
BEACON POINTE | VILLAGE 2 PLAN

NOVEMBER 2021 | SARATOGA SPRINGS, UT

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PREFACE

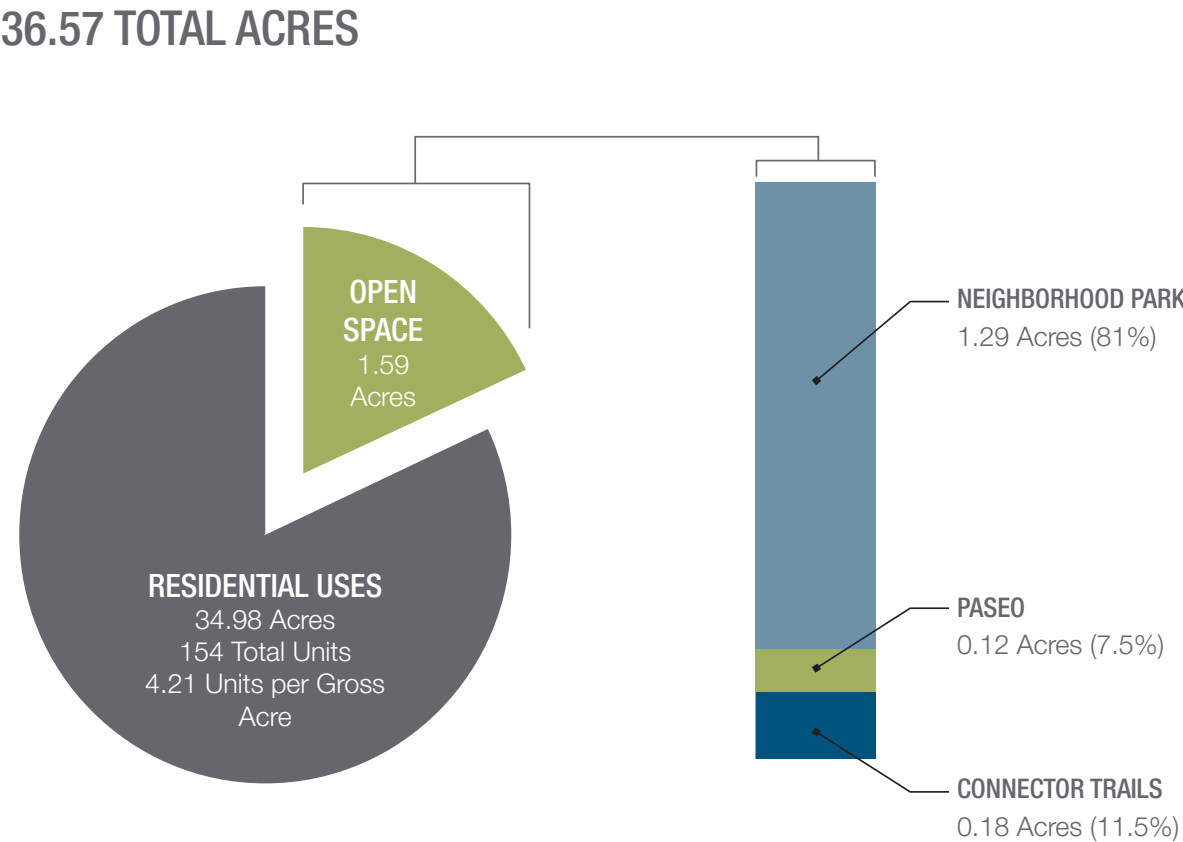
The following Village Plan document addresses the Improvements as they pertain to the Beacon Pointe Community located in Saratoga Springs, Utah. The property and the proposed improvements for the development are discussed in detail and follow the requirements set forth within the Village Plan requirements of the City Code of Saratoga Springs. This document supersedes Title 19 land development code and ordinances for Village 2 - Beck Ridge, where allowable by 2021 city code, however any issue not addressed in either the Beacon Pointe Community Plan or Village Plan, will default to Title 19 standards.

The purpose of the document is to inform the City (Staff, Planning Commission and City Council) and Public of the proposed general design elements, open space plans, guiding design principles and land uses for Village 2. In addition, utility capacities, based on conceptual plans, will outline the methods used to anticipate the demands and service requirements necessary to provide adequate utility service and infrastructure for both the residences within the development and the City.

EXECUTIVE SUMMARY

Village 2 - Beck Ridge is an approximate 36.57 acre parcel located east of the future Mountain View Corridor extension and North of the existing Grandview and Saratoga Hills subdivisions of Saratoga Springs.

The proposed Village Plan incorporates the following units and approximate acreages:



VILLAGE PLAN | LEGAL DESCRIPTION

BEACON POINTE I VILLAGE 2 PLAN I LEGAL DESCRIPTION

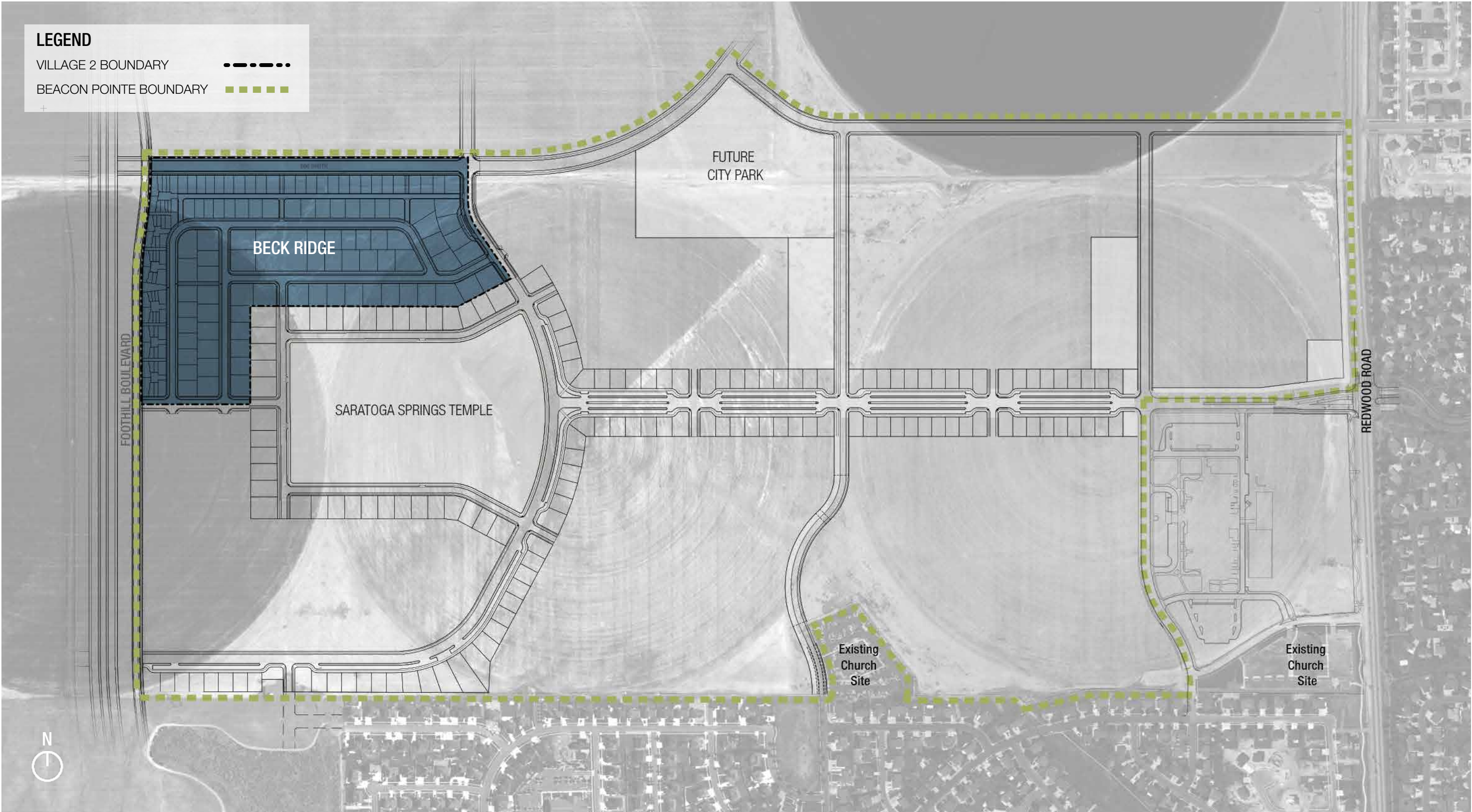
THE PROPOSED BEACON POINTE VILLAGE 2 CONTAINS APPROXIMATELY 36.57 ACRES OF PROPERTY. THE PARCEL METES AND BOUNDS LEGAL DESCRIPTION IS AS FOLLOWS:

A certain parcel of land located in Section 34, Township 5 South, Range 1 West, Salt Lake base and meridian being also known as parcel 58:041:0231 at the Utah County Assessor's Office. The parcel is referenced as "parcel 5" in entry 70865:2020 dated May 26, 2020 at the Utah County Recorder's Office. The surveyed description being as follows, to wit;

Beginning at the northeast corners of the above referenced parcel which point is located S89°45'46"E, along the section line, a distance of 756.02 Feet and N00°00'05"W, along the easterly line of parcel 58:041:0231, a distance of 99.70 Feet to the point of beginning; thence S00°00'05"E a distance of 221.07 Feet to the point of a tangent curve to the left; thence southeasterly along said curve to the left having a radius of 250 feet, a central angle of 34°11'31" and a length of 149.19 Feet (chord bears S17°05'50"E 146.99 Feet); thence S34°11'39"E a distance of 321.37 Feet; thence S61°50'54"W a distance of 234.82 Feet; thence S68°53'59"W a distance of 73.34 Feet; thence S89°59'55"W a distance of 1063.29 Feet; thence S00°00'05"E a distance of 504.04 Feet; thence S89°59'55"W a distance of 558.00 Feet; thence N00°00'05"W a distance of 599.11 Feet to the point of a tangent curve to the right; thence northeasterly along said curve to the right having a radius of 1,810.00 Feet, a central angle of 07°09'58" and a length of 226.38 Feet (chord bears N03°34'54"E 226.23 Feet); thence N07°09'53"E a distance of 147.66 Feet to the point of a tangent curve to the left; thence northeasterly along said curve to the left having a radius of 2000.00 Feet, a central angle of 08°31'59" and a length of 297.86 Feet (chord bears N02°53'55"E 297.58 Feet) to the northwest corner of parcel 58:041:0231; thence N89°59'55"E a distance of 1,625.33 Feet to the point of beginning.

CONTAINS: ±36.57 ACRES

BEACON POINTE I VILLAGE 2 PLAN | VILLAGE BOUNDARY



VILLAGE PLAN I USE MAP AND BUILDOUT ALLOCATION

BEACON POINTE I VILLAGE 2 PLAN I USE MAP AND BUILDOUT ALLOCATION

The following **Use Map** depicts the proposed land uses for the proposed Beck Ridge - Village 2. The District Area Plan (DAP) for Saratoga Springs provides specific “Place Types” that have been offered as guidelines for future development. The proposed land uses for Beck Ridge fall within the Traditional Neighborhood category with an gross dwelling density of 4.21 units per acre. The land use tabulations are broken down into the following categories:

MIXED RESIDENTIAL. This Village is characterized by both traditional single family detached and non-traditional detached & attached single-family housing products. Traditional single family lots radiate from the southeast corner of the development and give way to non-traditional alley-loaded single family homes to the north and non-traditional side-facing townhomes to the west.

OPEN SPACE. The overall site contains 1.59 acres (4%) of open space the majority being contained a centralized neighborhood park. Open space types as defined in the DAP include a Neighborhood Park, Paseos, and Connector Trails.

THE INDIVIDUAL VILLAGE INFORMATION IS BASED ON THE FOLLOWING LAND USE INTENSITIES:

- 4.11 persons per residential ERU has been used for estimating projected populations.

THE ASSOCIATED ERUS AND ACREAGE IS AS FOLLOWS:

BECK RIDGE – VILLAGE 2

This Village will center on small neighborhood park located at the center of the neighborhood.

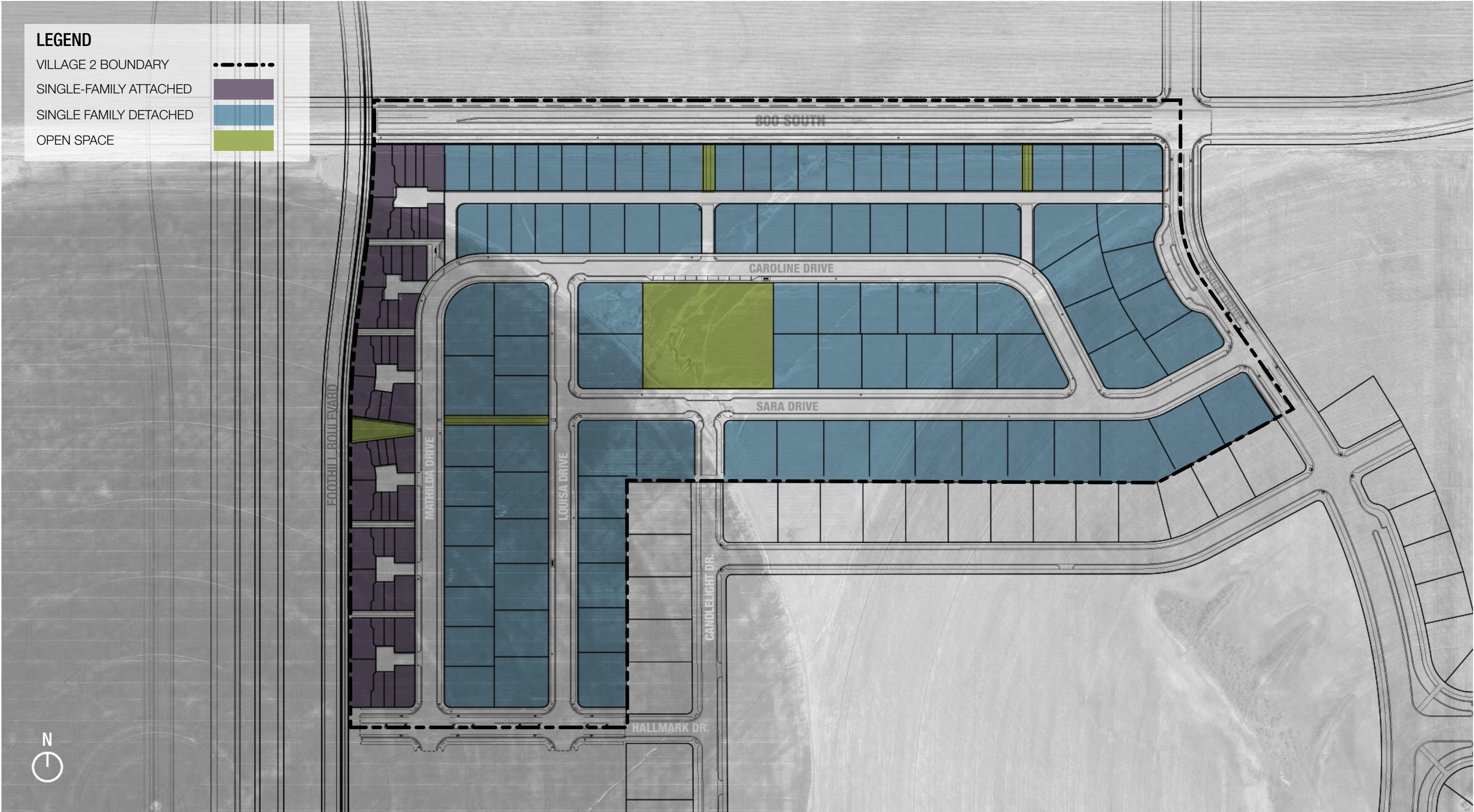
OVERALL VILLAGE AREA:	36.57 AC (100%)
Mixed Residential Area:	
34.98 Ac (96%) 154 ERUs Total (100%)	
154 Planned Units	
Open Space Area:	
1.59 Ac (4%)	
PROJECTED POPULATION:	633 Persons
UNITS PER GROSS AREA:	4.21 Units per Acre

Pursuant to the Community Plan, Lot Count may fluctuate up to 15% with approval of the Planning Director and lot dimensions may vary up to minimum established for Village 2, shifting village boundaries accordingly.

COMMUNITY PLAN COMPARISON:

OVERALL VILLAGE AREA:	36.8 AC (100%)
Mixed Residential Area:	
36.8 Ac (100%) 239 ERUs (100%)	
Open Space Area:	
0 Ac (0%)	
PROJECTED POPULATION:	982 Persons
UNITS PER GROSS AREA:	6.5 Units per Acre

BEACON POINTE I VILLAGE 2 PLAN | **USE MAP AND BUILDOUT ALLOCATION**



VILLAGE PLAN I DEVELOPMENT STANDARDS

SINGLE FAMILY DETACHED

LOT REGULATIONS:

LOT SIZE. The following minimum lot size shall be provided and maintained for each dwelling and uses accessory thereto:

BECK RIDGE I VILLAGE 2 – An area of not less than 4,000 square feet for lots. Average lot size 8,500 square feet.

SMALL LOTS 181-209

Typical 45-67 FT Frontage
~4,300-6,999 SQ FT Lots

MEDIUM LOTS 135-138, 146 & 147,151-157, 159-163, 210-220

Typical 75-100 FT Frontage
7,000-9,399 SQ FT Lots

LARGE LOTS 122-134, 139-145, 148-150, 158, 164-179

Typical 90-120 FT Frontages
~9,400-15,000 SQ FT Lots

WIDTH. The minimum width for any residential lot shall be 40 feet at the designated front setback. The minimum lot frontage along a public right-of-way shall be 30 feet.

MAXIMUM LOT COVERAGE. The maximum lot coverage shall be seventy-five percent.

(TRADITIONAL):

STREET-LOADED SINGLE FAMILY DETACHED SETBACKS

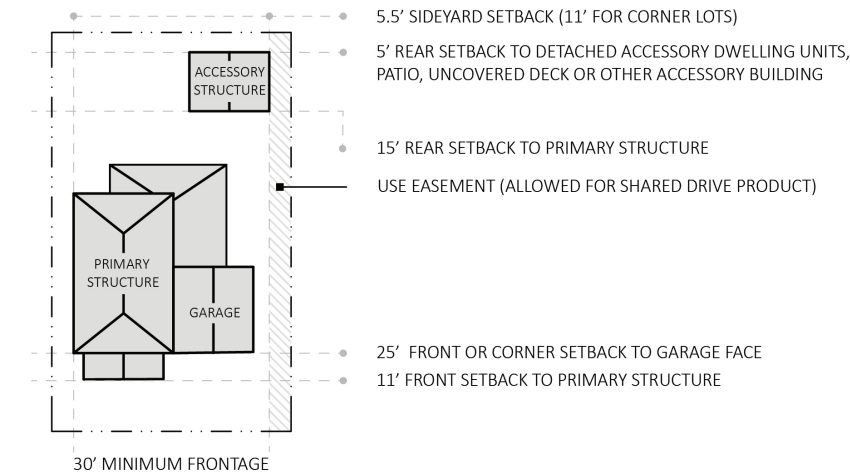
FRONT YARD REQUIREMENTS. The minimum front yard setback shall be 25 feet as measured from a public right-of-way to the garage face, and 11 feet measured to foundation of living space, a covered porch, patio, or garage side if present.

SIDE YARD REQUIREMENTS. All dwelling structures, other main buildings and accessory buildings requiring a building permit shall be set back from each side property line a distance of at least 5.5 feet. Setbacks shall be measured to the foundation, notwithstanding bay windows, pop outs and other structures (excluding eaves) shall not encroach upon the 5 foot setback or public utility easement.

REAR YARD REQUIREMENTS. All primary dwelling structures, shall be set back from the rear property line a minimum of 15 feet as measured to the foundation. Detached accessory dwelling units, uncovered decks, patios, detached garages, and other accessory buildings shall be set back from the rear property line a minimum of 5 feet as measured to the foundation.

CORNER LOTS. On corner lots, the side yard setback on the street side of the lot shall be 25 feet as measured from a public right-of-way to the detached garage face and 11 feet measured to foundation of the primary dwelling structure, a covered porch, patio, or garage side if present.

MINIMUM SETBACK DIAGRAM I STREET-LOADED SINGLE FAMILY



(NON-TRADITIONAL):

ALLEY-LOADED SINGLE FAMILY DETACHED SETBACKS

FRONT YARD REQUIREMENTS. The minimum front yard setback shall be 11 feet measured to foundation of living space, a covered porch, patio, or garage side if present.

SIDE YARD REQUIREMENTS. All dwelling structures, other main buildings and accessory buildings requiring a building permit shall be set back from each side property line a distance of at least 5.5 feet. Setbacks shall be measured to the foundation.

REAR YARD REQUIREMENTS. All primary dwelling structures, shall be set back from the rear property line a minimum of 20 feet as measured to the foundation. Detached accessory dwelling units,

uncovered decks, patios, detached garages, attached garages without living space above, and other accessory buildings shall be set back from the rear property line a minimum of 5 feet as measured to the foundation.

CORNER LOTS. On corner lots, the side yard setback on the street side of the lot shall be 11 feet as measured from a public right-of-way to the foundation of the primary dwelling structure, a covered porch, patio, or garage side if present.

LIGHTING. All rear yard structures facing onto the private alley shall have either directed under eave lighting or shielded exterior lighting fixtures to allow for safe egress/ingress and are encouraged to use sensors and timers as appropriate. Dark Sky approval or low BUG (Backlight, Uplight, Glare) ratings can be helpful in choosing appropriate fixtures.

SIZE OF BUILDINGS:

HEIGHT OF BUILDINGS. All single-family buildings shall be no higher than 40 feet as measured per Saratoga Springs Land Development Code.

MINIMUM SQUARE FEET. The minimum finished square footage shall be:

SMALL LOTS 181-209

1,200 square feet of living space above grade.

MEDIUM LOTS 135-138, 146 & 147,151-157, 159-163, 210-220

1,500 square feet of living space above grade.

LARGE LOTS 122-134, 139-145, 148-150, 158, 164-179

1,900 square feet of living space above grade.

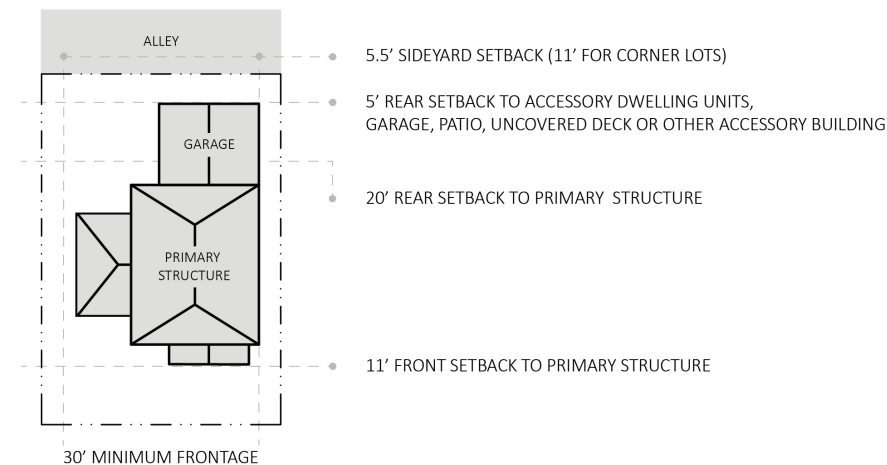
PARKING REQUIREMENTS

All single-family housing shall incorporate a minimum of 2 (two) enclosed parking spaces. All single-family housing shall incorporate a minimum 25 foot long driveway when the garage is facing a public right-of-way.

DRIVEWAYS. Narrow driveways at the street and widen them closer to the garage entrance. Maximum width at ROW is 20 feet.

BEACON POINTE | VILLAGE 2 PLAN | DEVELOPMENT STANDARDS

MINIMUM SETBACK DIAGRAM | ALLEY-LOADED SINGLE FAMILY



SINGLE FAMILY ATTACHED

(NON-TRADITIONAL):

MAXIMUM LOT COVERAGE. The maximum lot coverage shall be seventy-five percent.

SINGLE FAMILY ATTACHED SETBACKS

SETBACK REQUIREMENTS. All single family attached residential buildings shall have a minimum setback of 11 feet from property line to foundation along any public right-of-way and 15 feet from any other exterior property line. Interior lot and rear lot lines shall not be subject to minimum setbacks. Setbacks shall be measured to the foundation, notwithstanding bay windows, pop outs and other structures (excluding eaves) shall not encroach upon the 5 foot setback or public utility easement.

SIZE OF BUILDINGS:

HEIGHT OF BUILDINGS. All Single family attached buildings shall be no higher than 45 feet as measured per Saratoga Springs Land Development Code.

MINIMUM SQUARE FEET. The minimum finished square footage shall be:

TOWNHOME UNITS

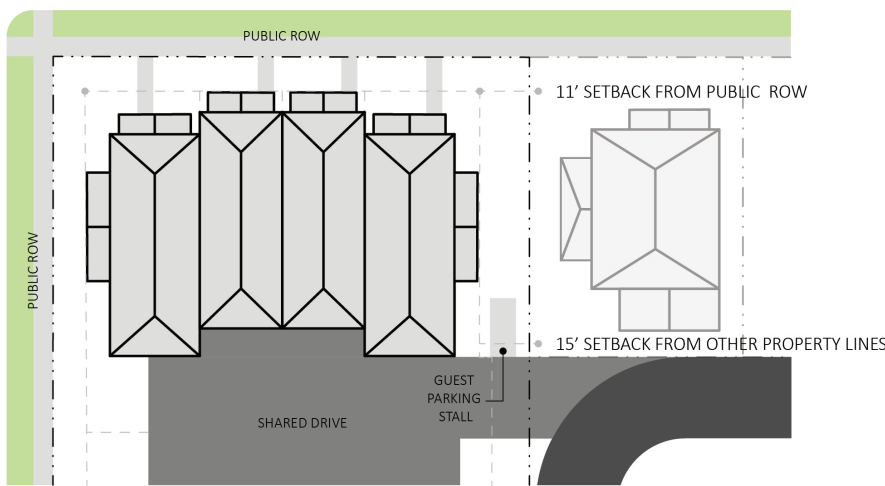
1,300 square feet of living space above grade.

PARKING REQUIREMENTS

Two parking stalls to be provided for each unit. Tandem parking of a garage stall and associated driveway stall shall be allowed and count as two stalls. Public street parking does not qualify to meet the requirement.

SHARED DRIVEWAYS. Narrow driveways at the street and widen them closer to the garage entrance. Maximum width at ROW is 26 feet.

MINIMUM SETBACK DIAGRAM | SINGLE FAMILY ATTACHED



ACCESSORY BUILDINGS AND DWELLING UNITS

Any Accessory Buildings including Detached Accessory Dwelling Units (ADU) shall complement the architecture and style of the main residence, with the intent that it appear part of the original build. ADUs shall be governed by state law and Saratoga Springs Title 19 regulations.

DEVELOPMENT STANDARD DEFINITIONS

PRIMARY DWELLING STRUCTURE. Areas of the primary structure that are used for living, sleeping and cooking. Excludes attached covered patios/decks, and other detached accessory buildings. Attached garages will adhere to primary structure setbacks unless a separate setback is specified.

ACCESSORY DWELLING UNIT. A subordinate dwelling, which has its own kitchen, living/sleeping area, and sanitation facilities.

ACCESSORY BUILDING. A detached structure or building which is subordinate to, and the use of which is subordinate to, and whose use is customarily incidental to, that of the primary dwelling structure, or use on the same lot. These include but are not limited to detached garages, greenhouses, pool houses, sunrooms, workshops, storage sheds and other similar structures.

LANDSCAPING

No area shall be maintained with bare soil for longer than 6 months. All ground surfaces not used for buildings, sidewalks, roadways, or other impermeable surfaces shall be covered with live grass, turf, shrubbery, trees, ground cover, flowering plants or appropriate mulching.

All landscaping shall be installed with initial construction (within 30 days of certificate of occupancy). Landscape plans shall be prepared by a licensed landscape architect, certified nurseryman or master gardener and approved by the Architectural Review Committee (ARC). If the planting of live material is hindered by adverse weather conditions, an extension of time may be granted for a period of up to six months. The ARC will monitor and enforce compliance with landscaping requirements. All plant material will meet or exceed ANSI Z60.1 standards for size and quality.

OPEN SPACE

STREETSCAPE:

PLANTING STRIPS. The minimum width for planting strips in Village 2 is 8 FT.

SIDEWALKS. The minimum width for public sidewalks in Village 2 is 5 FT.

TRAIL WIDTH. Streetside trails shall be 10 FT in width. Interior block connector trails shall be 8 FT in width.

STREET TREE SPACING. Street trees should be planted to create a continuous canopy at maturity. Actual spacing will depend on species variety.

SEATING. Melville Series from Landscape Forms

SIGN POSTS. Capital Streetscapes 3” Fluted Pole - Ball Finial
- Base 31 - White on Green or Blue Street Signs - ST Series frames without scrolls

LIGHTING. All street lighting will use the Saratoga Springs City standard fixtures.

Melville Bench Series by Landscape Forms

TRADITIONAL



Backed - Wood Seat



Backless - Wood Seat



Skateboard Deterrent - 1 Divider

MODERN



Backed - All Metal



Backless - All Metal



Skateboard Deterrent - 2 Dividers

Capital Streetscapes Sign Posts



Saratoga Springs City Light Fixtures



14' Local Street Light



20' Collector Street Light



28' Arterial Street Light



VILLAGE PLAN I DESIGN GUIDELINES

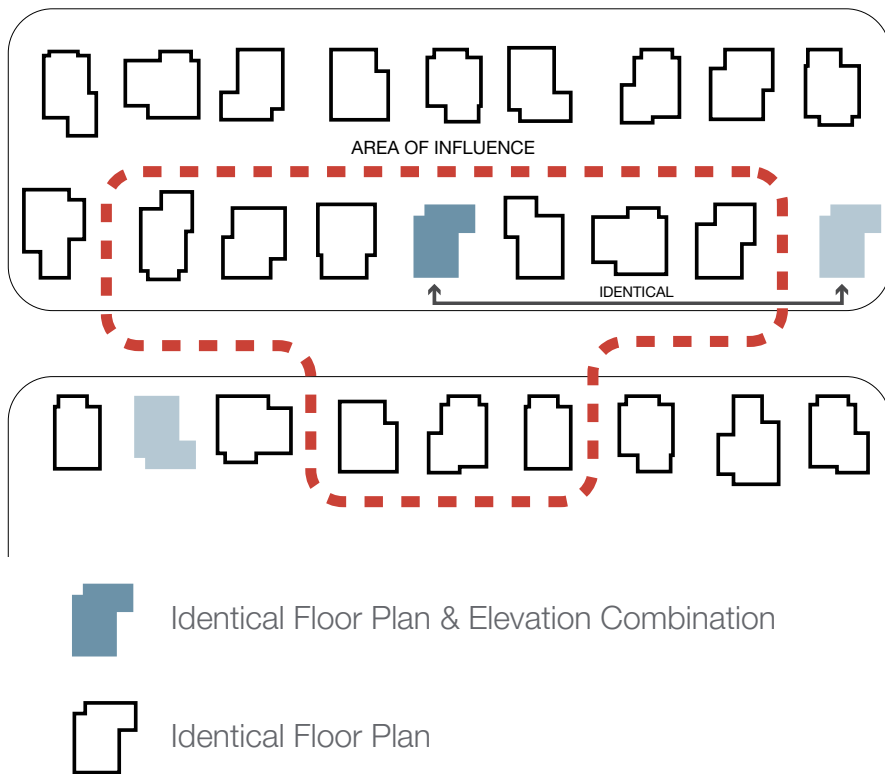
ARCHITECTURAL STANDARDS:

Architectural styles that include extreme colors, problematic materials, or styling as defined by the Architectural Review Committee will not be allowed within the Village. However, reasonable variations in the architectural styles and construction materials are allowed and will be necessary to give flexibility for future trends in the market place. All variations in style and material require formal approval from the Village Architectural Review Committee.

FLOORPLAN AND EXTERIOR COLOR SCHEME MIXING:

- In an effort to promote variety within the neighborhood the following village-wide restriction will be enforced:
- No single-family homes may be built on lots next door to or directly across the street from a previously selected single family home with the same floorplan.
 - Identical floor plan and elevation combinations must be separated by at least 3 lots
 - No main body exterior color can be built next door or directly across the street from a previously selected main body exterior color.

AREA OF INFLUENCE



ARCHITECTURAL STYLES:

Listed in this section are examples of architectural styles that will be acceptable for Village 2 Builders. Architectural Styles should be inspired by local and regional architecture to contribute to a sense of place. Avoid combining structural and decorative characteristics from different architectural styles into a single building. Allowable styles as set forth in this plan are as described by the Utah Department of Heritage and Arts. Further detail and reference at <https://heritage.utah.gov/history/building-styles> and in the document ‘Architectural Styles in Utah’ in Appendix G of the Community Plan.

A. CLASSICAL BUILDING STYLES

- Georgian
- Federal

B. PICTURESQUE BUILDING STYLES

- Greek Revival
- Gothic Revival
- Italianate

C. VICTORIAN BUILDING STYLES

- Stick Style
- Shingle Style
- Romanesque

D. EARLY TWENTIETH-CENTURY BUILDING STYLES

- Bungalow
- Arts and Crafts
- Prairie School

E. PERIOD REVIVAL BUILDING STYLES

- Colonial Revival
- Jacobethan Revival 1900-1935

F. WORLD WAR II/POST-WAR BUILDING STYLES

- Post-War Colonial
- Post-War Modern

SPATIAL HIERARCHY. Create a progression of spaces, transitioning from the public to private realm. At the sidewalk begin to define the semi-public front yard with a change in materials or planting and continue to articulate the semi-private porch or entry court with seating, planters and other furniture.

MASSING. Minimize the bulk of the buildings by limiting building length & height , or designing structure with two or more of the following special features to break up building bulk, including:

- Horizontal and vertical modulation defined by a minimum of 10 corners at the foundation
- Changes in roof form and height,
- Major full-height recesses (at least 5 feet deep) along the length of the building that successfully break the building into smaller discrete masses.

BUILDING HEIGHT. Step back the upper stories from the stories below, tuck the upper stories inside a pitched roof, or use pitched roofs with dormer windows for upper story rooms in order to maximize light, air, and privacy for residents. In sloped areas, design buildings to step down following the grade of the land, rather than having tall down-slope walls that are highly visible or out of scale with surrounding properties

BEACON POINTE I VILLAGE 2 PLAN | DESIGN GUIDELINES

PICTURESQUE BUILDING STYLES



Greek Revival



Gothic Revival



Italianate

CLASSIC BUILDING STYLES



Georgian Style



Federal Style

VICTORIAN BUILDING STYLES



Stick Style



Shingle Style



Romanesque

PERIOD REVIVAL BUILDING STYLES



Colonial Revival Style



Jacobethan Style

EARLY TWENTIETH-CENTURY BUILDING STYLES



Bungalow Style



Arts and Crafts Style



Prairie Style

WORLD WAR II/POST WAR BUILDING STYLES[†]



Post War Colonial



Post War Modern Style

BEACON POINTE | VILLAGE 2 PLAN | DESIGN GUIDELINES

BUILDING MATERIALS. Material choices should reflect and reinforce the architectural style of the residence. A minimum of 3 colors or materials should be used for the main structure, trim and accent.

- Use building materials that convey a sense of durability and permanence.
- Use the highest quality and most durable materials at the base of buildings, because those can be most impacted by landscaping, people, and automobiles.
- Use a complementary palette of materials on all four sides of buildings. Use building materials of similar durability and quality throughout the project.
- Use exterior siding materials such as wood siding, masonry, tile, wood shingles, metal panels, stucco and glass panels.
- Locate material changes at interior corners as a return at least six feet from the external corners or other logical terminations; and not at external corners.

FOUR-SIDED ARCHITECTURE | DO THIS



FOUR-SIDED ARCHITECTURE | NOT THIS



BUILDING COLORS. Select a coordinated palette of complimentary colors, rather than a patchwork of competing colors.

- Use bright and/or dark colors only as accent colors on trim.
- Do not use fluorescent or neon colors.
- Select a set of colors that is compatible with the architectural style of the property.

ARCHITECTURAL ARTICULATION. Design doorways, columns, overhangs, and other architectural elements to be substantial in depth, in order to create shadow and architectural relief. Architecture should have elevated articulation on any publicly visible face. Rear facades may not be flat or featureless. Incorporate the following features, consistent in design style, that provide articulation and design interest consistently throughout the property:

- Decorative trim elements that add detail and articulation, such as door surrounds with at least a two-inch depth, decorative eave detailing or belt courses appropriate for the architectural style
- Roof overhangs at least 18 inches deep
- Use a variety of materials, especially at ground level stories, for detailing at porches / entry areas, paneling at bays or at special parts of the building
- Building base (typically bottom three feet) that is faced with a stone or brick material, or is delineated with a channel or projection; and/or railings with a design pattern and materials such as wood, metal, or stone which reinforces the architectural style of the building
- Incorporate projections and recesses throughout the façade design to add architectural interest and a visual play of light and shadow. Examples include: bay windows, chimneys, front porches, balconies, overhangs, brackets, and cornices.
- Incorporate building projections that enhance the design and articulation of the building. These may project into required front, side, and rear yards up to the limits allowed in the development standards.

ROOF FORMS. Incorporate variable roof forms into the building designs, to the extent necessary to avoid a boxy appearance of residential buildings. This may be accomplished by changes in roof height, offsets, change in direction of roof slope, dormers, parapets, etc.

DOORS, PORCHES & ENTRANCES. Emphasize building entrances with special architectural and landscape treatments. Generous, functional porches or entry courts are strongly encouraged. Design building entrances so that they are not over-scaled relative to the size of the buildings, such that they exaggerate the scale of the structure. Front Entry doors are encouraged to have elevated styling and detail. Emphasis through color, material, upgraded hardware, transoms and sidelights, etc. is expected.

WINDOWS. Design window patterns and proportions to enhance all facades of the building and add architectural interest. Differentiate window designs (size, proportion) to reflect the different components of residential units, (for example entrances, living areas, stairways, and bedrooms) while ensuring harmony within that variety.

Design windows recesses, window trim and other window elements to be substantial in depth to create shadows and add architectural interest. Incorporate at least one of the following window features throughout the project:

- A minimum depth of at least two inches from glass to exterior of trim;
- A minimum depth of at least six inches from glass to wall edge around windows if there is no trim (this is only appropriate for certain genres such as Modern or Post-War styles);
- Decorative trim elements that add detail and articulation, such as window surrounds with at least a two-inch depth. They must be designed as an integral part of the design, and not appear “tacked-on.” Shutters must have hardware that implies full functionality, even if they are merely decorative.

BEACON POINTE | VILLAGE 2 PLAN | DESIGN GUIDELINES

ACCESSORY BUILDINGS. Design accessory buildings such that the exterior appearance of the building demonstrates design integrity in the following ways:

- Use complementary materials for exterior facades;
- Use window types that are similar in size, shape and proportion of the windows on the original building;
- Use consistent roof materials and roof forms.

PRIVACY. Use design strategies to protect privacy, such as offsetting windows of adjacent units, locating minor windows above eye level, and using opaque glass for minor windows.

FENCING. Fences and walls help define public and private open space boundaries, but can detract from the character of a community without regulation. Homeowners have the option of using the standard village-wide fence or submitting plans for a custom fence to the Architectural Review Committee for approval. Custom fences should correspond to the style of the Architecture and will be approved at the discretion of the Architectural Review Committee.

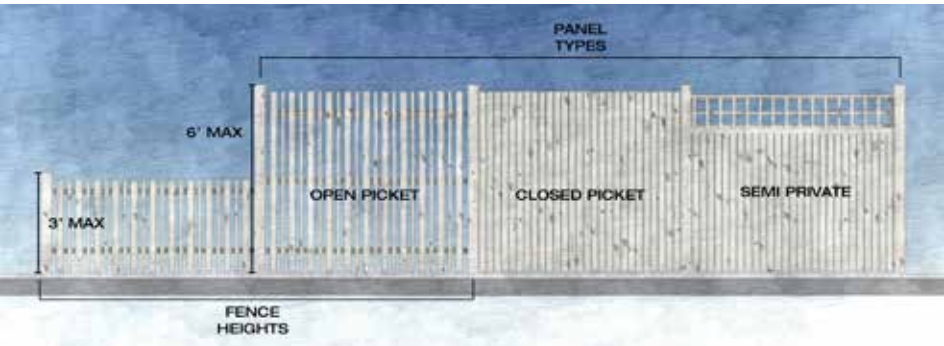
RESIDENTIAL PERIMETER FENCING

- Front Yard Height: maximum of 3 FT
- Back/Side Yard Height: maximum of 6 FT for privacy fencing between lots
- A privacy fence shall be reduced to a height of 3 FT for 10 FT in either direction of a driveway for visibility
- The standard fence style throughout Village 2 for is a wooden fence stained with Cabot Bleaching Stain in Natural Driftwood Gray.
- Acceptable materials for Custom Fencing – Wood, Metal, Brick, Stone, Architectural Concrete, etc. Vinyl, Composite, and precast concrete products will be allowed on a case-by-case basis as approved by the Architectural Review Committee.

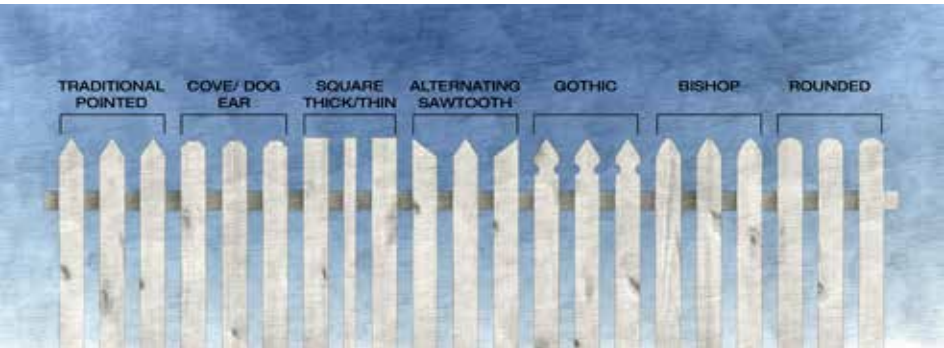
MAILBOX STRUCTURES. Village 2 will utilize the 16 Door Vogue Classic Cluster Mailbox or approved equivalent, located in or near the park strip for convenience. ADA accessible paths will allow access to the retrieval side.

Mailbox locations will be identified on all final plats.

FENCING | RESIDENTIAL



Picket Styles



Custom Fence Examples



Wood & Metal Perimeter Fence



Modern Slat Privacy Fence



Gabion & Wooden Fence



Contemporary Mesh Fence

MAILBOX | VILLAGE 2



Wooden Fence



Contemporary Semi Private Fence

PROTRUDING GARAGE | NOT THIS



RECESSED GARAGE | GOOD



SIDE FACING GARAGE | BETTER



REAR GARAGE | BEST



LANDSCAPE PLANS

Landscaping should be considered an extension of a residence and viewed as a series of outdoor rooms. This level of planning can dramatically extend the living environment by creating outdoor spaces with defined functions across the lot. Yards, especially those areas visible from the street, should complement the architecture while expressing the individuality of each homeowner.

Residential landscapes are a visible expression of neighborhood culture and identity. Any guidelines provided in this document are meant to create coherent streetscapes and encourage thoughtful planning of yards for each housing typology. Expression though landscaping is encouraged and aids in personalizing neighborhoods. Example planting palettes have been provided in the following pages.

