CLD | Fuss & O'Neill

January 5, 2018

Kathleen Mulcahey-Hampson NHDOT Liaison to the Public-Private Partnership Infrastructure Oversight Commission New Hampshire Department of Transportation John O. Morton Building 7 Hazen Drive PO Box 483 Concord, NH 03302-0483

Re: Technology Center

Millyard People Mover / Transit

CLD | Fuss & O'Neill Reference No. 20170216.000

To the P3 Oversight Commission:

As required by RSA 228:107-115; Public-Private Partnership Projects, please accept and review the attached Public-Private Partnership (P3) Application materials for review of a unique project concept conceived as **Millyard People Mover / Transit**. As outlined herein, this concept involves creation of a substantive parking structure / transit terminus at the reconfigured Exit 6 interchange, coupled with potentially staged People Moving in and out of Manchester's Millyard.

For decades, City planning studies have included or been focused upon creation of individual vehicle parking locations blended with use of multi-occupancy / pedestrian friendly / alternative transit concepts to address a known upcoming Tipping Point – achieving the highest and best use of the historic Millyard as a technology innovation destination will inevitably be throttled by surface parking / access limitations. The ramp-up to highest and best uses for the entire Millyard complex seem to be manifesting right now; therefore, the Tipping Point may have arrived. The included information you are reviewing developed with the Millyard located Engineering/Planning Firm of CLD |Fuss &O'Neill outlines that good utilization of combined public resources/focus with private innovation/ resources; monetary and otherwise, may be one practical route to a parking puzzle solid outcome all want for not just Manchester, but New Hampshire and the region.

The sponsor of these materials, the DEKA/HITCHCOCK Consortium, recognize that the presentation at this stage is conceptual, and deliberately so. The expectation is that once the P3 Oversight Commission can recognize this project within the statutory framework; particularly RSA 228:109, the focus of the State of New Hampshire and its related public agencies can be overtly engaged in working with The Consortium and other private partners to vet and refine actionable / fundable elements.

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Kathleen Mulcahey-Hampson CLD | Fuss & O'Neill Reference No. 20170216.000 January 5, 2018 Page 2 of 2

At the initial juncture, the Consortium requests essentially three (3) elements from the Commission:

- 1. Consistent with RSA 228:109, acknowledge this project within the P3 framework thereby engaging the State and other public agencies fully in conceptual refinement activities and focus;
- 2. aligned with item(1) provide, essentially, 'right of first refusal' to this project for use of expected excess Right-of-Way at Exit 6 to the project for a potential parking structure location. Expectation is that the release of RoW would experience the standard process, but with Commission P3 acknowledgment status, there becomes a targeted public need use involved;
- 3. Coordinate search and support for funding opportunities and scheduling initiatives, as appropriate.

The Consortium has worked through the late Summer and Fall to frame very fluid ideas; but the focus of having a terminus vehicle structure of magnitude at or adjacent to a reconfigured Exit 6 continually becomes a fundamental starting point. The hope is the P3 Commission sees the same and will 'give a nod' to gather and engage additional public resources to expand the detail of how something like this CAN get done.

Thanks for the consideration, and The Consortium looks forward to hearing how the P3 process can move this to next stages.

Very Truly Yours,

Kenneth R. Rhodes, PE

Senior Vice President

Don Clark, on behalf of the

DEKA/HITCHCOCK Consortium



APPLICANT INFORMATION



PUBLIC-PRIVATE PARTNERSHIP (P3) – CALL FOR PROJECTS 2017/2018

THE ELOCATE INTO CANADA					
APPLICANT:	DEKA / HITCHCOCK Consortium				
ADDRESS LINE 1:	c/o DEKA Research and Development Corp				
ADDRESS LINE 2:	340 Commercial Street				
CITY:	Manchester				
STATE:	New Hampshire				
ZIP CODE:	03101				
PHONE NUMBER:	603-206-0227				
EMAIL ADDRESS:	dclark@technologycenternh.com				
PROJECT DESCRIPTION					
PROJECT NAME:	Millyard People Mover / Transit				
	TYPE OF PROJECT				
AERONAUTICS X HIGHWAY X RAIL	X TRANSIT OTHER				

EXPLANATION OF PROJECT NEED:

A ground swell group; currently to be referenced as DEKA/HITCHCOCK Consortium (Consortium), led by Dean Kamen (DEKA) and Jeremy/Elizabeth Hitchcock; former Owners of Dyn, noted that proposed NHDoT Exit6/7 projects on the 10YR Plan (16099 / 16099A/16099B) involved significant new bridge structures specifically at Exit 6. Mr. Kamen has for over 2 decades envisioned a light rail / rail transit connection the length of Manchester's Millyard. Mr. Kamen linked the significant improvements involved with these projects with his vision and re-started the conversation of Millyard People Mover / Transit facilities. The Northern terminus/origin Mr. Kamen initially envisioned as a parking deck OVER the FEEverett Turnpike as an extension of the new bridge deck(s) sited between the 'hillsides' flanking either side. Concept investigation identifies significant physical challenges to this specific 'layout' but the potential surplus Right-of-Way may work quite well to accomplish the same overall goal. Couple this with a dedicated regular rail/light rail service north-south through the Millyard with strategic stops, and the City/State would be able to provide a multi-modal commuter service to a congested yet still expanding urban core of New Hampshire's largest City.

PROJECT NEED is driven by a disproportionate lack of area for vehicle parking in the Historic Millyard when compared to available commercial/office space and user requirements. This drives the need to execute on long envisioned alternative approaches to provide parking and commuter access to the Millyard. This basic reality is paired with a Place-making need to de-emphasize individual vehicles in The State's largest City urban core which continues a transition of Manchester's historic industrial complex to a 21st Century high-tech center drawing like-minded creative people together who identify less with personal vehicles for work-a-day transportation. As the high tech/ educational institution 'focus' of business/users in Manchester expands and accelerates, the ability to simply provide more surface or extensive parking structures within the Millyard yield only very limited results.

