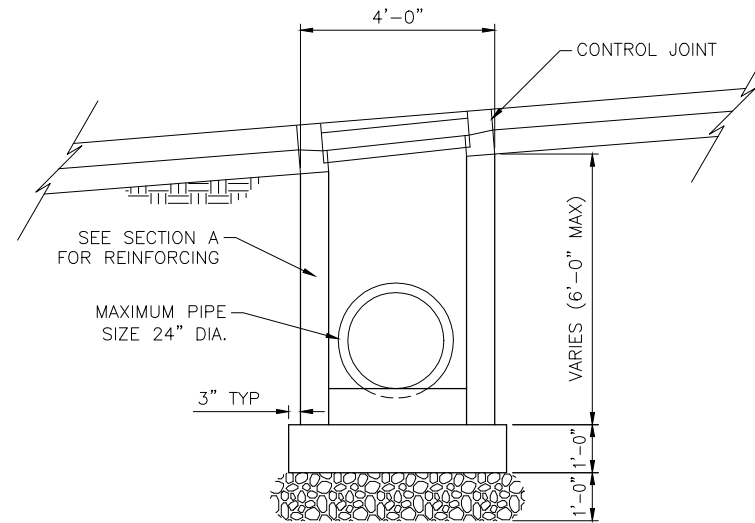
2 PLAN AT SINGLE CATCH BASIN
SCALE: N.T.S.



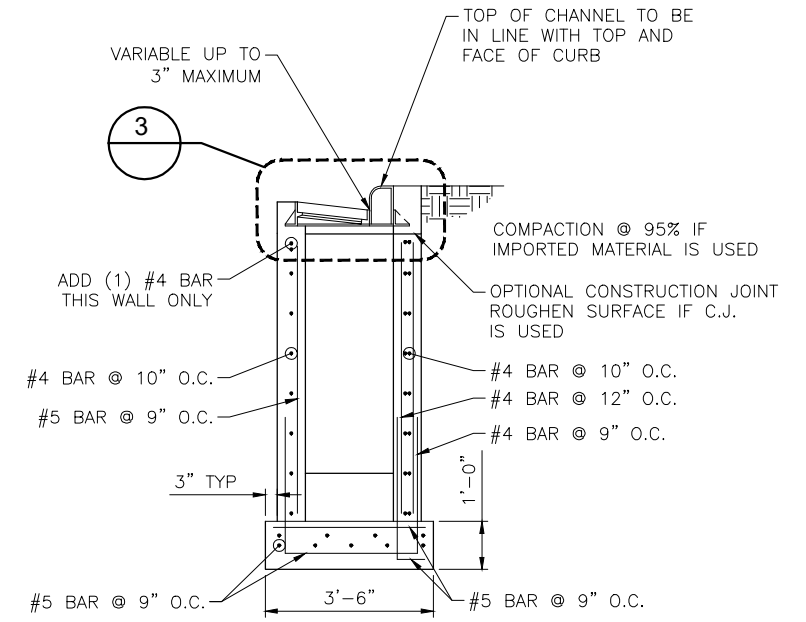
3 CATCH BASIN DETAIL
SCALE: N.T.S.



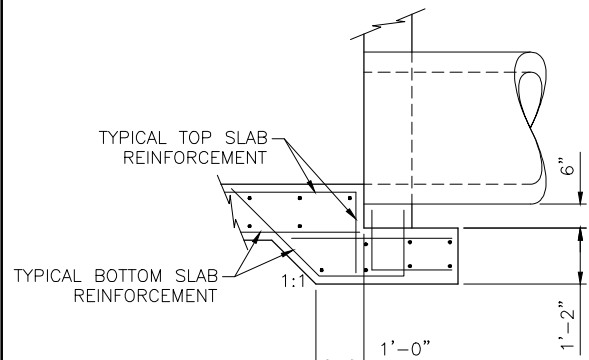
A DOUBLE CATCH BASIN SECTION
SCALE: N.T.S.



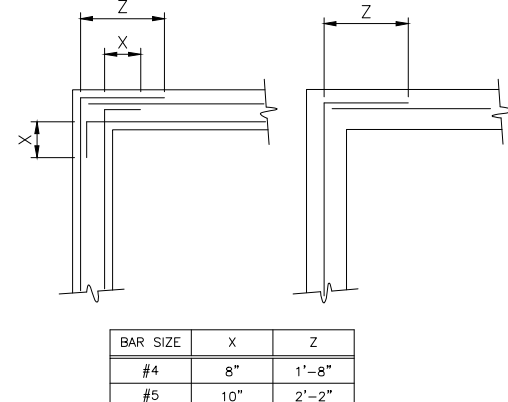
B SINGLE CATCH BASIN SECTION
SCALE: N.T.S.



C DOUBLE CATCH BASIN SECTION
SCALE: N.T.S.



4 OPTIONAL FOOTING DETAIL AT WALL-PIPE CONNECTION
SCALE: N.T.S.



5 HORIZONTAL REINF. @ WALL INTERSECTION
SCALE: N.T.S.

GENERAL NOTES:

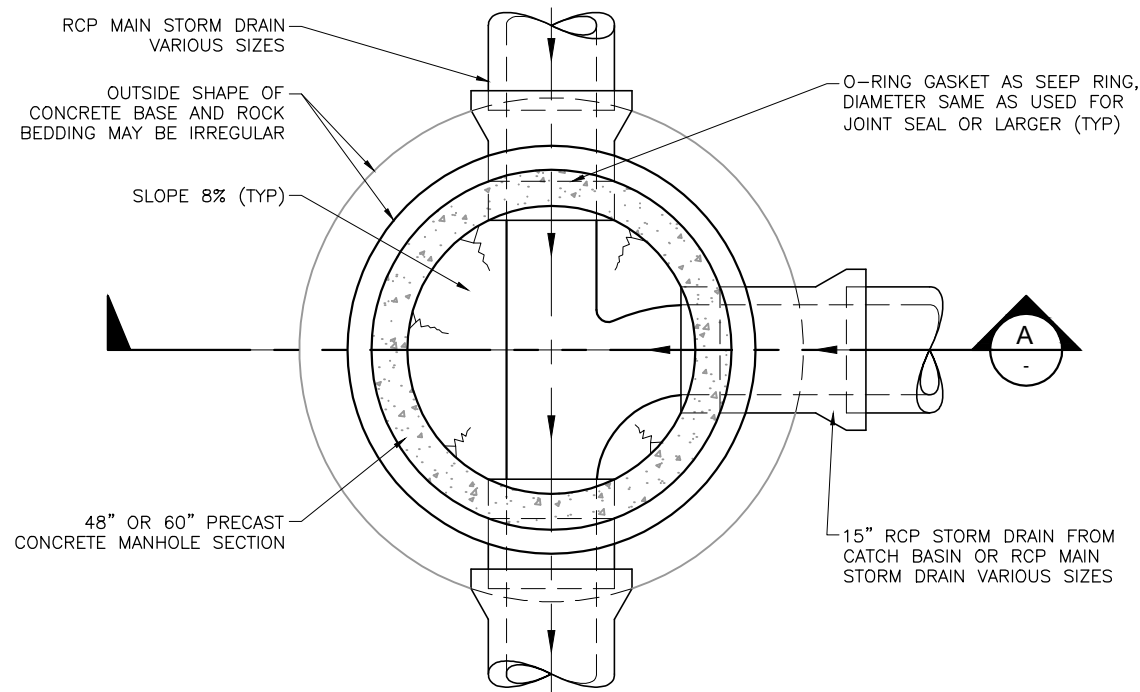
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 - IN WALLS WITH 2 CURTAINS #3 U OR Z SHAPE SPACES AT 6 FEET O.C. EACH WAY.

- METAL CLIPS OR SUPPORTS SHALL NOT BE PLACED IN CONTACT WITH THE FORMS OR THE SUBGRADE. CONCRETE BLOCKS (OR DOBBIES) SUPPORTING BARS ON SUBGRADE SHALL BE IN SUFFICIENT NUMBERS TO SUPPORT THE BARS WITHOUT SETTLEMENT, BUT IN NO CASE SHALL SUCH SUPPORT BE CONTINUOUS.
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- STRUCTURES HAVE BEEN DESIGNED FOR THE FOLLOWING: (IF CONDITIONS ARE EXCEEDED THE ENGINEER SHALL BE NOTIFIED)
 - AASHTO HS-20 TRUCK LOAD
 - 1'-6" MAXIMUM SOIL ABOVE THE ROOF OF THE STRUCTURE
 - GROUND WATER TO TOP OF STRUCTURE
 - "AT-REST" LATERAL SOIL PRESSURE OF 60 PCF FOR DRY SOIL CONDITIONS AND 92.4 PCF WHEN GROUND WATER IS PRESENT

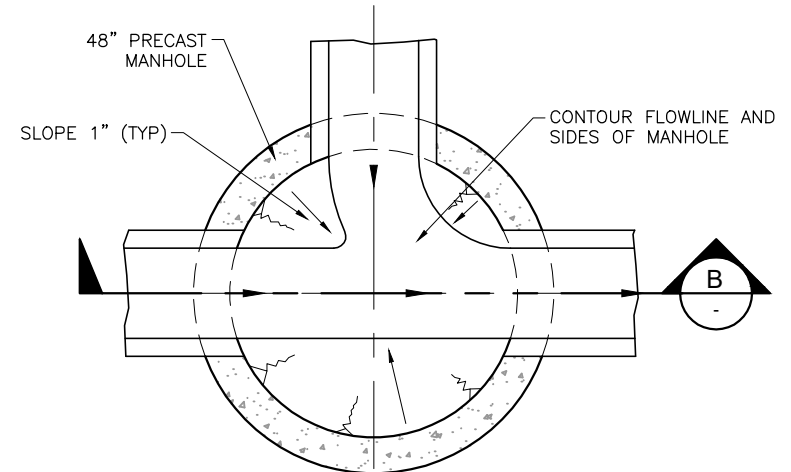
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KAYSVILLE CITY CORPORATION
DEVELOPMENT STANDARDS
STANDARD CATCH BASIN
DETAILS



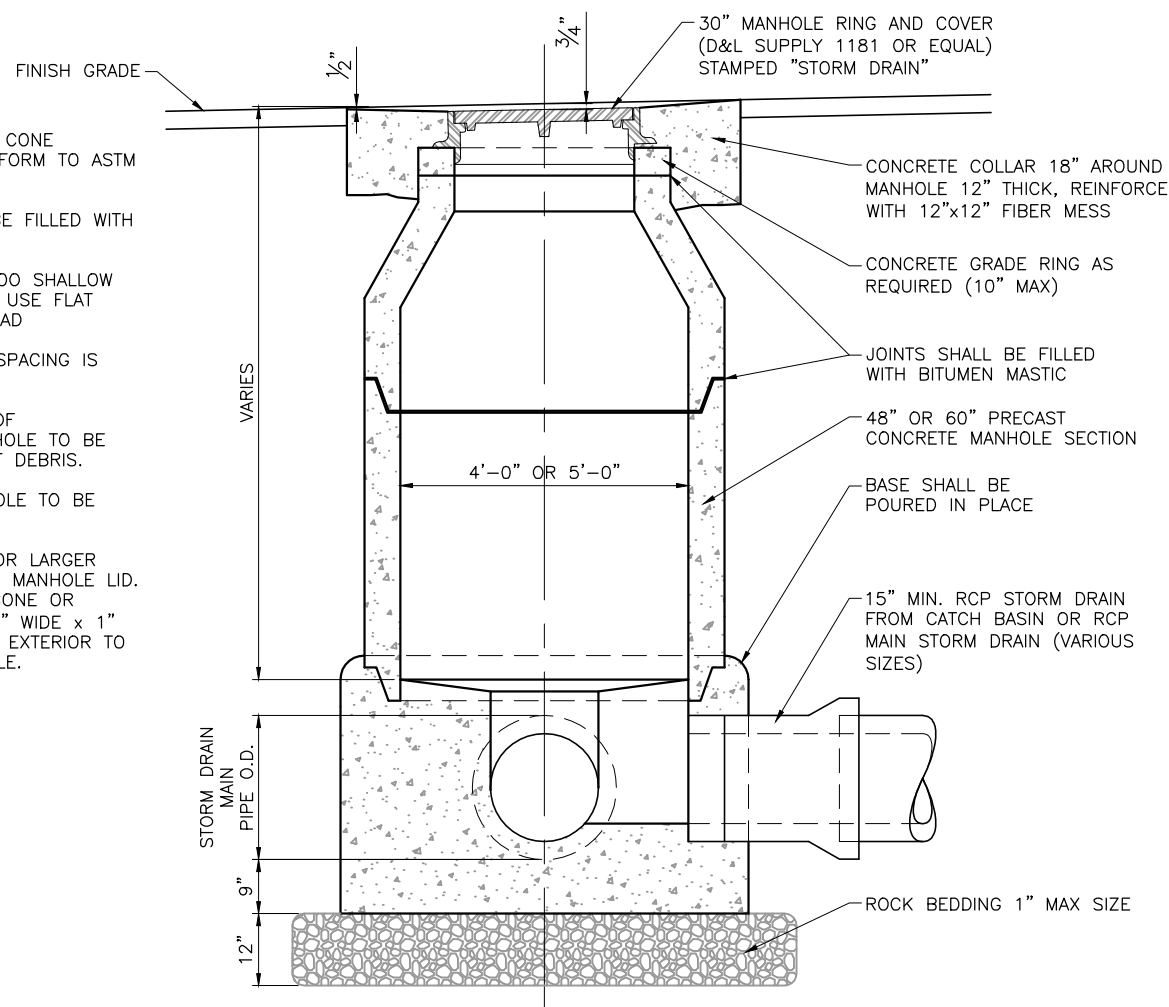
1 TYPICAL STORM DRAIN MANHOLE PLAN
SCALE: N.T.S.