Landscape designs should frame the home and reinforce the human scale already integrated into the architecture. For front yards, and side yards adjacent to a road, consider the impact of the design on social opportunities and street life. In general, the landscape should connect the residence to the street. **NOTE:** No fruit-bearing trees should be placed adjacent to public trails or sidewalks.

INTENT

- Landscaping should complement the surrounding architecture and unify open spaces.
- Landscapes should reduce the apparent mass of adjacent buildings by considering important architectural elements prior to planting and how vegetation will aid in grounding the structure.
- Landscaping should screen cars, trash enclosures, secondary structures, and parking from the road.
- Vegetation should be used to define boundaries and preserve residential privacy and discourage defaulting to fencing and walls. Plantings should soften fences and walls exposed to public view.
- Landscape should enhance safety and comfort. Avoid vegetation that reduces visibility along primary paths and entrances.

DESIGN GUIDELINES

RESIDENTIAL LANDSCAPES

All residential yards are encouraged to have plantings that correspond to the following locations or features of the lot, actual landscape requirements will follow Title 19 code:

FOUNDATION PLANTING

- 3 FT wide densely planted with shrubs to screen the foundation where exposed to view.

FENCE PLANTING

- Minimum of 2-3 FT of landscaping on sides exposed to public view where consistent maintenance is provided. (This requirement is waived along Foothill Boulevard (See Edge Condition #2).

All planting areas (planter beds and lawn) should contain a minimum of 12 inches of topsoil, tilled into the top 4 inches of the existing grade, and 3 inches of mulch (organic or inorganic) to maintain soil moisture and prevent weed growth.

Clean edges between lawn and plantings should be integrated into the landscape and can be accomplished with discrete edging or shovel cut edges.

LAWNS

Should be limited to areas where it serves a function. Deep rooted and drought tolerant turf varieties should be considered in an effort to conserve water. Do not place turf in narrow, small, or odd shaped areas that reduce irrigation efficiency. Lawn strips are encouraged to be at least 8 FT wide. Lawn strips on side yards may be reduced to 3 FT.

- Lawns must be a minimum of 2 FT from fencing and 3 FT from building foundations on sides exposed to public view.

IRRIGATION

Implement water efficient landscaping techniques. Utilize matched precipitation rate spray and rotor heads for all lawn areas. Avoid overspray by using the appropriate spray head distances and inspect system frequently. Shrub and perennial beds should be drip irrigated to more efficiently water planter areas and avoid spraying the house, garden structures, and fencing.

LANDSCAPE | FOUNDATION PLANTING



LANDSCAPE | FENCE PLANTING



LANDSCAPE | ALLEY PLANTING



BEACON POINTE I VILLAGE 2 PLAN | DESIGN GUIDELINES

GREEN ON GREEN PLANT PALETTE

TREES



Arborvitae



Linden



Persian Ironwood



Tiger Eyes Sumac

Hazelnut
English Oak
Norway Maple
Sumac
Green Ash
Zelkova
Bradford Callery
Pear
Cypress
Fir
Spruce

VINES



Boston Ivy



Dutchman's Pipe

English Ivy
Hops
Clematis

SHRUBS



Boxwood



Laurel



Dogwood



Heavenly Bamboo



Lo-grow Sumac



Dwarf Oregon Grape

Lowdense Privet
Hedge Cotoneaster
Burning Bush
Dwarf Arctic Willow
Viburnum
Yew

GROUNDCOVERS



Lily of the Valley



Pachysandra



Kinnickinnick



Mormon Tea

Speedwell
Veronica
Sweet Woodruff
Bishops Weed
Sedum
Scotch Moss

GRASSES



Zebra Maiden Grass



Japanese Forest Grass

Sedge
Maidenhair

MODERN COTTAGE PLANT PALETTE

TREES



Flowering Plum



Flowering Pear



Persian Ironwood



Serviceberry

- Sumac
- Birch
- Red Maple
- Ginnala Maple
- English Oak
- Weeping Cherry
- Lilac
- Crabapple
- Cherry
- Redbud
- Black Locust

VINES



Wisteria



Clematis

- Hops
- Boston Ivy
- Honeysuckle
- Trumpet Vine

SHRUBS



Spirea



Forsythia



English Lavender



Blue Mist Shrub

- Viburnum
- Snowberry
- Dogwood
- Dwarf Arctic Willow
- Mock Orange
- Myrtle
- Sage
- Hydrangea
- Lilac
- Mazanita
- Laurel
- Lodense Privet

PERENNIALS



Russian Sage



Blue Flax

- Baptista
- Bleeding Heart
- Bluebells
- Catmint
- Columbine
- Coneflower
- Tickseed
- Delphinium
- Fuchsia
- Gaura
- Hyssop
- Iris
- Penstemon
- Wormwood

GROUNDCOVERS



Hardy Plumbago



Lilly of the Valley



Speedwell

- Gro-low Sumac
- Lilyturf
- Sweet Woodruff
- Bugleweed
- Crested Iris
- Vinca

GRASSES



Blue Oat Grass



Mexican Feather Grass



Dwarf Fountain Grass

- Muhly Grass
- Little Bluestem
- Alkali Sacaton
- Deer Grass
- Blue Fescue
- Horsetail
- Indian Grass
- Feather Read Grass
- Blue Grama

ORNAMENTAL GRASS PLANT PALETTE

TREES



Birch



Sumac



Sweetgum

Willow
Zelkova
Ginkgo
Juniper
Arborvitae

VINES



Hops



Clematis



Honeysuckle

Silver Lace Vine
Helios Clematis

GRASSES



Maidenhair



Little Bluestem



Muhly Grass



Mexican Feather Grass



Purple Fountain Grass



Blonde Ambition Grama Grass

Karl Foerster Reed Grass
Dwarf Fountain Grass
Northern Sea Oats
Blue Oat Grass
Tufted Hair Grass

GROUNDCOVERS



Desert Green



Lily Turf



Sedge

Blue Fescue
Mondo Grass
Sea Pink
Red Yucca
Dianthus
Sweet Flag

SHRUBS



Horsetail



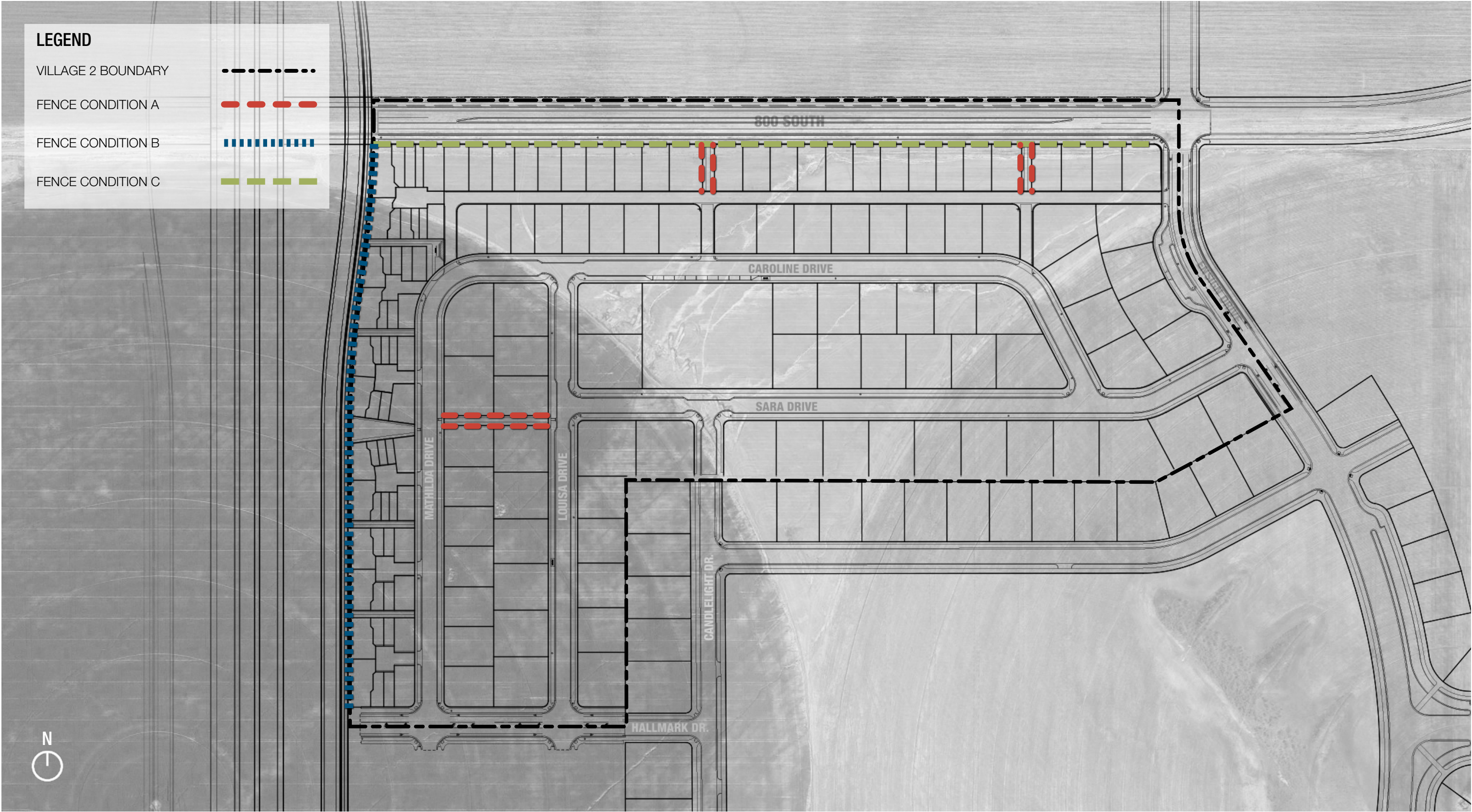
Redtwig Dogwood



Mormon Tea

Fine Line Buckthorn
Dwarf Arctic Willow

BEACON POINTE I VILLAGE 2 PLAN | DESIGN GUIDELINES





FENCE CONDITION A

- 1

3-6 foot tall fences for side yards will be required on either side of the connector trail. **PICKET STYLE:** Approved by ARC
- 2

Shade trees to provide a continuous canopy at maturity.
- 3

8 foot wide sidewalk.
- 4

3 foot wide turf strip with a 3 foot wide fence planting.



FENCE CONDITION B

- 1

3-6 foot fences for side yards will be required along the Foothill Boulevard Trail. **PICKET STYLE:** Approved by ARC
- 2

Fence planting is not required along Foothill Boulevard.
- 3

A concrete apron, decorative rock or other edging is encouraged to keep fence line tidy and free of weeds.



FENCE CONDITION C

- 1

3 foot fences for front yards will be required along 800 South.
PICKET STYLE: Traditional Pointed
- 2

Fence Planting is required.
- 3

Gates are optional.

VILLAGE PLAN | ARCHITECTURAL REVIEW COMMITTEE

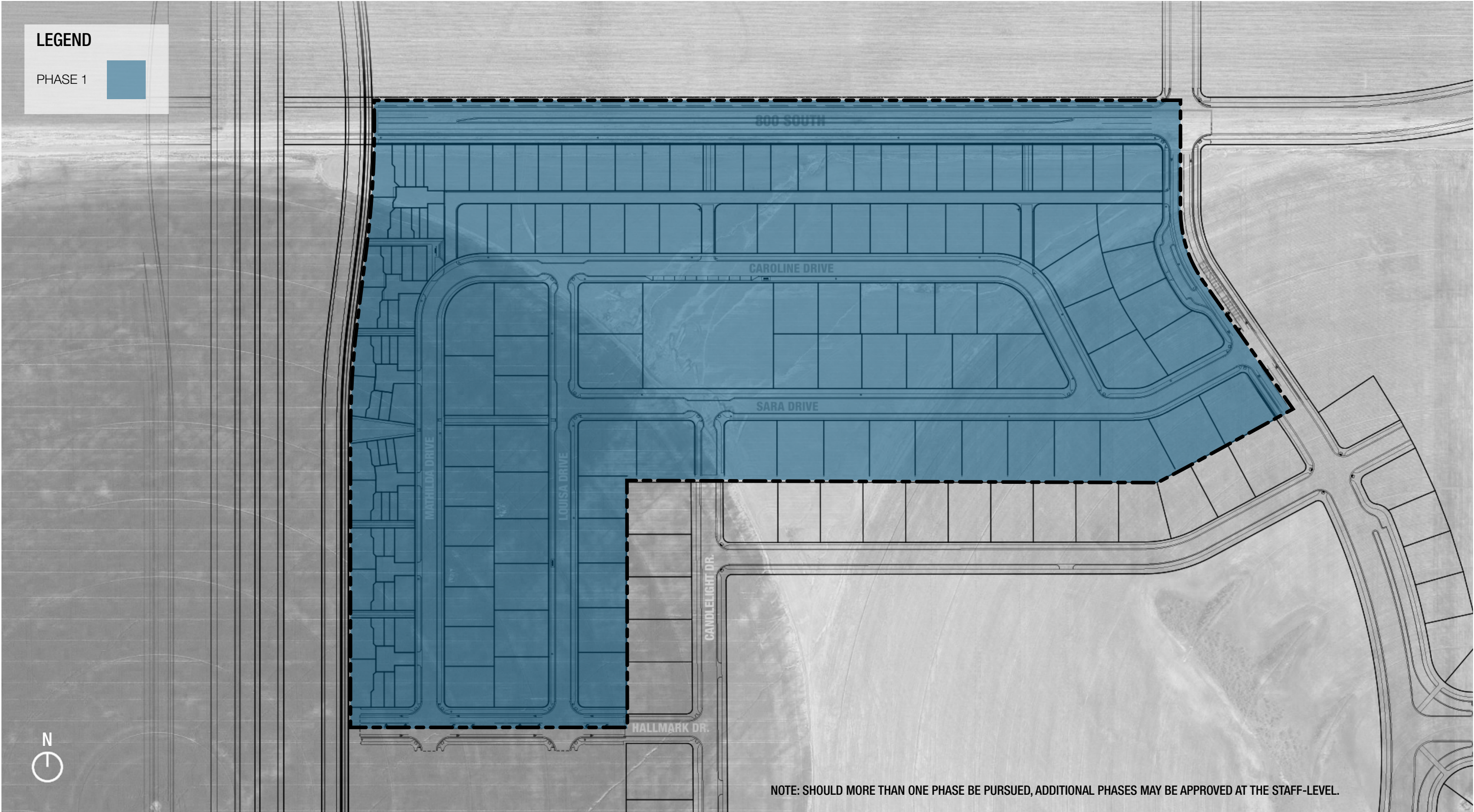
ARCHITECTURAL REVIEW COMMITTEE:

In order to create, maintain and improve the integrity of the community, and to establish and implement a consistent and harmonious design concept and to protect and promote the present and future values of Beacon Pointe, all exterior, architectural building elevations and building materials, colors and usage design, site plan and landscape treatments, wall and fencing, and signage within the Village shall be subject to a design review process and approval established by the Master Developer.

The committee shall consist of representatives from the following: The Master Developer and a selected team of design professionals, i.e. planners, engineers, architects, contractors, etc. The committee will review proposed materials as well as architectural and site plans for compliance with Guiding Principles set forth in the Community Plan and Village Design Guidelines.

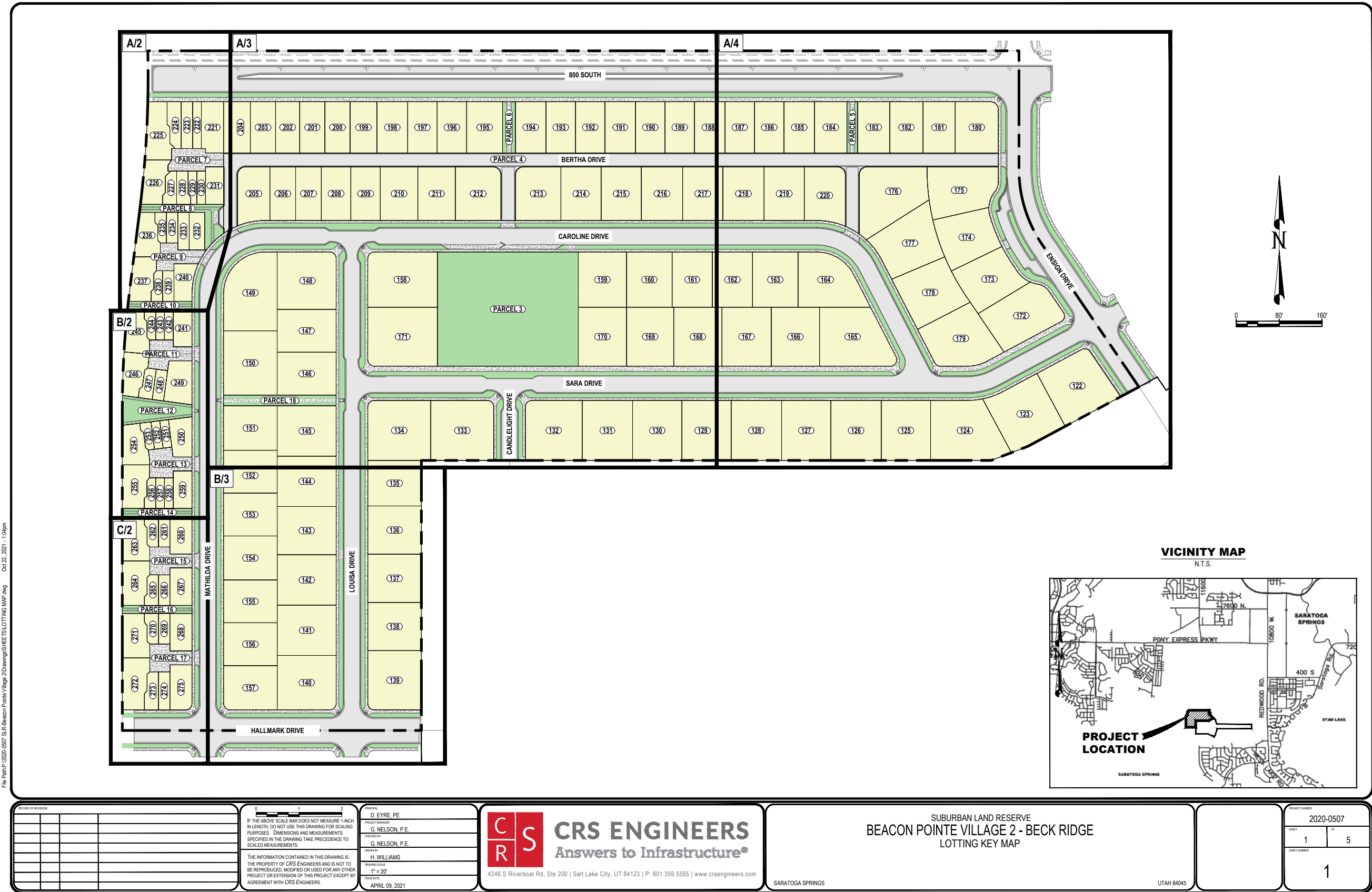
Applicants are responsible for submitting evidence of ARC approval to the City at the time of building permit application. The Master Developer shall retain the right to retain or replace members of the committee at its discretion. The Architectural Review Committee shall be the approval body until the Village is fully built out, at which time it can transition responsibilities over to the Village HOA.

VILLAGE PLAN | PHASING PLAN

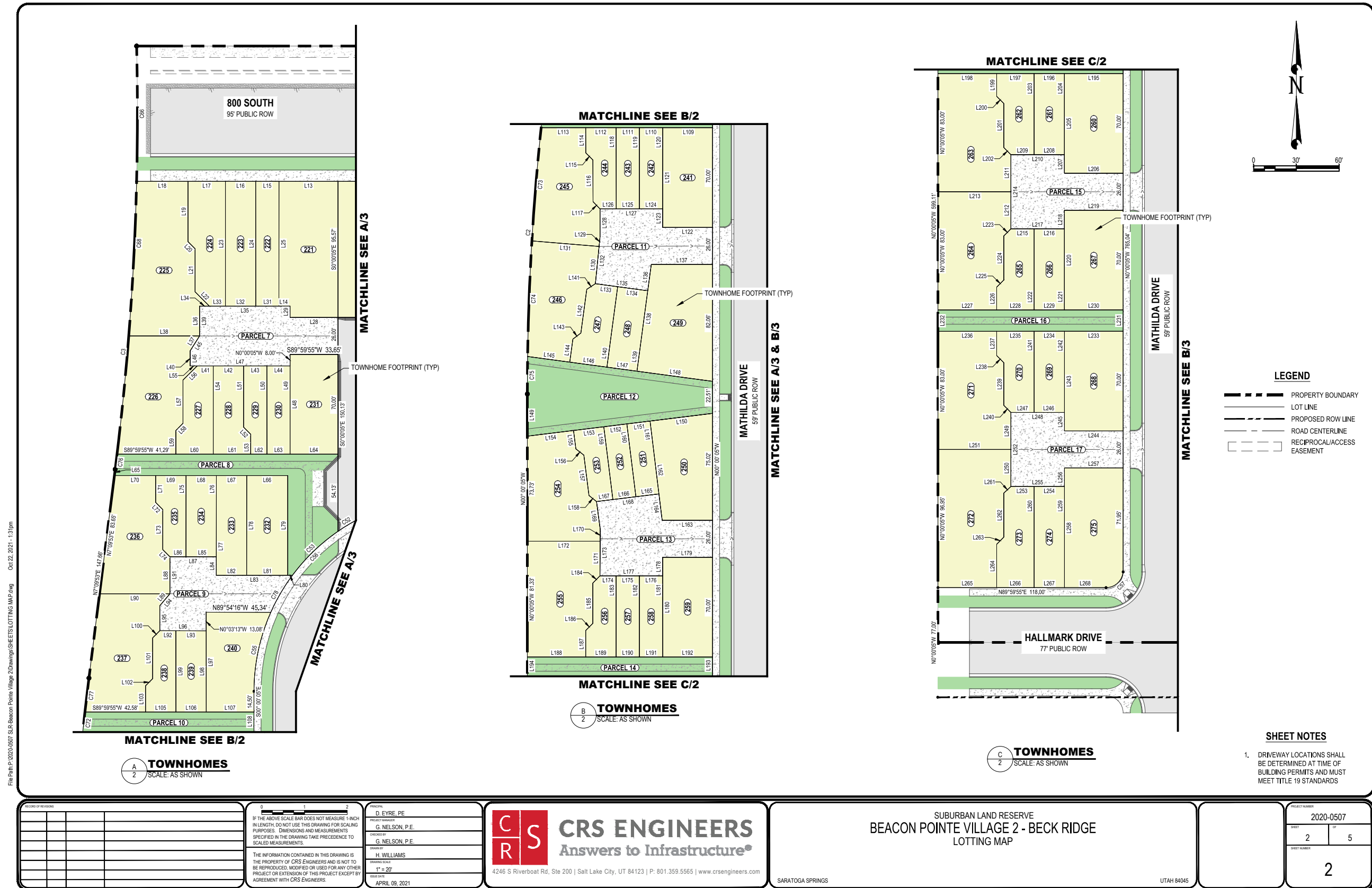


VILLAGE PLAN | LOTTING MAPS

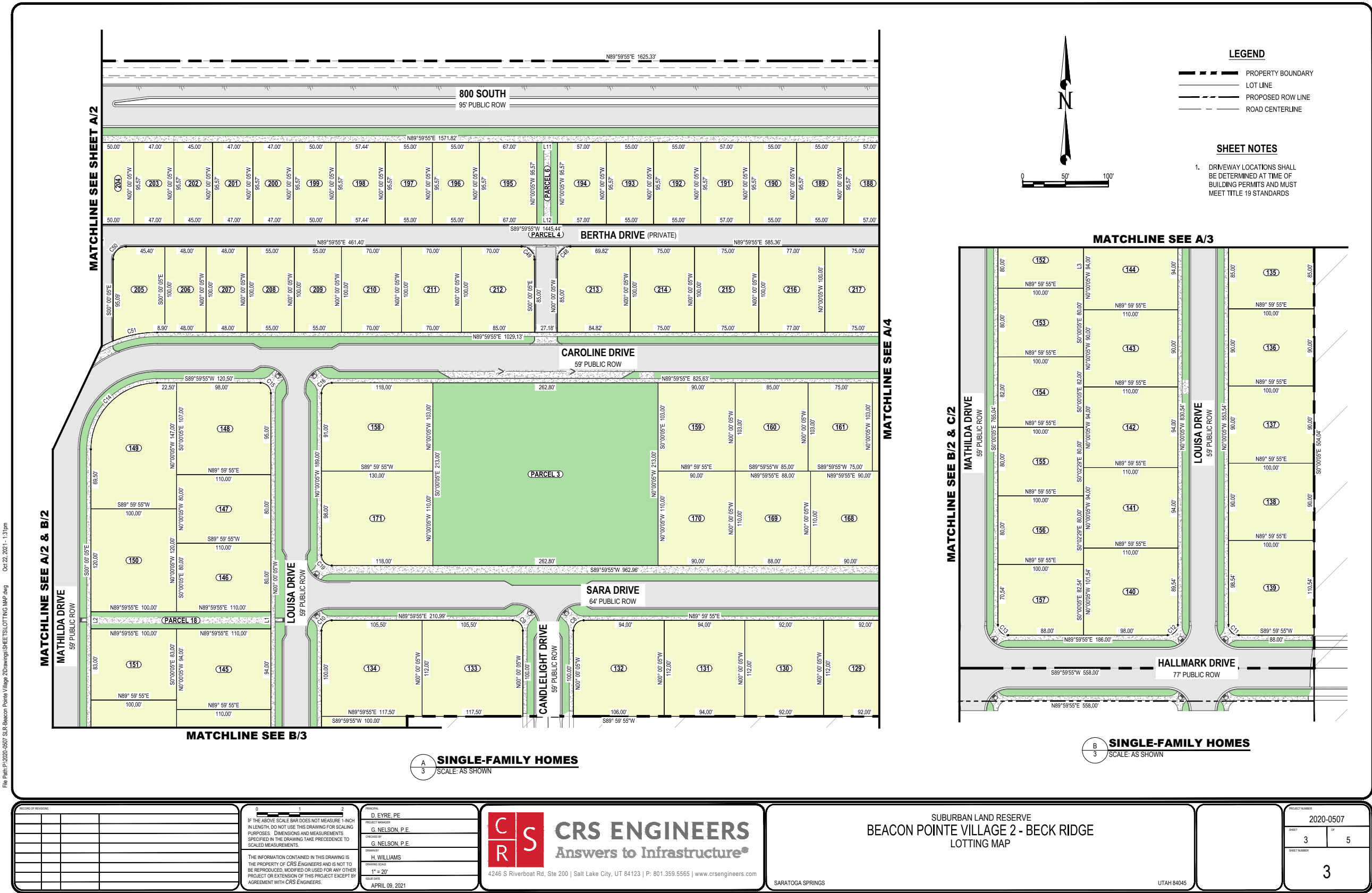
BEACON POINTE I VILLAGE 2 PLAN I LOTTING MAPS



BEACON POINTE | VILLAGE 2 PLAN | LOTTING MAPS

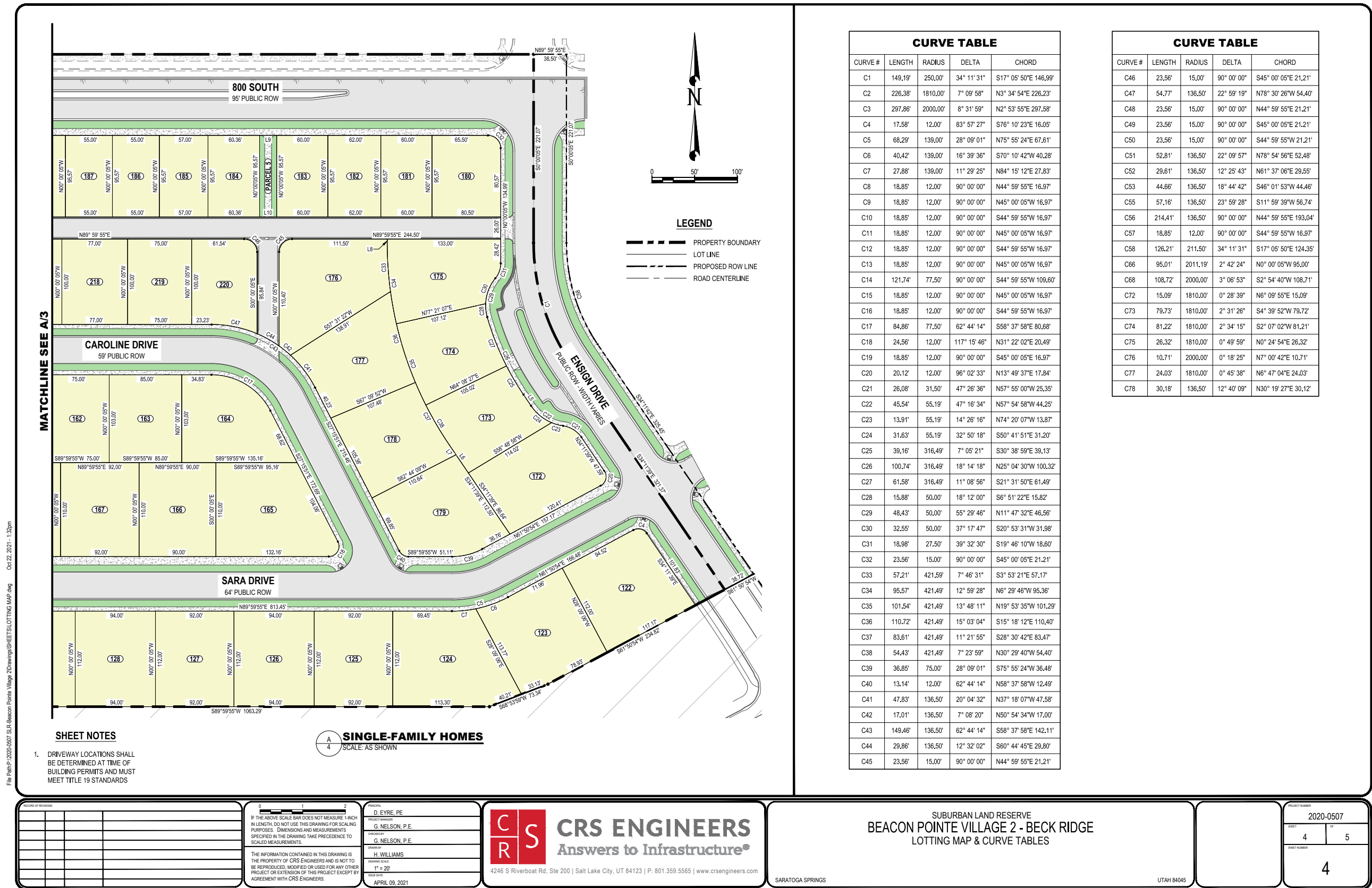


BEACON POINTE I VILLAGE 2 PLAN I LOTTING MAPS



RECORD OF REVISIONS	0 1 2	DESIGNED BY D. EYRE, PE	 CRS ENGINEERS Answers to Infrastructure® 4246 S Riverboat Rd, Ste 200 Salt Lake City, UT 84123 P: 801.359.5565 www.crsengineers.com	SUBURBAN LAND RESERVE BEACON POINTE VILLAGE 2 - BECK RIDGE LOTGING MAP	SARATOGA SPRINGS	UTAH 84045	PROJECT NUMBER 2020-0507
	IF THE ABOVE SCALE BAR DOES NOT MEASURE 1-INCH IN LENGTH, DO NOT USE THIS DRAWING FOR SCALING PURPOSES. DIMENSIONS AND MEASUREMENTS SPECIFIED IN THE DRAWING TAKE PRECEDENCE TO SCALED MEASUREMENTS.	DRAWN BY G. NELSON, P.E.					SHEET 3 OF 5
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE PROPERTY OF CRS ENGINEERS AND IS NOT TO BE REPRODUCED, MODIFIED OR USED FOR ANY OTHER PROJECT OR EXTENSION OF THIS PROJECT EXCEPT BY AGREEMENT WITH CRS ENGINEERS.	CHECKED BY G. NELSON, P.E.					3
		DATE H. WILLIAMS 1" = 20' APRIL 09, 2021					

BEACON POINTE | VILLAGE 2 PLAN | LOTTING MAPS



BEACON POINTE | VILLAGE 2 PLAN | LOTTING MAPS

LINE TABLE		
LINE #	LENGTH	DIRECTION
L1	20.00'	S0° 00' 05"E
L2	20.00'	N0° 00' 05"W
L3	80.00'	S30° 00' 05"E
L5	15.67'	S34° 11' 39"E
L6	39.59'	N34° 11' 39"W
L7	13.73'	S34° 11' 39"E
L8	4.50'	S0° 00' 05"E
L9	20.00'	N89° 59' 55"E
L10	20.00'	S89° 59' 55"W
L11	24.14'	N89° 59' 56"E
L12	24.14'	S89° 59' 56"W
L13	48.24'	N89° 59' 55"E
L14	7.83'	N89° 59' 55"E
L15	16.34'	S89° 59' 55"W
L16	21.29'	S89° 59' 55"W
L17	26.29'	S89° 59' 54"W
L18	36.03'	S89° 59' 55"W
L19	42.31'	S0° 00' 08"E
L20	7.07'	S45° 00' 04"E
L21	30.26'	S0° 00' 05"E
L22	14.14'	S45° 00' 04"E
L23	87.57'	N0° 00' 05"W
L24	87.57'	S0° 00' 05"E
L25	87.57'	S0° 01' 46"W
L28	33.65'	S89° 59' 55"W
L29	8.00'	N0° 00' 06"W
L31	16.29'	N89° 59' 55"E
L32	21.29'	N89° 59' 54"E
L33	11.29'	N89° 59' 57"E
L34	6.86'	N89° 59' 58"E
L35	63.56'	S89° 59' 55"W
L36	21.00'	N0° 00' 02"E
L37	12.39'	S32° 11' 44"W
L38	49.69'	N89° 59' 55"E
L39	21.00'	S0° 00' 02"W
L40	10.50'	S0° 00' 05"E
L41	11.23'	N89° 59' 34"W
L42	21.29'	N89° 59' 34"W
L43	16.35'	N89° 59' 34"W
L44	16.29'	N89° 59' 34"W
L45	12.39'	S32° 11' 44"W
L46	10.50'	S0° 00' 05"E
L47	70.16'	S89° 59' 34"E
L48	70.00'	N0° 00' 05"W
L49	62.00'	N0° 00' 05"W

LINE TABLE		
LINE #	LENGTH	DIRECTION
L50	62.00'	N0° 02' 07"W
L51	42.99'	N0° 00' 05"W
L52	7.07'	N44° 59' 53"W
L53	14.01'	N0° 01' 08"W
L54	62.01'	S0° 00' 05"E
L55	5.00'	S89° 59' 34"E
L56	14.03'	S45° 15' 45"E
L57	30.37'	S0° 00' 05"E
L58	7.08'	S44° 56' 19"W
L59	16.68'	S0° 00' 05"E
L60	26.26'	N89° 59' 55"E
L61	26.30'	N89° 59' 55"E
L62	11.29'	N89° 59' 55"E
L63	16.25'	S89° 59' 40"E
L64	33.65'	S89° 59' 55"W
L65	4.40'	N7° 09' 53"E
L66	28.80'	N89° 59' 54"E
L67	21.29'	S89° 59' 56"W
L68	21.29'	S89° 59' 54"W
L69	21.35'	S89° 59' 55"W
L70	28.96'	N89° 59' 50"E
L71	18.81'	S0° 00' 06"E
L72	7.07'	S45° 00' 00"E
L73	28.19'	S0° 00' 04"E
L74	7.07'	S45° 00' 05"E
L75	57.00'	N0° 03' 09"E
L76	57.00'	N0° 03' 07"E
L77	70.00'	S0° 03' 07"E
L78	70.00'	N0° 03' 12"E
L79	70.00'	N0° 00' 05"W
L80	3.30'	S89° 59' 55"W
L81	28.87'	S89° 59' 54"W
L82	21.29'	N89° 59' 54"E
L83	53.46'	S89° 59' 54"W
L84	13.00'	N0° 03' 07"E
L85	21.29'	S89° 59' 52"E
L86	11.30'	S89° 59' 52"E
L87	32.59'	N89° 59' 52"W
L88	26.00'	S0° 00' 05"E
L89	11.01'	S40° 05' 09"W
L90	48.39'	S89° 59' 55"W
L91	26.00'	S0° 00' 05"E
L92	11.29'	S89° 52' 00"E
L93	21.30'	S89° 52' 00"E
L94	11.01'	S40° 05' 09"W

LINE TABLE		
LINE #	LENGTH	DIRECTION
L95	17.50'	S0° 00' 05"E
L96	32.59'	S89° 52' 00"E
L97	70.08'	N0° 00' 05"W
L98	57.00'	S0° 03' 13"E
L99	57.05'	S0° 03' 44"E
L100	7.07'	N44° 59' 55"E
L101	28.67'	N0° 00' 04"E
L102	7.07'	N44° 59' 54"E
L103	18.41'	N0° 00' 06"W
L104	18.41'	S0° 00' 06"E
L105	21.35'	S89° 59' 55"W
L106	21.29'	S89° 59' 55"W
L107	33.55'	S89° 59' 55"E
L108	15.00'	S0° 00' 05"E
L109	34.94'	N89° 59' 55"E
L110	16.37'	S89° 59' 55"W
L111	16.35'	S89° 59' 54"W
L112	21.35'	S89° 59' 55"W
L113	31.31'	S89° 59' 55"W
L114	17.68'	N0° 08' 13"W
L115	7.07'	N45° 08' 13"W
L116	29.27'	N0° 08' 34"W
L117	7.06'	N44° 10' 47"W
L118	57.00'	N0° 04' 30"W
L119	57.00'	S0° 01' 16"W
L120	57.00'	N0° 03' 00"E
L121	70.00'	N0° 03' 00"E
L122	35.00'	S89° 59' 55"W
L123	13.00'	N0° 03' 00"E
L124	16.35'	N89° 59' 55"E
L125	16.25'	N89° 59' 55"E
L126	11.38'	N89° 59' 55"E
L127	43.97'	S89° 59' 55"W
L128	19.59'	S0° 03' 03"E
L129	6.82'	N5° 39' 49"E
L130	26.27'	N5° 40' 28"E
L131	47.35'	N85° 14' 47"W
L132	33.09'	S5° 40' 20"W
L133	15.81'	S82° 20' 54"E
L134	21.29'	S82° 20' 54"E
L135	37.10'	S82° 20' 54"E
L136	18.63'	N7° 39' 06"E
L137	16.93'	N89° 59' 55"E
L138	75.60'	N7° 39' 06"E
L139	56.97'	S7° 39' 06"W

LINE TABLE		
LINE #	LENGTH	DIRECTION
L140	56.97	N7° 39' 06"E
L141	7.22	N57° 06' 52"E
L142	30.96	N7° 39' 06"E
L143	7.07	N52° 39' 06"E
L144	16.31	N7° 39' 06"E
L145	29.88	S82° 20' 54"W
L146	26.29	N82° 20' 54"W
L147	21.29	N82° 20' 54"W
L148	53.51	N82° 20' 54"W
L149	29.60	N0° 00' 05"W
L150	44.18	S82° 59' 58"W
L151	16.38	S82° 59' 58"W
L152	16.38	S82° 59' 58"W
L153	21.35	S82° 59' 58"W
L154	32.69	S82° 59' 58"W
L155	13.06	N7° 14' 22"W
L156	7.07	N52° 14' 22"W
L157	28.57	N7° 14' 22"W
L158	6.81	N51° 02' 43"W
L159	51.50	N7° 07' 13"W
L160	51.50	N7° 02' 02"W
L161	51.50	N6° 57' 31"W
L162	70.15	S6° 57' 31"E
L163	35.35	S89° 59' 55"W
L164	18.65	N6° 57' 31"W
L165	16.30	N82° 59' 58"E
L166	16.28	N82° 59' 58"E
L167	11.57	N82° 59' 58"E
L168	44.15	S89° 59' 55"E
L169	19.79	N7° 38' 55"W
L170	8.19	N0° 22' 30"E
L171	24.33	N0° 22' 30"E
L172	51.15	S89° 59' 55"W
L173	32.52	S0° 22' 30"W
L174	11.32	N89° 59' 55"E
L175	16.35	N89° 59' 55"E
L176	16.34	N89° 59' 55"E
L177	44.02	N89° 59' 55"E
L178	13.00	N0° 03' 04"W
L179	35.00	N89° 59' 55"E
L180	70.00	N0° 03' 04"W
L181	57.00	S0° 03' 04"E
L182	57.00	N0° 01' 34"W
L183	57.00	N0° 00' 38"E
L184	7.12	N44° 38' 27"E

LINE TABLE		
LINE #	LENGTH	DIRECTION
L185	28.32'	N0° 00' 00"E
L186	7.07'	N45° 00' 36"E
L187	18.62'	N0° 00' 16"E
L188	40.99'	N89° 59' 55"E
L189	21.32'	S89° 59' 55"W
L190	16.39'	S89° 59' 55"W
L191	16.37'	S89° 59' 55"W
L192	34.94'	S89° 59' 55"W
L193	15.00'	N0° 00' 05"W
L194	15.00'	S0° 00' 05"E
L195	41.20'	N89° 59' 55"E
L196	21.29'	N89° 59' 55"E
L197	26.22'	N89° 59' 55"E
L198	44.29'	N89° 59' 55"E
L199	16.01'	S0° 00' 05"E
L200	7.07'	S45° 00' 00"E
L201	30.96'	S0° 00' 05"E
L202	7.09'	S44° 49' 42"E
L203	57.00'	N0° 00' 05"W
L204	57.00'	S0° 00' 05"E
L205	70.00'	N0° 00' 05"W
L206	41.20'	S89° 59' 55"W
L207	13.00'	N0° 00' 05"W
L208	21.29'	S89° 59' 55"W
L209	16.29'	S89° 59' 55"W
L210	37.58'	S89° 59' 55"W
L211	26.00'	S0° 00' 05"E
L212	60.00'	N0° 00' 05"W
L213	51.22'	S89° 59' 55"W
L214	52.00'	S0° 00' 05"E
L215	16.29'	N89° 59' 55"E
L216	21.29'	N89° 59' 55"E
L217	37.58'	N89° 59' 55"E
L218	13.00'	N0° 00' 05"W
L219	41.20'	N89° 59' 55"E
L220	70.00'	N0° 00' 05"W
L221	57.00'	S0° 00' 05"E
L222	57.00'	N0° 00' 05"W
L223	7.09'	N44° 49' 31"E
L224	30.96'	N0° 00' 04"W
L225	7.07'	N44° 59' 57"E
L226	16.01'	N0° 00' 06"W
L227	41.22'	N89° 59' 55"E
L228	26.29'	S89° 59' 55"W
L229	21.29'	S89° 59' 55"W