DESCRIPTION OF PROJECT: (Include general scope, limits of work, duration of project, etc.)

General Scope

As conceived on the attached diagrams, with a new parking structure readily accessed from the FEEverett turnpike, there can be several phased options to provide Park-and-Ride like service to Manchester's Downtown. Note that consistent with several parking studies for Manchester done through the years, other structures and 'stops' seem logical to further consider (recently approved new private Southern New Hampshire University (SNHU) garage at 33 SCommercial / add'l garage potential at River's Edge @ Queen City Avenue / terminus potential near rail bridge south of Manchester's WWTP).

The project as conceived is focused on requiring release of approx. 6 acres of excess Right of Way as shown on the diagrams to an entity. As this concept evolves, actual OWNERSHIP of this acreage by some combination of City, State, and private interests will manifest, but the core principle is that this excess land is needed outside the Turnpike System's vehicle corridors.

As discussed in the introduction, the impetus for the project is the envisioned structured parking conceived adjacent to and access nearly directly from the FEEverett Turnpike. Also adjacent to the current La Quinta Inn, a significant parking/multi-modal interface would be the 'seed' to grow to towards a Transit Oriented Development area. In the very least, there are hundreds of vehicle trips that can be 'removed' from crossing the Amoskeag bridge and utilizing Manchester core commercial streets. Along with the parking structure, there are several concepts of how to 'move' people from the structures to destinations.

RAIL / LIGHT RAIL – Mr. Kamen for years has envisioned a replica engine and passenger car unit(s) traversing north/south in the Millyard; preferably adjacent to the Merrimack River to be highly visible. His vision is that not only could this be a valuable local transit resource, but additionally as a unique municipal differentiator 'announcing' that Manchester and New Hampshire have seriously invested in localized multimodal solutions supporting economic development. Several challenges present:

- The transit units would require a river crossing as part of, or adjacent to the current Amoskeag bridge.
- Investigation of whether PanAm/Gilford Transportation would collaborate with the owning entity on utilizing the current rail corridor in some fashion. It does appear that the corridor width MAY be wide enough to 'lay down' a 2nd set of tracks as the current rails are sited to the west side of an approx. 38ft width of ROW (non-railroad detail evaluation, simply overviewed to assess initial credibility).
- If only dedicated single track, whether units could "pass" at a strategic mid-point to provide more regular service. AS an observation, if PanAm's collaboration can be gained, there is legacy railyard underutilized land width and length that is intriguing to consider for use as "passing" siding opportunities, transit set storage, transit set maintenance.
- If PanAm/Gilford's collaboration and property are not available, identifying a street corridor should be pursued. Conversations of riverside cantilevered /pier-supported structures end without a viable concept to credibly further pursue.

<u>DEDICATED SHUTTLES</u> – presently, Southern New Hampshire University (SNHU), has successfully operated (reportedly) a shuttle service to their location at 33 SCommercial Street in Manchester for several years. Several sizes of buses have been utilized to traverse from leased and public parking locations as well as to-from their Hooksett. Regular service during the core business hours has been utilized. Note herein that SNHU is about to heavily invest in a new parking structure directly adjacent to their 33 SCommercial St locus, so THEIR direct need for transit will be 'less' moving forward. However, the AM/PM impacts of significant numbers of vehicles moving to and from this new

garage will put stress on FEEverett Exit5 (Granite Street/Granite Street bridge) and the intersection of Granite and Commercial Street(s).

Early on, if the parking facility manifests, a dedicated shuttle service could be implemented within the existing street network. At a minimum, utilizing shuttle service could be a 'bridge' to other options mentioned herein.

<u>AUTONOMOUS VEHICLES</u> – although presently theoretical in application, but moving to deployment in the next decades MAY be where multimodal is 'headed'. Once deployed and activity utilized, it can be envisioned that origins and destinations can address unlimited needs with minimal, if any major street/transit infrastructure improvements.

<u>DEDICATED PERSONAL TRANSPORTERS</u> – similar to bike-share, it is consistent with the innovation theme of the Millyard and upcoming high-tech user groups that use of dedicated personal transporters could be integrated into the parking facility and Millyard locations to provide the linkage from vehicle locations to work locations. The author clearly recalls a presentation by Mr. Kamen himself expressing reality that individuals all moving point-to-point by 1-1/2ton, 90-100SF 'units' is unsustainable in urban environments; urban planning emphasis on short-range individual transport by approx. 100lbs, 6SF 'units'; is more logical and sustainable.

Overarching is that a new facility at the FEEverett Exit6 (Amoskeag Interchange) becomes the terminus of 800-1000 vehicles weekdays that do NOT enter the City's street system. Since personal habits are also VERY engrained in people; and in New Hampshire folks are NOT in the habit of leaving their personal vehicles for multimodal transit, establishment and investment in an alternative of this kind demonstrates the private-public collaboration to look forward to deemphasizing individual vehicles in favor of alternatives. This also can germinate personal daily planning to take advantage of other pedestrian / City accessible services / venues / activities consistent with INTown Manchester / Manchester Chamber of Commerce / Manchester Connects.

Limits of Work

FEEverett Turnpike Exit 6 excess Right of Way / Amoskeag bridge / Manchester Millyard (East) / south as far as practicable possible considering the transit options under consideration.

Duration of Project

Initial Duration should be considered coincidental to construction of Exit6/7 improvements. These improvements are in the current NHDoT 10yr Plan. Transit options need to be coordinated and phased as opportunity presents.

