



AGENDA
LEBANON CITY COUNCIL
WORK SESSION
WEDNESDAY, MAY 9, 2018
6:00PM – 8:00PM
COUNCIL CHAMBERS
CITY HALL, LEBANON

1. WORK SESSION:

- **PRESENTATION OF CAPACITY, MANAGEMENT, OPERATIONS, & MAINTENANCE (CMOM) SEWER SYSTEM MODEL FINDINGS; DISCUSSION OF NEXT STEPS**

Any person with a disability who wishes to attend this public meeting and needs additional accommodations, please contact the ADA coordinator at City Hall by calling 448-4220 at least 72 hours in advance so that the City can make any necessary arrangements.

**LEBANON CITY COUNCIL
WORK SESSION
MAY 9, 2018**

Presentation of Capacity, Management, Operations, & Maintenance (CMOM) Sewer System Model Findings; Discussion of Next Steps

CMOM

At a work session on October 25, 2017, the City Council was presented with findings relative to available residual capacity in the sewer interceptor system that carries wastewater from Lebanon to the Wastewater Treatment Plant. Based on those findings, on January 3, 2018, the City Council enacted a temporary limitation on sewer extensions to flows of up to 13,600 gallons per day.

Part of the presentation in October involved a discussion about our Capacity, Management, Operations, & Maintenance (CMOM) sewer system modeling and its applicability to fully understanding our sewer system (pipe sizes, capacities, locations, conditions, etc.)

Weston & Sampson is the engineering firm that we have utilized for the CMOM project. Chris Perkins of Weston & Sampson will be present to review the findings of the modeling project and discuss potential next steps for improving capacity within the interceptor.

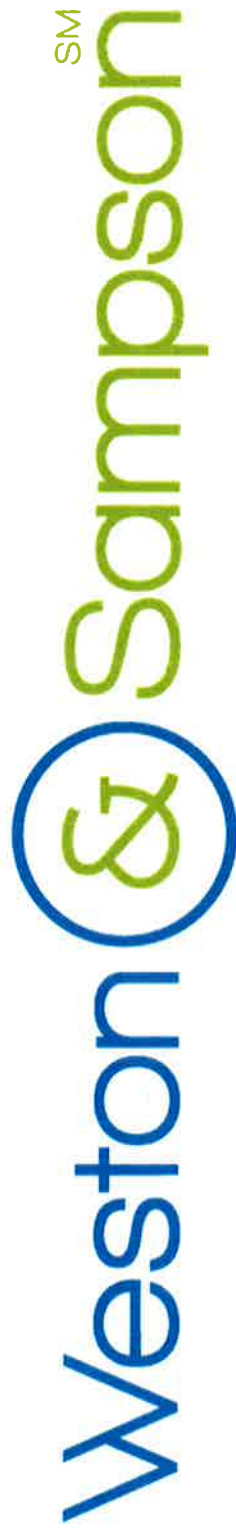
URBAN SERVICES DISTRICT

During discussions about capacity, and the capabilities of our current wastewater treatment plant, the creation of an Urban Services District was broached. Planning Director David Brooks has provided some very draft language (as a potential amendment to City Code Chapter 181) and a draft proposed district outline for your review. Should the Council decide that an Urban Services District is desirable, more work will need to be completed before adoption can take place.

Included in this Section:

1. Weston & Sampson PowerPoint Presentation: Sewer System Model Findings and Next Steps
2. Draft Language for Potential Future Amendment to Chapter 181 to establish an Urban Services District
3. Draft Map of Potential Future Urban Services District
4. Excerpt of Office of Strategic Initiatives Publication *Innovative Land Use Planning Techniques: A Handbook for Sustainable Development*

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transform your environment

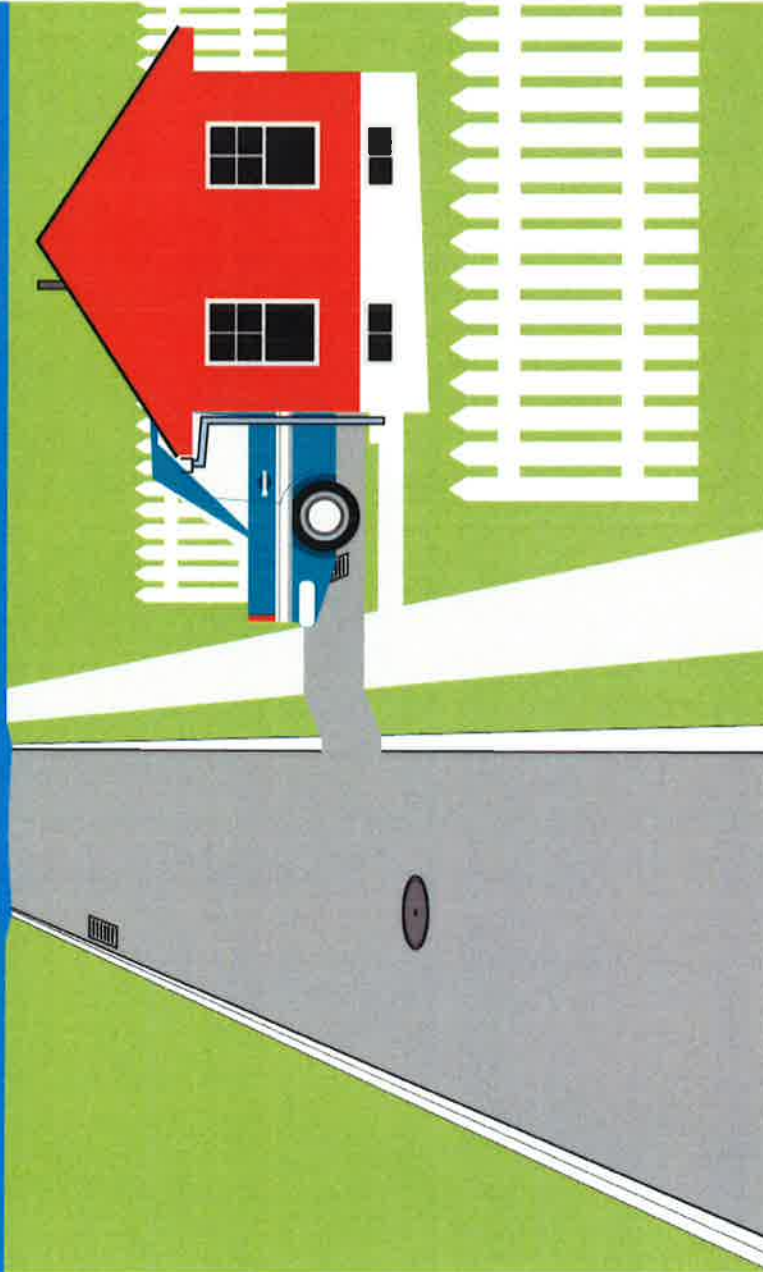
Sewer System Model

Findings and Next Steps

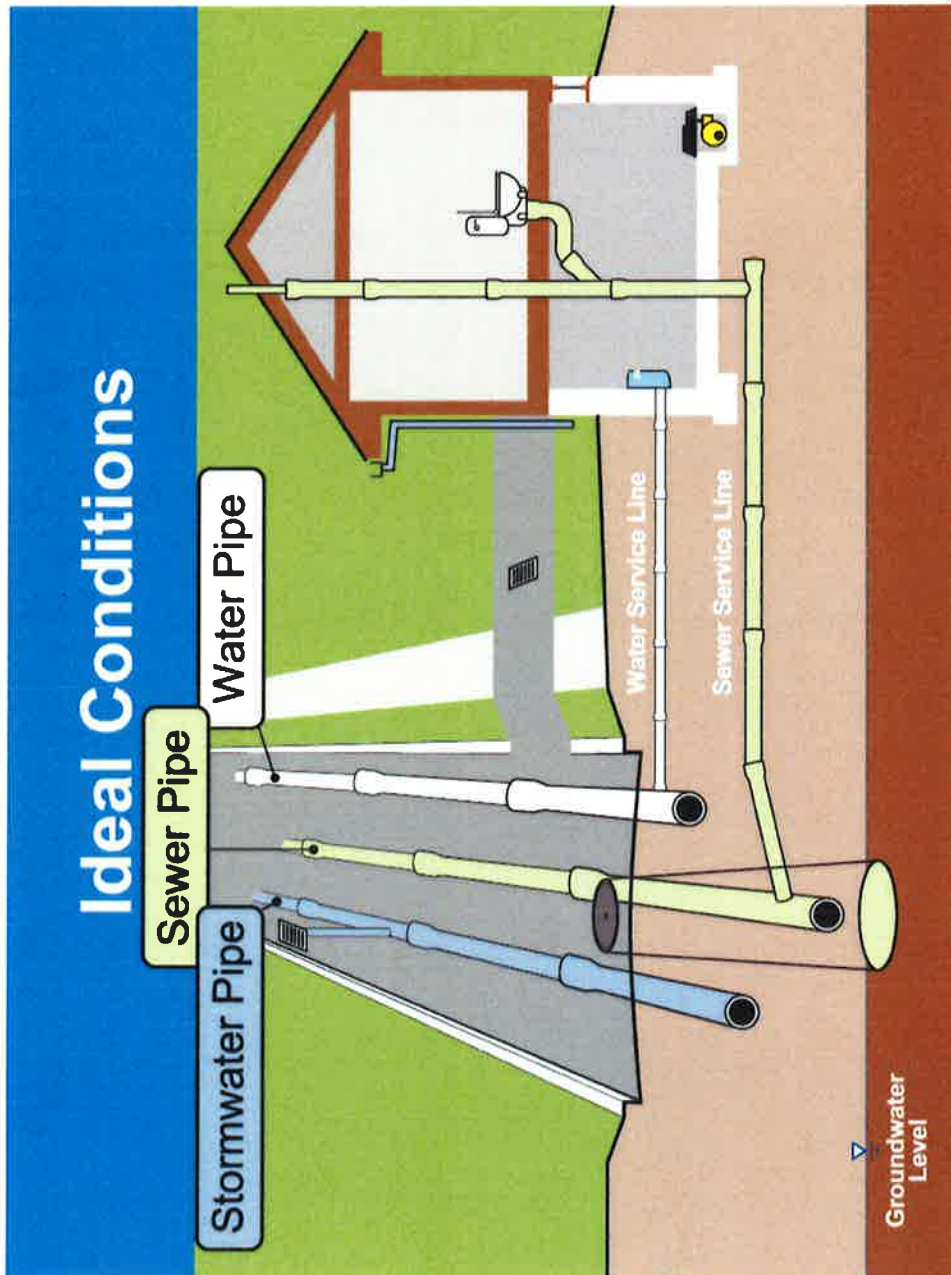
Definitions

- Base Sanitary: Wastewater generated by users directed to the sewer system
- Infiltration: Groundwater entry into sewer system via pipe and manhole defects
- Inflow: Surface runoff entry into sewer system via storm system, roof leaders, sump pumps, etc.
- I/I: Infiltration and Inflow
- mgd: million gallons per day
- gpd: gallons per day