LINE TABLE		
LINE #	LENGTH	DIRECTION
L230	41.20'	S89° 59' 55"W
L231	15.00'	S0° 00' 05"E
L232	15.00'	N0° 00' 05"W
L233	41.20'	N89° 59' 55"E
L234	21.29'	N89° 59' 55"
L235	26.22'	N89° 59' 55"E
L236	41.20'	S89° 59' 55"W
L237	17.01'	N0° 00' 05"W
L238	7.07'	N45° 00' 00"W
L239	29.96'	N0° 00' 05"W
L240	7.09'	N44° 49' 42"W
L241	57.00'	S0° 00' 05"E
L242	57.00'	S0° 00' 05"E
L243	70.00'	N0° 00' 05"E
L244	41.20'	S89° 59' 55"W
L245	13.00'	N0° 00' 05"W
L246	21.29'	S89° 59' 55"W
L247	16.26'	S89° 59' 55"W
L248	37.58'	S89° 59' 55"W
L249	26.00'	N0° 00' 05"W
L250	26.00'	S0° 00' 05"E
L251	51.22'	N89° 59' 55"E
L252	52.00'	S0° 00' 05"E
L253	16.29'	N89° 59' 55"E
L254	21.29'	N89° 59' 55"E
L255	37.58'	N89° 59' 55"E
L256	13.00'	N0° 00' 05"W
L257	41.20'	N89° 59' 55"E
L258	83.95'	N0° 00' 05"E
L259	70.95'	S0° 00' 05"E
L260	70.95'	N0° 00' 05"W
L261	6.77'	S47° 35' 20"W
L262	30.96'	N0° 00' 05"W
L263	7.07'	N45° 00' 00"E
L264	30.42'	N0° 00' 05"W
L265	41.22'	S89° 59' 55"W
L266	26.29'	S89° 59' 55"W
L267	21.29'	S89° 59' 55"W
L268	29.20'	S89° 59' 55"W

File Path: P:\2020-0507 SLR-Beacon Pointe Village 2\Drawings\Sheets\LOTING MAP.dwg Oct 22, 2021 - 1:32pm

[illegible]

PRINCIPAL	D. EYRE, PE
PROJECT MANAGER	G. NELSON, P.E.
CHECKED BY	G. NELSON, P.E.
DRAWN BY	H. WILLIAMS
DRAWING SCALE	1" = 20'
ISSUE DATE	APRIL 09, 2021



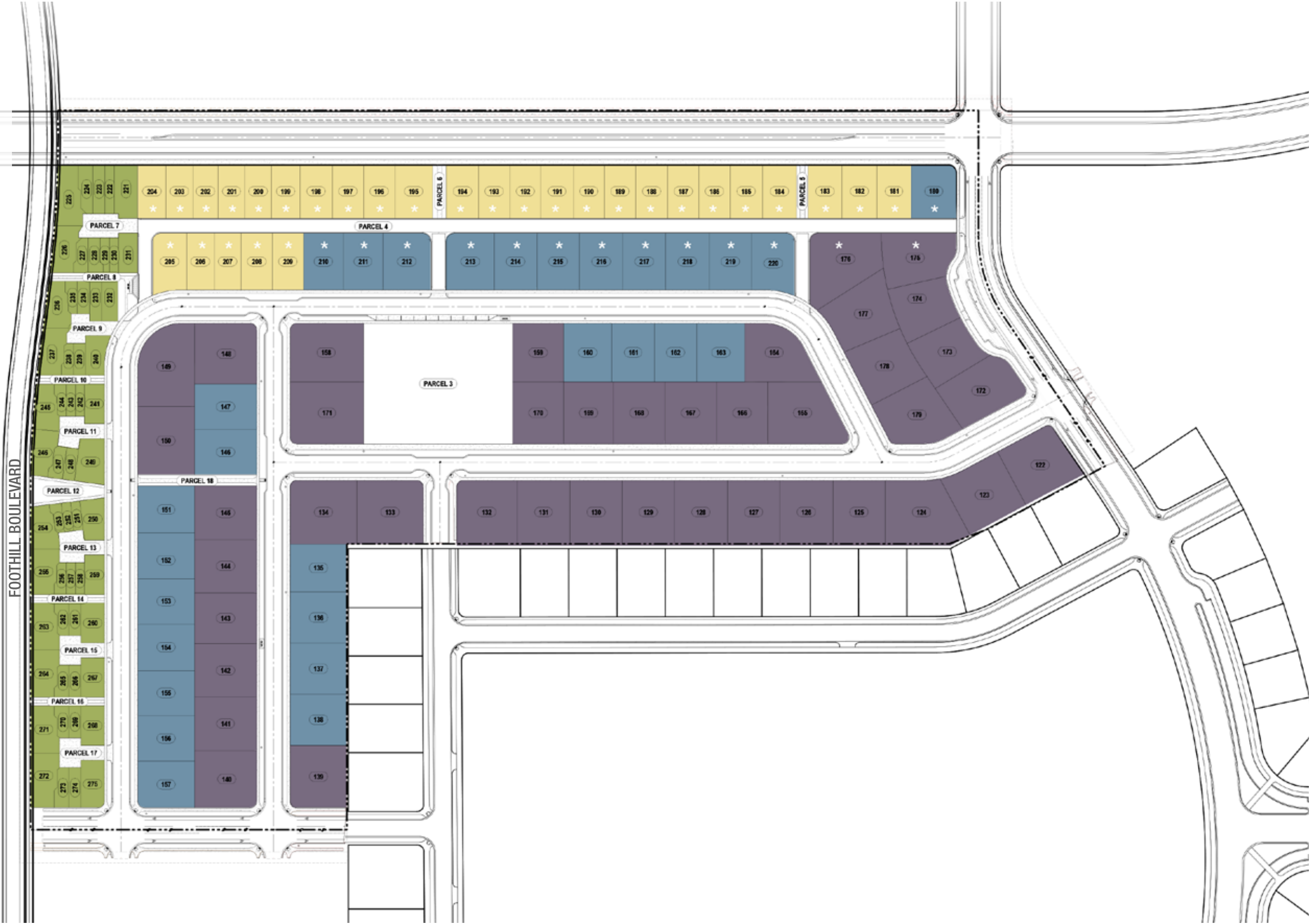
SUBURBAN LAND RESERVE
BEACON POINTE VILLAGE 2 - BECK RIDGE

PROJECT NUMBER	
2020-0507	
SHEET	OF
5	5
SHEET NUMBER	
5	

BEACON POINTE I VILLAGE 2 PLAN | LOTTING MAPS

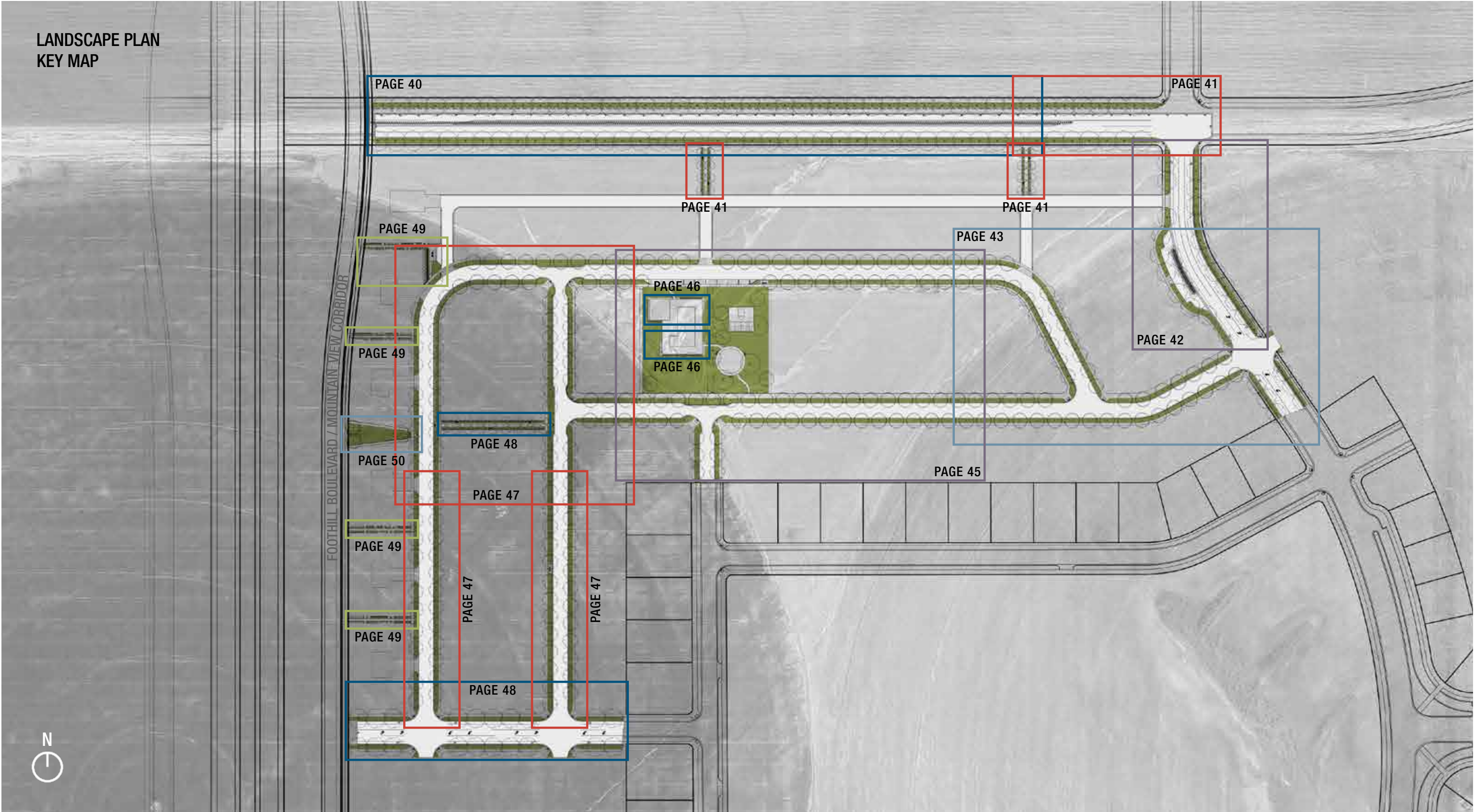
LEGEND

- VILLAGE 2 BOUNDARY
- SINGLE FAMILY DETACHED (S) LOTS
29 UNITS PLANNED
- SINGLE FAMILY DETACHED (M) LOTS
29 UNITS PLANNED
- SINGLE FAMILY DETACHED (L) LOTS
41 UNITS PLANNED
- SINGLE-FAMILY ATTACHED
55 UNITS PLANNED
- ALLEY-LOADED LOT

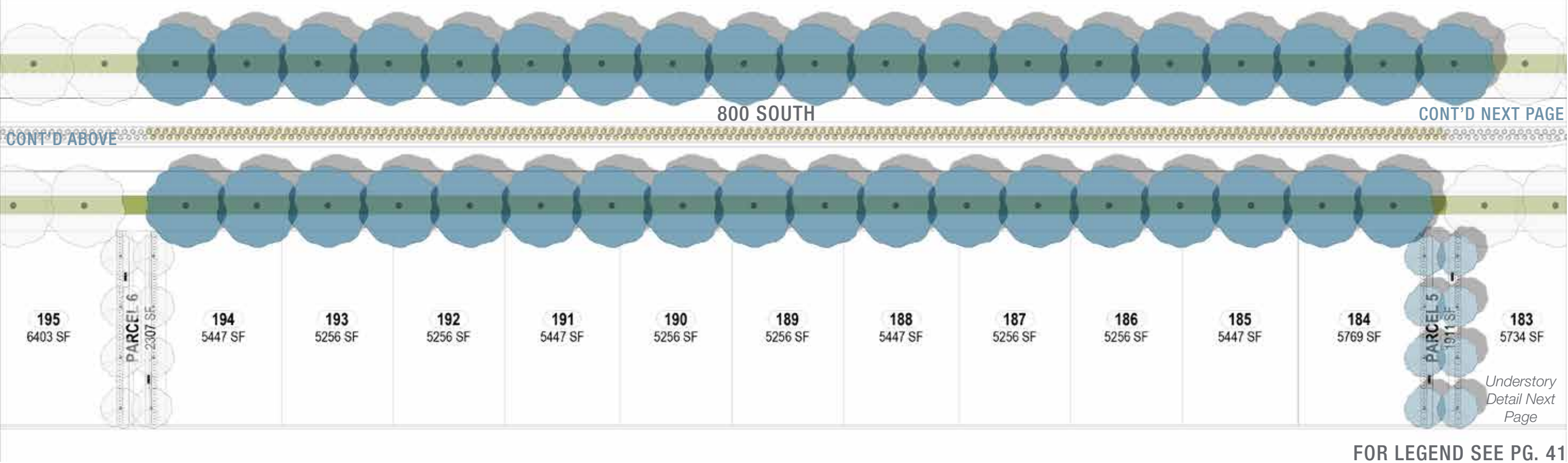
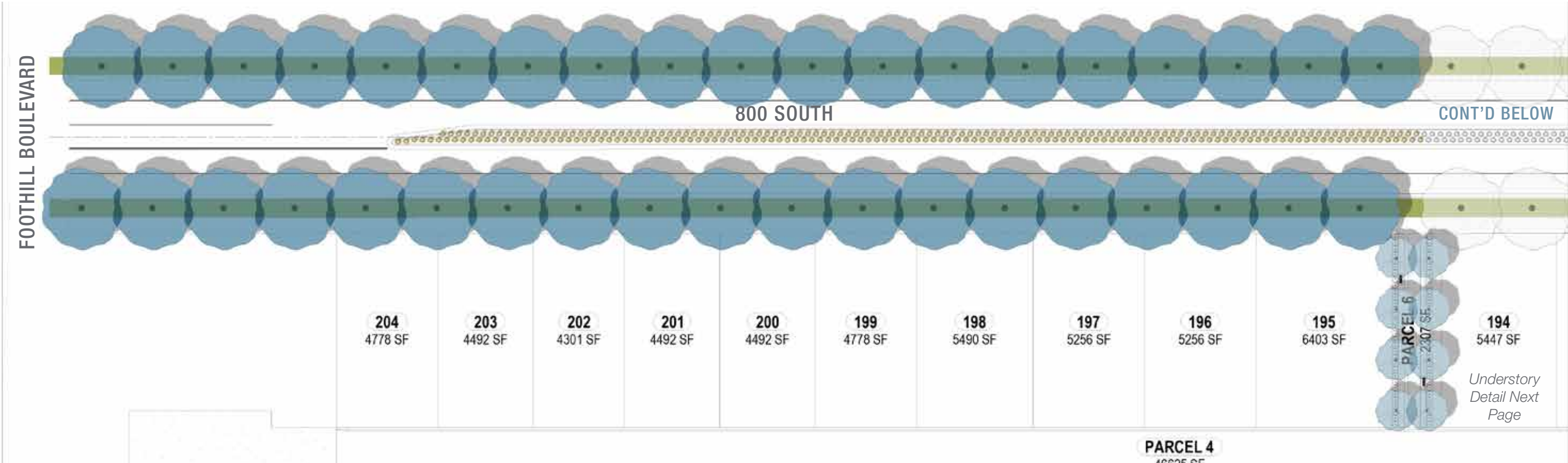


NOTE: ALL GRAPHICS SHOWN ARE CONCEPTUAL ONLY - ACTUAL FORM, DESIGN AND LAYOUT YET TO BE DETERMINED

VILLAGE PLAN | LANDSCAPING PLANS

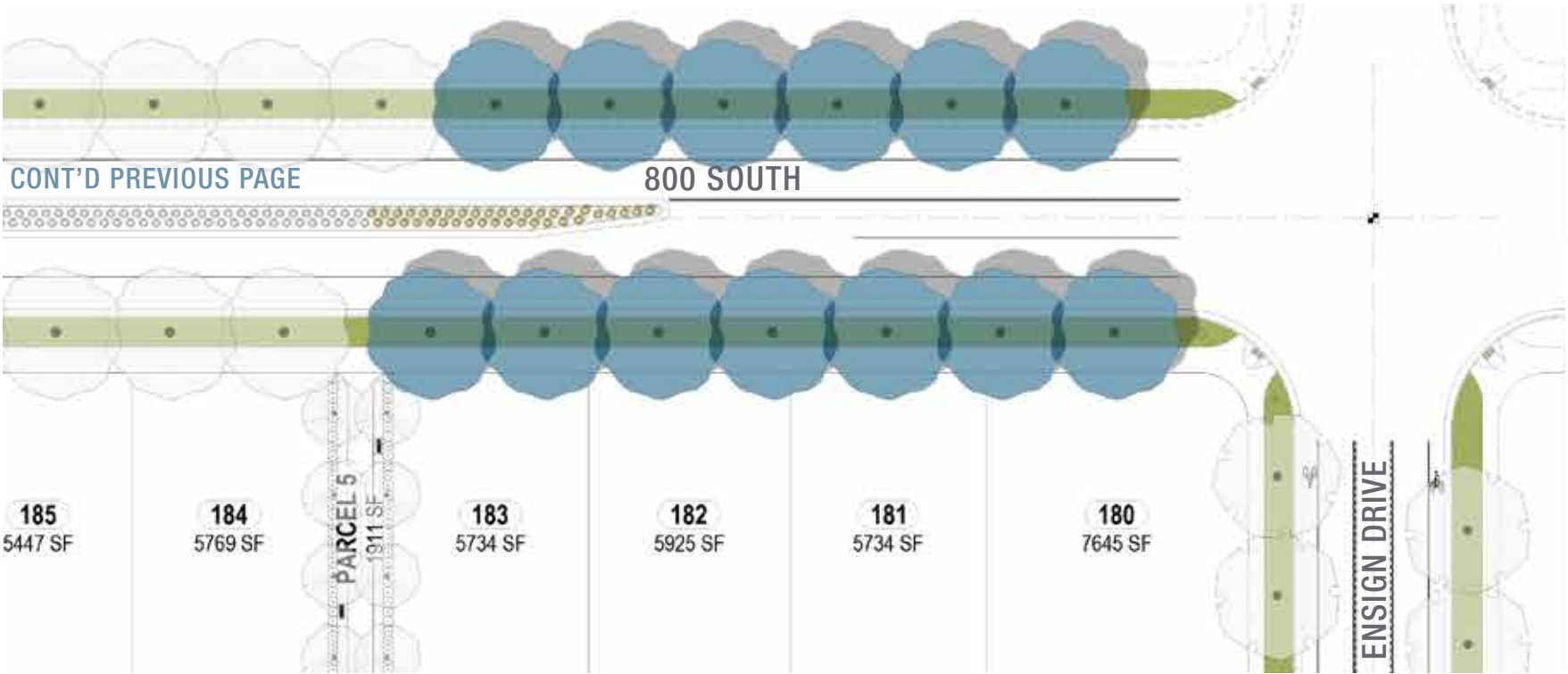


BEACON POINTE I VILLAGE 2 PLAN | LANDSCAPING PLANS



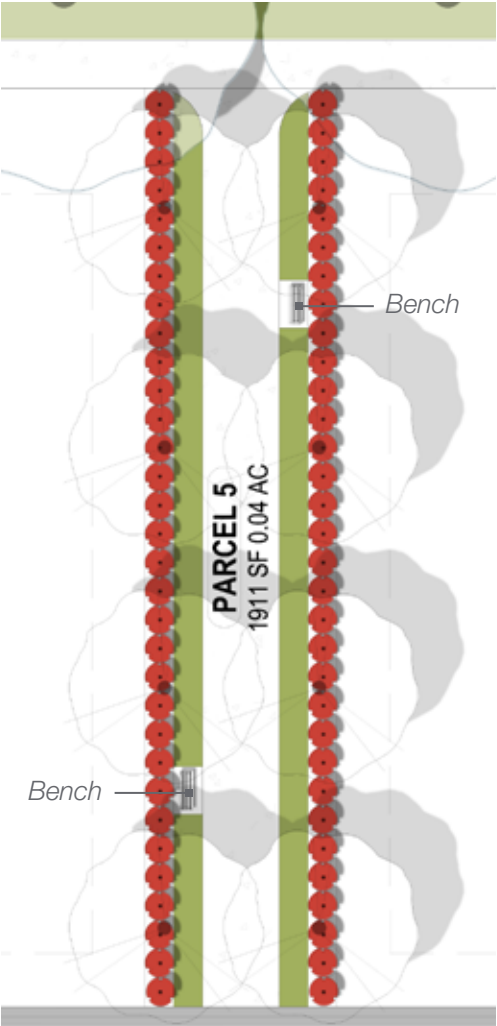
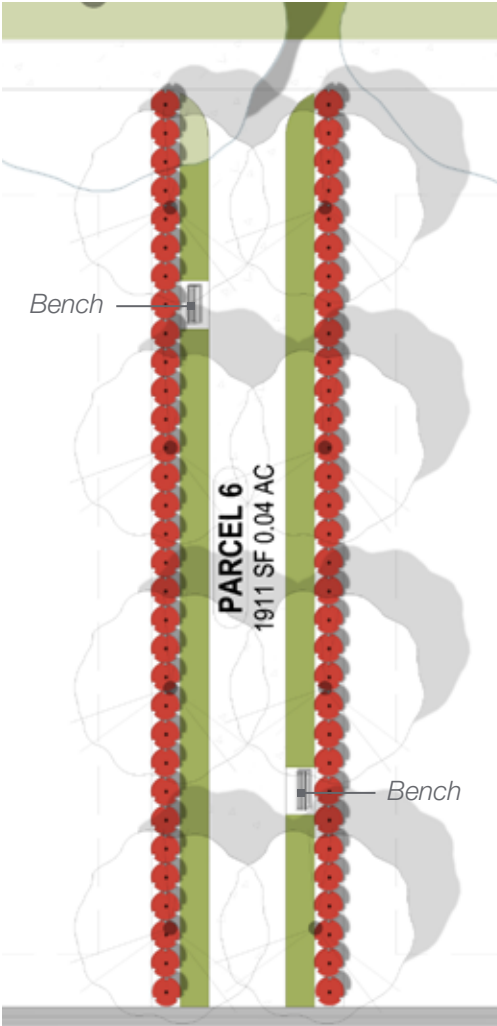
FOR LEGEND SEE PG. 41

BEACON POINTE | VILLAGE 2 PLAN | LANDSCAPING PLANS



- Allee Elm
2" Caliper - Qty. 88
- Spring Snow Crabapple
2" Caliper - Qty. 16
- Kelsey Dogwood
3 gallon - Qty. 128
- Lumen Gold Fountain Grass
2 gallon - Qty. 696
- Turf Grass

CONNECTOR TRAIL UNDERSTORY



800 S & CONNECTOR TRAILS



Allee Elm



Spring Snow Crabapple



Kelsey Dogwood



Kelsey Dogwood - Winter



Lumen Gold Fountain Grass



Turf Grass



SLIP LANE MEDIAN UNDERSTORY



ENSIGN DRIVE & SLIPLANE MEDIAN



Village Green Zelkova



Spring Snow Crabapple



Lumen Gold Fountain Grass



Flowering Pear



Village Green Zelkova
2" Caliper - Qty. 20



Spring Snow Crabapple
2" Caliper - Qty. 5



Fruitless Flowering Pear
2" Caliper - Qty. 3

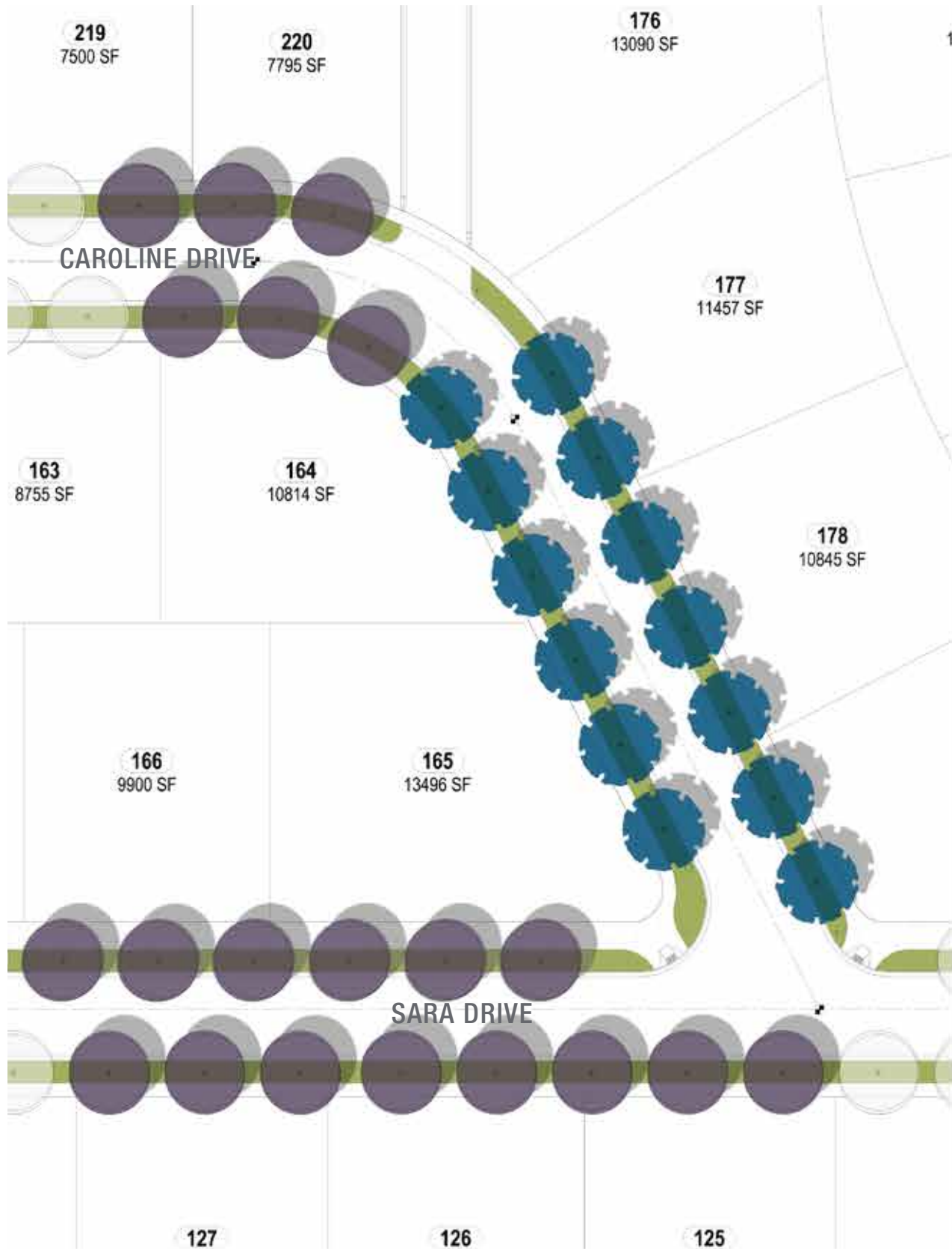


Lumen Gold Fountain Grass
2 Gall. - Qty. 96



Turf Grass

BEACON POINTE | VILLAGE 2 PLAN | LANDSCAPING PLANS



EAST CAROLINE & SARA DRIVES, SOUTH ENSIGN DRIVE



Village Green Zelkova



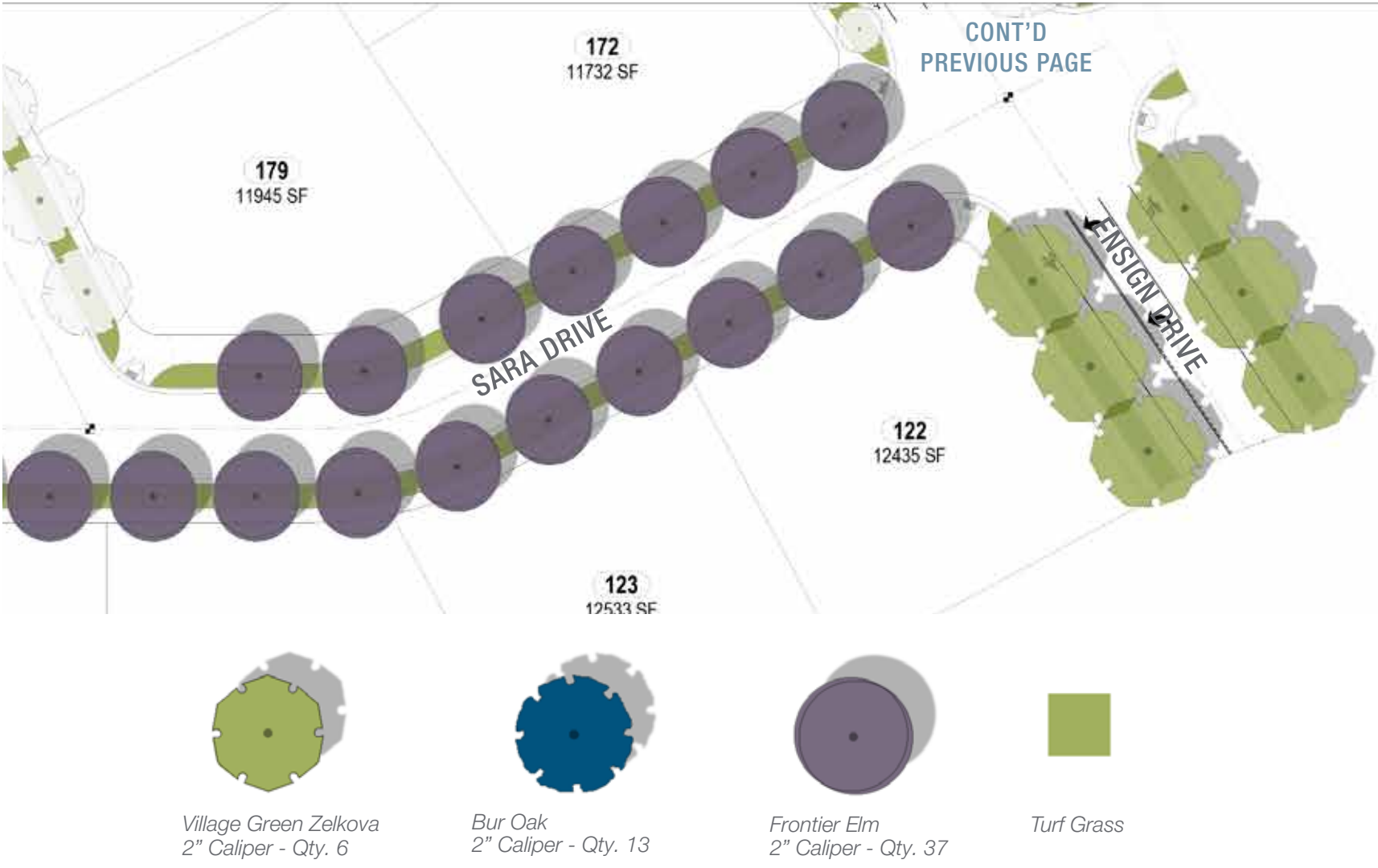
Bur Oak



Frontier Elm



Turf Grass



Village Green Zelkova
2" Caliper - Qty. 6



Bur Oak
2" Caliper - Qty. 13



Frontier Elm
2" Caliper - Qty. 37

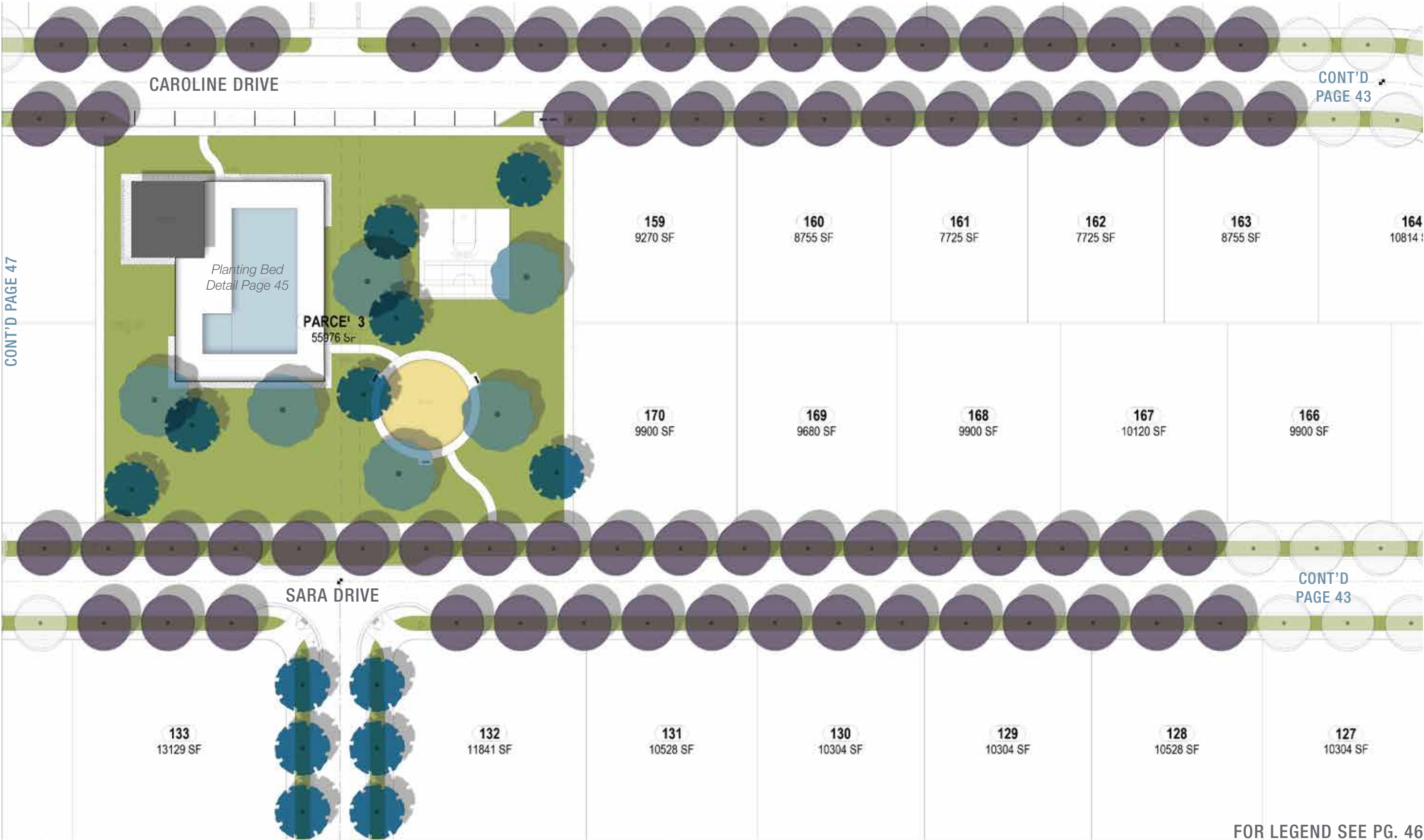


Turf Grass

Note: Actual tree quantities will vary due to drive cuts



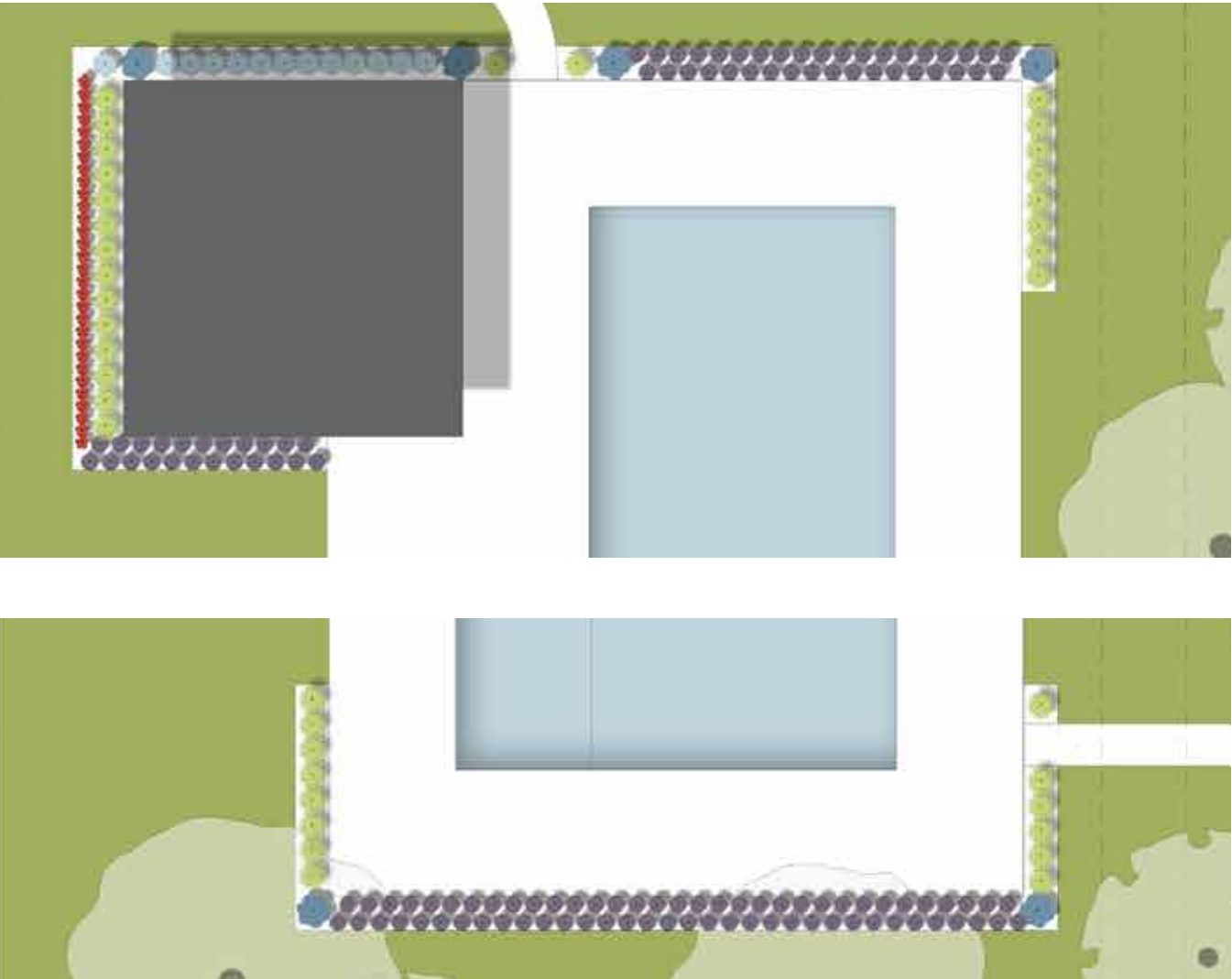
BEACON POINTE I VILLAGE 2 PLAN | LANDSCAPING PLANS



FOR LEGEND SEE PG. 46

BEACON POINTE I VILLAGE 2 PLAN | LANDSCAPING PLANS

NEIGHBORHOOD PARK PLANTING BEDS




Allee Elm
2" Caliper - Qty. 6


Bur Oak
2" Caliper - Qty. 13


Frontier Elm
2" Caliper - Qty. 67

Note: Actual tree quantities will vary due to drive cuts


Straight Talk Privet
5 gallon - Qty. 6


Sprinter Boxwood
3 gallon - Qty. 13


Morning Light Eulalia
3 gallon - Qty. 38


Pastor's Pride Lavender
2 gallon - Qty. 127


Autumn Fire Stonecrop
5" Pot - Qty. 30


Turf Grass

NEIGHBORHOOD PARK, WEST CAROLINE & SARA DRIVES



Straight Talk Privet



Morning Light Eulalia



Pastor's Pride Lavender

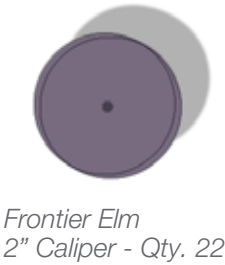
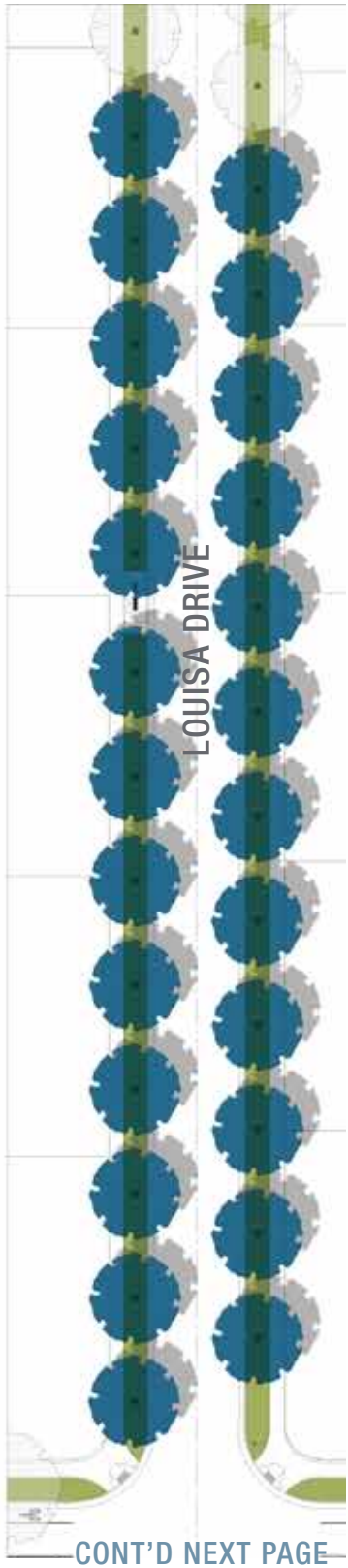
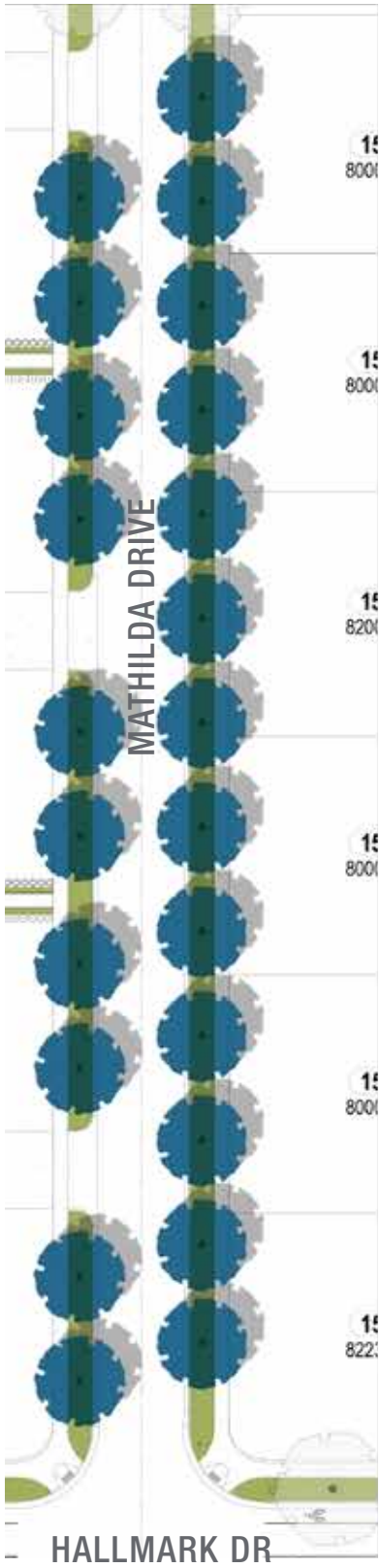
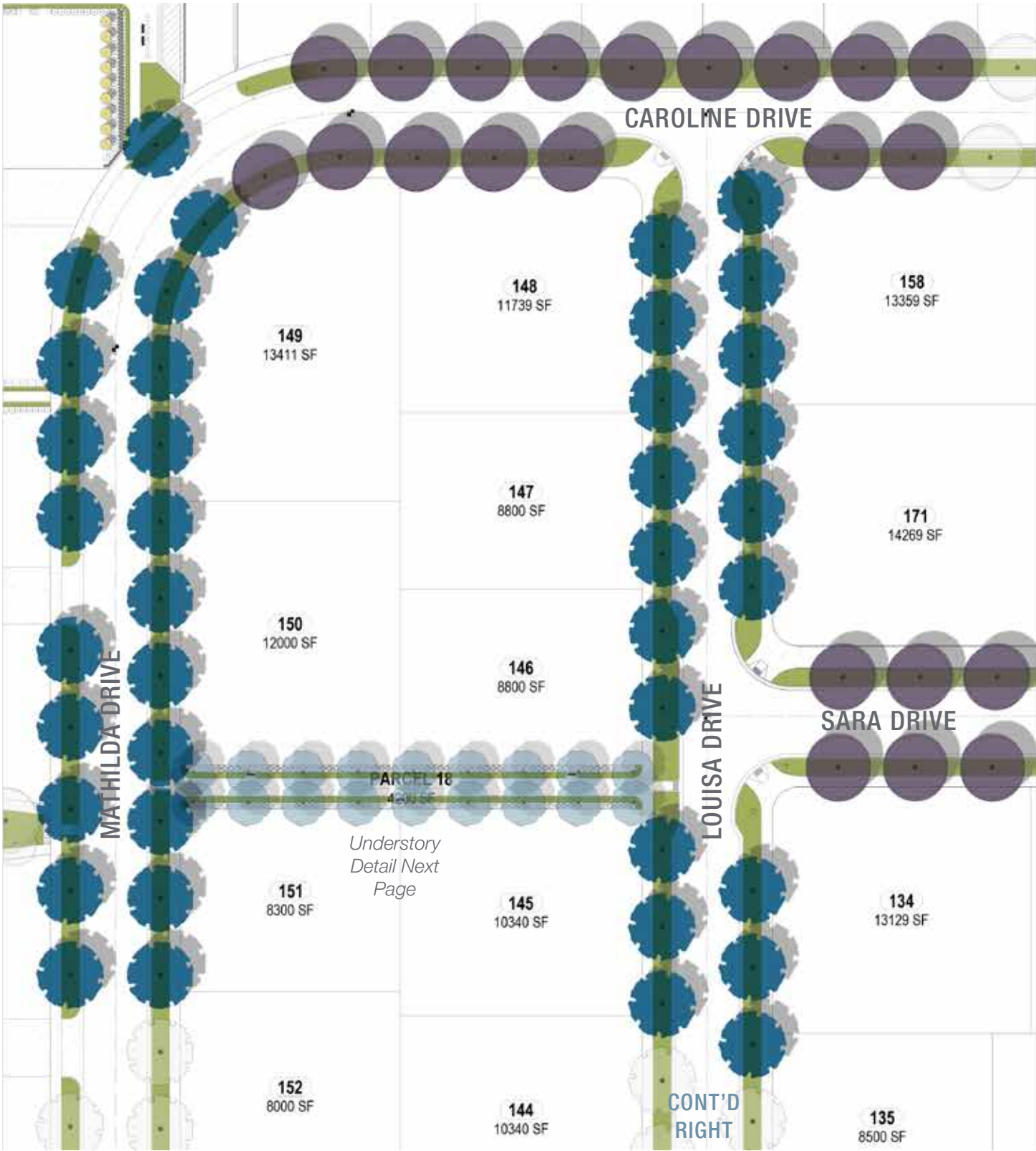