ESTIMATED COST & FINANCING

As conceptual as this application is presented, Costs and Financing are fluid and yet to be defined. P3 evaluation for viability is intended to first consider release of excess ROW to the project, and support pursuit of public support/match/grant funding consistent with project goals. No number(s) are entered below at this time, but the magnitude of conversations could be in aggregate over \$100million.

ESTIMATED DESIGN/PLANNING COST: N/A at this initial consideration

COST OF PROPERTY ACQUISITIONS/LEASES: N/A at this initial consideration

ESTIMATED CONSTRUCTION COST: N/A at this initial consideration

ESTIMATED COST OF OPERATIONS/MAINTENANCE: N/A at this initial consideration

TOTAL ESTIMATED PROJECT COST: N/A at this initial consideration

IS THIS PROJECT APPROVED IN A TRANSPORTATION PLAN SUCH AS AN RPC/MPO LONG RANGE PLAN, NHDOT TEN YEAR PLAN OR OTHER PLANNING DOCUMENT?

X YES, Describe: potential portion of NHDoT projects 16099/ 16099A/16099B referenced in General Scope above and consistent with important concepts envisioned within multiple published long range Millyard Planning studies

PRELIMINARY FINANCIAL PLAN: (Description of initial funding proposal including any State, Federal or Local funding that may be required, as well as any fees or tolls that may be necessary to support the project. If the applicant has concerns relative to confidentiality, they should note those concerns and only provide the information they feel could be discussed in a public setting.)

Presently, concept development presentation has been funded solely by Consortium private funds. Implementation funding for planning design, detailed design, and implementation has undefined components, but all mixes of private and public funding need to be assessed, vetted, and pursued.

PROJECT READINESS

LEVEL OF PLANNING/DESIGN COMPLETED: (Describe the degree of project planning and/or design that has been completed, including disposition of deliverables such as feasibility studies, conceptual plans, data collection, etc.)

The attached diagrams have been developed to outline and present some of the basic concepts involved. They should be considered very preliminary more in the context to possibility explorations to be further vetted, not 'hardlines'.

After this initial P3 review and acceptance as a project that should be investigated and vetted for further public-private partnership consideration, the Consortium expects next steps will be to explore detailed studies and technical layouts to begin execution.

NOTE - The Consortium is counting on NOT having to restart the entire vision of having remote parking serve the Millyard. This core idea has been stated within the Executive Summary of Millyard / Downtown Manchester for over 3 decades.

PROJECT MILESTONES/DURATIONS: (Provide duration and anticipated completion dates for major milestones such as planning, design, construction, operations and maintenance phases.)

N/A at this initial evaluation and framing stage

PRIVATE/PUBLIC PARTNERS/ASSETS NECESSARY TO SUPPORT PROJECT

STATE OR MUNICIPAL AGENCIES IMPACTED:

State of NH Department of Transportation City of Manchester Department of Highways

PRIVATE ENTITIES INVOIVED IN PROPOSAL:

DEKA/HITCHCOCK Consortium

Manchester Chamber of Commerce (Note: Exec Director briefed and supportive; no overt Board presentation yet made)
Manchester Historic Association (Note: Exec Director briefed and supportive; no overt Board presentation yet made)
Millyard Property Owners

Roedel Properties (La Quinta Inn at the Amoskeag interchange)

PanAm / Gilford Transportation

PUBLIC ASSETS NECESSARY TO ADVANCE PROJECT:

Excess Turnpike Right-of-Way Potential public street 'diet' to accommodate transit vehicles

PRIVATE ASSETS NECESSARY TO ADVANCE PROJECT:

Potential PanAm / Gilford Right-of-Way usage for transit vehicles PanAm / Gilford crossing enhancements

PROPERTY/FACILITIES IMPACTED AND CURRENT OWNERSHIP:

Multiple impacts to public and private facilities that will require collaboration specifically consistent with public/private partnership (P3) objectives

PROJECT BENEFITS

BENEFITS/HOW THIS PROJECT ADDRESSES A NEED:

As previously stated within this application narrative, for decades Manchester's Millyards, lack of surface area to provide individual vehicle parking has been identified as a chokepoint to reaching higher useful potential. This real world user issue, paired with Manchester's place-making goals that de-empthasizes vehicle priority in urban streetscapes, a changing workforce that identifies less with 'cars', and more with innovative transportation solutions make this project's approach beneficial.

BENEFITS OF P3 IMPLEMENTATION VERSUS CONVENTIONAL DELIVERY:

The creativity of the private sector has been demonstrated by the commitment to frame these concepts further. The blending into the Exit 6/7 Amoskeag Interchange re-configuration provides a logical interface for the public to dedicate support of and to the goals of Millyard parking alternatives and transit.

If approved within the parameters of P3 frameworks, the evolution of design and implementation will enjoy the overt support of State and Local public agencies as MORE than simply another in a series of explorations. The benefit to the Millyard People Mover/Transit is that with P3 selection, without large as yet undefined public investment, collaboration of resources can be focused on vetting alternatives to what is hoped to be an executable plan; in all aspects, that may not be possible without initial selection.

SIMILAR PROJECT EXAMPLES: (Have any other States or Municipalities to your knowledge pursued a similar P3 project?)

With all elements involved, author(s) do not have enough knowledge to respond beyond none known at this time. Exploration of airport transit; or other implemented systems should be part of next steps to assess strengths and failures and guidance.

