

### **Town Board of Trustees**

Tuesday, April 12, 2022 at 7:00 pm

# PLEASE SILENCE ALL CELL PHONE AND ELECTRONIC DEVICES. THANK YOU.

#### 1. Meeting Information

207 Muegge Way, Bennett, CO 80102

For a live stream of the meeting use the information below:

https://us02web.zoom.us/j/86421436556

Meeting ID: 86421436556

Passcode: 448985

Join by phone

(US) +1 646-558-8656

2. Call to Order

Royce D. Pindell, Mayor

- a. Roll Call
- 3. Pledge of Allegiance

Royce D. Pindell, Mayor

4. Approval of Agenda

Royce D. Pindell, Mayor

5. Consent Agenda

Royce D. Pindell, Mayor

a. March 22, 2022 - Regular Meeting Minutes

#### **Attachments:**

March 22, 2022 - Regular Meeting Minutes (03-22-2022\_-\_Regular\_Meeting Minutes.pdf)

#### **Public Comments on Items Not Scheduled for Public Hearing**

The Board of Trustees welcomes you. Thank you for joining us for our Town of Bennett Board of Trustees Meeting. If you are not speaking, we ask that you please mute your microphone. For public comment please sign up on the provided sheet or in the chat box. If you are on the phone, once we get through the sign-up sheet and chat box we will call for any other comments for items not on the agenda.

Your comments will be limited to three (3) minutes. The Board may not respond to your comments this evening, rather they may take your comments and suggestions under advisement and provide direction to the appropriate member of Town staff for follow-up. Thank you.

#### **Old Business**

#### 6. Public Hearing

#### a. 2022 Town of Bennett Budget Amendment

Resolution No. 913-22 - A Resolution Appropriating Sums of Money in Addition to those Appropriated in Resolution No. 852-20 for the 2021 Fiscal Year for the Town of Bennett Sales Tax Capital Improvement Fund, Capital Improvement Fund and Storm Drainage Impact Fee Fund

Danette Ruvalcaba, Director of Finance

#### **Attachments:**

- Public Hearing Script (0\_-Public\_Hearing\_Script.pdf)
- Staff Report 2022 Town of Bennett Budget Amendment (1\_-\_Staff\_Report.pdf)
- Resolution No. 913-22 A Resolution Appropriating Sums of Money in Addition to those Appropriated in Resolution No. 852-20 for the 20 21 Fiscal Year for the Town of Bennett Sales Tax Capital Improvement Fund, Capital Improvement Fund and Storm Drainage Impact Fee Fund (2\_-Budget\_Amendement\_Resolution.pdf)
- **Suggested Motion** (3\_-\_Suggested\_Motion.pdf)

#### 7. Action/Discussion Items

a. Amendments to the Town's Dynamic Braking Device Ordinance

Ordinance No. 737-22 - An Ordinance Amending Chapter 10 of the Bennett Municipal Code Concerning Dynamic Braking Devices

Melinda Culley, Town Attorney

#### **Attachments:**

- Staff Report Amendments to the Town's Dynamic Braking Device Or dinance (0\_-\_Staff\_Report\_\_clean\_.pdf)
- Ordinance No. 737-22 An Ordinance Amending Chapter 10 of the B ennett Municipal Code Concerning Dynamic Braking Devices (1\_-\_Ordinance\_No.\_737-22\_-\_Jake\_Brake.ord\_\_revised\_\_.pdf)
- **Suggested Motion** (2\_-\_suggested\_motion.pdf)

#### **Regular Business**

#### 8. Action/Discussion Items

 a. Acknowledgement of Service for Trustee Larry Vittum and Town of Bennett Board of Adjustment

Royce D. Pindell, Mayor

#### b. Oath of Office - New Town Board Trustees

Christina Hart, Town Clerk

#### **Attachments:**

- Oath of Office Trustee Kevin A. Barden (0\_-\_Oath\_of\_Office\_-\_Barden.p df)
- Oath of Office Trustee Steve Dambroski (1\_-\_Oath\_of\_Office\_-\_Dambroski.pdf)
- Oath of Office Trustee Darvin M. Harrell (2\_-Oath\_of\_Office\_-Harrell.pdf)