Sprinter Boxwood



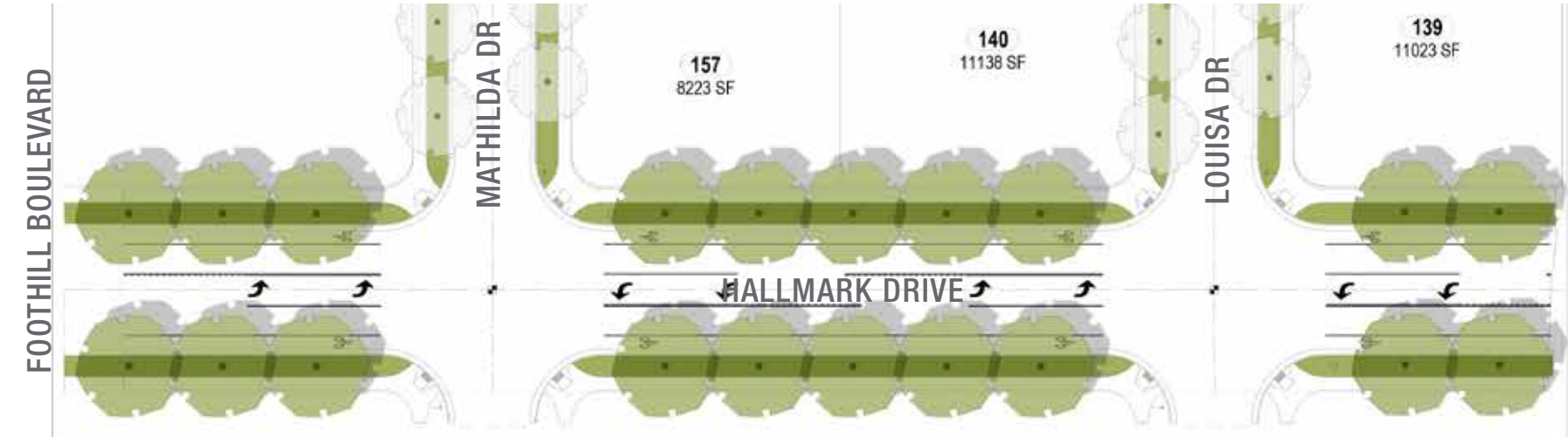
Autumn Fire Stonecrop

BEACON POINTE | VILLAGE 2 PLAN | LANDSCAPING PLANS

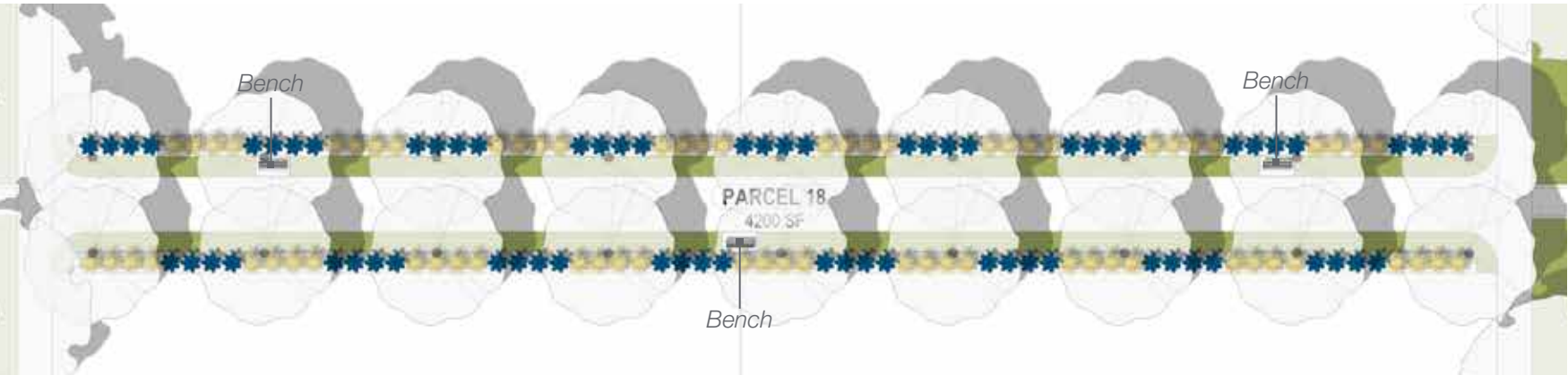


Note: Actual tree quantities will vary due to drive cuts

BEACON POINTE | VILLAGE 2 PLAN | LANDSCAPING PLANS



MID-BLOCK CONNECTOR TRAIL UNDERSTORY





Village Green Zelkova
2" Caliper - Qty. 20



Blueberry Sundae
False Indigo
2 gallon - Qty. 68



Lumen Gold
Fountain Grass
2 gallon - Qty. 68



Turf Grass

MATHILDA DRIVE, LOUISA DRIVE, HALLMARK DRIVE & MID-BLOCK CONNECTOR TRAIL



Bur Oak



Frontier Elm



Spring Snow Crabapple



Village Green Zelkova



Lumen Gold Fountain Grass

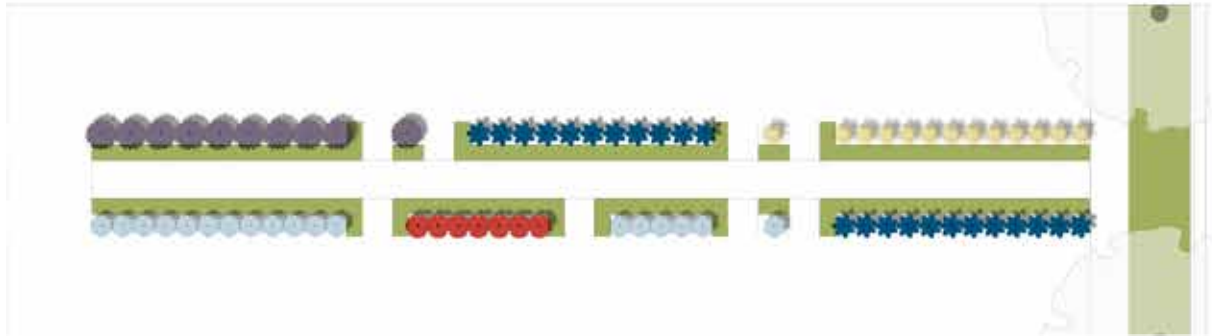
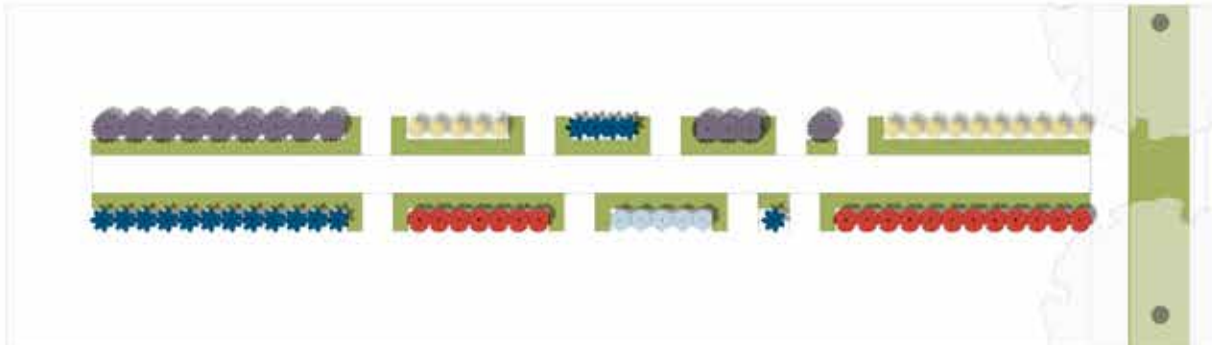
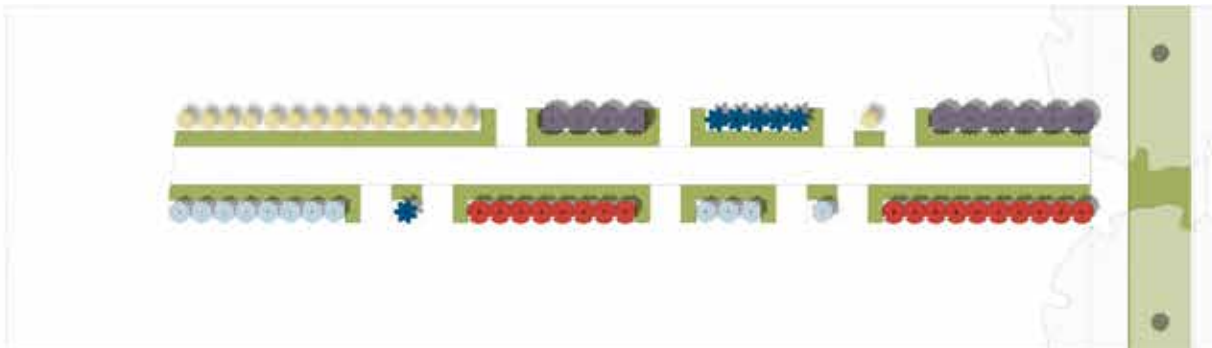
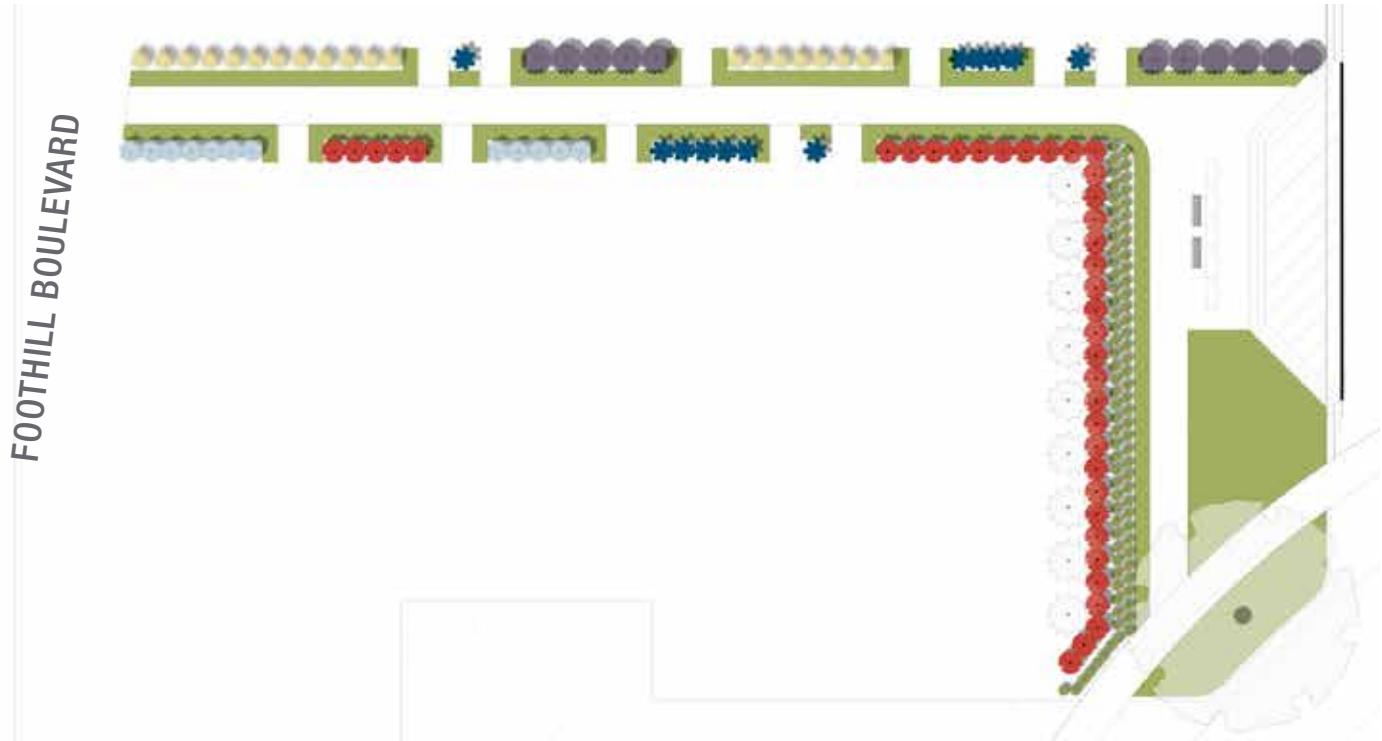


Blueberry Sundae False Indigo



Turf Grass

BEACON POINTE I VILLAGE 2 PLAN | LANDSCAPING PLANS



-  Low Scape
Hedger Chokecherry
5 gallon - Qty. 44
-  Sprinter Boxwood
3 gallon - Qty. 51
-  Blueberry Sundae
False Indigo
2 gallon - Qty. 58
-  Lumen Gold
Fountain Grass
2 gallon - Qty. 159
-  Kelsey Dogwood
3 gallon - Qty. 73
-  Apple Twist
Coral Bells
1 quart - Qty. 84

Note: Location of planting beds will adjust to accommodate actual entrance locations

TOWNHOME APPROACHES



Low Scape Hedger Chokecherry



Sprinter Boxwood



Blueberry Sundae False Indigo



Lumen Gold Fountain Grass



Kelsey Dogwood



Apple Twist Coral Bells

TOWNHOME PASEO



Frontier Elm



Spring Snow Crabapple



Turf Grass



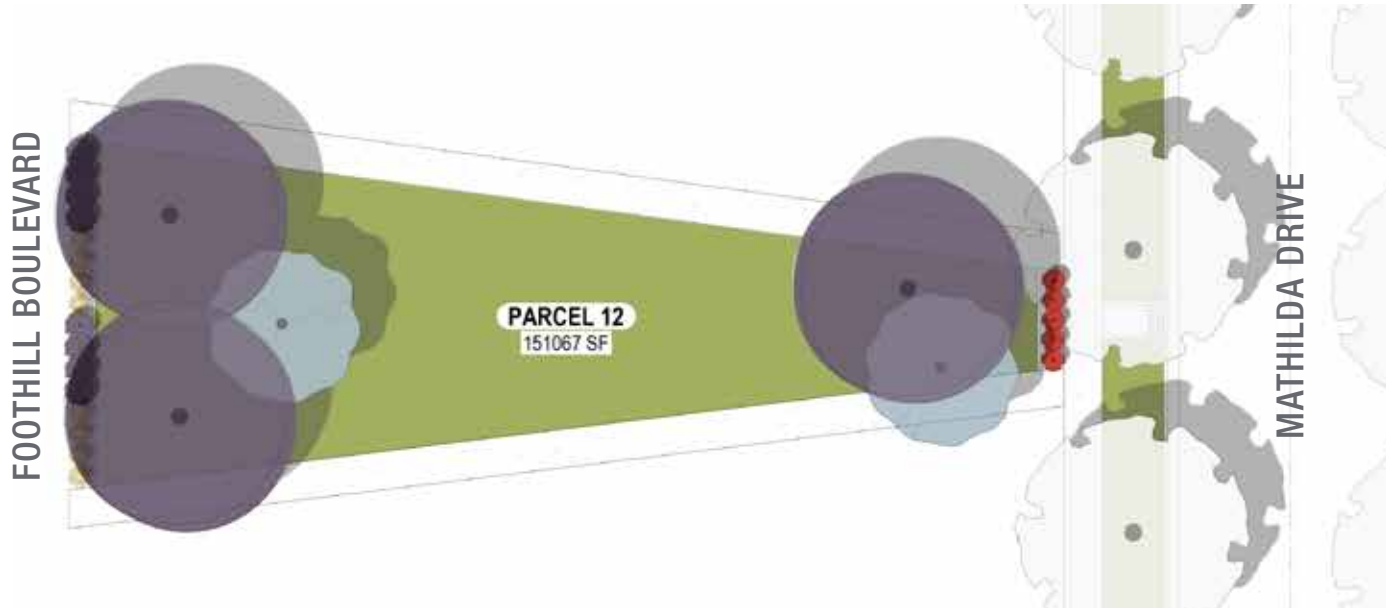
Los Scape Hedger Chokecherry



Lumen Gold Fountain Grass



Kelsey Dogwood



VILLAGE PLAN | UTILITY PLANS

UTILITY CAPACITIES

Village 2 will utilize existing utility stubs located on the southern border of the site which it shares with Village 1A. These utilities include culinary water, secondary water, sanitary sewer, and storm water. The following discusses specific details of each type of utility that were not addressed within the Utility Master Plan Submitted with the approved Community Plan:

CULINARY WATER

The Culinary water within Village 2 will follow the standard set forth in the approved Utility Master Plan with one change. The entirety of Village 2 is in Pressure Zone 2. The offsite-water main installed with Village 1A provides the backbone for Village 2. This offsite main will be extended north along the property west property boundary instead of through the subdivision and will eventually be looped back to the Zone 1 PRV installed with Village 1A. See the exhibit for reference.

SECONDARY WATER

The secondary water within Village 2 will follow the standard set forth in the approved Utility Master Plan. The entirety of Village 2 is in Pressure Zone 2. The offsite-water main installed with Village 1A provides the backbone for Village 2. This offsite main will be extended north along the property west property boundary instead of through the subdivision and will eventually be looped back to the Zone 1 PRV installed with Village 1A. See the exhibit for reference.

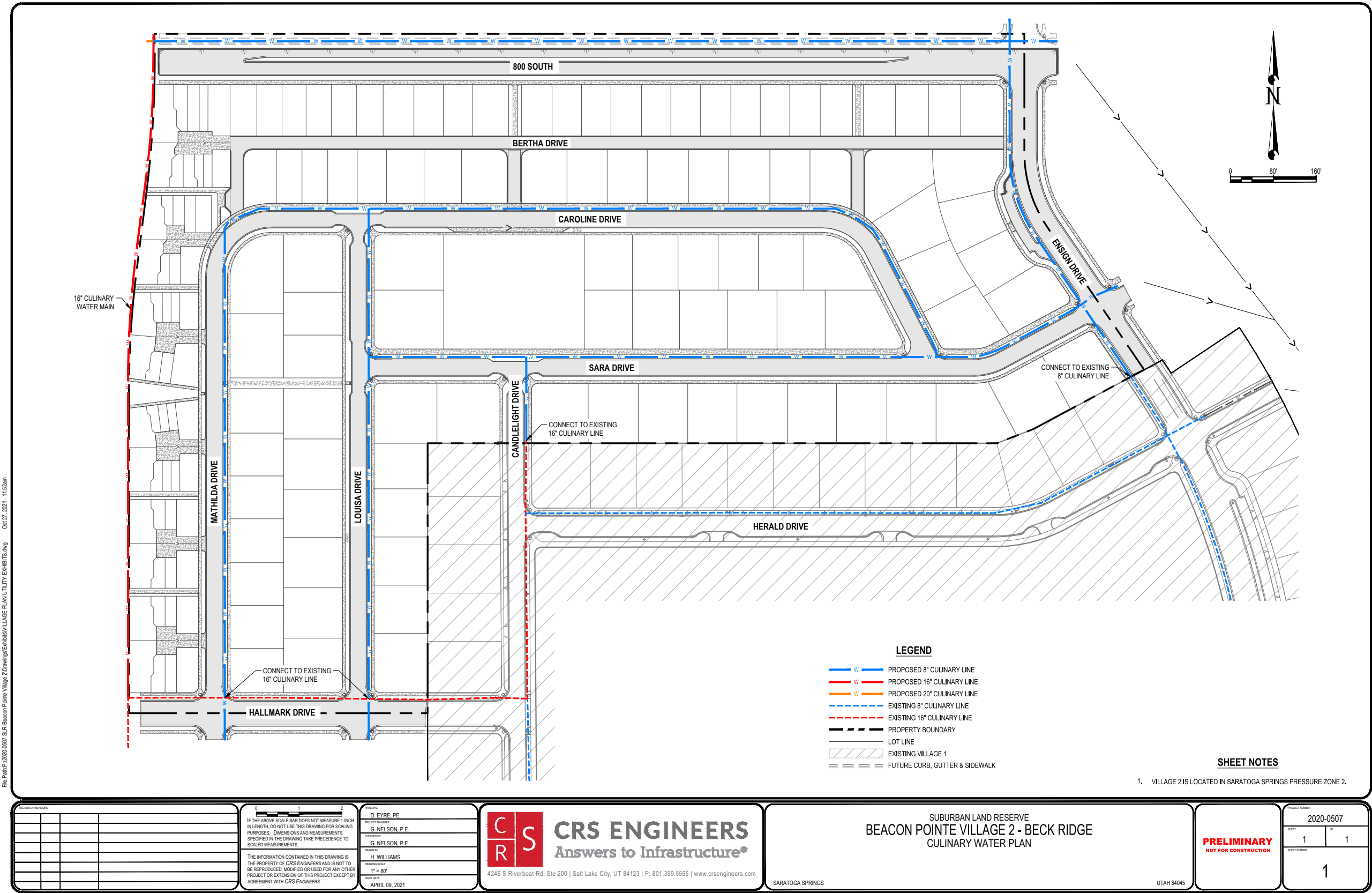
SANITARY SEWER

The sanitary sewer main within Village 2 will follow the standards set forth in the approved Utility Master Plan. See the exhibit for reference to the proposed improvements.

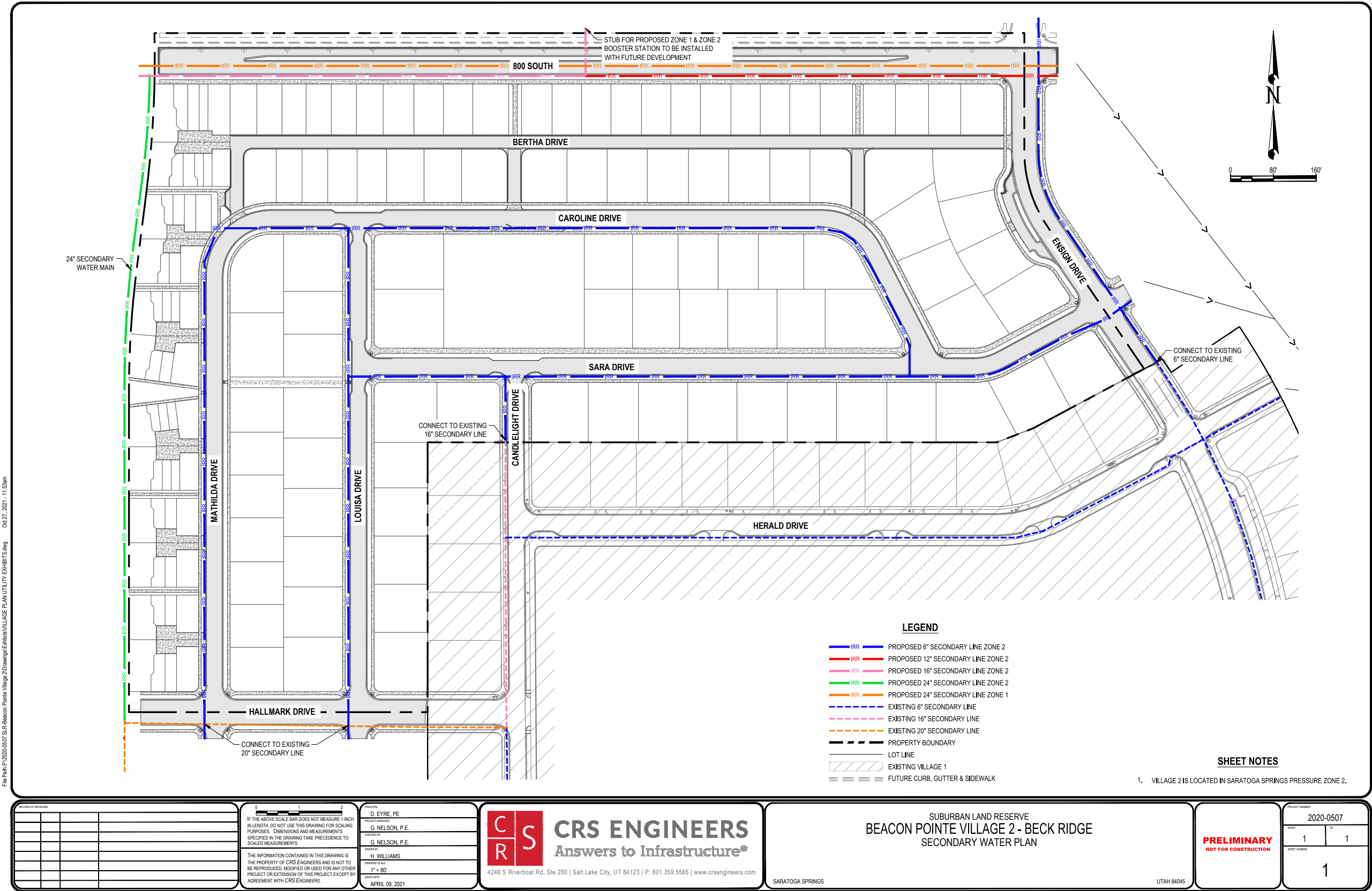
STORM DRAIN

The storm drain system within Village 2 will follow the standards set forth in the approved Utility Master Plan and connect to the Village 1A system. The overall discharge for the full development, including the middle school, is 58.0 cfs. Village 2 generates a maximum runoff of 13.7 cfs in a 10-year, 3-hour storm event. This in addition to the 12.8 cfs generated by Village 1A based on the same storm is less than the allowable 58.0 cfs for the entire project. However, the 100-year, 3-hour storm event applied to both villages generates a total runoff of 68.7 cfs. Therefore, the installation of a portion of the west detention basin outlined in the Community Plan will be installed with the necessary infrastructure to reduce the release rate to 58.0 cfs. The temporary bypass pipe network for this basin will remain open during this phase of development. See the Utility Analysis provided with this plan for further detail.

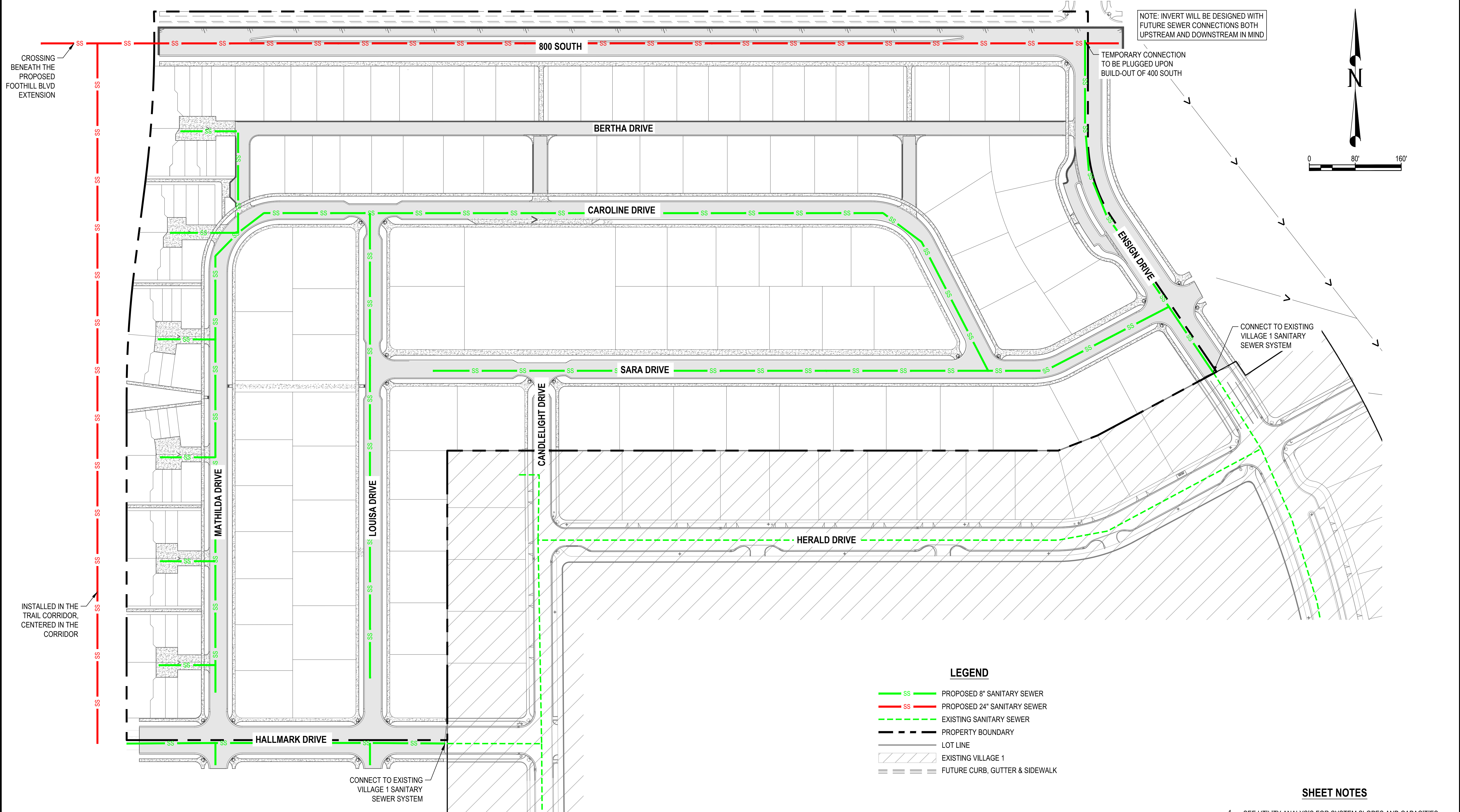
BEACON POINTE I VILLAGE 2 PLAN I UTILITY PLANS



BEACON POINTE | VILLAGE 2 PLAN | UTILITY PLANS



File Path: P:\2020-0507 SLR-Beacon Pointe Village 2\Drawings\Exhibits\VILLAGE PLAN UTILITY EXHIBITS.dwg Nov 04, 2021 - 11:17am



RECORD OF REVISIONS			

IF THE ABOVE SCALE BAR DOES NOT MEASURE 1-INCH IN LENGTH, DO NOT USE THIS DRAWING FOR SCALING PURPOSES. DIMENSIONS AND MEASUREMENTS SPECIFIED IN THE DRAWING TAKE PRECEDENCE TO SCALED MEASUREMENTS.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE PROPERTY OF CRS ENGINEERS AND IS NOT TO BE REPRODUCED, MODIFIED OR USED FOR ANY OTHER PROJECT OR EXTENSION OF THIS PROJECT EXCEPT BY AGREEMENT WITH CRS ENGINEERS.

PRINCIPAL
D. EYRE, PE
PROJECT MANAGER
G. NELSON, P.E.
CHECKED BY
G. NELSON, P.E.
DRAWN BY
H. WILLIAMS
DRAWING SCALE
1" = 80'
ISSUE DATE
APRIL 09, 2021

CRS

ENGINEERS

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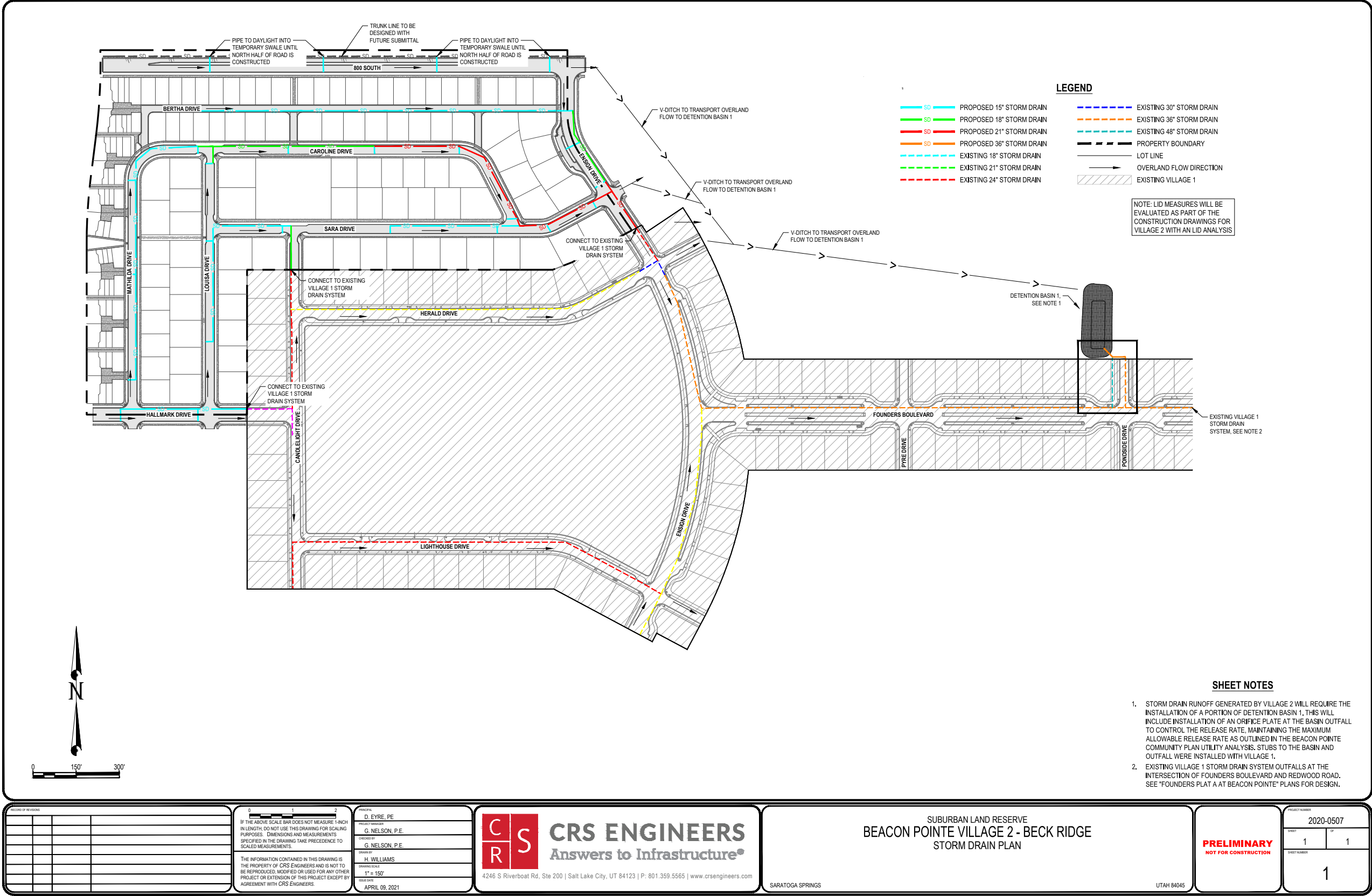
SUBURBAN LAND RESERVE
BEACON POINTE VILLAGE 2 - BECK RIDGE
SANITARY SEWER PLAN

UTAH 84045

PRELIMINARY
NOT FOR CONSTRUCTION

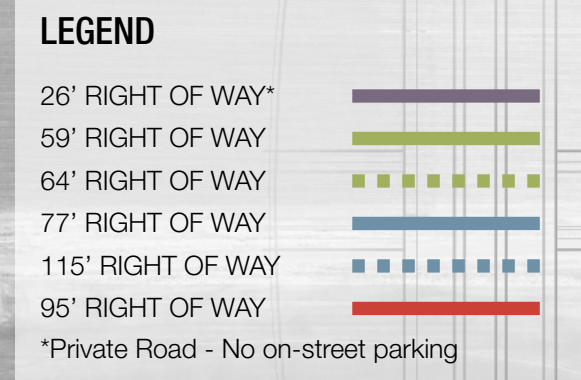
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BEACON POINTE I VILLAGE 2 PLAN I UTILITY PLANS



VILLAGE PLAN | VEHICULAR PLAN

BEACON POINTE | VILLAGE 2 PLAN | VEHICULAR PLAN



BEACON POINTE I VILLAGE 2 PLAN | **VEHICULAR PLAN**

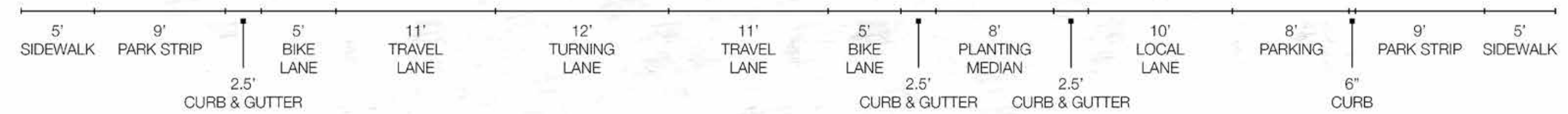


NOTE: NO ON-STREET PARKING IS ALLOWED. SIGNAGE, MARKING, AND ENFORCEMENT WILL BE THE RESPONSIBILITY OF THE DEVELOPER AND HOA.









COLLECTOR WITH SLIP LANE
106' ROW

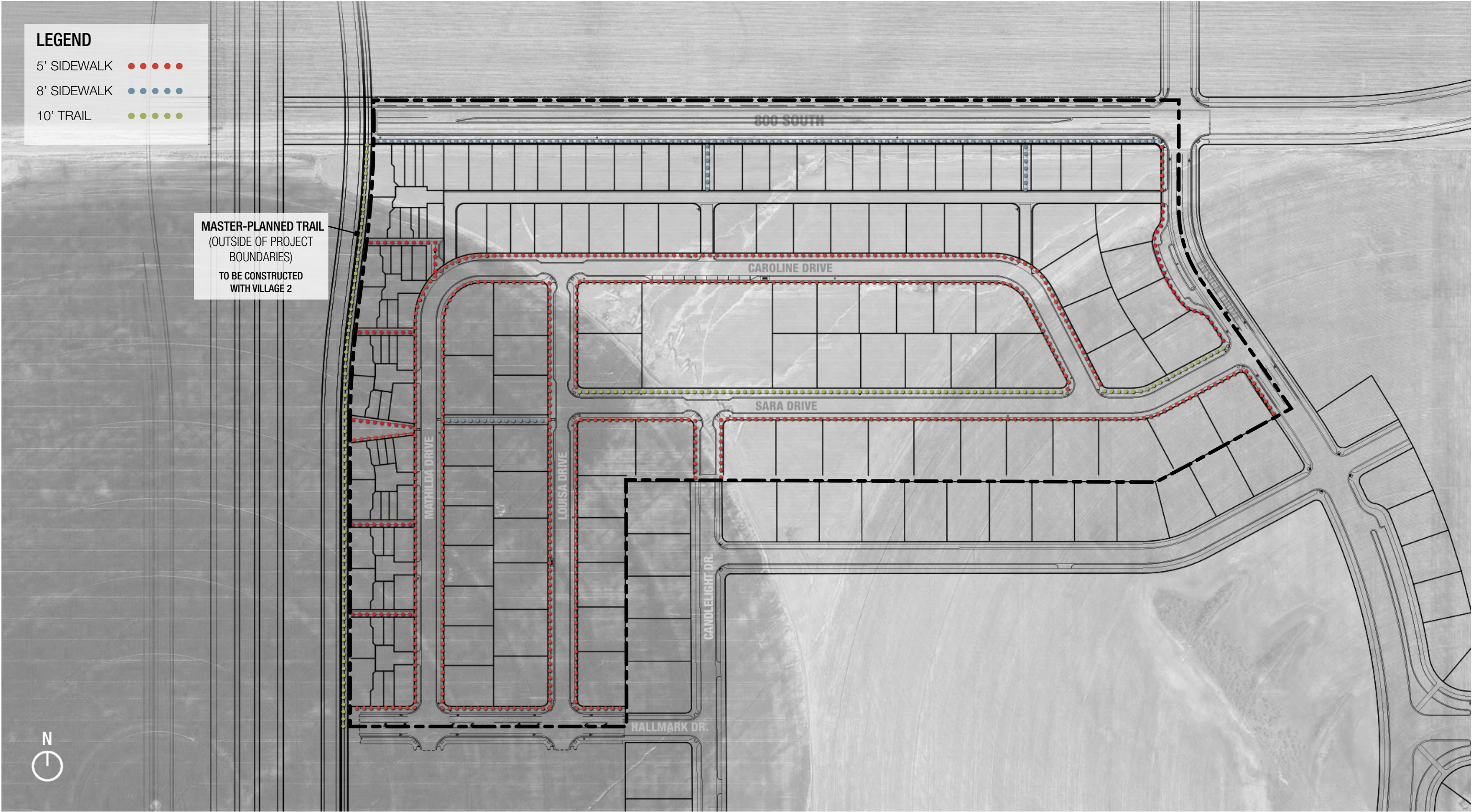


CITY STANDARD MINOR ARTERIAL (2018)
95' RIGHT OF WAY

NOTE: DEVELOPER ACKNOWLEDGES THAT THE ADDITIONAL WIDTH OF THE 95' ARTERIAL (VS THE 77' COLLECTOR REQUIRED) ON 800 SOUTH IS NOT IMPACT-FEE-ELIGIBLE

VILLAGE PLAN | PEDESTRIAN PLAN

BEACON POINTE I VILLAGE 2 PLAN | PEDESTRIAN PLAN





FOOTHILL BOULEVARD TRAIL

VILLAGE PLAN | ADDITIONAL PLANS

WILDLIFE MITIGATION PLANS.