CONTACT INFORMATION

CONTACT PERSON: <u>Don Clark</u>

ADDRESS LINE 1: <u>DEKA Research and Development</u>

ADDRESS LINE 2: 340 Commercial Street

CITY: <u>Manchester</u>

STATE: NH _

ZIP CODE: <u>03101</u>

PHONE NUMBER: 603-206-0227

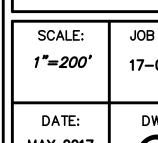
EMAIL ADDRESS: <u>dclark@technologycenternh.com</u>

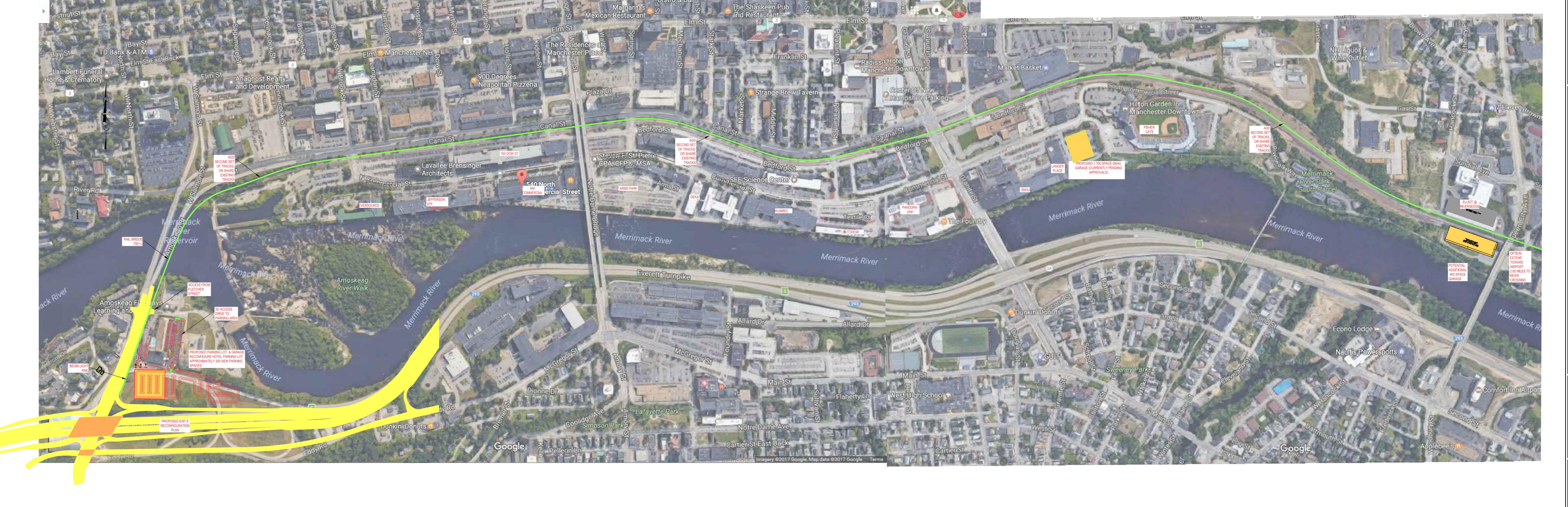
SUPPORTING DOCUMENTATION

LIST OF SUPPORTING DOCUMENTATION & ATTACHMENTS, INCLUDING MAPS:

Overview Plan
Parking Garage Plan
Hotel Reconfiguration Plan
Rail Corridor Concept Plan
Street Usage Concept Plan

It should be noted that this Letter of Interest is completely non-binding, but will be used by the Commission to establish the appropriate process and framework by which to evaluate and advance projects. Following review of this project proposal the Commission will contact the applicant to communicate the next steps in the process.



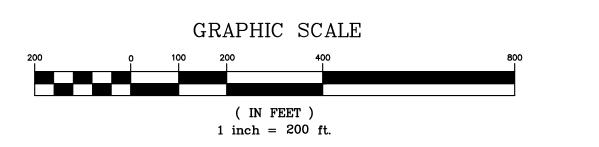


GENERAL NOTES: 1) THE PURPOSE OF THIS CONCEPT PLAN IS TO BEGIN A FEASIBILITY
ASSESSMENT FOR THE CONSTRUCTION OF A PEOPLE MOVER FROM THE
AMOSKEAG CIRCLE TO THE MILLYARD. ALL FEATURES SHOWN ARE CONCEPTUAL
AND WILL REQUIRE SIGNIFICANT ADDITIONAL STUDIES TO DETERMINE FEASIBILITY. 2) CHALLENGES WILL BE OBTAINING LAND/EASEMENTS, PHYSICAL CONSTRUCTION (ELEVATED, WITHIN EXISTING RIVERWALK, WITHIN EXISTING DRIVE AISLES, RIVER CROSSING, CROSSING UNDER GRANITE STREET, ETC) & ENVIRONMENTAL PERMITTING.