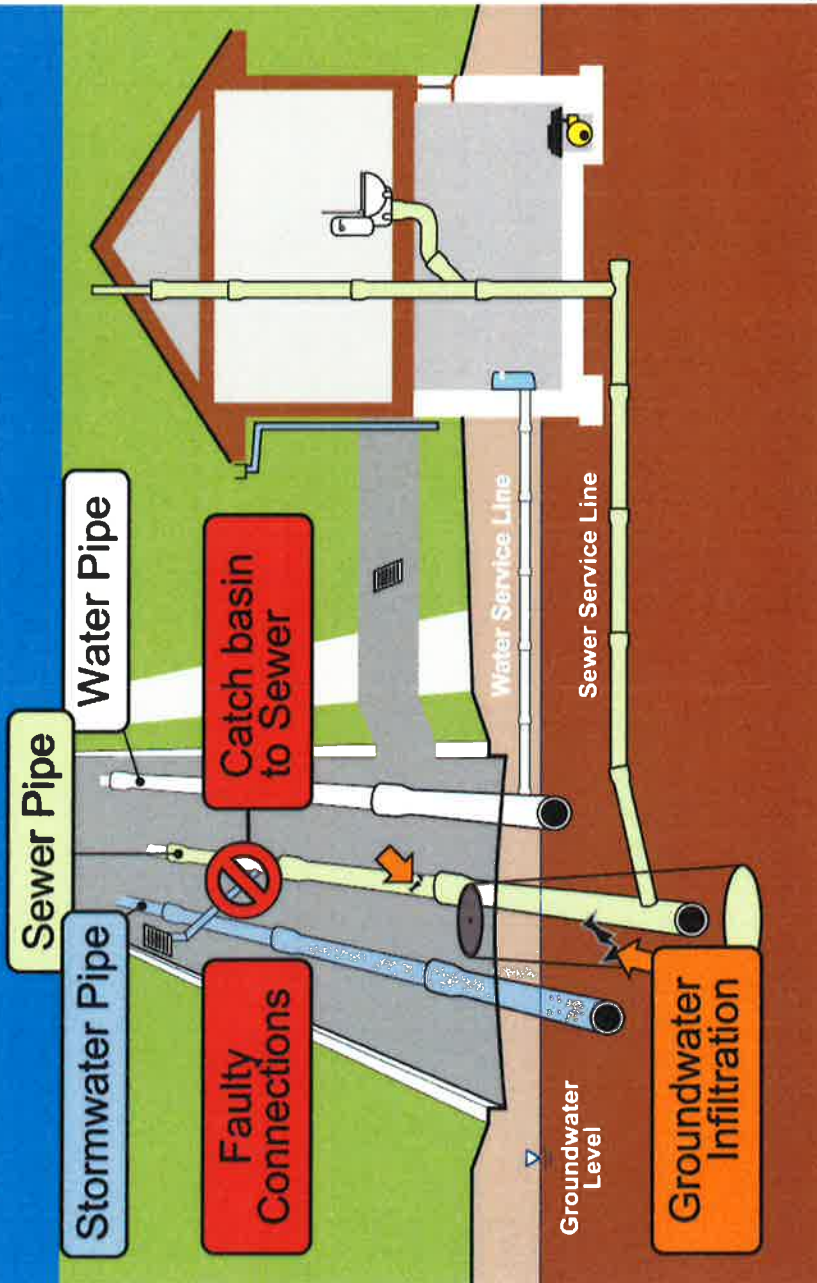
Ideal Conditions



Weston & Sampson

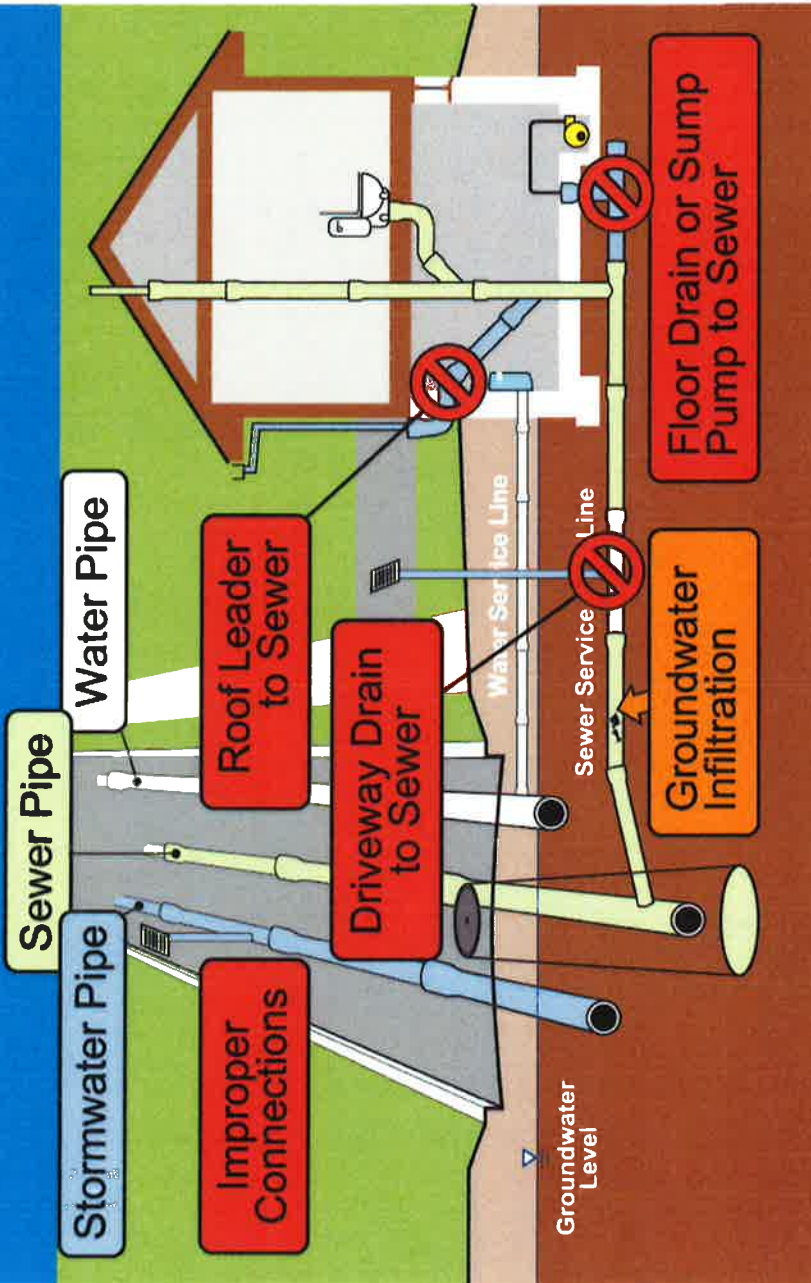


Public Infiltration / Inflow Sources

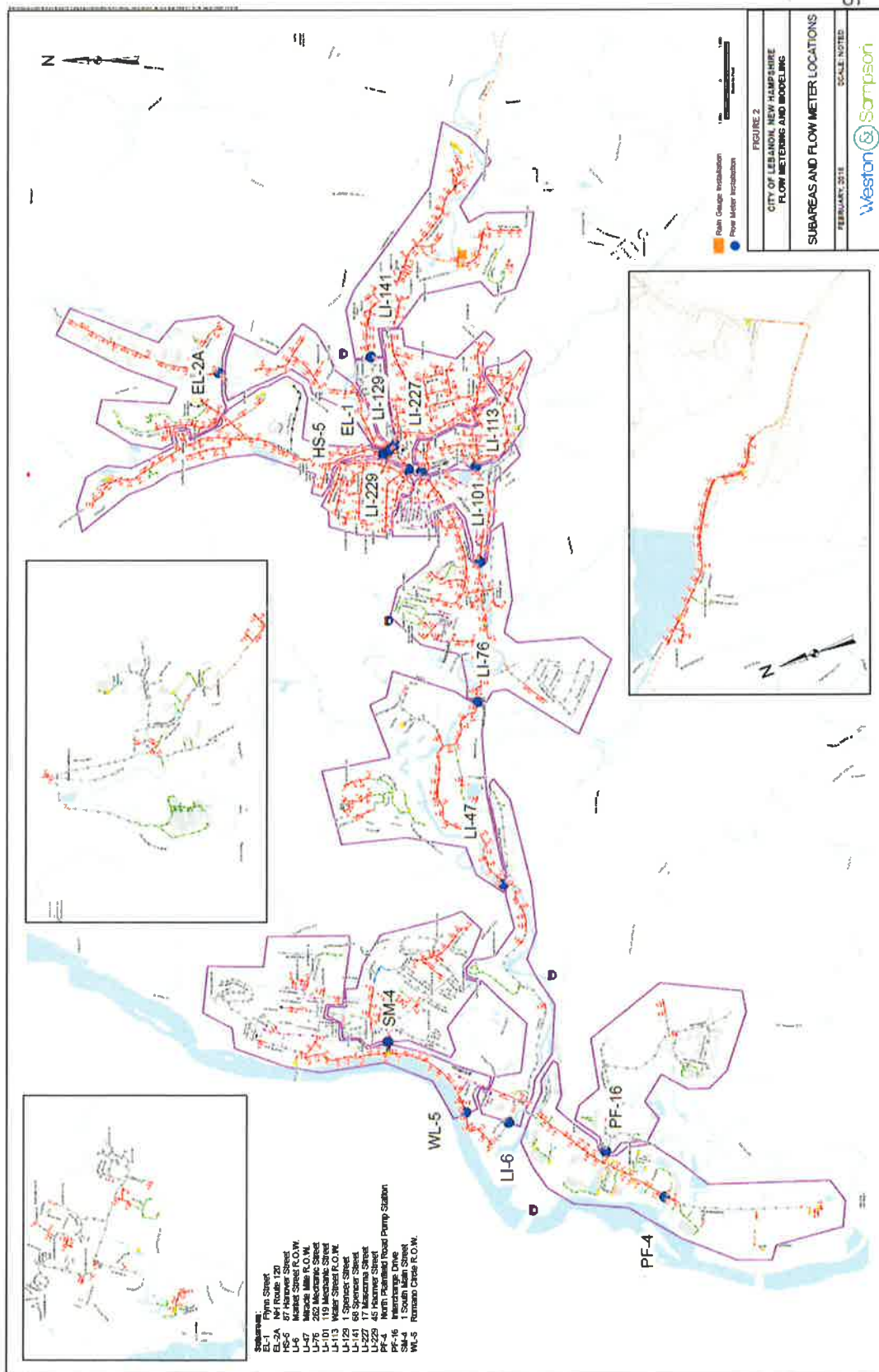


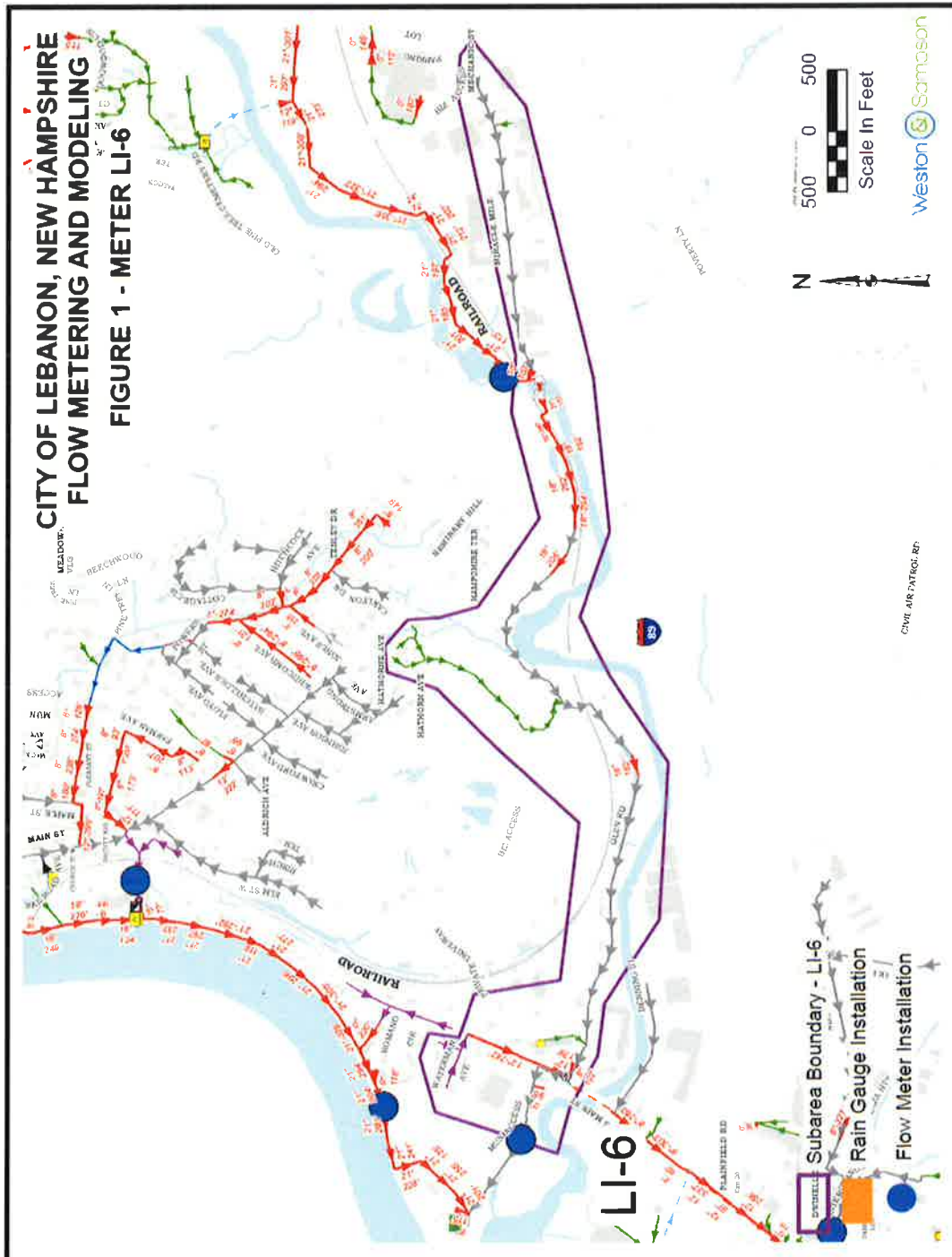
Weston & Sampson

Private Infiltration/Inflow Sources



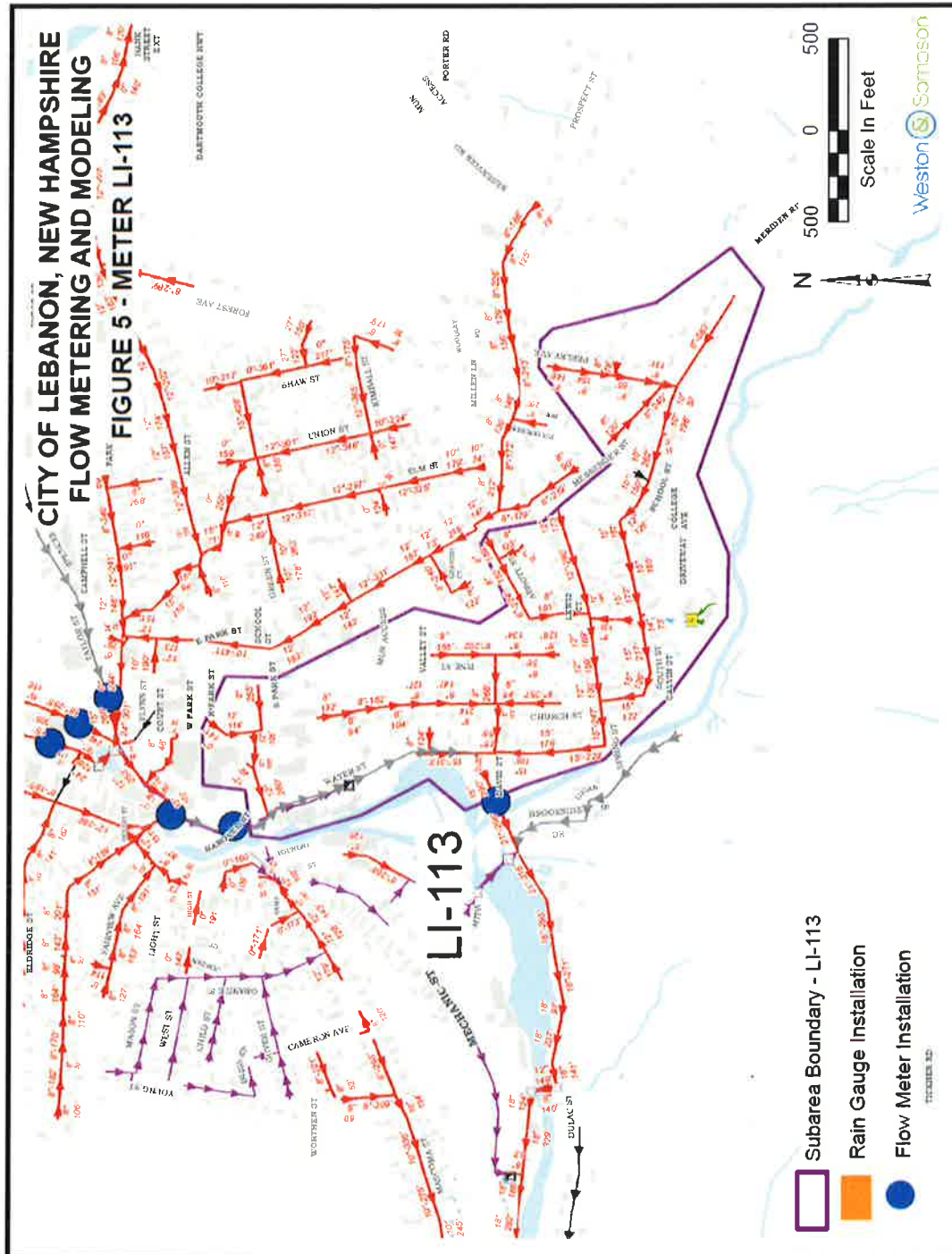
Weston & Sampson





Observed Conditions – Statistical Analysis

- Performed a statistical analysis of meter data for the 16 metered areas
- Compared flow data to maximum threshold (80% pipe capacity)
- 9 areas never exceeded threshold
- 6 areas had flows below threshold 99.85% of the metering program (i.e. above threshold less than 0.2% of the metering program)
- 1 area exceeded threshold for half of the metering program (15-inch pipe at LI-113)



What We Observed – July 1, 2017

- Brief Periods of Peak Intensity