The United States Fish and Wildlife Service has been contacted to determine whether there are any endangered species or wildlife that needs to be mitigated at this time. The Division responded and do not have any concerns due to the current agricultural use of the land.

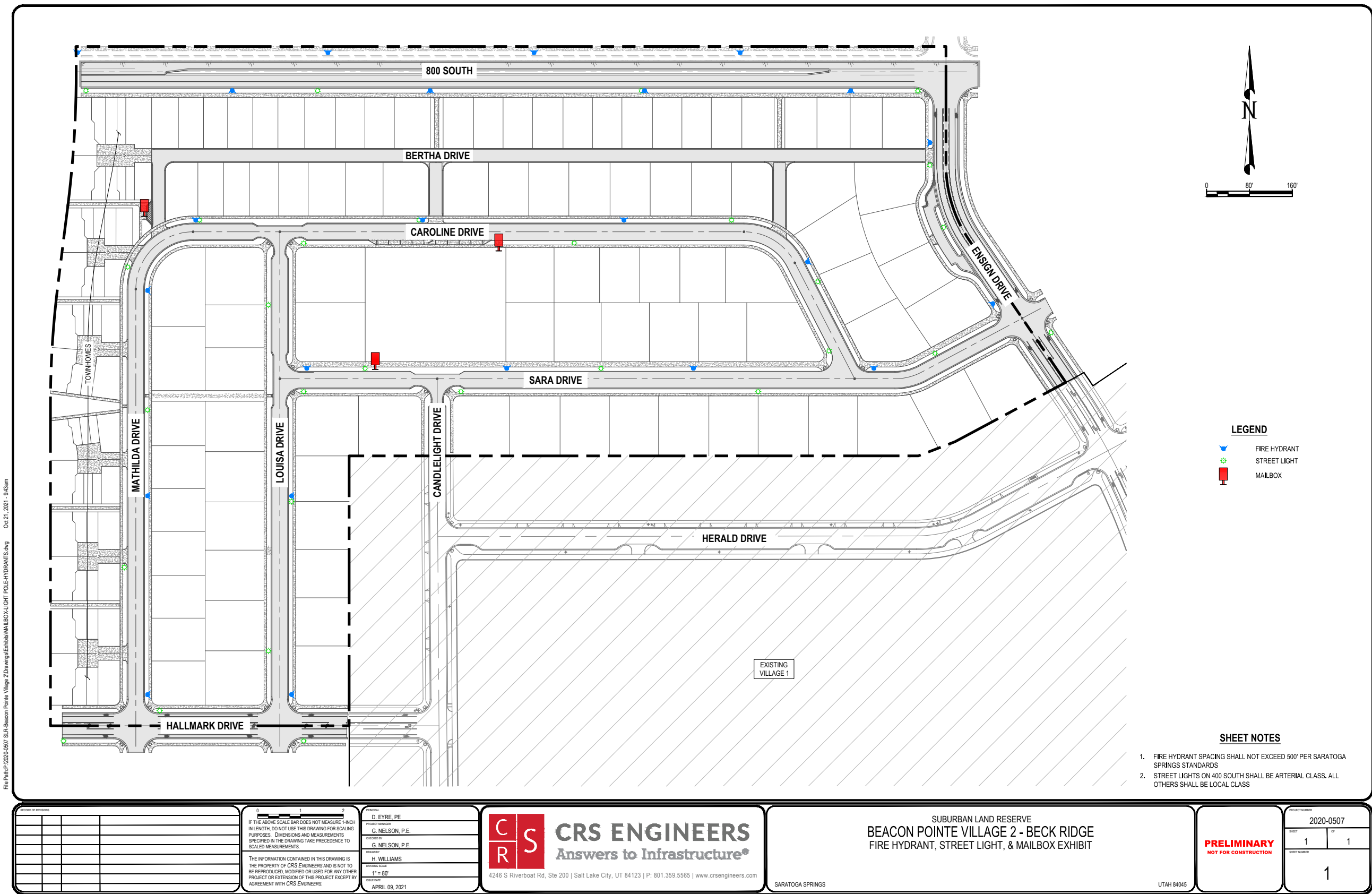
OPEN SPACE MANAGEMENT PLANS.

The proposed open space will be owned and maintained by the Beck Ridge HOA, including connecting trails, paseos, neighborhood park, and the entirety of the slip lane median along Ensign Drive and 800 South within the village boundaries. No open space within this village will be owned or maintained by the city. The future Foothill Boulevard Trail (outside of project boundaries) will be owned and maintained by the city, the portion of the trail adjacent to the village will be constructed with Village 2.

HAZARDOUS MATERIAL REMEDIATION PLANS.

No hazardous materials have been identified within the site. Should any hazardous materials be identified through further geotechnical investigation or site observation, acceptable mitigation must be completed prior to development.

BEACON POINTE | VILLAGE 2 PLAN | FIRE HYDRANNTS, STREET LIGHTS & MAILBOX LOCATIONS



VILLAGE PLAN | SITE CHARACTERISTICS

SITE CHARACTERISTICS

SENSITIVE LANDS

There are no known sensitive lands within the village boundary.

WATERWAYS

There is an existing natural channel that runs through the northwest corner of the site. Runoff through this channel will be captured by Mountain View Corridor/Foothill Boulevard which is currently under design.

FAULT LINES

There are no known fault lines within the village boundary.

GENERAL SOILS DATA

Soils vary from silty clay loam to a gravelly loam.

WETLANDS

There are no known wetlands within the village boundary.

SLOPES

The site slopes from west to east at an average of 2.5%. No slope within Village 2 exceeds 25%.

HISTORICAL SITES

There are no known historical sites within the village boundary.

ENDANGERED PLANTS

There are no known endangered plants within the village boundary.

VILLAGE PLAN | FINDINGS STATEMENT

FINDINGS

Village Plan 2 is the 36.57-acre second phase within the 371.8-acre Beacon Pointe Community Plan located in Saratoga Springs, Utah. Beacon Pointe Village 2 is compliant with all Planned Community Zone Requirements for Village Plans as defined in Section 19.26.09 of the Saratoga Springs Municipal Code. We find that Village Plan 2:

A. IS CONSISTENT WITH THE ADOPTED COMMUNITY PLAN;

Village Plan 2 adheres to the development standards, design guidelines, infrastructure plans, and other requirements established in the Beacon Pointe Community Plan.

B. DOES NOT EXCEED THE TOTAL NUMBER OF EQUIVALENT RESIDENTIAL UNITS (ERUS) DICTATED IN THE ADOPTED COMMUNITY PLAN;

The number of potential ERUs established in the Community Plan for Village Plan 2 establishes a maximum of 239 ERUs.

C. FOR AN INDIVIDUAL PHASE, DOES NOT EXCEED THE TOTAL NUMBER OF EQUIVALENT RESIDENTIAL UNITS DICTATED IN THE ADOPTED COMMUNITY PLAN UNLESS TRANSFERRED PER THE PROVISIONS OF THE COMMUNITY PLAN;

The number of ERUs established in Village 2 will not exceed the maximum of 239 ERUs.

D. IS CONSISTENT WITH THE UTILITY, INFRASTRUCTURE, AND CIRCULATION PLANS OF THE COMMUNITY PLAN; INCLUDES ADEQUATELY SIZED UTILITIES, SERVICES, AND ROADWAY NETWORKS TO MEET DEMANDS; AND MITIGATES THE FAIR-SHARE OF OFF-SITE IMPACTS;

Village Plan 2 implements the utility, infrastructure, and circulation plans as specified in the Beacon Pointe Community Plan.

E. PROPERLY INTEGRATES UTILITY, INFRASTRUCTURE, OPEN SPACES, PEDESTRIAN AND BICYCLE SYSTEMS, AND AMENITIES WITH ADJACENT PROPERTIES;

Village Plan 2 has been designed to accommodate necessary infrastructure elements for residents and establish a framework that will provide for future community development and adjacent connections.

F. CONTAINS THE REQUIRED ELEMENTS AS DICTATED IN SECTION 19.26.10 OF THE SARATOGA SPRINGS MUNICIPAL CODE.

Village Plan 2 contains all the relevant required elements as dictated in Section 19.26.10.

G. MEETS THE MINIMUM REQUIRED SPACE IN ADOPTED COMMUNITY PLAN, AND ADOPTED DISTRICT AREA PLAN IF APPLICABLE.

Village Plan 2 contains 36.57 acres, down from 36.8 acres as listed in the Beacon Pointe Community Plan, a reduction of .6%.

VILLAGE PLAN | APPENDIX A



BEACON POINTE VILLAGE 2 UTILITY ANALYSIS

STORM DRAIN & SANITARY SEWER

April 9, 2021

Description of Development

The Beacon Pointe development site is located west of Redwood Road and north of the existing Grandview subdivision in Saratoga Springs, Utah. The total project area is approximately 372 acres and will be broken into 8 separate villages. Village 2 is located on the northwest corner of the development, covering approximately 34 acres of the overall site and includes 154 dwelling units: 55 townhomes and 99 single-family residences. There is no existing infrastructure within the boundary of Village 2, but there are tie-in locations for storm drain and sanitary sewer systems on the southern edge of the site.

Storm Drainage

Existing Site Conditions

No existing storm drain systems drain into Village 2. This site was considered in the overall Beacon Pointe Community Plan and will tie into the existing storm drain infrastructure installed with Village 1 which constitutes the backbone of the infrastructure for the whole community. Points of connection for this site are in Hallmark Drive, Candlelight Drive, and Ensign Drive. See Exhibit 1 in Appendix A for drainage area delineation and connection locations. Natural washes and channels that would contribute runoff to Village 2 from the southwest will be captured by the development of Foothill Boulevard and Mountain View Corridor and are not considered in this analysis.

The Village 1 system shares an outfall point with the junior high located at the east end of Founders Boulevard. The storm drain report for the Community Plan states that the overall site has a maximum allowable discharge rate of 58.00 cfs. The school accounts for 5.76 cfs, leaving 52.24 cfs for Beacon Pointe. The storm drain report for Village 1 anticipated discharge for 3 different storm events. The runoff generated from the largest event, 100-yr, 3-hr, was 36.72 cfs, less than the allowable 52.24 cfs. Therefore, no detention basins were installed with Village 1, but infrastructure was put in place for the future detention basins as required by the overall Community Plan.

Model & Anticipated Discharge

This site was modeled using Autodesk Storm and Sanitary Sewer Analysis 2020 (SSA). The model (model 1) utilized the TR-55 methodology to calculate time of concentration for each subbasin. The storm drain system and rainfall events were designed per city standards. NRCS curve numbers were assigned to each subbasin. Impervious areas were assigned a curve number of 98. Pervious areas were either categorized as townhomes (1/8 acre or less) or 1/4 acre lots and were assigned the curve numbers of 77 and 61, respectively.

Greg Nelson, PE
Associate

c.801.792.7730
Gregory.nelson@crsengineers.com

The model was used to analyze the 2-year, 10-year, and 100-year storm events. The results from each analysis are shown in Table 1 below.

Table 1: Maximum Runoff Estimates

Storm Event	Maximum Runoff (cfs)
2-yr, 3-hr	6.78
10-yr, 3-hr	13.68
100-yr, 3hr	26.21

As was previously mentioned, the entire community, including the school, has an allowable discharge rate of 58.00 cfs. The school accounts for 5.76 cfs and Village 1 accounts for an additional 36.72 cfs, leaving 15.52 cfs for Village 2. The anticipated discharge from the 100-yr, 3-hr event exceeds the allowable discharge rate for the community and will require the installation of a detention basin with Village 2.

SSA was used to design an additional model (model 2) for the portion of Village 1 downstream of the proposed basin. The model used the same criteria as was outlined in the report submitted with Village 1. Results of this model stated that this area has a release rate of 14.83 cfs for the 100-yr, 3-hr event.

A hydrodynamic storm water treatment device was sized and installed with the Village 1 improvements. Per the Village 1 storm drain analysis report, the peak treatment at full build out was found to be 36.06 cfs.

Storm Drain Pipe Sizing

Storm drain pipes were sized to convey runoff generated by the 10-yr, 3-hr and 100-yr, 3-hr events without any flooding. Larger flows will be conveyed through the streets as overland flow toward the detention basins east of Village 2. All pipes were designed to meet City standards. A detailed list of pipe properties and model results can be found in Appendix A.

To ensure larger flows from Village 2 can be conveyed in Ensign Drive in Village 1, the model and storm drain report for Village 1 were obtained from the designer of Village 1. The SSA model for Village 1 did not include the full acreage of Village 2; it accounted for only 27.7 acres out of the required 34 acres of flow from Village 2. CRS has added the remainder of the acreage of Village 2 to the Village 1 model. The Village 1 model also did not model the overland flow to ensure the streets had capacity. CRS has added bypass links to model the overland flow in the Village 1 model and rerun the 100-yr storm event. The findings revealed that Village 2 will contribute 6.8 cfs to Village 1 (into Ensign Drive as overland flow). The cross section of Ensign Drive was modelled in Hydraulic Toolbox, and the capacity found was 8.2 cfs. Therefore, Ensign Drive can handle the overland flow that is added by Village 2, before entering Herald Drive and spilling out to the east. To ensure this flow has a path to the detention basin after spilling out, a v-ditch will be constructed as part of Village 2.

Detention Basin & Orifice Plate Sizing

The results of model 2 state that Village 1 improvements downstream of the basin produce a release rate 14.83 cfs, leaving 37.41 cfs for the areas upstream of the basin. The total flow upstream of the basin generated by Village 1 and Village 2 is 48.06 cfs, requiring the installation of a detention basin. Model 1 was used to size an orifice plate and detention basin. Results of model 1 state that a 14.75-inch orifice plate combined with a

31,500 CF detention basin produce a release rate of 37.04 cfs. This brings the total release rate of both villages to 51.87 cfs, less than the maximum allowable release rate.

Village 1 installed the infrastructure to route flow into the proposed 315,000 CF detention basins outlined in the master plan. However, the basins were bypassed as neither were needed for the development of Village 1. The bypass pipe for the basin in Village 3 will remain open and a portion of the basin will be installed with the development of Village 2. See Exhibit 2 in Appendix A for basin and orifice plate locations. The limiting factor to be maintained throughout this and future projects is the maximum allowable discharge rate of 52.24 cfs. As such, the full build-out of this basin and the other proposed basins including the resize of the orifice plate installed with Village 2 will be required with the development of future villages.

Offsite Runoff

Included in the development of Village 2 is half of a frontage road along the north boundary line of the site. This road will be dedicated as public right-of-way with this project. As such, the Beacon Pointe development will not be responsible for the conveyance of flows generated by this road.

City standards state that storm drain trunk lines are to be located on the north side of this road. Village 2 only includes the construction of the south half. Gutter inlet boxes will be installed in the south half of the road with stubs that will daylight to the north into temporary drainage swales until the remainder of the road is built.

Sanitary Sewer

Autodesk Storm and Sanitary Sewer Analysis 2020 (SSA) was used to model the Village 2 sanitary sewer system trunk line. All pipes were designed to flow with a velocity of 2 fps at 80 percent full q/Q ratio per city standards. Village 2 contributes a total of 162 ERUs – 56 townhomes, 105 single-family homes, and 1 park - to the overall system installed with Village 1. An exhibit showing contributing areas and nodes as well as detailed pipe calculations and model results are included in Appendix B.

Update: Village 2 ERUs increased from 162 to 193. The ERUs were increased at each junction to account for the additional ERUs. Flows were then recalculated and input into the SSA model. All pipe sizes flow at less than 80 percent full q/Q ratio with the increased ERUs; no changes to pipe sizes were made.

The northmost lots will be serviced by a 24-inch trunk line as defined in the 2020 Sewer Capital Facilities Plan (CFP) which is intended to convey sewer flows from major areas south of the Beacon Pointe development. This trunk line will end at the east edge of the Village 2 frontage and will be temporarily routed through the Beacon Pointe development. Upon full build out, the temporary connection into Village 2 will be plugged and flows will continue east as defined in the CFP.

Conclusion

SSA was used to create a storm drain model of the Beacon Pointe Village 2 development area. Village 2 utilizes the infrastructure installed with Beacon Pointe Village 1. The combined runoff generated by the 100-year 3-hour event for both villages requires runoff to be detained and released at a lower rate into the overall system to

Greg Nelson, PE
Associate

Greg Nelson, PE
Associate

meet the maximum allowable release rate for the community. Pipe sizing calculations were completed to account for all flows generated by the site.

SSA was also used to model the sewer system for the development and the offsite trunkline along the north frontage of the site. Calculations were completed to size all pipes and manholes to adequately convey all flows from the development into the existing Village 1 infrastructure. CRS recommends the implementation of a maintenance plan to ensure the proper function of pipes at the upstream ends of the system.

Sincerely,
CRS Engineers

A handwritten signature in black ink, appearing to read "Greg Nelson", with a long, sweeping horizontal stroke extending to the right.

Greg Nelson, PE

Greg Nelson, PE
Associate

c.801.792.7730
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APPENDIX A

File Path: P:\2020-0507 SLR-Beacon Pointe Village 2\Drawings\Exhibits\STORM DRAIN ANALYSIS EXHIBIT.dwg Apr 12, 2021 10:39am

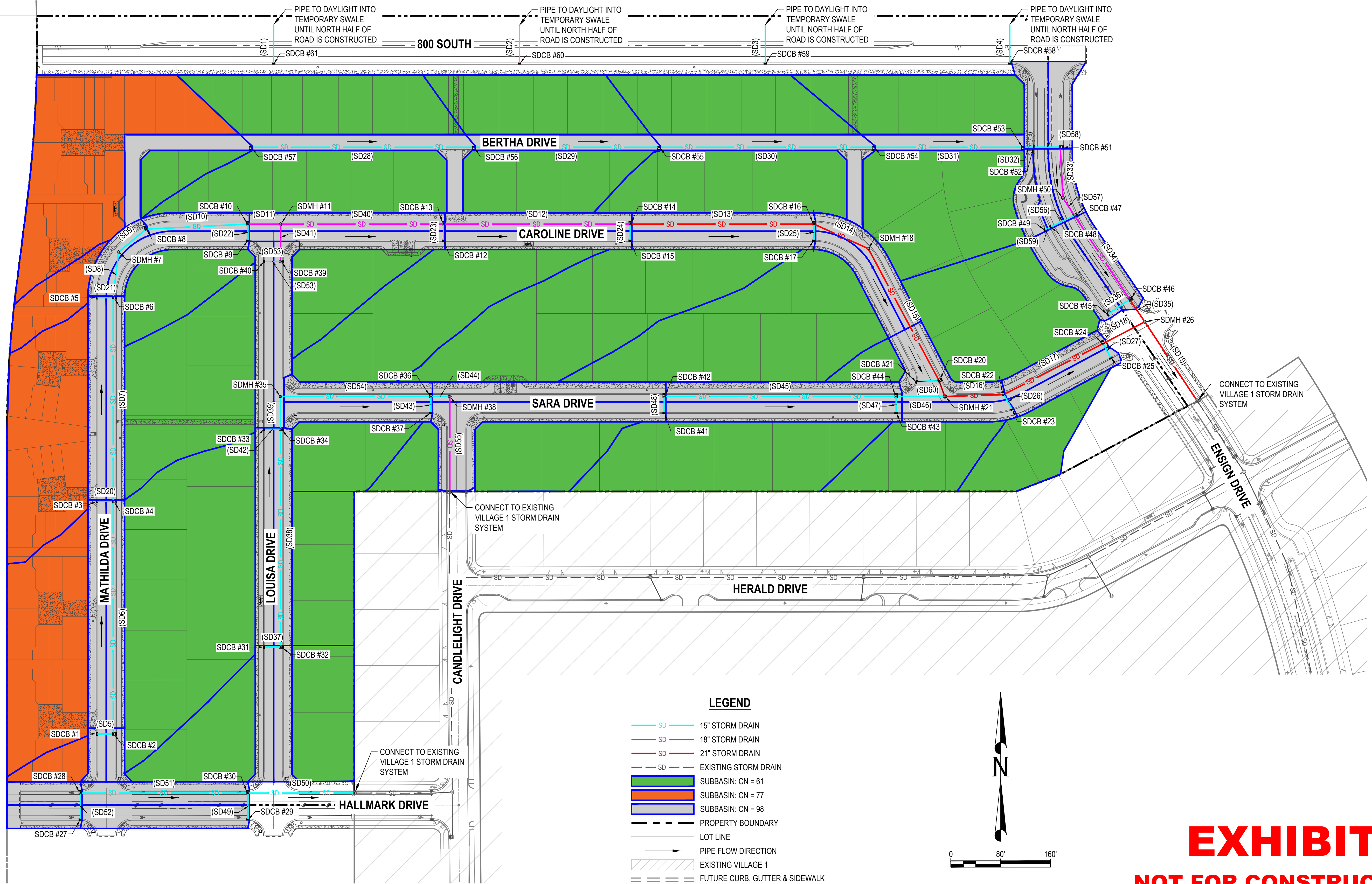


EXHIBIT
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RECORD OF REVISIONS			

IF THE ABOVE SCALE BAR DOES NOT MEASURE 1-INCH IN LENGTH, DO NOT USE THIS DRAWING FOR SCALING PURPOSES. DIMENSIONS AND MEASUREMENTS SPECIFIED IN THE DRAWING TAKE PRECEDENCE TO SCALED MEASUREMENTS.

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PRINCIPAL
D. EYRE, P.E.

PROJECT MANAGER
G. NELSON, P.E.

CHECKED BY
G. NELSON, P.E.

DRAWN BY
H. WILLIAMS

DRAWING SCALE
1" = 80'

ISSUE DATE
APRIL 9, 2021

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STORM DRAIN
CONTRIBUTING AREAS, STRUCTURES, & PIPES

SARATOGA SPRINGS, UT 84045

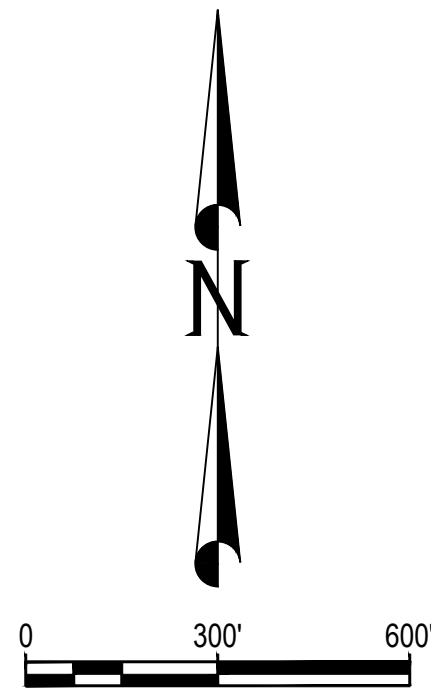
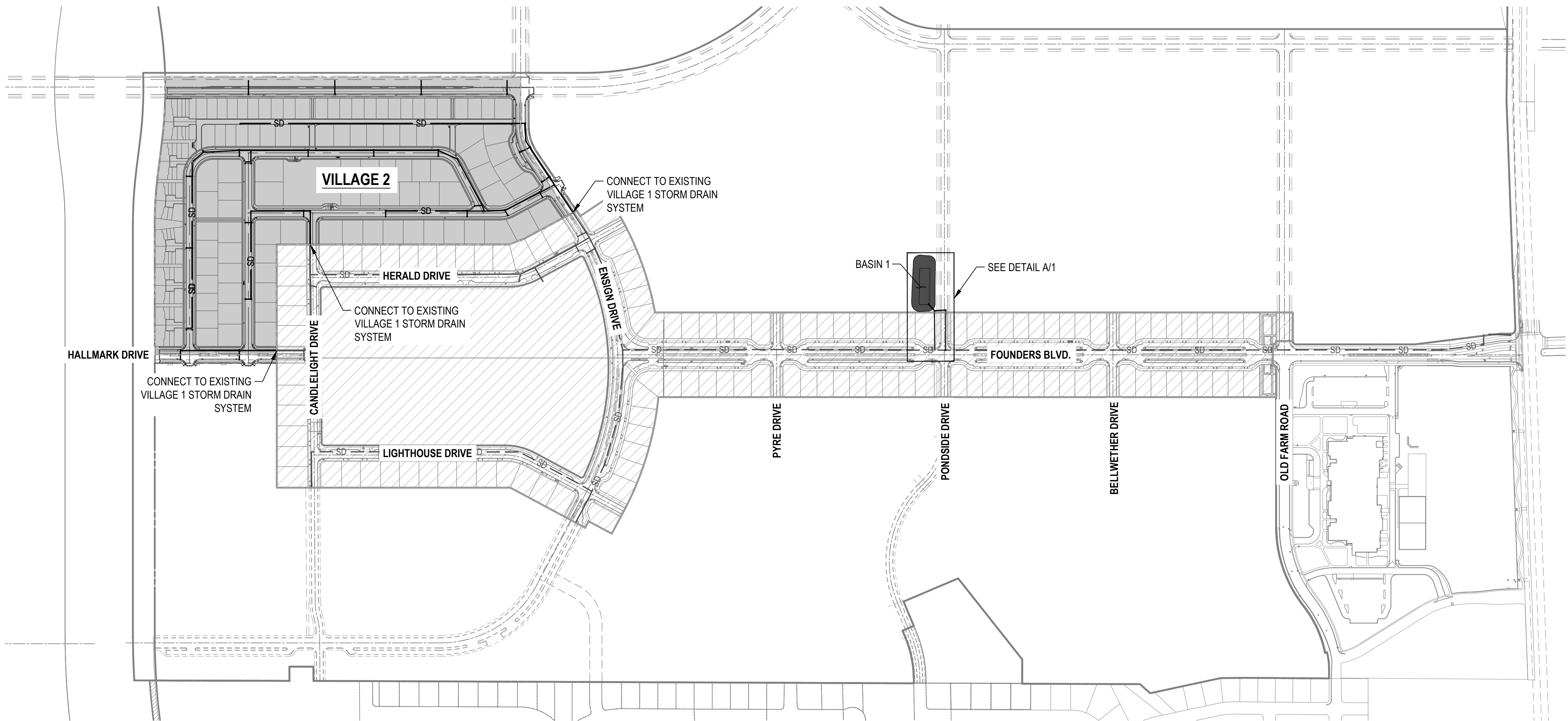
PROJECT NUMBER
2020-0507

SHEET
OF

SHEET NUMBER

EXHIBIT

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- LEGEND**
- SD PROPOSED STORM DRAIN
 - SD EXISTING STORM DRAIN
 - SUBBASIN BOUNDARY
 - PROPERTY BOUNDARY
 - LOT LINE
 - EXISTING VILLAGE 1
 - FUTURE CURB, GUTTER & SIDEWALK

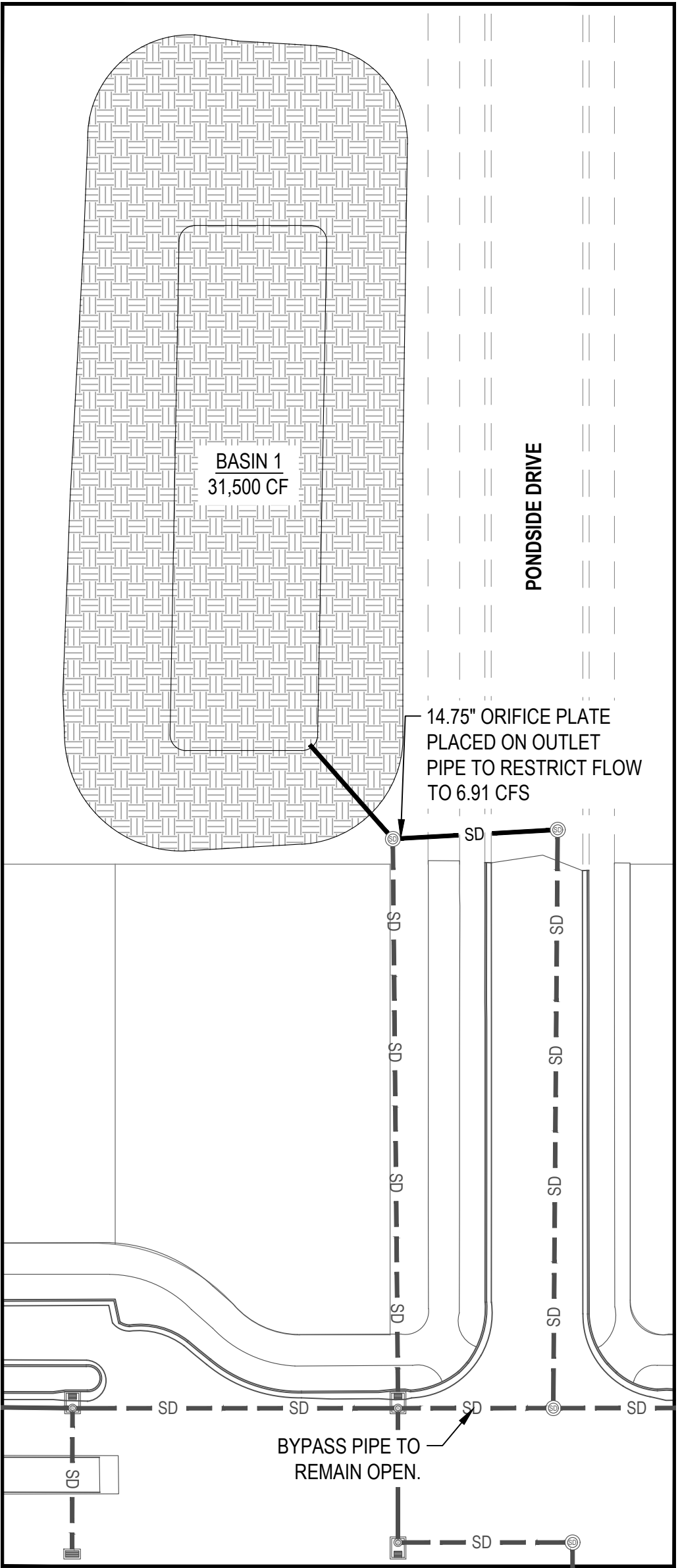


EXHIBIT
NOT FOR CONSTRUCTION

RECORD OF REVISIONS		

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PRINCIPAL
D. EYRE, P.E.

PROJECT MANAGER
G. NELSON, P.E.

CHECKED BY
G. NELSON, P.E.

DRAWN BY
H. WILLIAMS

DRAWING SCALE
1" = 300'

ISSUE DATE
APRIL 9, 2021

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STORM DRAIN
BASIN LOCATION & ORIFICE PLATE

PROJECT NUMBER
2020-0507

SHEET
OF

SHEET NUMBER

EXHIBIT

SARATOGA SPRINGS, UT 84045

Project Description

File Name	2021-04-07 SD Final Design.SPF
Description	10-Year 3-Hour Event

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	Jan 21, 2021	00:00:00
End Analysis On	Jan 22, 2021	00:00:00
Start Reporting On	Jan 21, 2021	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	30	seconds

Number of Elements

	Qty
Rain Gages	1
Subbasins.....	81
Nodes.....	67
<i>Junctions</i>	14
<i>Outfalls</i>	2
<i>Flow Diversions</i>	1
<i>Inlets</i>	49
<i>Storage Nodes</i>	1
Links.....	105
<i>Channels</i>	38
<i>Pipes</i>	66
<i>Pumps</i>	0
<i>Orifices</i>	1
<i>Weirs</i>	0
<i>Outlets</i>	0
Pollutants	0
Land Uses	0

Rainfall Details

SN	Rain Gage ID	Data Source	Data Source ID	Rainfall Type	Rain Units	State	County	Return Period (years)	Rainfall Depth (inches)	Rainfall Distribution
1	Rain Gage:(Choose_Storm)	Time Series	10-year 3-hour	Cumulative	inches				0.00	

Subbasin Summary

SN	Subbasin ID	Area	Peak Rate	Weighted Curve Number	Total Rainfall	Total Runoff	Total Runoff Volume	Peak Runoff	Time of Concentration
		(ac)	Factor	Number	(in)	(in)	(ac-in)	(cfs)	(days hh:mm:ss)
1	SD13	0.20	484.00	98.00	0.98	0.77	0.15	0.36	0 00:05:48
2	Sub-01	1.36	484.00	77.00	0.98	0.04	0.06	0.05	0 00:10:00
3	Sub-02	0.25	484.00	77.00	0.98	0.04	0.01	0.01	0 00:05:00
4	Sub-03	1.01	484.00	77.00	0.98	0.04	0.04	0.04	0 00:10:00
5	Sub-04	1.02	484.00	77.00	0.98	0.04	0.04	0.04	0 00:10:00
6	Sub-05	0.13	484.00	77.00	0.98	0.04	0.01	0.01	0 00:05:00
7	Sub-06	0.10	484.00	98.00	0.98	0.77	0.08	0.19	0 00:05:00
8	Sub-07	0.10	484.00	98.00	0.98	0.77	0.08	0.19	0 00:05:00
9	Sub-08	0.23	484.00	98.00	0.98	0.77	0.18	0.43	0 00:05:19
10	Sub-09	0.23	484.00	98.00	0.98	0.77	0.18	0.43	0 00:05:19
11	Sub-10	0.06	484.00	98.00	0.98	0.77	0.05	0.11	0 00:05:00
12	Sub-11	0.06	484.00	98.00	0.98	0.77	0.05	0.11	0 00:05:00
13	Sub-12	0.25	484.00	98.00	0.98	0.77	0.19	0.44	0 00:06:52
14	Sub-13	0.25	484.00	98.00	0.98	0.77	0.19	0.44	0 00:06:48
15	Sub-14	0.10	484.00	98.00	0.98	0.77	0.07	0.17	0 00:06:13
16	Sub-15	0.22	484.00	98.00	0.98	0.77	0.17	0.39	0 00:06:12
17	Sub-16	0.10	484.00	98.00	0.98	0.77	0.08	0.18	0 00:05:00
18	Sub-17	0.18	484.00	98.00	0.98	0.77	0.14	0.33	0 00:05:21
19	Sub-18	0.11	484.00	98.00	0.98	0.77	0.08	0.20	0 00:05:00
20	Sub-19	0.21	484.00	98.00	0.98	0.77	0.16	0.38	0 00:06:07
21	Sub-20	0.19	484.00	98.00	0.98	0.77	0.15	0.35	0 00:06:07
22	Sub-21	0.20	484.00	98.00	0.98	0.77	0.16	0.37	0 00:05:52
23	Sub-22	0.20	484.00	98.00	0.98	0.77	0.16	0.37	0 00:05:52
24	Sub-24	0.20	484.00	98.00	0.98	0.77	0.15	0.36	0 00:05:48
25	Sub-25	0.16	484.00	98.00	0.98	0.77	0.13	0.30	0 00:06:28
26	Sub-26	0.14	484.00	98.00	0.98	0.77	0.11	0.26	0 00:05:41
27	Sub-27	0.23	484.00	98.00	0.98	0.77	0.18	0.43	0 00:06:19
28	Sub-28	0.13	484.00	98.00	0.98	0.77	0.10	0.25	0 00:05:00
29	Sub-29	0.14	484.00	98.00	0.98	0.77	0.11	0.26	0 00:05:00
30	Sub-30	0.13	484.00	98.00	0.98	0.77	0.10	0.24	0 00:05:00
31	Sub-31	0.28	484.00	98.00	0.98	0.77	0.21	0.49	0 00:06:47
32	Sub-32	0.28	484.00	98.00	0.98	0.77	0.21	0.49	0 00:06:49
33	Sub-33	0.27	484.00	98.00	0.98	0.77	0.21	0.49	0 00:06:43
34	Sub-34	0.43	484.00	98.00	0.98	0.77	0.33	0.73	0 00:08:11
35	Sub-35	0.18	484.00	98.00	0.98	0.77	0.14	0.33	0 00:05:00
36	Sub-36	0.18	484.00	98.00	0.98	0.77	0.14	0.33	0 00:05:00
37	Sub-37	0.18	484.00	98.00	0.98	0.77	0.14	0.33	0 00:05:33
38	Sub-38	0.21	484.00	98.00	0.98	0.77	0.16	0.38	0 00:05:36
39	Sub-39	0.24	484.00	98.00	0.98	0.77	0.18	0.42	0 00:06:46
40	Sub-40	0.24	484.00	98.00	0.98	0.77	0.18	0.42	0 00:06:46
41	Sub-41	0.15	484.00	98.00	0.98	0.77	0.11	0.27	0 00:05:00
42	Sub-42	0.15	484.00	98.00	0.98	0.77	0.11	0.27	0 00:05:00
43	Sub-43	0.10	484.00	98.00	0.98	0.77	0.08	0.18	0 00:05:00
44	Sub-44	0.13	484.00	98.00	0.98	0.77	0.10	0.25	0 00:05:00
45	Sub-45	0.10	484.00	98.00	0.98	0.77	0.08	0.19	0 00:05:00
46	Sub-46	0.15	484.00	98.00	0.98	0.77	0.12	0.28	0 00:05:54
47	Sub-47	0.21	484.00	98.00	0.98	0.77	0.16	0.38	0 00:06:03
48	Sub-48	0.15	484.00	98.00	0.98	0.77	0.11	0.27	0 00:05:25
49	Sub-49	0.28	484.00	98.00	0.98	0.77	0.21	0.49	0 00:06:58
50	Sub-50	0.18	484.00	98.00	0.98	0.77	0.14	0.32	0 00:06:15
51	Sub-51	0.28	484.00	98.00	0.98	0.77	0.21	0.48	0 00:07:16
52	Sub-53	0.19	484.00	98.00	0.98	0.77	0.15	0.35	0 00:06:09
53	Sub-54	0.83	484.00	61.00	0.98	0.00	0.00	0.00	0 00:07:00
54	Sub-55	0.65	484.00	61.00	0.98	0.00	0.00	0.00	0 00:07:00
55	Sub-56	0.70	484.00	61.00	0.98	0.00	0.00	0.00	0 00:07:00
56	Sub-57	0.69	484.00	61.00	0.98	0.00	0.00	0.00	0 00:07:00
57	Sub-58	0.96	484.00	61.00	0.98	0.00	0.00	0.00	0 00:08:00
58	Sub-59	1.40	484.00	61.00	0.98	0.00	0.00	0.00	0 00:10:00
59	Sub-60	0.26	484.00	61.00	0.98	0.00	0.00	0.00	0 00:05:00
60	Sub-61	0.86	484.00	61.00	0.98	0.00	0.00	0.00	0 00:07:00
61	Sub-62	1.07	484.00	61.00	0.98	0.00	0.00	0.00	0 00:10:00
62	Sub-63	0.12	484.00	61.00	0.98	0.00	0.00	0.00	0 00:05:00
63	Sub-64	1.40	484.00	61.00	0.98	0.00	0.00	0.00	0 00:10:00
64	Sub-65	1.50	484.00	61.00	0.98	0.00	0.00	0.00	0 00:11:00
65	Sub-66	1.07	484.00	61.00	0.98	0.00	0.00	0.00	0 00:10:00
66	Sub-67	0.46	484.00	61.00	0.98	0.00	0.00	0.00	0 00:05:00
67	Sub-68	0.48	484.00	61.00	0.98	0.00	0.00	0.00	0 00:05:00
68	Sub-69	0.51	484.00	61.00	0.98	0.00	0.00	0.00	0 00:05:00
69	Sub-70	1.05	484.00	61.00	0.98	0.00	0.00	0.00	0 00:10:00
70	Sub-71	0.51	484.00	61.00	0.98	0.00	0.00	0.00	0 00:05:00
71	Sub-72	0.18	484.00	61.00	0.98	0.00	0.00	0.00	0 00:05:00
72	Sub-73	0.42	484.00	61.00	0.98	0.00	0.00	0.00	0 00:05:00
73	Sub-74	0.57	484.00	61.00	0.98	0.00	0.00	0.00	0 00:07:00
74	Sub-75	0.26	484.00	61.00	0.98	0.00	0.00	0.00	0 00:05:00
75	Sub-76	0.50	484.00	61.00	0.98	0.00	0.00	0.00	0 00:05:00
76	Sub-77	1.99	484.00	61.00	0.98	0.00	0.00	0.00	0 00:12:00
77	Sub-78	1.17	484.00	61.00	0.98	0.00	0.00	0.00	0 00:10:00
78	Sub-79	0.40	484.00	61.00	0.98	0.00	0.00	0.00	0 00:05:00
79	Sub-80	0.58	484.00	61.00	0.98	0.00	0.00	0.00	0 00:07:00
80	Sub-81	0.14	484.00	98.00	0.98	0.77	0.10	0.25	0 00:05:00
81	Sub-82	0.08	484.00	98.00	0.98	0.77	0.06	0.14	0 00:05:00

Node Summary

SN	Element ID	Element Type	Invert Elevation	Ground/Rim (Max) Elevation	Initial Water Elevation	Surcharge Elevation	Ponded Area	Peak Inflow	Max HGL Elevation Attained	Max Surcharge Depth Attained	Min Freeboard Attained	Time of Peak Flooding Occurrence	Total Flooded Volume
			(ft)	(ft)	(ft)	(ft)	(ft²)	(cfs)	(ft)	(ft)	(ft)	(days hh:mm)	(ac-in)
1	EX SDMH-1	Junction	4642.01	4653.30	4642.01	0.00	0.00	1.18	4642.26	0.00	11.04	0 00:00	0.00
2	EX SDMH-2	Junction	4631.00	4644.00	4631.00	0.00	0.00	2.98	4631.48	0.00	12.52	0 00:00	0.00
3	EX SDMH-3	Junction	4606.70	4614.37	4606.70	0.00	0.00	13.92	4607.56	0.00	6.81	0 00:00	0.00
4	OUT-CANDLELIGHT	Junction	4631.72	4641.87	4631.72	0.00	0.00	1.85	4632.26	0.00	9.61	0 00:00	0.00
5	OUT-ENSIGN	Junction	4608.31	4614.70	4608.31	4614.70	0.00	11.11	4609.49	0.00	5.21	0 00:00	0.00
6	OUT-HALLMARK	Junction	4645.42	4653.32	4645.42	4453.32	0.00	1.18	4646.58	0.00	6.74	0 00:00	0.00
7	SDMH-11	Junction	4631.68	4639.64	4631.68	4639.64	0.00	2.82	4632.14	0.00	7.49	0 00:00	0.00
8	SDMH-18	Junction	4617.61	4625.31	4617.61	4625.31	0.00	4.77	4618.34	0.00	6.97	0 00:00	0.00
9	SDMH-21	Junction	4615.01	4622.68	4615.01	4622.68	0.00	7.34	4615.82	0.00	6.86	0 00:00	0.00
10	SDMH-26	Junction	4608.76	4616.54	4608.76	4616.54	0.00	11.11	4610.81	0.00	5.73	0 00:00	0.00
11	SDMH-35	Junction	4636.52	4644.06	4636.52	4644.06	0.00	1.27	4636.87	0.00	7.19	0 00:00	0.00
12	SDMH-38	Junction	4632.18	4638.57	4632.18	4639.00	0.00	1.85	4632.87	0.00	5.70	0 00:00	0.00
13	SDMH-50	Junction	4610.36	4617.53	4610.36	4618.65	0.00	2.13	4611.12	0.00	6.41	0 00:00	0.00
14	SDMH-7	Junction	4637.05	4644.65	4637.05	4644.65	0.00	1.52	4637.43	0.00	7.22	0 00:00	0.00
15	Out-04	Outfall	0.00					22.91	0.00				
16	OUTFALL	Outfall	0.00					6.41	0.00				
17	EX SDMH-4	Flow Diversions	4574.00	4580.00	4574.00		0.00	35.27	4575.08				0.00
18	Stor-01	Storage Node	4573.00	4576.00	4573.00		0.00	12.31	4574.82				0.00

Total Time
Flooded

[illegible]

