2. ALTERNATIVES

2. ALTERNATIVES

2.1. Introduction

This chapter describes the range of alternatives that have been considered for the Southern Connector/Champlain Parkway. The logical termini for the project have been determined to include the previously constructed C-1 Section to the south, and the City Center District (CCD) to the north.

It should be noted that the alternatives considered in this Supplemental Environmental Impact Statement (SEIS) are being presented as the full-build scenario, not as an interim phase.

2.2. Scoping of Alternatives

Alternatives evaluated in the 1979 Final Environmental Impact Statement (FEIS) include:

- 1. No-Build Alternative;
- 2. The use of Alternate Travel Modes:
- 3. Pine Street Alternative involving a widening of Pine Street to four-lanes, in addition to new location sections connecting I-189 and Battery Street; and
- 4. New Location Alternative, involving construction, primarily on new locations, connecting the I-189 interchange to Battery Street.

Figure 2-1 illustrates the 1979 FEIS Selected Alternative. This alternative is also referred to as the Null Alternative.

The following interim alternatives were evaluated to temporarily avoid the Pine Street Barge Canal Superfund Site in the 1997 Final Supplemental Environmental Impact Statement (FSEIS) to provide improvements pending resolution of the Superfund Site:

- 1. No-Build Alternative;
- 2. Transportation Systems Management, Transportation Demand Management and Public Transportation (Transit/TSM/TDM);
- 3. Build Alternatives; consisting of the previously constructed C-1 Section, a transition to a two-lane facility along the C-2 Section and five variations of the interim C-6 Section, connecting the I-189 interchange to Battery Street.

Figure 2-2 illustrates the 1997 FSEIS Selected Interim Alternative.

Since the 1997 determination of a Selected Interim Alternative, there have been several additional alternatives considered and evaluated. These include the following:

- 1. No-Build Alternative
- 2. Transportation Systems Management/Transportation Demand Management
- 3. C-1 Section, C-2 Section and C-8 Section (four-lane) Null Alternative
- 4. C-1 Section, C-2 Section and C-8 Section (two-lane)
- 5. C-1 Section, C-2 Section and C-6 Section Battery Street Extension (four-lane)
- 6. C-1 Section, C-2 Section and C-6 Section Battery Street Extension (two-lane)
- 7. C-1 Section, C-2 Section and C-6 Section Pine Street (four-lane)
- 8. C-1 Section, C-2 Section and C-6 Section Pine Street (two-lane)
- 9. C-1 Section and C-2 Section Only (two-lane)
- 10. C-1 Section, C-2 Section and geometric improvements along Pine Street (two-lane)
- 11. C-1 Section, C-2 Section and C-6 Section with one-way street patterns.

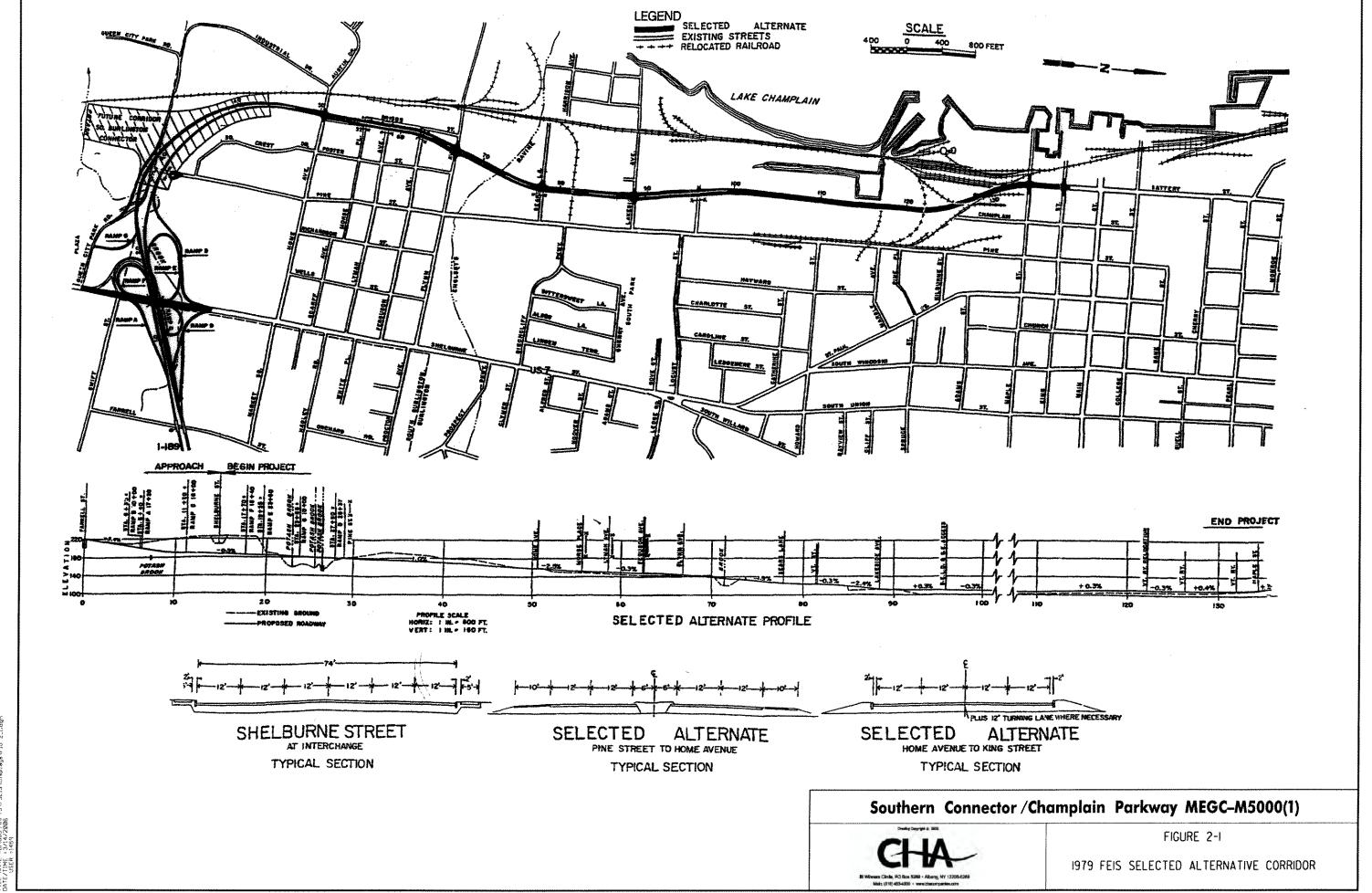
These alternatives are described below.

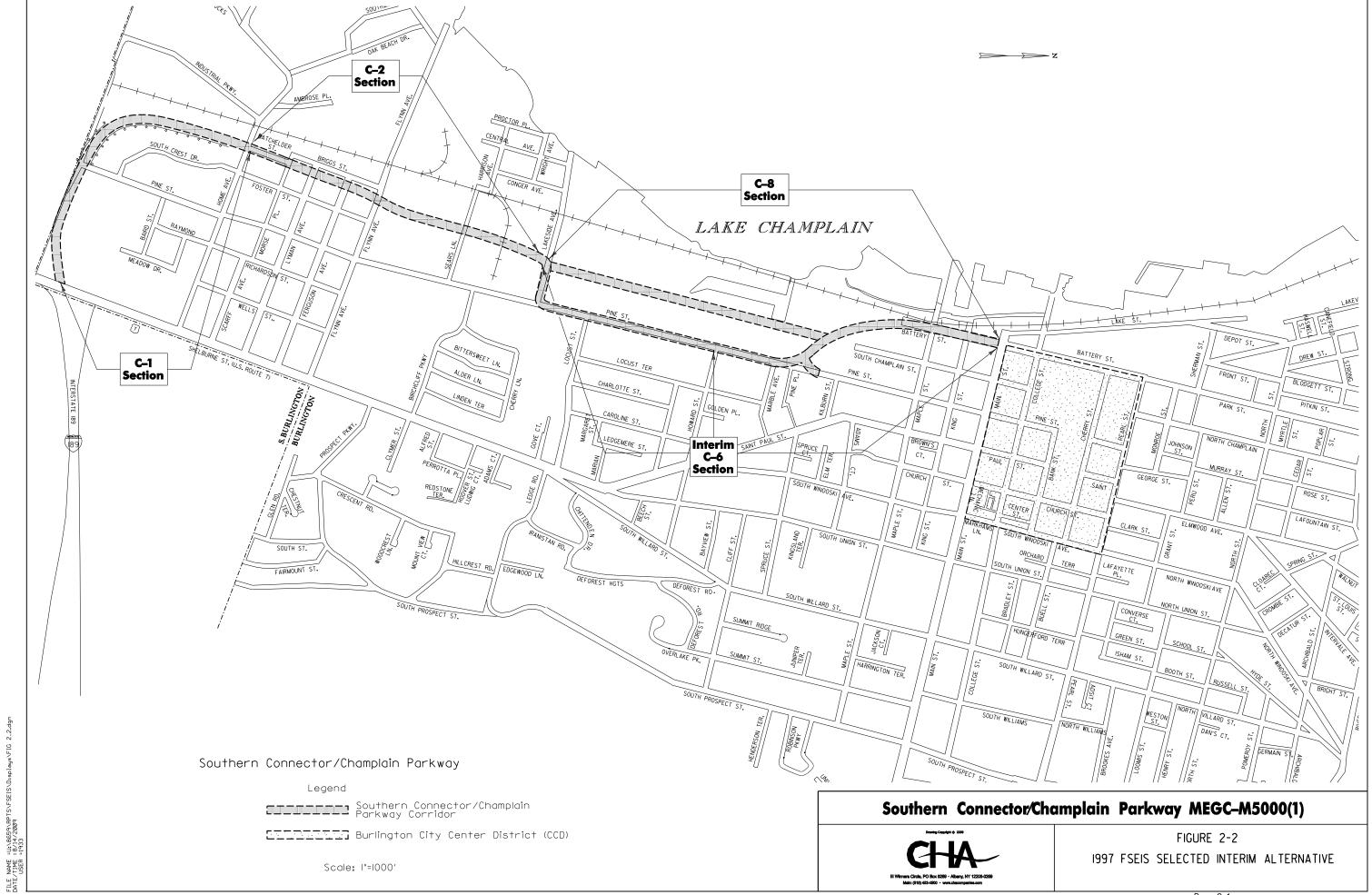
2.2.1. No-Build Alternative

The 1979 FEIS No-Build Alternative was the proposal to leave the existing street network in its current state at that time. This alternative was not in conformance with the local and regional planning goals of that time. Traffic capacity problems were already occurring during peak periods, and travel quality was anticipated to decrease as a result of increasing traffic volume. The No-Build Alternative was discarded from further evaluation because it offered no solution to the problem.

The 1997 FSEIS No-Build Alternative was defined as the scenario in which the C-2 Section and C-6 Section would not be constructed. Therefore, the previously constructed C-1 Section would remain unopened to traffic. The No-Build Alternative was not selected as an interim alternative at that time.

The No-Build Alternative, as presented in this document, would consist of the existing street network in its present configuration. No further construction associated with the Southern Connector/Champlain Parkway would occur. The No-Build Alternative is discussed in more detail in later sections of this document.





2.2.2. Transportation Systems Management, Transportation Demand Management and Public Transportation Alternatives (Transit/TSM/TDM)

Transportation Systems Management (TSM) measures are relatively inexpensive improvements that utilize technology solutions to make existing transportation systems operate more efficiently and to maximize the existing infrastructure investment. Examples of typical TSM improvements include the addition of traffic signals or optimization of existing traffic signal timings, added vehicle turn lanes, and the reconfiguration of lanes. These types of improvements are generally provided at specific locations.

Transportation Demand Management (TDM) measures include improving public transit, creation of park and ride facilities that encourage car pooling and/or transit use, increased bicycle commuting opportunities, and working with employers to provide alternatives to single occupant vehicle use by employees. The objective of TDM is to reduce vehicular volumes within urban areas.

The 1979 FEIS discussed the use of Alternate Travel Modes (i.e., transportation modes other than private automobiles). At that time, this alternative was considered unrealistic because it alone would not meet the total transportation demand.

The 1997 FSEIS discussed Transit/TSM/TDM alternatives for the project. At that time, these alternatives were not considered to be sufficient enough to address the project purpose and need if implemented alone.

As part of the development of this 2009 FSEIS, TSM options were considered as an alternative to the proposed project. The proposed project is focused on providing a system-wide improvement; therefore, TSM improvements alone would neither meet the future traffic demands anticipated within the study area, nor would they satisfy the purpose and need of the project.

TDM options were considered as alternatives to the proposed project action. There have been considerable efforts focused on TDM measures within the City of Burlington in the past. Analysis indicates that TDM measures alone are not sufficient enough to address the project purpose and need. For comparison purposes, additional information regarding the traffic analysis for this alternative is presented in Appendix 3 of this 2009 FSEIS.

Public Transportation was also considered as an alternative to the proposed project action. The possibility of increased public transportation has been evaluated in the City of Burlington for many years. The 2001 Chittenden County Regional Plan identified one of its goals was to improve the mass transit system by the expansion of the Chittenden County Transportation Authority service area and frequency of operation, introduction of passenger and commuter rail and construction of multi-modal centers, transit-oriented developments, and park-and-ride lots.

Recently, the operation of the commuter train from Charlotte to Burlington, the Champlain Flyer, was suspended indefinitely by the VTrans as a result of poor utilization. For a commuter train to succeed it must connect one substantial population base to another. This commuter train was originally intended to alleviate traffic congestion anticipated during the reconstruction of U.S. Route 7; however, the reduction in traffic that this may have provided may not be known since the reconstruction project did not take place while the commuter train was in operation.

Expanded pubic transportation is recommended to be pursued in the city, but is not, by itself, considered to be a reasonable solution to address the purpose and need of the project.

It should also be noted that FHWA's Technical Advisory (T 6640.8A), *Guidance for Preparing and Processing Environmental and Section 4(f) Documents*, states that TSM and mass transit should be considered for major highway projects in urbanized areas with populations over 200,000. The 2000 U.S. Census data shows that the City of Burlington only has a population of 38,889 and that Chittenden County has a population of 146,571. Subsequent to the issuance of the 2006 DSEIS, the U.S. Census Bureau released its 2006 data which shows that the City of Burlington has a population of 38,358 and Chittenden County has a population of 150,069. Therefore, the area does not meet the threshold.

2.2.3. Pine Street Alternative (four-lane)

The Pine Street Alternative was presented in the 1979 FEIS and would construct a four-lane roadway on new alignment from I-189 to a point on Pine Street north of Flynn Avenue. Pine Street would be widened to Pine Place where a new alignment from Pine Street would connect to Battery Street. This alternative was previously dismissed from additional study because of adverse impacts on the surrounding area, including abolishment of parking on Pine Street, conflicts with through and turning traffic movements and cost to the City of Burlington for relocation of utilities. Therefore, this alternative is not being evaluated for detailed study in this 2009 FSEIS.

2.2.4. C-1 Section, C-2 Section and C-8 Section (four-lane) - Null Alternative

The 1979 FEIS presented a New Location Alternative as the Selected Alternative, since it provided the most satisfactory, safe, and expeditious movement of traffic, with the least adverse social, economic, cultural and natural resource impacts. This alternative consisted of the C-1 Section, the C-2 Section and the C-8 Section and was proposed to be a four-lane facility. Figure 2-1 illustrates the 1979 FEIS Selected Alternative. This alternative is referred to as the Null Alternative in this 2009 FSEIS. The Null Alternative is not being evaluated for detailed study due to the substantial environmental impacts associated with this alternative. The City of Burlington and VTrans, with FHWA concurrence, cooperatively agreed to abandon the C-8 Section for the construction of the Southern Connector/Champlain Parkway project in March 2002 due to the impacts and complexities

of environmental issues associated with the Pine Street Barge Canal Superfund Site (See Appendix 1). For comparison purposes, refer to Appendix 3 of this 2009 FSEIS for detailed traffic analysis for this alternative.

2.2.5. C-1 Section, C-2 Section and C-8 Section (two-lane)

A two-lane alternative following the same alignment as the Null Alternative, consisting of the C-1 Section, C-2 Section and C-8 Section, was considered during the development of the 2006 DSEIS. Although a two-lane roadway section would reduce the environmental, impacts associated with the Pine Street Barge Canal Superfund Site when compared to the four-lane alternative, it would not eliminate them. As stated above, the City of Burlington and the VTrans cooperatively agreed to abandon the C-8 Section for the construction of the Southern Connector/Champlain Parkway project due to impacts and complexities of environmental processing associated with the Pine Street Barge Canal Superfund Site (See Appendix 1). Therefore, this alternative is not being evaluated for detailed study due of the substantial environmental impacts associated with this alternative.

2.2.6. C-1 Section, C-2 Section and C-6 Section – Battery Street Extension (four-lane)

This alternative consists of a roadway alignment similar to the 1997 Selected Interim Alternative and the Pine Street Alternative (refer to Section 2.2.3). The C-1 Section, C-2 Section and C-6 Section would be constructed as a four-lane roadway with turn-lanes, as needed. This alternative was initially considered for traffic comparison purposes to the Null Alternative. Substantial right-of-way, environmental and social impacts along Pine Street would be necessary in order to provide a four-lane section. This alternative would connect Pine Street to Battery Street by constructing a new four-lane roadway through the existing Burlington rail yard facilities. The railroad operations that would be impacted by the new roadway would be mitigated. As a result of the substantial environmental, socioeconomic and right-of-way impacts and issues associated with the relocation of the railroad operations, this alternative is not being evaluated for detailed study. For comparison purposes, refer to Appendix 3 of this 2009 FSEIS for detailed traffic analysis for this alternative.

2.2.7. C-1 Section, C-2 Section and C-6 Section – Battery Street Extension (two-lane)

This alternative consists of a roadway alignment similar to the 1997 Selected Interim Alternative. The C-1 Section, C-2 Section and C-6 Section would be constructed as a two-lane roadway with turn-lanes, as needed. This alternative would connect Pine Street to Battery Street by constructing a new two-lane roadway through the existing Burlington rail yard facilities. The railroad operations that would be impacted by the new roadway would be mitigated. This alternative would have similar environmental and right-of-way impacts compared to the four-lane roadway described above in the vicinity of the Burlington rail yard; however, the impacts along Pine Street would be less compared to the

four-lane section. This alternative is being evaluated for detailed study and is referred to as Build Alternative 1 in later sections of this 2009 FSEIS.

2.2.8. C-1 Section, C-2 Section and C-6 Section – Pine Street (four-lane)

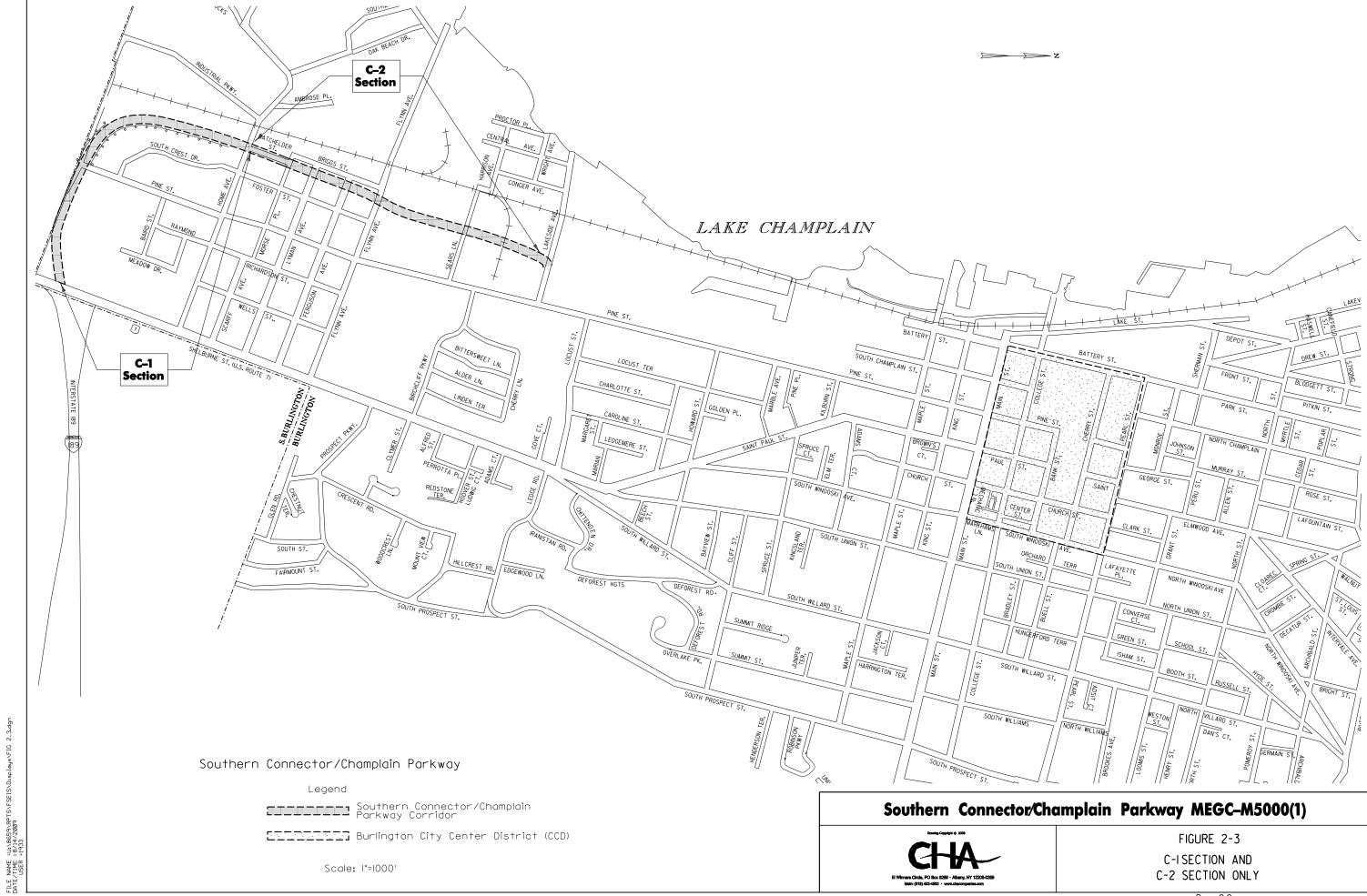
This alternative would consist of the C-1 Section, C-2 Section and C-6 Section as a four-lane roadway with turn-lanes, as needed. The C-6 Section would utilize Pine Street from Lakeside Avenue to Main Street to provide access to the CCD. This alternative was initially considered for traffic comparison purposes to the Null Alternative. The widening of Pine Street to accommodate a four-lane section would eliminate parking on Pine Street and substantially reduce the existing green space. As a result of the substantial environmental, socio-economic and right-of-way impacts this alternative is not being evaluated for detailed study.

2.2.9. C-1 Section, C-2 Section and C-6 Section – Pine Street (two-lane)

This alternative would consist of the C-1 Section, C-2 Section and C-6 Section as a twolane roadway with turn-lanes, as needed. The C-6 Section would utilize Pine Street from Lakeside Avenue to Main Street to provide access to the CCD. The environmental, socioeconomic and right-of-way impacts along Pine Street would be substantially less compared to the four-lane section. This alternative is being evaluated for detailed study and is referred to as Build Alternative 2 in later sections of this 2009 FSEIS.