 - Total Precipitation ~3.5 inches
 - Several hours of > 1 inch peak intensity precipitation
 - Correspond to 10 year events
 - System surcharging
 - CSO-23 at Mechanic St., 346,000 gallon overflow (LI-101)
 - CSO-22 at Water St., 1,300 gallon overflow (LI-141)

Meter	Maximum Flow (mgd)	Maximum Depth (ft)	Surcharge (ft)
HS-5	0.41	0.34	
LI-141	2.22	0.68	
EL-2A	0.54	0.40	
LI-229	0.83	0.07	
EL-1	0.55	0.43	
LI-129	2.17	2.38	1.13
LI-227	4.76	0.74	
LI-113	4.09	9.83	8.58
LI-101	5.39	7.08	5.58
LI-76	5.25	3.03	1.28
LI-47	4.96	2.48	0.73
LI-6	5.61	3.26	1.76
PF-4	0.71	0.78	
PF-16	0.50	0.38	
WL-5	2.56	2.40	0.65
SM-4	0.47	0.29	

What We Learned

Base Sanitary:
1.07 mgd

Infiltration:
1.59 mgd

Inflow:
3.29 mgd

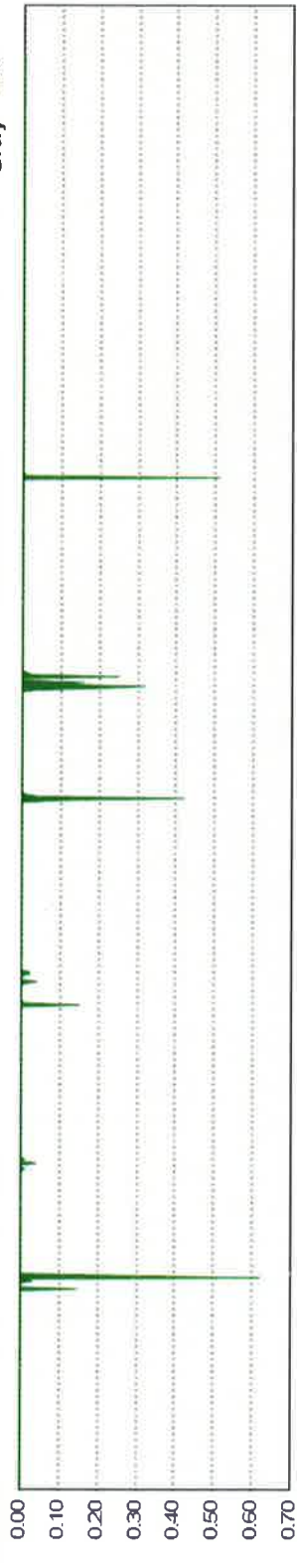
Note: Green shaded cell represents an area separated since completion of metering.
Blue shaded cells represent future separation project areas.