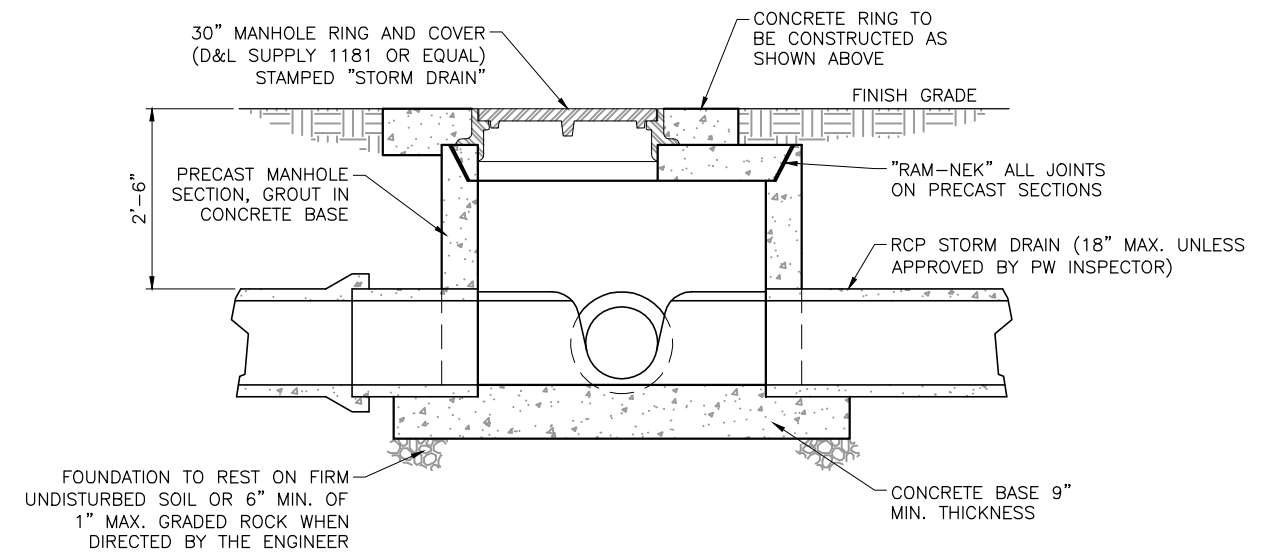
2 FLAT LID STORM DRAIN MANHOLE PLAN
SCALE: N.T.S.

NOTES:

1. MANHOLE WALL AND CONE SECTION SHALL CONFORM TO ASTM C 478
2. LIFT HOLES SHALL BE FILLED WITH GROUT
3. IF MANHOLES ARE TOO SHALLOW FOR CONE SECTION, USE FLAT CONCRETE LID INSTEAD
4. MAXIMUM MANHOLE SPACING IS 500 FT.
5. UPON COMPLETION OF CONSTRUCTION MANHOLE TO BE CLEAN AND FREE OF DEBRIS.
6. STEPS INSIDE MANHOLE TO BE ALIGNED.
7. INSTALL 12 GAUGE OR LARGER TRACER WIRE UP TO MANHOLE LID. NOTCH IN TOP OF CONE OR MANHOLE SECTION $\frac{1}{4}$ " WIDE x 1" DEEP SAWCUT FROM EXTERIOR TO INTERIOR OF MANHOLE.



A TYPICAL STORM DRAIN MANHOLE SECTION
SCALE: N.T.S.



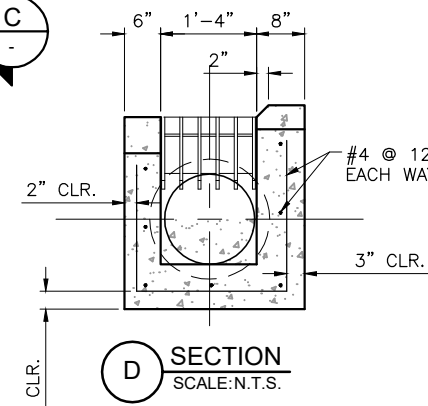
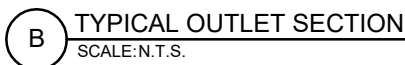
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SCALE: N.T.S.

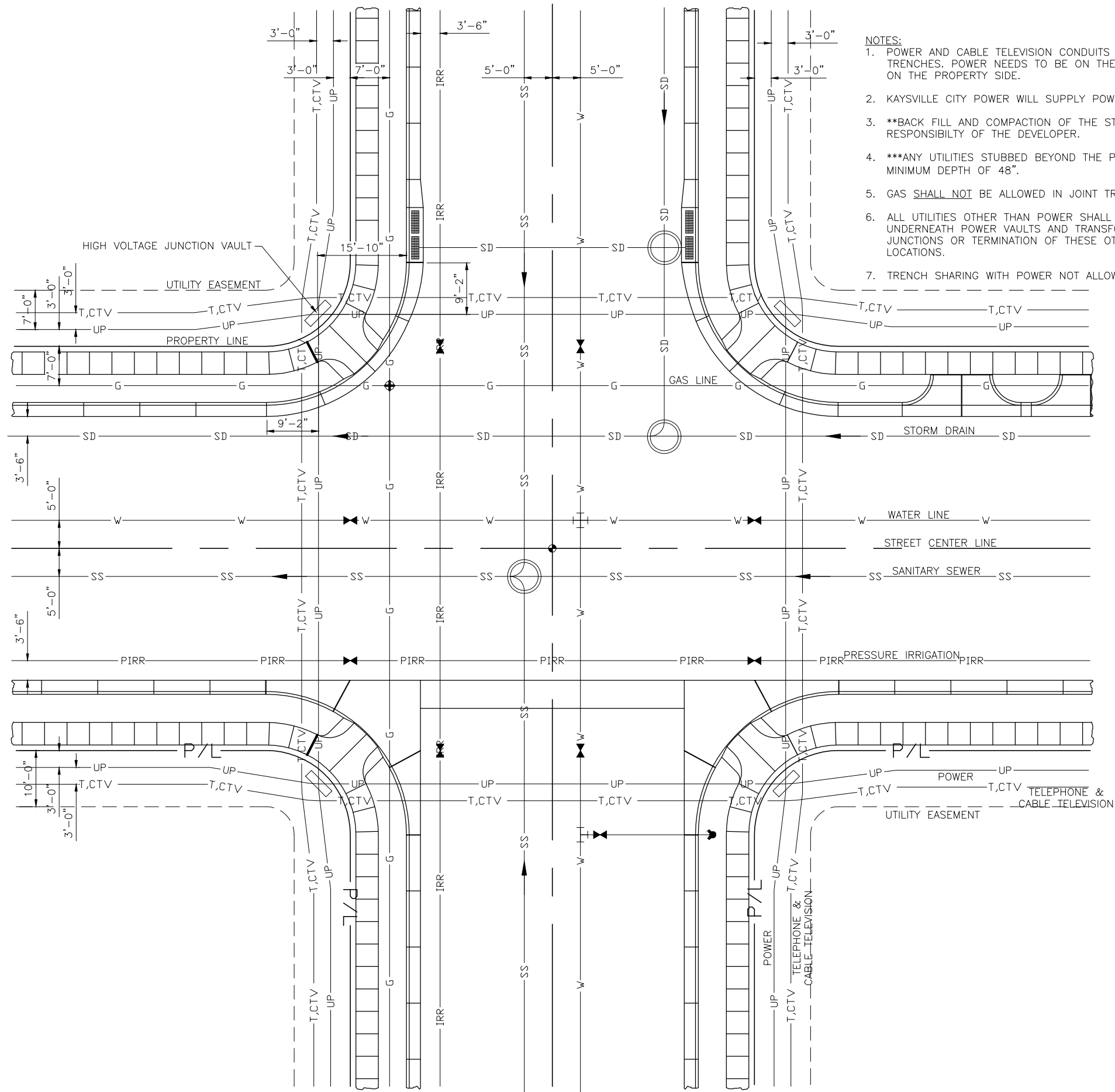
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**KAYSVILLE CITY CORPORATION
DEVELOPMENT STANDARDS**
STANDARD STORM DRAIN MANHOLES





- NOTES:
1. POWER AND CABLE TELEVISION CONDUITS TO BE INSTALLED IN SEPARATE TRENCHES. POWER NEEDS TO BE ON THE STREET SIDE. ALL OTHER UTILITIES ON THE PROPERTY SIDE.
 2. KAYSVILLE CITY POWER WILL SUPPLY POWER CONDUIT.
 3. **BACK FILL AND COMPACTION OF THE STREET CROSSING IS THE RESPONSIBILITY OF THE DEVELOPER.
 4. ***ANY UTILITIES STUBBED BEYOND THE PROPERTY LINE MUST MAINTAIN A MINIMUM DEPTH OF 48".
 5. GAS SHALL NOT BE ALLOWED IN JOINT TRENCH.
 6. ALL UTILITIES OTHER THAN POWER SHALL BE ROUTED AROUND AND NOT UNDERNEATH POWER VAULTS AND TRANSFORMERS. THERE SHALL BE NO JUNCTIONS OR TERMINATION OF THESE OTHER UTILITIES IN THESE LOCATIONS.
 7. TRENCH SHARING WITH POWER NOT ALLOWED UNLESS ELEVATION STAGGERED.

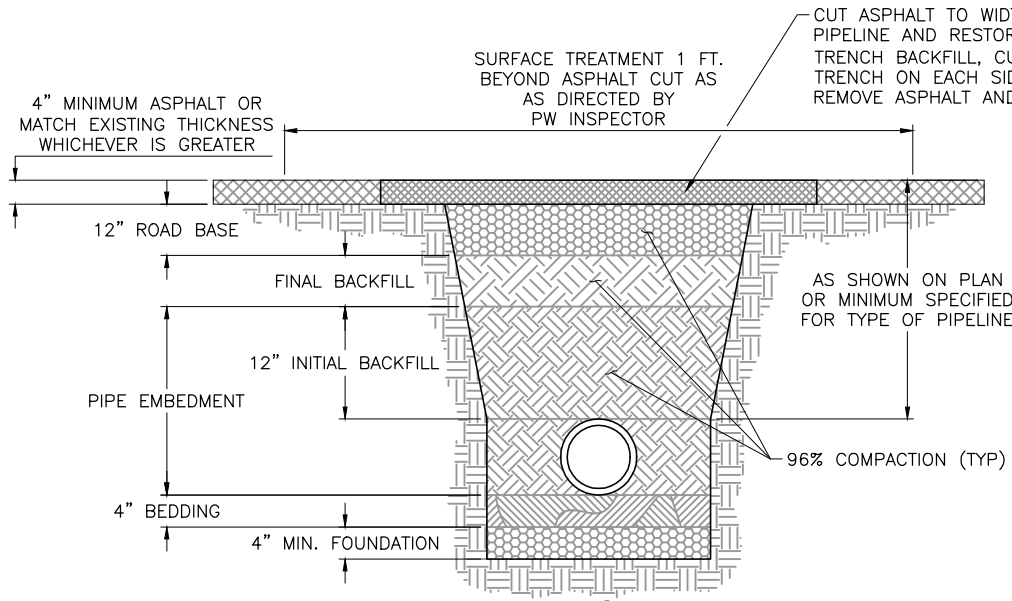
TYPICAL STREET IMPROVEMENT PLAN
SCALE: N.T.S.

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NO.	REVISION DESCRIPTION	BY	DATE

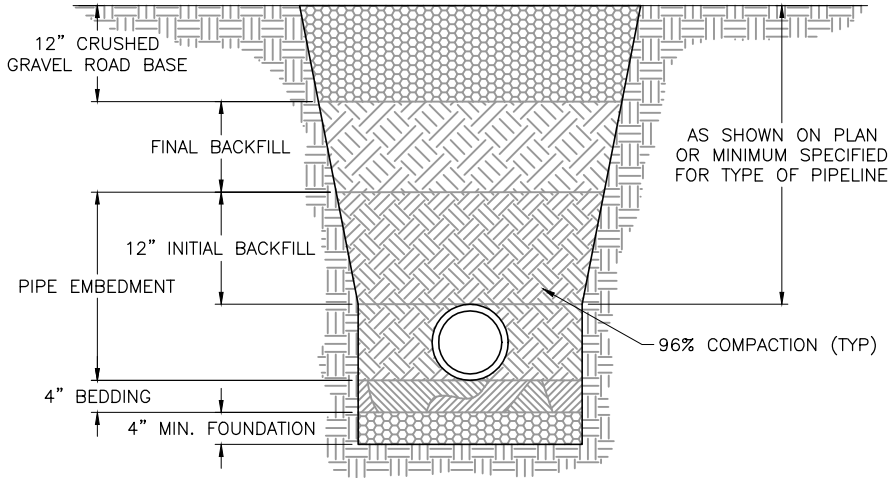
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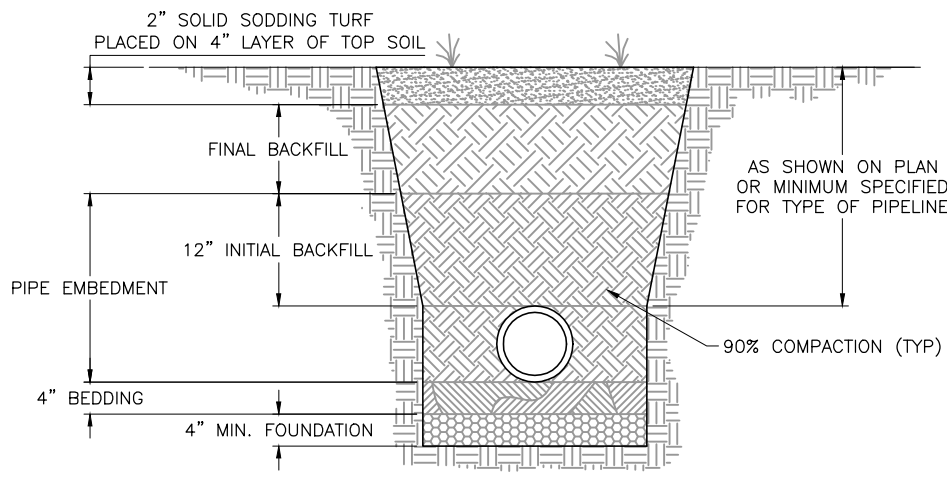
KAYSVILLE CITY CORPORATION
DEVELOPMENT STANDARDS
STANDARD STREET IMPROVEMENTS
POWER AND CABLE TELEVISION LINES