2.2.10. C-1 Section and C-2 Section Only (two-lane)

This alternative would consist of constructing the C-1 Section and the C-2 Section only. The C-1 Section would involve reconstruction of the I-189/Shelburne Street (U.S. Route 7) Interchange, and construction of the Southern Connector/Champlain Parkway to approximately Home Avenue. This portion of the project has been constructed as a four-lane facility. Within the limits of the previously built section, lane and shoulder reconfiguration would provide one lane in each direction. Additional improvements would include replacing a majority of the existing concrete median barrier with a raised grass median, removal of excess pavement, lighting and landscaping to enhance the entrance to the City. A new shared-use path would also be constructed connecting Pine Street to Shelburne Street (U.S. Route 7) along the northern side of the C-1 Section. The C-2 Section would commence at the northern terminus of the C-1 Section, near Home Avenue, and extend northerly, as far as Lakeside Avenue. The C-2 Section would be a two-lane facility with dedicated turn lanes providing access to the existing local street network where permitted. At the terminus of the C-2 Section, traffic would be directed



easterly on to the existing Lakeside Avenue to Pine Street. Traffic could then proceed north on the existing Pine Street to its intersection with Maple Street or divert to the local street system. Traffic could proceed westerly on Maple Street to Battery Street or continue northerly on Pine Street to Burlington's CCD (See Figure 2-3). This alternative is not being evaluated further because it would result in unacceptable levels of congestion during peak hours due to the increase in traffic volumes along the northern section of Pine Street, specifically in the area of Maple Street and King Street. For comparison purposes, refer to Appendix 3 of this 2009 FSEIS for detailed traffic analysis for this alternative.

2.2.11. C-1 Section, C-2 Section and geometric improvements along Pine Street (two-lane)

This alternative would consist of constructing the C-1 Section and the C-2 Section and providing geometric improvements along Pine Street. The C-1 Section would involve reconstruction of the I-189/Shelburne Street (U.S. Route 7) interchange, and construction of the Southern Connector/Champlain Parkway to approximately Home Avenue. This portion of the project has been constructed as a four-lane facility. Within the limits of the previously built section, lane and shoulder reconfiguration would provide one lane in each direction. Additional improvements would include replacing a majority of the existing concrete median barrier with a raised grass median, removal of excess pavement, lighting and landscaping to enhance the entrance to the city. A new shared-use path would also be constructed connecting Pine Street to Shelburne Street (U.S. Route 7) along the northern side of the C-1 Section. The C-2 Section would commence at the northern terminus of the C-1 Section, near Home Avenue, and extend northerly, as far as Lakeside Avenue. The C-2 Section would be a two-lane facility with dedicated turn lanes providing access to the existing local street network where permitted. At the terminus of the C-2 Section, traffic would be directed easterly onto Lakeside Avenue to Pine Street. Traffic could then proceed north on Pine Street to Burlington's CCD (See Figure 2-4). Pine Street would be reconstructed as a two-lane roadway with dedicated bicycle lanes, sidewalks and turn-lanes at intersections, where required. The addition of turn-lanes would require additional roadway width than currently exists. This would result in property impacts and acquisitions along Pine Street. A parking lane would be provided along Pine Street where feasible; however, on-street parking between Maple Street and Main Street would not be provided to limit impacts to adjacent residential buildings. As a result of substantial socioeconomic issues associated with the loss of on-street parking along Pine Street in the vicinity of Maple Street, King Street and Main Street; this alternative is not being evaluated further at this time. Consideration was also given to expanding the geometric improvements to include widening the Pine Street pavement to provide on-street parking between Maple Street and Main Street as well as the additional pavement width for the required turn lanes. This scenario is not being evaluated further at this time because it would create substantial right-of-way impacts, socio-economic impacts

historical/archaeological impacts. For comparison purposes, refer to Appendix 3 of this 2009 FSEIS for detailed traffic analysis for this alternative.

2.2.12. C-1 Section, C-2 Section and C-6 Section with one-way street patterns

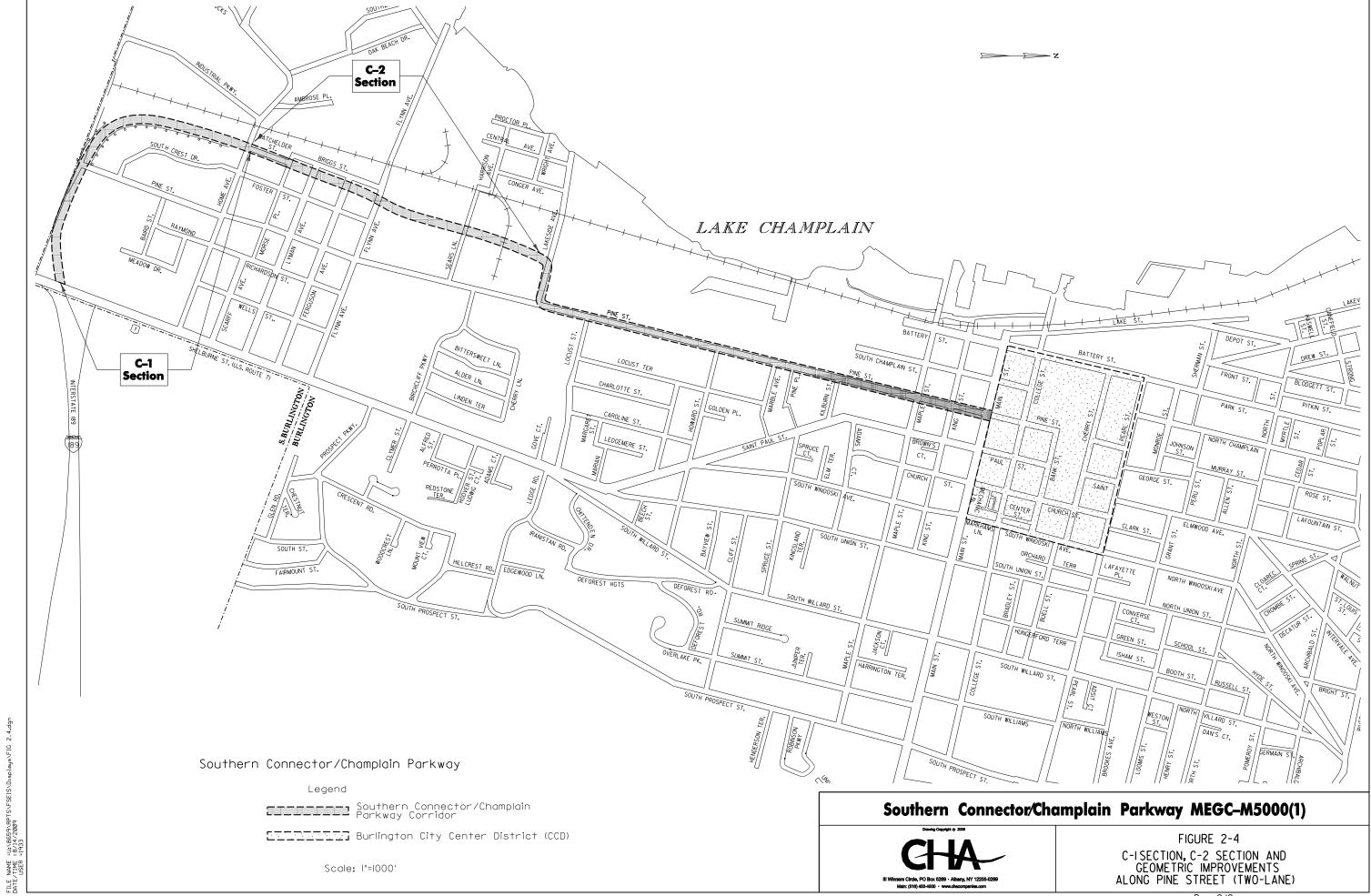
This alternative would consist of constructing the C-1 Section, C-2 Section and reconstructing Pine Street from Lakeside Avenue to Pine Place. This alternative would require the construction of a new roadway from the southern terminus of South Champlain Street to Pine Street in the vicinity of Pine Place (See Figure 2-5). This section of roadway is referred to as the South Champlain Street Extension. This new alignment would almost parallel the Battery Street Extension. Pine Street would be one-way northbound between Kilburn Street and Main Street. South Champlain Street would be one-way southbound between Main Street and Pine Street. Maple Street would be oneway eastbound between Battery Street and Pine Street. King Street would be one-way westbound between Pine Street and Battery Street. The need to provide only one travel lane within the existing curblines would allow for dedicated bicycle lanes and on-street parking lanes. The South Champlain Street Extension would impact Curtis Lumber's (formerly Gregory Supply) current business operations and facility located on Pine Street. The former Burlington Street Department property would also be impacted. alternative is not being evaluated further due to the right-of-way, socio-economic, Section 4(f) and rail yard impacts. For comparison purposes, additional information regarding the traffic analysis for this alternative is presented in Appendix 3 of this 2009 FSEIS.

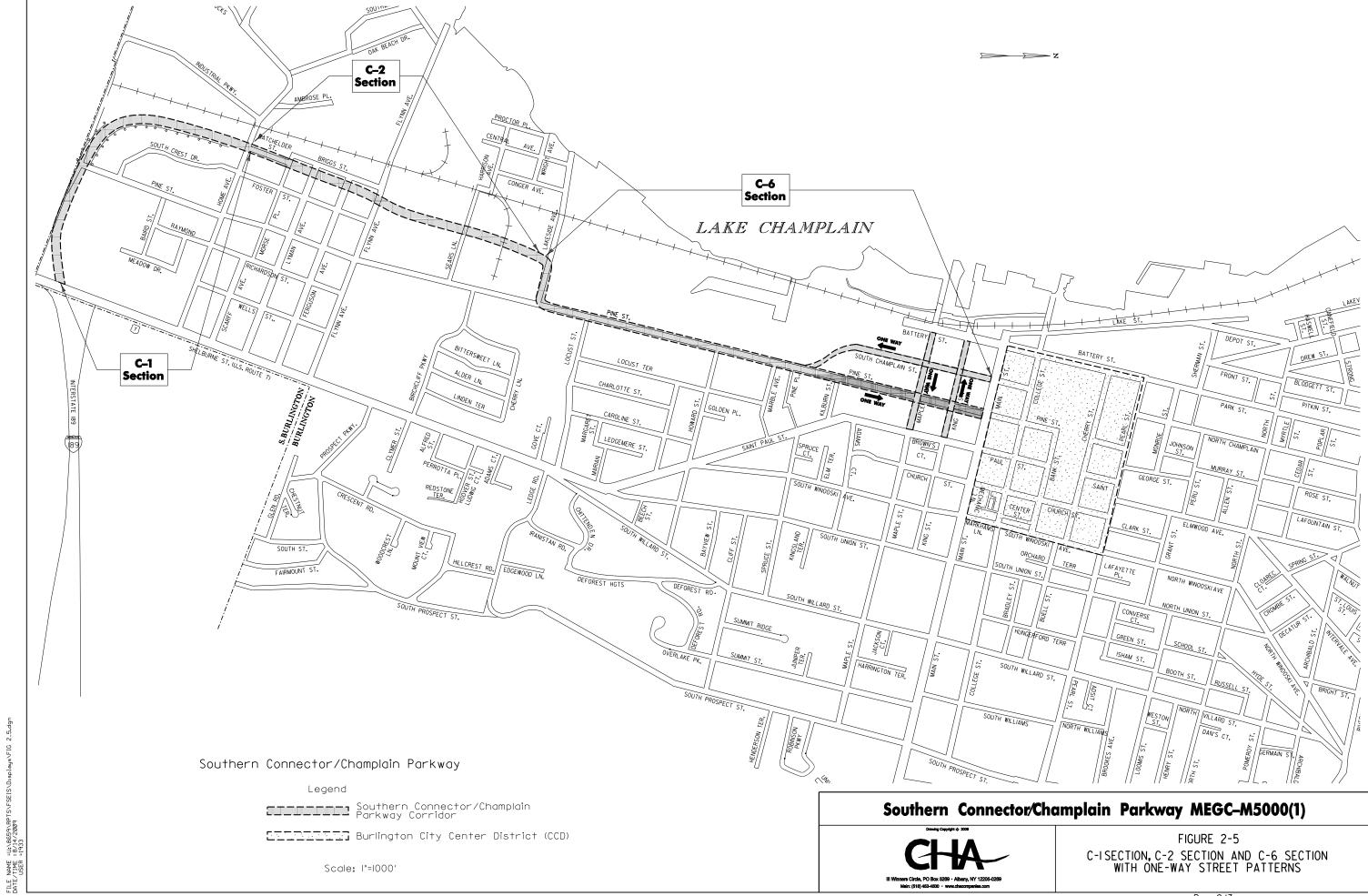
2.3. Alternatives Evaluated in this SEIS

2.3.1. No-Build Alternative

The No-Build Alternative would consist of the existing street network in its present configuration. No further construction related to the Southern Connector/Champlain Parkway would be implemented. The previously constructed C-1 Section would remain closed to traffic. Other projects in the study area may be implemented including:

- Full build of the Circumferential Highway (Under Environmental Review)
- College Street Waterfront Access Project (Under Construction)
- Side Streets to the Church Street Marketplace Improvement Project (Under Design)
- Downtown Transit Center





- Market Street Improvements (Under Design)
- Shelburne Street Traffic Circle (Under Design)
- U.S Route 7 Improvements (Under Construction)

2.3.2. Build Alternatives

2.3.2.1. Overview

The build alternatives evaluated in this 2009 FSEIS are intended to satisfy the purpose and need of the project, while avoiding or minimizing, to the maximum extent feasible, impacts to environmentally and historically sensitive areas such as, the Pine Street Barge Canal Superfund Site and other areas contaminated with hazardous materials, natural resources, Section 4(f) resources and historic properties, and business and community interests.

There are two build alternatives presented in this 2009 FSEIS. Both of the Build Alternatives consist of the C-1 Section, C-2 Section and C-6 Section (refer to Figure 1-3). For comparison purposes, the build alternatives are referred to as Build Alternative 1 and Build Alternative 2. Build Alternative 2 is being presented as the City's Preferred Alternative in this 2009 FSEIS.

2.3.2.1.1. Build Alternative 1

Build Alternative 1 would consist of a roadway alignment similar to the 1997 Selected Interim Alternative. The C-1 Section, C-2 Section and C-6 Section would be constructed as a two-lane roadway with turn-lanes, as needed. This alternative would connect I-189/U.S. Route 7 (Shelburne Street) to Battery Street. The three sections of Build Alternative 1 are described below:

C-1 Section:

The C-1 Section would consist of reconstruction of the I-189/Shelburne Street (U.S. Route 7) interchange, and construction of the Southern Connector/Champlain Parkway to approximately Home Avenue. This portion of the project has been previously constructed as a four-lane facility. Within the limits of the previously built section, lane and shoulder reconfiguration would reduce the roadway cross-section to one lane in each direction. Additional improvements would include replacing a majority of the existing concrete median barrier with a raised grass median, removal of excess pavement, inclusion of lighting and landscaping to enhance the entrance to the City of Burlington. This section of the project would provide a transition between the interstate and the city street system. A new shared-use path would also be constructed connecting Pine Street to Shelburne Street (U.S. Route 7) along the northern side of the C-1 Section. A typical cross-section of the proposed two-lane, C-1 Section is shown on Figure 2-6.

C-2 Section:

The C-2 Section would commence at the northern terminus of the C-1 Section, near Home Avenue, and extend northerly on new location for approximately 0.7 mile, as far as Lakeside Avenue. A four-lane concept for this portion of the project was previously approved and designed, and right of way that corresponded to that design has been acquired. The C-2 Section was never constructed. Similar to the C-1 Section, modifications have been proposed for the C-2 Section design subsequent to the 1979 FEIS. The C-2 Section would be a two-lane facility with dedicated turn lanes at the local street at-grade intersections where permitted (refer to Figure 2-12). A typical cross-section of the proposed two-lane, C-2 Section is shown on Figure 2-7.

C-6 Section:

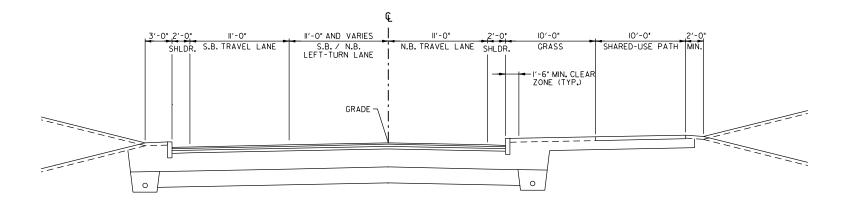
Build Alternative 1 would reconstruct a portion of Lakeside Avenue, from the terminus of the C-2 Section to its intersection with Pine Street. Build Alternative 1 would proceed north along Pine Street for approximately 0.6 mile, from Lakeside Avenue to approximately Pine Place. Build Alternative 1 would depart Pine Street near the former Burlington Street Department property, and continue northwesterly on new location to the intersection of Battery Street and Maple Street. From this intersection, Build Alternative 1 would proceed north along Battery Street to its intersection with Main Street. Build Alternative 1 would provide access to Burlington's CCD.

Lakeside Avenue:

Build Alternative 1 would reconstruct a portion of Lakeside Avenue, from the terminus of the C-2 Section to its intersection with Pine Street. This section of Lakeside Avenue is approximately 500-feet in length.

The improvements proposed along Lakeside Avenue for Build Alternative 1 include the following, as shown on Figure 2-13:

- A new fully-actuated traffic signal at the intersection of the C-2 Section and Lakeside Avenue;
- A new fully-actuated traffic signal at the intersection of Lakeside Avenue and Pine Street;
- Minor geometric improvements, roadway reconstruction and drainage improvements along Lakeside Avenue, from the Gilbane Properties (formerly General Dynamics) parking lot to Pine Street; and



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FIGURE 2-7

FILE NAME =ux\8659\RPTS\FSEIS\Displays\TYP.DGN DATE/TIME =9\27/2006 USER =597 • Construction of a shared-use path along the southern side of Lakeside Avenue, connecting the C-2 Section shared-use path with Pine Street.

The proposed roadway is anticipated to be constructed at approximately the existing grade and should not create substantial increases in elevation.

Pine Street (Lakeside Avenue to Pine Place)

Build Alternative 1 would proceed north along Pine Street for approximately 0.6 mile, from Lakeside Avenue to approximately Pine Place. Build Alternative 1 would include a full-depth reconstruction of Pine Street in this area with geometric improvements, drainage improvements, and the relocation of existing aerial utilities underground. Build Alternative 1 would widen Pine Street to accommodate two 11-foot travel lanes, two five-foot bicycle lanes, an eight-foot parking lane on the eastern side (where feasible and permitted), curbing and sidewalks as shown in Figure 2-13. A typical cross-section for the proposed Pine Street is shown on Figure 2-8. Along this portion of Pine Street, widening would occur primarily along the western side of the road, due to the number of physical constraints on the eastern side. The widening would require additional right-of-way acquisition from numerous properties along Pine Street. The City of Burlington proposes to relocate the commercial entrance associated with the Maltex building approximately 25-feet to the south in order to provide a four-way intersection with Howard Street.

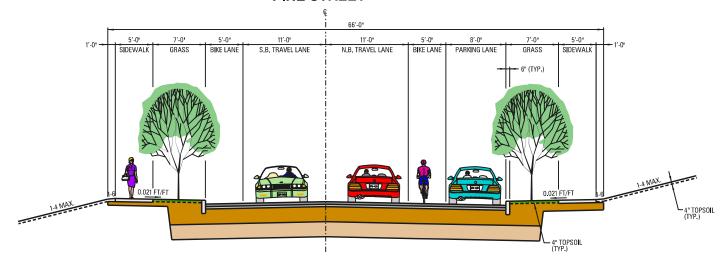
Sidewalks are proposed on the western side of Pine Street from Lakeside Avenue north to the Maltex building. A continuous sidewalk would be provided along the eastern side of Pine Street from Lakeside Avenue to Pine Place.

Overhead utilities presently located on the western side of Pine Street would be relocated underground. Landscaping and street lighting would also be provided along Pine Street.

The proposed roadway is anticipated to be constructed at approximately the existing grade and would not create substantial increases in elevation.

Pine Place to the CCD:

Build Alternative 1 would proceed northwesterly on new location from Pine Street to the intersection of Battery Street and Maple Street. This connection is referred to as the Battery Street Extension (Figure 2-9). From the intersection of Battery Street and Maple Street, Build Alternative 1 would proceed north along existing Battery Street to its intersection with Main Street, providing a connection to the CCD. This alternative departs from Pine Street, just north of the Pine Place intersection in the vicinity of the former Burlington Street Department property, and proceeds northwesterly, traversing

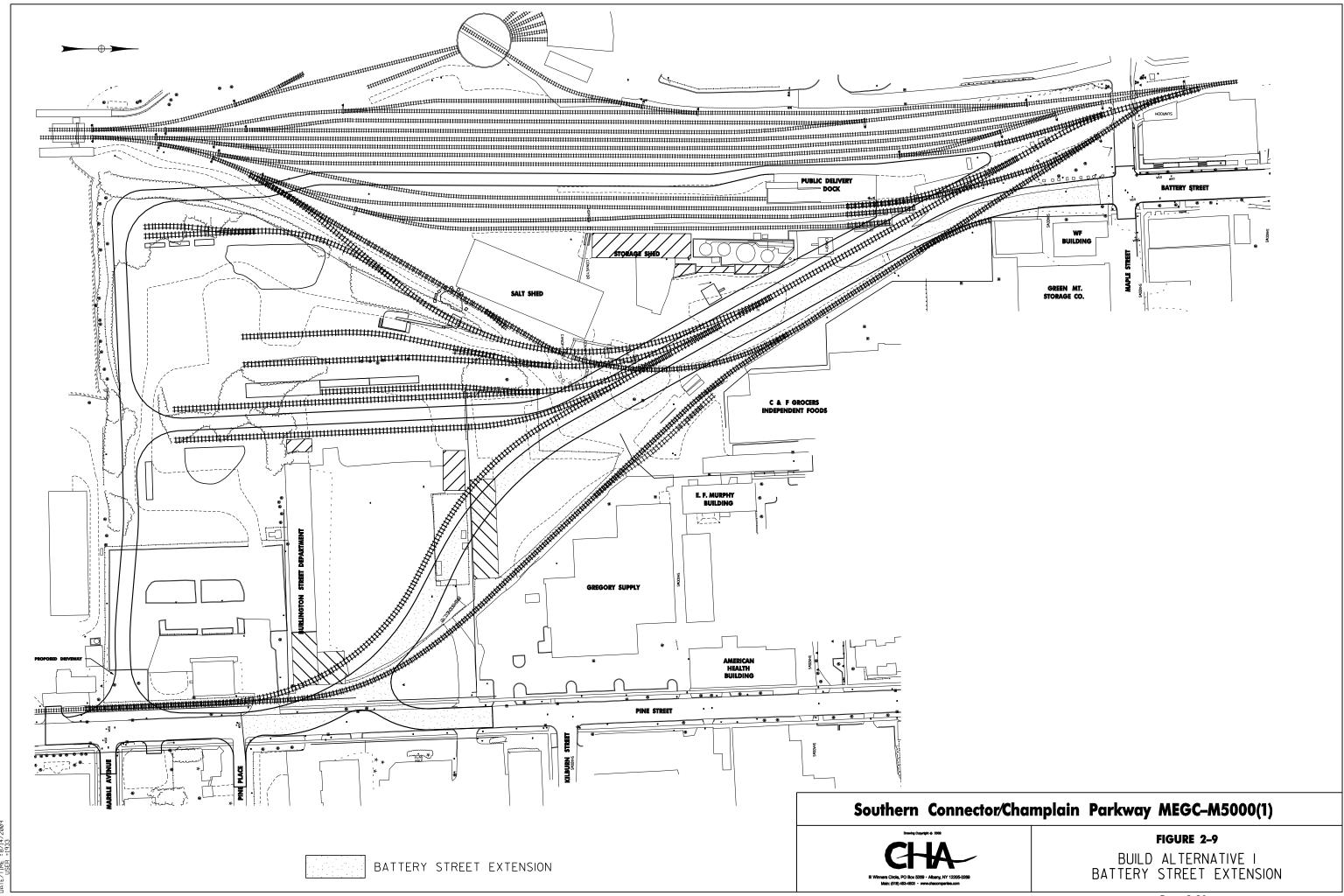


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FIGURE 2-8



the former City of Burlington Street Department property, Curtis Lumber's (formerly Gregory Supply Company) property and the VTR property. The typical roadway section in this area would consist of two 12-foot travel lanes with two-foot shoulders, curbing and a sidewalk along the eastern side of the roadway (Figure 2-10). Right-of-way acquisitions would be required for the construction of this alternative. Build Alternative 1 would require the demolition of approximately one-quarter of the former Burlington Street The extent of this demolition would be determined upon the Department building. completion of a feasibility assessment of this structure. As part of the Southern Connector/Champlain Parkway project, the City of Burlington has already relocated their operations to a new facility at the intersection of Pine Street and Lakeside Avenue. This alternative would also relocate the existing rail spur to the west of the proposed Battery Street Extension; therefore, no railroad grade crossings would be created along this portion of the proposed roadway. As part of Build Alternative 1, a rail yard mitigation plan would be included for impacts to portions of VTR's operations within the State of Vermont's existing rail yard. This rail yard mitigation is discussed further in Section 4.2.2 of this 2009 FSEIS.