0.00
0.00

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Average Slope	Diameter or Height	Manning's Roughness	Peak Flow	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Peak Flow Depth	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged	Reported Condition
					(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	(ft)		(min)	
1	B-BP-2	Pipe	SDCB-4	SDCB-6	325.00	4651.70	4645.79	1.8200	18.000	0.0150	0.03	12.27	0.00	9.30	0.03	0.02	0.00	Calculated
2	EX PIPE: (1)	Pipe	OUT-HALLMARK	EX SDMH-1	154.79	4646.32	4642.01	2.7800	21.000	0.0130	1.18	26.42	0.04	5.88	0.24	0.14	0.00	Calculated
3	EX PIPE: (2)	Pipe	EX SDMH-1	EX SDMH-2	345.71	4642.01	4631.00	3.1900	21.000	0.0130	1.17	28.28	0.04	5.03	0.36	0.20	0.00	Calculated
4	EX PIPE: (3)	Pipe	OUT-CANDLELIGHT	EX SDMH-2	137.55	4631.72	4631.00	0.5200	21.000	0.0150	1.84	9.94	0.19	3.75	0.51	0.29	0.00	Calculated
5	EX PIPE: (4)	Pipe	EX SDMH-2	EX SDMH-3	1300.00	4631.00	4606.70	1.8700	18.000	0.0150	2.81	12.45	0.23	4.08	0.66	0.44	0.00	Calculated
6	EX PIPE: (5)	Pipe	OUT-ENSIGN	EX SDMH-3	91.48	4608.31	4606.70	1.7600	21.000	0.0150	11.12	18.22	0.61	8.29	1.00	0.58	0.00	Calculated
7	EX PIPE: (6)	Pipe	EX SDMH-3	EX SDMH-4	1950.00	4606.70	4574.00	1.6800	36.000	0.0150	13.38	74.86	0.18	6.78	0.97	0.32	0.00	Calculated
8	EX PIPE: (BASIN)	Pipe	EX SDMH-4	Stor-01	180.78	4574.00	4573.00	0.5500	48.000	0.0150	12.31	92.59	0.13	6.39	1.34	0.34	0.00	Calculated
9	Link-64	Pipe	EX SDMH-4	Out-04	44.95	4574.00	4571.44	5.7000	36.000	0.0130	22.91	159.17	0.14	12.37	0.92	0.31	0.00	Calculated
10	SD10	Pipe	SDCB-8	SDCB-10	163.58	4635.83	4632.88	1.8000	15.000	0.0130	1.69	8.67	0.19	5.30	0.38	0.31	0.00	Calculated
11	SD11	Pipe	SDCB-10	SDMH-11	52.81	4632.63	4631.68	1.8000	18.000	0.0130	2.16	14.09	0.15	4.77	0.45	0.30	0.00	Calculated
12	SD12	Pipe	SDCB-13	SDCB-14	300.00	4626.97	4621.57	1.8000	18.000	0.0130	3.46	14.09	0.25	6.42	0.51	0.34	0.00	Calculated
13	SD13	Pipe	SDCB-14	SDCB-16	295.12	4621.32	4618.52	0.9500	21.000	0.0130	4.13	15.44	0.27	4.64	0.69	0.40	0.00	Calculated
14	SD14	Pipe	SDCB-16	SDMH-18	95.61	4618.52	4617.61	0.9500	21.000	0.0130	4.77	15.44	0.31	4.87	0.75	0.43	0.00	Calculated
15	SD15	Pipe	SDMH-18	SDCB-19	140.44	4617.61	4616.28	0.9500	21.000	0.0130	4.77	15.44	0.31	4.76	0.76	0.43	0.00	Calculated
16	SD16	Pipe	SDMH-21	SDCB-22	94.63	4615.01	4613.17	1.9500	21.000	0.0130	7.34	22.13	0.33	7.27	0.76	0.44	0.00	Calculated
17	SD17	Pipe	SDCB-22	SDCB-24	182.56	4613.17	4609.60	1.9500	21.000	0.0130	8.03	22.15	0.36	6.04	1.09	0.64	0.00	Calculated
18	SD18	Pipe	SDCB-24	SDMH-26	72.43	4609.60	4608.77	1.1500	21.000	0.0130	8.19	17.02	0.48	3.74	1.60	0.94	0.00	Calculated
19	SD19	Pipe	SDMH-26	OUT-ENSIGN	149.60	4608.77	4608.31	0.3000	21.000	0.0130	11.11	8.74	1.27	5.17	1.45	0.84	0.00	> CAPACITY
20	SD20	Pipe	SDCB-3	SDCB-4	26.50	4644.41	4644.15	1.0000	15.000	0.0130	0.40	6.46	0.06	2.26	0.25	0.21	0.00	Calculated
21	SD21	Pipe	SDCB-5	SDCB-6	26.50	4638.52	4638.25	1.0000	15.000	0.0130	0.38	6.46	0.06	1.96	0.29	0.24	0.00	Calculated
22	SD22	Pipe	SDCB-9	SDCB-10	26.50	4633.15	4632.88	1.0000	15.000	0.0130	0.31	6.46	0.05	2.53	0.20	0.16	0.00	Calculated
23	SD23	Pipe	SDCB-12	SDCB-13	26.50	4627.49	4627.22	1.0000	15.000	0.0130	0.34	6.46	0.05	2.52	0.23	0.19	0.00	Calculated
24	SD24	Pipe	SDCB-15	SDCB-14	26.50	4622.09	4621.82	1.0000	15.000	0.0130	0.36	6.46	0.06	2.62	0.21	0.17	0.00	Calculated
25	SD25	Pipe	SDCB-17	SDCB-16	26.50	4619.29	4619.02	1.0000	15.000	0.0130	0.35	6.46	0.05	2.61	0.23	0.19	0.00	Calculated
26	SD26	Pipe	SDCB-23	SDCB-22	27.27	4613.94	4613.67	1.0000	15.000	0.0130	0.25	6.46	0.04	2.38	0.19	0.16	0.00	Calculated
27	SD27	Pipe	SDCB-25	SDCB-24	27.92	4609.88	4609.60	1.0000	15.000	0.0130	0.30	10.79	0.03	2.14	0.96	0.81	0.00	Calculated
28	SD28	Pipe	SDCB-57	SDCB-56	358.43	4631.64	4625.72	1.6500	15.000	0.0130	0.31	8.30	0.04	2.35	0.21	0.17	0.00	Calculated
29	SD29	Pipe	SDCB-56	SDCB-55	297.57	4625.72	4620.81	1.6500	15.000	0.0130	0.74	8.30	0.09	3.71	0.28	0.22	0.00	Calculated
30	SD30	Pipe	SDCB-55	SDCB-54	344.97	4620.81	4615.12	1.6500	15.000	0.0130	1.04	8.30	0.13	4.06	0.33	0.26	0.00	Calculated
31	SD31	Pipe	SDCB-54	SDCB-53	239.50	4615.12	4611.17	1.6500	15.000	0.0130	1.48	8.30	0.18	4.16	0.42	0.33	0.00	Calculated
32	SD32	Pipe	SDCB-53	SDCB-52	17.74	4611.17	4610.83	1.9200	18.000	0.0130	1.73	14.56	0.12	2.81	0.57	0.38	0.00	Calculated
33	SD33	Pipe	SDCB-51	SDMH-50	81.74	4610.62	4610.36	0.3200	18.000	0.0130	2.13	5.92	0.36	2.49	0.73	0.49	0.00	Calculated
34	SD34	Pipe	SDCB-47	SDCB-46	176.74	4610.21	4609.23	0.5500	18.000	0.0130	2.54	5.64	0.45	3.61	0.91	0.65	0.00	Calculated
35	SD35	Pipe	SDCB-46	SDMH-26	28.08	4608.98	4608.84	0.5000	21.000	0.0130	3.13	27.73	0.11	2.97	1.41	0.82	0.00	Calculated
36	SD36	Pipe	SDCB-45	SDCB-46	43.77	4609.84	4609.40	1.0100	15.000	0.0130	0.42	4.37	0.10	1.64	0.97	0.83	0.00	Calculated
37	SD37	Pipe	SDCB-31	SDCB-32	26.50	4643.83	4643.56	1.0000	15.000	0.0130	0.25	6.46	0.04	2.10	0.19	0.15	0.00	Calculated
38	SD38	Pipe	SDCB-32	SDCB-34	350.00	4643.56	4637.44	1.7500	15.000	0.0130	0.49	8.55	0.06	2.41	0.27	0.23	0.00	Calculated
39	SD39	Pipe	SDCB-34	SDMH-35	52.76	4637.44	4636.52	1.7500	15.000	0.0130	1.27	8.54	0.15	4.39	0.35	0.29	0.00	Calculated
40	SD40	Pipe	SDMH-11	SDCB-13	261.59	4631.68	4626.97	1.8000	18.000	0.0130	2.83	14.09	0.20	5.60	0.49	0.33	0.00	Calculated
41	SD41	Pipe	SDCB-39	SDMH-11	52.75	4632.34	4631.68	1.2500	18.000	0.0130	0.71	11.74	0.06	2.44	0.34	0.24	0.00	Calculated
42	SD42	Pipe	SDCB-33	SDCB-34	26.50	4637.70	4637.44	1.0000	15.000	0.0130	0.39	6.46	0.06	1.89	0.28	0.23	0.00	Calculated
43	SD43	Pipe	SDCB-37	SDCB-36	26.50	4632.90	4632.63	1.0000	15.000	0.0130	0.33	6.46	0.05	1.72	0.37	0.31	0.00	Calculated
44	SD44	Pipe	SDCB-36	SDMH-38	30.45	4632.63	4632.18	1.5000	15.000	0.0130	1.85	7.91	0.23	3.19	0.59	0.48	0.00	Calculated
45	SD45	Pipe	SDCB-42	SDCB-44	379.54	4624.31	4616.90	1.9500	15.000	0.0130	1.07	9.02	0.12	3.54	0.37	0.30	0.00	Calculated
46	SD46	Pipe	SDCB-44	SDMH-21	71.28	4616.90	4615.51	1.9500	15.000	0.0130	2.06	9.02	0.23	5.52	0.43	0.34	0.00	Calculated
47	SD47	Pipe	SDCB-43	SDCB-44	26.50	4617.17	4616.91	1.0000	15.000	0.0130	0.51	6.46	0.08	1.90	0.35	0.28	0.00	Calculated
48	SD48	Pipe	SDCB-41	SDCB-42	26.50	4624.57	4624.31	1.0000	15.000	0.0130	0.64	6.46	0.10	2.85	0.30	0.24	0.00	Calculated
49	SD49	Pipe	SDCB-29	SDCB-30	42.50	4649.40	4648.97	1.0000	15.000	0.0130	0.43	6.16	0.07	2.25	0.26	0.21	0.00	Calculated
50	SD5	Pipe	SDCB-1	SDCB-2	26.50	4651.02	4650.75	1.0000	15.000	0.0130	0.10	6.46	0.02	1.66	0.12	0.10	0.00	Calculated
51	SD50	Pipe	SDCB-30	OUT-HALLMARK	169.53	4649.01	4645.42	2.1200	15.000	0.0130	1.18	9.40	0.12	2.86	0.72	0.58	0.00	Calculated
52	SD51	Pipe	SDCB-28	SDCB-30	269.00	4653.85	4649.01	1.8000	15.000	0.0130	0.34	8.67	0.04	2.17	0.23	0.19	0.00	Calculated
53	SD52	Pipe	SDCB-27	SDCB-28	42.50	4654.28	4653.85	1.0000	15.000	0.0130	0.18	6.46	0.03	1.96	0.16	0.13	0.00	Calculated
54	SD53	Pipe	SDCB-40	SDCB-39	26.49	4632.86	4632.59	1.0000	15.000	0.0130	0.39	6.46	0.06	2.67	0.22	0.18	0.00	Calculated
55	SD54	Pipe	SDMH-35	SDCB-36	241.53	4636.52	4632.63	1.6100	15.000	0.0150	1.26	7.10	0.18	3.34	0.42	0.35	0.00	Calculated
56	SD55	Pipe	SDMH-38	OUT-CANDLELIGHT	151.85	4632.18	4631.72	0.3000	18.000	0.0150	1.85	4.99	0.37	2.72	0.61	0.41	0.00	Calculated

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Average Slope	Diameter or Height	Manning's Roughness	Peak Flow	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Peak Flow Depth	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged	Reported Condition
					(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	(ft)		(min)	
57	SD56	Pipe	SDCB-48	SDCB-47	42.48	4610.88	4610.46	1.0000	15.000	0.0130	0.31	6.46	0.05	2.30	0.34	0.29	0.00	Calculated
58	SD57	Pipe	SDMH-50	SDCB-47	33.87	4610.36	4610.21	0.4400	18.000	0.0130	2.13	6.99	0.30	2.42	0.75	0.52	0.00	Calculated
59	SD58	Pipe	SDCB-52	SDCB-51	42.83	4610.83	4610.62	0.4900	18.000	0.0130	1.94	7.36	0.26	2.43	0.69	0.46	0.00	Calculated
60	SD59	Pipe	SDCB-49	SDCB-48	10.49	4610.98	4610.88	0.9500	15.000	0.0150	0.16	5.47	0.03	1.54	0.18	0.14	0.00	Calculated
61	SD6	Pipe	SDCB-2	SDCB-4	367.00	4650.75	4644.15	1.8000	15.000	0.0130	0.19	8.67	0.02	1.48	0.20	0.16	0.00	Calculated
62	SD60	Pipe	SDCB-20	SDCB-19	26.50	4617.04	4616.78	1.0000	15.000	0.0130	0.27	6.46	0.04	2.44	0.23	0.18	0.00	Calculated
63	SD63	Pipe	SDCB-19	SDMH-21	127.35	4616.28	4615.07	0.9500	21.000	0.0130	5.29	15.44	0.34	5.18	0.77	0.44	0.00	Calculated
64	SD7	Pipe	SDCB-4	SDCB-6	327.50	4644.15	4638.25	1.8000	15.000	0.0130	0.98	8.67	0.11	3.69	0.33	0.27	0.00	Calculated
65	SD8	Pipe	SDCB-6	SDMH-7	66.91	4638.25	4637.05	1.8000	15.000	0.0130	1.52	8.67	0.18	4.71	0.38	0.31	0.00	Calculated
66	SD9	Pipe	SDMH-7	SDCB-8	67.73	4637.05	4635.83	1.8000	15.000	0.0130	1.52	8.67	0.18	4.67	0.39	0.31	0.00	Calculated
67	A-BP-1	Channel	SDCB-57	SDCB-56	355.18	4638.50	4632.69	1.6400	5.040	0.0320	0.02	2.08	0.01	13.69	0.06	0.14	0.00	
68	A-BP-2	Channel	SDCB-56	SDCB-55	295.10	4632.69	4627.87	1.6300	5.040	0.0320	0.03	2.08	0.01	20.10	0.06	0.14	0.00	
69	A-BP-3	Channel	SDCB-55	SDCB-54	342.47	4627.87	4622.28	1.6300	5.040	0.0320	0.02	2.08	0.01	17.94	0.04	0.11	0.00	
70	A-BP-4	Channel	SDCB-54	SDCB-53	237.00	4622.28	4618.44	1.6200	5.040	0.0320	0.03	2.07	0.01	18.93	0.06	0.14	0.00	
71	A-BP-5	Channel	SDCB-53	SDCB-52	17.00	4618.44	4617.75	4.0600	5.040	0.0320	0.02	3.28	0.00	15.44	0.05	0.12	0.00	
72	A-BP-6	Channel	SDCB-51	SDCB-47	109.00	4617.92	4617.18	0.6800	7.320	0.0320	0.01	18.77	0.00	8.52	0.03	0.08	0.00	
73	A-BP-6A	Channel	SDCB-52	SDCB-48	129.00	4617.75	4617.02	0.5700	7.320	0.0320	0.01	17.12	0.00	6.77	0.05	0.09	0.00	
74	A-BP-7	Channel	SDCB-47	SDCB-46	173.00	4617.18	4616.10	0.6200	7.320	0.0320	0.01	17.99	0.00	9.69	0.03	0.06	0.00	
75	A-BP-7A	Channel	SDCB-48	SDCB-45	169.00	4617.02	4616.17	0.5000	7.320	0.0320	0.01	16.14	0.00	6.05	0.04	0.07	0.00	
76	A-BP-7B	Channel	SDCB-49	SDCB-45	170.00	4617.01	4616.17	0.4900	7.320	0.0320	0.01	16.00	0.00	4.26	0.05	0.09	0.00	
77	B-BP-1	Channel	SDCB-2	SDCB-4	364.50	4658.33	4651.70	1.8200	6.000	0.0320	0.01	15.36	0.00	10.19	0.03	0.05	0.00	
78	B-BP-1A	Channel	SDCB-1	SDCB-3	363.00	4658.17	4651.54	1.8300	6.000	0.0320	0.01	15.40	0.00	4.13	0.04	0.08	0.00	
79	B-BP-2A	Channel	SDCB-3	SDCB-5	323.50	4651.54	4645.76	1.7800	6.000	0.0320	0.03	15.22	0.00	5.01	0.07	0.13	0.00	
80	B-BP-3	Channel	SDCB-6	SDCB-9	260.20	4645.79	4640.61	1.9900	6.000	0.0320	0.01	16.07	0.00	13.86	0.03	0.06	0.00	
81	B-BP-3A	Channel	SDCB-5	SDCB-8	170.91	4645.76	4643.48	1.3400	6.000	0.0320	0.02	13.18	0.00	5.23	0.07	0.14	0.00	
82	B-BP-4	Channel	SDCB-8	SDCB-10	162.80	4643.48	4640.59	1.7700	6.000	0.0320	0.01	15.17	0.00	12.70	0.03	0.07	0.00	
83	B-BP-5	Channel	SDCB-10	SDCB-13	311.90	4640.59	4634.92	1.8200	6.000	0.0320	0.01	15.35	0.00	5.44	0.05	0.10	0.00	
84	B-BP-5A	Channel	SDCB-9	SDCB-12	310.40	4640.61	4634.99	1.8100	6.000	0.0320	0.02	15.32	0.00	5.88	0.06	0.12	0.00	
85	B-BP-6	Channel	SDCB-13	SDCB-14	297.50	4634.92	4629.51	1.8200	6.000	0.0320	0.02	15.36	0.00	23.10	0.03	0.07	0.00	
86	B-BP-6A	Channel	SDCB-12	SDCB-15	296.00	4634.99	4629.64	1.8100	6.000	0.0320	0.02	15.32	0.00	5.77	0.06	0.12	0.00	
87	B-BP-7	Channel	SDCB-14	SDCB-16	292.62	4629.51	4626.20	1.1300	6.000	0.0320	0.02	12.12	0.00	15.18	0.05	0.10	0.00	
88	B-BP-7A	Channel	SDCB-15	SDCB-17	291.12	4629.64	4624.36	1.8100	6.000	0.0320	0.02	15.33	0.00	5.90	0.06	0.13	0.00	
89	B-BP-8	Channel	SDCB-16	SDCB-19	240.30	4626.20	4623.93	0.9400	6.000	0.0320	0.02	11.07	0.00	17.00	0.04	0.09	0.00	
90	B-BP-8A	Channel	SDCB-17	SDCB-20	205.30	4624.36	4623.11	0.6100	6.000	0.0320	0.02	8.91	0.00	6.15	0.07	0.14	0.00	
91	B-BP-9	Channel	SDCB-19	SDCB-22	206.00	4623.93	4620.61	1.6100	6.000	0.0320	0.02	14.47	0.00	15.53	0.04	0.09	0.00	
92	C-BP-1	Channel	SDCB-32	SDCB-34	347.50	4651.10	4644.99	1.7600	6.000	0.0320	0.02	15.11	0.00	14.79	0.04	0.09	0.00	
93	C-BP-1A	Channel	SDCB-31	SDCB-33	346.00	4650.94	4644.83	1.7700	6.000	0.0320	0.02	15.14	0.00	5.20	0.06	0.11	0.00	
94	C-BP-2	Channel	SDCB-34	SDCB-37	268.55	4637.44	4631.88	2.0700	6.000	0.0320	0.02	25.16	0.00	1.81	0.27	0.55	0.00	
95	C-BP-2A	Channel	SDCB-33	SDCB-40	273.00	4644.83	4639.99	1.7700	6.000	0.0320	0.02	15.16	0.00	5.59	0.07	0.13	0.00	
96	D-BP-1	Channel	SDCB-36	SDCB-42	372.50	4639.19	4631.64	2.0300	6.000	0.0320	0.02	16.22	0.00	13.77	0.05	0.10	0.00	
97	D-BP-1A	Channel	SDCB-37	SDCB-41	371.00	4638.93	4631.38	2.0400	6.000	0.0320	0.02	16.25	0.00	4.74	0.06	0.12	0.00	
98	D-BP-2	Channel	SDCB-42	SDCB-44	377.04	4631.64	4624.23	1.9600	6.000	0.0320	0.03	15.97	0.00	15.79	0.06	0.12	0.00	
99	D-BP-2A	Channel	SDCB-41	SDCB-43	375.74	4631.38	4623.74	2.0300	6.000	0.0320	0.09	16.24	0.01	6.17	0.11	0.21	0.00	
100	D-BP-3A	Channel	SDCB-43	SDCB-23	176.20	4623.74	4620.22	2.0000	6.000	0.0320	0.03	16.09	0.00	5.95	0.07	0.14	0.00	
101	D-BP-4	Channel	SDCB-22	SDCB-24	191.50	4620.61	4616.90	1.9400	6.000	0.0320	0.02	15.86	0.00	14.73	0.05	0.11	0.00	
102	D-BP-4A	Channel	SDCB-23	SDCB-25	186.80	4620.22	4616.55	1.9700	6.000	0.0320	0.01	15.97	0.00	5.49	0.05	0.10	0.00	
103	E-BP-1	Channel	SDCB-28	SDCB-30	266.50	4661.14	4656.20	1.8500	7.320	0.0320	0.01	31.00	0.00	10.05	0.04	0.06	0.00	
104	E-BP-1A	Channel	SDCB-27	SDCB-29	265.00	4660.98	4656.03	1.8600	7.320	0.0320	0.01	31.09	0.00	5.15	0.04	0.07	0.00	
105	Orifice-01	Orifice	Stor-01	OUTFALL		4573.00	0.00		14.750		6.41							

Inlet Summary

SN	Element ID	Inlet Manufacturer	Manufacturer Part Number	Inlet Location	Number of Inlets	Catchbasin Invert Elevation	Max (Rim) Elevation	Initial Water Elevation	Ponded Area	Peak Flow	Peak Flow Intercepted	Peak Flow Bypassing Inlet	Inlet Efficiency during Peak Flow	Allowable Spread	Max Gutter Spread during Peak Flow	Max Gutter Water Elev. during Peak Flow
						(ft)	(ft)	(ft)	(ft²)	(cfs)	(cfs)	(cfs)	(%)	(ft)	(ft)	(ft)
1	SDCB-1	FHWA HEC-22 GENERIC	N/A	On Grade	1	4651.02	4658.17	4651.02	N/A	0.11	0.10	0.01	93.94	7.00	0.88	4658.20
2	SDCB-10	FHWA HEC-22 GENERIC	N/A	On Grade	1	4632.63	4640.59	4632.63	N/A	0.20	0.19	0.01	93.94	7.00	1.65	4640.66
3	SDCB-12	FHWA HEC-22 GENERIC	N/A	On Grade	1	4627.49	4634.99	4627.49	N/A	0.34	0.32	0.02	93.94	7.00	2.80	4635.11
4	SDCB-13	FHWA HEC-22 GENERIC	N/A	On Grade	1	4626.97	4634.92	4626.97	N/A	0.37	0.35	0.02	93.94	7.00	3.08	4635.05
5	SDCB-14	FHWA HEC-22 GENERIC	N/A	On Grade	1	4621.32	4629.51	4621.32	N/A	0.36	0.34	0.02	93.94	7.00	3.02	4629.64
6	SDCB-15	FHWA HEC-22 GENERIC	N/A	On Grade	1	4622.09	4629.64	4622.09	N/A	0.36	0.34	0.02	93.94	7.00	3.01	4629.76
7	SDCB-16	FHWA HEC-22 GENERIC	N/A	On Grade	1	4618.52	4626.20	4618.52	N/A	0.35	0.33	0.02	93.94	7.00	2.93	4626.32
8	SDCB-17	FHWA HEC-22 GENERIC	N/A	On Grade	1	4619.29	4624.36	4619.29	N/A	0.35	0.33	0.02	93.94	7.00	2.93	4624.48
9	SDCB-19	FHWA HEC-22 GENERIC	N/A	On Grade	1	4616.28	4623.93	4616.28	N/A	0.29	0.27	0.02	93.94	7.00	2.38	4624.03
10	SDCB-2	FHWA HEC-22 GENERIC	N/A	On Grade	1	4650.75	4658.33	4650.75	N/A	0.11	0.10	0.01	93.94	7.00	0.88	4658.36
11	SDCB-20	FHWA HEC-22 GENERIC	N/A	On Sag	1	4617.04	4623.11	4617.04	0.00	0.25	N/A	N/A	N/A	7.00	1.33	4623.20
12	SDCB-22	FHWA HEC-22 GENERIC	N/A	On Grade	1	4613.17	4620.61	4613.17	N/A	0.41	0.39	0.02	93.94	7.00	3.41	4620.75
13	SDCB-23	FHWA HEC-22 GENERIC	N/A	On Grade	1	4613.94	4620.22	4613.94	N/A	0.23	0.22	0.01	93.94	7.00	1.94	4620.30
14	SDCB-24	FHWA HEC-22 GENERIC	N/A	On Sag	1	4609.60	4616.90	4609.60	0.00	0.25	N/A	N/A	N/A	7.00	1.29	4616.98
15	SDCB-25	FHWA HEC-22 GENERIC	N/A	On Sag	1	4610.38	4616.55	4610.38	0.00	0.26	N/A	N/A	N/A	7.00	1.36	4616.64
16	SDCB-27	FHWA HEC-22 GENERIC	N/A	On Grade	1	4654.28	4660.98	4654.28	N/A	0.19	0.18	0.01	93.94	7.00	1.55	4661.04
17	SDCB-28	FHWA HEC-22 GENERIC	N/A	On Grade	1	4653.85	4661.14	4653.85	N/A	0.19	0.18	0.01	93.94	7.00	1.55	4661.21
18	SDCB-29	FHWA HEC-22 GENERIC	N/A	On Sag	1	4649.40	4656.03	4649.40	0.00	0.42	N/A	N/A	N/A	7.00	2.28	4656.18
19	SDCB-3	FHWA HEC-22 GENERIC	N/A	On Grade	1	4644.41	4651.54	4644.41	N/A	0.42	0.40	0.03	93.94	7.00	3.50	4651.68
20	SDCB-30	FHWA HEC-22 GENERIC	N/A	On Sag	1	4649.01	4656.20	4649.01	0.00	0.42	N/A	N/A	N/A	7.00	2.19	4656.35
21	SDCB-31	FHWA HEC-22 GENERIC	N/A	On Grade	1	4643.83	4650.94	4643.83	N/A	0.27	0.25	0.02	93.94	7.00	2.24	4651.03
22	SDCB-32	FHWA HEC-22 GENERIC	N/A	On Grade	1	4643.56	4651.10	4643.56	N/A	0.27	0.25	0.02	93.94	7.00	2.24	4651.19
23	SDCB-33	FHWA HEC-22 GENERIC	N/A	On Grade	1	4637.70	4644.83	4637.70	N/A	0.40	0.38	0.02	93.94	7.00	3.33	4644.96
24	SDCB-34	FHWA HEC-22 GENERIC	N/A	On Grade	1	4637.44	4644.99	4637.44	N/A	0.40	0.38	0.02	93.94	7.00	3.33	4645.12
25	SDCB-36	FHWA HEC-22 GENERIC	N/A	On Grade	1	4632.63	4639.19	4631.62	N/A	0.33	0.31	0.02	93.94	7.00	2.73	4639.30
26	SDCB-37	FHWA HEC-22 GENERIC	N/A	On Grade	1	4631.88	4638.93	4631.88	N/A	0.33	0.31	0.02	93.94	7.00	2.73	4639.04
27	SDCB-39	FHWA HEC-22 GENERIC	N/A	On Sag	1	4632.34	4640.15	4632.34	0.00	0.32	N/A	N/A	N/A	7.00	1.69	4640.26
28	SDCB-4	FHWA HEC-22 GENERIC	N/A	On Grade	1	4644.15	4651.70	4644.15	N/A	0.42	0.40	0.03	93.94	7.00	3.51	4651.84
29	SDCB-40	FHWA HEC-22 GENERIC	N/A	On Sag	1	4632.86	4639.99	4632.86	0.00	0.37	N/A	N/A	N/A	7.00	1.93	4640.12
30	SDCB-41	FHWA HEC-22 GENERIC	N/A	On Grade	1	4624.57	4631.38	4624.57	N/A	0.71	0.62	0.09	87.37	7.00	4.99	4631.56
31	SDCB-42	FHWA HEC-22 GENERIC	N/A	On Grade	1	4624.31	4631.64	4624.31	N/A	0.47	0.44	0.03	93.94	7.00	3.89	4631.79
32	SDCB-43	FHWA HEC-22 GENERIC	N/A	On Grade	1	4617.17	4623.74	4617.17	N/A	0.47	0.44	0.03	93.94	7.00	3.87	4623.89
33	SDCB-44	FHWA HEC-22 GENERIC	N/A	On Sag	1	4616.90	4624.23	4616.90	0.00	0.47	N/A	N/A	N/A	7.00	2.45	4624.40
34	SDCB-45	FHWA HEC-22 GENERIC	N/A	On Sag	1	4609.90	4616.17	4609.84	0.00	0.37	N/A	N/A	N/A	7.00	1.96	4616.30
35	SDCB-46	FHWA HEC-22 GENERIC	N/A	On Sag	1	4609.70	4616.10	4609.23	0.00	0.27	N/A	N/A	N/A	7.00	1.43	4616.20
36	SDCB-47	FHWA HEC-22 GENERIC	N/A	On Grade	1	4610.21	4617.18	4610.21	N/A	0.19	0.18	0.01	93.94	7.00	1.55	4617.24
37	SDCB-48	FHWA HEC-22 GENERIC	N/A	On Grade	1	4610.88	4617.02	4610.88	N/A	0.14	0.13	0.01	93.94	7.00	1.17	4617.07
38	SDCB-49	FHWA HEC-22 GENERIC	N/A	On Grade	1	4610.98	4617.01	4610.98	N/A	0.18	0.17	0.01	93.94	7.00	1.46	4617.07
39	SDCB-5	FHWA HEC-22 GENERIC	N/A	On Grade	1	4638.52	4645.76	4638.52	N/A	0.38	0.36	0.02	93.94	7.00	3.15	4645.89
40	SDCB-51	FHWA HEC-22 GENERIC	N/A	On Grade	1	4610.62	4617.92	4610.62	N/A	0.25	0.23	0.01	93.94	7.00	2.04	4618.00
41	SDCB-52	FHWA HEC-22 GENERIC	N/A	On Grade	1	4610.83	4617.75	4610.83	N/A	0.25	0.23	0.01	93.94	7.00	2.04	4617.83
42	SDCB-53	FHWA HEC-22 GENERIC	N/A	On Grade	1	4611.17	4618.44	4611.17	N/A	0.27	0.25	0.02	93.94	7.00	2.20	4618.53
43	SDCB-54	FHWA HEC-22 GENERIC	N/A	On Grade	1	4615.12	4622.28	4615.12	N/A	0.46	0.44	0.03	93.94	7.00	3.85	4622.44
44	SDCB-55	FHWA HEC-22 GENERIC	N/A	On Grade	1	4620.81	4627.87	4620.81	N/A	0.31	0.29	0.02	93.94	7.00	2.59	4627.97
45	SDCB-56	FHWA HEC-22 GENERIC	N/A	On Grade	1	4625.72	4632.69	4625.72	N/A	0.45	0.42	0.03	93.94	7.00	3.74	4632.84
46	SDCB-57	FHWA HEC-22 GENERIC	N/A	On Grade	1	4631.64	4638.50	4631.64	N/A	0.34	0.32	0.02	93.94	7.00	2.79	4638.61
47	SDCB-6	FHWA HEC-22 GENERIC	N/A	On Grade	1	4638.25	4645.79	4638.25	N/A	0.17	0.16	0.01	93.94	7.00	1.39	4645.85
48	SDCB-8	FHWA HEC-22 GENERIC	N/A	On Grade	1	4635.83	4643.48	4635.83	N/A	0.18	0.17	0.01	93.94	7.00	1.46	4643.54
49	SDCB-9	FHWA HEC-22 GENERIC	N/A	On Grade	1	4633.15	4640.61	4633.15	N/A	0.32	0.30	0.02	93.94	7.00	2.69	4640.72

Junction Input

SN	Element ID	Invert Elevation	Ground/Rim (Max) Elevation	Ground/Rim (Max) Offset	Initial Water Elevation	Initial Water Depth	Surcharge Elevation	Surcharge Depth	Ponded Area	Minimum Pipe Cover
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft²)	(in)
1	EX SDMH-1	4642.01	4653.30	11.29	4642.01	0.00	0.00	-4653.30	0.00	0.00
2	EX SDMH-2	4631.00	4644.00	13.00	4631.00	0.00	0.00	-4644.00	0.00	0.00
3	EX SDMH-3	4606.70	4614.37	7.67	4606.70	0.00	0.00	-4614.37	0.00	0.00
4	OUT-CANDLELIGHT	4631.72	4641.87	10.15	4631.72	0.00	0.00	-4641.87	0.00	0.00
5	OUT-ENSIGN	4608.31	4614.70	6.39	4608.31	0.00	4614.70	0.00	0.00	0.00
6	OUT-HALLMARK	4645.42	4653.32	7.90	4645.42	0.00	4453.32	-200.00	0.00	0.00
7	SDMH-11	4631.68	4639.64	7.96	4631.68	0.00	4639.64	0.00	0.00	0.00
8	SDMH-18	4617.61	4625.31	7.70	4617.61	0.00	4625.31	0.00	0.00	0.00
9	SDMH-21	4615.01	4622.68	7.67	4615.01	0.00	4622.68	0.00	0.00	0.00
10	SDMH-26	4608.76	4616.54	7.77	4608.76	0.00	4616.54	0.00	0.00	0.00
11	SDMH-35	4636.52	4644.06	7.54	4636.52	0.00	4644.06	0.00	0.00	0.00
12	SDMH-38	4632.18	4638.57	6.39	4632.18	0.00	4639.00	0.43	0.00	0.00
13	SDMH-50	4610.36	4617.53	7.17	4610.36	0.00	4618.65	1.12	0.00	0.00
14	SDMH-7	4637.05	4644.65	7.60	4637.05	0.00	4644.65	0.00	0.00	0.00

Junction Results

SN Element ID	Peak Inflow	Peak Lateral Inflow	Max HGL Elevation Attained	Max HGL Depth Attained	Max Surcharge Depth Attained	Min Freeboard Attained	Average HGL Elevation Attained	Average HGL Depth Attained	Time of Max HGL Occurrence	Time of Peak Flooding Occurrence	Total Flooded Volume	Total Time Flooded
	(cfs)	(cfs)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(days hh:mm)	(days hh:mm)	(ac-in)	(min)
1 EX SDMH-1	1.18	0.00	4642.26	0.25	0.00	11.04	4642.02	0.01	0 00:47	0 00:00	0.00	0.00
2 EX SDMH-2	2.98	0.00	4631.48	0.48	0.00	12.52	4631.02	0.02	0 00:51	0 00:00	0.00	0.00
3 EX SDMH-3	13.92	0.00	4607.56	0.86	0.00	6.81	4606.74	0.04	0 00:54	0 00:00	0.00	0.00
4 OUT-CANDLELIGHT	1.85	0.00	4632.26	0.54	0.00	9.61	4631.74	0.02	0 00:48	0 00:00	0.00	0.00
5 OUT-ENSIGN	11.11	0.00	4609.49	1.18	0.00	5.21	4608.36	0.05	0 00:52	0 00:00	0.00	0.00
6 OUT-HALLMARK	1.18	0.00	4646.58	1.16	0.00	6.74	4646.30	0.88	0 00:46	0 00:00	0.00	0.00
7 SDMH-11	2.82	0.00	4632.14	0.46	0.00	7.49	4631.70	0.02	0 00:47	0 00:00	0.00	0.00
8 SDMH-18	4.77	0.00	4618.34	0.73	0.00	6.97	4617.64	0.03	0 00:49	0 00:00	0.00	0.00
9 SDMH-21	7.34	0.00	4615.82	0.81	0.00	6.86	4615.05	0.04	0 00:50	0 00:00	0.00	0.00
10 SDMH-26	11.11	0.00	4610.81	2.05	0.00	5.73	4608.84	0.08	0 00:51	0 00:00	0.00	0.00
11 SDMH-35	1.27	0.00	4636.87	0.35	0.00	7.19	4636.53	0.01	0 00:47	0 00:00	0.00	0.00
12 SDMH-38	1.85	0.00	4632.87	0.69	0.00	5.70	4632.20	0.02	0 00:47	0 00:00	0.00	0.00
13 SDMH-50	2.13	0.00	4611.12	0.76	0.00	6.41	4610.39	0.03	0 00:51	0 00:00	0.00	0.00
14 SDMH-7	1.52	0.00	4637.43	0.38	0.00	7.22	4637.06	0.01	0 00:47	0 00:00	0.00	0.00

Channel Input

SN	Element ID	Length	Inlet Invert Elevation	Inlet Invert Offset	Outlet Invert Elevation	Outlet Invert Offset	Total Drop	Average Slope	Shape	Height	Width	Manning's Roughness	Entrance Losses	Exit/Bend Losses	Additional Losses	Initial Flow	Flap Gate
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(%)		(ft)	(ft)						(cfs)
1	A-BP-1	355.18	4638.50	6.86	4632.69	6.96	5.81	1.6400	User-Defined	0.420	2.000	0.0320	0.5000	0.5000	0.0000	0.00	No
2	A-BP-2	295.10	4632.69	6.96	4627.87	7.06	4.82	1.6300	User-Defined	0.420	2.000	0.0320	0.5000	0.5000	0.0000	0.00	No
3	A-BP-3	342.47	4627.87	7.06	4622.28	7.16	5.59	1.6300	User-Defined	0.420	2.000	0.0320	0.5000	0.5000	0.0000	0.00	No
4	A-BP-4	237.00	4622.28	7.16	4618.44	7.27	3.84	1.6200	User-Defined	0.420	2.000	0.0320	0.5000	0.5000	0.0000	0.00	No
5	A-BP-5	17.00	4618.44	7.27	4617.75	6.92	0.69	4.0600	User-Defined	0.420	2.000	0.0320	0.5000	0.5000	0.0000	0.00	No
6	A-BP-6	109.00	4617.92	7.30	4617.18	6.97	0.74	0.6800	User-Defined	0.610	24.500	0.0320	0.5000	0.5000	0.0000	0.00	No
7	A-BP-6A	129.00	4617.75	6.92	4617.02	6.14	0.73	0.5700	User-Defined	0.610	24.500	0.0320	0.5000	0.5000	0.0000	0.00	No
8	A-BP-7	173.00	4617.18	6.97	4616.10	6.40	1.08	0.6200	User-Defined	0.610	24.500	0.0320	0.5000	0.5000	0.0000	0.00	No
9	A-BP-7A	169.00	4617.02	6.14	4616.17	6.27	0.85	0.5000	User-Defined	0.610	24.500	0.0320	0.5000	0.5000	0.0000	0.00	No
10	A-BP-7B	170.00	4617.01	6.03	4616.17	6.27	0.84	0.4900	User-Defined	0.610	24.500	0.0320	0.5000	0.5000	0.0000	0.00	No
11	B-BP-1	364.50	4658.33	7.58	4651.70	7.55	6.63	1.8200	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
12	B-BP-1A	363.00	4658.17	7.15	4651.54	7.13	6.63	1.8300	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
13	B-BP-2A	323.50	4651.54	7.13	4645.76	7.25	5.77	1.7800	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
14	B-BP-3	260.20	4645.79	7.54	4640.61	7.46	5.18	1.9900	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
15	B-BP-3A	170.91	4645.76	7.25	4643.48	7.65	2.29	1.3400	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
16	B-BP-4	162.80	4643.48	7.65	4640.59	7.96	2.89	1.7700	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
17	B-BP-5	311.90	4640.59	7.96	4634.92	7.95	5.67	1.8200	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
18	B-BP-5A	310.40	4640.61	7.46	4634.99	7.50	5.62	1.8100	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
19	B-BP-6	297.50	4634.92	7.95	4629.51	8.19	5.41	1.8200	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
20	B-BP-6A	296.00	4634.99	7.50	4629.64	7.55	5.36	1.8100	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
21	B-BP-7	292.62	4629.51	8.19	4626.20	7.68	3.31	1.1300	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
22	B-BP-7A	291.12	4629.64	7.55	4624.36	5.08	5.27	1.8100	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
23	B-BP-8	240.30	4626.20	7.68	4623.93	7.65	2.27	0.9400	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
24	B-BP-8A	205.30	4624.36	5.08	4623.11	6.06	1.26	0.6100	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
25	B-BP-9	206.00	4623.93	7.65	4620.61	7.44	3.32	1.6100	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
26	C-BP-1	347.50	4651.10	7.54	4644.99	7.55	6.11	1.7600	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
27	C-BP-1A	346.00	4650.94	7.11	4644.83	7.12	6.11	1.7700	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
28	C-BP-2	268.55	4637.44	0.00	4631.88	0.00	5.56	2.0700	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
29	C-BP-2A	273.00	4644.83	7.12	4639.99	7.14	4.84	1.7700	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
30	D-BP-1	372.50	4639.19	6.56	4631.64	7.33	7.55	2.0300	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
31	D-BP-1A	371.00	4638.93	7.05	4631.38	6.81	7.55	2.0400	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
32	D-BP-2	377.04	4631.64	7.33	4624.23	7.32	7.41	1.9600	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
33	D-BP-2A	375.74	4631.38	6.81	4623.74	6.57	7.64	2.0300	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
34	D-BP-3A	176.20	4623.74	6.57	4620.22	6.28	3.52	2.0000	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
35	D-BP-4	191.50	4620.61	7.44	4616.90	7.30	3.71	1.9400	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
36	D-BP-4A	186.80	4620.22	6.28	4616.55	6.17	3.67	1.9700	User-Defined	0.500	16.000	0.0320	0.5000	0.5000	0.0000	0.00	No
37	E-BP-1	266.50	4661.14	7.29	4656.20	7.19	4.94	1.8500	User-Defined	0.610	24.500	0.0320	0.5000	0.5000	0.0000	0.00	No
38	E-BP-1A	265.00	4660.98	6.70	4656.03	6.64	4.94	1.8600	User-Defined	0.610	24.500	0.0320	0.5000	0.5000	0.0000	0.00	No