1 ASPHALT SURFACE
SCALE:N.T.S.



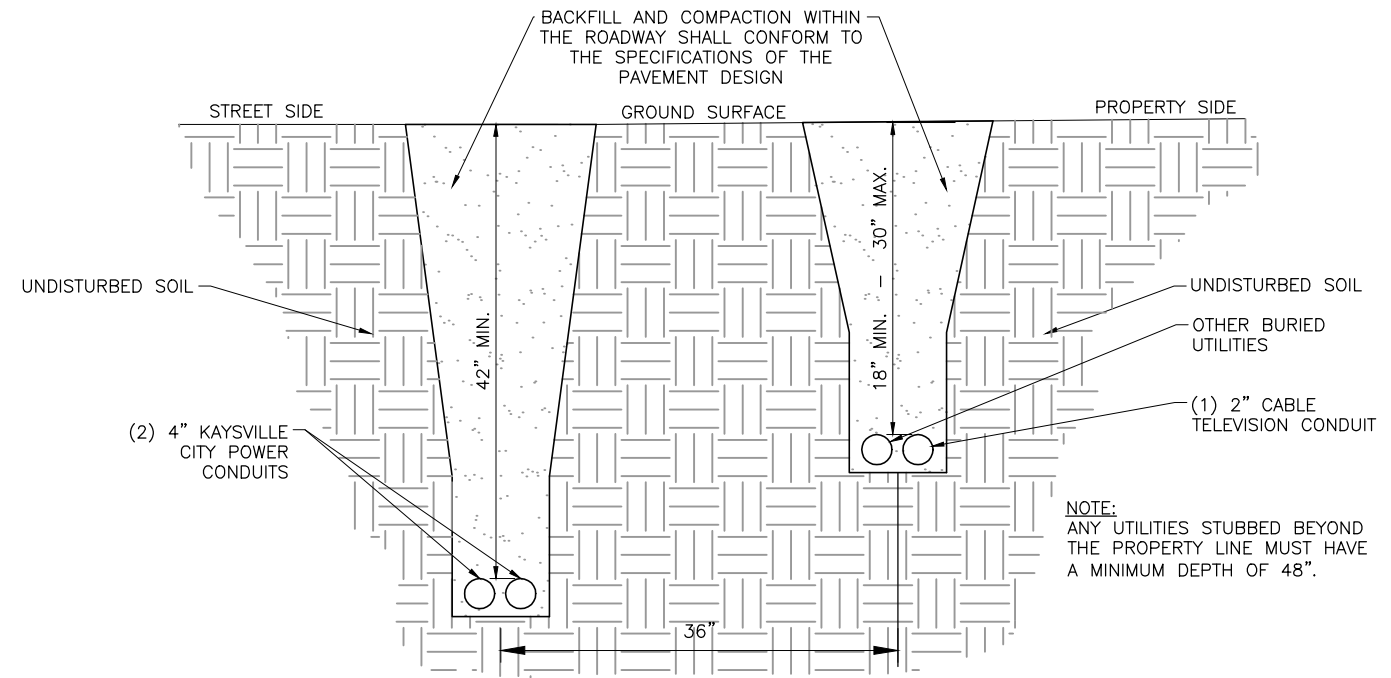
2 GRAVEL SURFACE
SCALE:N.T.S.



3 TURF SURFACE
SCALE:N.T.S.

TYPICAL TRENCH SECTIONS

- NOTES:
1. SLOPE TRENCH TO MEET OSHA REQUIREMENTS (LATEST EDITION) OR USE TRENCH BOX.
 2. FOUNDATION AND BEDDING MATERIAL AS REQUIRED.
 3. INSTALL PIPELINES ON STABLE FOUNDATION WITH UNIFORM BEARING FOR FULL LENGTH OF BARREL, EXCAVATE IN BEDDING FOR ALL PIPE JOINTS.
 4. IF GRAVEL MATERIAL IS USED FOR PIPE EMBEDMENT, FABRIC IS TO BE USED ON TOP OF GRAVEL BEFORE BACKFILLING TRENCH.
 5. FOR POTHOLE: USE STATE SPEC. FLOWABLE FILL PER SECTION 03575 UDOT SPECS. UP TO ASPHALT GRADE AND THEN PAVE PROPER ASPHALT DEPTH
 6. THE INDIVIDUAL RESPONSIBLE FOR THE COMPLETE REPAIR OF ALL ASPHALT SURFACES SHALL ALSO CRACK SEAL AND SURFACE TREATMENT THE ENTIRE EXCAVATED AREA AS DETERMINED BY KAYSVILLE CITY. ALL JOINTS SHALL BE CRACK SEALED PRIOR TO SLURRY SEAL. CRACK SEAL MUST BE INSPECTED BEFORE SLURRY SEAL IS APPLIED. SLURRY SEAL SHALL BE A TYPE 2 SLURRY WITH SAND.

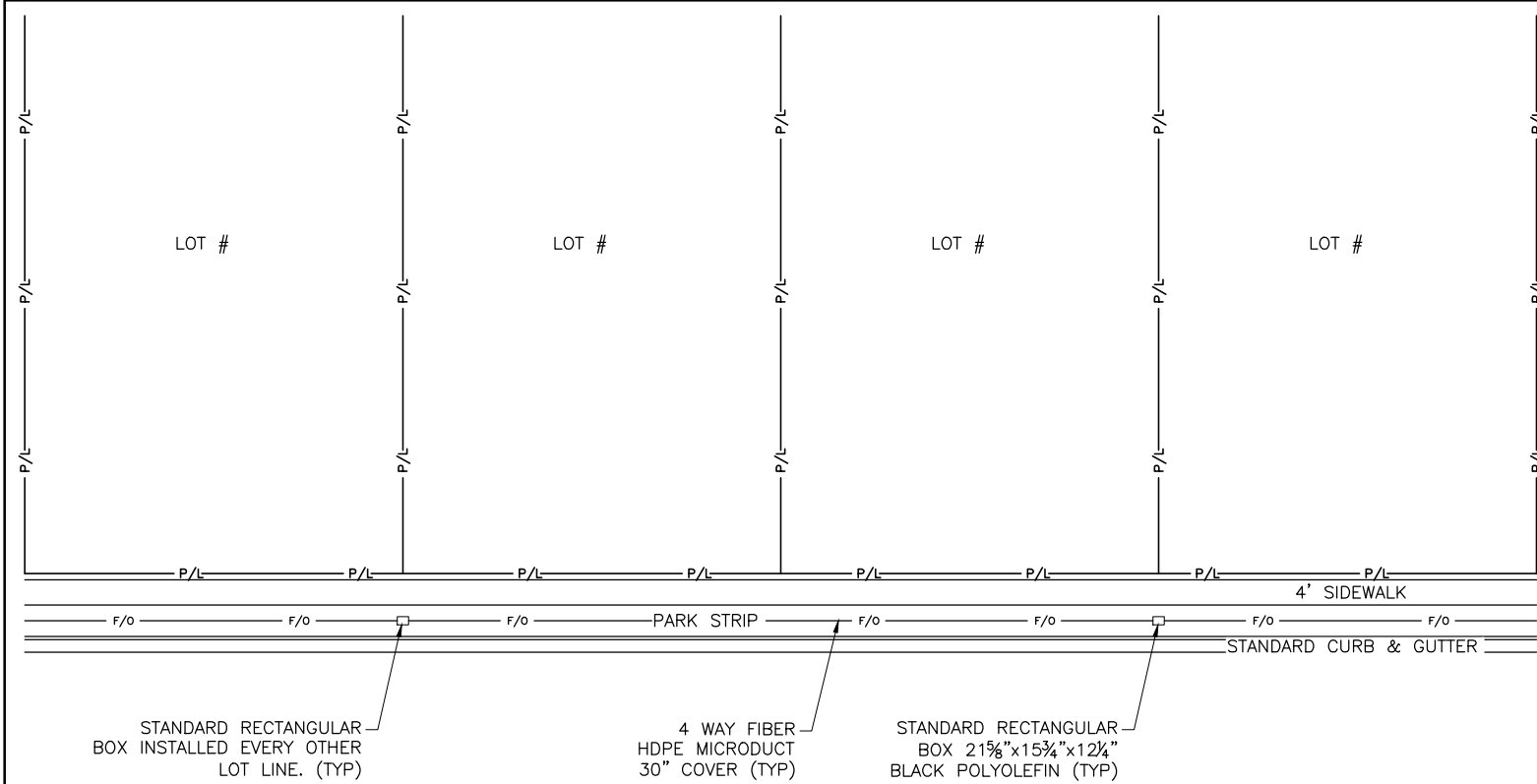


POWER AND CABLE T.V. TRENCH SECTION

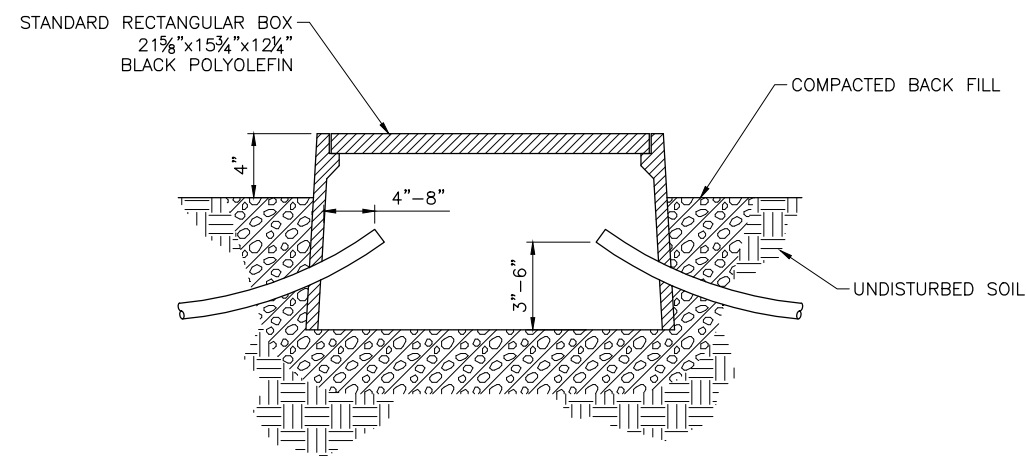
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NO.	REVISION DESCRIPTION	BY	DATE		



KAYSVILLE CITY CORPORATION
DEVELOPMENT STANDARDS
TYPICAL TRENCH SECTIONS



TYPICAL LOT LAYOUT
SCALE: N.T.S.



PROFILE BOX VIEW
SCALE: N.T.S.

Plot Date: 2/11/2021 3:25 PM Plotted By: Mark Jenkins
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DRAWN BY: JDM
DESIGN BY: SRM
CHECKED BY: SRM





Kaysville
City

LOW IMPACT DEVELOPMENT
MANUAL

2021

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1. Introduction

1.1 Purpose

The purpose of this manual is to provide some basic information and understanding of how new construction and re-development, in accordance with Kaysville City ordinances, can fulfill the requirements outlined in Utah's Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4). Specific audiences include developers, designers, contractors and homeowners. This manual may not detail all Kaysville City, State or Federal requirements.

1.2 Background

Polluted storm water runoff is often transported to MS4s and ultimately discharges into local rivers and streams without treatment. EPA's Storm Water Phase II Rule establishes an MS4 storm water management program that is intended to improve the Nation's waterways by reducing the quantity of pollutants that are introduced into storm sewer systems during storm events. Common pollutants include oil and grease from roadways, roadway salts and deicing materials, pesticides and fertilizers from lawns, sediment from construction sites, and carelessly discarded trash, such as cigarette butts, paper wrappers, and plastic bottles. When deposited into nearby waterways through MS4 discharges, these pollutants can impair the waterways, thereby discouraging use of the resource, contaminating water supplies, and interfering with the habitat for fish, other aquatic organisms, and wildlife.

In 1990, EPA promulgated rules establishing Phase I of the National Pollutant Discharge Elimination System (NPDES) storm water program. The Phase I program for MS4s requires operators of "medium" and "large" MS4s, that is, those that generally serve populations of 100,000 or greater, to implement a storm water management program as a means to control polluted discharges from these MS4s. The Storm Water Phase II Rule extends coverage of the NPDES storm water program to certain "small" MS4s but takes a slightly different approach to how the storm water management program is developed and implemented. Kaysville City is currently regulated under the General Permit for Discharges from Small MS4s.

1.3 Scope

The scope of this manual is to provide information relative to the State of Utah proposed UPDES permit section 4.2.5.3.2 which states "...the program shall include a process which requires the evaluation of Low Impact Development (LID) approach...", furthermore, "If an LID approach cannot be utilized, the Permittee must document an explanation of the reasons preventing this approach and the rationale for the chosen alternative controls on a case by case basis for the project."

All determinations and approvals for LID designs and plans shall be made at the sole discretion of the City.

2. Low Impact Development Principles

2.1 What is Low Impact development

As defined in the State of Utah's "***A Guide to Low Impact Development within Utah***", "LID refers to engineered systems, either structural or natural, that use or mimic natural processes to promote infiltration, evapotranspiration, and/or reuse of storm water as close to its source as possible to protect water quality and aquatic habitat." LID generally targets minimizing runoff and may incorporate man made treatment or a combination of processes.

Low Impact Development is not a replacement for Flood Control. LID techniques target water quality. These standards should be followed in conjunction with volume and flood control efforts.

2.2 Developing a Low Impact Development Plan

New construction or redevelopments that disturb one acre or more of land, or that are part of a larger common plan of development that disturbs one acre or more, will be required to incorporate LID measures into their design plans, and submit said plans to the City for review and approval. This requirement also applies to all redevelopment of property where existing development is demolished and rebuilt, or significantly improved where said improvements disturb one acre or more of land. This requirement does not apply to remodels or additions that disturb less than one acre of land. The design plans will be subjected to a review process prior to the issuance of approvals for permits and construction.

The purpose of this manual is to provide information that can be used to select the appropriate Best Management Practices (BMPs) for a given site. This manual describes some of the minimum standards and methods for sizing and designing LID facilities. This is a minimum standard. Other more rigorous methods may be used and will be evaluated on a case-by-case basis.

To develop a plan that works with the site, it is imperative to include consideration in the conceptual design phase of the project. It is also important to have a general understanding of the specific site and any site constraints that might exist.

2.2.1 BMP Determination and Feasibility

Most long-term LID BMPs can fit into two general functional categories; BMPs that infiltrate, and BMPs that filter. Some BMPs are hybrids that can accomplish more than one function at a time. The order of priority specified below shall be according to documented feasibility and apply to all projects.

1. Infiltration (Retention of the 80th percentile storm on site)
2. Natural Filters or Treatment
3. Man Made Filters or Treatment
4. Combination of the above

Because of the retention requirement, BMPs that infiltrate are given the highest priority and should be utilized until the Water Quality Volume (as detailed in section 2.2.6 below) has been captured and stored. If it is not feasible to retain and infiltrate, then treating and releasing may be considered. If compliance is infeasible, the project Site and LID Plan shall document an explanation of the reasons preventing this approach and the rationale for the chosen alternative controls on a case by case basis for the project.