Improvements along Battery Street from Maple Street to Main Street are also required. The typical section for Battery Street in this area would consist of two travel lanes with left-turn lanes at the intersections and parking lanes on both sides of the street. Approximately a seven-foot shift in the eastern curbline between Maple Street and King Street would be required to accommodate the additional parking lane. This would create a reduction in green space for this entire area; however, no other substaintal features are affected as a result of this change. The western curbline remains unchanged. Currently, Battery Street, south of Maple Street ends at the rail yard with no clear physical definition. When the proposed improvement is in place, it would be a defined street with curbs and pavement adjacent to the rail yard. A new traffic signal is proposed at the intersection of Maple Street and Battery Street. No additional right-of-way acquisitions are anticipated for construction in this area.

2.3.2.1.2. Build Alternative 2

Build Alternative 2 would consist of the C-1 Section, C-2 Section and C-6 Section. This alternative would be constructed as a two-lane roadway with turn-lanes, as needed. Build Alternative 2 would connect I-189/U.S. Route 7 (Shelburne Street) to the CCD. The three sections of Build Alternative 2 are described below:

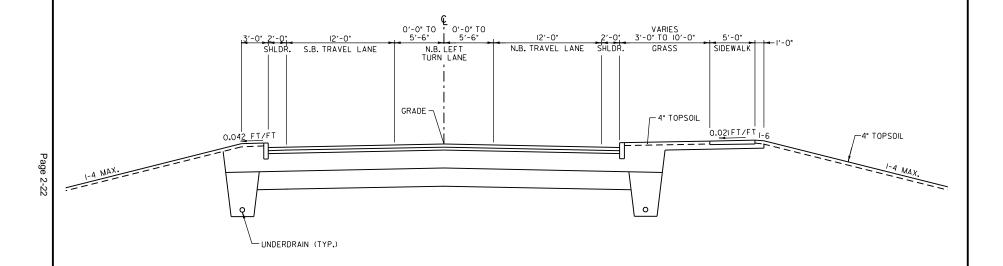
C-1 Section:

The C-1 Section would be identical to Build Alternative 1, as described above.

C-2 Section:

The C-2 Section would be identical to Build Alternative 1, as described above.

BUILD ALTERNATIVE 1 PROPOSED TYPICAL SECTION BATTERY STREET EXTENSION



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FIGURE 2-10

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C-6 Section:

Build Alternative 2 would reconstruct a portion of Lakeside Avenue, from the terminus of the C-2 Section to its intersection with Pine Street. Build Alternative 2 would proceed north along Pine Street for approximately 0.6 mile, from Lakeside Avenue to approximately Pine Place. Build Alternative 2 would continue north along Pine Street to its intersection with Main Street. Build Alternative 2 would provide direct access to Burlington's CCD.

Lakeside Avenue:

Build Alternative 2 would be identical to Build Alternative 1 along Lakeside Avenue, as described above.

Pine Street (Lakeside Avenue to Pine Place):

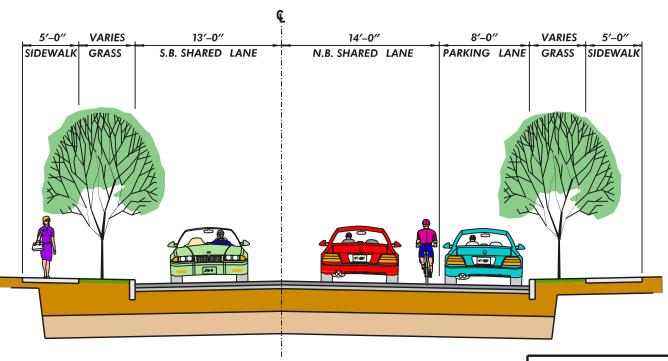
Build Alternative 2 would consist of cold planing and resurfacing the existing Pine Street pavement, limited drainage improvements, new granite curb, and construction/replacement of sidewalk to provide a continuous walkway for pedestrians. Build Alternative 2 would accommodate two 13-foot minimum travel lanes and an eight-foot parking lane on the eastern side (where feasible and permitted), curbing and sidewalks as shown in Figure 2-14. The travel lanes would be designated as shared-lanes to accommodate both motor vehicles and bicyclists. A typical cross-section for the proposed Pine Street is shown on Figure 2-11. Sidewalks are proposed on the western side of Pine Street from Lakeside Avenue north to Pine Place. A continuous sidewalk would also be provided along the eastern side of Pine Street from Lakeside Avenue to Pine Place.

Build Alternative 2 would not provide relocated utilities unless conflicts with proposed features occur; therefore, the existing overhead utilities located along Pine Street would remain in their current location

Pine Place to the CCD:

Build Alternative 2 would continue north along existing Pine Street to the intersection with Main Street providing the preferred connection to the CCD.

Under Build Alternative 2 (Figure 2-11), the improvements previously described for Pine Street between Lakeside Avenue and Pine Place would continue. Pine Street would be cold planed and resurfaced, limited drainage improvements, new granite curb, and a continuous sidewalk on both sides of the roadway for pedestrians would be incorporated. The typical roadway section in this area would consist of two 13-foot minimum travel lanes and an eight-foot parking lane on the eastern side (where feasible and permitted),



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FIGURE 2-II

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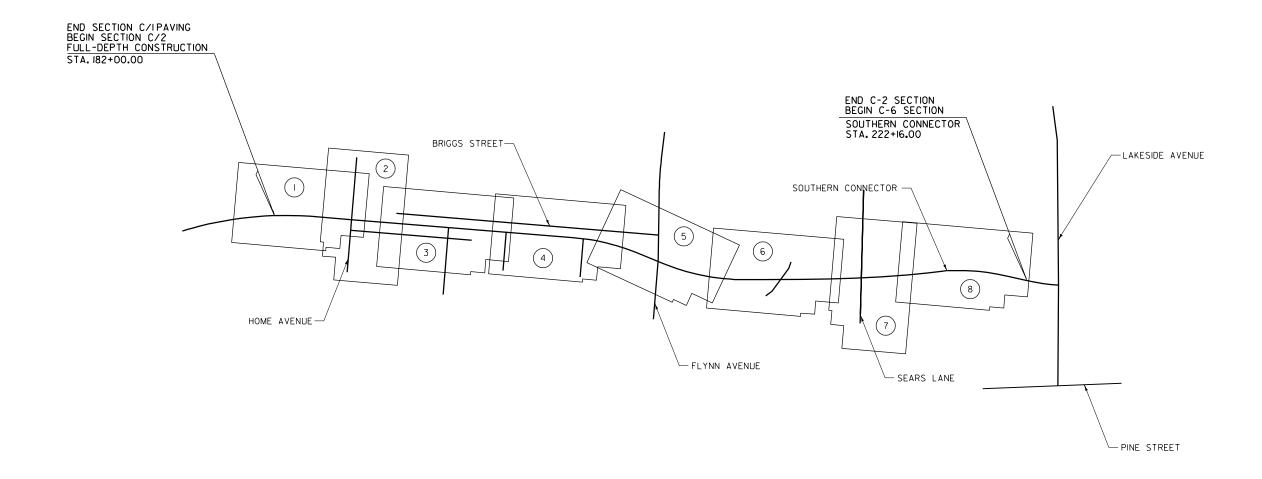
curbing and sidewalks as shown in Figure 2-14. Bicyclists would utilize the shared-travel lane as previously described for the segment between Lakeside Avenue and Pine Place. Right-of-way acquisitions are anticipated to be limited to properties adjacent to Pine Street's intersections with Maple Street and King Street. These potential acquisitions would be associated with the installation of new traffic signals at these two intersections and any utility relocation required to accommodate these new traffic signals. Temporary easements are anticipated to complete the construction along Pine Street. Build Alternative 2 would not result in any impact to the State of Vermont's existing rail yard, the former Burlington Street Department property or Curtis Lumber (formerly Gregory Supply Company).

2.4 SUMMARY OF BUILD ALTERNATIVES

The Southern Connector/Champlain Parkway is an approximately 2.4 mile roadway project with two proposed Build Alternatives. The Build Alternatives are comprised of the C-1 Section, the C-2 Section and the C-6 Section. The differences between the Build Alternative 1 and Build Alternative 2 alignments occur within the last 0.5 mile of the C-6 Section. Within this 0.5 mile, Build Alternative 1 would construct a new roadway section that would require the demolition of a portion of a historic building, compensation for property and economic impacts to existing businesses, and mitigation to impacted rail yard operations to provide access to the western edge of the CCD.

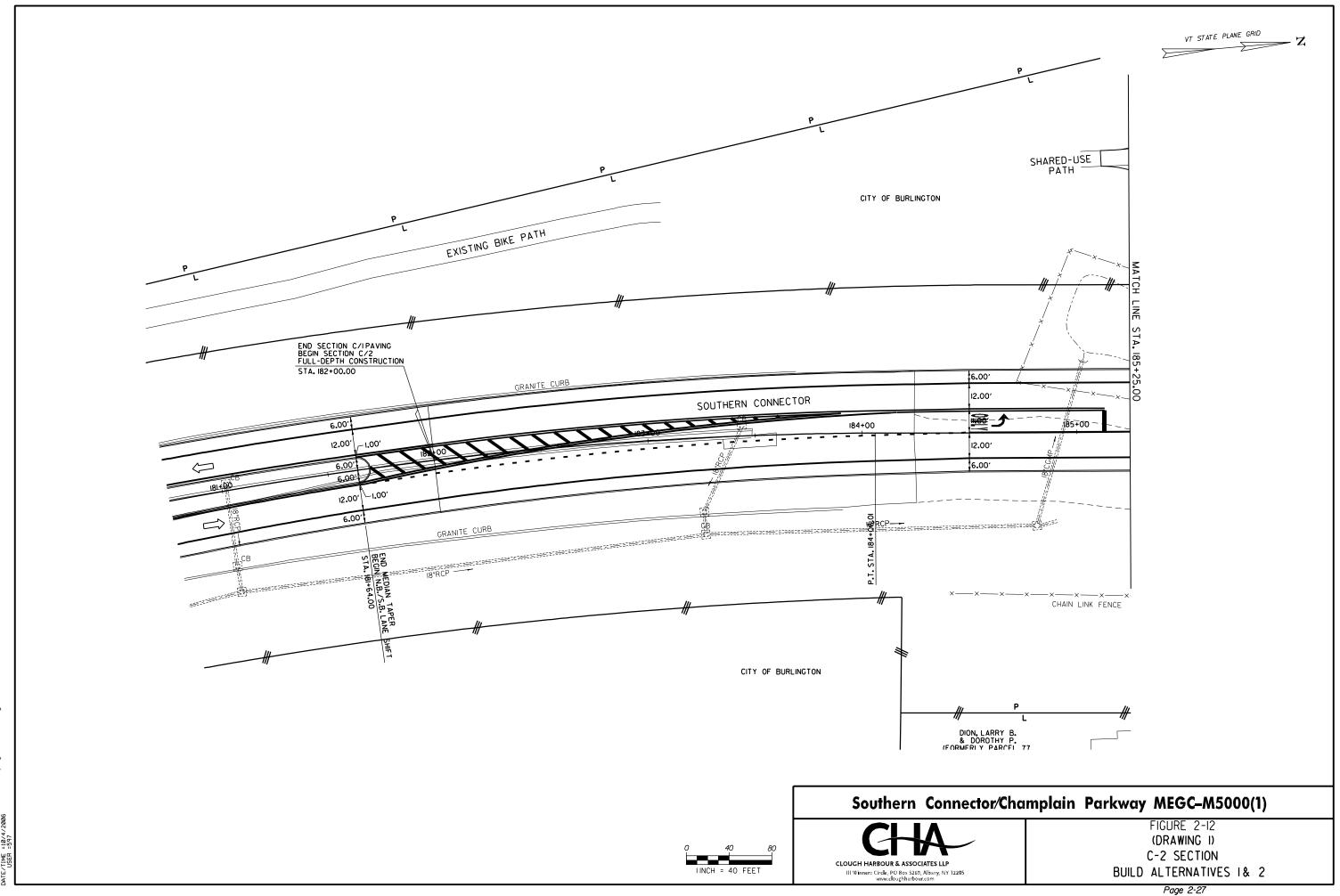
Within a parallel 0.5 mile segment, Build Alternative 2, the Preferred Alternative, would utilize existing roadways and require the installation of two new traffic signals at existing intersections to provide a direct connection to the center of the CCD.

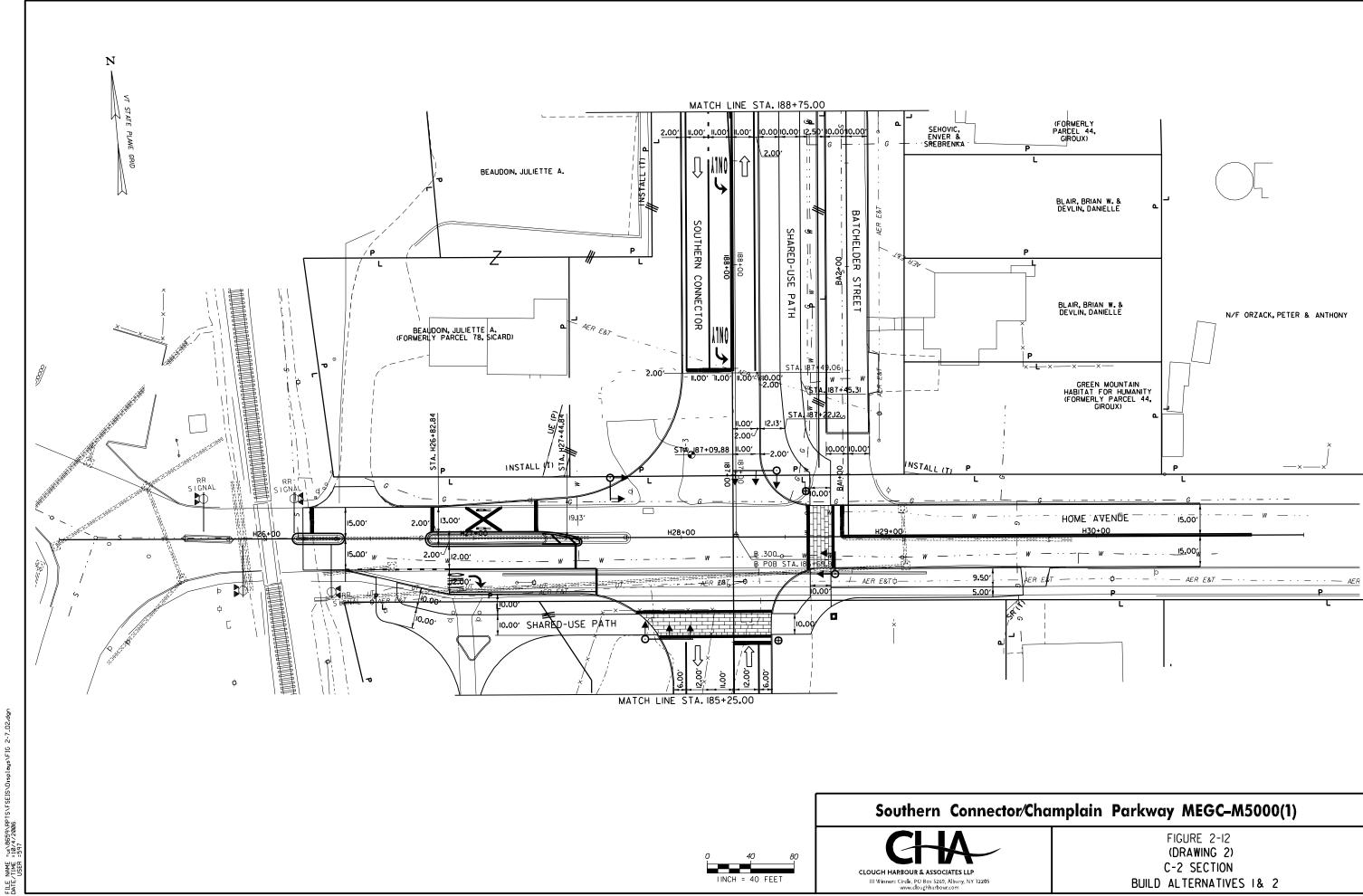


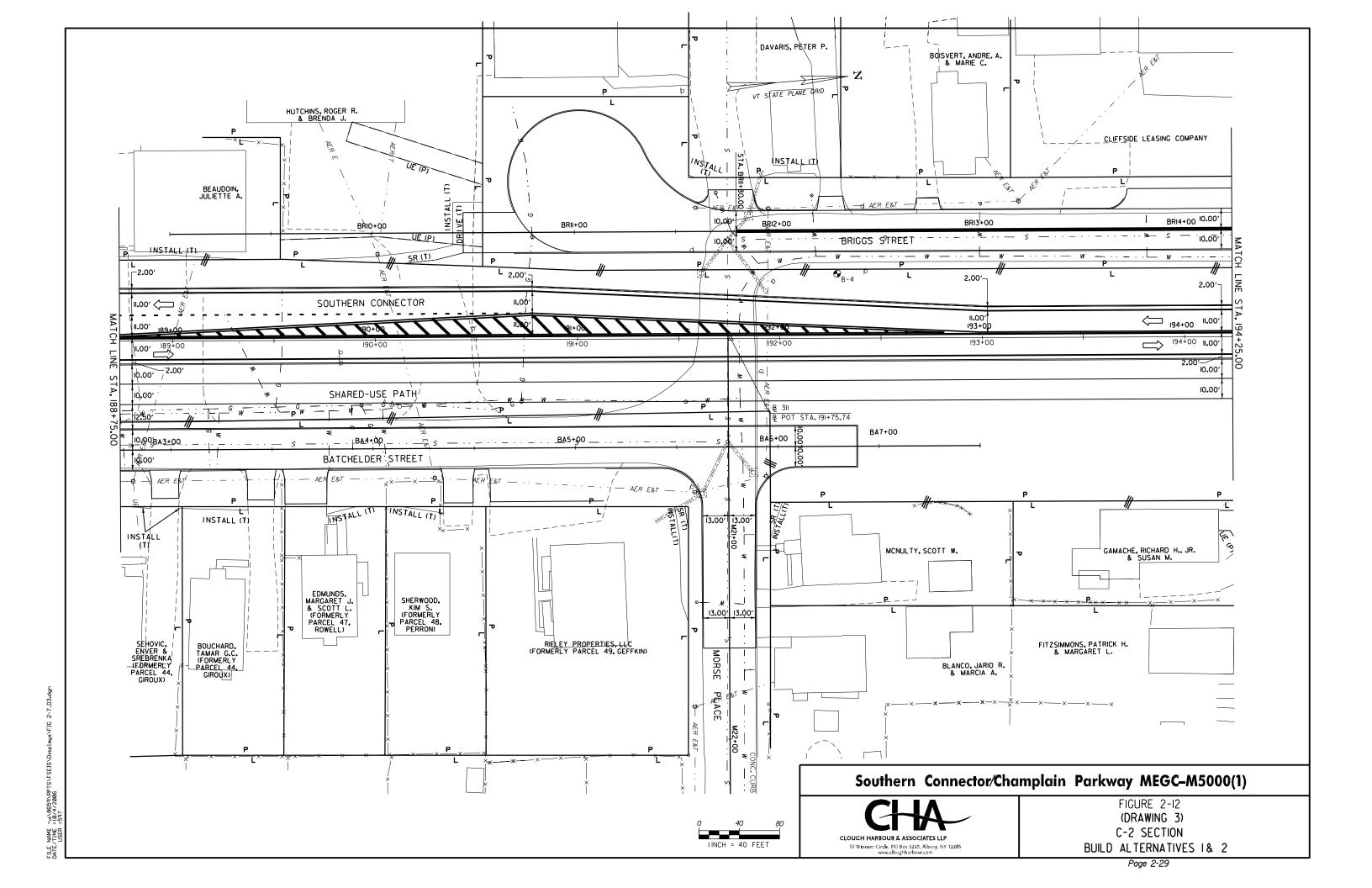


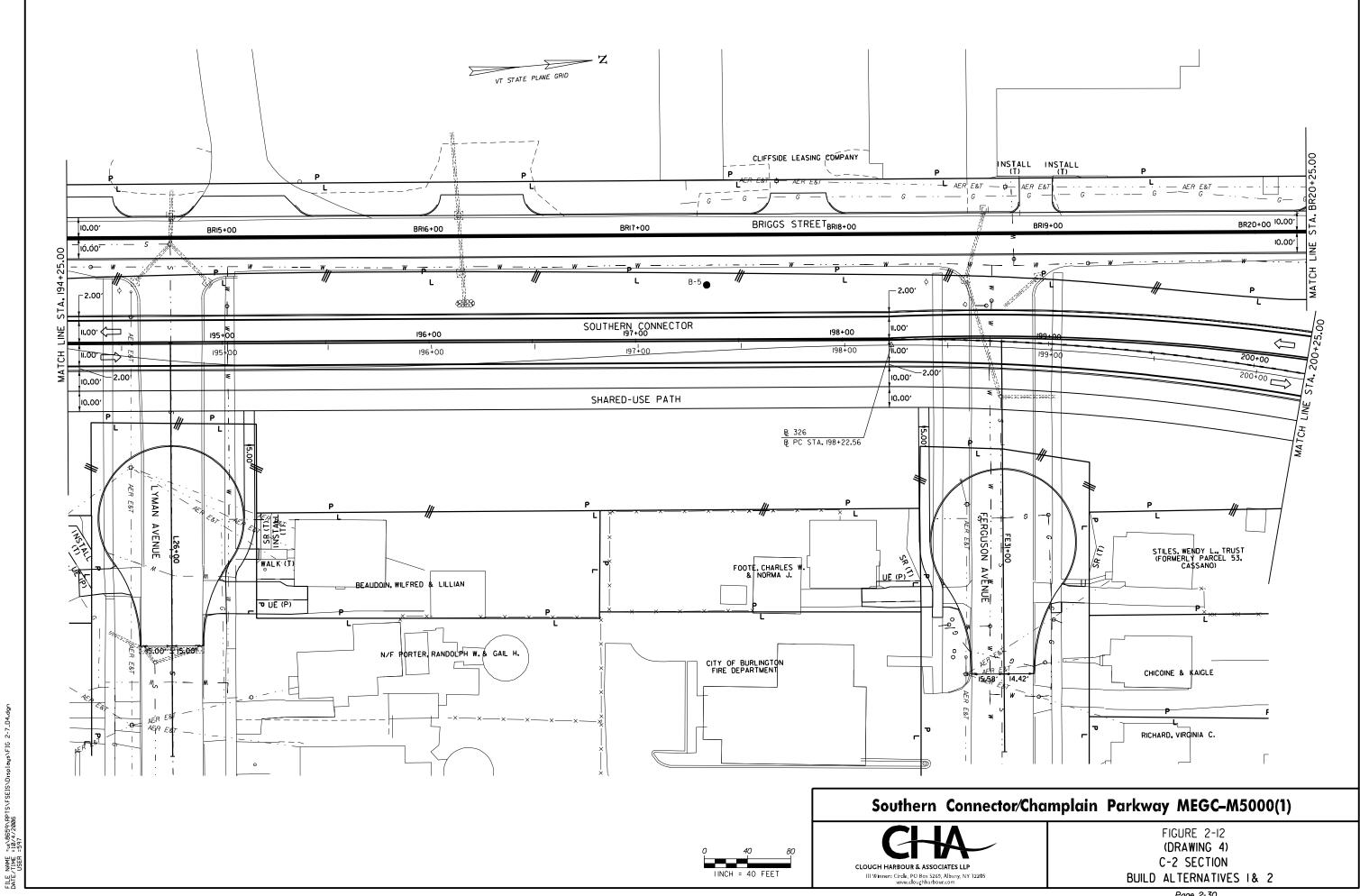
Southern Connector/Champlain Parkway MEGC-M5000(1)