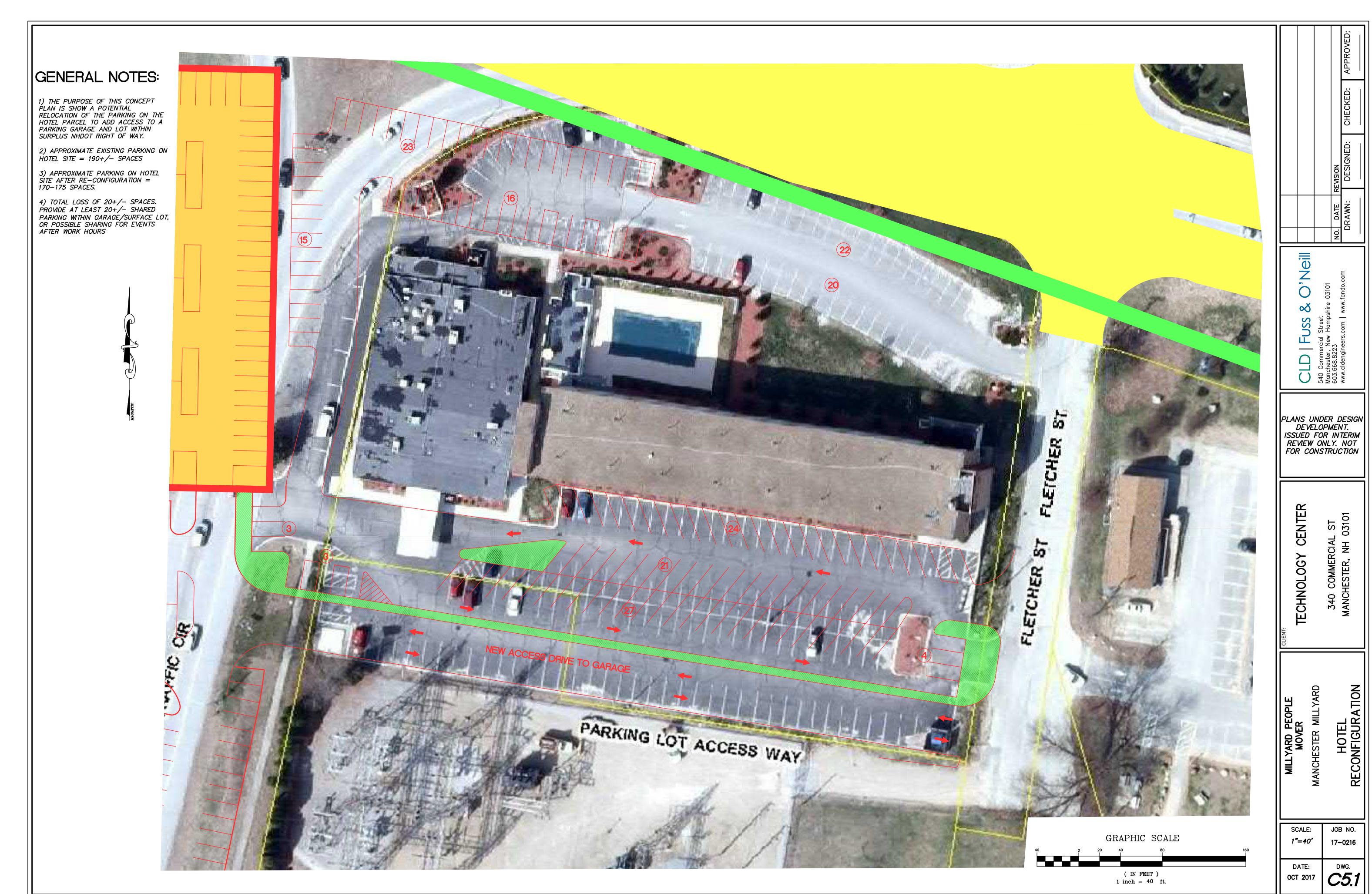
3) NHDES WETLAND PERMITTING FOR DISTURBANCES TO SHORELAND WILL BE DIFFICULT.

MILLYARD PARKING NOTES EXISTING MILLYARD PARKING

TOTAL SPACES = 4,800+/TOTAL SQUARE FOOTAGE = 3,700,000 s.f.



:\PROJ2017\170216 MILLYARD PEOPLE MOVER\CIVIL\DRAWNGS\CONCEPT PLAN - RAIL CORRIDOR ROUTE & GARAGE.DWG 11/15/2017 3:49 PM



340 COMMERCIAL ST MANCHESTER, NH 031

17-0216

C5.1

PLANS UNDER DESIGN
DEVELOPMENT.
ISSUED FOR INTERIM
REVIEW ONLY. NOT
FOR CONSTRUCTION

340 COMMERCIAL ST MANCHESTER, NH 03101

> RAIL CORRIDOR USAGE CONCEPT

JOB NO.

17-0216

DWG.

C2.2

MANCHESTER MILLYARD

SCALE: 1"=50'

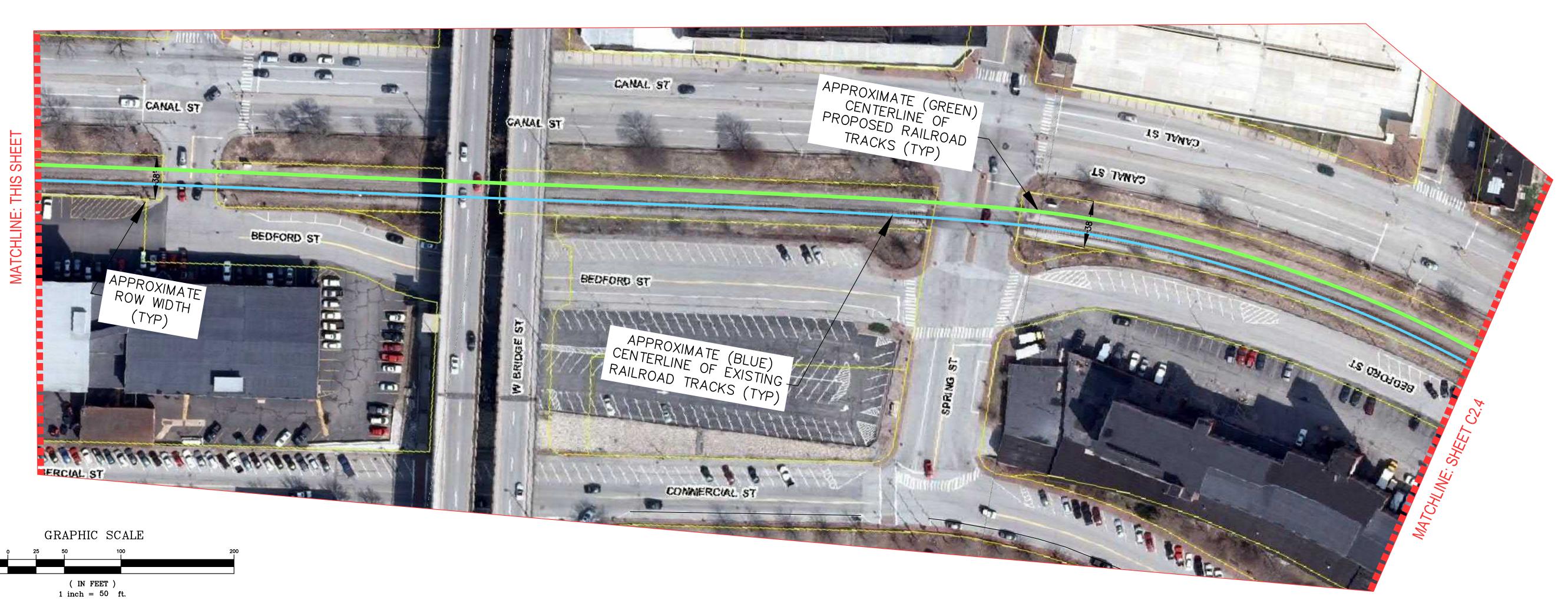
DATE:

SEPT 2017

CENTER

TECHNOLOGY





MANCHESTER MILLYARD MILLYARD PEOPLE MOVER

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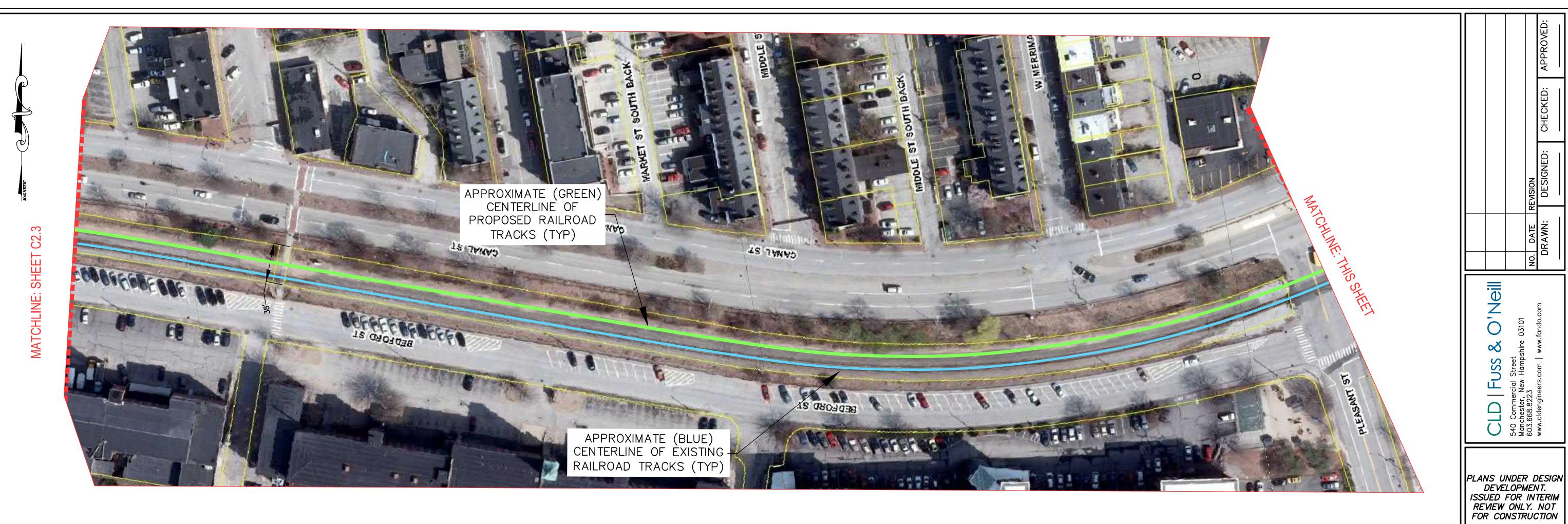
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SCALE: JOB NO. 1"=50" 17-0216

RAIL CORRIDOR USAGE CONCEPT

DWG.

DATE: SEPT 2017





GRAPHIC SCALE (IN FEET) 1 inch = 50 ft.

CENTER **TECHNOLOGY**

340 COMMERCIAL ST MANCHESTER, NH 0310

RAIL CORRIDOR USAGE CONCEPT

JOB NO. 17-0216

1"=50" DWG. DATE: SEPT 2017

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340 COMMERCIAL ST MANCHESTER, NH 03101

> RAIL CORRIDOR USAGE CONCEPT

17-0216

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TECHNOLOGY

1"=50'