Infiltration/retention will be considered feasible only when all of the following criteria can be met:

- The lowest elevation of all retention facilities shall be a minimum of three feet above the documented water table
- Retention volumes must infiltrate or evaporate within two days or 48 hours after a storm has subsided
- Retention facilities can be no closer than thirty feet from the nearest structural foundation
- Retention facilities can be no closer than fifty feet horizontally from live streams or water bodies
- Retention facilities can be no closer than five feet horizontally from roads or parking lots
- If a slope in the project vicinity is steeper than 20%, there must be a geotechnical investigation to determine a safe setback from the top of slope to allow for any infiltration to occur
- Retention facilities cannot be placed on slopes exceeding 5%
- Retention shall not be allowed in areas where a licensed geotechnical engineer determines that infiltration would adversely impact the potential for geological hazards on the project site or on neighboring parcels of land
- Side slopes on all open retention facilities must be 3:1 or flatter
- A project has no land drains
- Soil infiltration rates must be 0.5 inches per hour, or greater
- Infiltration will not be allowed in Zones 1 or 2 of any Drinking Water Source Protection Plan for a Public Water System
- Infiltration will not be allowed in HSG soil classifications C and D

2.2.2 Determining Soil Characteristics

Soil characteristics play a major role in determining LID feasibility and sizing of facilities on a site. A basic soil evaluation will need to be conducted on each site. Kaysville has elected to standardize based on the Natural Resource Conservation Service (NRCS) Hydrologic Soil Group (HSG) classifications. The NRCS system includes four hydrologic soil groups: A, B, C, and D as described below:

Group A is sand, loamy sand or sandy loam types of soils. It has low runoff potential and high infiltration rates even when thoroughly wetted. They consist chiefly of deep, well to excessively drained sands or gravels and have a high rate of water transmission.

Group B is silt loam or loam. It has a moderate infiltration rate when thoroughly wetted and consists chiefly or moderately deep to deep, moderately well to well drained soils with moderately fine to moderately coarse textures.

Group C soils are sandy clay loam. They have low infiltration rates when thoroughly wetted and consist chiefly of soils with a layer that impedes downward movement of water and soils with moderately fine to fine structure.

Group D soils are clay loam, silty clay loam, sandy clay, silty clay or clay. This HSG has the highest runoff potential. They have very low infiltration rates when thoroughly wetted and consist chiefly of clay soils with a high swelling potential, soils with a permanent high water table, soils with a claypan or clay layer at or near the surface and shallow soils over nearly impervious material.

Soils analysis may be done utilizing information obtained from the National Cooperative Soil Survey. The NRCS mapping tool is called Web Soil Survey (WSS) and provides information on drainage characteristics, water table depth (in some cases) and soil groups:

<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>.

2.2.3 Determining Water Table Depth

Water table depth is a major factor in determining feasibility and sizing of LID techniques that infiltrate. Shallow groundwater may severely hinder or prohibit the effectiveness of infiltration. A part of any geotechnical investigations at a site should include an assessment of the high groundwater level. This should include a measurement of the existing water table at the time of the investigation and careful review of the soil structure, looking for evidence of the historic high water.

2.2.4 Determining Existing Drainage Patterns

An assessment of the existing drainage system/patterns will also assist in locating/sizing LID facilities. A detailed site survey should be conducted and existing contours developed. Preliminary site plans will include existing contours and show existing drainage patterns. Any existing storm drains should be identified, located, and elevations established. It is easier to mimic pre-development hydrology if existing drainage patterns can be maintained. Locating LID facilities

generally works best by following natural patterns. An understanding of flow direction and locating natural storm drainage collection points can simplify LID design.

2.2.5 Determining Infiltration Rates

The bottom line number that will dictate sizing of most LID facilities is the infiltration rate. Kaysville City has adopted the approach of using generalized hydraulic conductivity rates based on NRCS HSGs. This is a simplified approach. If a developer chooses to do a more detailed analysis by actually measuring infiltration rates in the field, these will be reviewed on a case-by-case basis. The type of LID facility proposed will dictate acceptable methods for determining the rate at which stormwater can be absorbed into the ground. The following table shall be used to size LID facilities unless a more stringent process is followed by the developer and infiltration rates are determined in the field.

Typical infiltration rates of various soil groups

Table 2-1: Hydraulic Conductivity of NRCS Soil Groups

NRCS HSG	Typical Soil Texture	Saturated Infiltration Rate (in./hr)	Porosity (Volume ratio)	Field Capacity (dimensionless)
A	Sand	8.0	0.437	0.062
A	Loamy sand	2.0	0.437	0.105
B	Sandy loam	1.0	0.435	0.190
B	Loam	0.5	0.463	0.232
C	Silt loam	0.25	0.501	0.284
C	Sandy clay loam	0.15	0.398	0.244
D	Clay loam and silty clay loam	<0.09	0.465	0.325
D	Clay	<0.05	0.475	0.378

(Taken from Design of Urban Stormwater Controls, a revision of the Water Environment Federation's (WEF's) and the American Society of Civil Engineer's (ASCE's) manual of practice titled *Urban Runoff Quality management (1998)*. Table 9.2, pg. 367)

2.2.6 Determining Water Quality Volume (WQV)

The *General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4) Permit No. UTR090000*, requires projects to “manage rainfall on-site, and prevent the off-site discharge of the precipitation from all rainfall events less than or equal to the 80th percentile rainfall event.” The volume of water generated from this 80th percentile event is being defined as the Water Quality Volume.

Table 2-2: 80th Percentile Precipitation Rates at Surrounding Weather Stations

Location	Station	Elevation	Years of Record	80 th Percentile Storm (inches)
Weber Basin	USC00429346	4899.9	55	0.64
Fruit Heights	US1UTDV0024	4801.8	6	0.64
Ogden Hinckley	USW00024126	4470.1	25	0.50
Farmington Lower	US1UTDV0001	4238.9	11	0.50
Triad Center	USC00427606	4279.86	34	0.48
Salt Lake Airport	USW00024127	4225.07	71	0.44

Information in Table 2-2 was taken from the Utah Climate Center. Elevations in Kaysville range from 4780 on the east side to 4230 on the west side. To simplify calculations, **Kaysville City has chosen to use 0.48 inches or 0.04 feet** as the 80th percentile storm depth.

The Water Quality Volume is calculated using the following equation:

$$WQV = R_v d A$$

Where:

WQV = 80th percentile volume, cf

R_v = Volumetric runoff coefficient, unitless

d = 80th percentile precipitation depth, ft (convert from inches to feet if required)

A = Project area or BMP drainage area, sf

The NRCS has developed regression equations to determine the runoff coefficient R_v . There are three equations based on soil type:

Table 2-3: Runoff Coefficient Equations Based on NRCS Soil Groups

NRCS Soil Group		
A	B	C/D
$R_{V-A} = 0.84i^{1.302}$	$R_{V-B} = 0.84i^{1.169}$	$R_{V-C/D} = 0.83i^{1.122}$

Note: “i” is runoff intensity, measured in in/hour

Using these equations a WQV is calculated in cubic feet. This is the volume that needs to be retained (with no discharge) until it infiltrates or evapo-transpires.

2.3 Universal LID Best Management Practices

Not all LID BMPs include construction of a structure. Some LID BMPs involve the implementation of basic principles. These principles should be a general practice on all sites. If applicable and feasible for the given site conditions, the following measures are required and should be incorporated on all projects:

2.3.1 Eliminating Directly Connected Impervious Areas

One of the primary contributors to urban runoff is directly connected impervious areas or DCIAs. They affect both water quality and water volume. A directly connected impervious area is defined as a surface where stormwater conveys directly from an impervious area to a storm drain or waterway. Examples of directly connected impervious areas include; building downspouts that are piped to the gutter or storm drain pipe, and parking lots with inlets in the gutter that go straight to the storm drain pipe.

All new development should eliminate these direct connects and direct runoff through landscape areas and LID facilities whenever possible. Infiltration that occurs across landscape areas may be calculated and applied toward meeting WQV requirements. The amount of infiltration allowed will be a function of soils, vegetation and slope (residence time) of the landscape areas.

2.3.2 Utilizing Landscaped (Natural) Buffers

Much the same as eliminating DCIAs, maintaining landscaped buffers through which stormwater flows provides opportunities for natural filtering and infiltration that you don't get in a pipe or gutter. The best buffers are ones where the pre-development ground and vegetation are left undisturbed; however, it is recognized that a more groomed approach is desirable in many cases. Development is strongly encouraged to utilized landscape areas as buffers and direct stormwater to these landscaped areas. Stormwater can be collected in the landscaped areas after it has had a chance to filter/infiltrate.

3. Various BMP Details and Abilities

3.1 Best Management Practice Categories

Structural BMPs shall be designed to manage and capture stormwater runoff. Most long-term stormwater BMPs can fit into three general functional categories; BMPs that infiltrate, BMPs that harvest, and BMPs that filter. Some BMPs are hybrids that can accomplish more than one function at a time. The order of priority specified below shall apply to all projects. Each type of BMP shall be implemented to the maximum extent feasible when determining the appropriate BMPs for a project before moving to the next priority.

1. Infiltration
2. Natural Filters
3. Combination of any of the above

Because of the retention requirement, BMPs that infiltrate are given the highest priority and should be utilized until the WQV has been captured and stored. If it is not feasible to retain the entire WQV (feasibility is defined in section 3.1.1 below) then harvesting should be considered. Utah water rights laws limit the amount of stormwater that can be harvested and reused. If the WQV cannot be handled by the first two priorities then treating and releasing may be considered. If partial or complete onsite compliance of any type is technically infeasible, the project Site and LID Plan shall be required to document an explanation of the reasons preventing this approach and the rationale for the chosen alternative controls on a case by case basis for the project.

3.1.1 Infiltration Feasibility

Infiltration will be considered feasible only when all of the following criteria can be met:

- The lowest elevation of all retention facilities shall be a minimum of three (3) feet above the measured water table
- Retention volumes must infiltrate or evaporate within two (2) days or 48 hours after a storm has subsided
- Retention facilities can be no closer than thirty (30) feet from the nearest structural foundation
- Retention facilities can be no closer than fifty (50) feet horizontally from live streams or water bodies
- Retention facilities can be no closer than five (5) feet horizontally from roads or parking lots .
- If a slope is steeper than 20%, there must be a geotechnical investigation to determine a safe setback from the top of slope to allow for any infiltration to occur.
- Retention facilities cannot be placed on slopes exceeding 5%

- Retention shall not be allowed in areas where a licensed geotechnical engineer determines that infiltration would adversely impact the potential for geological hazards on the project site or on neighboring parcels of land
- Side slopes on all open retention facilities must be 3:1 or flatter
- BMPs that focus on infiltration will not be allowed if land drains are required for a development.
- Infiltration will not be allowed in Zones 1 or 2 of any Drinking Water Source Protection Plan for a Public Water System
- Infiltration will not be allowed in HSG soil classifications C and D.

3.1.2 Infiltration BMPs

The following paragraphs provide general descriptions of various types of infiltration BMPs.

3.1.2.1 Infiltration basin

Description: Infiltration basin consists of an earthen basin constructed in naturally pervious soils with a flat bottom typically vegetated with dry-land grasses or irrigated turf grass. An infiltration basin functions by retaining the design runoff volume in the basin and allowing the retained runoff to percolate into the underlying native soils over a specified period of time.

Application: Infiltration Basins are typically utilized for larger drainage areas

Water Quality Effectiveness:

Target Pollutant	Relative Removal Effectiveness
Sediment	Excellent
Nutrients	Excellent
Metals	Excellent
Bacteria	Excellent
Oil/Grease	Excellent

Design Criteria: The following criteria shall be met for all open infiltration basins:

Parameter	Requirement
Minimum depth to measured water table from the lowest elevation in the basin	3 feet
Maximum standing water time	48 hours
Maximum side slope	3 H: 1 V
Minimum freeboard	1 foot

Other	Must have a safe flood path to convey up to the 100 year storm safely to an established Right-of-way
WQV	As defined in Section 2.2.6
Maximum Infiltration Rate	As determined in Section 2.2.5

3.1.2.2 Infiltration Trenches

Description: Infiltration trenches, which are similar to basins, are long, narrow, gravel-filled trenches, often vegetated, that infiltrate stormwater runoff from small drainage areas. Infiltration trenches may include a shallow depression at the surface, but the majority of runoff is stored in the void space within the gravel and infiltrates through the sides and bottom of the trench.

Application: Infiltration trenches are commonly used for moderately sized drainage areas where the available footprint is narrow.

Water Quality Effectiveness:

Target Pollutant	Relative Removal Effectiveness
Sediment	Excellent
Nutrients	Excellent
Metals	Excellent
Bacteria	Excellent
Oil/Grease	Excellent

Design Criteria: The following criteria shall be met for all infiltration trenches:

Parameter	Requirement
Minimum depth to the measured water table from the lowest elevation in the basin	3 feet
Minimum depth of trench	2 feet
Maximum longitudinal trench slope	1%
Minimum width	2 feet
WQV	As defined in Section 2.2.6
Maximum Infiltration Rate	As determined in Section 2.2.5

3.1.2.3 Infiltration galleries

Description: Infiltration galleries are similar to infiltration basins except they are underground. A number of vendors offer prefabricated, modular infiltration

galleries that provide subsurface storage and allow for infiltration. Infiltration galleries come in a variety of material types, shapes and sizes.

Infiltration galleries are best served when there is an isolator row or pretreatment device. Maintaining underground retention without the isolator row or pretreatment can be problematic and costly.

Application: Infiltration Galleries are typically utilized for drainage areas between 5 and 50 acres.

Water Quality Effectiveness:

Target Pollutant	Relative Removal Effectiveness
Sediment	Excellent
Nutrients	Excellent
Metals	Excellent
Bacteria	Excellent
Oil/Grease	Excellent

Design Criteria: The following criteria shall be met for all infiltration galleries:

Parameter	Requirement
Minimum depth to the measured water table from the lowest elevation in the basin	3 feet
Maximum standing water time	48 hours
Other	- Must have a safe flood path to convey up to the 100 year storm safely to an established Right-of-way - Must meet all the requirements of the manufacturer.
WQV	As defined in Section 2.2.6
Maximum Infiltration Rate	As determined in Section 2.2.5

3.1.2.4 Injection Wells

Description: An injection well is defined as an excavated, bored, drilled, or driven shaft or hole whose depth is greater than its width. Injection wells are similar to infiltration trenches in their design and function, as they are designed to temporarily store and infiltrate runoff, primarily from rooftops or other impervious areas with low pollutant loading. An injection well may be either a drilled borehole filled with aggregate or a prefabricated storage chamber or pipe segment.