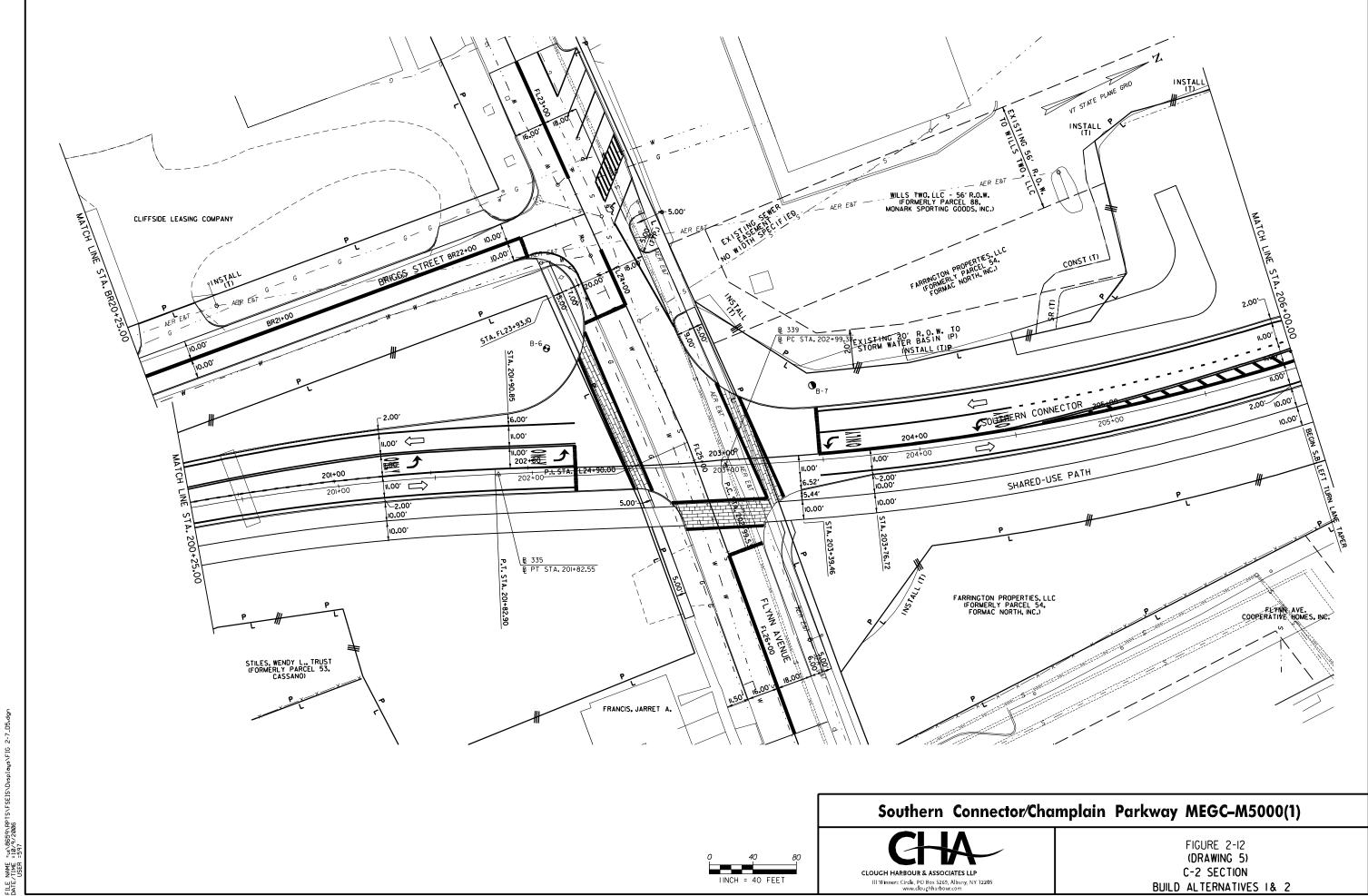


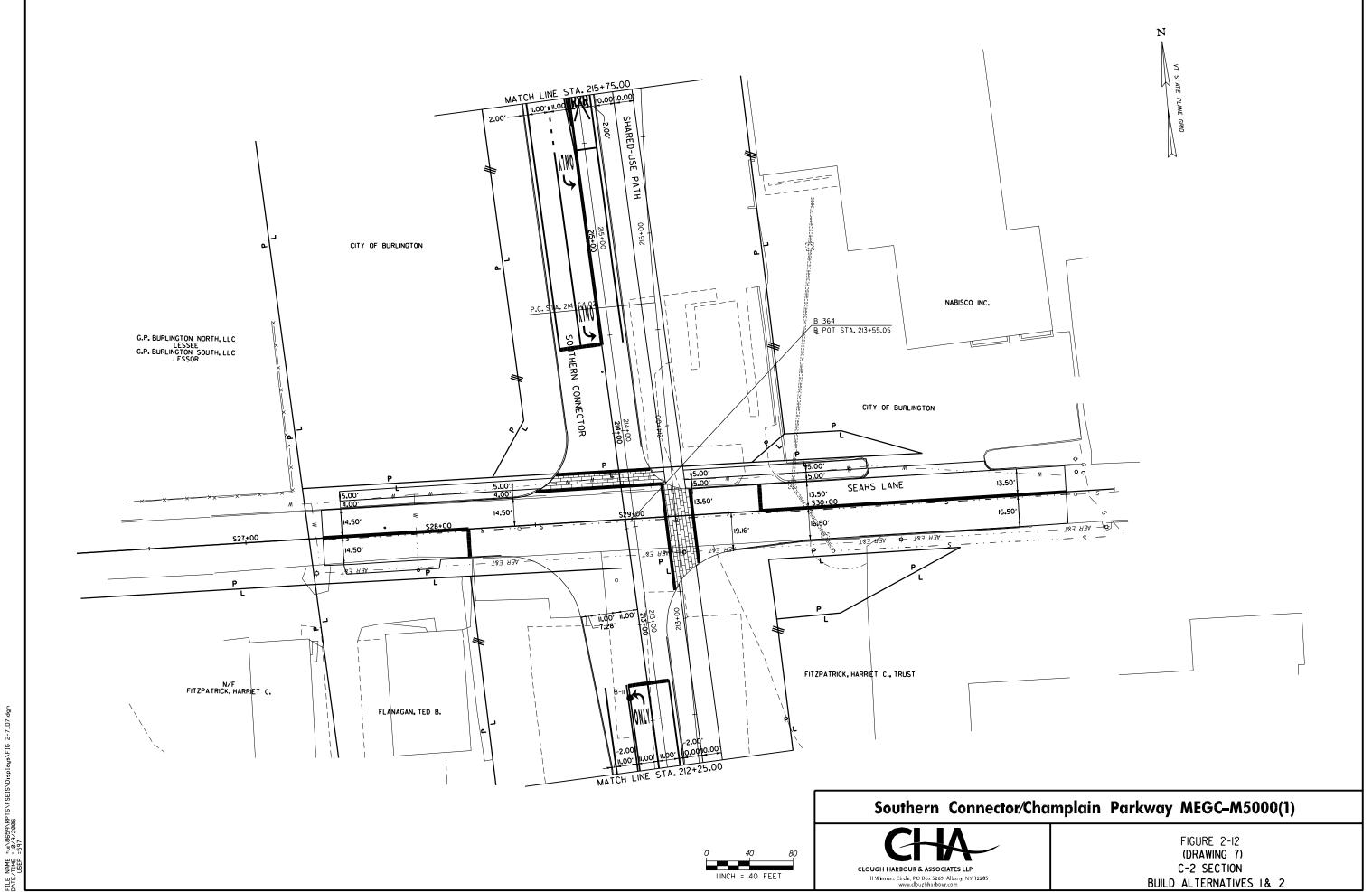


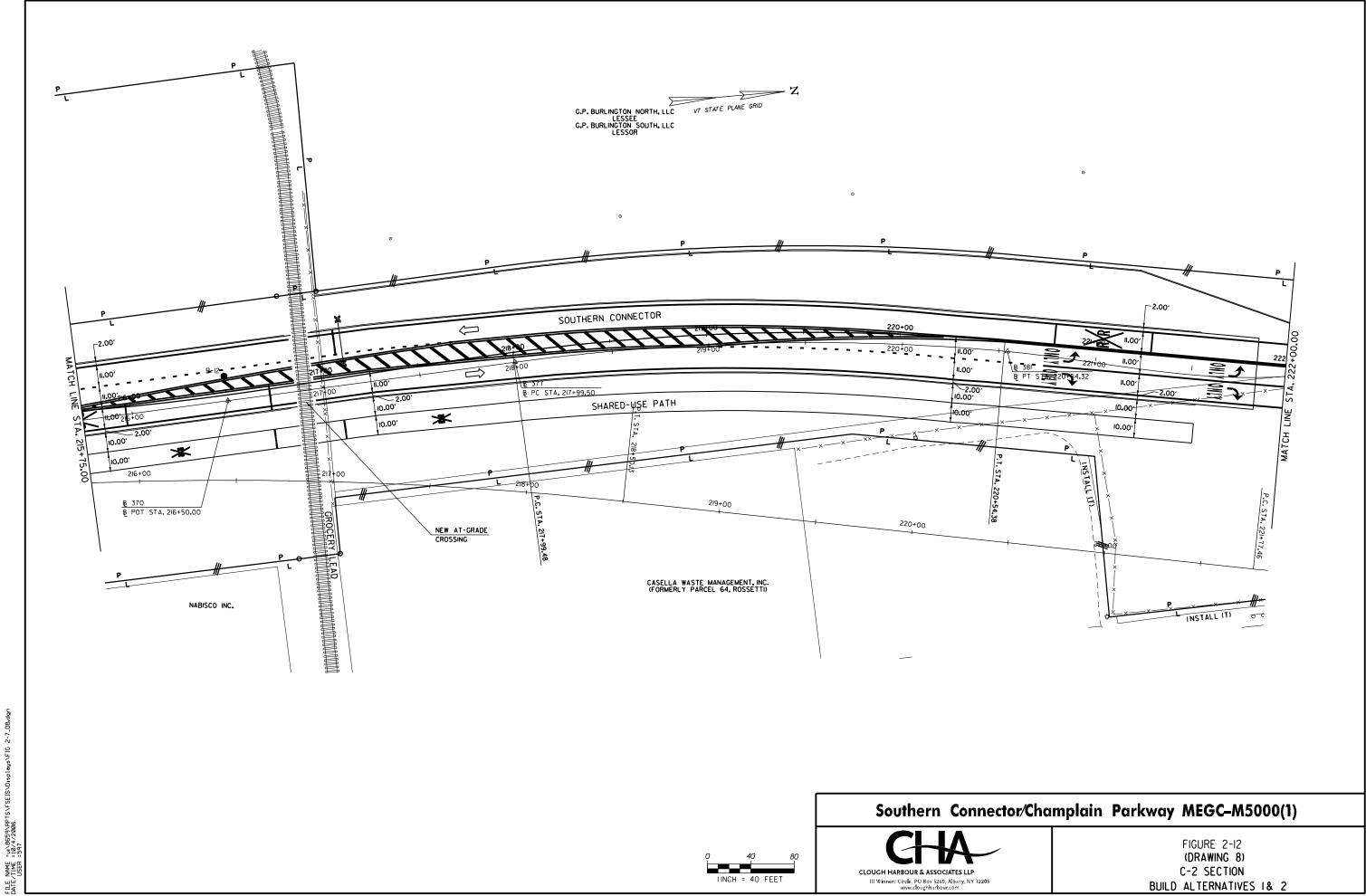


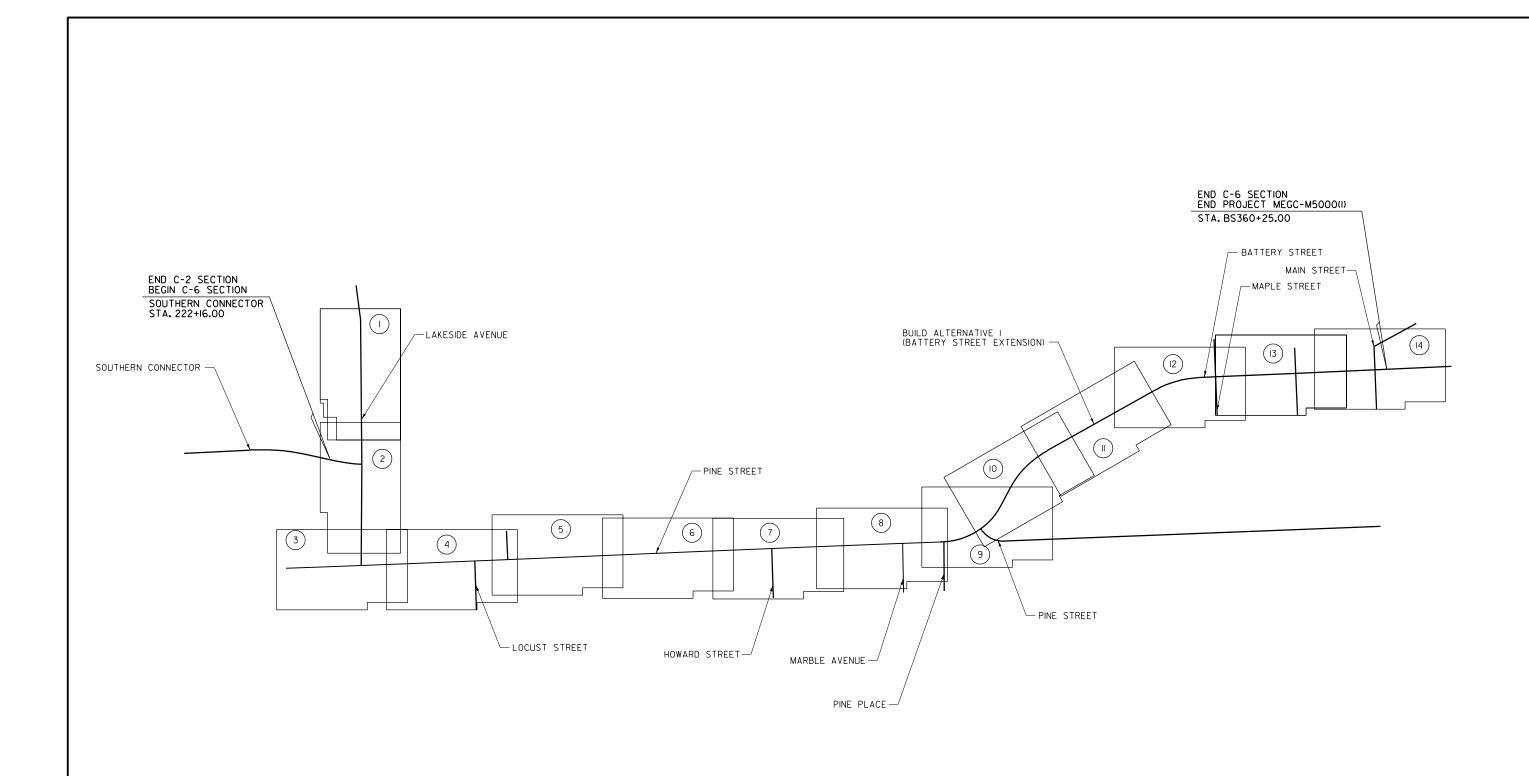










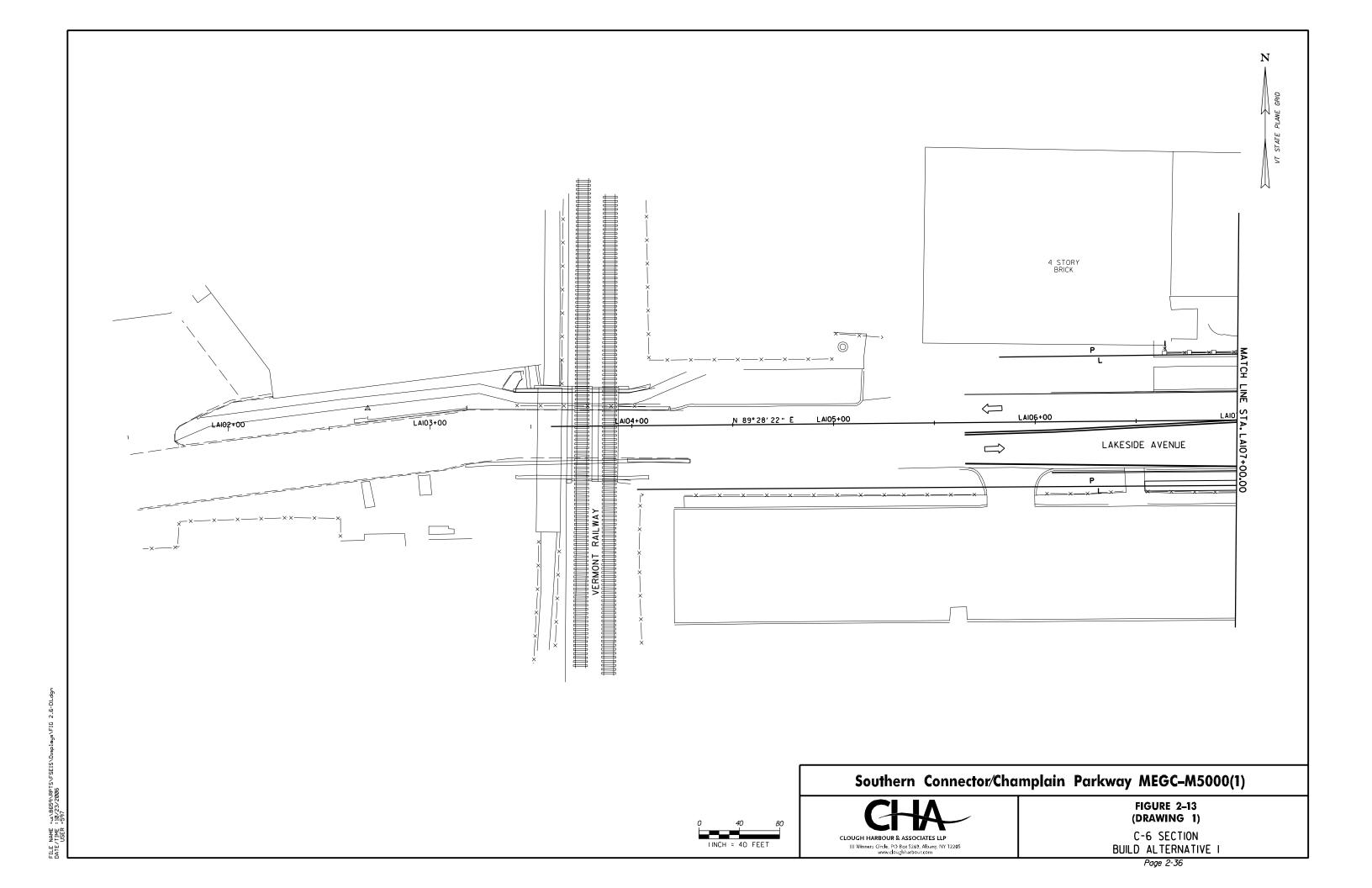


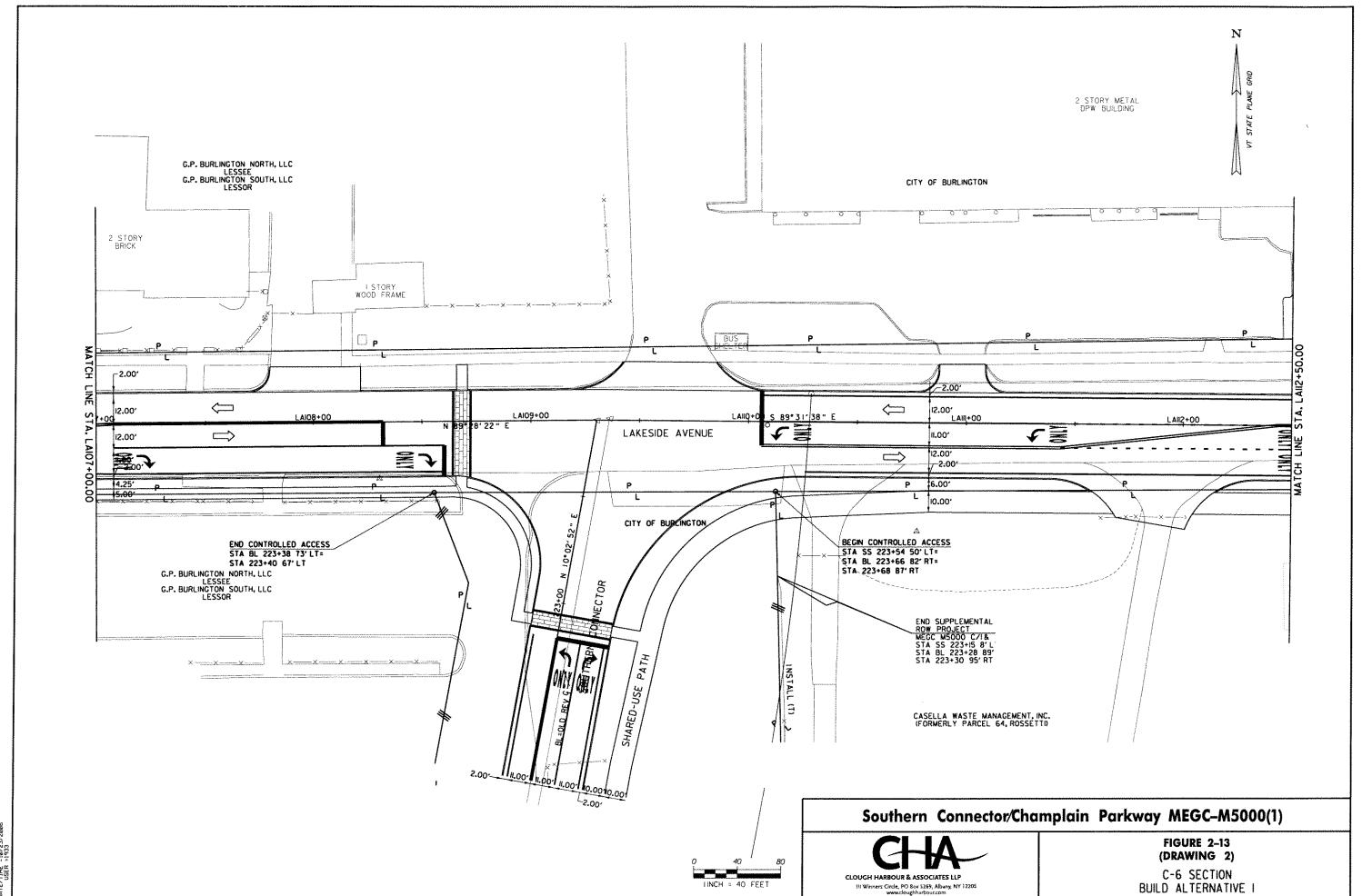


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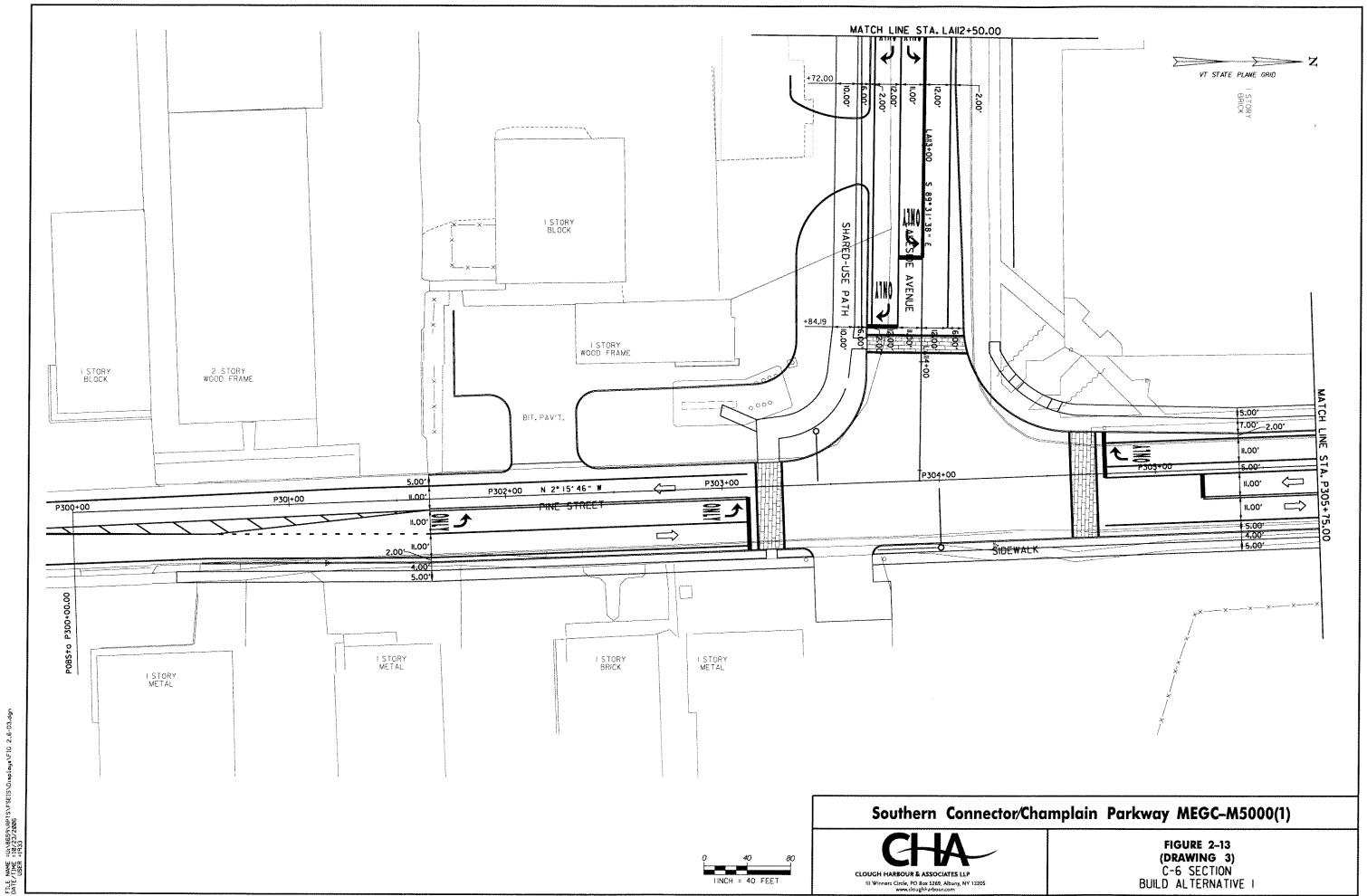