#### c. Mayor Pro Tem Selection

Royce D. Pindell, Mayor

#### **Attachments:**

• **Suggested Motion** (0\_-\_Suggested\_Motion\_-\_Selection\_of\_Mayor\_Pro\_Tem.p df)

#### d. 2022 Appointment of Town Officials

Royce D. Pindell, Mayor

#### **Attachments:**

- **Staff Report 2022 Appointment of Town Officials** (0\_-\_Staff\_Report\_-\_th redline.pdf)
- Oath of Office Town Clerk, Christina Hart (1\_-\_Oath\_of\_Office\_-\_Town\_ Clerk\_\_Christina\_Hart\_\_2022.pdf)
- Oath of Office Town Clerk Pro Tem, Taeler Houlberg (2\_-\_Oath\_of\_Office\_-\_Town\_Clerk\_Pro\_Tem\_\_Taeler\_Houlberg\_\_2022.pdf)
- Oath of Office Second Town Clerk Pro Tem, Rachel Summers (3\_-\_O ath\_of\_Office\_-\_2nd\_Town\_Clerk\_Pro\_Tem\_\_Rachel\_Summers\_\_2022.pdf)
- Oath of Office Town Treasurer, Danette Ruvalcaba (4\_-\_Oath\_of\_Offic e\_-\_Town\_Treasurer\_\_Danette\_Ruvalcaba\_\_2022.pdf)
- Oath of Office Town Attorney, Kelly P.C. (5\_-Oath\_of\_Office\_-Town\_At torney\_\_Kelly\_P.C.\_\_2022.pdf)
- Oath of Office Presiding Municipal Judge, Shawn Day (6\_-\_Oath\_of\_Of fice\_-\_Presiding\_Judge\_\_Shawn\_Day\_\_2022.pdf)
- **Suggested Motion** (7\_-\_Suggested\_Motion-thredline.pdf)

#### e. Town of Bennett Planning and Zoning Appointments

Christina Hart, Town Clerk

#### **Attachments:**

- Staff Report Town of Bennett Planning and Zoning Appointments (0\_-\_Staff\_Report\_Update.pdf)
- Rachel Connor Application (Connor Application.pdf)

- Martin Metsker Application (Metsker Application.pdf)
- Oath of Office Commissioner Rachel Connor (3\_-\_Oath\_of\_Office\_-\_Rachel Connor.pdf)
- Oath of Office Commissioner Martin Metsker (4\_-\_Oath\_of\_Office\_-\_Martin\_Metsker.pdf)
- **Suggested Motion** (5\_-\_Suggested\_Motion.pdf)

#### 9. Public Hearing

a. Case No. 21.24 - Bennett Crossing Filing No. 5 Final Plat

Resolution No. 912-22 - A Resolution Approving a Final Plat for Bennett Crossing Filing No. 5 Steve Hebert, Planning and Economic Development Manager

#### **Attachments:**

- **Public Hearing Script** (0\_-\_Public\_Hearing\_Script.PC.pdf)
- Staff Report Case No. 21.24 Bennett Crossing Filing No. 5 Final Plat (
   1 Bennett Crossing F5 CaseNo.21.24 BoardStaffReport thredline.pdf)
- PowerPoint Presentation Case No. 21.24 Bennett Crossing Filing No.
   5 Final Plat (2-PowerPoint\_BennettCrossingFiling5\_FinalPlat\_BoardHearing\_0 4\_12\_22\_FINAL.pdf)
- Land Use Application (3-bc final plat app.pdf)
- Letter of Intent/Narrative (4-Letter of Intent Bennett Crossing 5.pdf)
- Bennett Crossing Filing No. 5 Subdivision Final Plat (5-120-00343-FP\_A dams County 01-15-2022.pdf)
- Bennett Crossing Outline Development Plan (6-01.10.22\_BENNETT\_ODP \_Amend1\_01\_31\_22Version.pdf)
- Combined Staff and Referral Agency Comments (7-Combined\_BCrossin g\_Filing5\_FP\_ReferralComments.pdf)
- **Bennett Crossing Filing No. 5 Traffic Study** (8-Traffic\_Impact\_Analysis\_B ennettCrossingFiling5-072021.pdf)
- Planning and Zoning Commission Resolution No. 2022-08 (9\_-\_Resoluti on\_No.\_2022-08\_-\_Recommending\_Approval\_of\_The\_Final\_Plat\_for\_the\_Benn ett\_Crossing\_Filing\_No.\_5\_Subdivision.pdf)
- Resolution No. 912-22 A Resolution Approving a Final Plat for Benn ett Crossing Filing No. 5 (10\_-BennettCrossing\_F\_No.\_5\_BOT\_reso\_912-2 2.pdf)
- Suggested Motion (11 Suggested Motion.pdf)