Channel Results

SN	Element ID	Peak Flow	Time of Peak Flow Occurrence	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Travel Time	Peak Flow Depth	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged	Froude Number	Reported Condition
		(cfs)	(days hh:mm)	(cfs)		(ft/sec)	(min)	(ft)		(min)		
1	A-BP-1	0.02	0 00:45	2.08	0.01	13.69	0.43	0.06	0.14	0.00		
2	A-BP-2	0.03	0 00:49	2.08	0.01	20.10	0.24	0.06	0.14	0.00		
3	A-BP-3	0.02	0 00:45	2.08	0.01	17.94	0.32	0.04	0.11	0.00		
4	A-BP-4	0.03	0 00:45	2.07	0.01	18.93	0.21	0.06	0.14	0.00		
5	A-BP-5	0.02	0 00:45	3.28	0.00	15.44	0.02	0.05	0.12	0.00		
6	A-BP-6	0.01	0 00:45	18.77	0.00	8.52	0.21	0.05	0.08	0.00		
7	A-BP-6A	0.01	0 00:45	17.12	0.00	6.77	0.32	0.05	0.09	0.00		
8	A-BP-7	0.01	0 00:45	17.99	0.00	9.69	0.30	0.03	0.06	0.00		
9	A-BP-7A	0.01	0 00:45	16.14	0.00	6.05	0.47	0.04	0.07	0.00		
10	A-BP-7B	0.01	0 00:45	16.00	0.00	4.26	0.67	0.05	0.09	0.00		
11	B-BP-1	0.01	0 00:45	15.36	0.00	10.19	0.60	0.03	0.05	0.00		
12	B-BP-1A	0.01	0 00:45	15.40	0.00	4.13	1.46	0.04	0.08	0.00		
13	B-BP-2A	0.03	0 00:45	15.22	0.00	5.01	1.08	0.07	0.13	0.00		
14	B-BP-3	0.01	0 00:45	16.07	0.00	13.86	0.31	0.03	0.06	0.00		
15	B-BP-3A	0.02	0 00:45	13.18	0.00	5.23	0.54	0.07	0.14	0.00		
16	B-BP-4	0.01	0 00:45	15.17	0.00	12.70	0.21	0.03	0.07	0.00		
17	B-BP-5	0.01	0 00:45	15.35	0.00	5.44	0.96	0.05	0.10	0.00		
18	B-BP-5A	0.02	0 00:45	15.32	0.00	5.88	0.88	0.06	0.12	0.00		
19	B-BP-6	0.02	0 00:45	15.36	0.00	23.10	0.21	0.03	0.07	0.00		
20	B-BP-6A	0.02	0 00:45	15.32	0.00	5.77	0.85	0.06	0.12	0.00		
21	B-BP-7	0.02	0 00:45	12.12	0.00	15.18	0.32	0.05	0.10	0.00		
22	B-BP-7A	0.02	0 00:45	15.33	0.00	5.90	0.82	0.06	0.13	0.00		
23	B-BP-8	0.02	0 00:45	11.07	0.00	17.00	0.24	0.04	0.09	0.00		
24	B-BP-8A	0.02	0 00:45	8.91	0.00	6.15	0.56	0.07	0.14	0.00		
25	B-BP-9	0.02	0 00:45	14.47	0.00	15.53	0.22	0.04	0.09	0.00		
26	C-BP-1	0.02	0 00:45	15.11	0.00	14.79	0.39	0.04	0.09	0.00		
27	C-BP-1A	0.02	0 00:45	15.14	0.00	5.20	1.11	0.06	0.11	0.00		
28	C-BP-2	0.02	0 00:45	25.16	0.00	1.81	2.47	0.27	0.55	0.00		
29	C-BP-2A	0.02	0 00:45	15.16	0.00	5.59	0.81	0.07	0.13	0.00		
30	D-BP-1	0.02	0 00:45	16.22	0.00	13.77	0.45	0.05	0.10	0.00		
31	D-BP-1A	0.02	0 00:45	16.25	0.00	4.74	1.30	0.06	0.12	0.00		
32	D-BP-2	0.03	0 00:45	15.97	0.00	15.79	0.40	0.06	0.12	0.00		
33	D-BP-2A	0.09	0 00:50	16.24	0.01	6.17	1.01	0.11	0.21	0.00		
34	D-BP-3A	0.03	0 00:45	16.09	0.00	5.95	0.49	0.07	0.14	0.00		
35	D-BP-4	0.02	0 00:45	15.86	0.00	14.73	0.22	0.05	0.11	0.00		
36	D-BP-4A	0.01	0 00:45	15.97	0.00	5.49	0.57	0.05	0.10	0.00		
37	E-BP-1	0.01	0 00:45	31.00	0.00	10.05	0.44	0.04	0.06	0.00		
38	E-BP-1A	0.01	0 00:45	31.09	0.00	5.15	0.86	0.04	0.07	0.00		

Pipe Input

SN	Element ID	Length	Inlet Invert Elevation	Inlet Invert Offset	Outlet Invert Elevation	Outlet Invert Offset	Total Drop	Average Slope	Pipe Shape	Pipe Diameter or Height	Pipe Width	Manning's Roughness	Entrance Losses	Exit/Bend Losses	Additional Losses	Initial Flow
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(%)		(in)	(in)					(cfs)
1	B-BP-2	325.00	4651.70	7.55	4645.79	7.54	5.90	1.8200	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	0.00
2	EX PIPE: (1)	154.79	4646.32	0.90	4642.01	0.00	4.30	2.7800	CIRCULAR	21.000	21.000	0.0130	0.5000	0.5000	0.0000	0.00
3	EX PIPE: (2)	345.71	4642.01	0.00	4631.00	0.00	11.01	3.1900	CIRCULAR	21.000	21.000	0.0130	0.5000	0.5000	0.0000	0.00
4	EX PIPE: (3)	137.55	4631.72	0.00	4631.00	0.00	0.72	0.5200	CIRCULAR	21.000	21.000	0.0150	0.5000	0.5000	0.0000	0.00
5	EX PIPE: (4)	1300.00	4631.00	0.00	4606.70	0.00	24.30	1.8700	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	0.00
6	EX PIPE: (5)	91.48	4608.31	0.00	4606.70	0.00	1.61	1.7600	CIRCULAR	21.000	21.000	0.0150	0.5000	0.5000	0.0000	0.00
7	EX PIPE: (6)	1950.00	4606.70	0.00	4574.00	0.00	32.70	1.6800	CIRCULAR	36.000	36.000	0.0150	0.5000	0.5000	0.0000	0.00
8	EX PIPE: (BASIN)	180.78	4574.00	0.00	4573.00	0.00	1.00	0.5500	CIRCULAR	48.000	48.000	0.0150	0.5000	0.5000	0.0000	0.00
9	Link-64	44.95	4574.00	0.00	4571.44	4571.44	2.56	5.7000	CIRCULAR	36.000	36.000	0.0130	0.5000	0.5000	0.0000	0.00
10	SD10	163.58	4635.83	0.00	4632.88	0.25	2.94	1.8000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
11	SD11	52.81	4632.63	0.00	4631.68	0.00	0.95	1.8000	CIRCULAR	18.000	18.000	0.0130	0.5000	0.5000	0.0000	0.00
12	SD12	300.00	4626.97	0.00	4621.57	0.25	5.40	1.8000	CIRCULAR	18.000	18.000	0.0130	0.5000	0.5000	0.0000	0.00
13	SD13	295.12	4621.32	0.00	4618.52	0.00	2.80	0.9500	CIRCULAR	21.000	21.000	0.0130	0.5000	0.5000	0.0000	0.00
14	SD14	95.61	4618.52	0.00	4617.61	0.00	0.91	0.9500	CIRCULAR	21.000	21.000	0.0130	0.5000	0.5000	0.0000	0.00
15	SD15	140.44	4617.61	0.00	4616.28	0.00	1.33	0.9500	CIRCULAR	21.000	21.000	0.0130	0.5000	0.5000	0.0000	0.00
16	SD16	94.63	4615.01	0.00	4613.17	0.00	1.85	1.9500	CIRCULAR	21.000	21.000	0.0130	0.5000	0.5000	0.0000	0.00
17	SD17	182.56	4613.17	0.00	4609.60	0.00	3.57	1.9500	CIRCULAR	21.000	21.000	0.0130	0.5000	0.5000	0.0000	0.00
18	SD18	72.43	4609.60	0.00	4608.77	0.00	0.84	1.1500	CIRCULAR	21.000	21.000	0.0130	0.5000	0.5000	0.0000	0.00
19	SD19	149.60	4608.77	0.00	4608.31	0.00	0.45	0.3000	CIRCULAR	21.000	21.000	0.0130	0.5000	0.5000	0.0000	0.00
20	SD20	26.50	4644.41	0.00	4644.15	0.00	0.27	1.0000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
21	SD21	26.50	4638.52	0.00	4638.25	0.00	0.26	1.0000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
22	SD22	26.50	4633.15	0.00	4632.88	0.25	0.27	1.0000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
23	SD23	26.50	4627.49	0.00	4627.22	0.25	0.27	1.0000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
24	SD24	26.50	4622.09	0.00	4621.82	0.50	0.27	1.0000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
25	SD25	26.50	4619.29	0.00	4619.02	0.50	0.27	1.0000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
26	SD26	27.27	4613.94	0.00	4613.67	0.50	0.27	1.0000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
27	SD27	27.92	4609.88	-0.50	4609.60	0.00	0.28	1.0000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
28	SD28	358.43	4631.64	0.00	4625.72	0.00	5.91	1.6500	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
29	SD29	297.57	4625.72	0.00	4620.81	0.00	4.91	1.6500	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
30	SD30	344.97	4620.81	0.00	4615.12	0.00	5.69	1.6500	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
31	SD31	239.50	4615.12	0.00	4611.17	0.00	3.95	1.6500	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
32	SD32	17.74	4611.17	0.00	4610.83	0.00	0.34	1.9200	CIRCULAR	18.000	18.000	0.0130	0.5000	0.5000	0.0000	0.00
33	SD33	81.74	4610.62	0.00	4610.36	0.00	0.26	0.3200	CIRCULAR	18.000	18.000	0.0130	0.5000	0.5000	0.0000	0.00
34	SD34	176.74	4610.21	0.00	4609.23	-0.47	0.98	0.5500	CIRCULAR	18.000	18.000	0.0130	0.5000	0.5000	0.0000	0.00
35	SD35	28.08	4608.98	-0.72	4608.84	0.08	0.14	0.5000	CIRCULAR	21.000	21.000	0.0130	0.5000	0.5000	0.0000	0.00
36	SD36	43.77	4609.84	-0.06	4609.40	-0.30	0.44	1.0100	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
37	SD37	26.50	4643.83	0.00	4643.56	0.00	0.27	1.0000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
38	SD38	350.00	4643.56	0.00	4637.44	0.00	6.13	1.7500	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
39	SD39	52.76	4637.44	0.00	4636.52	0.00	0.92	1.7500	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
40	SD40	261.59	4631.68	0.00	4626.97	0.00	4.71	1.8000	CIRCULAR	18.000	18.000	0.0130	0.5000	0.5000	0.0000	0.00
41	SD41	52.75	4632.34	0.00	4631.68	0.00	0.66	1.2500	CIRCULAR	18.000	18.000	0.0130	0.5000	0.5000	0.0000	0.00
42	SD42	26.50	4637.70	0.00	4637.44	0.00	0.26	1.0000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
43	SD43	26.50	4632.90	1.01	4632.63	0.00	0.27	1.0000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
44	SD44	30.45	4632.63	0.00	4632.18	0.00	0.46	1.5000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
45	SD45	379.54	4624.31	0.00	4616.90	0.00	7.40	1.9500	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
46	SD46	71.28	4616.90	0.00	4615.51	0.50	1.39	1.9500	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
47	SD47	26.50	4617.17	0.00	4616.91	0.00	0.27	1.0000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
48	SD48	26.50	4624.57	0.00	4624.31	0.00	0.27	1.0000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
49	SD49	42.50	4649.40	0.00	4648.97	-0.04	0.43	1.0000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
50	SD5	26.50	4651.02	0.00	4650.75	0.00	0.27	1.0000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
51	SD50	169.53	4649.01	0.00	4645.42	0.00	3.59	2.1200	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
52	SD51	269.00	4653.85	0.00	4649.01	0.00	4.84	1.8000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
53	SD52	42.50	4654.28	0.00	4653.85	0.00	0.43	1.0000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
54	SD53	26.49	4632.86	0.00	4632.59	0.25	0.26	1.0000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
55	SD54	241.53	4636.52	0.00	4632.63	0.00	3.88	1.6100	CIRCULAR	15.000	15.000	0.0150	0.5000	0.5000	0.0000	0.00
56	SD55	151.85	4632.18	0.00	4631.72	0.00	0.46	0.3000	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	0.00
57	SD56	42.48	4610.88	0.00	4610.46	0.25	0.43	1.0000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
58	SD57	33.87	4610.36	0.00	4610.21	0.00	0.15	0.4400	CIRCULAR	18.000	18.000	0.0130	0.5000	0.5000	0.0000	0.00
59	SD58	42.83	4610.83	0.00	4610.62	0.00	0.21	0.4900	CIRCULAR	18.000	18.000	0.0130	0.5000	0.5000	0.0000	0.00
60	SD59	10.49	4610.98	0.00	4610.88	0.00	0.10	0.9500	CIRCULAR	15.000	15.000	0.0150	0.5000	0.5000	0.0000	0.00
61	SD6	367.00	4650.75	0.00	4644.15	0.00	6.61	1.8000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
62	SD60	26.50	4617.04	0.00	4616.78	0.50	0.26	1.0000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
63	SD63	127.35	4616.28	0.00	4615.07	0.05	1.21	0.9500	CIRCULAR	21.000	21.000	0.0130	0.5000	0.5000	0.0000	0.00
64	SD7	327.50	4644.15	0.00	4638.25	0.00	5.89	1.8000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
65	SD8	66.91	4638.25	0.00	4637.05	0.00	1.20	1.8000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00
66	SD9	67.73	4637.05	0.00	4635.83	0.00	1.22	1.8000	CIRCULAR	15.000	15.000	0.0130	0.5000	0.5000	0.0000	0.00

[illegible]

Pipe Results

SN Element ID	Peak Flow	Time of Peak Flow Occurrence	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Travel Time	Peak Flow Depth	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged	Froude Number	Reported Condition
	(cfs)	(days hh:mm)	(cfs)		(ft/sec)	(min)	(ft)		(min)		
1 B-BP-2	0.03	0 00:45	12.27	0.00	9.30	0.58	0.03	0.02	0.00		Calculated
2 EX PIPE: (1)	1.18	0 00:46	26.42	0.04	5.88	0.44	0.24	0.14	0.00		Calculated
3 EX PIPE: (2)	1.17	0 00:47	28.28	0.04	5.03	1.15	0.36	0.20	0.00		Calculated
4 EX PIPE: (3)	1.84	0 00:48	9.94	0.19	3.75	0.61	0.51	0.29	0.00		Calculated
5 EX PIPE: (4)	2.81	0 00:51	12.45	0.23	4.08	5.31	0.66	0.44	0.00		Calculated
6 EX PIPE: (5)	11.12	0 00:52	18.22	0.61	8.29	0.18	1.00	0.58	0.00		Calculated
7 EX PIPE: (6)	13.38	0 00:54	74.86	0.18	6.78	4.79	0.97	0.32	0.00		Calculated
8 EX PIPE: (BASIN)	12.31	0 00:56	92.59	0.13	6.39	0.47	1.34	0.34	0.00		Calculated
9 Link-64	22.91	0 00:55	159.17	0.14	12.37	0.06	0.92	0.31	0.00		Calculated
10 SD10	1.69	0 00:48	8.67	0.19	5.30	0.51	0.38	0.31	0.00		Calculated
11 SD11	2.16	0 00:48	14.09	0.15	4.77	0.18	0.45	0.30	0.00		Calculated
12 SD12	3.46	0 00:48	14.09	0.25	6.42	0.78	0.51	0.34	0.00		Calculated
13 SD13	4.13	0 00:49	15.44	0.27	4.64	1.06	0.69	0.40	0.00		Calculated
14 SD14	4.77	0 00:49	15.44	0.31	4.87	0.33	0.75	0.43	0.00		Calculated
15 SD15	4.77	0 00:49	15.44	0.31	4.76	0.49	0.76	0.43	0.00		Calculated
16 SD16	7.34	0 00:50	22.13	0.33	7.27	0.22	0.76	0.44	0.00		Calculated
17 SD17	8.03	0 00:49	22.15	0.36	6.04	0.50	1.09	0.64	0.00		Calculated
18 SD18	8.19	0 00:51	17.02	0.48	3.74	0.32	1.60	0.94	0.00		Calculated
19 SD19	11.11	0 00:52	8.74	1.27	5.17	0.48	1.45	0.84	0.00		> CAPACITY
20 SD20	0.40	0 00:45	6.46	0.06	2.26	0.20	0.25	0.21	0.00		Calculated
21 SD21	0.38	0 00:45	6.46	0.06	1.96	0.23	0.29	0.24	0.00		Calculated
22 SD22	0.31	0 00:45	6.46	0.05	2.53	0.17	0.20	0.16	0.00		Calculated
23 SD23	0.34	0 00:45	6.46	0.05	2.52	0.18	0.23	0.19	0.00		Calculated
24 SD24	0.36	0 00:45	6.46	0.06	2.62	0.17	0.21	0.17	0.00		Calculated
25 SD25	0.35	0 00:45	6.46	0.05	2.61	0.17	0.23	0.19	0.00		Calculated
26 SD26	0.25	0 00:45	6.46	0.04	2.38	0.19	0.19	0.16	0.00		Calculated
27 SD27	0.30	0 00:49	10.79	0.03	2.14	0.22	0.96	0.81	0.00		Calculated
28 SD28	0.31	0 00:46	8.30	0.04	2.35	2.54	0.21	0.17	0.00		Calculated
29 SD29	0.74	0 00:48	8.30	0.09	3.71	1.34	0.28	0.22	0.00		Calculated
30 SD30	1.04	0 00:49	8.30	0.13	4.06	1.42	0.33	0.26	0.00		Calculated
31 SD31	1.48	0 00:49	8.30	0.18	4.16	0.96	0.42	0.33	0.00		Calculated
32 SD32	1.73	0 00:49	14.56	0.12	2.81	0.11	0.57	0.38	0.00		Calculated
33 SD33	2.13	0 00:49	5.92	0.36	2.49	0.55	0.73	0.49	0.00		Calculated
34 SD34	2.54	0 00:48	5.64	0.45	3.61	0.82	0.91	0.65	0.00		Calculated
35 SD35	3.13	0 00:48	27.73	0.11	2.97	0.16	1.41	0.82	0.00		Calculated
36 SD36	0.42	0 00:46	4.37	0.10	1.64	0.44	0.97	0.83	0.00		Calculated
37 SD37	0.25	0 00:45	6.46	0.04	2.10	0.21	0.19	0.15	0.00		Calculated
38 SD38	0.49	0 00:45	8.55	0.06	2.41	2.42	0.27	0.23	0.00		Calculated
39 SD39	1.27	0 00:46	8.54	0.15	4.39	0.20	0.35	0.29	0.00		Calculated
40 SD40	2.83	0 00:48	14.09	0.20	5.60	0.78	0.49	0.33	0.00		Calculated
41 SD41	0.71	0 00:45	11.74	0.06	2.44	0.36	0.34	0.24	0.00		Calculated
42 SD42	0.39	0 00:45	6.46	0.06	1.89	0.23	0.28	0.23	0.00		Calculated
43 SD43	0.33	0 00:45	6.46	0.05	1.72	0.26	0.37	0.31	0.00		Calculated
44 SD44	1.85	0 00:47	7.91	0.23	3.19	0.16	0.59	0.48	0.00		Calculated
45 SD45	1.07	0 00:50	9.02	0.12	3.54	1.79	0.37	0.30	0.00		Calculated
46 SD46	2.06	0 00:48	9.02	0.23	5.52	0.22	0.43	0.34	0.00		Calculated
47 SD47	0.51	0 00:45	6.46	0.08	1.90	0.23	0.35	0.28	0.00		Calculated
48 SD48	0.64	0 00:50	6.46	0.10	2.85	0.15	0.30	0.24	0.00		Calculated
49 SD49	0.43	0 00:45	6.16	0.07	2.25	0.31	0.26	0.21	0.00		Calculated
50 SD5	0.10	0 00:45	6.46	0.02	1.66	0.27	0.12	0.10	0.00		Calculated
51 SD50	1.18	0 00:46	9.40	0.12	2.86	0.99	0.72	0.58	0.00		Calculated
52 SD51	0.34	0 00:45	8.67	0.04	2.17	2.07	0.23	0.19	0.00		Calculated
53 SD52	0.18	0 00:45	6.46	0.03	1.96	0.36	0.16	0.13	0.00		Calculated
54 SD53	0.39	0 00:45	6.46	0.06	2.67	0.17	0.22	0.18	0.00		Calculated
55 SD54	1.26	0 00:47	7.10	0.18	3.34	1.21	0.42	0.35	0.00		Calculated
56 SD55	1.85	0 00:48	4.99	0.37	2.72	0.93	0.61	0.41	0.00		Calculated
57 SD56	0.31	0 00:45	6.46	0.05	2.30	0.31	0.34	0.29	0.00		Calculated
58 SD57	2.13	0 00:49	6.99	0.30	2.42	0.23	0.75	0.52	0.00		Calculated
59 SD58	1.94	0 00:49	7.36	0.26	2.43	0.29	0.69	0.46	0.00		Calculated
60 SD59	0.16	0 00:45	5.47	0.03	1.54	0.11	0.18	0.14	0.00		Calculated
61 SD6	0.19	0 00:46	8.67	0.02	1.48	4.13	0.20	0.16	0.00		Calculated
62 SD60	0.27	0 00:45	6.46	0.04	2.44	0.18	0.23	0.18	0.00		Calculated
63 SD63	5.29	0 00:50	15.44	0.34	5.18	0.41	0.77	0.44	0.00		Calculated
64 SD7	0.98	0 00:47	8.67	0.11	3.69	1.48	0.33	0.27	0.00		Calculated
65 SD8	1.52	0 00:47	8.67	0.18	4.71	0.24	0.38	0.31	0.00		Calculated
66 SD9	1.52	0 00:48	8.67	0.18	4.67	0.24	0.39	0.31	0.00		Calculated

Inlet Input

SN	Element ID	Inlet Manufacturer	Manufacturer Part Number	Inlet Location	Number of Inlets	Catchbasin Invert Elevation (ft)	Max (Rim) Elevation (ft)	Inlet Depth (ft)	Initial Water Elevation (ft)	Initial Water Depth (ft)	Ponded Area (ft²)	Grate Clogging Factor (%)
1	SDCB-1	FHWA HEC-22 GENERIC	N/A	On Grade	1	4651.02	4658.17	7.15	4651.02	0.00	N/A	0.00
2	SDCB-10	FHWA HEC-22 GENERIC	N/A	On Grade	1	4632.63	4640.59	7.96	4632.63	0.00	N/A	0.00
3	SDCB-12	FHWA HEC-22 GENERIC	N/A	On Grade	1	4627.49	4634.99	7.50	4627.49	0.00	N/A	0.00
4	SDCB-13	FHWA HEC-22 GENERIC	N/A	On Grade	1	4626.97	4634.92	7.95	4626.97	0.00	N/A	0.00
5	SDCB-14	FHWA HEC-22 GENERIC	N/A	On Grade	1	4621.32	4629.51	8.19	4621.32	0.00	N/A	0.00
6	SDCB-15	FHWA HEC-22 GENERIC	N/A	On Grade	1	4622.09	4629.64	7.55	4622.09	0.00	N/A	0.00
7	SDCB-16	FHWA HEC-22 GENERIC	N/A	On Grade	1	4618.52	4626.20	7.68	4618.52	0.00	N/A	0.00
8	SDCB-17	FHWA HEC-22 GENERIC	N/A	On Grade	1	4619.29	4624.36	5.08	4619.29	0.00	N/A	0.00
9	SDCB-19	FHWA HEC-22 GENERIC	N/A	On Grade	1	4616.28	4623.93	7.65	4616.28	0.00	N/A	0.00
10	SDCB-2	FHWA HEC-22 GENERIC	N/A	On Grade	1	4650.75	4658.33	7.58	4650.75	0.00	N/A	0.00
11	SDCB-20	FHWA HEC-22 GENERIC	N/A	On Sag	1	4617.04	4623.11	6.06	4617.04	0.00	0.00	0.00
12	SDCB-22	FHWA HEC-22 GENERIC	N/A	On Grade	1	4613.17	4620.61	7.44	4613.17	0.00	N/A	0.00
13	SDCB-23	FHWA HEC-22 GENERIC	N/A	On Grade	1	4613.94	4620.22	6.28	4613.94	0.00	N/A	0.00
14	SDCB-24	FHWA HEC-22 GENERIC	N/A	On Sag	1	4609.60	4616.90	7.30	4609.60	0.00	0.00	0.00
15	SDCB-25	FHWA HEC-22 GENERIC	N/A	On Sag	1	4610.38	4616.55	6.17	4610.38	0.00	0.00	0.00
16	SDCB-27	FHWA HEC-22 GENERIC	N/A	On Grade	1	4654.28	4660.98	6.70	4654.28	0.00	N/A	0.00
17	SDCB-28	FHWA HEC-22 GENERIC	N/A	On Grade	1	4653.85	4661.14	7.29	4653.85	0.00	N/A	0.00
18	SDCB-29	FHWA HEC-22 GENERIC	N/A	On Sag	1	4649.40	4656.03	6.64	4649.40	0.00	0.00	0.00
19	SDCB-3	FHWA HEC-22 GENERIC	N/A	On Grade	1	4644.41	4651.54	7.13	4644.41	0.00	N/A	0.00
20	SDCB-30	FHWA HEC-22 GENERIC	N/A	On Sag	1	4649.01	4656.20	7.19	4649.01	0.00	0.00	0.00
21	SDCB-31	FHWA HEC-22 GENERIC	N/A	On Grade	1	4643.83	4650.94	7.11	4643.83	0.00	N/A	0.00
22	SDCB-32	FHWA HEC-22 GENERIC	N/A	On Grade	1	4643.56	4651.10	7.54	4643.56	0.00	N/A	0.00
23	SDCB-33	FHWA HEC-22 GENERIC	N/A	On Grade	1	4637.70	4644.83	7.12	4637.70	0.00	N/A	0.00
24	SDCB-34	FHWA HEC-22 GENERIC	N/A	On Grade	1	4637.44	4644.99	7.55	4637.44	0.00	N/A	0.00
25	SDCB-36	FHWA HEC-22 GENERIC	N/A	On Grade	1	4632.63	4639.19	6.56	4631.62	-1.01	N/A	0.00
26	SDCB-37	FHWA HEC-22 GENERIC	N/A	On Grade	1	4631.88	4638.93	7.05	4631.88	0.00	N/A	0.00
27	SDCB-39	FHWA HEC-22 GENERIC	N/A	On Sag	1	4632.34	4640.15	7.81	4632.34	0.00	0.00	0.00
28	SDCB-4	FHWA HEC-22 GENERIC	N/A	On Grade	1	4644.15	4651.70	7.55	4644.15	0.00	N/A	0.00
29	SDCB-40	FHWA HEC-22 GENERIC	N/A	On Sag	1	4632.86	4639.99	7.14	4632.86	0.00	0.00	0.00
30	SDCB-41	FHWA HEC-22 GENERIC	N/A	On Grade	1	4624.57	4631.38	6.81	4624.57	0.00	N/A	0.00
31	SDCB-42	FHWA HEC-22 GENERIC	N/A	On Grade	1	4624.31	4631.64	7.33	4624.31	0.00	N/A	0.00
32	SDCB-43	FHWA HEC-22 GENERIC	N/A	On Grade	1	4617.17	4623.74	6.57	4617.17	0.00	N/A	0.00
33	SDCB-44	FHWA HEC-22 GENERIC	N/A	On Sag	1	4616.90	4624.23	7.32	4616.90	0.00	0.00	0.00
34	SDCB-45	FHWA HEC-22 GENERIC	N/A	On Sag	1	4609.90	4616.17	6.27	4609.84	-0.06	0.00	0.00
35	SDCB-46	FHWA HEC-22 GENERIC	N/A	On Sag	1	4609.70	4616.10	6.40	4609.23	-0.47	0.00	0.00
36	SDCB-47	FHWA HEC-22 GENERIC	N/A	On Grade	1	4610.21	4617.18	6.97	4610.21	0.00	N/A	0.00
37	SDCB-48	FHWA HEC-22 GENERIC	N/A	On Grade	1	4610.88	4617.02	6.14	4610.88	0.00	N/A	0.00
38	SDCB-49	FHWA HEC-22 GENERIC	N/A	On Grade	1	4610.98	4617.01	6.03	4610.98	0.00	N/A	0.00
39	SDCB-5	FHWA HEC-22 GENERIC	N/A	On Grade	1	4638.52	4645.76	7.25	4638.52	0.00	N/A	0.00
40	SDCB-51	FHWA HEC-22 GENERIC	N/A	On Grade	1	4610.62	4617.92	7.30	4610.62	0.00	N/A	0.00
41	SDCB-52	FHWA HEC-22 GENERIC	N/A	On Grade	1	4610.83	4617.75	6.92	4610.83	0.00	N/A	0.00
42	SDCB-53	FHWA HEC-22 GENERIC	N/A	On Grade	1	4611.17	4618.44	7.27	4611.17	0.00	N/A	0.00
43	SDCB-54	FHWA HEC-22 GENERIC	N/A	On Grade	1	4615.12	4622.28	7.16	4615.12	0.00	N/A	0.00
44	SDCB-55	FHWA HEC-22 GENERIC	N/A	On Grade	1	4620.81	4627.87	7.06	4620.81	0.00	N/A	0.00
45	SDCB-56	FHWA HEC-22 GENERIC	N/A	On Grade	1	4625.72	4632.69	6.96	4625.72	0.00	N/A	0.00
46	SDCB-57	FHWA HEC-22 GENERIC	N/A	On Grade	1	4631.64	4638.50	6.86	4631.64	0.00	N/A	0.00
47	SDCB-6	FHWA HEC-22 GENERIC	N/A	On Grade	1	4638.25	4645.79	7.54	4638.25	0.00	N/A	0.00
48	SDCB-8	FHWA HEC-22 GENERIC	N/A	On Grade	1	4635.83	4643.48	7.65	4635.83	0.00	N/A	0.00
49	SDCB-9	FHWA HEC-22 GENERIC	N/A	On Grade	1	4633.15	4640.61	7.46	4633.15	0.00	N/A	0.00

Roadway & Gutter Input

SN Element ID	Roadway Longitudinal Slope (ft/ft)	Roadway Cross Slope (ft/ft)	Roadway Manning's Roughness	Gutter Cross Slope (ft/ft)	Gutter Width (ft)	Gutter Depression (in)	Allowable Spread (ft)
1 SDCB-1	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
2 SDCB-10	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
3 SDCB-12	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
4 SDCB-13	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
5 SDCB-14	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
6 SDCB-15	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
7 SDCB-16	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
8 SDCB-17	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
9 SDCB-19	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
10 SDCB-2	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
11 SDCB-20	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
12 SDCB-22	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
13 SDCB-23	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
14 SDCB-24	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
15 SDCB-25	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
16 SDCB-27	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
17 SDCB-28	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
18 SDCB-29	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
19 SDCB-3	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
20 SDCB-30	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
21 SDCB-31	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
22 SDCB-32	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
23 SDCB-33	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
24 SDCB-34	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
25 SDCB-36	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
26 SDCB-37	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
27 SDCB-39	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
28 SDCB-4	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
29 SDCB-40	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
30 SDCB-41	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
31 SDCB-42	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
32 SDCB-43	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
33 SDCB-44	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
34 SDCB-45	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
35 SDCB-46	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
36 SDCB-47	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
37 SDCB-48	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
38 SDCB-49	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
39 SDCB-5	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
40 SDCB-51	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
41 SDCB-52	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
42 SDCB-53	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
43 SDCB-54	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
44 SDCB-55	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
45 SDCB-56	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
46 SDCB-57	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
47 SDCB-6	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
48 SDCB-8	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00
49 SDCB-9	0.0100	0.0200	0.0160	0.0620	2.00	0.0656	7.00

Inlet Results

SN	Element ID	Peak Flow (cfs)	Peak Lateral Inflow (cfs)	Peak Flow Intercepted by Inlet (cfs)	Peak Flow Bypassing Inlet (cfs)	Inlet Efficiency during Peak Flow (%)	Max Gutter Spread during Peak Flow (ft)	Max Gutter Water Elev. during Peak Flow (ft)	Max Gutter Water Depth during Peak Flow (ft)	Time of Max Depth Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	SDCB-1	0.11	0.11	0.10	0.01	93.94	0.88	4658.20	0.04	0 00:45	0.00	0.00
2	SDCB-10	0.20	0.20	0.19	0.01	93.94	1.65	4640.66	0.07	0 00:47	0.00	0.00
3	SDCB-12	0.34	0.34	0.32	0.02	93.94	2.80	4635.11	0.11	0 00:45	0.00	0.00
4	SDCB-13	0.37	0.37	0.35	0.02	93.94	3.08	4635.05	0.12	0 00:48	0.00	0.00
5	SDCB-14	0.36	0.36	0.34	0.02	93.94	3.02	4629.64	0.12	0 00:48	0.00	0.00
6	SDCB-15	0.36	0.36	0.34	0.02	93.94	3.01	4629.76	0.12	0 00:45	0.00	0.00
7	SDCB-16	0.35	0.35	0.33	0.02	93.94	2.93	4626.32	0.12	0 00:49	0.00	0.00
8	SDCB-17	0.35	0.35	0.33	0.02	93.94	2.93	4624.48	0.12	0 00:45	0.00	0.00
9	SDCB-19	0.29	0.29	0.27	0.02	93.94	2.38	4624.03	0.10	0 00:49	0.00	0.00
10	SDCB-2	0.11	0.11	0.10	0.01	93.94	0.88	4658.36	0.04	0 00:46	0.00	0.00
11	SDCB-20	0.25	0.25	N/A	N/A	N/A	1.33	4623.20	0.09	0 00:45	0.00	0.00
12	SDCB-22	0.41	0.41	0.39	0.02	93.94	3.41	4620.75	0.14	0 00:49	0.00	0.00
13	SDCB-23	0.23	0.23	0.22	0.01	93.94	1.94	4620.30	0.08	0 00:45	0.00	0.00
14	SDCB-24	0.25	0.25	N/A	N/A	N/A	1.29	4616.98	0.09	0 00:51	0.00	0.00
15	SDCB-25	0.26	0.26	N/A	N/A	N/A	1.36	4616.64	0.09	0 00:51	0.00	0.00
16	SDCB-27	0.19	0.19	0.18	0.01	93.94	1.55	4661.04	0.06	0 00:45	0.00	0.00
17	SDCB-28	0.19	0.19	0.18	0.01	93.94	1.55	4661.21	0.06	0 00:45	0.00	0.00
18	SDCB-29	0.42	0.42	N/A	N/A	N/A	2.28	4656.18	0.15	0 00:45	0.00	0.00
19	SDCB-3	0.42	0.42	0.40	0.03	93.94	3.50	4651.68	0.14	0 00:45	0.00	0.00
20	SDCB-30	0.42	0.42	N/A	N/A	N/A	2.19	4656.35	0.15	0 00:46	0.00	0.00
21	SDCB-31	0.27	0.27	0.25	0.02	93.94	2.24	4651.03	0.09	0 00:45	0.00	0.00
22	SDCB-32	0.27	0.27	0.25	0.02	93.94	2.24	4651.19	0.09	0 00:45	0.00	0.00
23	SDCB-33	0.40	0.40	0.38	0.02	93.94	3.33	4644.96	0.13	0 00:45	0.00	0.00
24	SDCB-34	0.40	0.40	0.38	0.02	93.94	3.33	4645.12	0.13	0 00:46	0.00	0.00
25	SDCB-36	0.33	0.33	0.31	0.02	93.94	2.73	4639.30	0.11	0 00:47	0.00	0.00
26	SDCB-37	0.33	0.33	0.31	0.02	93.94	2.73	4639.04	0.11	0 00:47	0.00	0.00
27	SDCB-39	0.32	0.32	N/A	N/A	N/A	1.69	4640.26	0.11	0 00:45	0.00	0.00
28	SDCB-4	0.42	0.42	0.40	0.03	93.94	3.51	4651.84	0.14	0 00:47	0.00	0.00
29	SDCB-40	0.37	0.37	N/A	N/A	N/A	1.93	4640.12	0.13	0 00:45	0.00	0.00
30	SDCB-41	0.71	0.71	0.62	0.09	87.37	4.99	4631.56	0.18	0 00:50	0.00	0.00
31	SDCB-42	0.47	0.47	0.44	0.03	93.94	3.89	4631.79	0.16	0 00:50	0.00	0.00
32	SDCB-43	0.47	0.47	0.44	0.03	93.94	3.87	4623.89	0.16	0 00:45	0.00	0.00
33	SDCB-44	0.47	0.47	N/A	N/A	N/A	2.45	4624.40	0.17	0 00:48	0.00	0.00
34	SDCB-45	0.37	0.37	N/A	N/A	N/A	1.96	4616.30	0.13	0 00:51	0.00	0.00
35	SDCB-46	0.27	0.27	N/A	N/A	N/A	1.43	4616.20	0.10	0 00:52	0.00	0.00
36	SDCB-47	0.19	0.19	0.18	0.01	93.94	1.55	4617.24	0.06	0 00:52	0.00	0.00
37	SDCB-48	0.14	0.14	0.13	0.01	93.94	1.17	4617.07	0.05	0 00:45	0.00	0.00
38	SDCB-49	0.18	0.18	0.17	0.01	93.94	1.46	4617.07	0.06	0 00:45	0.00	0.00
39	SDCB-5	0.38	0.38	0.36	0.02	93.94	3.15	4645.89	0.13	0 00:45	0.00	0.00
40	SDCB-51	0.25	0.25	0.23	0.01	93.94	2.04	4618.00	0.08	0 00:49	0.00	0.00
41	SDCB-52	0.25	0.25	0.23	0.01	93.94	2.04	4617.83	0.08	0 00:49	0.00	0.00
42	SDCB-53	0.27	0.27	0.25	0.02	93.94	2.20	4618.53	0.09	0 00:49	0.00	0.00
43	SDCB-54	0.46	0.46	0.44	0.03	93.94	3.85	4622.44	0.16	0 00:49	0.00	0.00
44	SDCB-55	0.31	0.31	0.29	0.02	93.94	2.59	4627.97	0.10	0 00:49	0.00	0.00
45	SDCB-56	0.45	0.45	0.42	0.03	93.94	3.74	4632.84	0.15	0 00:48	0.00	0.00
46	SDCB-57	0.34	0.34	0.32	0.02	93.94	2.79	4638.61	0.11	0 00:46	0.00	0.00
47	SDCB-6	0.17	0.17	0.16	0.01	93.94	1.39	4645.85	0.06	0 00:47	0.00	0.00
48	SDCB-8	0.18	0.18	0.17	0.01	93.94	1.46	4643.54	0.06	0 00:48	0.00	0.00
49	SDCB-9	0.32	0.32	0.30	0.02	93.94	2.69	4640.72	0.11	0 00:45	0.00	0.00

Storage Nodes

Storage Node : Stor-01

Input Data

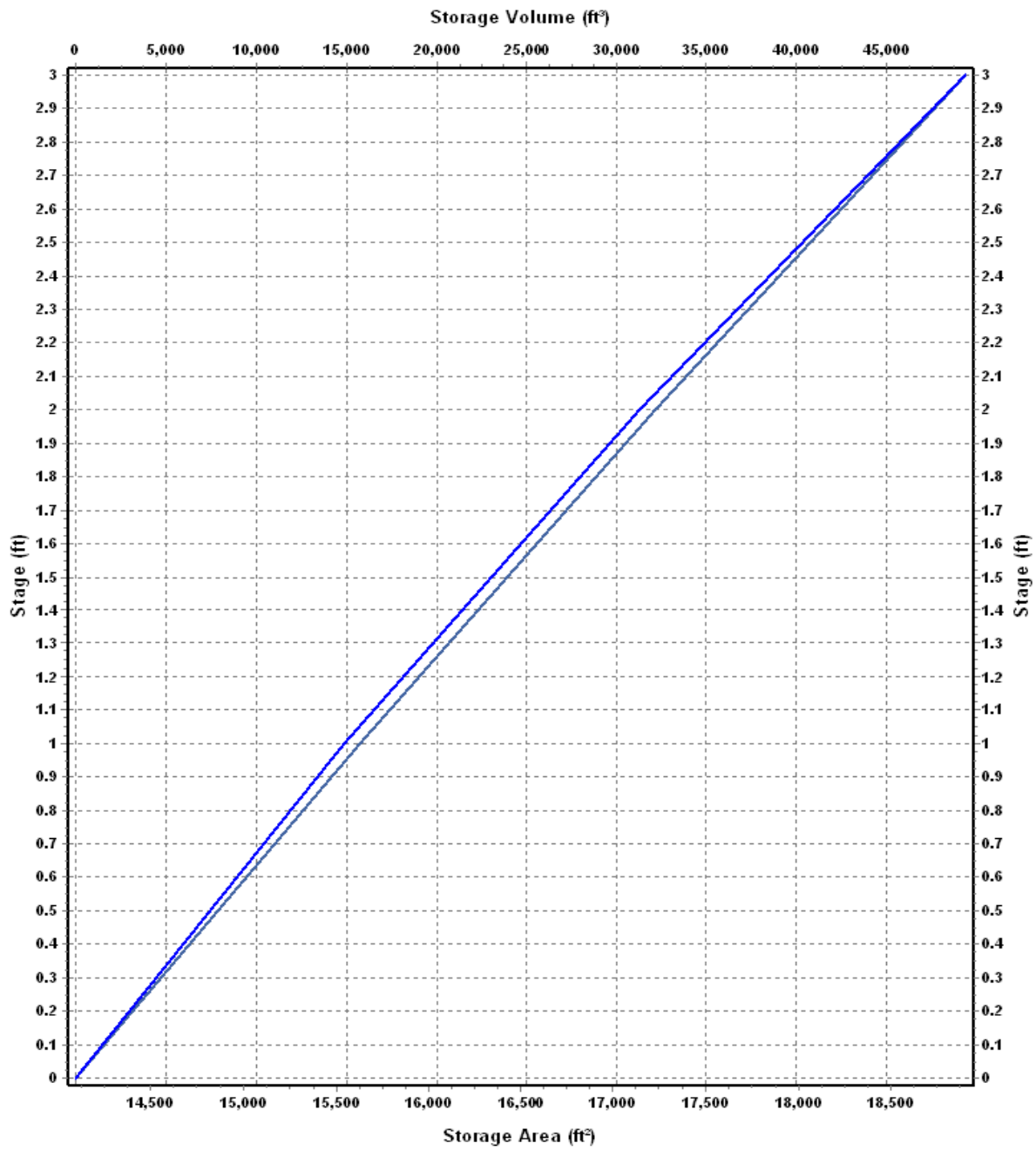
Invert Elevation (ft)	4573.00
Max (Rim) Elevation (ft)	4576.00
Max (Rim) Offset (ft)	3.00
Initial Water Elevation (ft)	4573.00
Initial Water Depth (ft)	0.00
Ponded Area (ft²)	0.00
Evaporation Loss	0.00

Storage Area Volume Curves

Storage Curve : Storage-01

Stage	Storage Area	Storage Volume
(ft)	(ft²)	(ft³)
0	14094	0.000
1	15624	14859.00
2	17226	31284.00
3	18900	49347.00

Storage Area Volume Curves



Storage Area Storage Volume

Storage Node : Stor-01 (continued)

Outflow Orifices

SN	Element ID	Orifice Type	Orifice Shape	Flap Gate	Circular Orifice Diameter (in)	Rectangular Orifice Height (in)	Rectangular Orifice Width (in)	Orifice Invert Elevation (ft)	Orifice Coefficient
1	Orifice-01	Side	CIRCULAR	No	14.75			4573.00	0.61

Output Summary Results

Peak Inflow (cfs)	12.31
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	6.41
Peak Exfiltration Flow Rate (cfm)	0.00
Max HGL Elevation Attained (ft)	4574.82
Max HGL Depth Attained (ft)	1.82
Average HGL Elevation Attained (ft)	4574.73
Average HGL Depth Attained (ft)	1.73
Time of Max HGL Occurrence (days hh:mm)	0 02:04
Total Exfiltration Volume (1000-ft³)	0.000
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

APPENDIX B

File Path: P:\2020-0507 SLR-Beacon Pointe Village 2\Drawings\Exhibits\SEWER ANALYSIS EXHIBIT.dwg Apr 12, 2021 - 11:33am

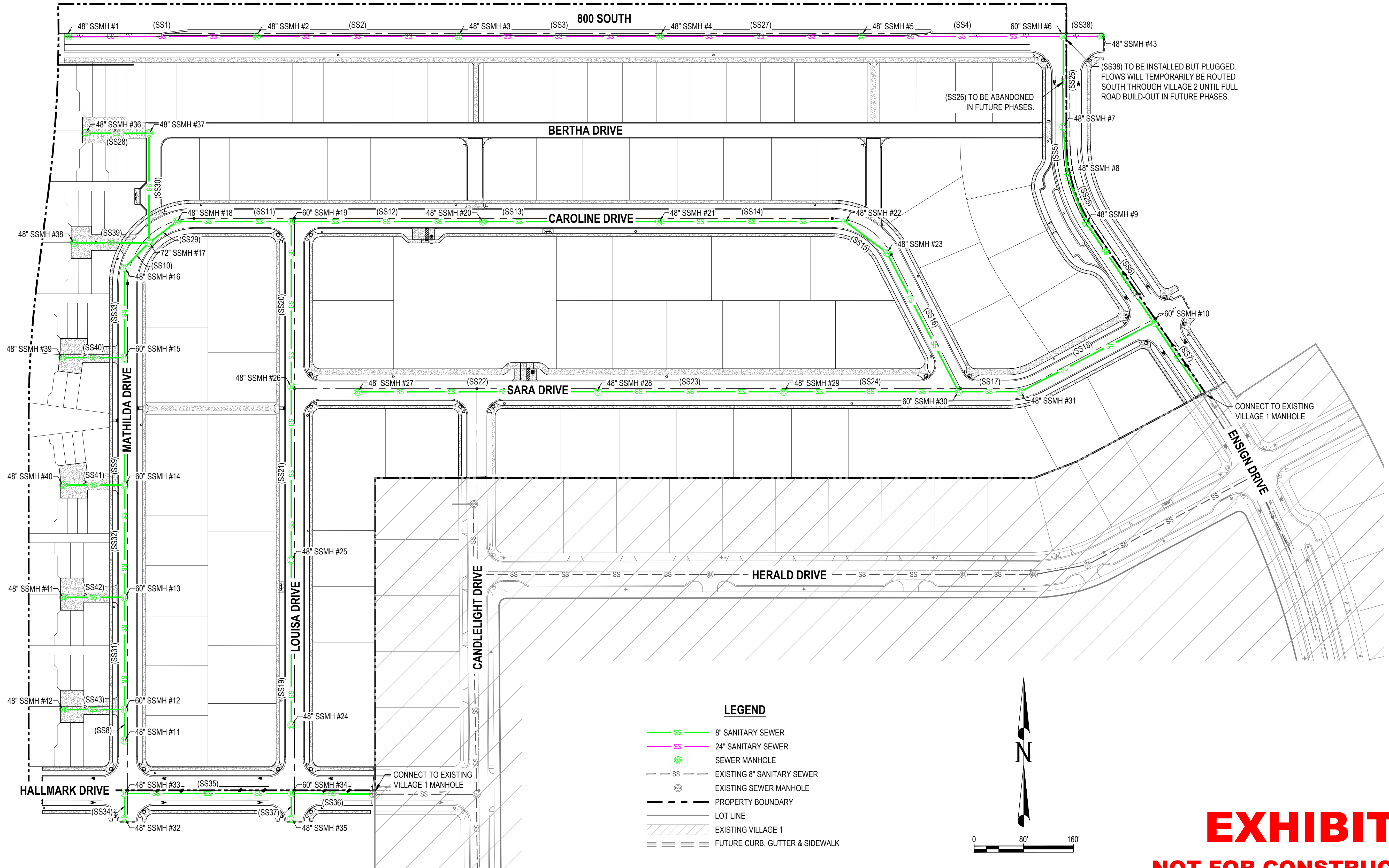


EXHIBIT
NOT FOR CONSTRUCTION

RECORD OF REVISIONS			

0 1 2

IF THE ABOVE SCALE BAR DOES NOT MEASURE 1-INCH IN LENGTH, DO NOT USE THIS DRAWING FOR SCALING PURPOSES. DIMENSIONS AND MEASUREMENTS SPECIFIED IN THE DRAWING TAKE PRECEDENCE TO SCALED MEASUREMENTS.