Meter	Base Sanitary, gpd	Infiltration, gpd	Inflow, gpd
HS-5	44,591	38,909	45,500
LI-141	149,084	59,316	215,600
EL-2A	91,552	42,148	107,700
LI-229	24,989	73,011	79,700
EL-1	41,449	8,017	86,200
LI-129	13,872	162,528	178,900
LI-227	50,063	152,837	373,200
LI-113	71,585	97,715	149,300
LI-101	118,622	189,098	763,300
LI-76	90,140	178,595	336,000
LI-47	72,576	37,024	339,500
LI-6	94,677	263,723	260,900
PF-4	68,547	56,353	69,163
PF-16	37,626	81,174	86,400
WL-5	41,578	29,922	171,900
SM-4	61,563	121,237	33,900
TOTAL	1,072,514	1,591,607	3,287,163

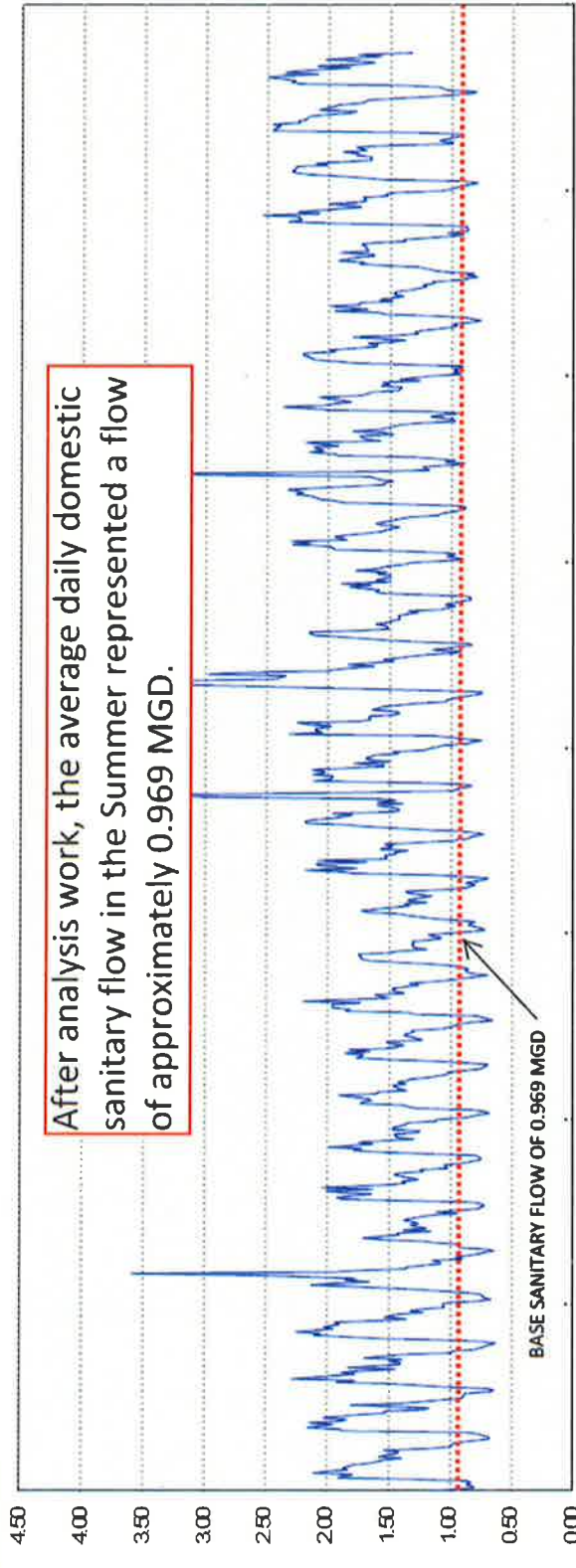
Period Covered: 08/01/2017 - 09/01/2017 Every 1 Hour

Printed on: 10/10/2017

Rain (in)



Flow (mgd)

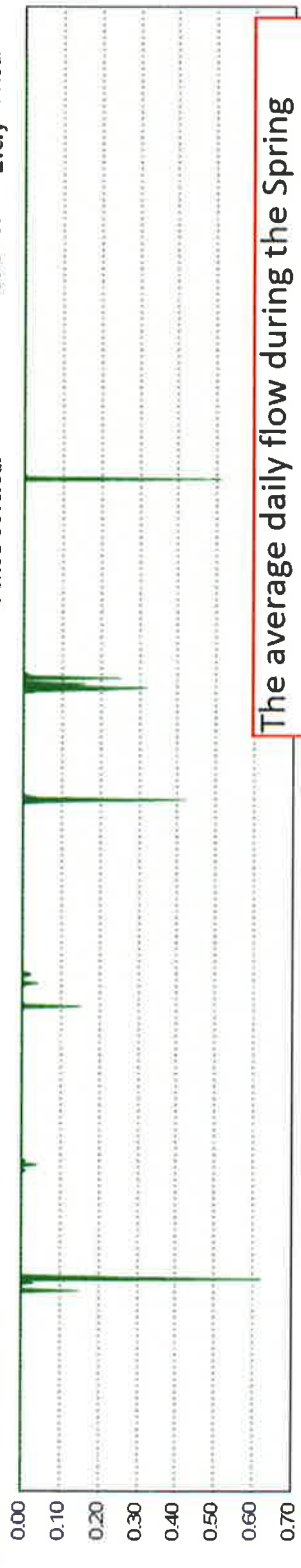


8/1/17 0:00 8/5/17 0:00 8/9/17 0:00 8/13/17 0:00 8/17/17 0:00 8/21/17 0:00 8/25/17 0:00 8/29/17 0:00 9/1/17 0:00

Period Covered: 08/01/2017 - 09/01/2017 Every 1 Hour

Printed on: 10/10/2017

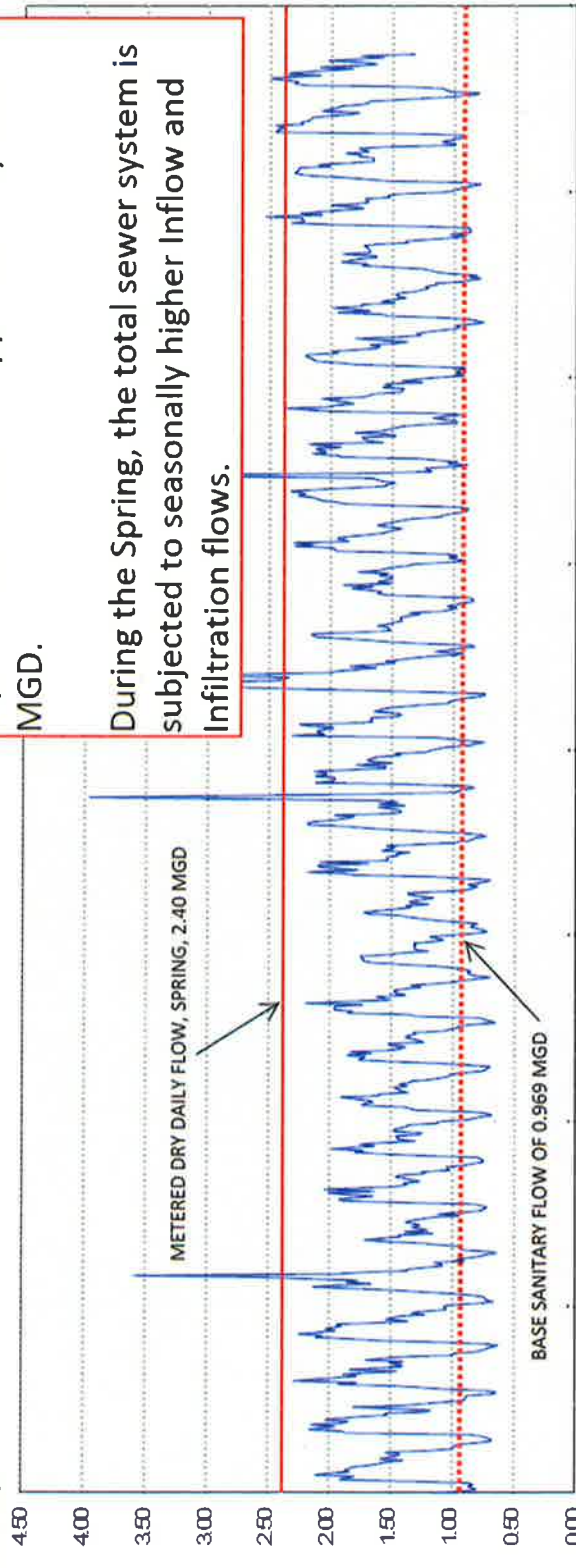
Rain (in)

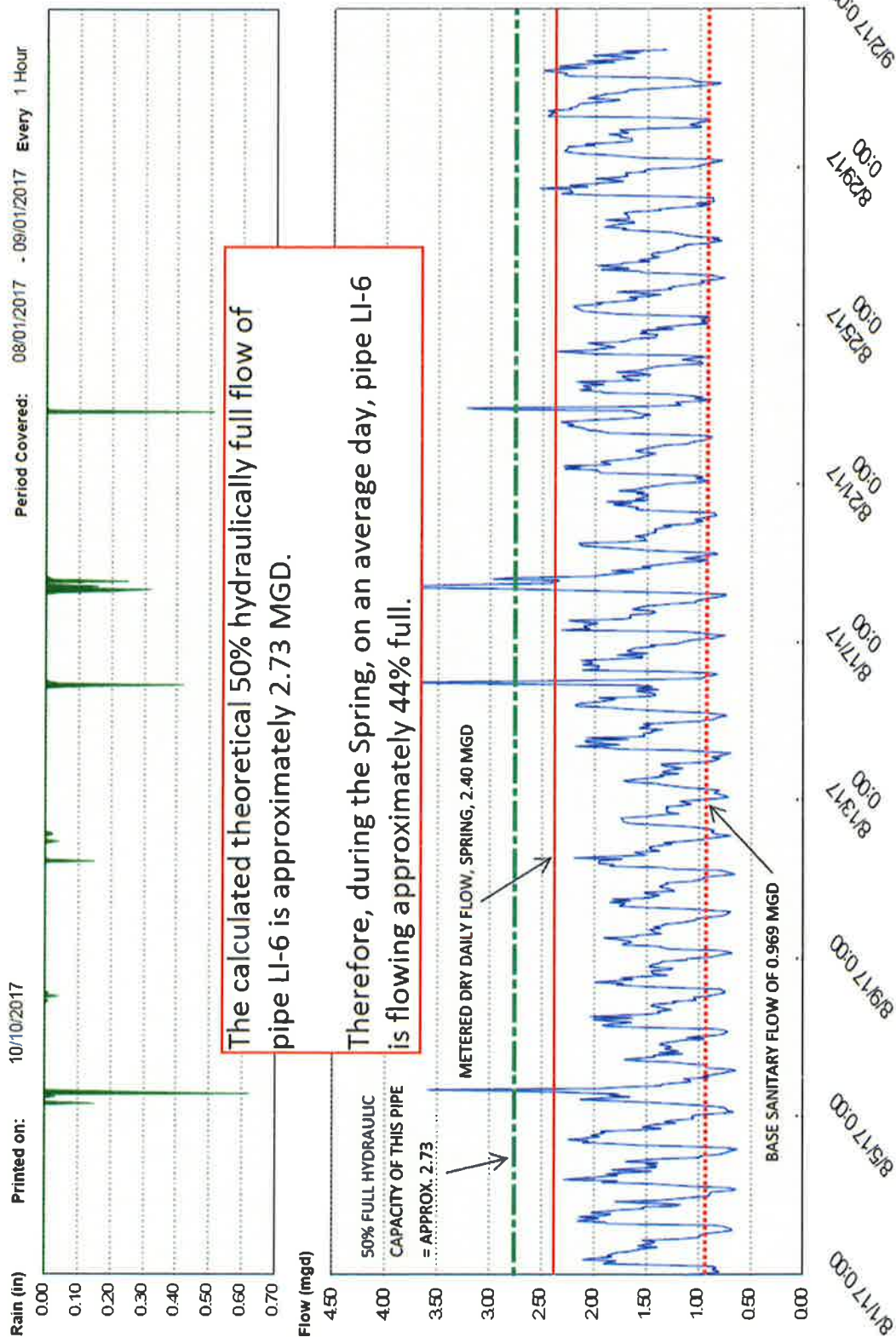


The average daily flow during the Spring represented a flow of approximately 2.40 MGD.