#### 10. Action/Discussion Items

a. Bennett Ranch Sanitary Sewer Interceptor Upgrades

Dan Giroux, Town Engineer

#### **Attachments:**

- Staff Report Bennett Ranch Sanitary Sewer Interceptor Upgrades
   (0\_-Bennett\_Ranch\_IGA\_re\_SS\_Upgrade\_-\_Staff\_Report\_4-7-2022.pdf)
- Bennett Ranch Sanitary Sewer Map Exhibit (1\_-\_B-Ranch\_Downsream\_v \_Custer\_Bypass\_SS\_Align\_Alts\_Mar\_2022.pdf)

- Intergovernmental Agreement for Town-Requested Sanitary Sewer U pgrades (2\_-\_Town\_of\_Bennett-Bennett\_MD\_No.\_1\_Cost\_Sharing\_IGA\_2022-0 3-23.pdf)
- Resolution No. 911-22 A Resolution Approving an Intergovernment al Agreement for Town-Requested Sanitary Sewer Upgrades (3\_-\_Resolution\_No.\_911-22\_BR.pdf)
- **Suggested Motion** (4\_-Proposed\_Motion.pdf)

#### 11. Town Administrator Report

Trish Stiles, Town Administrator

- a. Board of Trustees: Organization and Committee Assignments
  Attachments:
  - Board of Trustees: Organization and Committee Assignments (Draft\_-\_Organizations\_and\_Committee\_Assignments\_2022.pdf)

#### 12. Trustee Comments and Committee Reports

Mayor and Trustees

#### 13. Adjournment

Individuals with disabilities who need auxiliary aids in attending the meeting may request assistance by contacting the Town Hall at 207 Muegge Way, Bennett, CO 80102-7806, (303) 644-3249. Please give notice at least 48 hours in advance of the meeting to allow for enough time in making the necessary arrangements.

Contact: Christina Hart (chart@bennett.co.us 1303-644-3249 X1001) | Agenda published on 04/08/2022 at 3:13 PM

#### TOWN OF BENNETT, COLORADO BOARD OF TRUSTEES Regular Meeting March 22, 2022

#### 1. CALL TO ORDER

The Board of Trustees of the Town of Bennett met in regular session on Tuesday, March 22, 2022 via hybrid meeting. Mayor Royce D. Pindell called the meeting to order at 7:03 p.m. The following persons were present upon the call of the roll:

Mayor: Royce D. Pindell

Trustees Present: Kevin Barden

Darvin Harrell Whitney Oakley Denice Smith Donna Sus Larry Vittum

Staff Present: Trish Stiles, Town Administrator

Taeler Houlberg, Administrative Services Director

Steve Hebert, Planning and Economic Development Manager

Adam Meis, IT and Communications Manager

Dan Giroux, Town Engineer

Mike Heugh, Town Traffic Engineer Steve King, Special Projects Coordinator

Melinda Culley, Town Attorney

Public Present: Kathy Smiley, Steve Dambroski, John Vitella, Jim Marshall, Karen Henry,

Mike Thiesen, Peter Gonzales, Kirk Money, Tony Hill, Renee Meriaux

#### 2. PLEDGE OF ALLEGIANCE

The Pledge of Allegiance was led by Mayor Royce D. Pindell.

#### 3. APPROVAL OF AGENDA

TRUSTEE VITTUM MOVED, TRUSTEE MAYOR PRO TEM HARRELL SECONDED to approve the agenda as presented. The voting was as follows:

YES: Harrell, Oakley, Pindell, Smith, Sus, Vittum, Barden

NO: None

Mayor Royce D. Pindell declared the motion carried by unanimous vote.