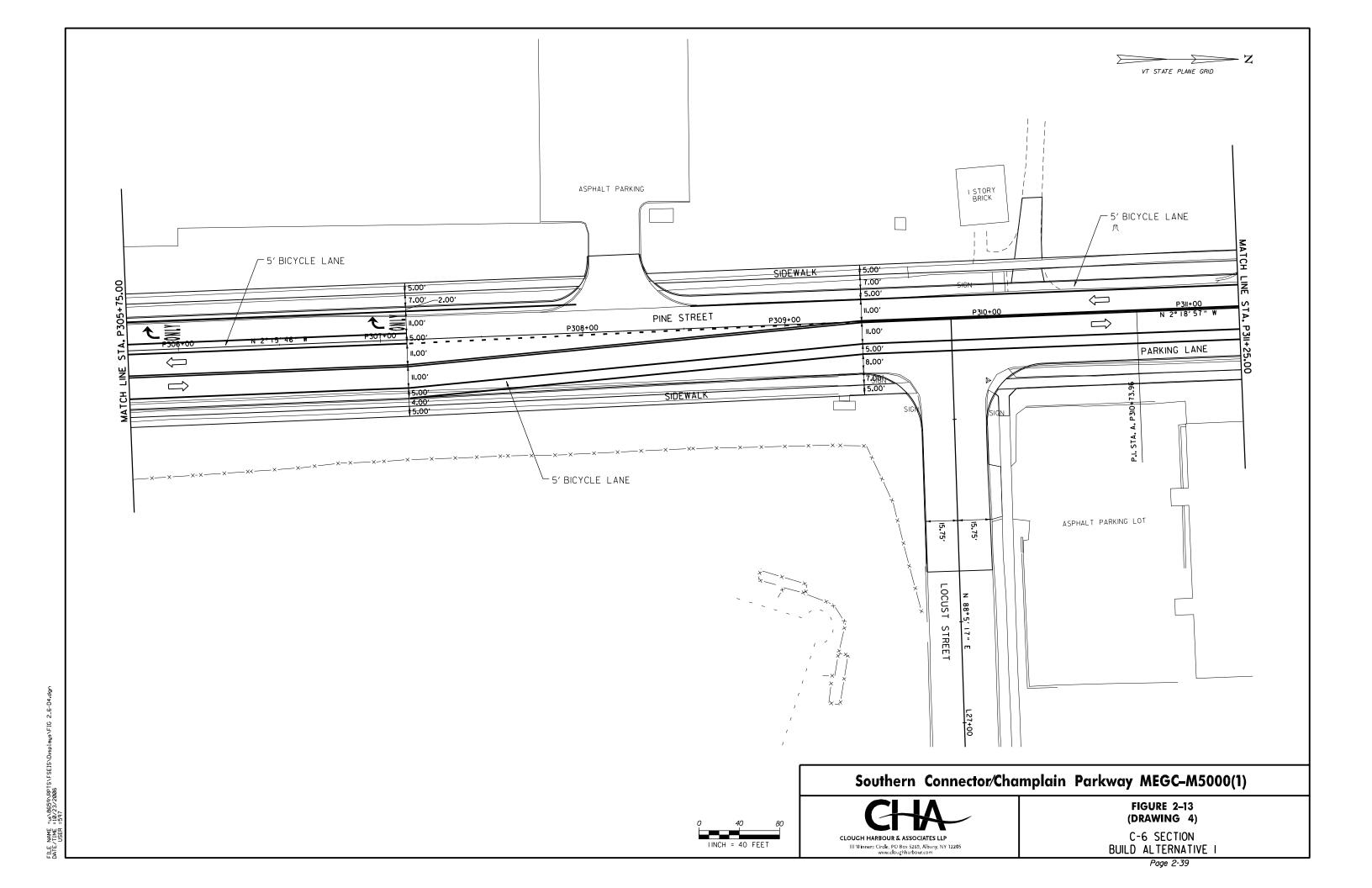
FIGURE 2-13
PLAN KEY
C-6 SECTION
BUILD ALTERNATIVE I

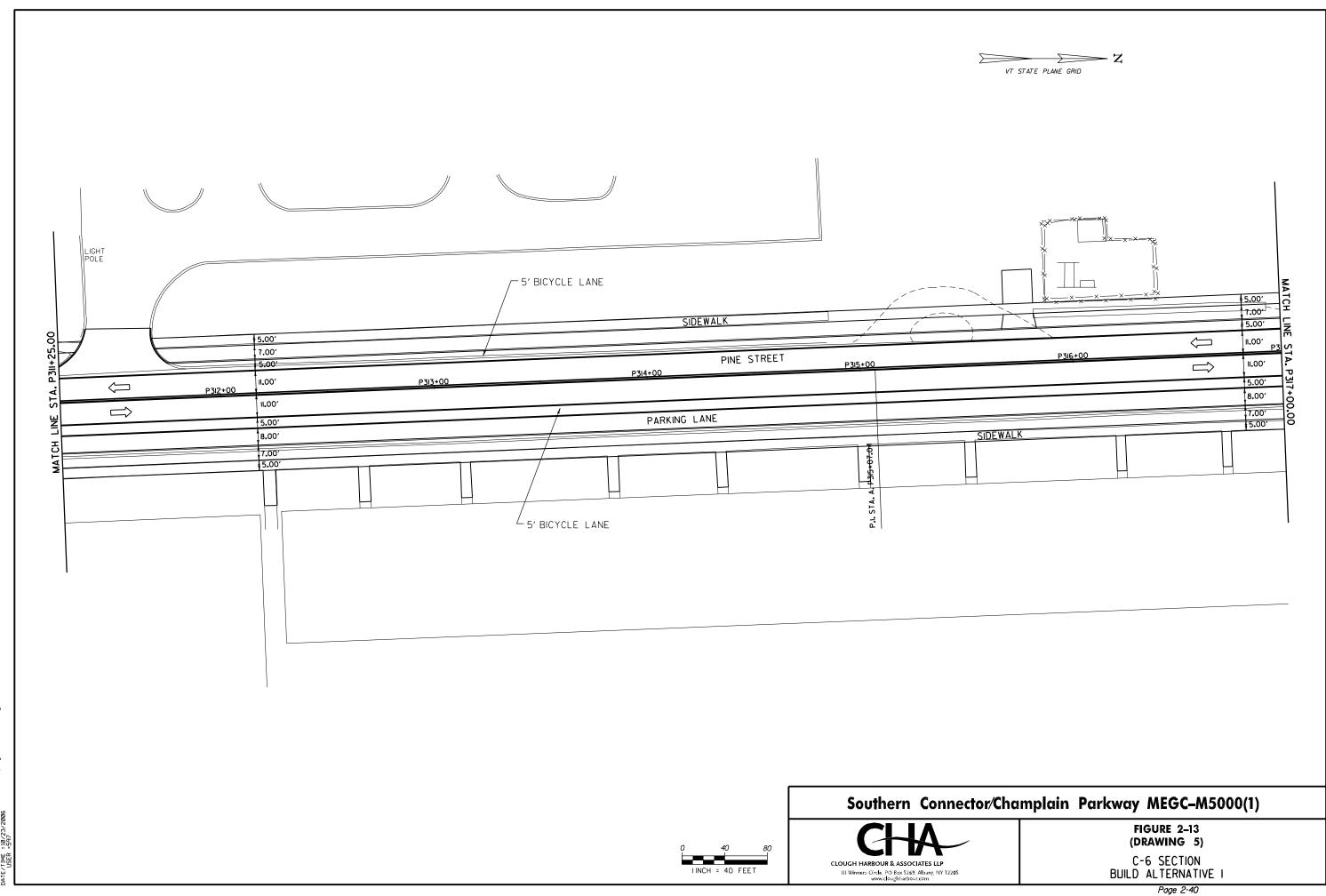


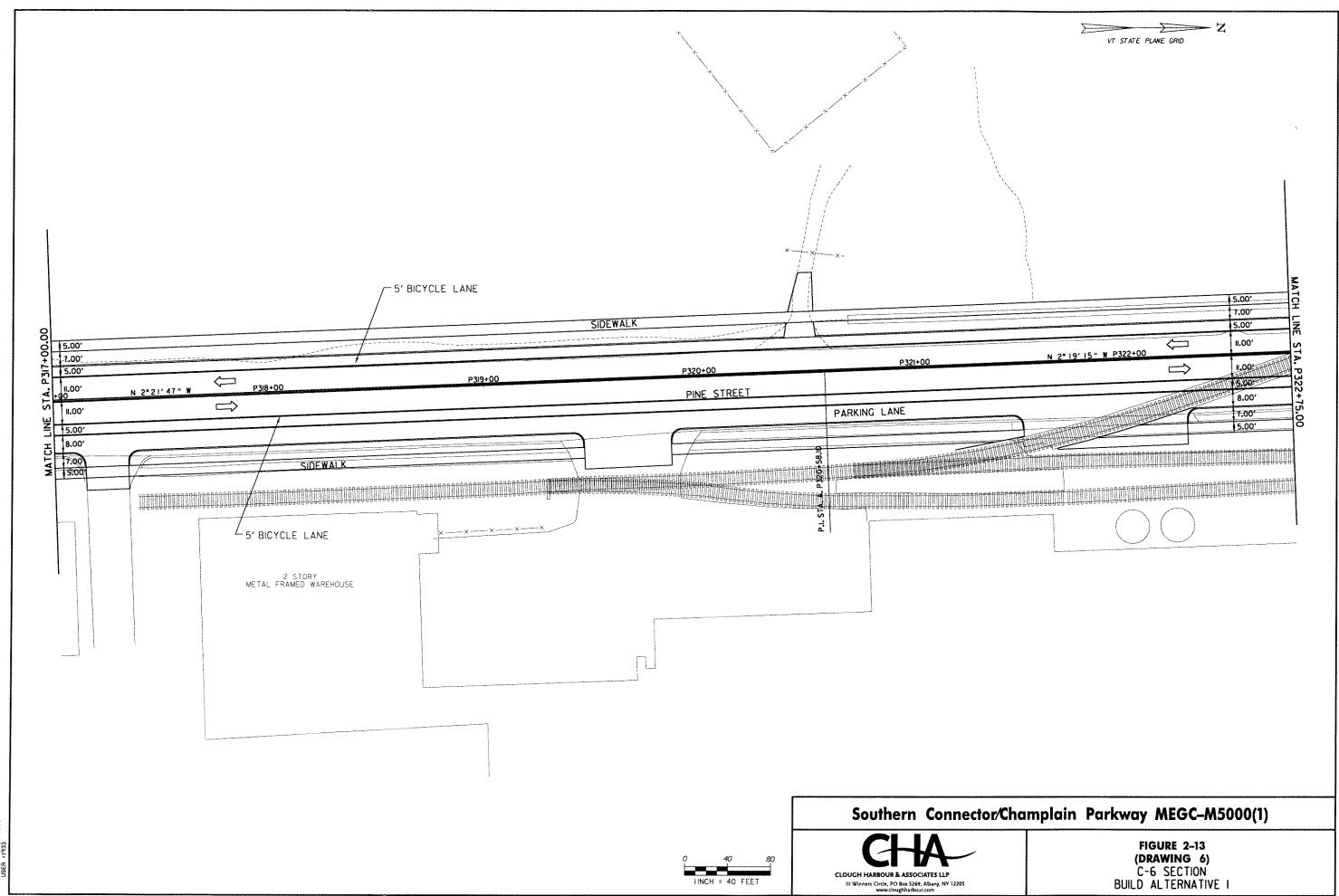


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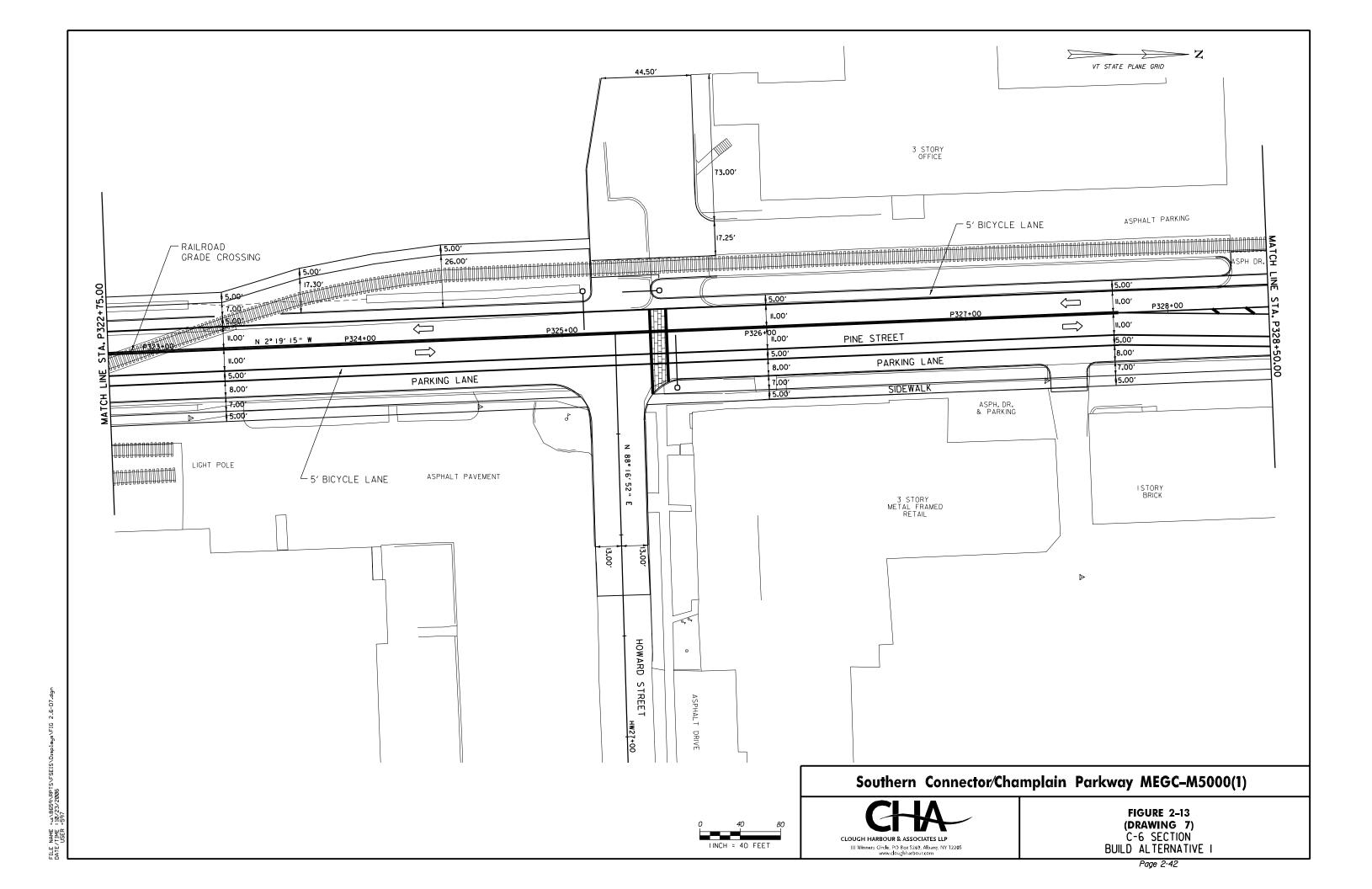