DATE: SEPT 2017



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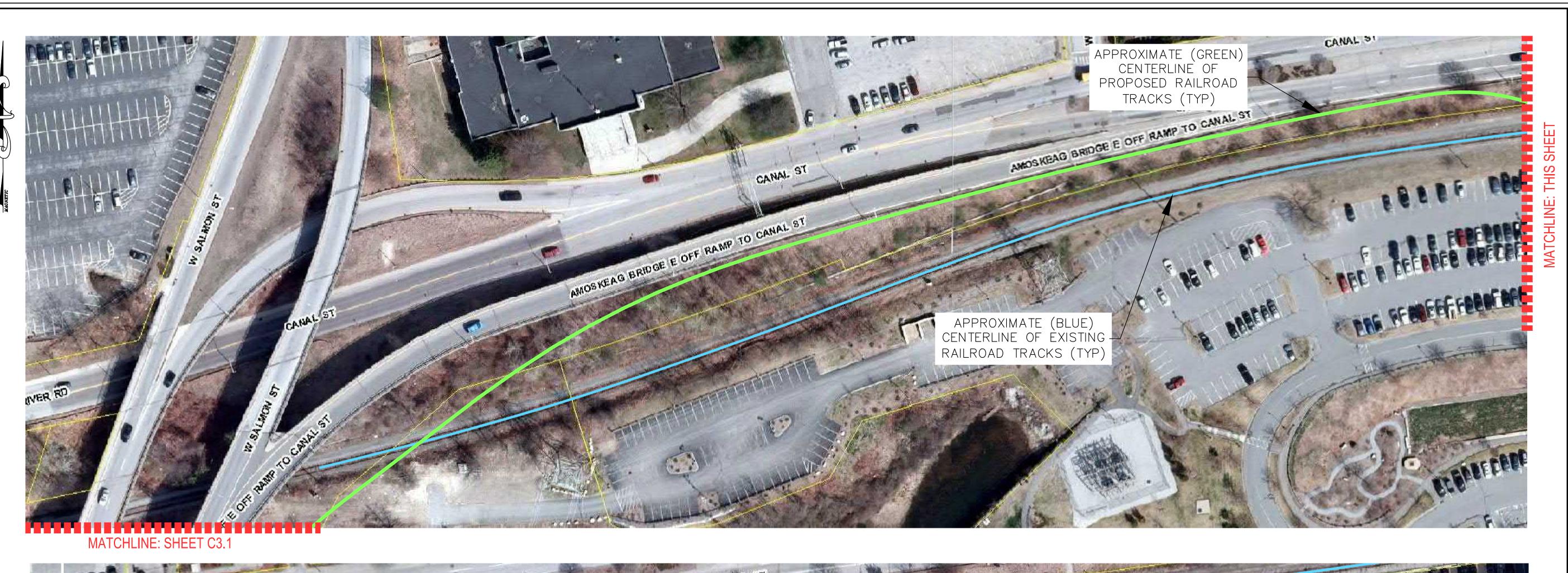
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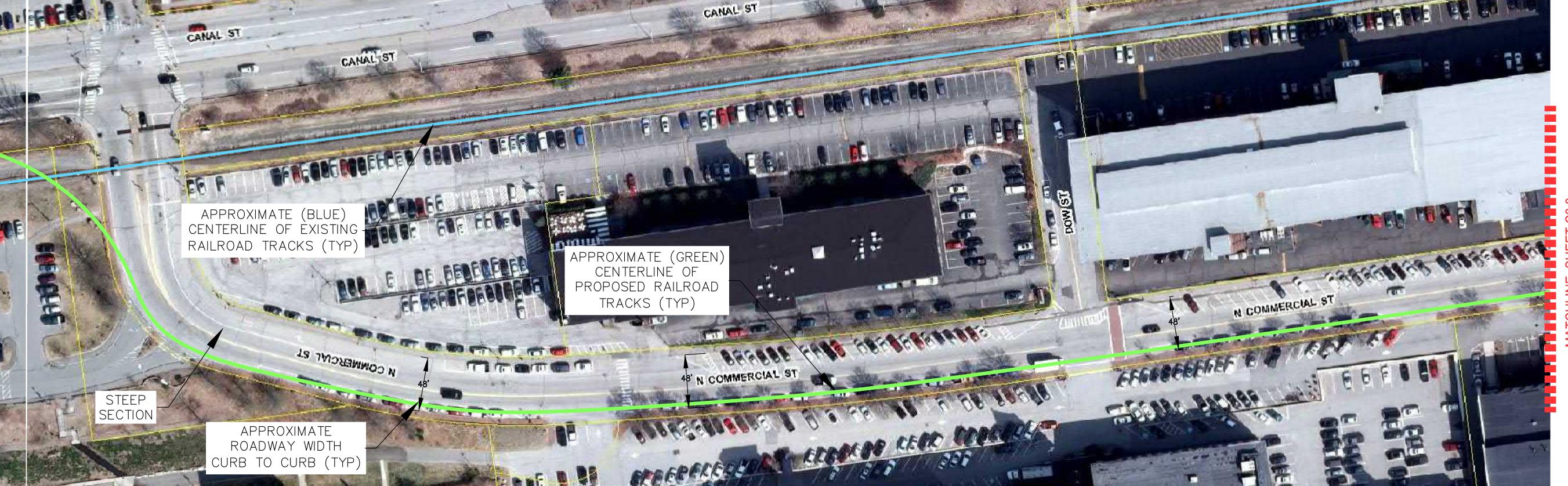
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1"=50" DATE: SEPT 2017

DWG.







GRAPHIC SCALE (IN FEET) 1 inch = 50 ft.