#### 4. CONSENT AGENDA

MAYOR PRO TEM HARRELL MOVED, TRUSTEE SMITH SECONDED to move item 5b Adams County Homelessness Memorandum of Understanding to regular business. The consent agenda was approved as amended.

YES: Oakley, Pindell, Smith, Sus, Vittum, Barden, Harrell

NO: None

Mayor Royce D. Pindell declared the motion carried by unanimous vote.

A. Action: Approval of March 8, 2022 Regular Meeting Minutes

B. Action: Memorandum of Understanding between the Town of Bennett and

Kiowa Creek Preserve Holdings, LLC.

#### PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA

There were no public comments presented.

#### 5. REGULAR BUSINESS

#### A. Public Hearing

1. Case 22.01 Bennett North (Mundell Property) Annexation and Annexation Agreement

Resolution No. 907-22 – A Resolution Concerning a Petition for the Annexation of Property to the Town of Bennett, Colorado, Known as the Bennett North Annexation and Finding the Area Proposed to be Annexed Eligible for Annexation

Ordinance No. 739-22 – An Ordinance Approving an Annexation Known as the Bennett North Annexation to the Town of Bennett, Colorado

<u>Resolution No. 908-22 – A Resolution Approving an Annexation Agreement for the</u> Bennett North Annexation

Mayor Royce D. Pindell called the matter of Case 22.01 Bennett North Annexation to the Town of Bennett and initial zoning for the property. The initial zoning requested is Mid-Density Residential (R-2) to order. The public hearing was opened at 7:09 p.m.

Taeler Houlberg, Town Clerk Pro Tem, stated that in accordance with Colorado State Statue, notice of the public hearing was properly posted and published in the Eastern Colorado News on February 4, February 11, February 18, and February 25, 2022. Legal #2587.

Steve Hebert, Planning and Economic Development Manager, report to the Trustees the applicants have petitioned the Town of Bennett to annex 153.62 acres into the Town of Bennett. The property is located at the southwest corner of East 38<sup>th</sup> Avenue and 1<sup>st</sup> Street/Converse Road. It is zoned A-3 in unincorporated Adams County. The current property owners are several members of the extended Mundell family.

In Colorado, annexation into a municipality like the Town of Bennett can take place in three ways: (1) landowner petition; (2) annexation election; or (3) unilateral annexation of an enclave or municipal-owned land. In this case, the landowners have submitted a petition to

annex. On January 25, 2022, the Board of Trustees determined the annexation petition was in substantial compliance with the applicable laws of the State of Colorado and set the annexation public hearing for March 22, 2022. Case No. 22.01 is to consider the following:

- 1. Bennett North Annexation Eligibility Resolution No. 907-22;
- 2. Bennett North Annexation Ordinance No. 739-22; and,
- 3. Bennett North Annexation Agreement Resolution No. 908-22

The subject property is within the Area of Planning Interest in the 2021 Comprehensive Plan. The Area of Planning Interest includes unincorporated infill properties within Bennett, contiguous properties and properties within a logical service area, ideal for future annexation to the Town.

Staff has had initial conversations with an adjoining property owner clarifying the nature of the application.

#### 2. Case 22.02 Bennett North (Mundell Property) Zoning

### Ordinance No. 740-22 – An Ordinance Zoning Property Annexed to the Town of Bennett and Known as the Bennett North Annexation

The applicants have petitioned the Town of Bennett to annex 153.62 acres into the Town of Bennett. As part of the annexation process, the property owner can also apply for zoning consistent with the Town's zoning code. In this case, the applicant is applying for R-2 – Mid Density Residential. The annexation petition will also be considered by the Town Board of Trustees on March 22, 2022.

The property is currently unincorporated and zoned A-3 in Adams County.

The Area of Planning Interest includes unincorporated infill properties within Bennett, contiguous properties and properties within a logical service area, ideal for future annexation to the Town.

Staff finds the proposed zoning is consistent with, or will promote, the goals and policies of the Town of Bennett 2021 Comprehensive Plan as required by Sections 16-1-90 and 16-2-360 of the Municipal Code.

#### **PUBLIC COMMENTS**

No public comments were presented.

The public hearing closed at 8:07 p.m.