Application: Injection wells are best suited for soils with high conductivity rates. They can contribute to aquifer recharge. As such, they should be registered as Class V Injection Wells with the State Division of Water Quality
<https://deq.utah.gov/legacy/programs/water-quality/utah-underground-injectioncontrol/drainage-wells/index.htm>.

Water Quality Effectiveness:

Target Pollutant	Relative Removal Effectiveness
Sediment	Excellent
Nutrients	Excellent
Metals	Excellent
Bacteria	Excellent
Oil/Grease	Excellent

Design Criteria: The following criteria shall be met for all injection wells:

Parameter	Requirement
Minimum depth to the measured water table from the lowest elevation in the basin	3 feet
Maximum standing water time	48 hours
Other	- Must have a safe flood path to convey up to the 100 year storm safely to an established Right-of-way. - Must meet all the requirements of the manufacturer.
WQV	As defined in Section 2.2.6
Maximum Infiltration Rate	As determined in Section 2.2.5

3.1.2.5 Constructed Wetlands

Description: A constructed wetland is an artificial wetland created for the purpose of treating discharges such as municipal stormwater runoff. Constructed wetlands are engineered system that use natural functions of vegetation, soil, and organisms to treat water running through them. The wetlands should be designed to spread the flow, slow the velocity and maximize infiltration. The wetlands should also be designed to meet the specific needs of the water running through them including sediment removal, nutrient uptake, and heavy metals containment. Constructed wetlands may also serve a secondary purpose of providing habitat for native or migratory wildlife.

Application: Constructed wetlands can handle unlimited volumes of water provided there is a large enough footprint to process the flows. A good rule of thumb in sizing wetlands is to use 0.5% to 2.0% of the contributing drainage area for the wetland footprint (Tyndall & Bowman, 2016 – *A NRS Cost Tool Overview*). Constructed wetlands are typically not as effective when they are less than 0.25 acre in size.

Water Quality Effectiveness:

Target Pollutant	Relative Removal Effectiveness
Sediment	Excellent
Nutrients	Excellent
Metals	Excellent
Bacteria	Excellent
Oil/Grease	Excellent

Design Criteria: The following criteria shall be met for all constructed wetlands:

Parameter	Requirement
Maximum depth to the measured water table from the lowest elevation in the wetland	1.5 feet with no supplemental water
Supplemental water	To keep a wetland viable it requires a fairly consistent water source. Stormwater, by itself in Utah, does not usually provide adequate water source. It is very likely that supplemental water will be needed.
Hydraulic residence time	≥ 48 hours to achieve 80% reduction in Nitrogen
WQV	As defined in Section 2.2.6
Maximum Infiltration Rate	As determined in Section 2.2.5

3.1.2.6 Combined Measures

Any of the above infiltration type BMPs may be combined with any other BMPs to fit the site and to meet the allowable discharge requirements.

3.1.3 Natural Filters

Natural Filter facilities are landscaped shallow depressions that capture and filter stormwater runoff. As stormwater passes down through the planting soil, pollutants are filtered, adsorbed, and biodegraded by the soil and plants. Because they are not contained within an impermeable structure, they may allow for some infiltration.

Projects that have demonstrated they cannot manage 100% of the water quality design volume onsite through infiltration may manage the remaining volume through the use of a high removal efficiency natural filter BMP. A high removal efficiency natural filter BMP shall be sized to adequately capture **1.5** times the volume not managed through infiltration and/or capture and use.

3.1.3.1 Biofilter

Description: Most natural filter systems can be classified as biofilters. They normally consist of a ponding area, mulch layer, planting soils, plants, and in some cases an underdrain. Runoff that passes through a biofiltration system is treated by the natural absorption and filtration characteristics of the plants, soils, and microbes with which the water contacts. Plants are used to increase infiltration and nutrient uptake.

Application: Biofilters are typically incorporated into site landscaping elements and are commonly used in park strips and parking lot islands

Water Quality Effectiveness:

Target Pollutant	Relative Removal Effectiveness
Sediment	Excellent
Nutrients	Excellent
Metals	Excellent
Bacteria	Excellent
Oil/Grease	Excellent

Design Criteria: The following criteria shall be met for biofilters:

Parameter	Requirement
Minimum depth to the measured water table from the lowest elevation in the basin	3 feet
Maximum standing water time	48 hours
Maximum ponding depth	1 foot
WQV	As defined in Section 2.3.5
Maximum Infiltration Rate	As determined in Section 2.3.4
Minimum freeboard	6 inches
Other	Must have a safe flood path to convey up to the 100 year storm safely to an established Right-of-way.

3.1.3.2 Rain Gardens

Description: Rain gardens are simply gardens designed to capture and treat runoff. Rain gardens usually consist of a small depression with engineered or native soils and a variety of plants. The plants are used to increase infiltration and nutrient uptake. They are often topped with wood or rock mulch. For projects with impervious areas exceeding 4,000 square feet; biofilters, planter boxes with infiltration, vegetated swales or natural buffer strips should be considered.

Application: Small sites – impervious areas < 4,000 square feet

Water Quality Effectiveness:

Target Pollutant	Relative Removal Effectiveness
Sediment	Excellent
Nutrients	Excellent
Metals	Excellent
Bacteria	Excellent
Oil/Grease	Excellent

Design Criteria: The following criteria shall be met for rain gardens:

Parameter	Requirement
Minimum depth to the measured water table from the lowest elevation in the basin	3 feet
Maximum standing water time	48 hours
Maximum ponding depth	18 inches
Maximum side slopes	3H:1V
Minimum freeboard	6 inches
Other	Must have a safe flood path to convey up to the 100 year storm safely to an established Right-of-way.
WQV	As defined in Section 2.2.6
Maximum Infiltration Rate	As determined in Section 2.2.5

3.1.3.3 Planter Boxes with infiltration

Description: Planter boxes with infiltration are natural filtration treatment control measures located in and around structures and facilities to handle larger volumes of water than a typical rain garden. They typically are constructed with vertical or near vertical sides and above ground. They can be equipped with underdrains if necessary. Planter boxes with infiltration should maintain setbacks from adjacent buildings, other structures, sidewalks or roadways.

Application: Planter boxes with infiltration are typically incorporated into site landscaping elements and are commonly used in park strips and parking lot islands. They are sometimes raised planters. Raised planters are most successful for treating stormwater from roof tops.

Water Quality Effectiveness:

Target Pollutant	Relative Removal Effectiveness
Sediment	Excellent
Nutrients	Excellent
Metals	Excellent
Bacteria	Excellent
Oil/Grease	Excellent

Design Criteria: The following criteria shall be met for planter boxes with infiltration:

Parameter	Requirement
Minimum depth to the measured water table from the lowest elevation in the basin	3 feet
Maximum standing water time	48 hours
Maximum ponding depth	1 foot
WQV	As defined in Section 2.3.5
Maximum Infiltration Rate	As determined in Section 2.3.4
Minimum freeboard	6 inches
Other	Must have a safe flood path to convey up to the 100 year storm safely to an established Right-of-way.

3.1.3.4 Bio-Infiltration

Description: Bioinfiltration facilities are designed for partial infiltration of runoff and partial biotreatment. These facilities are similar to bioretention devices with underdrains but they include a raised underdrain above a gravel sump designed to facilitate infiltration and nitrification/denitrification. These facilities can be used in areas where there are little to no hazards associated with infiltration, but infiltration screening does not allow for infiltration BMPs due to low infiltration rates or high depths of fill.

Application: Bio-infiltration systems are typically incorporated into site landscaping elements and are commonly used in park strips and parking lot islands. Bio-infiltration includes a higher likelihood for infiltration than the basic biofilter.

Water Quality Effectiveness:

Target Pollutant	Relative Removal Effectiveness
Sediment	Excellent
Nutrients	Excellent
Metals	Excellent
Bacteria	Excellent
Oil/Grease	Excellent

Design Criteria: The following criteria shall be met for bio-infiltration:

Parameter	Requirement
Minimum depth to the measured water table from the lowest elevation in the basin	3 feet
Maximum standing water time	48 hours
Maximum ponding depth	1 foot
WQV	As defined in Section 2.3.5
Maximum Infiltration Rate	As determined in Section 2.3.4
Minimum freeboard	6 inches
Other	Must have a safe flood path to convey up to the 100 year storm safely to an established Right-of-way.

3.1.3.5 *Vegetated Swales*

Description: Vegetated swales are open, shallow channels with dense, low-lying vegetation covering the side slopes and bottom that collect and slowly convey runoff to downstream discharge points. An effective vegetated swale achieves uniform sheet flow through the densely vegetated area for a period of several minutes. The vegetation in the swale can vary depending on its location and is the choice of the designer. Most swales are grass-lined.

Application: Vegetated swales serve a dual function. They are used both as a minor treatment alternative and as a conveyance system.

Water Quality Effectiveness:

Target Pollutant	Relative Removal Effectiveness
Sediment	Good
Nutrients	Fair
Metals	Good
Bacteria	Fair
Oil/Grease	Excellent

Design Criteria: The following criteria shall be met for vegetated swales:

Parameter	Requirement
Minimum depth to the measured water table from the lowest elevation in the basin	3 feet

Maximum longitudinal slope	5%
Maximum side slope	3H:1V
Maximum velocity	1.0 ft/s
Maximum flow depth	2/3 vegetation height
WQV	As defined in Section 2.3.5
Minimum freeboard	6 inches
Maximum Infiltration Rate	As determined in Section 2.3.4
Minimum residence time	5. min
Vegetative Cover	>65%

3.1.3.6 Filter or buffer strips

Description: Filter strips are vegetated areas designed to treat sheet flow runoff from adjacent impervious surfaces such as parking lots and roadways, or intensive landscaped areas such as golf courses. While some assimilation of dissolved constituents may occur, filter strips are generally more effective in trapping sediment and particulate-bound metals, nutrients, and pesticides. Filter strips are more effective when the runoff passes through the vegetation and thatch layer in the form of shallow, uniform flow. Filter strips are primarily used to pretreat runoff before it flows to an infiltration BMP or another natural filtration BMP.

Application: Most effective when inflow is not concentrated, but comes in by sheet flow. Works well on road shoulders or off parking lots with no curb and gutter.

Water Quality Effectiveness:

Target Pollutant	Relative Removal Effectiveness
Sediment	Good
Nutrients	Fair
Metals	Good
Bacteria	Excellent
Oil/Grease	Excellent

Design Criteria: The following criteria shall be met for filter or buffer strips:

Parameter	Requirement
Minimum flow length	15 feet
Maximum longitudinal slope	5H:1V
Maximum flow velocity	1.0 ft/s
Maximum flow depth	2/3 vegetation height
Minimum freeboard	6 inches

Minimum vegetation cover	>65%
WQV	As defined in Section 2.2.6
Maximum Infiltration Rate	As determined in Section 2.2.5

3.1.3.7 Velocity Dissipaters

Description: Velocity dissipaters are BMPs designed to slow the velocity and minimize erosive action of flowing water. Check dams and level spreaders are two kinds of velocity dissipaters that are commonly used. Check dams are designed to create a series of step-downs with pools in between while level spreaders are designed like weirs to spread the flow out and to control water levels. Level spreaders are commonly used in wetland areas to maintain a uniform distribution of water and keep the flows from channelizing.

Application: Typically used in flow channels (concentrated flows) or to disperse water entering into a wetland area

Water Quality Effectiveness:

Target Pollutant	Relative Removal Effectiveness
Sediment	Good
Nutrients	Fair
Metals	Fair
Bacteria	Good
Oil/Grease	Fair

Design Criteria: The following criteria shall be met for velocity dissipaters:

Parameter	Requirement
Maximum flow velocity	1.0 f/s
Minimum freeboard	6 inches
WQV	As defined in Section 2.2.6
Maximum Infiltration Rate	As determined in Section 2.2.5

3.1.4 Man-made Treatment

3.1.4.1 Hydrodynamic Separators

Description: Hydrodynamic separators are stormwater management devices that work primarily based on vortex and gravity principles to separate stormwater from the pollutants. They are generally designed as flow-through systems with either on-line or off-line storage of pollutants. They include chambers for settling and storage of pollutants and are often used in conjunction with other BMPs as pretreatment. They are not especially effective for the removal of fine materials or dissolved pollutants. On-line separators are more susceptible to scour or re-suspension of pollutants than systems that incorporate off-line storage. They are generally not designed to treat stormwater flows exceeding 25 cfs.

Application: Typically limited by flow rates. Small footprint, but normally require depth for pollutant storage

Water Quality Effectiveness:

Target Pollutant	Relative Removal Effectiveness
Sediment	Excellent
Nutrients	Good
Metals	Excellent
Bacteria	Fair
Oil/Grease	Good

Design Criteria: The following criteria shall be met for hydrodynamic separators:

Parameter	Requirement
Maximum flow rate for prefabricated units	25 cfs
Design per manufacturer's requirements	
Typically need a high flow bypass	
WQV	As defined in Section 2.2.6

3.1.4.2 Saff Baffle

Description: Saff Baffles are a brand name product designed primarily as a post-construction retrofit pretreatment system. They require a sump structure. A specially designed perforated metal plate is installed inside a sump manhole or vault. Water flows through the plate. This action facilitates improved settling and re-suspension characteristics. Sediment removal rates are generally less than with hydrodynamic separators. These baffles are a fair low cost alternative that require a minimal footprint.

Sediments are stored in the lower reaches of the manhole or vault. Safl Baffles are not effective for floatables.

Application: Typically can be used anywhere a hydrodynamic separator can be used, but can handle higher flow rates. Pollutant removal rates slightly worse than a hydrodynamic separator.

Water Quality Effectiveness:

Target Pollutant	Relative Removal Effectiveness
Sediment	Good
Nutrients	Fair
Metals	Good
Bacteria	Fair
Oil/Grease	Poor*

*When used in conjunction with a skimmer their performance with oil/grease is “Good”

Design Criteria: The following criteria shall be met for Safl Baffles:

Parameter	Requirement
Maximum flow rate	50 cfs
Design per manufacturer’s requirements	
Removal efficiency goes down with higher flows	
WQV	As defined in Section 2.2.6

3.1.4.3 Skimmer

Description: Skimmers are designed to trap floatables in a holding facility until they can be removed by absorbent materials or a vactor truck. They can take many shapes and sizes. They can be prefabricated or custom built to fit the needs of almost any project. They generally require a certain amount of standing water to maintain a seal so the floatables cannot escape. They also require relatively frequent inspection and maintenance because of small storage capacity. They work on the principle of baffles

Application: Skimmers are typically not used as standalone treatment options. They are best utilized when floatables are the primary pollutant of concern

Water Quality Effectiveness:

Target Pollutant	Relative Removal Effectiveness
Sediment	Poor
Nutrients	Poor
Metals	Poor
Bacteria	Poor
Oil/Grease	Good

Design Criteria:

Per Manufacturer's recommendations

3.2 Sample Calculations

All categories of BMPs require a determination of the Water Quality Volume (WQV). Section 2.2.6 describes that calculation process.