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PRINCIPAL
D. EYRE, P.E.

PROJECT MANAGER
G. NELSON, P.E.

CHECKED BY
G. NELSON, P.E.

DRAWN BY
H. WILLIAMS

DRAWING SCALE
1" = 80'

ISSUE DATE
APRIL 9, 2021

C

R

S

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SANITARY SEWER
CONTRIBUTING AREAS AND MANHOLES

PROJECT NUMBER 2020-0507	
SHEET	OF
SHEET NUMBER	
EXHIBIT	

SARATOGA SPRINGS, UT 84045

Project Description

File Name	2021-02-02 Updated Design - Peak 4.SPF
Description	Beacon Pointe Village 2 Sewer Analysis

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	Rational
Time of Concentration (TOC) Method	User-Defined
Link Routing Method	Kinematic Wave
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	Feb 02, 2021	00:00:00
End Analysis On	Feb 03, 2021	00:00:00
Start Reporting On	Feb 02, 2021	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	30	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins.....	0
Nodes.....	39
<i>Junctions</i>	38
<i>Outfalls</i>	1
<i>Flow Diversions</i>	0
<i>Inlets</i>	0
<i>Storage Nodes</i>	0
Links.....	38
<i>Channels</i>	0
<i>Pipes</i>	38
<i>Pumps</i>	0
<i>Orifices</i>	0
<i>Weirs</i>	0
<i>Outlets</i>	0
Pollutants	0
Land Uses	0

Rainfall Details

Return Period.....	2 year(s)
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Node Summary

SN	Element ID	Element Type	Invert Elevation	Ground/Rim (Max) Elevation	Initial Water Elevation	Surcharge Elevation	Ponded Area	Peak Inflow	Max HGL Elevation Attained	Max Surcharge Depth Attained	Min Freeboard Attained	Time of Peak Flooding Occurrence	Total Flooded Volume	Total Time Flooded
			(ft)	(ft)	(ft)	(ft)	(ft²)	(cfs)	(ft)	(ft)	(ft)	(days hh:mm)	(ac-in)	(min)
1	STRUCTURE: (1)	Junction	4627.74	4643.29	4627.74	4643.29	0.00	0.00	4627.74	0.00	15.55	0 00:00	0.00	0.00
2	STRUCTURE: (10)	Junction	4605.22	4616.16	4605.22	4616.16	0.00	0.25	4605.61	0.00	10.55	0 00:00	0.00	0.00
3	STRUCTURE: (11)	Junction	4645.05	4659.17	4645.05	4659.17	0.00	0.00	4645.05	0.00	14.13	0 00:00	0.00	0.00
4	STRUCTURE: (12)	Junction	4644.06	4658.18	4644.06	4658.18	0.00	0.01	4644.31	0.00	13.88	0 00:00	0.00	0.00
5	STRUCTURE: (13)	Junction	4640.80	4654.92	4640.80	4654.92	0.00	0.03	4641.04	0.00	13.88	0 00:00	0.00	0.00
6	STRUCTURE: (14)	Junction	4637.50	4651.61	4637.50	4651.61	0.00	0.05	4637.75	0.00	13.87	0 00:00	0.00	0.00
7	STRUCTURE: (15)	Junction	4633.84	4647.95	4633.84	4647.95	0.00	0.07	4634.09	0.00	13.86	0 00:00	0.00	0.00
8	STRUCTURE: (16)	Junction	4631.25	4645.39	4631.25	4645.39	0.00	0.07	4631.47	0.00	13.92	0 00:00	0.00	0.00
9	STRUCTURE: (17)	Junction	4630.21	4644.28	4630.21	4644.28	0.00	0.10	4630.57	0.00	13.71	0 00:00	0.00	0.00
10	STRUCTURE: (18)	Junction	4629.27	4643.47	4629.27	4643.47	0.00	0.10	4629.46	0.00	14.01	0 00:00	0.00	0.00
11	STRUCTURE: (19)	Junction	4625.00	4640.10	4625.00	4640.10	0.00	0.13	4625.25	0.00	14.86	0 00:00	0.00	0.00
12	STRUCTURE: (2)	Junction	4622.98	4638.58	4622.98	4638.58	0.00	0.01	4623.04	0.00	15.54	0 00:00	0.00	0.00
13	STRUCTURE: (20)	Junction	4620.75	4634.65	4620.75	4634.65	0.00	0.14	4620.90	0.00	13.75	0 00:00	0.00	0.00
14	STRUCTURE: (21)	Junction	4615.52	4629.37	4615.52	4629.37	0.00	0.15	4615.70	0.00	13.67	0 00:00	0.00	0.00
15	STRUCTURE: (22)	Junction	4610.82	4625.51	4610.82	4625.51	0.00	0.16	4611.04	0.00	14.47	0 00:00	0.00	0.00
16	STRUCTURE: (23)	Junction	4609.66	4624.36	4609.66	4624.36	0.00	0.17	4609.89	0.00	14.47	0 00:00	0.00	0.00
17	STRUCTURE: (24)	Junction	4639.60	4653.68	4639.60	4653.68	0.00	0.00	4639.60	0.00	14.08	0 00:00	0.00	0.00
18	STRUCTURE: (25)	Junction	4634.26	4648.54	4634.26	4648.54	0.00	0.01	4634.34	0.00	14.19	0 00:00	0.00	0.00
19	STRUCTURE: (26)	Junction	4628.67	4643.13	4628.67	4643.13	0.00	0.02	4628.77	0.00	14.36	0 00:00	0.00	0.00
20	STRUCTURE: (27)	Junction	4627.48	4641.50	4627.48	4641.50	0.00	0.00	4627.48	0.00	14.02	0 00:00	0.00	0.00
21	STRUCTURE: (28)	Junction	4619.74	4634.34	4619.74	4634.34	0.00	0.01	4619.83	0.00	14.51	0 00:00	0.00	0.00
22	STRUCTURE: (29)	Junction	4613.74	4628.04	4613.74	4628.04	0.00	0.02	4613.85	0.00	14.19	0 00:00	0.00	0.00
23	STRUCTURE: (3)	Junction	4618.11	4633.75	4618.11	4633.75	0.00	0.01	4618.19	0.00	15.56	0 00:00	0.00	0.00
24	STRUCTURE: (30)	Junction	4608.09	4622.11	4608.09	4622.11	0.00	0.19	4608.35	0.00	13.77	0 00:00	0.00	0.00
25	STRUCTURE: (31)	Junction	4606.38	4619.58	4606.38	4619.58	0.00	0.19	4606.61	0.00	12.97	0 00:00	0.00	0.00
26	STRUCTURE: (36)	Junction	4631.77	4643.58	4631.77	4643.58	0.00	0.01	4631.80	0.00	11.78	0 00:00	0.00	0.00
27	STRUCTURE: (37)	Junction	4631.20	4641.77	4631.20	4641.77	0.00	0.02	4631.44	0.00	10.33	0 00:00	0.00	0.00
28	STRUCTURE: (38)	Junction	4630.79	4646.74	4630.79	4646.74	0.00	0.01	4630.82	0.00	15.92	0 00:00	0.00	0.00
29	STRUCTURE: (39)	Junction	4634.41	4649.79	4634.41	4649.79	0.00	0.01	4634.45	0.00	15.34	0 00:00	0.00	0.00
30	STRUCTURE: (4)	Junction	4613.56	4628.92	4613.56	4628.92	0.00	0.02	4613.65	0.00	15.27	0 00:00	0.00	0.00
31	STRUCTURE: (40)	Junction	4638.08	4653.39	4638.08	4653.39	0.00	0.01	4638.11	0.00	15.28	0 00:00	0.00	0.00
32	STRUCTURE: (41)	Junction	4641.36	4656.98	4641.36	4656.98	0.00	0.01	4641.40	0.00	15.58	0 00:00	0.00	0.00
33	STRUCTURE: (42)	Junction	4644.62	4660.69	4644.62	4660.69	0.00	0.01	4644.66	0.00	16.03	0 00:00	0.00	0.00
34	STRUCTURE: (5)	Junction	4609.03	4624.09	4609.03	4624.09	0.00	0.03	4609.10	0.00	14.98	0 00:00	0.00	0.00
35	STRUCTURE: (6)	Junction	4607.23	4618.26	4607.23	4618.26	0.00	0.04	4607.32	0.00	10.94	0 00:00	0.00	0.00
36	STRUCTURE: (7)	Junction	4606.65	4618.27	4606.65	4618.27	0.00	0.04	4606.75	0.00	11.52	0 00:00	0.00	0.00
37	STRUCTURE: (8)	Junction	4606.33	4617.80	4606.33	4617.80	0.00	0.04	4606.43	0.00	11.37	0 00:00	0.00	0.00
38	STRUCTURE: (9)	Junction	4606.00	4617.32	4606.00	4617.32	0.00	0.05	4606.11	0.00	11.20	0 00:00	0.00	0.00
39	Out-1PIPE: (29)	Outfall	4604.68					0.25	4604.89					

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Average Slope	Diameter or Height	Manning's Roughness	Peak Flow	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Peak Flow Depth	Peak Flow Depth/ Total Depth Ratio	Total Time Reported Surcharged	Condition
					(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	(ft)		(min)	
1	SS1	Pipe	STRUCTURE: (1)	STRUCTURE: (2)	312.93	4627.74	4623.04	1.5000	24.000	0.0090	0.00	40.02	0.00	0.00	0.00	0.00	0.00	Calculated
2	SS10	Pipe	STRUCTURE: (16)	STRUCTURE: (17)	59.51	4631.25	4630.28	1.6300	8.000	0.0090	0.07	2.23	0.03	2.90	0.08	0.12	0.00	Calculated
3	SS11	Pipe	STRUCTURE: (18)	STRUCTURE: (19)	180.00	4629.27	4625.10	2.3200	8.000	0.0090	0.10	2.66	0.04	3.65	0.09	0.13	0.00	Calculated
4	SS12	Pipe	STRUCTURE: (19)	STRUCTURE: (20)	297.50	4625.00	4620.79	1.4200	8.000	0.0090	0.13	2.08	0.06	3.33	0.11	0.17	0.00	Calculated
5	SS13	Pipe	STRUCTURE: (20)	STRUCTURE: (21)	289.02	4620.75	4615.59	1.7900	8.000	0.0090	0.14	2.33	0.06	3.68	0.11	0.17	0.00	Calculated
6	SS14	Pipe	STRUCTURE: (21)	STRUCTURE: (22)	296.00	4615.52	4610.92	1.5500	8.000	0.0090	0.15	2.18	0.07	3.57	0.12	0.18	0.00	Calculated
7	SS15	Pipe	STRUCTURE: (22)	STRUCTURE: (23)	79.87	4610.82	4609.76	1.3200	8.000	0.0090	0.16	2.01	0.08	3.45	0.13	0.19	0.00	Calculated
8	SS16	Pipe	STRUCTURE: (23)	STRUCTURE: (30)	247.24	4609.66	4608.19	0.6000	8.000	0.0090	0.17	1.35	0.12	2.62	0.16	0.24	0.00	Calculated
9	SS17	Pipe	STRUCTURE: (30)	STRUCTURE: (31)	94.47	4608.09	4606.48	1.7100	8.000	0.0090	0.19	2.28	0.08	3.97	0.13	0.20	0.00	Calculated
10	SS18	Pipe	STRUCTURE: (31)	STRUCTURE: (10)	237.19	4606.38	4605.42	0.4000	8.000	0.0090	0.19	1.11	0.18	2.39	0.19	0.28	0.00	Calculated
11	SS19	Pipe	STRUCTURE: (24)	STRUCTURE: (25)	262.39	4639.60	4634.34	2.0000	8.000	0.0090	0.00	2.47	0.00	0.00	0.00	0.00	0.00	Calculated
12	SS2	Pipe	STRUCTURE: (2)	STRUCTURE: (3)	321.00	4622.98	4618.17	1.5000	24.000	0.0090	0.00	40.02	0.00	0.96	0.02	0.01	0.00	Calculated
13	SS20	Pipe	STRUCTURE: (26)	STRUCTURE: (19)	261.40	4628.67	4625.20	1.3300	8.000	0.0090	0.02	2.01	0.01	1.87	0.05	0.07	0.00	Calculated
14	SS21	Pipe	STRUCTURE: (25)	STRUCTURE: (26)	276.13	4634.26	4628.74	2.0000	8.000	0.0090	0.01	2.47	0.00	1.80	0.03	0.05	0.00	Calculated
15	SS22	Pipe	STRUCTURE: (27)	STRUCTURE: (28)	382.52	4627.48	4619.83	2.0000	8.000	0.0090	0.00	2.47	0.00	0.00	0.00	0.00	0.00	Calculated
16	SS23	Pipe	STRUCTURE: (28)	STRUCTURE: (29)	296.00	4619.74	4613.82	2.0000	8.000	0.0090	0.01	2.47	0.00	1.60	0.03	0.04	0.00	Calculated
17	SS24	Pipe	STRUCTURE: (29)	STRUCTURE: (30)	277.17	4613.74	4608.20	2.0000	8.000	0.0090	0.02	2.47	0.01	2.03	0.04	0.06	0.00	Calculated
18	SS25	Pipe	STRUCTURE: (8)	STRUCTURE: (9)	76.58	4606.33	4606.02	0.4000	8.000	0.0090	0.04	1.10	0.04	1.54	0.09	0.14	0.00	Calculated
19	SS26	Pipe	STRUCTURE: (6)	STRUCTURE: (7)	142.19	4607.23	4606.66	0.4000	8.000	0.0090	0.04	1.10	0.04	1.51	0.09	0.13	0.00	Calculated
20	SS27	Pipe	STRUCTURE: (4)	STRUCTURE: (5)	321.00	4613.56	4609.07	1.4000	24.000	0.0090	0.02	38.66	0.00	1.66	0.04	0.02	0.00	Calculated
21	SS28	Pipe	STRUCTURE: (36)	STRUCTURE: (37)	91.87	4631.77	4631.40	0.4000	8.000	0.0090	0.01	1.10	0.01	0.84	0.04	0.05	0.00	Calculated
22	SS29	Pipe	STRUCTURE: (17)	STRUCTURE: (18)	45.61	4630.21	4629.37	1.8500	8.000	0.0090	0.10	2.37	0.04	3.39	0.09	0.14	0.00	Calculated
23	SS3	Pipe	STRUCTURE: (3)	STRUCTURE: (4)	321.00	4618.11	4613.62	1.4000	24.000	0.0090	0.01	38.66	0.00	1.41	0.03	0.02	0.00	Calculated
24	SS30	Pipe	STRUCTURE: (37)	STRUCTURE: (17)	172.69	4631.20	4630.51	0.4000	8.000	0.0090	0.02	1.10	0.02	1.17	0.06	0.09	0.00	Calculated
25	SS31	Pipe	STRUCTURE: (12)	STRUCTURE: (13)	177.00	4644.06	4640.87	1.8000	8.000	0.0090	0.01	2.34	0.01	1.83	0.04	0.06	0.00	Calculated
26	SS32	Pipe	STRUCTURE: (13)	STRUCTURE: (14)	179.20	4640.80	4637.57	1.8000	8.000	0.0090	0.03	2.34	0.01	2.35	0.05	0.08	0.00	Calculated
27	SS33	Pipe	STRUCTURE: (15)	STRUCTURE: (16)	136.00	4633.84	4631.39	1.8000	8.000	0.0090	0.07	2.34	0.03	2.95	0.08	0.12	0.00	Calculated
28	SS39	Pipe	STRUCTURE: (38)	STRUCTURE: (17)	115.29	4630.79	4630.21	0.5000	8.000	0.0090	0.01	1.23	0.00	0.90	0.03	0.05	0.00	Calculated
29	SS4	Pipe	STRUCTURE: (5)	STRUCTURE: (6)	321.00	4609.03	4607.25	0.5500	24.000	0.0090	0.03	24.29	0.00	1.35	0.06	0.03	0.00	Calculated
30	SS40	Pipe	STRUCTURE: (39)	STRUCTURE: (15)	90.29	4634.41	4634.05	0.4000	8.000	0.0090	0.01	1.10	0.01	0.83	0.04	0.05	0.00	Calculated
31	SS41	Pipe	STRUCTURE: (40)	STRUCTURE: (14)	91.24	4638.08	4637.71	0.4000	8.000	0.0090	0.01	1.10	0.01	0.84	0.04	0.05	0.00	Calculated
32	SS42	Pipe	STRUCTURE: (41)	STRUCTURE: (13)	86.78	4641.36	4641.00	0.4100	8.000	0.0090	0.01	1.12	0.01	0.85	0.04	0.05	0.00	Calculated
33	SS43	Pipe	STRUCTURE: (42)	STRUCTURE: (12)	86.80	4644.62	4644.27	0.4000	8.000	0.0090	0.01	1.11	0.01	0.84	0.04	0.05	0.00	Calculated
34	SS5	Pipe	STRUCTURE: (7)	STRUCTURE: (8)	76.47	4606.65	4606.34	0.4000	8.000	0.0090	0.04	1.10	0.04	1.51	0.09	0.13	0.00	Calculated
35	SS6	Pipe	STRUCTURE: (9)	STRUCTURE: (10)	189.06	4606.00	4605.25	0.4000	8.000	0.0090	0.05	1.10	0.04	1.57	0.09	0.14	0.00	Calculated
36	SS7	Pipe	STRUCTURE: (10)	Out-1PIPE: (29)	136.60	4605.22	4604.68	0.4000	8.000	0.0090	0.25	1.10	0.23	2.56	0.22	0.32	0.00	Calculated
37	SS8	Pipe	STRUCTURE: (11)	STRUCTURE: (12)	51.08	4645.05	4644.13	1.8000	8.000	0.0090	0.00	2.34	0.00	0.00	0.00	0.00	0.00	Calculated
38	SS9	Pipe	STRUCTURE: (14)	STRUCTURE: (15)	199.39	4637.50	4633.91	1.8000	8.000	0.0090	0.05	2.34	0.02	2.65	0.07	0.10	0.00	Calculated

Junction Input

SN	Element ID	Invert Elevation	Ground/Rim (Max) Elevation	Ground/Rim (Max) Offset	Initial Water Elevation	Initial Water Depth	Surcharge Elevation	Surcharge Depth	Ponded Area	Minimum Pipe Cover
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft²)	(in)
1	STRUCTURE: (1)	4627.74	4643.29	15.55	4627.74	0.00	4643.29	0.00	0.00	0.00
2	STRUCTURE: (10)	4605.22	4616.16	10.93	4605.22	0.00	4616.16	0.00	0.00	0.00
3	STRUCTURE: (11)	4645.05	4659.17	14.13	4645.05	0.00	4659.17	0.00	0.00	0.00
4	STRUCTURE: (12)	4644.06	4658.18	14.12	4644.06	0.00	4658.18	0.00	0.00	0.00
5	STRUCTURE: (13)	4640.80	4654.92	14.12	4640.80	0.00	4654.92	0.00	0.00	0.00
6	STRUCTURE: (14)	4637.50	4651.61	14.11	4637.50	0.00	4651.61	0.00	0.00	0.00
7	STRUCTURE: (15)	4633.84	4647.95	14.11	4633.84	0.00	4647.95	0.00	0.00	0.00
8	STRUCTURE: (16)	4631.25	4645.39	14.13	4631.25	0.00	4645.39	0.00	0.00	0.00
9	STRUCTURE: (17)	4630.21	4644.28	14.06	4630.21	0.00	4644.28	0.00	0.00	0.00
10	STRUCTURE: (18)	4629.27	4643.47	14.20	4629.27	0.00	4643.47	0.00	0.00	0.00
11	STRUCTURE: (19)	4625.00	4640.10	15.10	4625.00	0.00	4640.10	0.00	0.00	0.00
12	STRUCTURE: (2)	4622.98	4638.58	15.60	4622.98	0.00	4638.58	0.00	0.00	0.00
13	STRUCTURE: (20)	4620.75	4634.65	13.90	4620.75	0.00	4634.65	0.00	0.00	0.00
14	STRUCTURE: (21)	4615.52	4629.37	13.84	4615.52	0.00	4629.37	0.00	0.00	0.00
15	STRUCTURE: (22)	4610.82	4625.51	14.69	4610.82	0.00	4625.51	0.00	0.00	0.00
16	STRUCTURE: (23)	4609.66	4624.36	14.69	4609.66	0.00	4624.36	0.00	0.00	0.00
17	STRUCTURE: (24)	4639.60	4653.68	14.08	4639.60	0.00	4653.68	0.00	0.00	0.00
18	STRUCTURE: (25)	4634.26	4648.54	14.27	4634.26	0.00	4648.54	0.00	0.00	0.00
19	STRUCTURE: (26)	4628.67	4643.13	14.46	4628.67	0.00	4643.13	0.00	0.00	0.00
20	STRUCTURE: (27)	4627.48	4641.50	14.02	4627.48	0.00	4641.50	0.00	0.00	0.00
21	STRUCTURE: (28)	4619.74	4634.34	14.60	4619.74	0.00	4634.34	0.00	0.00	0.00
22	STRUCTURE: (29)	4613.74	4628.04	14.30	4613.74	0.00	4628.04	0.00	0.00	0.00
23	STRUCTURE: (3)	4618.11	4633.75	15.64	4618.11	0.00	4633.75	0.00	0.00	0.00
24	STRUCTURE: (30)	4608.09	4622.11	14.02	4608.09	0.00	4622.11	0.00	0.00	0.00
25	STRUCTURE: (31)	4606.38	4619.58	13.20	4606.38	0.00	4619.58	0.00	0.00	0.00
26	STRUCTURE: (36)	4631.77	4643.58	11.82	4631.77	0.00	4643.58	0.00	0.00	0.00
27	STRUCTURE: (37)	4631.20	4641.77	10.57	4631.20	0.00	4641.77	0.00	0.00	0.00
28	STRUCTURE: (38)	4630.79	4646.74	15.95	4630.79	0.00	4646.74	0.00	0.00	0.00
29	STRUCTURE: (39)	4634.41	4649.79	15.38	4634.41	0.00	4649.79	0.00	0.00	0.00
30	STRUCTURE: (4)	4613.56	4628.92	15.36	4613.56	0.00	4628.92	0.00	0.00	0.00
31	STRUCTURE: (40)	4638.08	4653.39	15.32	4638.08	0.00	4653.39	0.00	0.00	0.00
32	STRUCTURE: (41)	4641.36	4656.98	15.62	4641.36	0.00	4656.98	0.00	0.00	0.00
33	STRUCTURE: (42)	4644.62	4660.69	16.07	4644.62	0.00	4660.69	0.00	0.00	0.00
34	STRUCTURE: (5)	4609.03	4624.09	15.06	4609.03	0.00	4624.09	0.00	0.00	0.00
35	STRUCTURE: (6)	4607.23	4618.26	11.03	4607.23	0.00	4618.26	0.00	0.00	0.00
36	STRUCTURE: (7)	4606.65	4618.27	11.63	4606.65	0.00	4618.27	0.00	0.00	0.00
37	STRUCTURE: (8)	4606.33	4617.80	11.47	4606.33	0.00	4617.80	0.00	0.00	0.00
38	STRUCTURE: (9)	4606.00	4617.32	11.31	4606.00	0.00	4617.32	0.00	0.00	0.00

Junction Results

SN Element ID	Peak Inflow	Peak Lateral Inflow	Max HGL Elevation Attained	Max HGL Depth Attained	Max Surge Depth Attained	Min Freeboard Attained	Average HGL Elevation Attained	Average HGL Depth Attained	Time of Max HGL Occurrence	Time of Peak Flooding Occurrence	Total Flooded Volume	Total Time Flooded
	(cfs)	(cfs)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(days hh:mm)	(days hh:mm)	(ac-in)	(min)
1 STRUCTURE: (1)	0.00	0.00	4627.74	0.00	0.00	15.55	4627.74	0.00	0 00:00	0 00:00	0.00	0.00
2 STRUCTURE: (10)	0.25	0.01	4605.61	0.39	0.00	10.55	4605.61	0.39	0 00:49	0 00:00	0.00	0.00
3 STRUCTURE: (11)	0.00	0.00	4645.05	0.00	0.00	14.13	4645.05	0.00	0 00:00	0 00:00	0.00	0.00
4 STRUCTURE: (12)	0.01	0.01	4644.31	0.25	0.00	13.88	4644.31	0.25	0 00:26	0 00:00	0.00	0.00
5 STRUCTURE: (13)	0.03	0.01	4641.04	0.24	0.00	13.88	4641.04	0.24	0 00:27	0 00:00	0.00	0.00
6 STRUCTURE: (14)	0.05	0.01	4637.75	0.25	0.00	13.87	4637.75	0.25	0 00:28	0 00:00	0.00	0.00
7 STRUCTURE: (15)	0.07	0.01	4634.09	0.25	0.00	13.86	4634.09	0.25	0 00:27	0 00:00	0.00	0.00
8 STRUCTURE: (16)	0.07	0.00	4631.47	0.22	0.00	13.92	4631.47	0.22	0 00:33	0 00:00	0.00	0.00
9 STRUCTURE: (17)	0.10	0.01	4630.57	0.36	0.00	13.71	4630.57	0.36	0 00:37	0 00:00	0.00	0.00
10 STRUCTURE: (18)	0.10	0.00	4629.46	0.19	0.00	14.01	4629.46	0.19	0 00:36	0 00:00	0.00	0.00
11 STRUCTURE: (19)	0.13	0.01	4625.25	0.25	0.00	14.86	4625.25	0.25	0 00:41	0 00:00	0.00	0.00
12 STRUCTURE: (2)	0.01	0.01	4623.04	0.06	0.00	15.54	4623.04	0.06	0 00:00	0 00:00	0.00	0.00
13 STRUCTURE: (20)	0.14	0.01	4620.90	0.15	0.00	13.75	4620.90	0.15	0 00:42	0 00:00	0.00	0.00
14 STRUCTURE: (21)	0.15	0.01	4615.70	0.18	0.00	13.67	4615.70	0.18	0 00:42	0 00:00	0.00	0.00
15 STRUCTURE: (22)	0.16	0.01	4611.04	0.22	0.00	14.47	4611.04	0.22	0 00:43	0 00:00	0.00	0.00
16 STRUCTURE: (23)	0.17	0.01	4609.89	0.23	0.00	14.47	4609.89	0.23	0 00:43	0 00:00	0.00	0.00
17 STRUCTURE: (24)	0.00	0.00	4639.60	0.00	0.00	14.08	4639.60	0.00	0 00:00	0 00:00	0.00	0.00
18 STRUCTURE: (25)	0.01	0.01	4634.34	0.08	0.00	14.19	4634.34	0.08	0 00:00	0 00:00	0.00	0.00
19 STRUCTURE: (26)	0.02	0.01	4628.77	0.10	0.00	14.36	4628.77	0.10	0 00:38	0 00:00	0.00	0.00
20 STRUCTURE: (27)	0.00	0.00	4627.48	0.00	0.00	14.02	4627.48	0.00	0 00:00	0 00:00	0.00	0.00
21 STRUCTURE: (28)	0.01	0.01	4619.83	0.09	0.00	14.51	4619.83	0.09	0 00:00	0 00:00	0.00	0.00
22 STRUCTURE: (29)	0.02	0.01	4613.85	0.11	0.00	14.19	4613.85	0.11	0 00:46	0 00:00	0.00	0.00
23 STRUCTURE: (3)	0.01	0.01	4618.19	0.08	0.00	15.56	4618.19	0.08	0 01:11	0 00:00	0.00	0.00
24 STRUCTURE: (30)	0.19	0.01	4608.35	0.26	0.00	13.77	4608.35	0.26	0 00:44	0 00:00	0.00	0.00
25 STRUCTURE: (31)	0.19	0.00	4606.61	0.23	0.00	12.97	4606.61	0.23	0 00:47	0 00:00	0.00	0.00
26 STRUCTURE: (36)	0.01	0.01	4631.80	0.03	0.00	11.78	4631.80	0.03	0 00:00	0 00:00	0.00	0.00
27 STRUCTURE: (37)	0.02	0.01	4631.44	0.24	0.00	10.33	4631.44	0.24	0 00:27	0 00:00	0.00	0.00
28 STRUCTURE: (38)	0.01	0.01	4630.82	0.03	0.00	15.92	4630.82	0.03	0 00:00	0 00:00	0.00	0.00
29 STRUCTURE: (39)	0.01	0.01	4634.45	0.04	0.00	15.34	4634.45	0.04	0 00:00	0 00:00	0.00	0.00
30 STRUCTURE: (4)	0.02	0.01	4613.65	0.09	0.00	15.27	4613.65	0.09	0 01:14	0 00:00	0.00	0.00
31 STRUCTURE: (40)	0.01	0.01	4638.11	0.04	0.00	15.28	4638.11	0.04	0 00:00	0 00:00	0.00	0.00
32 STRUCTURE: (41)	0.01	0.01	4641.40	0.04	0.00	15.58	4641.40	0.04	0 00:00	0 00:00	0.00	0.00
33 STRUCTURE: (42)	0.01	0.01	4644.66	0.04	0.00	16.03	4644.66	0.04	0 00:00	0 00:00	0.00	0.00
34 STRUCTURE: (5)	0.03	0.01	4609.10	0.07	0.00	14.98	4609.10	0.07	0 01:17	0 00:00	0.00	0.00
35 STRUCTURE: (6)	0.04	0.01	4607.32	0.09	0.00	10.94	4607.32	0.09	0 01:19	0 00:00	0.00	0.00
36 STRUCTURE: (7)	0.04	0.00	4606.75	0.10	0.00	11.52	4606.75	0.10	0 01:23	0 00:00	0.00	0.00
37 STRUCTURE: (8)	0.04	0.00	4606.43	0.10	0.00	11.37	4606.43	0.10	0 01:24	0 00:00	0.00	0.00
38 STRUCTURE: (9)	0.05	0.00	4606.11	0.11	0.00	11.20	4606.11	0.11	0 01:24	0 00:00	0.00	0.00

Pipe Input

SN	Element ID	Length	Inlet Invert Elevation	Inlet Invert Offset	Outlet Invert Elevation	Outlet Invert Offset	Total Drop	Average Slope	Pipe Shape	Pipe Diameter or Height	Pipe Width	Manning's Roughness	Entrance Losses	Exit/Bend Losses	Additional Losses	Initial Flow	Flap Gate	No. of Barrels
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(%)		(in)	(in)					(cfs)		
1	SS1	312.93	4627.74	0.00	4623.04	0.06	4.69	1.5000	CIRCULAR	24.000	24.000	0.0090	0.5000	0.5000	0.0000	0.00	No	1
2	SS10	59.51	4631.25	0.00	4630.28	0.07	0.97	1.6300	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
3	SS11	180.00	4629.27	0.00	4625.10	0.09	4.18	2.3200	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
4	SS12	297.50	4625.00	0.00	4620.79	0.04	4.22	1.4200	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
5	SS13	289.02	4620.75	0.00	4615.59	0.07	5.16	1.7900	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
6	SS14	296.00	4615.52	0.00	4610.92	0.10	4.60	1.5500	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
7	SS15	79.87	4610.82	0.00	4609.76	0.10	1.06	1.3200	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
8	SS16	247.24	4609.66	0.00	4608.19	0.10	1.47	0.6000	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
9	SS17	94.47	4608.09	0.00	4606.48	0.10	1.61	1.7100	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
10	SS18	237.19	4606.38	0.00	4605.42	0.20	0.96	0.4000	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
11	SS19	262.39	4639.60	0.00	4634.34	0.08	5.26	2.0000	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
12	SS2	321.00	4622.98	0.00	4618.17	0.06	4.82	1.5000	CIRCULAR	24.000	24.000	0.0090	0.5000	0.5000	0.0000	0.00	No	1
13	SS20	261.40	4628.67	0.00	4625.20	0.20	3.47	1.3300	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
14	SS21	276.13	4634.26	0.00	4628.74	0.07	5.52	2.0000	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
15	SS22	382.52	4627.48	0.00	4619.83	0.08	7.65	2.0000	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
16	SS23	296.00	4619.74	0.00	4613.82	0.08	5.92	2.0000	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
17	SS24	277.17	4613.74	0.00	4608.20	0.11	5.54	2.0000	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
18	SS25	76.58	4606.33	0.00	4606.02	0.02	0.31	0.4000	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
19	SS26	142.19	4607.23	0.00	4606.66	0.02	0.57	0.4000	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
20	SS27	321.00	4613.56	0.00	4609.07	0.04	4.49	1.4000	CIRCULAR	24.000	24.000	0.0090	0.5000	0.5000	0.0000	0.00	No	1
21	SS28	91.87	4631.77	0.00	4631.40	0.20	0.37	0.4000	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
22	SS29	45.61	4630.21	0.00	4629.37	0.10	0.84	1.8500	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
23	SS3	321.00	4618.11	0.00	4613.62	0.06	4.49	1.4000	CIRCULAR	24.000	24.000	0.0090	0.5000	0.5000	0.0000	0.00	No	1
24	SS30	172.69	4631.20	0.00	4630.51	0.30	0.69	0.4000	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
25	SS31	177.00	4644.06	0.00	4640.87	0.07	3.19	1.8000	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
26	SS32	179.20	4640.80	0.00	4637.57	0.07	3.23	1.8000	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
27	SS33	136.00	4633.84	0.00	4631.39	0.14	2.45	1.8000	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
28	SS39	115.29	4630.79	0.00	4630.21	0.00	0.58	0.5000	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
29	SS4	321.00	4609.03	0.00	4607.25	0.02	1.77	0.5500	CIRCULAR	24.000	24.000	0.0090	0.5000	0.5000	0.0000	0.00	No	1
30	SS40	90.29	4634.41	0.00	4634.05	0.21	0.36	0.4000	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
31	SS41	91.24	4638.08	0.00	4637.71	0.21	0.36	0.4000	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
32	SS42	86.78	4641.36	0.00	4641.00	0.20	0.36	0.4100	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
33	SS43	86.80	4644.62	0.00	4644.27	0.21	0.35	0.4000	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
34	SS5	76.47	4606.65	0.00	4606.34	0.02	0.31	0.4000	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
35	SS6	189.06	4606.00	0.00	4605.25	0.02	0.76	0.4000	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
36	SS7	136.60	4605.22	0.00	4604.68	0.00	0.55	0.4000	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
37	SS8	51.08	4645.05	0.00	4644.13	0.07	0.92	1.8000	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1
38	SS9	199.39	4637.50	0.00	4633.91	0.07	3.59	1.8000	CIRCULAR	8.040	8.040	0.0090	0.5000	0.5000	0.0000	0.00	No	1

Pipe Results

SN	Element ID	Peak Flow	Time of Peak Flow Occurrence	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Travel Time	Peak Flow Depth	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged	Froude Number	Reported Condition
		(cfs)	(days hh:mm)	(cfs)		(ft/sec)	(min)	(ft)		(min)		
1	SS1	0.00	0 00:00	40.02	0.00	0.00		0.00	0.00	0.00		Calculated
2	SS10	0.07	0 00:34	2.23	0.03	2.90	0.34	0.08	0.12	0.00		Calculated
3	SS11	0.10	0 00:37	2.66	0.04	3.65	0.82	0.09	0.13	0.00		Calculated
4	SS12	0.13	0 00:42	2.08	0.06	3.33	1.49	0.11	0.17	0.00		Calculated
5	SS13	0.14	0 00:42	2.33	0.06	3.68	1.31	0.11	0.17	0.00		Calculated
6	SS14	0.15	0 00:43	2.18	0.07	3.57	1.38	0.12	0.18	0.00		Calculated
7	SS15	0.16	0 00:43	2.01	0.08	3.45	0.39	0.13	0.19	0.00		Calculated
8	SS16	0.17	0 00:45	1.35	0.12	2.62	1.57	0.16	0.24	0.00		Calculated
9	SS17	0.19	0 00:48	2.28	0.08	3.97	0.40	0.13	0.20	0.00		Calculated
10	SS18	0.19	0 00:50	1.11	0.18	2.39	1.65	0.19	0.28	0.00		Calculated
11	SS19	0.00	0 00:00	2.47	0.00	0.00		0.00	0.00	0.00		Calculated
12	SS2	0.00	0 01:11	40.02	0.00	0.96	5.57	0.02	0.01	0.00		Calculated
13	SS20	0.02	0 00:41	2.01	0.01	1.87	2.33	0.05	0.07	0.00		Calculated
14	SS21	0.01	0 00:39	2.47	0.00	1.80	2.56	0.03	0.05	0.00		Calculated
15	SS22	0.00	0 00:00	2.47	0.00	0.00		0.00	0.00	0.00		Calculated
16	SS23	0.01	0 00:46	2.47	0.00	1.60	3.08	0.03	0.04	0.00		Calculated
17	SS24	0.02	0 00:48	2.47	0.01	2.03	2.28	0.04	0.06	0.00		Calculated
18	SS25	0.04	0 01:25	1.10	0.04	1.54	0.83	0.09	0.14	0.00		Calculated
19	SS26	0.04	0 01:23	1.10	0.04	1.51	1.57	0.09	0.13	0.00		Calculated
20	SS27	0.02	0 01:17	38.66	0.00	1.66	3.22	0.04	0.02	0.00		Calculated
21	SS28	0.01	0 00:28	1.10	0.01	0.84	1.82	0.04	0.05	0.00		Calculated
22	SS29	0.10	0 00:36	2.37	0.04	3.39	0.22	0.09	0.14	0.00		Calculated
23	SS3	0.01	0 01:14	38.66	0.00	1.41	3.79	0.03	0.02	0.00		Calculated
24	SS30	0.02	0 00:38	1.10	0.02	1.17	2.46	0.06	0.09	0.00		Calculated
25	SS31	0.01	0 00:28	2.34	0.01	1.83	1.61	0.04	0.06	0.00		Calculated
26	SS32	0.03	0 00:30	2.34	0.01	2.35	1.27	0.05	0.08	0.00		Calculated
27	SS33	0.07	0 00:33	2.34	0.03	2.95	0.77	0.08	0.12	0.00		Calculated
28	SS39	0.01	0 00:33	1.23	0.00	0.90	2.14	0.03	0.05	0.00		Calculated
29	SS4	0.03	0 01:19	24.29	0.00	1.35	3.96	0.06	0.03	0.00		Calculated
30	SS40	0.01	0 00:27	1.10	0.01	0.83	1.81	0.04	0.05	0.00		Calculated
31	SS41	0.01	0 00:29	1.10	0.01	0.84	1.81	0.04	0.05	0.00		Calculated
32	SS42	0.01	0 00:27	1.12	0.01	0.85	1.70	0.04	0.05	0.00		Calculated
33	SS43	0.01	0 00:27	1.11	0.01	0.84	1.72	0.04	0.05	0.00		Calculated
34	SS5	0.04	0 01:24	1.10	0.04	1.51	0.84	0.09	0.13	0.00		Calculated
35	SS6	0.05	0 01:26	1.10	0.04	1.57	2.01	0.09	0.14	0.00		Calculated
36	SS7	0.25	0 01:27	1.10	0.23	2.56	0.89	0.22	0.32	0.00		Calculated
37	SS8	0.00	0 00:00	2.34	0.00	0.00		0.00	0.00	0.00		Calculated
38	SS9	0.05	0 00:34	2.34	0.02	2.65	1.25	0.07	0.10	0.00		Calculated