TRUSTEE OAKLEY MOVED, TRUSTEE VITTUM SECONDED to approve Resolution No. 907-22 – A resolution concerning a petition for the annexation of property to the Town of Bennett, Colorado, known as the Bennett North Annexation and finding the area proposed to be annexed eligible for annexation. The voting was as follows:

YES: Pindell, Smith, Sus, Vittum, Barden, Harrell, Oakley

NO: None

Mayor Royce D. Pindell declared the motion passed unanimously.

TRUSTEE OAKLEY MOVED, TRUSTEE VITTUM SECONDED to approve Ordinance No. 739-22 – An ordinance approving an annexation known as the Bennett North Annexation to the Town of Bennett, Colorado. The voting was as follows:

YES: Smith, Sus, Vittum, Barden, Harrell, Oakley, Pindell

NO: None

Mayor Royce D. Pindell declared the motion passed unanimously.

TRUSTEE OAKLEY MOVED, TRUSTEE SMITH SECONDED to approve Resolution No. 908-22 – A resolution approving an annexation agreement for the Bennett North Annexation. Voting was as follows:

YES: Sus, Vittum, Barden, Harrell, Oakley, Pindell, Smith

NO: None

Mayor Royce D. Pindell declared the motion passed unanimously.

TRUSTEE SUS MOVED, MOTION NOT SECONDED to approve Ordinance No. 740-22 – An ordinance zoning property annexed to the Town of Bennett and known as the Bennett North Annexation. The motion failed.

#### **B.** Action/Discussion

#### 1. Brunner Subdivision Agreement

### Resolution No. 909-22 – A Resolution Approving a Subdivision Agreement for the Brunner Subdivision

Melinda Culley, Town Attorney, reported to the Trustees on February 8, the Board of Trustees approved a Final Plat for the Brunner Subdivision, which will allow up to 87 single-family detached lots on the south side of US Hwy 36/Colfax Ave, just east of the SkyView Subdivision. As a condition of approval, the Subdivider is required to enter into a Subdivision Agreement (SA) regarding the public improvements for the project.

Notable provisions of the proposed SA for the Brunner Subdivision include:

- The Subdivider is responsible for constructing approximately \$4 million in public improvements.
- The Subdivider will pay the Town's costs for improving the Penrith Park lift station to accommodate sewage flows from the Brunner Subdivision. The Town's Water Engineer is finalizing cost estimates for those improvements, which will be added to the SA before it is executed. If the actual cost exceeds the estimated cost, the Muegge Farms Metro District No. 3 will be responsible for 50% of the overages. The Subdivider is allowed up to 25 building permits and certificates of occupancy (COs) prior to completion of the lift station improvements.
- Muegge Farms Metro District No. 3 will be responsible for constructing the following offsite road improvements:
  - o the eastern half-section of Penrith Road between Civic Center Drive and the limits of the Penrith Park Subdivision;
  - o the full section of Civic Center Drive between Penrith Road and Foggy Street;
  - the southern half-section of Civic Center Drive between Foggy Street and the western limit of Civic Center Drive to be constructed as part of Muegge Farms Filing No. 4; and

- the Lark Sparrow Way extension between the Brunner Subdivision and Civic Center Drive.
- Subdivider will be allowed up to five building permits and COs for model homes prior to completion of the off-site road improvements. The model homes may be open to the public for walk-throughs and general community sales purposes, but not occupied as a living space prior to completion of the off-site road improvements.

As noted above, cost estimates for the lift station improvements and other public improvements are still being finalized. Therefore, the enclosed resolution approves the SA, subject to finalization and approval of the cost estimates and exhibits by the Town Engineer.

TRUSTEE VITTUM MOVED, TRUSTEE SMITH SECONDED to approve Resolution No. 909-22 – A resolution approving a Subdivision Agreement for the Brunner Subdivision. Voting was as follows:

YES: Barden, Harrell, Oakley, Pindell, Smith, Sus, Vittum

NO: None

Mayor Royce D. Pindell declared the motion passed unanimously.

#### 2. Adams County Homelessness Services Memorandum of Understanding (MOU)

Trish Stiles, Town Administrator, reported to the Trustees, Adams County has begun coordinating homelessness services, data sharing and determining roles and responsibilities between the county and municipalities (i.e., City of Aurora, City of Brighton, City of Commerce City, City of Federal Heights, City of Northglenn, City of Thornton, City of Westminster, City and County of Broomfield and Town of Bennett) in order to coordinate services and investments countywide and reach as many people experiencing homelessness in the community as possible.