3.2.1 Calculating Size Requirements for Infiltration BMPs

The main challenge associated with infiltration BMPs is preventing system clogging and subsequent infiltration inhibition. In addition, infiltration BMPs must be designed to drain in a reasonable period of time so that storage capacity is available for subsequent storms and so that standing water does not result in unwanted conditions. Infiltration BMPs should be designed according to the requirements listed in Table 3-1 and outlined in the following text:

Infiltration facilities must be sized to completely infiltrate the design capture volume within **72 hours**.

Step 1: Calculate the Design Volume

Infiltration facilities shall be sized to capture and infiltrate the water quality volume as described in section 2.2.6.

Table 3-1: Infiltration BMP Design Criteria

Design Parameter	Unit	Basins and Trenches	Galleries	Permeable Pavement	Dry Well	Hybrid Bioretention/ Dry Well
Design Water Quality Volume	cubic feet	See Section 2.3.5				
Design Surface Drawdown Time	hr	48				
Setbacks and Elevations	feet	In accordance with the Infiltration Feasibility Criteria, Section 3.1.1				
Pretreatment	-	Appropriate Treatment Control Measure shall be provided as pretreatment for all tributary surfaces other than roofs				
Hydraulic Conductivity, $K_{sat, measured}$	in/hr	In accordance with Section 2.3.4 or as measured in the field by a certified hydrogeologist				
Factor of Safety, FS	-	5				
Facility geometry	-	Bottom slope $\leq 3\%$ (basins); side slope shall not exceed 3:1 (H:V)	Flat bottom slope	Pavement slope $\leq 5\%$; If $\geq 2\%$, area shall be terraced	Typical 18 – 36 inch diameter; flat bottom slope	Bioretention: Bottom slope $\leq 3\%$; side slope shall not exceed 3:1 Drywell: flat bottom
Ponding Depth	inch	18 (maximum) ^a				
Media Depth	feet	2 (min) 8 (max)	-	2 (min) 8 (max)	-	2 (min) 8 (max)
Gravel media diameter	inch	1 – 3	-	1 - 2	3/8 – 1	3/8 - 1
Inlet erosion control	-	Energy dissipater to reduce velocity				
Overflow device	-	Required if system is on-line and does not have an upstream bypass structure. Shall be designed to handle the peak storm flow in accordance with the Building and Safety code and requirements				

a: Ponding depth may vary for galleries (which have a storage depth) and may be different from one vendor to another. Ponding depth is not necessarily applicable to permeable pavement.

Step 2: Calculate the BMP Surface Area

Determine the size of the required infiltrating surface by assuming the water quality volume will fill the available ponding depth.

Determine the minimum infiltrating surface area necessary to infiltrate the design volume

$$A_{min} = (V_{design} \times 12 \text{ in/ft}) / (T \times K_{sat, design})$$

Where:

A_{min} = Minimum infiltrating surface area (sq ft),

V_{design} = Design volume (cf)

T = Drawdown time (hours), 72 hours

$K_{sat, design}$ = Design infiltration rate of filter media (in/hr)

For infiltration basins, the surface area should be calculated as the surface area at mid-ponding depth. For infiltration trenches, the surface area should be calculated at the bottom of the trench.

3.2.2 Natural Filter Calculations

Natural filter facilities can be sized using one of two methods: a simple sizing method or a hydrologic routing modeling method. With either method the design capture volume must be completely infiltrated within the drawdown time shown in Table 3-2. Steps for the simple sizing method are provided below. BMPs should be designed according to the requirements listed in Table 3-2 and outlined in the following text. Swales and filter strips must be handled as indicated in the following sections.

Table 3-2: Natural Filter BMP Design Criteria

Design Parameter	Unit	Rain Garden	Planter Box	Bio-infiltration		Vegetated Swale	Filter Strip
Water Quality Volume, WQV	cubic feet	See Section 2.3.5					-
Design Drawdown Time	hr	48				-	-
Factor of Safety ^c	-	3				-	
Soil Media Infiltration Rate	in/hr	5 (max)				-	
Design Contact Time	min	-				≥ 7	
Slope in Flow Direction	%	-				1% (min) 6% (max)	2% (min) 33% (max)
Design Flow Velocity	ft/sec	-				≤ 1	
Maximum Ponding/Flow Depth	inch	18	12	18	-	5	1
Minimum Width	ft	2			-	2	15
Soil Depth	ft	2 (3 preferred) Topped with 3" of mulch			-	2	-
Underdrain	-	Slotted PVC pipe embedded in 12" gravel section and located 1" from bottom of facility		Slotted PVC pipe at least 2' above bottom of facility		N/A	Not required

Step 1: Calculate Water Quality Volume

See Section 2.2.6

Step 2: Determine Infiltration Rate

See Section 2.2.5

Step 3: Calculate Ponding Depth

Select a ponding depth (dp) that satisfies geometric criteria and is congruent with the constraints of the site. The ponding depth must satisfy the maximum ponding depth constraint shown in Table 3-2 as well as the following:

$$d_p \text{ (ft)} = (K_{\text{sat,design}} \times T) / 12$$

Where: d_p = Ponding depth (ft)

$K_{\text{sat,design}}$ = Design infiltration rate of filter media (in/hr)

T = Required surface drain time (hrs), from Table 4.2

Step 4: Calculate Surface Area

$$A_{\text{min}} = (V_{\text{design}}) / [(T_{\text{fill}} \times K_{\text{sat}}/12) + d]$$

Where:

A_{min} = Design infiltrating area (sq ft)

T_{fill} = Time to fill to max ponding depth with water (hrs) [unless a hydrologic routing model is used, assume a maximum of 3 hours]

K_{sat} = Design infiltration rate of filter media (in/hr)

d = depth of ponded water (ft)

The calculated BMP surface area only considers the surface area of the BMP where infiltration through amended media can occur. The total footprint of the BMP should include a buffer for side slopes and freeboard.

3.2.3 Swale Sizing

Swales shall be designed with a trapezoidal channel shape with side slopes of 3:1 (H:V). They shall incorporate at least two feet of soil beneath the vegetated surface. Swale sizing will be determined on a case-by-case basis. As is the case with other biofiltration BMPs, the sizing criteria presented in Table 3-2 must be met.

3.2.4 Filter Strip Sizing

Because filter strips are most often used for pretreatment purposes, their design will depend on the desired flow-rate to be treated and the type of BMP downstream, among other factors. As a result, filter strip sizing is not covered in this manual, but will be determined on a case-by-case basis.

4. Offsite Mitigation Measures

4.1 Offsite Mitigation Measures

Offsite mitigation shall only be utilized after on-site mitigation opportunities are exhausted and after approval from the City. If on-site mitigation meets the minimum requirements no off-site mitigation will be required. The following criteria shall be implemented in considering off-site mitigation:

1. Locate off-site projects as close as possible to the project site.
2. Locate off-site projects within the same sub-watershed as the proposed project.
3. Off-site projects may be completed on either private or public land.
4. Secure needed easements and rights to the property on which off-site projects are completed.
5. Demonstrate that same level of water quality protection is achieved as if all the runoff were retained on-site.
6. Demonstrate that the off-site project, including any on-site mitigation, addresses the same volume of water that would have been addressed if BMPs were all constructed on-site.
7. The developer shall execute an Agreement in Perpetuity with the city and recorded with the property, for on-going maintenance and upkeep of both on-site and off-site BMP(s).

4.2 Regional Facilities

In lieu of an independent off-site mitigation project designed specifically to meet the needs of a given project, the developer may be able to work together with the City and/or other groups to construct a larger regional water quality mitigation project. If a regional project is pursued, the following criteria should be considered:

1. An agreement shall be obtained with the City and/or other partners for the design, sizing, construction and maintenance of the regional facility.
2. The regional facility shall be sized to accommodate the water quality needs of all interested parties.
3. The same net level of water quality protection shall be achieved for the combined facility as would be required for each separate entity as if they were separate and distinct facilities.
4. The same total volume of water required to be addressed at each individual and independent site shall be addressed as the accumulated total volume at the regional facility.
5. All Maintenance Agreements in Perpetuity that would have been required for each separate facility shall be addressed in agreement(s) for the regional facility and shall be recorded with each parcel encompassed as part of the regional facility.

APPENDIX A

WATER QUALITY VOLUME
REPORT FORM

Water Quality Volume Report Form

STORM WATER QUALITY REPORT

Date: _____
Project Name: _____
Project ID: _____
Design Engineer: _____

Is the project within a watershed that is 303(d) listed? (<http://mapserv.utah.gov/surfacewaterquality/>)

If yes:

Name of Receiving Water(s): _____

Listed Impairment(s): _____

Does the watershed have an approved TMDL?

If yes:

Approved TMDL(s): _____

I have reviewed the storm water quality design and find this report to be complete, accurate, and current.

(Name), Project Manager

(Name), Permittee's Designated Storm Water Coordinator

(PE stamp required)

(Name), Permittee's Head of Maintenance

Project Information

Type of Project (New Development, Redevelopment): _____

Area of Land Disturbance (acre): _____

Project Impervious Area (acre): _____

Project Imperviousness (%): _____

Project Runoff Coefficient, R_v : _____

90th Percentile Storm Depth (in): _____

Project 90th Percentile Volume, V_{goal} (cf): _____

Groundwater Information

Depth to Groundwater (ft): _____

Historical High Depth to Groundwater, if known (ft): _____

Source: _____

Soil Information

Infiltration Rate (in/hr): _____

Source: _____

LID Drainage Areas

(add additional rows as needed)

Contributing Drainage Area	Area (acre)	Impervious Area (acre)	Imperviousness (%)	Runoff Coefficient, R_v	Water Quality Volume WQV (cf)
Total WQV (cf)					

LID BMP Design

(add additional rows as needed)

Contributing Drainage Area	LID BMP Type	Water Quality Volume WQV (cf)	Runoff Retained (cf)	Percent of Runoff Captured (%)
Total Volume Retained (cf)				

Percent of V_{goal} captured by LID BMPs: _____%

If 100% of V_{goal} is not captured, document and provide narrative of technical infeasibilities and/or alternate compliance measures below:

Describe additional storm water quality measures incorporated into the site:

APPENDIX B

80TH PERCENTILE STORM EVENT
CALCULATION

Appendix B: 80th Percentile Storm Event Calculations

Weber Basin

Fruit Heights

Ogden Hinkley Airport

Farmington Lower

Triad Center

Salt Lake International Airport

Appendix B: 80th Percentile Storm Calculations

Calculating the 80th Percentile Storm Event

The desire of the National and State Storm Water Regulations is for the hydrology of any given site after development should mimic the hydrology of that same parcel of land in its natural state. The State of Utah has selected the 90th Percentile Storm as the standard to use to meet this desire. The State of Utah has further outlined the steps to be taken to determine the depth of the 90th Percentile storm at any given weather station. The following text was taken from the State of Utah: *A Guide to Low Impact Development within Utah*.

90th Percentile Depth

Determine the 90th percentile precipitation depth.

1. Obtain long-term daily rainfall data from the following sources:
 - a. National Oceanic and Atmospheric Administration (NOAA):
<https://www.ncdc.noaa.gov/cdoweb/datatools/selectlocation>; or
 - b. Reliable historical local data; or
 - c. Any other reliable data source.
2. Sort data low to high
3. Remove small precipitation events (≤ 0.1 inch) and all snowfall.
4. Use the Excel PERCENTILE function to calculate the 90th percentile rainfall depth.

A more in-depth discussion on determining the 90th percentile precipitation depth is found here:

<https://owl.cwp.org/mdocs-posts/urban-subwatershed-restoration-manual-series-manual-3/>

A reliable record of historical precipitation data should meet the following conditions:

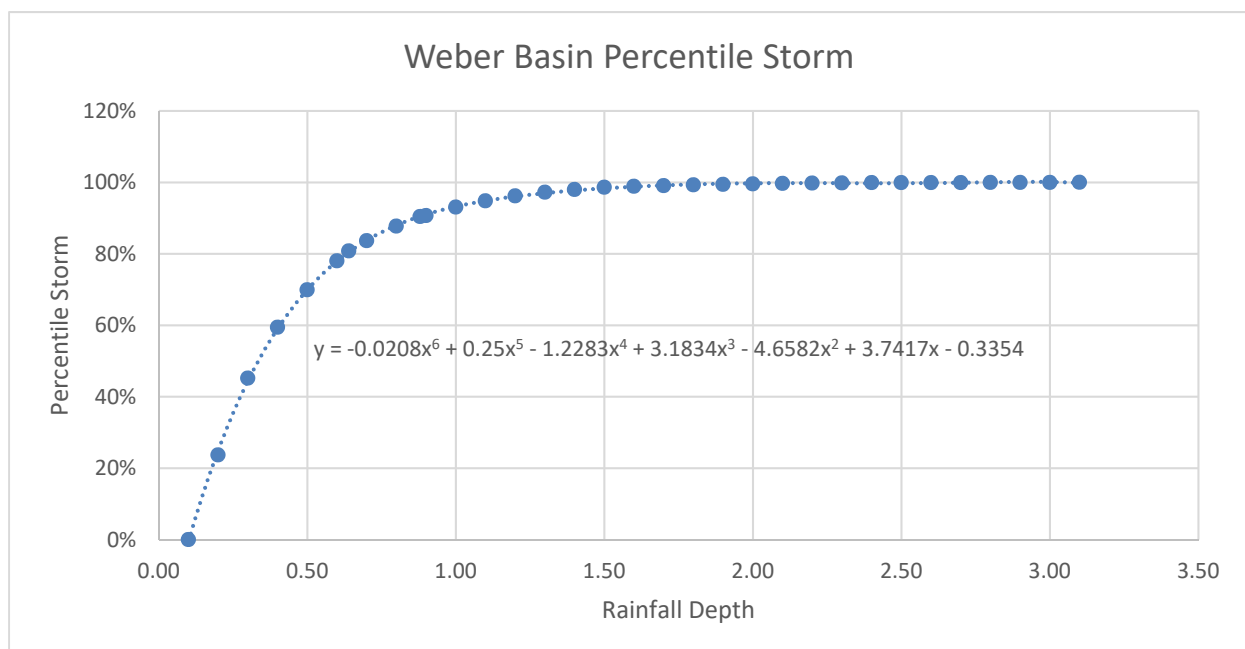
1. Come from an active rain gage;
2. Have at least 30 years of data;
3. Have 90% data coverage for the period of record.