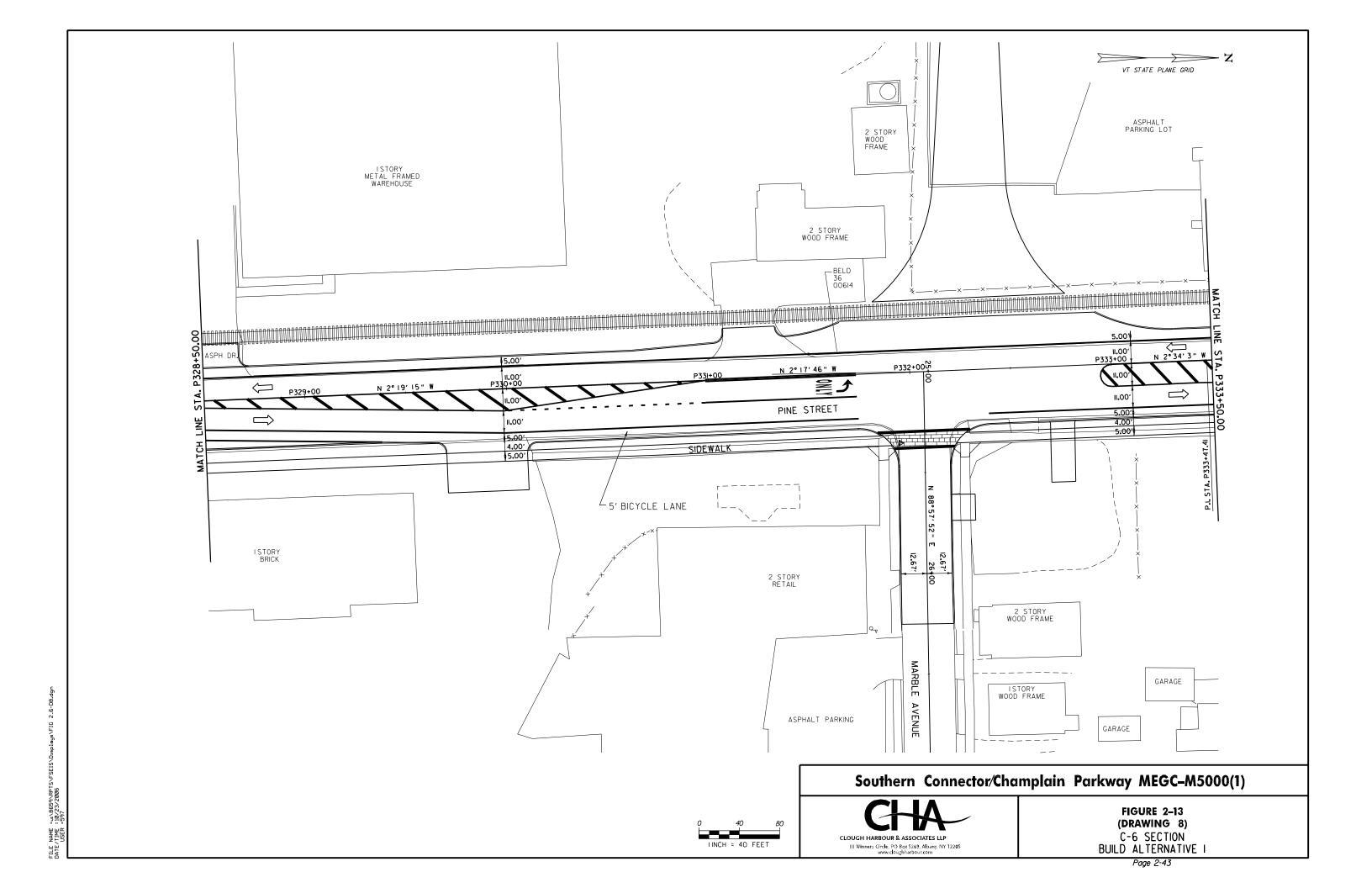


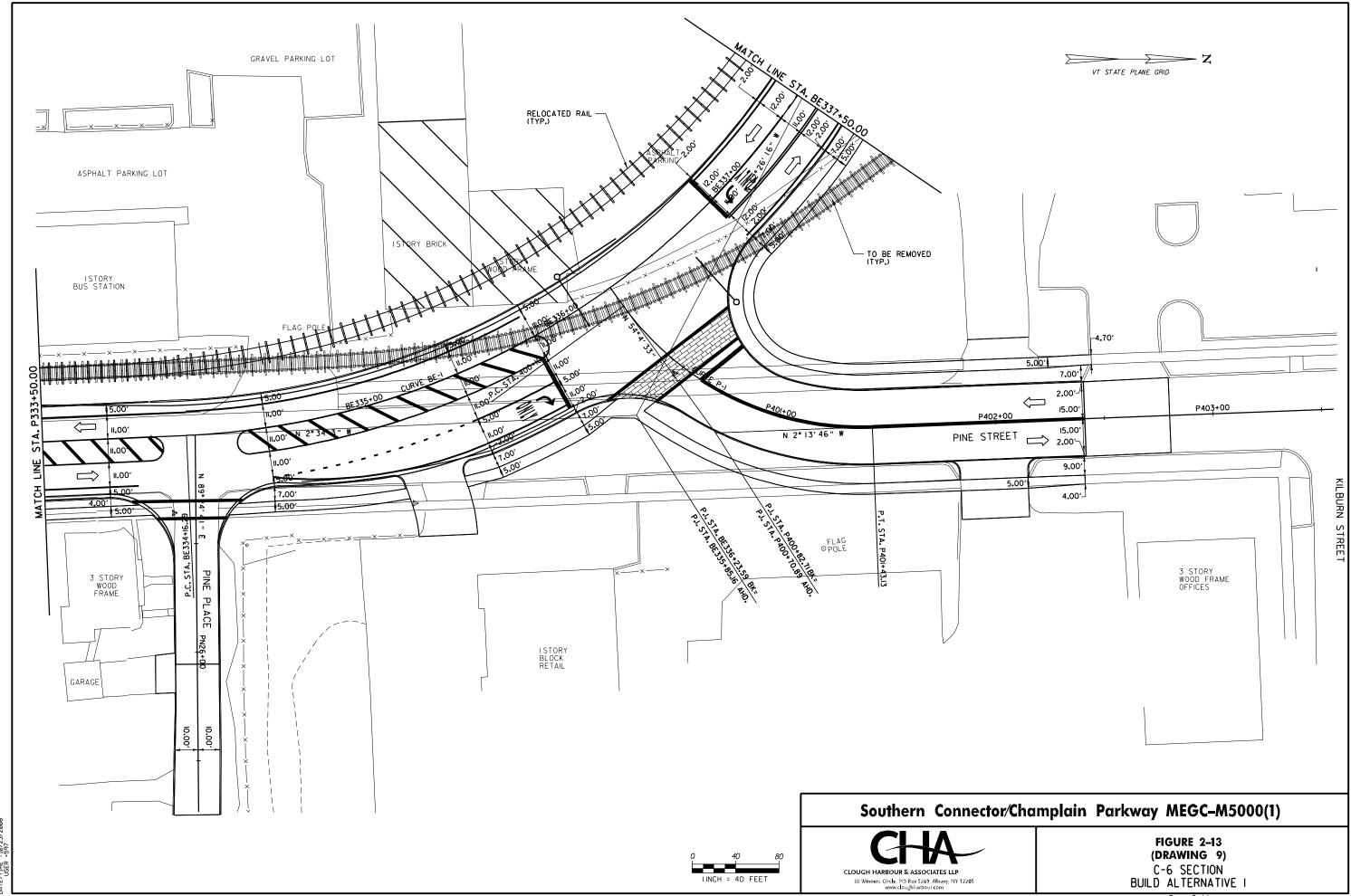


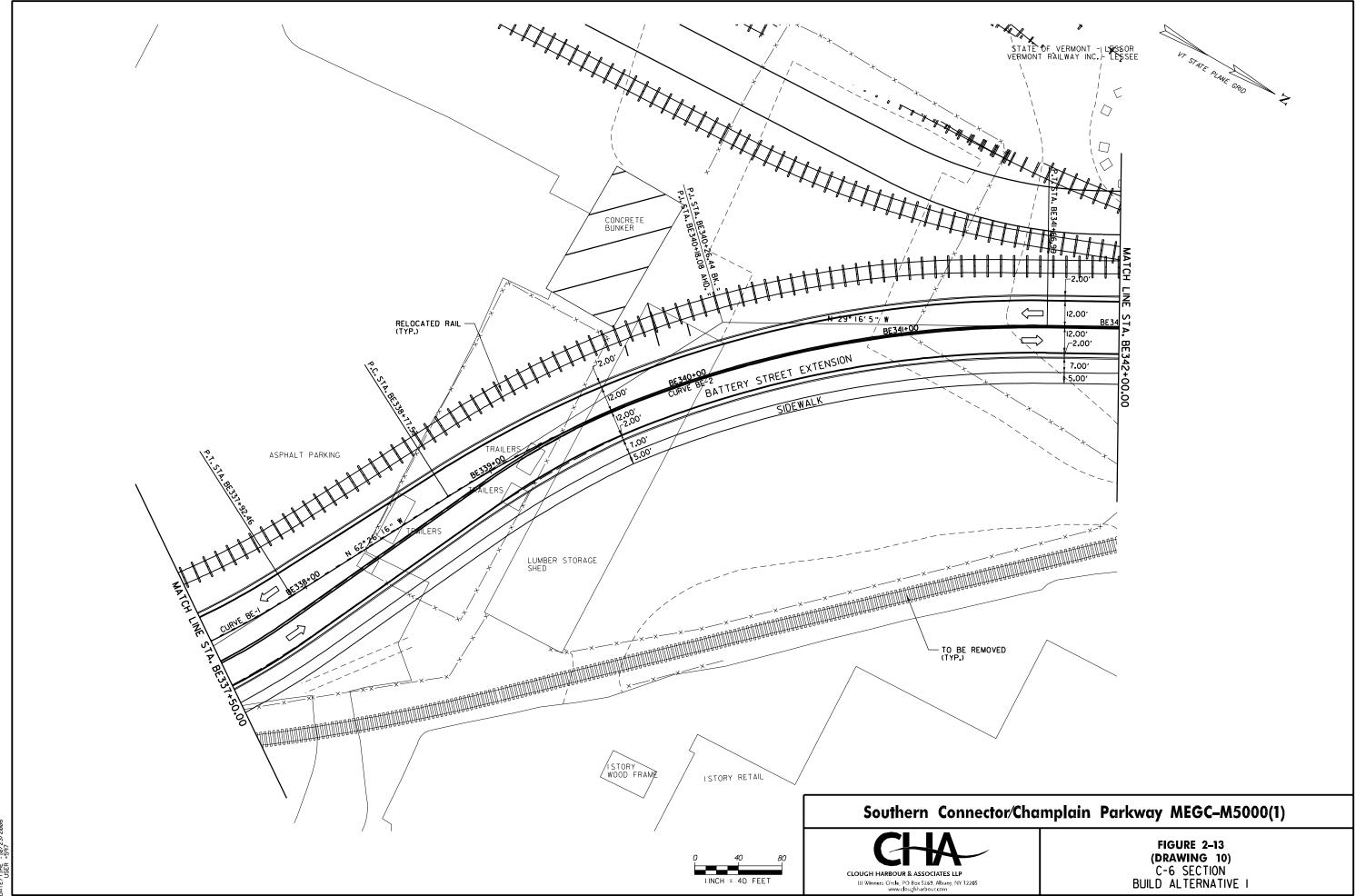


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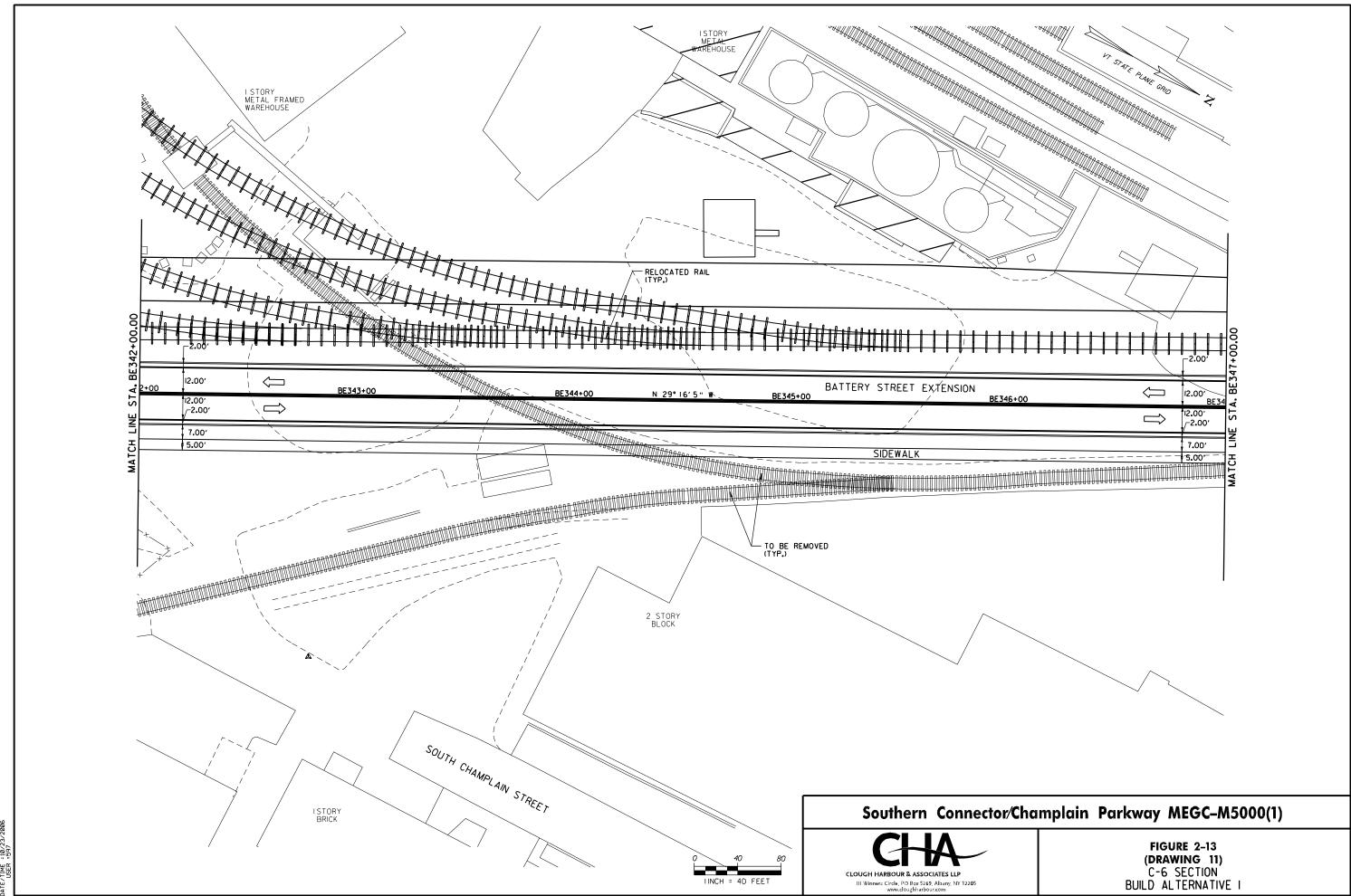




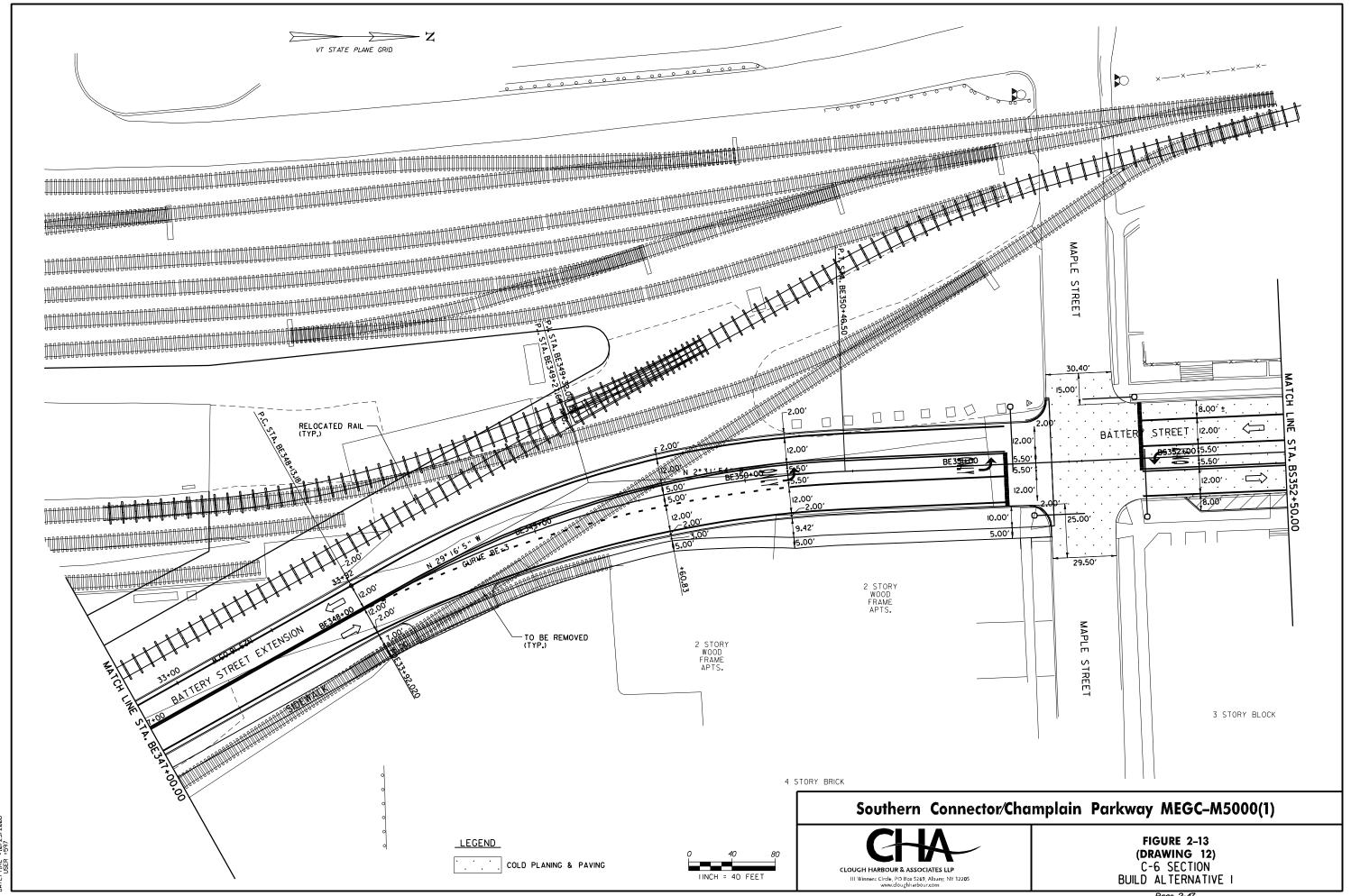


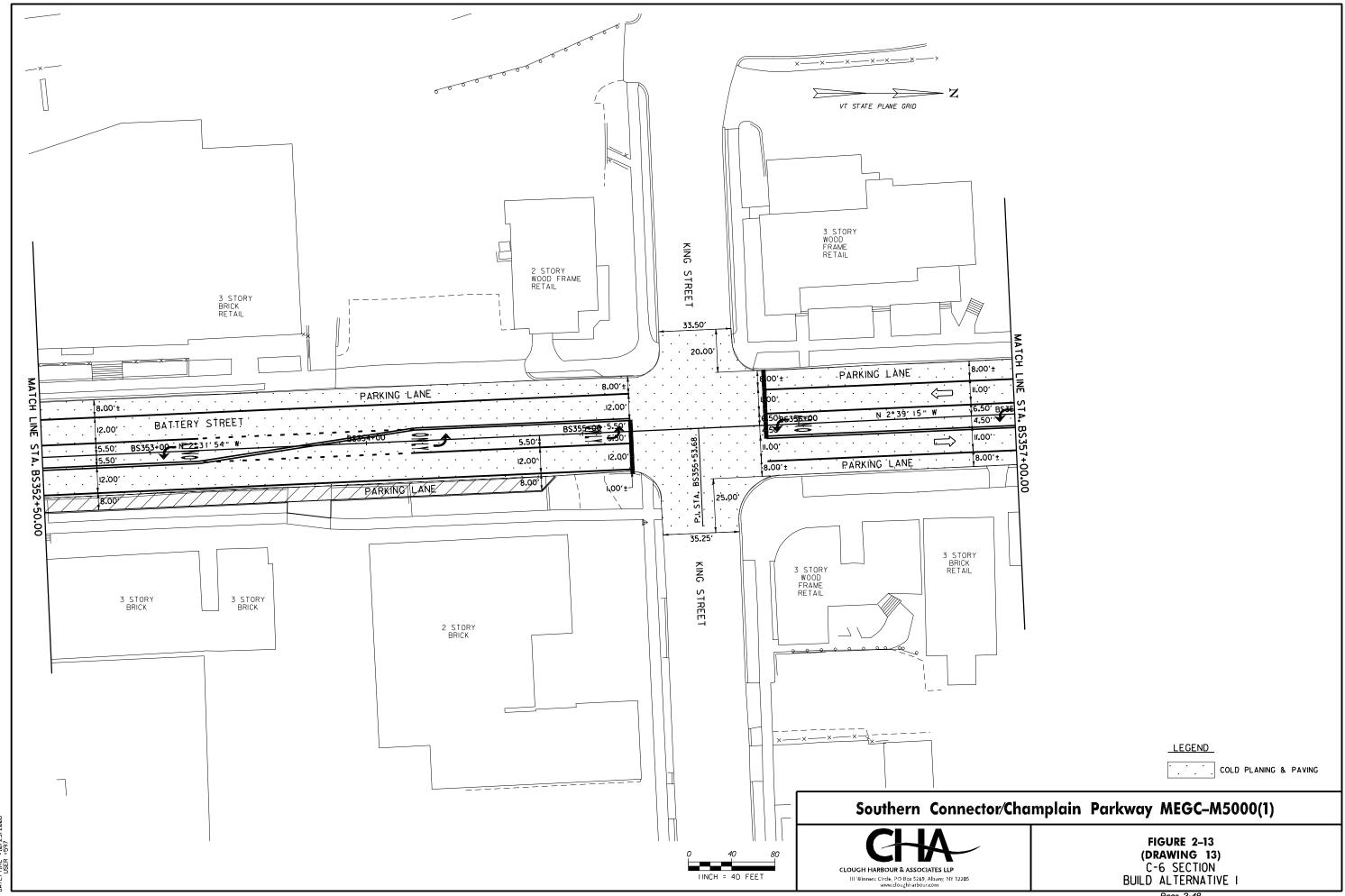


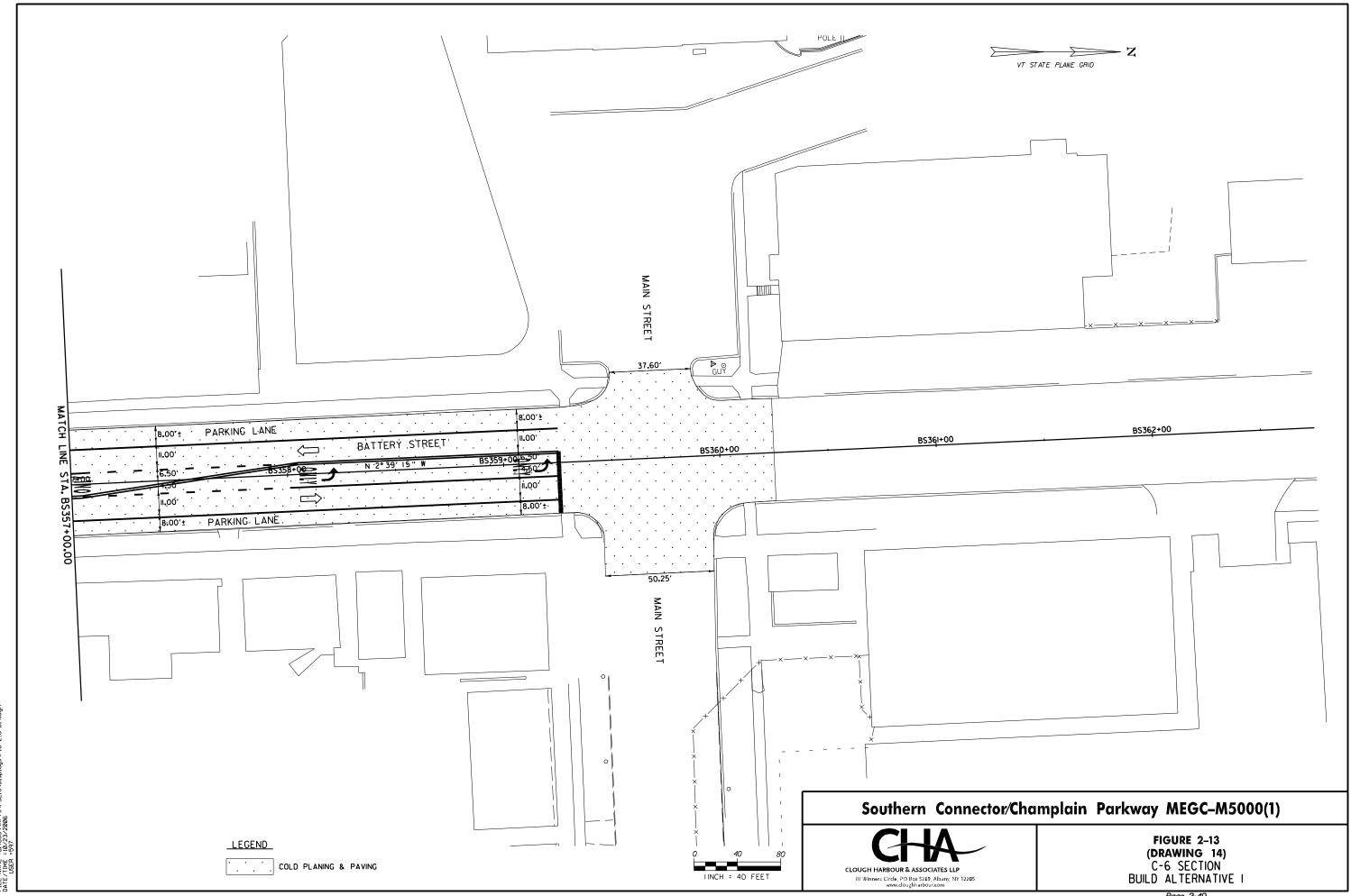
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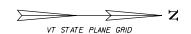