The proposed Memorandum of Understanding ("MOU") would take effect in 2022 and remain in effect through December 31, 2024, subject to the Town's right to terminate its involvement at any time.

This proposed MOU regarding homelessness services will strengthen regional coordination and improve outcomes for individuals experiencing or at risk of homelessness. Through a shared commitment to share and utilize available data, all parties agree to identify resources and service needs for people experiencing or at risk of homelessness and potential locations and properties that can best provide those resources and services.

The Town of Bennett would be responsible for collaborating efforts, participating in meetings, sharing data with Adams County to help facilitate program planning, and assigning a staff member to the Core Team who can speak on behalf of the Town.

Through the MOU, the Town of Bennett will have an opportunity to further evaluate the homelessness situation in the area as well as provide dignity related services to any resident experiencing or at risk of homelessness.

Furthermore, the MOU does not require a financial obligation from the Town and it contains a termination right, which would allow the Town to terminate its involvement if necessary.

TRUSTEE SUS MOVED, TRUSTEE BARDEN SECONDED to approve the Memorandum of Understanding between Adams County, Colorado, and the Cities of Aurora, Brighton, Commerce City, Federal Heights, Northglenn, Thornton, Westminster, the Town of Bennett and the City and County of Broomfield regarding homelessness services. The voting was as follows:

YES: Oakley, Pindell, Smith, Sus, Barden

NO: Harrell, Vittum

Mayor Royce D. Pindell declared the motion passed 5 to 2.

#### 3. Building Department Services Contract Charles Abbott Associates, Inc.

Resolution No. 910-22 – A Resolution Approving an Agreement for Building Department Services by and Between the Town of Bennett and Charles Abbott Associates, Inc.

Trish Stiles, Town Administrator, reported to the Trustees, the Town of Bennett has contracted in various forms with Charles Abbott Associates, Inc. (CAA) since 2018 to perform building department inspection and review services. CAA has been a national alternative service provider to state and local government agencies since 1984. Their expertise allows them to provide public agencies for building & safety, city engineering, public works, environmental, and fire prevention services. Prior to this contract, the Town of Bennett utilized SAFEbuilt for many years prior in similar contractual services. In 2019, staff reviewed the proposed contract and determined at the time that an in house building inspector, supplemented with electrical inspections from CAA would the best and most cost effective delivery of services. In 2021, an in house electrical inspector was hired and CAA provided back up services on an as needed basis. After changes in staff during December 2021until present, the Town of Bennett has been contracting with CAA to do all building inspection and review services.

During this time, staff received and reviewed a new proposal from CAA as well as looked at possible replacements for in house services to continue.

#### In-house Inspection Services:

As with many business sectors at this time, the building inspection sector is, a tight and competitive job market with limited supply of qualified Chief Building Officials as well as Electrical Inspectors. This is due in large part to the building industry pulling candidates into the private sector as well as Colorado state law that requires electrical inspectors to be master electricians. While staff did post these positions, our response for qualified candidates was very limited and the pool was not as strong as we had hoped.

#### **Contract Inspection Services:**

CAA also submitted a revised proposal to the Town of Bennett to offer full service building inspection at a rate of 60% of building permit revenues. This is an improved proposal from 2019 when the proposal was a minimum of 70% of revenues with a stepped approach with various metric points being met at both 65% and 60%. Per the proposal, CAA will perform residential and commercial building inspections, including electrical inspections, plan

reviews, and building official services as needed. This would be a three-year contract but would be something that each party could terminate with 30 days written notice.

TRUSTEE BARDEN MOVED, TRUSTEE SUS SECONDED to approve Resolution No. 910-22 – A resolution approving an agreement for Building Department services by and between the Town of Bennett and Charles Abbott Associates, Inc. The voting was as follows:

YES: Oakley, Pindell, Smith, Sus, Vittum, Barden, Harrell

NO: None

Mayor Royce D. Pindell declared the motion passed unanimously.