Of the stations available for analysis and with a long enough period of record to provide reliable data, it was felt that the Triad Center was the station that best represents Kaysville City in elevation and proximity to the mountains. The following pages include a summary of data collected from local rain gages taken from the Utah Climate Center.

Appendix B: 80th Percentile Storm Event Calculations

Weber Basin

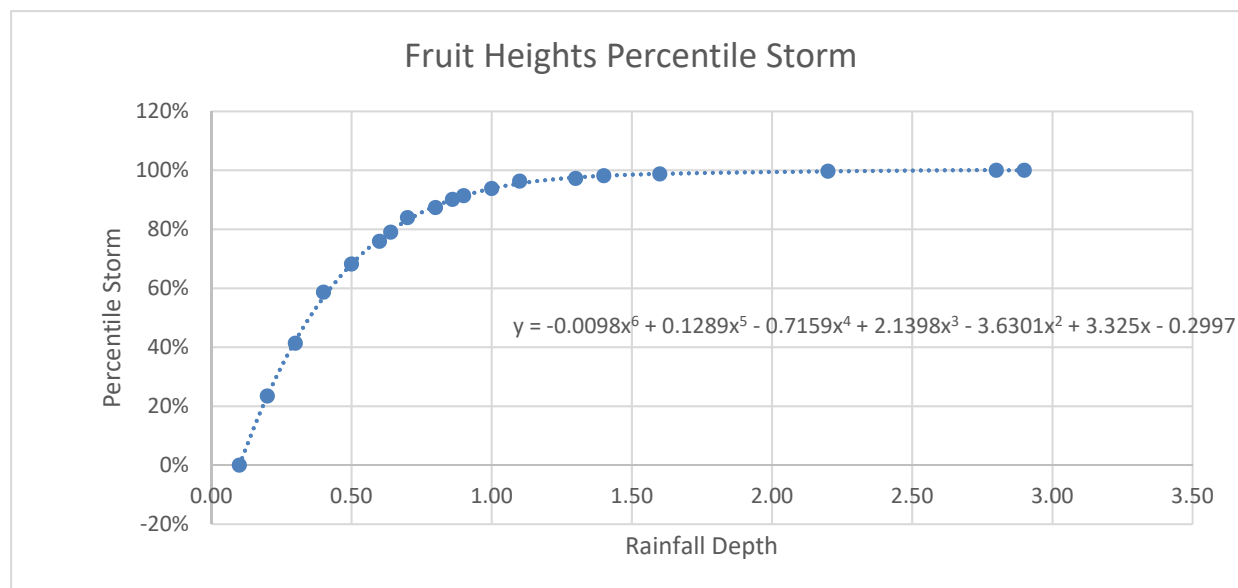
Number of Storms Greater than or equal to	Rainfall (in)	Percentile Storm
3011	0.10	0%
2298	0.20	24%
1651	0.30	45%
1222	0.40	59%
906	0.50	70%
662	0.60	78%
578	0.64	81%
492	0.70	84%
369	0.80	88%
288	0.88	90%
281	0.90	91%
209	1.00	93%
156	1.10	95%
115	1.20	96%
84	1.30	97%
61	1.40	98%
42	1.50	99%
33	1.60	99%
28	1.70	99%
22	1.80	99%
17	1.90	99%
14	2.00	100%
9	2.10	100%
7	2.20	100%
0	3.10	100%



Appendix B: 80th Percentile Storm Calculations

Fruit Heights

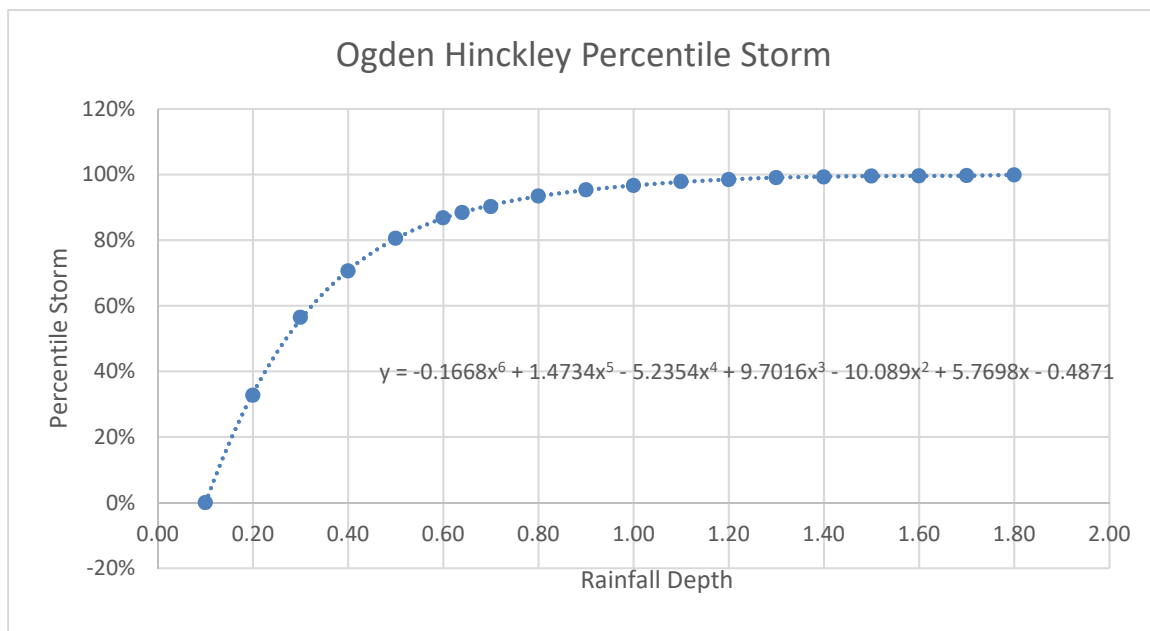
Number of Storms Greater than or equal to	Rainfall (in)	Percentile Storm
324	0.10	0%
248	0.20	23%
190	0.30	41%
134	0.40	59%
103	0.50	68%
78	0.60	76%
68	0.64	79%
52	0.70	84%
41	0.80	87%
32	0.86	90%
28	0.90	91%
20	1.00	94%
12	1.10	96%
9	1.30	97%
6	1.40	98%
4	1.60	99%
1	2.20	100%
0	2.80	100%



Appendix B: 80th Percentile Storm Event Calculations

Ogden Hinckley Airport

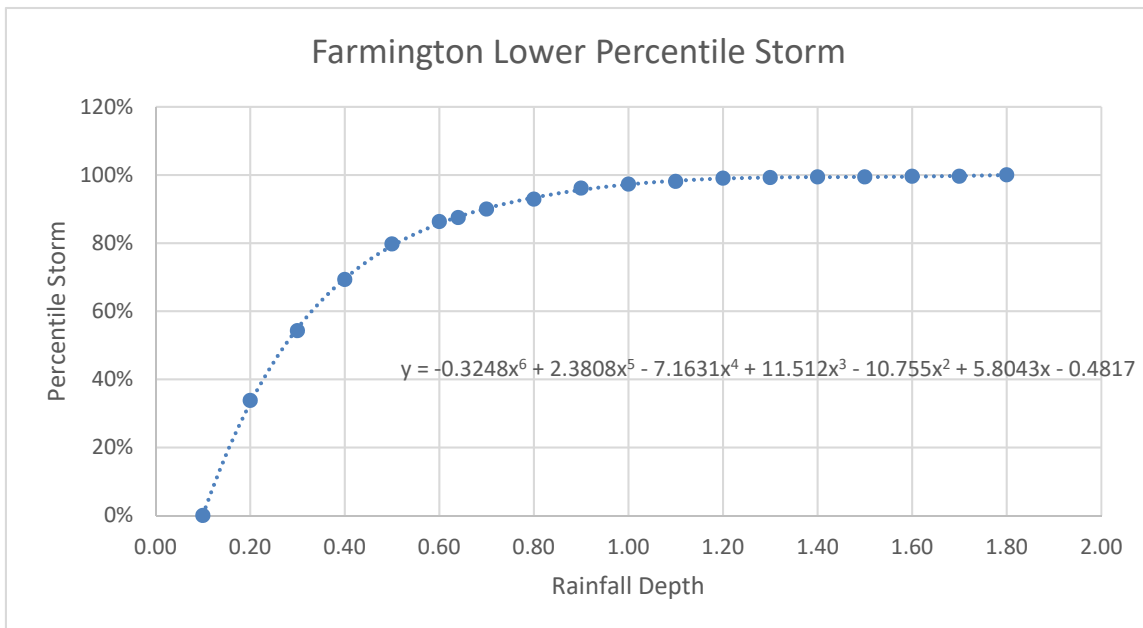
Number of Storms Greater than or equal to	Rainfall (in)	Percentile Storm
1055	0.10	0%
710	0.20	33%
459	0.30	56%
310	0.40	71%
205	0.50	81%
139	0.60	87%
122	0.64	88%
103	0.70	90%
69	0.80	93%
49	0.90	95%
35	1.00	97%
22	1.10	98%
16	1.20	98%
10	1.30	99%
8	1.40	99%
5	1.50	100%
4	1.60	100%
3	1.70	100%
1	1.80	100%
0	3.40	100%



Appendix B: 80th Percentile Storm Calculations

Farmington Lower

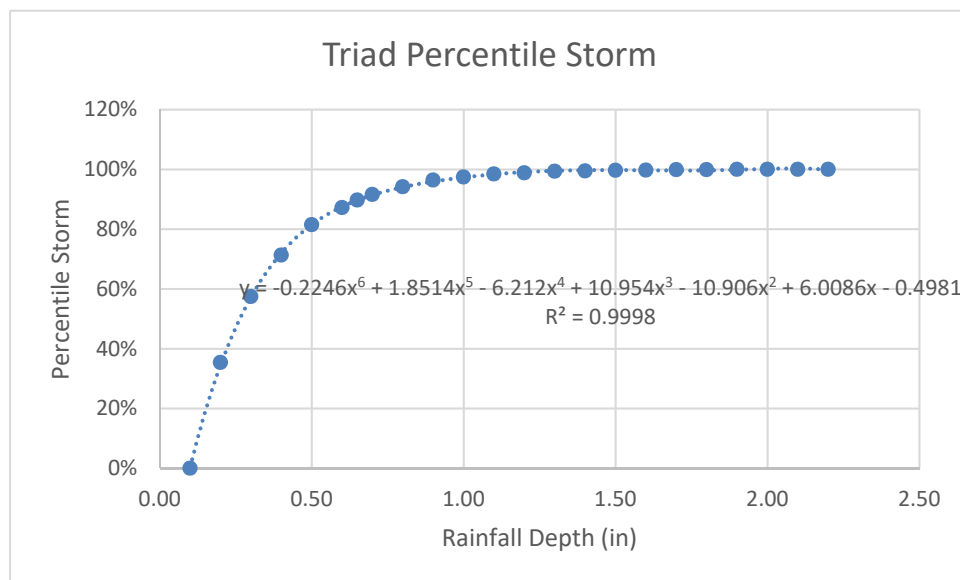
Number of Storms Greater than or equal to	Rainfall (in)	Percentile Storm
518	0.10	0%
343	0.20	34%
237	0.30	54%
159	0.40	69%
105	0.50	80%
71	0.60	86%
65	0.64	87%
52	0.70	90%
37	0.80	93%
20	0.90	96%
14	1.00	97%
10	1.10	98%
5	1.20	99%
4	1.30	99%
3	1.40	99%
3	1.50	99%
2	1.60	100%
2	1.70	100%
0	1.80	100%



Appendix B: 80th Percentile Storm Event Calculations

Triad Center

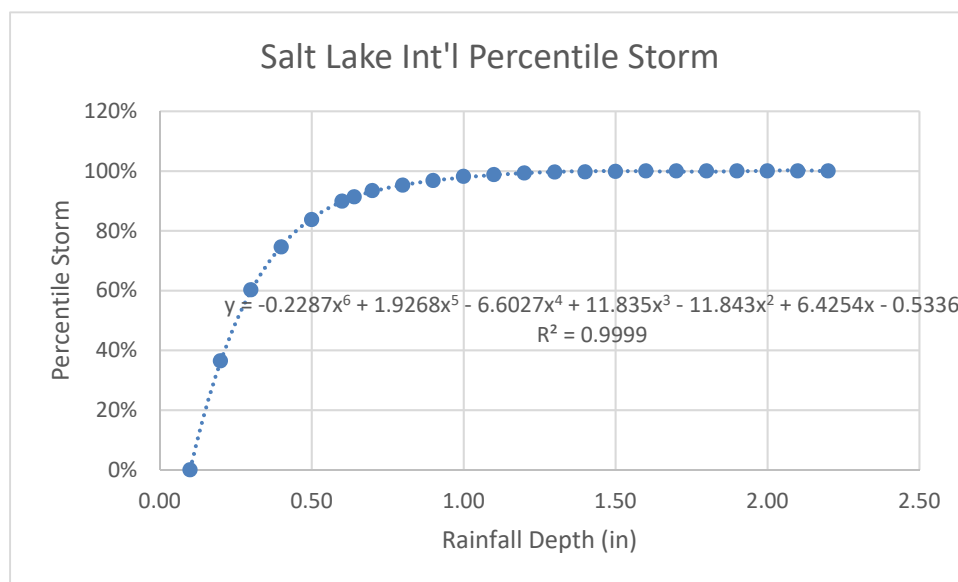
Number of Storms Greater than or equal to	Rainfall (in)	Percentile Storm
1286	0.10	0%
831	0.20	35%
547	0.30	58%
369	0.40	71%
238	0.48	80%
164	0.60	87%
132	0.65	90%
108	0.70	92%
75	0.80	94%
46	0.90	96%
33	1.00	97%
20	1.10	98%
15	1.20	99%
8	1.30	99%
7	1.40	99%
4	1.50	100%
3	1.60	100%
1	1.70	100%
1	1.80	100%
0	1.90	100%



Appendix B: 80th Percentile Storm Calculations

Salt Lake International Airport

Number of Storms Greater than or equal to	Rainfall (in)	Percentile Storm
1305	0.10	0%
829	0.20	37%
519	0.30	60%
332	0.40	75%
284	0.44	80%
212	0.50	84%
132	0.60	90%
113	0.64	91%
86	0.70	93%
62	0.80	95%
42	0.90	97%
24	1.00	98%
16	1.10	99%
9	1.20	99%
5	1.30	100%
4	1.40	100%
2	1.50	100%
0	1.60	100%



APPENDIX C

MUNICIPAL ORDINANCES

Appendix C: Municipal Ordinances

Title 9 – Public Works

Chapter 3.....	Storm Water
Chapter 3a.....	Storm Drainage System
Chapter 3b.....	Storm Water Management and Permit
Chapter 3c.....	Prohibited Actions
Chapter 3d.....	Violations and Enforcement

Title 18 – Building Regulations

Chapter 1.....	General Provisions
Chapter 2.....	Standard Codes
Chapter 3.....	Residential Construction
Chapter 4.....	Commercial, Industrial, and Institutional Development
Chapter 5.....	Commercial Building Design

Title 19 – Subdivision

Chapter 1.....	General Provisions
Chapter 2.....	Development Procedures
Chapter 3.....	Preliminary Plat
Chapter 4.....	Final Plat
Chapter 5.....	Subdivision Standards
Chapter 6.....	Subdivision Improvements Required
Chapter 7.....	Fees

**KAYSVILLE CITY PLANNING COMMISSION
MEETING MINUTES
September 23, 2021**

Planning Commission Members in Attendance: Vice-Chair Hunt, Commissioners Barrus, Lyon, Doxey, Branch and Sundloff

Staff Present: Lyle Gibson, Dan Jessop, Mindi Edstrom

Public Attendees: none

The Planning Commission meeting was held on Thursday, September 23, 2021 at 7:00 p.m. in the Kaysville City Hall located at 23 East Center Street. Vice-Chairperson Hunt opened the meeting by welcoming those present.