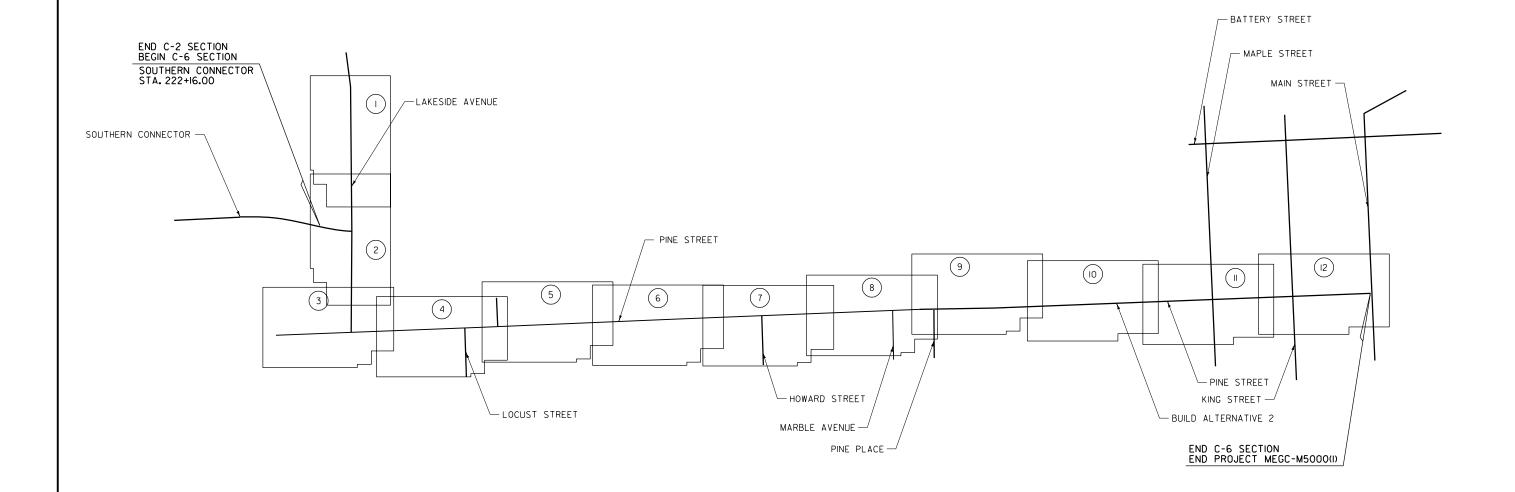
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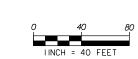








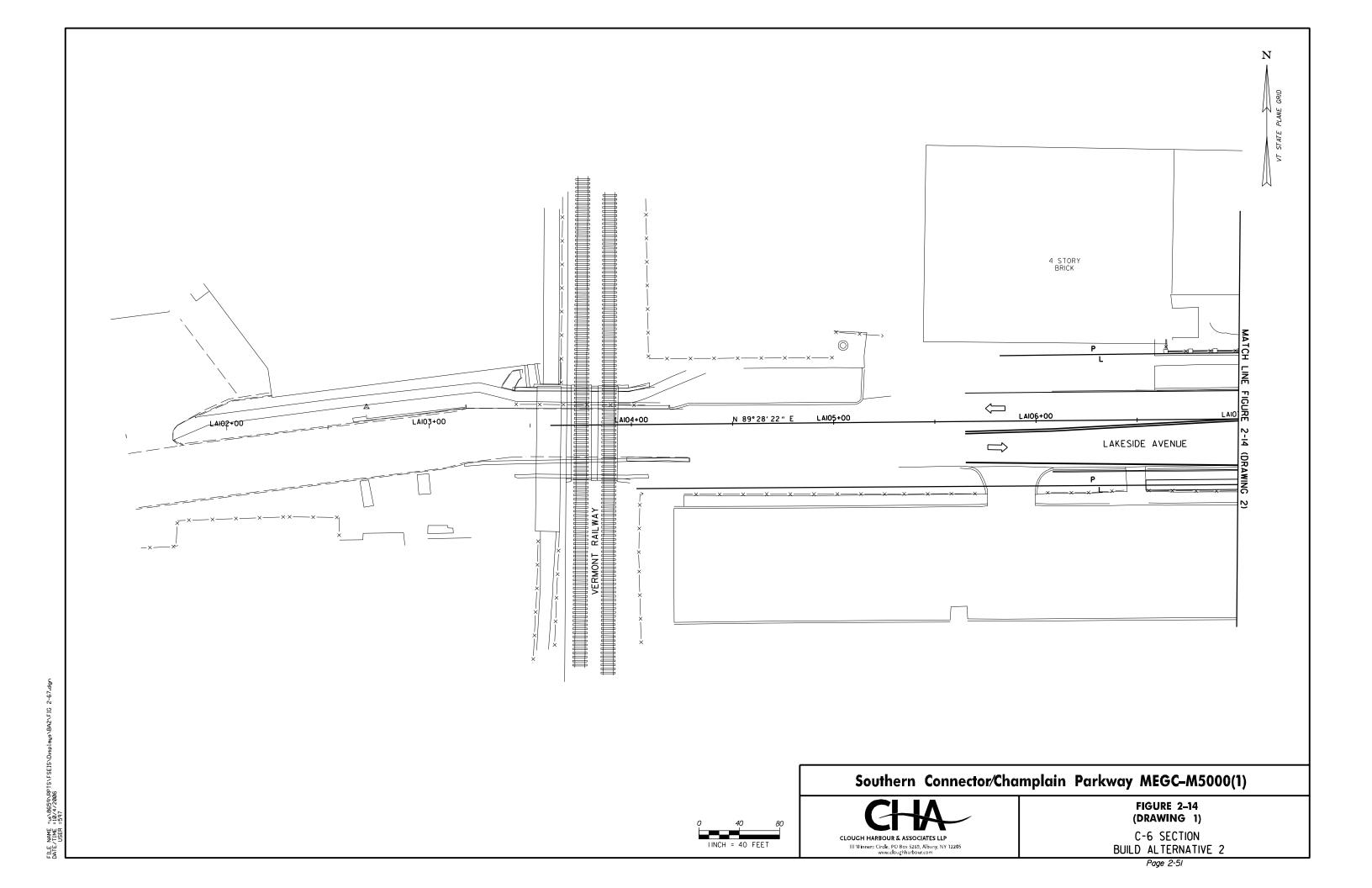


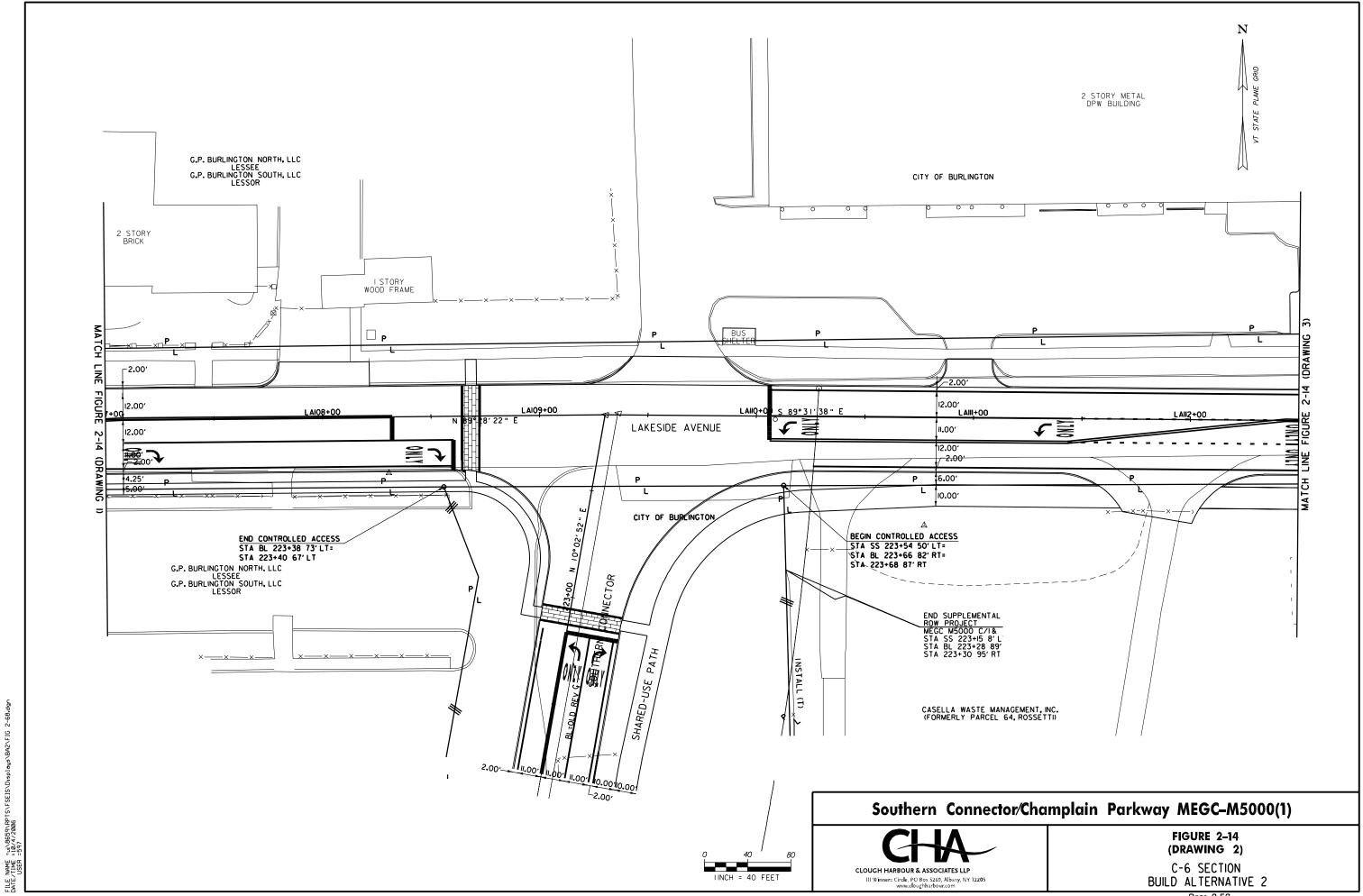


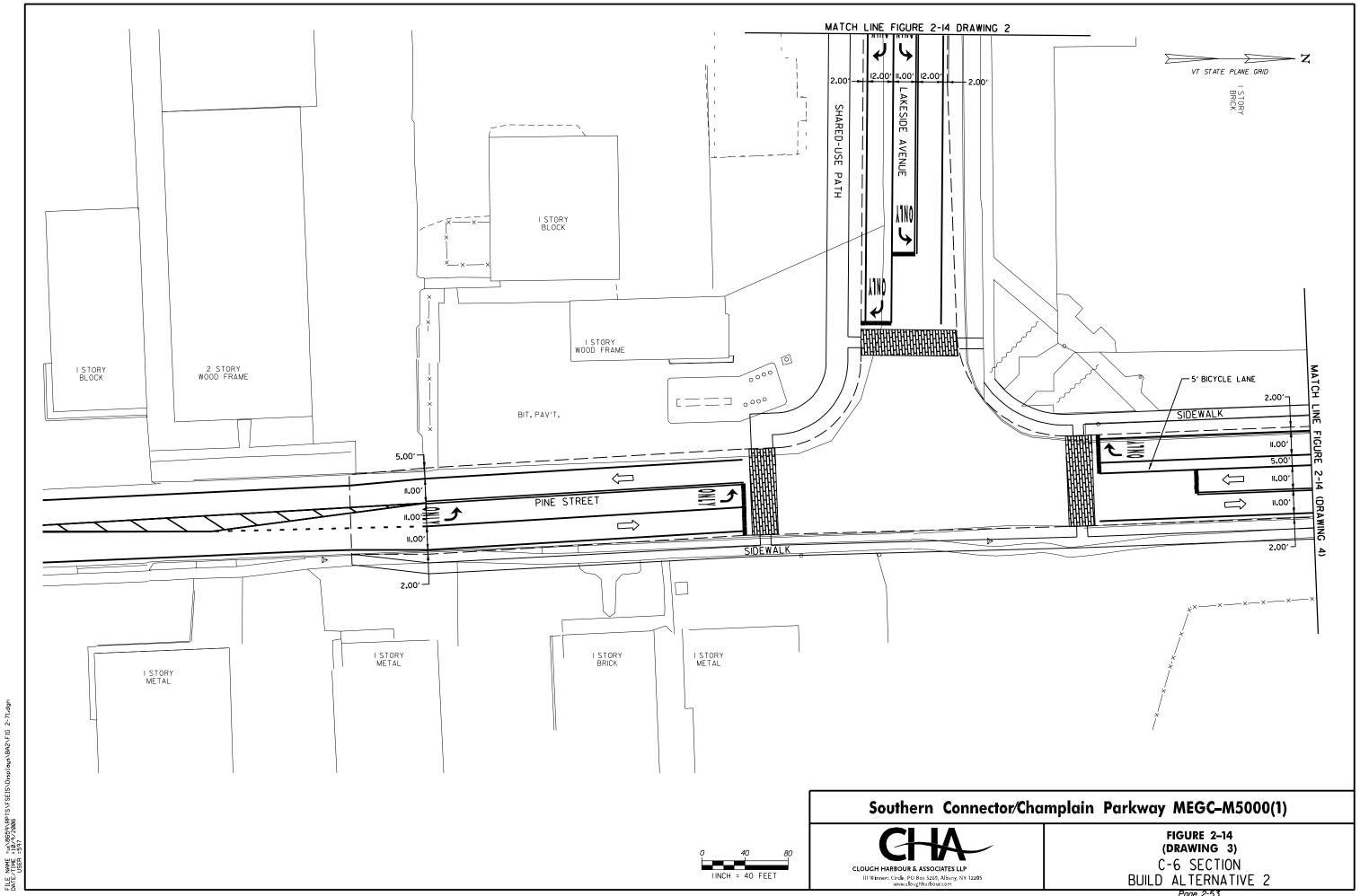
Southern Connector/Champlain Parkway MEGC-M5000(1)

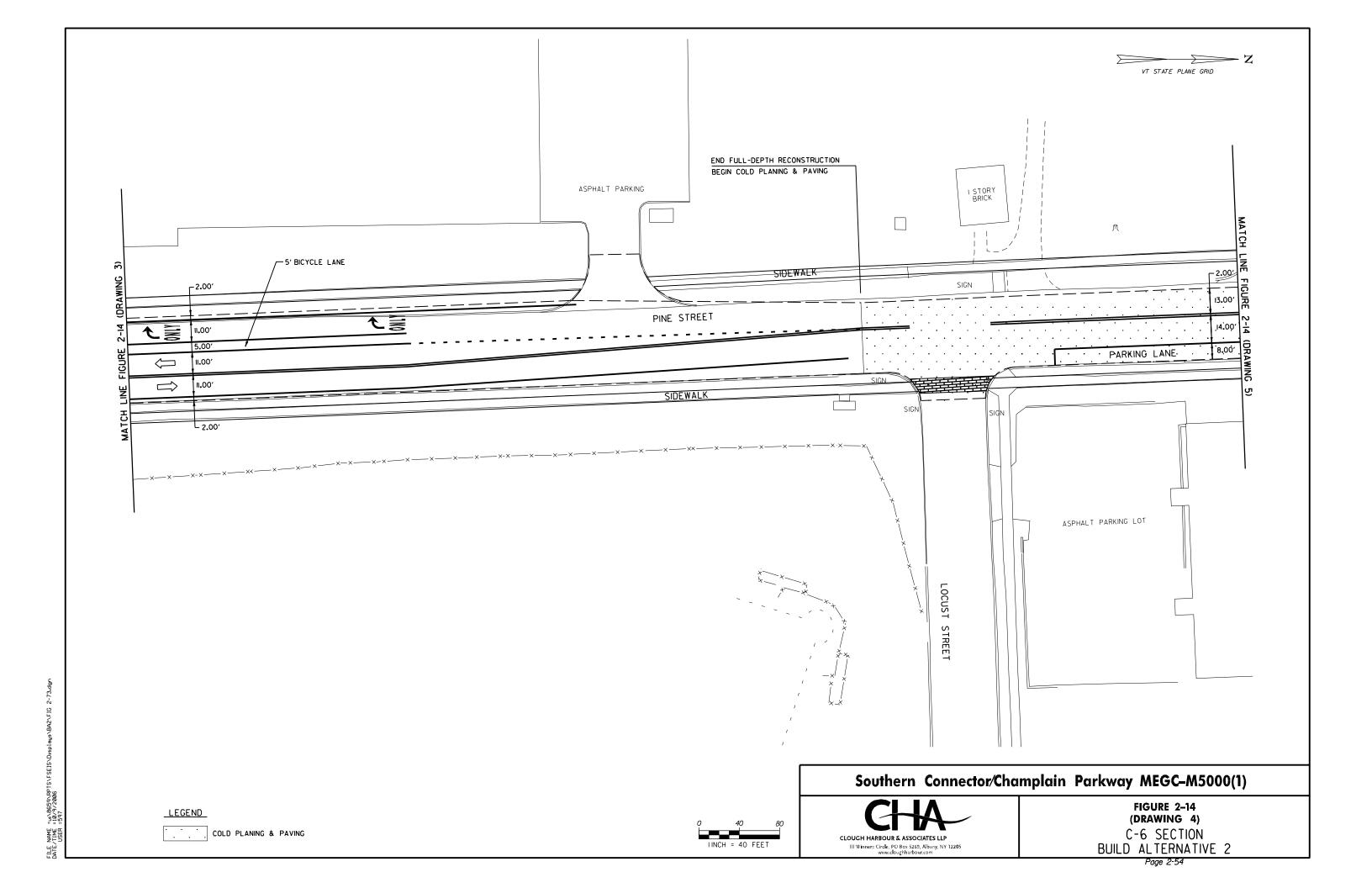


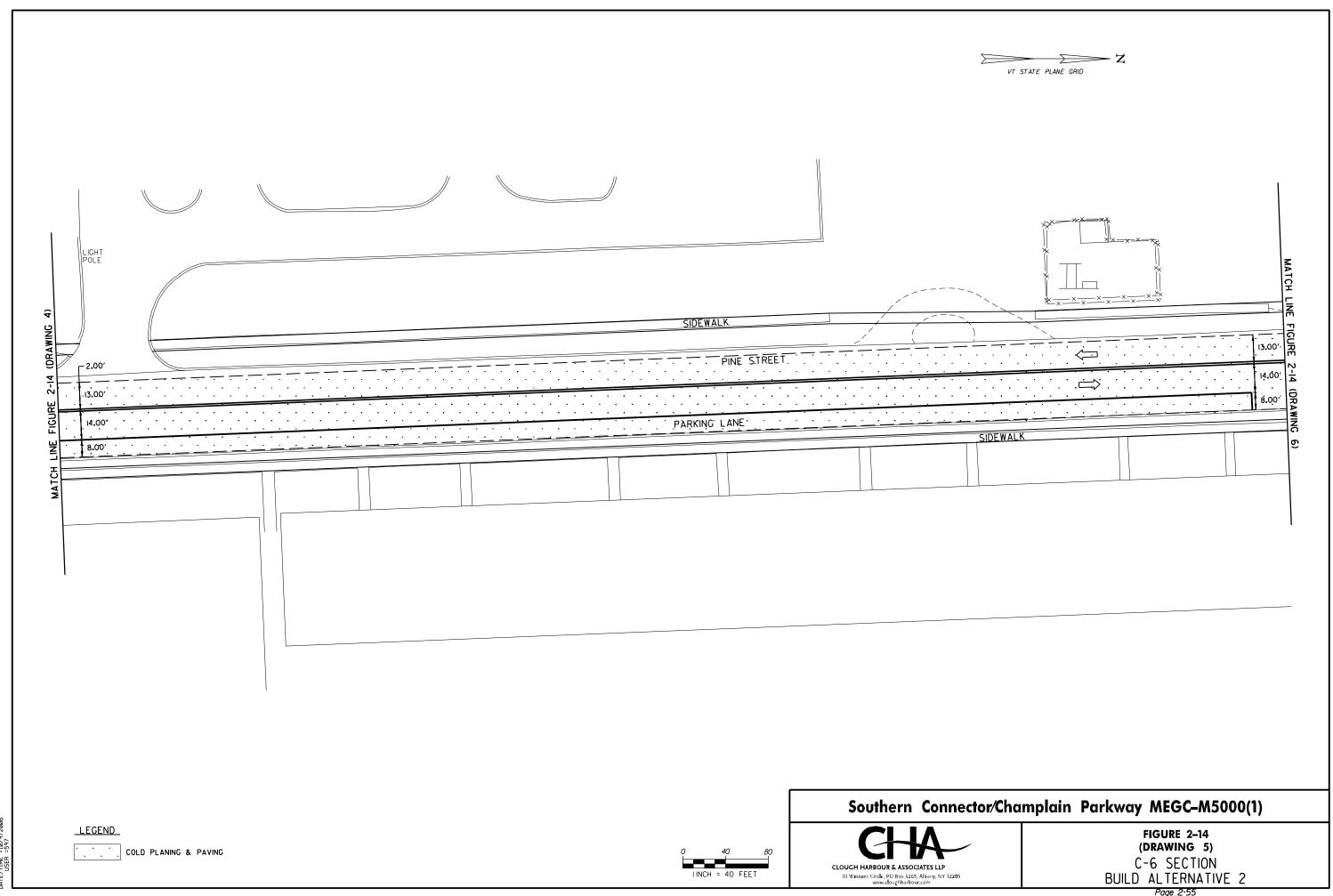
FIGURE 2-14
PLAN KEY
C-6 SECTION
BUILD ALTERNATIVE 2