During the Spring, the total sewer system is subjected to seasonally higher Inflow and Infiltration flows.

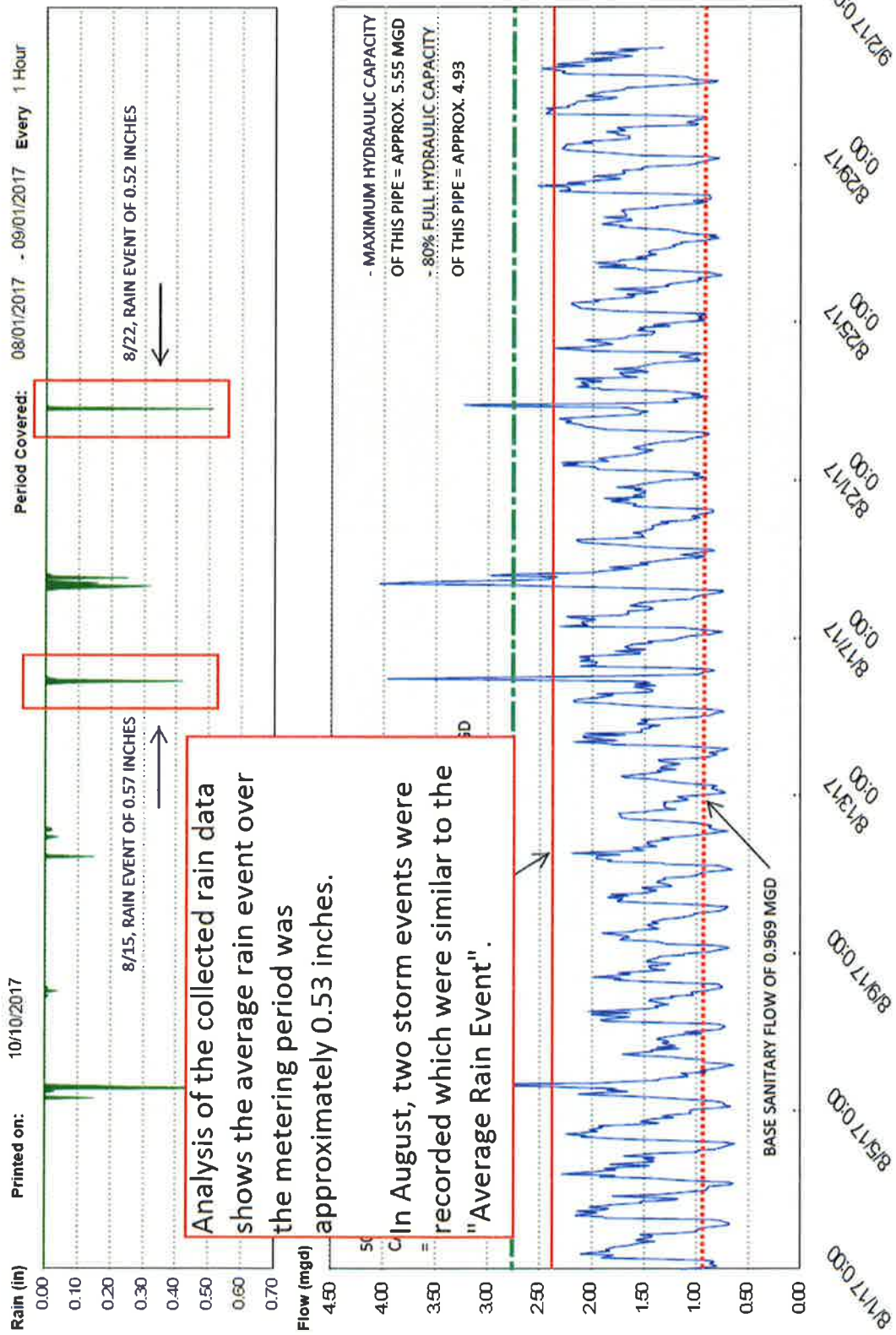
Flow (mgd)

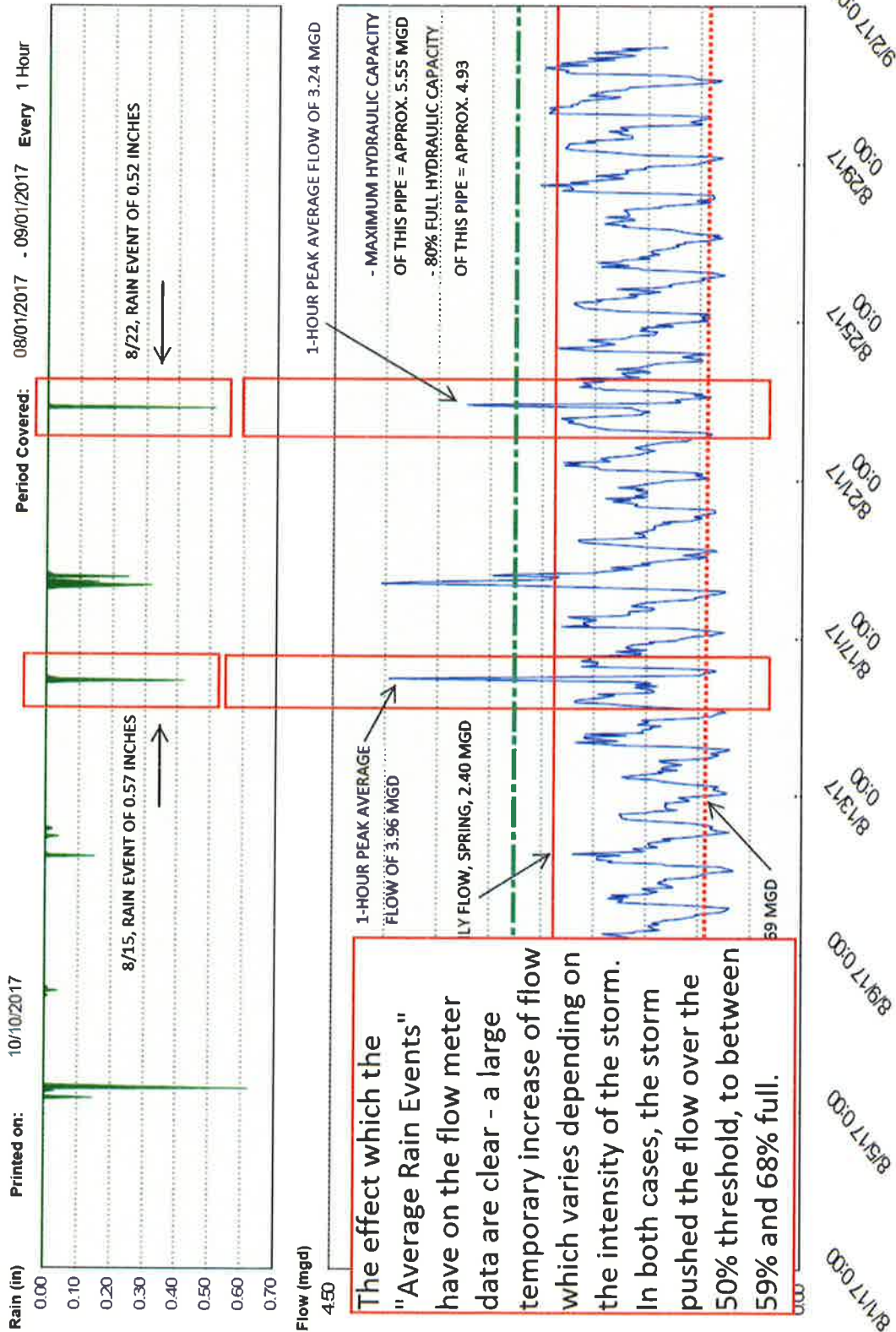




Rain (in)







Next Steps:

- Continue with CSO separation program

CSO-11 Phase 1 Contract
LI-141

Now complete, was ongoing during 2017
metering

CSO-11 Phase 2 Contract
LI-101

Complete in late 2019

CSO-12 Contract

LI-76 currently in design phase
Complete in late 2019

Note: Green shaded cell represents an area separated since
completion of metering.
Blue shaded cells represent future separation project areas.

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SM-4	61,563	121,237	33,900
TOTAL	1,072,514	1,591,607	3,287,163

Next Steps

- Additional Modeling:
 - Add Approved/Planned Developments, Re-Run Detailed Peak Sanitary with Infiltration
 - Model Post- CSO-11 Contract conditions and associated I/I reduction from those areas
 - Use this information to determine timing of Sewer Rehab Project
 - Anticipate this model to be completed in August 2018

- Report results to City Council, fall 2018

Meter	Base Sanitary, gpd	Infiltration, gpd	Inflow, gpd
HS-5	44,591	38,909	45,500
LI-141	149,084	59,316	215,600
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Next Steps

- Consider a Sewer Rehab Project – First Priority Target Areas:

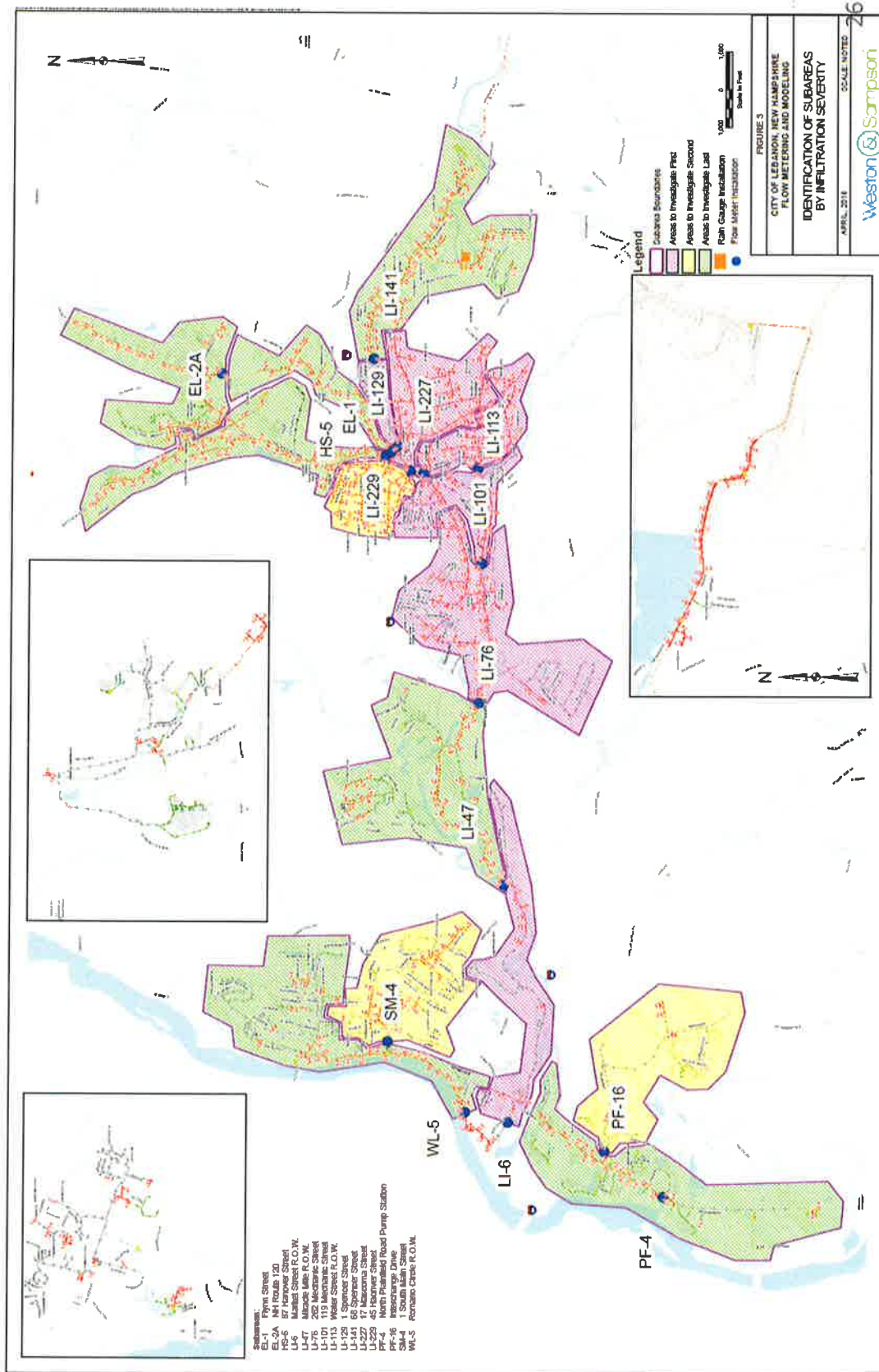
LI-6
LI-76
LI-101
LI-113
LI-227
LI-129

- These areas total approximately 1.04 mgd of the metered 1.59 mgd infiltration

- Second Priority Target Areas:

LI-229
PF-16
SM-4

Meter	Base Sanitary, gpd	Infiltration, gpd	Inflow, gpd
HS-5	44,591	38,909	45,500
LI-141	149,084	59,316	215,600
EL-2A	91,552	42,148	107,700
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thank you
westonandsampson.com

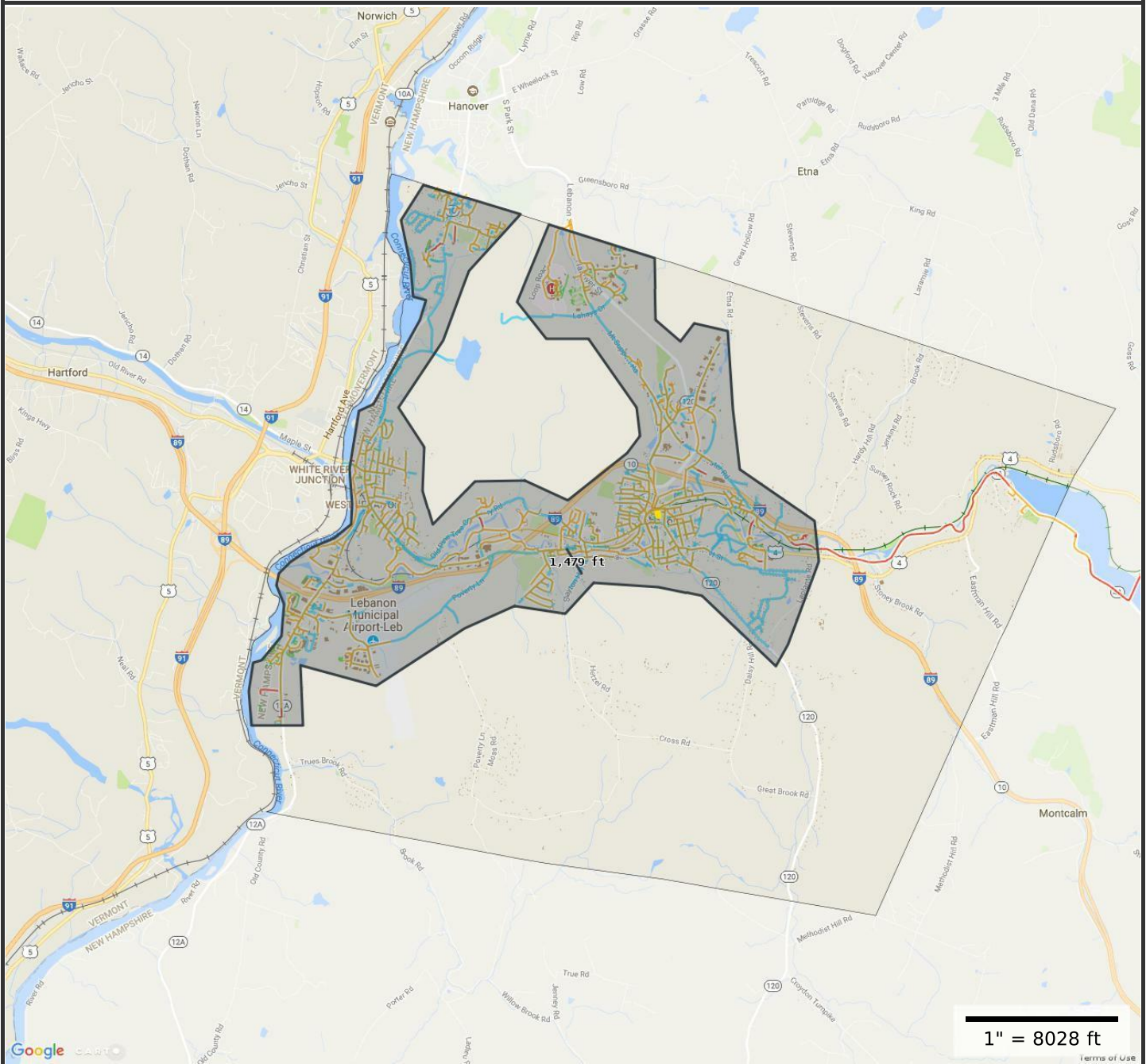


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**DRAFT POTENTIAL AMENDMENT TO
CITY CODE CHAPTER 181
WATER AND SEWER MAIN EXTENSIONS**

§181-7 Urban Service District

- A.** Pursuant to the authority set forth in RSA 674:16 and RSA 674:21, the City of Lebanon hereby establishes an Urban Service District for the municipality that defines a service area within which the municipality can meet its water and sewer service needs and beyond which public water and sewer services will not be extended until infill has taken place, consistent with policies of the master plan and the capital improvement program. The purpose of this District shall be to permit the City to reduce capital and operating costs of water and sewer systems by focusing development into areas already served by existing infrastructure, and to preserve rural character by not facilitating dense development in outlying areas.
- B.** The area where future water and sewer extensions and connections may be allowed pursuant to §181-5 or §181-6 above, shall only occur within the delineated Urban Service District as shown on the map attached hereto and made a part of this Chapter, as approved by the Lebanon City Council on *[date]*.
- C.** The City Council and City Administration shall review the location of the Urban Service District boundary at least every five (5) years with respect to development that has occurred and/or water and sewer infrastructure changes or improvements that have been made, in order to ensure that the purposes of the District as set forth in §181-7.A above continue to be achieved.

**Property Information**

Property ID 91-246
Location 51 N PARK ST
Owner CITY OF LEBANON



**MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT**

City of Lebanon, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Parcels updated 7/1/2015
Properties updated 09/20/2017

1.8 Urban Growth Boundary and Urban Service District

BACKGROUND AND PURPOSE

Urban growth boundaries and urban service districts are planning tools that promote more efficient, orderly, and compact development. For communities adopting them, they are two components of a municipal growth management program designed to uphold community character, protect water and other natural resources, promote efficient development and use of public infrastructure, stimulate community and economic development, and impart long term, comprehensive thinking about the community's future.

RELATED TOOLS:

- Infill Development
- Density Transfer Credit
- Village Plan Alternative

FIGURE 1.8.1 Urban Growth Boundaries



Urban Growth Boundary for Portland, Oregon (on-line resources at www.portlandonline.com/planning).



Urban Growth Boundary in Washington State illustrates land uses and densities (from University of Washington's Evans School of Public Affairs at <http://depts.washington.edu/visions>).

An urban growth boundary is the line on a map showing the demarcation between land that has or may receive concentrated development (urban, suburban) and land that has or may receive less development (rural, scattered). On one side of the boundary line are predominantly low-density land uses, such as farms, timberland, large residential lots, and natural or protected lands. On the other side are more intensive land uses and densely developed lands, such as commercial and industrial uses, multi family and small lot residential, schools, government facilities, and transit services. An urban growth boundary provides a clear picture of what lands will be

developed for a given period of time as specified by a growth management plan. It could be used with a transfer of density program to ensure that property owners receive fair compensation for their land.

An urban service district is an area in which urban services will be provided and outside of which such services will not be extended thus discouraging development sprawl. In this section it is organized as a zoning district within which the municipality would plan for, coordinate and provide and maintain municipal services and facilities, such as sewer, water and wastewater treatment, and transit. This zoning district allows the municipality to develop and manage public facilities and services, such as fire police and school, more efficiently and cost effectively. A district of this type could stimulate infill development within its boundaries and provide a more efficient use of land in harmony with its natural characteristics; preserve more usable open space, agricultural land, tree cover, recreation areas or scenic vistas and expand the opportunity for the development of affordable housing.

URBAN GROWTH BOUNDARY

An urban growth boundary is a product of the master plan process directed and approved by the planning board. During their analysis the planning board would need to ensure that there are adequate public facilities and services, a sufficient amount of land to meet projected growth, a mix of land uses, an analysis of impacts on water and natural resources from growth, and a fair and equitable process and criteria for establishing the growth boundary. Once adopted by the planning board, it could be incorporated into the zoning ordinance and other land use regulations per municipal legislative processes.

Normally before defining the growth boundary, the municipality would make three planning studies addressing:

1. Population growth projection, housing needs and land needs for residential, commercial, industrial and public spaces and buildings.
2. Inventory of public facilities, their capacity and projected needs.
3. Estimate of a 20-year supply of buildable land, taking into consideration topography and other factors.

Based on the planning studies, the municipality and the regional planning agency, would amend their master plans to delineate the growth boundary and describe policy goals, standards, and implementation strategies. The policies and implementation strategies would most likely address land use, transportation, housing, development design and appearance, and facilities and services issues.

Supplementing this master plan action, the municipality could amend its zoning ordinance and map to establish an urban growth overlay district. Within this overlay district, permitted land uses and intensities would be defined as well as development standards. Economic incentives for development may be provided. All or some development could be subject to planning board approval via a Conditional Use Permit. All development would be subject to normal or special subdivision and site plan review and development regulations appropriate to implement master plan growth area policy goals.