OPENING

Vice-Commissioner Hunt made a motion to approve the minutes from the September 9, 2021 meeting. Commissioner Lyon and Commissioner Doxey seconded the motion and they were unanimously approved.

Public Hearing for the rezone of 0.18 acres of property from HC (Health Care) to the PB (Public Business) zoning district.

Introduced by: Dan Jessop

Description:

The applicant is requesting to rezone the property at the subject address. It was Re-zoned from PB to HC in 2018 for purpose of running an adult day care business. The property is located just south of Davis Tech along the east side of Main Street, and has been used as a commercial property for many years. Now the applicant would like to return the zoning of the parcel back to the PB zone and return to using the building for office use.

Recommendation:

As a legislative decision, the Planning Commission is tasked with making a recommendation to the City Council. The Commission has broad discretion in its

decision making on a rezone, but should look to see how the requested zone fits at this location based on its surroundings and the general plan.

Discussion:

Commissioner Lyon: Asks that if this is just a rezone not a tear down.

Lyle Gibson: No, just a rezone for a business change.

Commissioner Hunt: Since there is no public here for the Public Hearing we will entertain a motion.

Motion: Commissioner Sundloff to motion to approve the property for the rezone

Motion to approve: Commissioner Sundloff

Motion to second: Commissioner Lyon

Vote on the motion: Vote is unanimous

Public Hearing for consideration of a Water Efficient Landscaping Ordinance

Introduced by: Lyle Gibson

Description:

The Planning Commission has previously discussed this item. The ordinance is primarily focused on addressing the desires of Weber Basin Water Conservancy District to conserve water resources. The ordinance as prepared is based on a draft ordinance given by the water district focused on the essential items that if implemented would qualify property owners in the city for incentives from the district to install more water efficient landscapes. The requirements are applicable to new construction.

The draft ordinance highlights the minimum requirements from the district in green. The other language attempts to address previous discussions from the commission to give options to residential development and place more specific requirements on commercial and institutional development types.

The Commission requested that a public hearing be held for this item before moving further along with the discussion and making a recommendation to the city council.

Recommendation:

The ordinance as proposed is still very detailed, staff may prefer to simplify, but with the intent of providing multiple options and addressing the minimums of the water district is ready to have it discussed by the public. Staff is seeking additional direction from the commission if changes are needed or would recommend that the commission forward a recommendation to the council should they feel ready.

Public Comment: No emails or calls and no public at meeting.

Discussion:

Lyle Gibson: Items in green in the ordinance draft are all items that Weber Basin Water is requiring in the ordinance. Everything else is a bonus. We could really simply this ordinance

Commissioner Lyon: 17-6-7 and 17-6-8 reference existing draft. Perhaps leave that section in there and reference the city code.

Commissioner Hunt opened and closed public hearing comment due to the fact that no one was in attendance.

Commissioner Lyon: Aware of some cities that water certain days by last name or house number.

Lyle Gibson: How does staff regulate or control those who are doing new building?

Residential example: Right now if Ivory homes builds homes and we don't have the builder bring in plans for landscaping as landscaping is often done well after occupancy. Staff is grappling with how to regulate.

Commissioner Lyon: You almost have to have it set that when you approve a new subdivision in the deed documents then you have the requirements in there so that the home owner is aware of the ordinance.

Commissioner Sundloff: Why do we add this into the document since it could open flood gates. Questions Lyle...the green items are what Weber Basin Water Conservancy District are requiring us to insert into the ordinance, what benefit do the residents get for participating.

Lyle Gibson: Flip your strip, in order to participate you have to have an ordinance. Weber Basin Water Conservancy District would give up to \$1.50 per square foot to pull out the existing park strip and put in a water wise park strip.

Commissioner Lyon: Would Weber Basin be open to just allowing rock without green strip?

Commissioner Sundloff: If we are going to put a number on the turf, let the home owner put their percentage where they would choose. Park strips are hard to water efficiently. Like turf, not all created equal. Some are even better than non-turf. Definition of turf is read.

Beyond the park strips, on new development for a ½ acre9000 square feet that cannot be put as turf. That is a lot of non-turf area. If we were to pass this it would be passed in the night since there is no one here. The residents would be furious with %35 required.

Lyle Gibson: Can we still support water wise landscaping, is it worth doing the ordinance in the way that it is written? There could be other options.

Commissioner Hunt: Have other cities passed an ordinance?

Lyle Gibson: Yes, Layton city

Commissioner Doxey: Drought tolerant grass needs to be a specific grass since it would require less water than a Kentucky Blue grass.

Commissioner Barrus: Concerned that just because you have a certain type of grass that you will water less.

Commissioner Doxey and Lyon: Both said that we would need to educate your public as to what would be allowed in the city.

Commissioner Lyon: People are still watering 3 -5 days a week because they are conditioned.

Commissioner Sundloff: Residents would be much more in favor to address water usage if they saw the meter. You can meter it like a cell phone plan. And charge for over usage. Standardize the usages, but then we will lose the incentives from WBWDC.

Commissioner Doxey: When he lived in Ill. he had to pay for water and it was \$200 for a month and after that he was ok to let his lawn go yellow.

Commissioner Branch: What would be the follow up and will they comply? What teeth do we have if someone does not comply too the ordinance?

Lyle Gibson: We don't have much in place and short on staff to regulate.

Commissioner Branch: If an ordinance is not well regulated and no way to follow up, the ordinance would lose its relevance and importance.

Commissioner Hunt: What other options do we have? When would everyone be getting their meters? And once we have them, will we start charging them for water usage.

Lyle Gibson: Meters are mandated by the state. The water districts have been doing some retro fitting for some of the existing home. Around \$2000 for each meter. Could be years until it is all complete with every resident.

Commissioner Hunt: So are we kicking this down the road 5-10 years for having meters in place. If we are trying to solve a problem in the community we would need to have something else in place to help the problem.

Lyle Gibson: Get Weber Basin's suggestions on other ways we can create an ordinance.

Commissioner Doxey: Have we heard from the State on how we are doing as far water conservation? Any statistics?

Commissioner Barrus: They stated on the Weber Basin tour that they have been able to conserve water this year to allow drinking water usage for next year but if things don't improve we won't have drinking water.

Commissioner Lyon: We have had a huge influx of development in the state which has added to the water shortage.

Commissioner Hunt: Open to public comment and closed due to the fact that no one in attendance.

Motion: Commissioner Sundloff to motion to table the item to allow staff to look into other opinions.

Motion to approve: Commissioner Sundloff

Motion to second: Commissioner Lyons

Vote on the motion: Vote is unanimous

Public Hearing for an Instructional Home Occupation Ordinance

Introduced by: Lyle Gibson

Description:

The Planning Commission was given an initial introduction to a new business license type that would address a unique way of conducting business from residential properties within Kaysville.

Recommendation:

After holding the public hearing the Planning Commission should give direction to staff regarding any changes they would like to see made to the ordinance, or the Commission may recommend that the Ordinance be denied or approved by the City Council.

Public Comment: Commissioner Hunt opened up the discussion to the public, however no one is there to comment, so Commissioner Hunt closed the public comment.

Discussion:

Lyle Gibson: Asks what is the temperament of the Commission?

Commissioner Sundloff: Fear of government we are continuing to add more laws to the books, giving a reduction of freedom, however this ordinance will allow more freedom and we will be facilitating growth. Thinks that this ordinance is a great start.

Commissioner Lyon: Does the city worry about liability between the two parties?

Lyle Gibson: He will check with the City Lawyer.

Commissioner Hunt: Do we have a way to make sure the owner is approving the business on their party?

Lyle Gibson: We could come up with a form to help establish permission. Are there any details that need to be changed with number of participants, property usage, instructors, etc.? Is the commission comfortable with the numbers we have in place?

Commissioner Hunt: Suggests maybe removing the percentage of property that is allowed for a home business.

Lyle Gibson: Suggests writing in an exception to the percentage of the outside usable space for the business.

Commissioner Sundloff: In theory home with a pool and it takes up the whole back yard if they had a shed as well.

Lyle: As staff we can play with the numbers on the percentages. Maybe not even necessary to have a percentage.

Motion: Table the item and push it back to staff to revise from the notes taken

Motion to approve: Commissioner Sundloff

Motion to second: Commissioner Doxey

Vote on the motion: Vote is unanimous

Discussion Item: Routine and Uncontested Variance Process

Introduced by: Lyle Gibson

Description:

There are regularly items that come before staff where a property owner is looking for a bit of wiggle room in order to accommodate an addition or new construction. The Planning Commission has similarly seen similar requests on occasion where someone determines they would like to pursue it enough that they request a variance. On multiple occasions the Planning Commission has looked at a request and expressed something to the effect of, it makes sense, but it doesn't work with the rules or variance process so have been unable to grant the wiggle room requested. In some instances ordinance changes have been pursued to create new rules or adjust old rules that would accommodate the request and similar circumstances. Zoning ordinances apply broadly too many properties and cannot always anticipate or account for every circumstance. The variance process on the books is extremely rigid and difficult to utilize when a property owner desires some flexibility. The Routine and Uncontested Variance discussion is a potential solution to the right circumstances where some wiggle room makes sense and even the neighbors agree.

Included with the report is the ordinance and the application form for the process used by Layton City.

Staff is looking to discuss this example process with the commission to determine if this is something that should be pursued further for Kaysville City.

Discussion:

Commissioner Lyon: We have changed ordinances to help with situations like on 1475 S. This process is something that could be a good thing for some neighborhoods.

Commissioner Sundloff: Looks like what Layton did was delegate the Planning Commission's authority to staff. Suggestion is to create an ordinance that is legislative and create standards that gives staff parameters within which they are then acting administratively. How can we write a law that allows for some flexibility for those instances and then let staff make the decisions administratively not quasi-judicially?

Commissioner Barrus: When we worked with the applicant from 1475 S. we were able to come up with a better ordinance. If swept under the rug then maybe would push away better ordinances.

Commissioner Hunt: If we were to go with the uncontested process it would not offer a lot of protection for staff.

Lyle Gibson: We (staff) don't always love to make discretionary decisions. A variance is a variance. Getting standards right can be tricky. Maybe come up with something different for the process? Perhaps staff can come up with some examples that are brought to them on a regular basis to help getting the standards right.

Commissioner Sundloff: It is very difficult to create standards and then apply them evenly so we could just say that we are going to keep with our ordinances as written and apply the variance. He could go either way.

Commissioner Doxey: From a strategic perspective he always wants to simplify the process. If you have competent people, then give latitude within boundaries. Then if you exceed the boundaries then bring it forward. You need to be thoughtful in latitude in those boundaries.

Commissioner Branch: What examples have the staff had to maybe make some standards?

Lyle Gibson: We can identify some as staff, pitched roofs, variation in facade, or architectural changes.

Commissioner Sundloff: Maybe not make a new ordinance, but amend the ordinance in place.

Commissioner Lyon: Agrees with making the process simple. Let's amend the ordinances.

Commissioner Barrus: Likes to make things simple, however, would this open the flood gates with everyone asking for a variance.

Lyle Gibson: If the neighbors agree to the applicants proposal it is hard to know if they are "really" on board and not persuaded.

Commissioner Sundloff: Variances that have come before that we like to approve but we can't because of the letter but it seems that we were able to find some solutions within our ordinances. There is also a slight risk that staff could pass something through that would be questionable.

Commissioner Hunt: Could we make a conditional use permit for the variance so that it would always have to come to Planning Commission?

Lyle Gibson: Staff could consider a Conditional Use Permit for this. We can have staff make a list of ordinances that are being addressed daily.

No Motion required

REPORTS, CORRESPONDANCE AND CALENDAR

Reports: The General Plan comments starting to flow in. Will use the Commission to help get the word out. The first week of October will be the Public Open House. Open house will be from 6-8:00 at City Hall. Parks Advisory Board will also be part of the open house. All materials from the open house will be left in the foyer for public. Meeting on the 13th before the public hearing.

Commissioner Lyon: He thought the conference was good. State trying to take control of cities. Taking things away from local control won't work. Loved the conference.

Commissioner Hunt: Deed restrictions, housing affordability issue. Work with developers to help control housing prices.

Commissioner Lyon: Farmington just passed an ordinance to help control housing prices. Doesn't work with a developer without enough funding, the city would be compensating the builder to get them to come in. The city would need to have the funding.

Lyle Gibson: It is likely that taxes would have to increase if the city wishes to help finance affordable units, or the city would need to be willing to increase project densities for builders to justify providing affordable units.

Commissioner Barrus: Park City was talking about their problems at the conference when the employees couldn't afford to live in the house. And the businesses went to the city to get help.

Commissioner Lyon: Asks Lyle to pull the affordability ordinance from Farmington and North Salt Lake.

ADJOURNMENT

Motion to adjourn by Commissioner Lyons and seconded by Commissioner Branch. Meeting was adjourned at 8:35 pm.