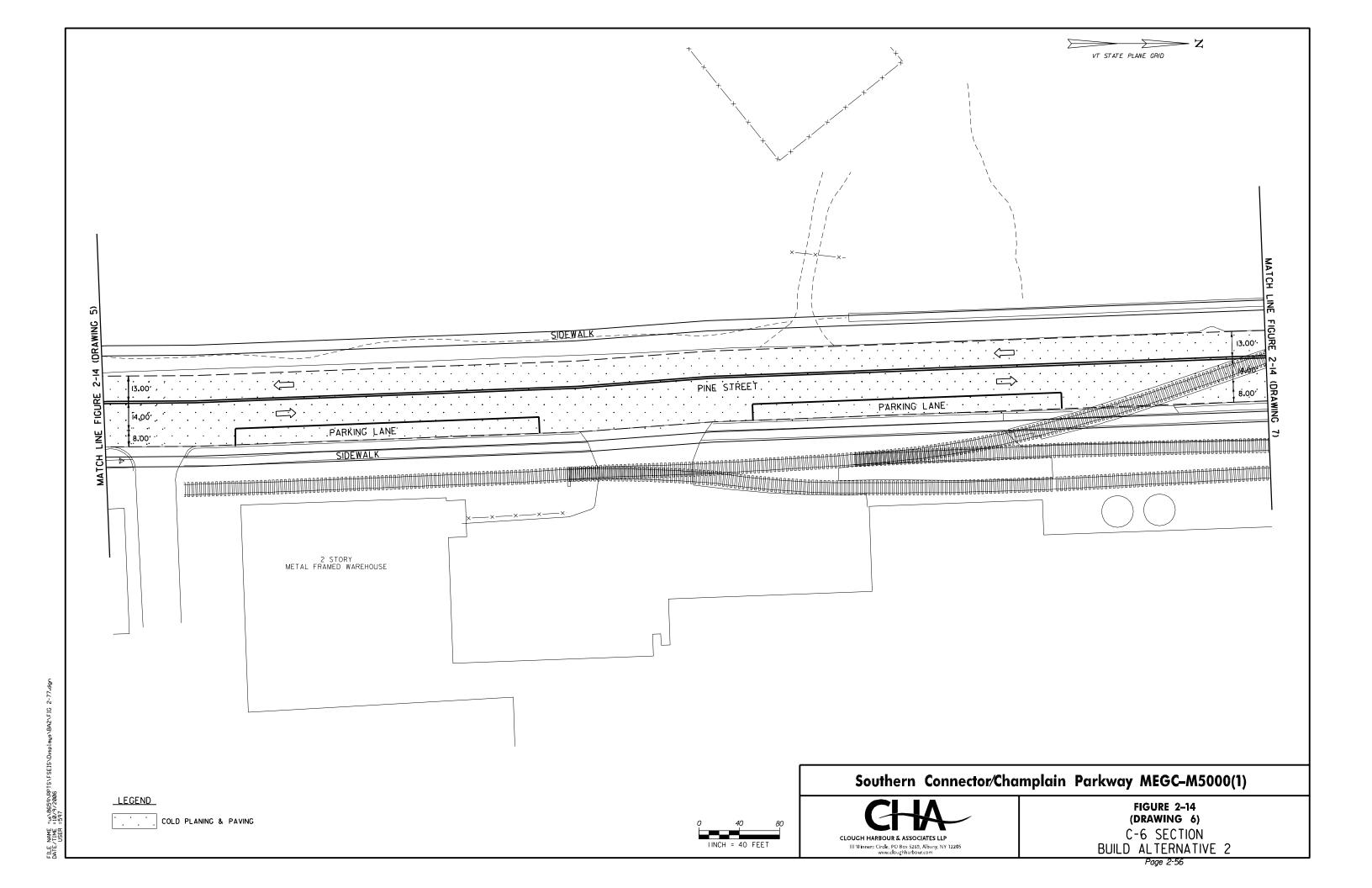


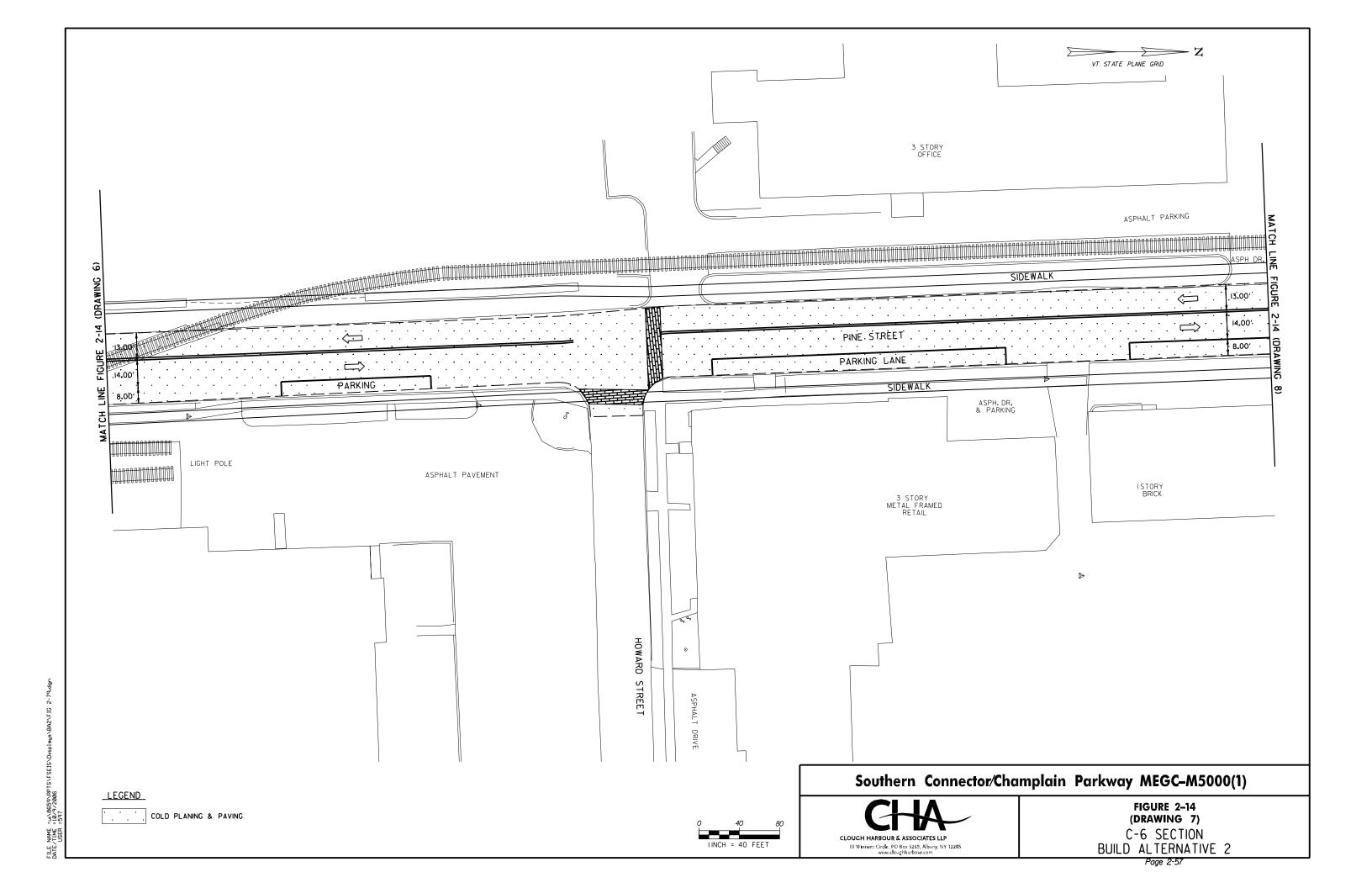


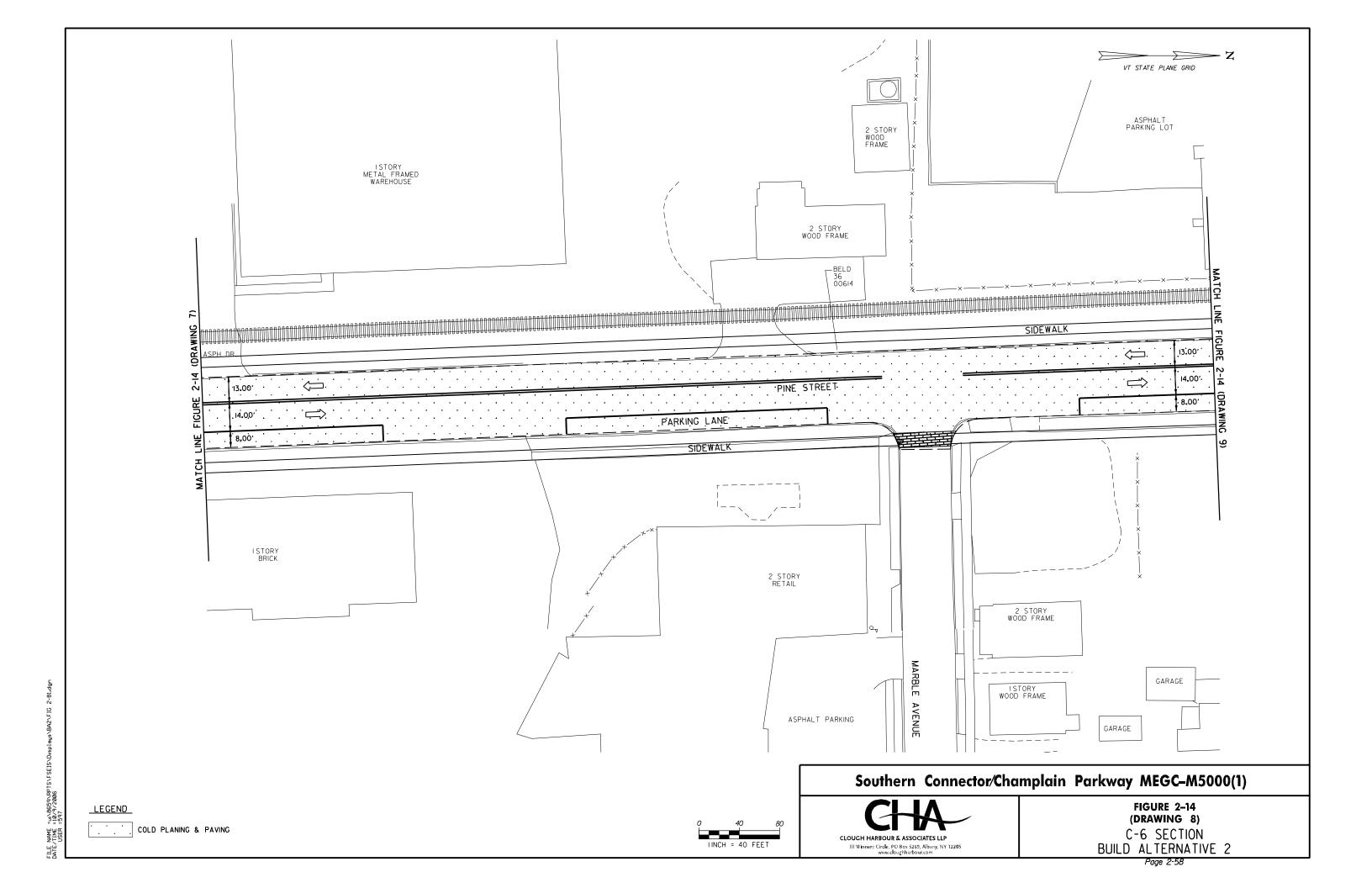


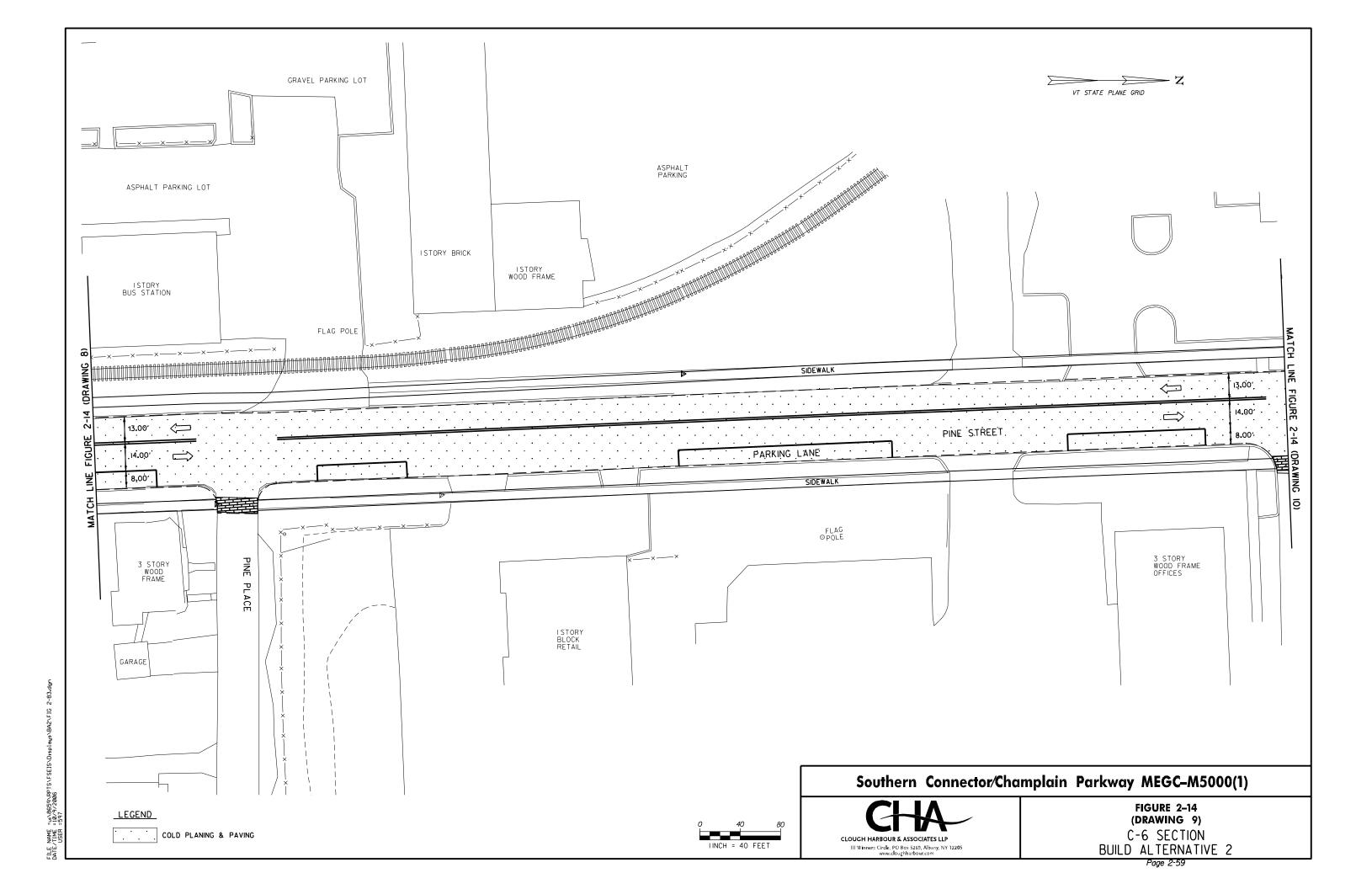


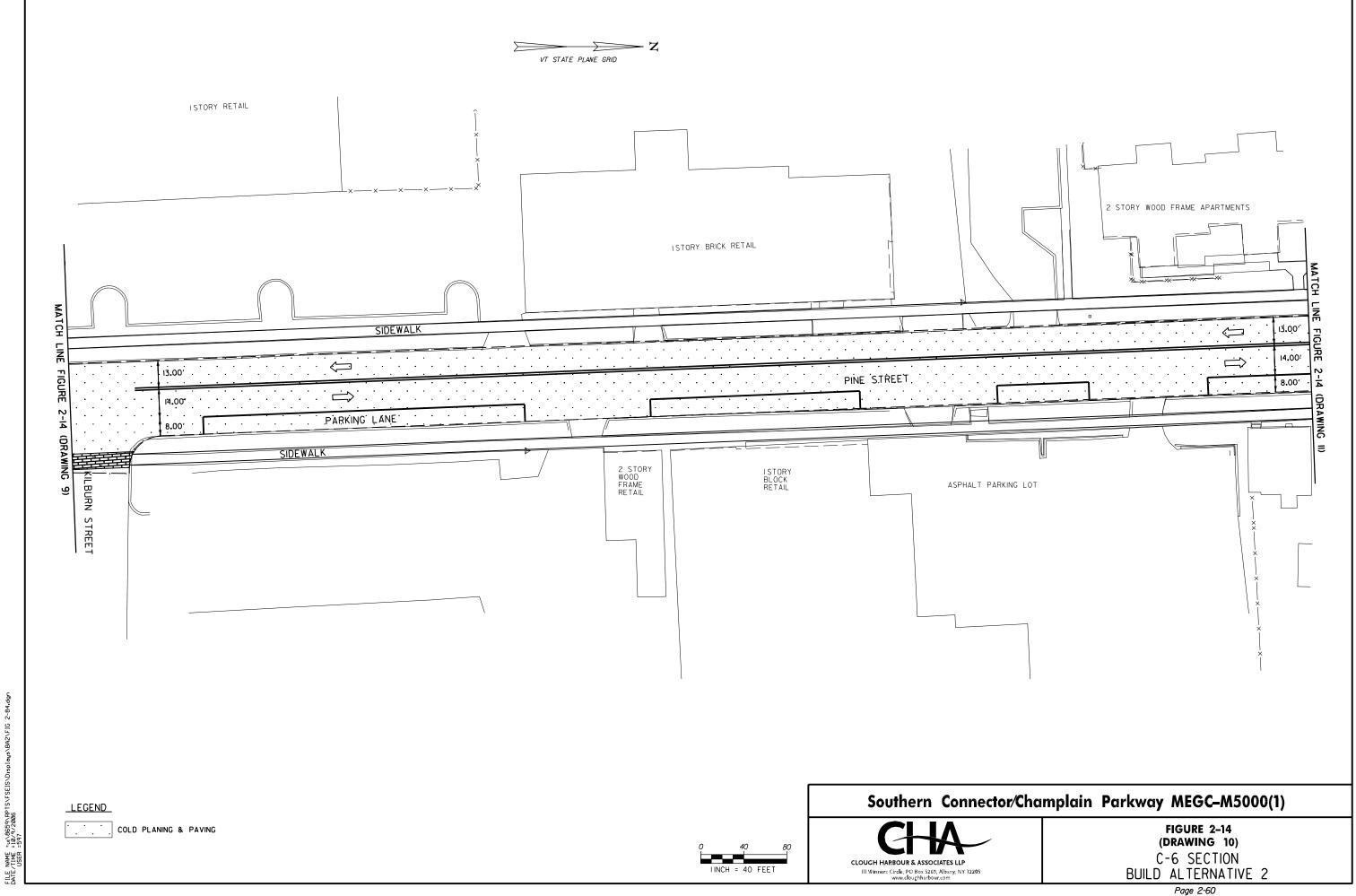
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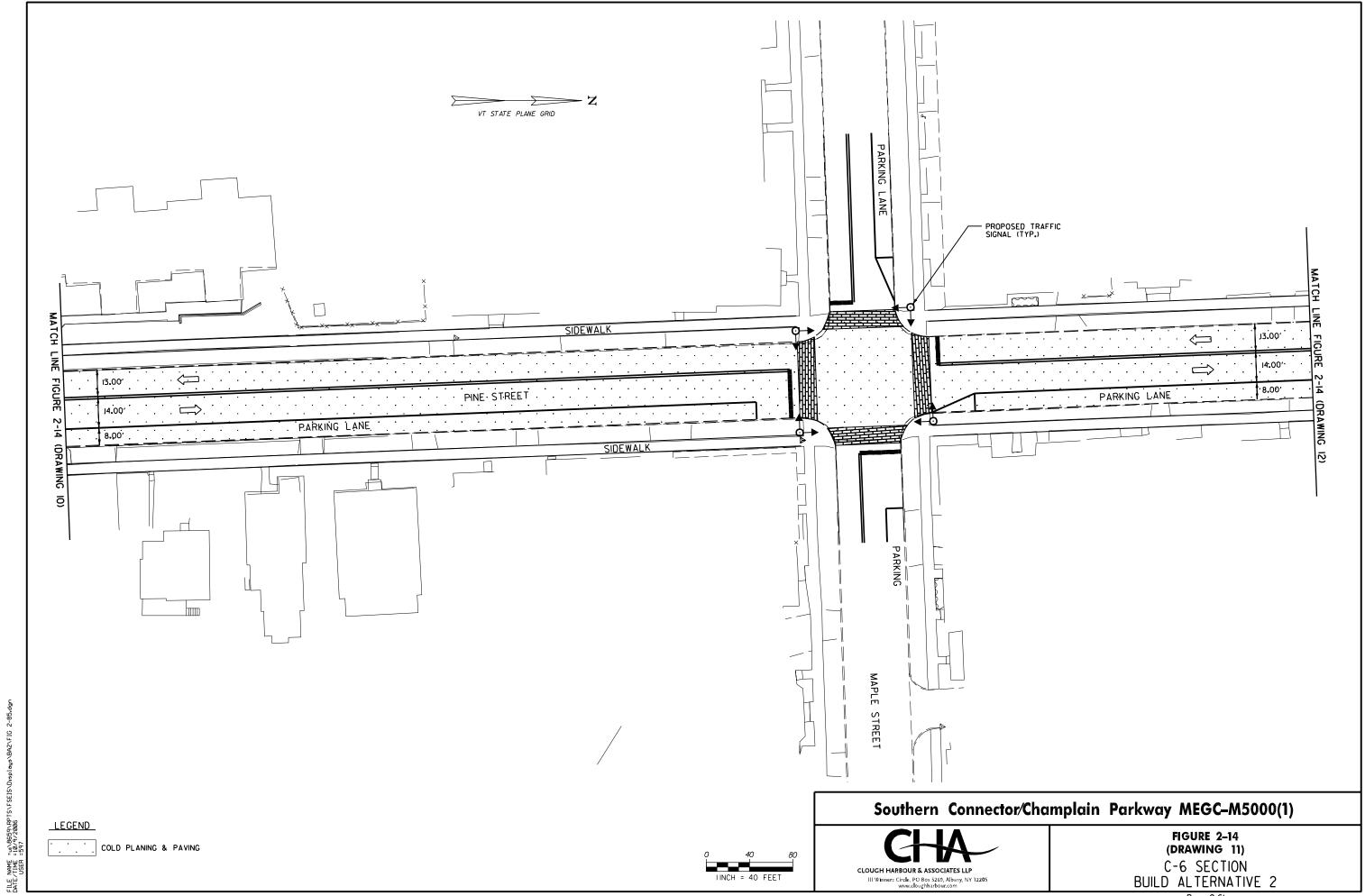


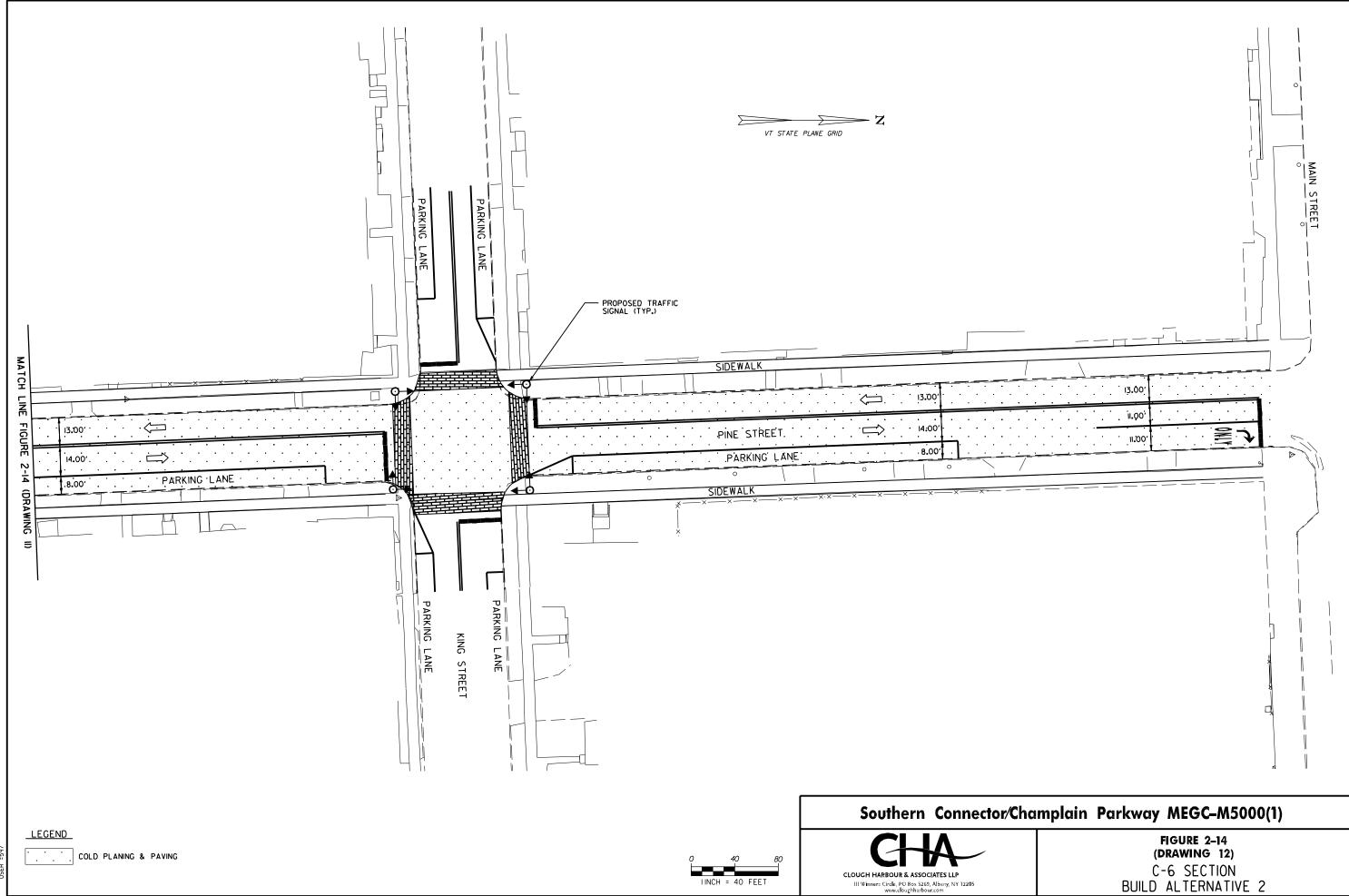












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