CENTER **TECHNOLOGY**

MILLYARD PEOPLE MOVER

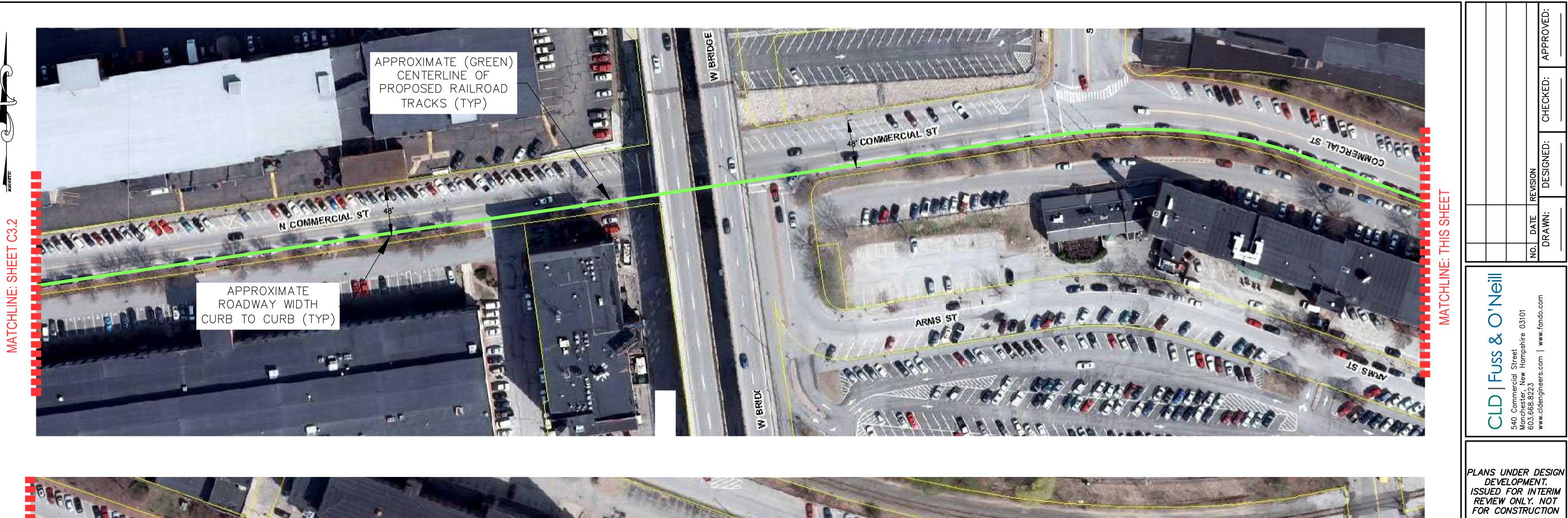
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PLANS UNDER DESIGN DEVELOPMENT. ISSUED FOR INTERIM REVIEW ONLY. NOT FOR CONSTRUCTION

COMMERCIAL STREET USAGE CONCEPT MANCHESTER MILLYARD

> JOB NO. 17-0216

1"=50' DWG. DATE: C3.2 SEPT 2017





GRAPHIC SCALE

(IN FEET) 1 inch = 50 ft.

DWG. C3.3

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540 Manc 603.

CENTER

TECHNOLOGY

340 COMMERCIAL ST MANCHESTER, NH 03101

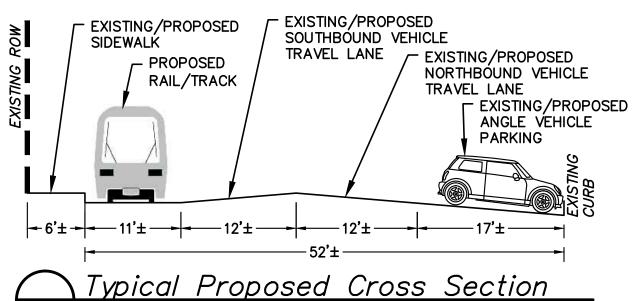
COMMERCIAL STREET USAGE CONCEPT

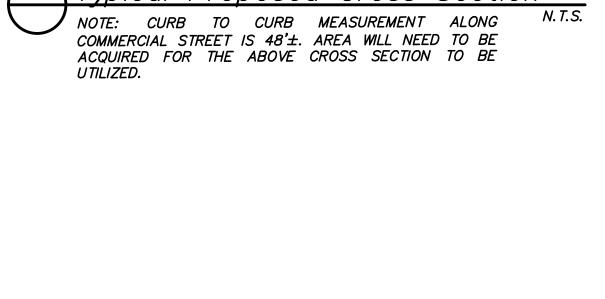
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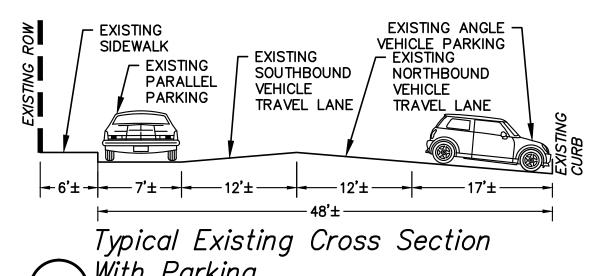
CONCEPT NOTES:

- 1. THE PURPOSE OF THIS CONCEPT PLAN IS TO BEGIN A FEASIBILITY ASSESSMENT FOR THE CONSTRUCTION OF A PEOPLE MOVER FROM THE AMOSKEAG CIRCLE TO THE MILLYARD, VIA COMMERCIAL STREET. ALL FEATURES SHOWN ARE CONCEPTUAL AND WILL REQUIRE SIGNIFICANT ADDITIONAL STUDIES TO DETERMINE FEASIBILITY.

 2. PARKING SPACES ARE PROPOSED TO BE LOST IN THIS CONCEPT, SOUTHBOUND PARALLEL PARKING SPACES LOST = 135-140±
- CHALLENGES WILL BE OBTAINING LAND/EASEMENTS, PHYSICAL CONSTRUCTION (ELEVATED, WITHIN EXISTING DRIVE AISLES, RIVER CROSSING, CROSSING UNDER GRANITE STREET, ETC) & ENVIRONMENTAL
- NHDES WETLAND PERMITTING FOR DISTURBANCES TO SHORELAND WILL BE







EXISTING ROW		EXISTING SOUTHBOUND VEHICLE TRAVEL LANE 2'± 48'± Sting Cross	Section	EXISTING CURB
	<i>)</i>	<i></i>		N.T.S.

GRAPHIC SCALE (IN FEET) 1 inch = 50 ft.

1"=50" DATE: SEPT 2017

MILLYARD PEOPLE MOVER

17-0216 DWG.

MANCHESTER MILLYARD

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340 COMMERCIAL ST MANCHESTER, NH 031

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