To protect conservation areas outside the growth boundary, the municipality could amend its zoning ordinance to establish adequate provisions for agriculture, forestry, variable lot or large lot residential, or other natural resource based zoning land use and intensity provisions. This would function to limit leapfrog development or scattered or premature subdivision of land as provided in RSA 764:36 II (a), or as may be regulated by a municipality via site plan review regulations per RSA 764:44 II.

Once established, the zoning ordinance also should provide that the scope and extent of the growth boundary be reviewed every five years by the planning board and adjusted accordingly.

URBAN SERVICE DISTRICT

To promote development within the urban growth boundary, an urban service district may be created. The purpose of this district is to contain development within the growth boundary where services such as water and sewer are in place or are planned.

The boundary of the urban service district may be the same as the growth boundary, or somewhere within, but in no case shall it extend outside or beyond the growth boundary.

Again, uses and intensities of use would be defined. Most importantly, there would be a provision that municipal services, such as sewer and water lines, would not be extended beyond the district, unless supported by additional development conditions and a concomitant change in the urban growth boundary within the master plan.

APPROPRIATE CIRCUMSTANCES AND CONTEXT FOR USE

A planning board may wish to use an urban growth boundary and urban service district in two differing scenarios. The first scenario would be for a municipality that has existing development patterns with urban densities and intensities of use. There would most likely be sewer, water, transit, etc. provided by the municipality in this area. Examples include New Hampshire cities and some of our smaller towns with historic mill districts. The second scenario would be for a municipality that is establishing an urban or village center, within which they are encouraging growth. Either way, the municipality would be monitoring development activity through its growth management program and providing tools and incentives through zoning and land use regulations to control the locations and intensity of future development.

CONNECTION TO DENSITY TRANSFER CREDIT PROGRAM

A Density Transfer Credit program allows landowners to transfer density rights from conservation zones to development zones. These programs establish two zones:

1. **Sending Area:** a defined area outside the growth boundary from which development rights are transferred from, resulting in the permanent preservation of lands possessing significant conservation features, farms or forests.

2. **Receiving Area:** a defined area within the growth boundary to which development rights are transferred to, resulting in more efficient and intense use of suitable development sites, where land may be developed at a higher density than would otherwise be allowed by local zoning.

A municipality could use an urban growth boundary as the demarcation for sending and receiving areas for a density transfer credit program. Property within the urban growth boundary would be classified as a receiving zone, and property outside the boundary would be classified as a sending zone. Based on the research done by the Maine State Planning Office, there needs to be an economic incentive for these programs to be used by municipalities and property owners.

LEGAL BASIS AND CONSIDERATIONS FOR NEW HAMPSHIRE

RSA 674:16 states that the power to adopt a zoning ordinance

“... expressly includes the power to adopt innovative land use controls which may include, but what are not limited to, the methods contained in RSA 674:21.”

Among the techniques listed in 674:21 are

“... (a) timing incentives, (b) phased development, and (i) flexible and discretionary zoning.”

RSA 674:36 states that ...

“the subdivision regulations which the planning board adopts may: (a) provide against such scattered or premature subdivision of lands as would involve danger or injury to health, safety, or prosperity by reason of the lack of water supply, drainage, transportation, schools, fire protections, or other public services, or necessitate the excessive expenditure of public funds for the supply of such services.”

Additionally, RSA 674:39 states that existing site approvals

“... shall be exempt from all subsequent changes in subdivision regulations, site plan review regulations, impact fee ordinances, and zoning ordinances adopted by any city, town, ... except those regulations and ordinances which expressly protect public health standards, such as water quality and sewage treatment requirements.”

EXAMPLES AND OUTCOMES

Concord, New Hampshire

The City of Concord, New Hampshire adopted Urban Growth Management Boundaries as part of its master plan for the Year 2010 on December 15, 1993 incorporating it within the Future Land Use Plan, Transportation Improvement Plan, and Open Space Plan. In 2001, Concord completed a comprehensive revision to the zoning ordinance premised on the master plan and zoning ordinance closely following the urban growth boundary. For instance, the residential open space district is outside the urban growth boundary, and all other districts are within the boundary. Concord's infrastructure planning is based on the divide between rural and urban for water and sewer systems. Currently the master plan is being amended,

FIGURE 1.8.2 Concord Village/Master Plan Districts



and the urban growth boundary may be further refined. (See Figure 1.8.2 for City of Concord Master Plan Map).

Derry, New Hampshire

During Derry's rapid growth in the 1970s and 1980s, predominantly residential growth created a substantial imbalance amongst development, services, and the environment. The strain on municipal services and revenues, and citizen concerns about the environment led to the December 1994 adoption of a one-year moratorium on growth while the town developed a growth plan and regulations. A growth management plan and program was developed in 1996 and adopted. In 1998 the town adopted a growth management ordinance based on the Ramapo, N.J. growth management ordinance, which used a future buildout analysis. The ordinance regulates the timing and phasing of major new development proposals and established a building permit limit of fifty residential units per year. The ordinance links development rights to the availability of town services, facilities, and schools. Since it was adopted, it has helped to keep Derry's growth rate lower than some of the neighboring towns.

Derry does not have an urban growth boundary per se. However, as part of growth management planning, in 1997 the town developed and adopted a revised zoning map that more closely guides development to desired and appropriate areas in Derry. The town also uses a thirty year capital improvement program upon which the growth controls of the ordinance are based. This is an instance where careful construction of the zoning map and zoning districts functions like an urban growth boundary.

Oregon

In 1966 communities in Oregon joined together to consider future urban growth options. They realized that the only way forward was through regional planning. Statewide planning goals were adopted to express the state's policies on land use and related topics, such as citizen involvement, housing, and natural resources. These state goals include implementation guidelines but are not mandatory. Goal 14, adopted in 1974, mandated the creation of urban growth boundaries in each city in Oregon. The goal's intention was to provide for an orderly and efficient transition from rural to urban land use, to accommodate urban populations and urban employment inside urban growth boundaries, to ensure efficient use of land and to provide for livable communities.

Oregon's 241 cities all have an urban growth boundary, a line drawn on planning and zoning maps to show where the city expects to grow. Land inside the urban growth boundary would be developed to accommodate the municipality's future growth. Every city was to adopt an urban growth boundary in a cooperative process between the city and county or counties surrounding it. When determining the location of the growth boundary there were two key factors: need – how much land needs to be included inside the boundary; and location – what is the efficient use of land, protection of agricultural land, and the cost effect on public services. By 1997 almost 2 million acres of Oregon's 28 million acres of privately owned land had been included inside urban growth boundaries. Inside the urban growth boundaries, development occurs at a very high rate as developers recognize that they can meet market demand. (More information at: www.oregon.gov/LCD/docs/goals/goal.14.pdf).

Maine

In 1998 the Maine State Planning Office studied development patterns in the state and documented that Maine's population was spreading out. This sprawling development pattern created increased local and state taxes for new or redundant infrastructure in remote areas; lengthened service routes for police, fire, and road maintenance; increased air and water pollution; fragmented wildlife habitats; isolated the poor and elderly in cities; disrupted farming and forestry activities; and left declining populations and underused infrastructure in older city and town centers.

Understanding that sprawl was happening in Maine, the state adopted the Comprehensive Planning and Land Use Regulation Act in 1999. This act mandated that all communities prepare and adopt comprehensive plans and land use ordinances consistent with state goals. Goal 1 was to encourage orderly growth and

development in appropriate areas of each community while protecting the state's rural character, making efficient use of public services and preventing development sprawl. The state recognized that developers didn't cause sprawl, they simply sought the path of least resistance in building and selling.

A 2005 Maine State Planning Office report on the Growth Management Act stated that comprehensive planning has had little effect on growth patterns. Most of the evidence shows that growth is not being directed to the designated growth areas as specified in local plans. State planners say that on average, about 70 percent of the growth in the last 15 years has occurred in rural areas, and that the vast majority of recent growth has been single homes, not subdivisions.

The town of Kennebunk's comprehensive plan includes: limiting sewer and water utility service area boundaries to growth areas; endorsing formal mutual aid agreements for police and fire protection; increasing capital planning for sidewalks and bikeways; retaining elements of the town's cultural landscape and developing design standards to enhance neighborhood character; and developing an open space, trail, and corridor plan based on criteria.

Kennebunk's plan proposed implementation strategies limiting the annual number of permits allowed in non-growth areas to no more than 25 percent of the total permits issued town-wide the preceding calendar year, allocated among three non-growth areas. The proposed cap would allocate 5 percent to the critical rural area; 5 percent to the proposed rural area, and 15 percent to the proposed transitional growth area.

The town of Acton's comprehensive plan protects its water resources, reflecting the dedication of its active lake associations. Among the plan's land use strategies is to create a small village zone, which spans the border, Salmon Falls River, with New Hampshire at Milton Mills, N.H. While residents are not in favor of large-scale commercial development, the concept of an essential services category is proposed for uses such as hardware, convenience, and professional services for this small traditional village.

The town of Union's comprehensive plan strives to maintain a thriving village area while protecting the town's working and scenic rural landscape. It includes a 50 percent open space provision in the agricultural overlay zone to help conserve Union's important agricultural lands. The plan also recognizes of the importance of working with neighboring communities to address shared resources and issues.

Model Language and Guidance for Implementation

URBAN GROWTH OVERLAY DISTRICT

I. PURPOSE

The purpose of the Urban Growth Overlay District is to guide future planned growth and development, and enable the municipality to meet the service needs most effectively and at the lowest reasonable cost consistent with policies of the master plan and the capital improvement program.

II. AUTHORITY

This provision is adopted in accordance with RSA 674:16 and RSA 674:21.

III. ESTABLISHMENT

The municipality hereby establishes, under the guidance of the planning board in cooperation with the municipality's elected legislative representatives, e.g. council, board of selectmen and Urban Growth Overlay District. The Overlay District's boundary shall be as shown on the adopted Zoning Map, consistent with the adopted master plan map, as may be amended by the planning board.

IV. ADOPTION

This ordinance supersedes and replaces any ordinance, resolution, regulation, rule, or other provision that purports to regulate or administer the issuance of permits or otherwise authorize or require tie-ins or increase utilization of municipal facilities.

V. APPLICATION

This ordinance shall apply to all applicants who seek a new subdivision or site plan approval, building, or any other permit, expansion of existing permit and use, and renewals for permit to tie into, utilize or expand utilization of municipal facilities or services.

VI. CONDITIONAL USE PERMIT

Land Uses permitted shall be consistent with the provisions of the underlying land use zoning district [*or as may be otherwise specified*] and subject to approval of a Conditional Use Permit by the planning board.

VII. DEVELOPMENT STANDARDS

[State development standards if other than the provisions of the underlying land use zoning district. See note on following page.]

A coordinated set of regulatory and non-regulatory standards can be selected to ensure development that complements community character and to guide the development process while meeting the goals and needs of the community.

Regulatory Requirements may include:

- Permitted and conditional uses, density, density bonuses (see incentives below).
- Lot area and dimensions, building height, building setbacks, lot coverage, open space coverage, parking, driveways, access, connectivity.
- Design guidelines and standards for overall form and spatial relationships.
- Performance standards for landscaping and water quality.
- Review and approval process, conditional use or special use permits.

Incentive-Based Improvements and Public Benefits may include:

- Traffic and safety, sidewalks, roads, lighting, water and sewer infrastructure, storm water management, water quality.
- Historic preservation, Brownfields redevelopment.
- Public access and walkways, multi-use corridors, parks, gardens, street trees and landscaping.
- Natural resource protection and restoration.
- Affordable and workforce housing, and economic investments.

Phased Development

Municipalities may consider adopting a phased development plan to sustain growth rates and protect the growth area's potential for urban development over the projected growth period. A phased development plan could be based on designation of concentric growth around an existing urban core, new mixed use or village hubs, and neighborhood revitalization and expansion. Any plans associated with designation of a UGB should incorporate several overarching goals:

- Prioritize and integrate residential development districts, commercial uses, mixed uses, and public areas.
- Develop a growth time table to accommodate expansion of infrastructure, utilities and services.
- Define an urban core with designated growth areas or districts in priority order as defined in a phased development plan.

VIII. ADMINISTRATION

The planning board shall review the provisions of this article every five years to ensure consistency with the adopted master plan and make findings and recommendations to the municipality's legislative body.

URBAN SERVICE DISTRICT AND SERVICE EXPANSION AREA

I. AUTHORITY

This ordinance is adopted in accordance with RSA 674:16 and RSA 674:21.

II. ESTABLISHMENT

The municipality hereby establishes, under the guidance of the planning board in cooperation with the municipality's elected legislative representatives and the *[applicable municipal service provider having jurisdiction over the service or operating department,]* an Urban Service District and Service Expansion Area for the municipality that defines a service area within which the municipality can meet the service needs most effectively and at the lowest reasonable cost for the provision of municipal facilities consistent with policies of the master plan and the capital improvement program.

III. ADOPTION

This ordinance supersedes and replaces any ordinance, resolution, regulation, rule, or other provision that purports to regulate or administer the issuance of permits or otherwise authorize or require tie-ins or increase utilization of municipal facilities.

IV. APPLICABILITY

This ordinance shall apply to all applicants who are seeking new permits, expansion of existing permits and uses, and renewals for permits to tie in to, utilize or expand utilization of municipal facilities.

V. EXISTING PERMITS

All permits that have been legally issued and/or properly renewed on an annual basis in accordance with the municipality's regulations shall be required to submit for a conditional use permit under this ordinance at the expiration of the previously issued permit. Permits that have expired or that have been transferred in violation of any provision of or have not been renewed in accordance with the applicable rules shall require a newly issued conditional use permit. Conditional Use Permits must be renewed on an annual basis.

VI. SERVICE CONNECTIONS

The area where future connections can be allowed shall only occur within the area delineated by the municipality as the established district as shown on the zoning map entitled "Urban Service District" as approved and available from the municipality's office (e.g. town hall). Service to areas outside the district, in "Expansion Districts" can only be provided as permitted herein according to, and consistent with, a phased program of improvements meeting the service needs of the new service area in conjunction with available capacity and projected service and rate-payer base.

VII. CONDITIONAL USE PERMITS

Conditional Use Permits shall be issued by the planning board in accordance with RSA 674:21 and RSA 676:4, including notice provisions and appeals. No user shall be permitted to tie in to or expand their use of municipal services without first securing a conditional use permit.

A. **Definitions and Findings.** The following definitions and findings are made in accordance with the reported data from the municipality on the status of applicable service facilities, including, demand, service capacity, reserved capacity, and outstanding approvals in process.

1. **Acceptable Service Level (Sustainable Yield).** The Acceptable Service Level (Sustainable Yield) is that amount of service that can be reasonably relied upon at acceptable levels to the citizens and users of municipal facilities under normal operating conditions. This is also considered the capacity of the municipal system.

a. *[Define the measuring criteria for each service: (Note: Include one or several as appropriate and include the measuring criteria.)]*

- *Public Transportation: Ridership.*
- *Roads: Miles maintained or plowed.*
- *Fire and/or Police: Response time within ____ minutes.*
- *Water: Gallons per day.*
- *Wastewater: Gallons per day.*
- *Schools: Capacity by square feet.*

b. *[Set the Acceptable Service Level/Sustainable Yield.]*

2. **Demand.** The demand is the reasonable estimate of the use of any facility listed in “1. Acceptable Service Level” above. The demand reflects the impact of all users on the system and the projected demand of those sites that claim vested and approved status, taking into account, the time of the year, the specific and general circumstances affecting demand, and utilization management programs that are in place.

a. *[This amount is determined through a review of current and historical data provided by the relevant administrative department and the capital improvement program.]*

b. *[Set the demand.]*

3. **Reserve Capacity.** The reserve capacity of the service facility or system is that amount of service that can be considered available for new and expanded use by users without considering expanded facilities or undue municipal expense.

a. *[This amount is determined by review of the relevant municipal department data on current and past usage amounts, utilization management programs in place at the time and recent impacts to the system. The reserve capacity is the difference between the acceptable service level/sustainable yield and the demand.]*

b. *[Complete the calculation and quantify.]*

4. The relevant municipal department shall prepare, on a semi-annual basis (on or about the target dates of June 1 and January 1), a report to the municipality's elected legislative body and the planning board on the status of the municipal facilities and services covered by this ordinance and the ability to provide reserve capacity for services within the municipal service district.

a. Contents of the report. The report shall include the following information:

- The usage data for the municipal system on a monthly (or other reasonable accounting period) accounting basis.
- The facilities that provide the service, such as buildings, infrastructure, etc.
- Estimate of the number and capacity needed for potential users with unexpired permits that have remained in compliance with Section V of this ordinance.
- Estimate of the number and capacity needed for potential users with unexpired, expired, or newly issued permits that have been issued a conditional use permit in accordance with Section VII.
- Such other information as may be required by the elected legislative representatives or planning board.

B. **Permit Conditions.** The planning board may issue a conditional use permit for the delivery of services to facilities located on parcels of land located within the urban service district and not contained within the areas delineated in accordance with Section VII.C if the following conditions exist.

1. Sufficient capacity is provided to meet the projected demand for the application of the requested services.

- a. Existing capacity is present in the system as determined by the board under the reporting requirements of Section VII.A.4.
- b. A new supply source is identified by the elected legislative representatives in sufficient quality and quantity to assure the planning board that the approval process, and deployment for the supply can be reasonably determined and the quantity of services to be provided is sufficient to allow the municipality to operate the system at the acceptable service level and provide sufficient supply for the proposed use.

Where a new supply is proposed, the planning board may condition its approval on the deployment of new supplies or any other reasonable condition necessary to insure the appropriate timing for the demand and the source availability.

2. The owner of the property to be served desires delivery of services by the municipality as evidenced by a written acknowledgement which shall include the estimate of projected demand for the new or expanded service

in a manner acceptable to the planning board using best available data from the relevant department of the municipality or other generally acceptable and scientifically based estimates.

3. The municipality can meet the demand of the proposed use without violating the standards of acceptable service level/sustainable yield of the system.
4. The municipality can supply the needed services without reducing the ability to meet the needs of those properties and their respective capacity reservations as listed in Section VII.C. capacity reservation.
5. An application for approval, as required, must be submitted and accepted for approval from the planning board within three months of the issuance of the conditional use permit. If no application is filed, the conditional use permit shall expire unless renewed.
6. All impact fees and off site exactions required under RSA 674:21, and municipal tie-ins are paid, or waived as provided for in the respective authorizing legislation thereof, prior to connection.
7. Renewals for conditional use permits issued under this section must show continual and adequate progress toward completion given the scale, scope, and complexity of the project.

C. Capacity Reservation. The planning board may issue a conditional use permit for the delivery of services to facilities located on parcels of land located within the capacity reservation areas in the urban service district if the following conditions exist.

1. The total amount of services to be provided to new and or expanded services under this provision shall not exceed [_____].
2. The capacity reservation area is located in the urban service district and is for a use of land that is located within the area so designated.
3. The owner of the property to be served desires delivery of services by the municipality as evidenced by a written acknowledgement which shall include the estimate of projected demand for the new or expanded service in a manner acceptable to the planning board using best available data from the relevant department or other generally acceptable and scientifically based estimates.
4. The municipality can meet the demand of the proposed use without exceeding the acceptable service level/sustainable yield of the system.
5. An application for approval, as required, must be submitted and accepted for approval from the planning board within three months of the issuance of the conditional use permit. If no application is filed, the conditional use permit shall expire unless renewed.
6. All impact fees and off-site exactions as required by RSA 674:21 and municipal tie-ins are paid, or waived as provided for in the respective authorizing legislation thereof, prior to connection.

7. Renewals for conditional use permits issued under this section must show continual and adequate progress toward completion given the scale, scope, and complexity of the project.

D. Service Expansion Area. The planning board shall consider delivery of services to areas outside the established urban services district in the service expansion area only where the planning board determines that there is a clearly defined need for service, that the provision of service by the municipality is appropriate and consistent with the municipal master plan, and that the service district under Section VII.B. and capacity reservations required in Section VII.C. are maintained and that improved services may be expected to enhance the municipality's ability to meet the service needs of existing municipal residents and businesses in the existing service district.

1. The planning board shall only grant such a permit provided the capacity reservations required in Section VII.B. and C. are met by the current capacity of the facilities in place in the municipality or through the provision of new supplies by the applicant to provide additional supply beyond the requirements of the proposed facility and that the provision of such facilities does not result in undue municipal expense.
2. The applicant shall provide a report to the planning board showing that the expansion is fiscally responsible through evidence that the cost to construct new facilities, the new service base to be provided, and the long-term maintenance costs are balanced and will not result in an increased expenditure for the municipality.
3. An applicant for permit shall provide existing data showing the capacity of the existing facilities to provide service, quantification of proposed capacity needs for the entire expansion area, and all other amounts found in the annual report required under Section VII.A.1.
4. The applicant may meet these requirements by providing new supplies or funding the acquisition of additional supplies by the municipality that exceed the projected demand of the proposed facility.

VIII. SEPARABILITY

If any portion of this ordinance is found to be invalid or illegal by a court of competent jurisdiction, the remainder of the ordinance shall not be affected thereby.

REFERENCES

The following publications provide an overview of urban growth boundaries and urban service areas and implementation issues.

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Daniels T. and Bowers D. 1997. *Holding Our Land: Protecting Americas Farms and Farmlands*. Island Press, Washington D.C.

Department of Land Conservation & Development. January 1992, revised May 1995. "What is an Urban Growth Boundary?" www.uoregon.edu/~pppm/landuse/UGB.html, Salem, Oregon.

Kolakowski, Kelly; Machemer, Patricia; Thomas, June; and Hamlin, Roger. December 2000. *Urban Growth Boundaries: A Policy Brief for the Michigan Legislature*. Urban and Regional Planning Program, Dept. of Geography, Michigan State University.

Land Use Department. 2006. "Boulder Valley Comprehensive Plan: Community Service Areas." www.co.boulder.co.us/lu/bccp/index.htm, Boulder, Colorado.

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Manning, Rob. February 2003. "Portland's Expansion is the Biggest Yet." American Planning Association.

Planners Web. 2001. "Sprawl Guide: Urban Growth Boundaries." Planning Commissioners Journal. Burlington, Vermont. www.plannersweb.com/sprawl/solutions_sub_urban.html