#### 6. TOWN ADMINISTRATOR REPORT

Trish Stiles, Town Administrator, reported on the following:

- Water Committee comments responses were due back at the beginning of March 2022. Case is moving along.
- Attended some Transportation Sub-regional Forums regarding trail connections.
- Attended monthly CDOT meeting. Ms. Stiles extended an invitation for a meeting between the Board of Trustees and CDOT for possibly May 10.
- Working on a water sustainability grant for expansion of the purple pipe.
- Orientation scheduled for April 1 at 2:00 p.m.
- Reception for outgoing Trustee Vittum and Board of Adjustment April 12 at 6:00 p.m. The board meeting will follow at 7:00 p.m.

#### 7. TRUSTEE COMMENTS AND COMMITTEE REPORTS

#### **Larry Vittum**

Trustee Vittum reported on the following:

- Attended DRCOG
- Reported to DRCOG Mayor Pindell would be attending future DRCOG meetings

#### **Whitney Oakley**

Trustee Oakley reported on the following:

- Attended the I-70 Corridor Chamber of Commerce lunch and learn. Steve Hebert and Lynette White presented during the program. Trustee Oakley spoke about our Community Service Officers while addressing crime within the Town.
- Anythink Library has been hosting the Corridor Creative Arts group.

#### Royce D. Pindell

Mayor Pindell reported on the following:

• Thanked Public Works staff for repairing the water line break.

#### 8. ADJOURNMENT

TRUSTEE VITTUM MOVED, TRUSTEE SMITH SECONDED to adjourn the meeting. The meeting was adjourned at 9:17 p.m. Voting was as follows:

YES: Pindell, Smith, Sus, Vittum, Barden, Harrell, Oakley

NO: None

| Mayor Royce D. Pindell declared the motion carried by unanimous vote. |                         |
|---|-------------------------|
|   |                         |
|   | Royce D. Pindell, Mayor |
| Christina Hart, Town Clerk  |                         |

# Public Hearing Script Board of Trustees 2022 Town of Bennett Budget Amendment

MAYOR: I will next call the matter of the 2022 Town of Bennett Budget Amendment to

order. This is a public hearing on the 2022 Budget Amendment.

MAYOR: Ms. Hart, for the record, please state whether this hearing has been properly

noticed.

[Town Clerk to summarize the notice required and accomplished for the

hearing.]

**MAYOR:** Is there a staff presentation on this matter?

[Staff presentation/information]

MAYOR: This is a public hearing. Please keep public comment to the issues before the

Town Board. Each speaker is asked to limit comment time to 3 minutes, unless the speaker represents a group of citizens, in which event additional time may be allocated. Please respect these limitations. I reserve the right to limit public comment that is inappropriate under these guidelines or otherwise improper. I also reserve the right to limit testimony or questioning that is repetitive, cumulative, argumentative, or not pertinent to the issues, and to set a limit on the duration of testimony if I determine it to be necessary in light of the number

of persons who have signed up to testify.

**MAYOR:** Is there anyone here who wishes to speak on this issue?

[Public comment]

MAYOR: Is there anyone else in the public who wishes to speak on this issue? Hearing

none, I now close the public comment portion of the public hearing. We will now proceed to Board discussion. Are there any questions from the Trustees,

or any discussion of the Trustees?

[Town Board questions and discussion]

MAYOR: If there is no further discussion by the Town Board, I will entertain a motion on

the 2022 Town of Bennett Budget Amendment.

### STAFF REPORT



TO: Mayor and Town of Bennett Board of Trustees

FROM: Danette Ruvalcaba, Director of Finance

DATE: April 12, 2022

SUBJECT: 2022 Town of Bennett Budget Amendment

#### Background

On December 8, 2020, the Bennett Board of Trustees approved Resolution 852-20 appropriating sums of money to various funds of the Town of Bennett for the 2021 budget year. Due to underbudgeting of three capital projects, additional appropriations are required in three funds, the Sales Tax Capital Improvement Fund, the Capital Improvement Fund and the Storm Drainage Impact Fee Fund.

#### Proposed Budget Amendment

First, \$650,000 was budgeted for the Marketplace Signalization Project. On October 21, 2021, the Board approved a contract with Morton Electric, Inc., in an amount not to exceed \$1,158,245, and a subsequent change order for material escalation was issued in the amount of \$15,000, making the full contract amount of \$1,173,245. Therefore, a Budget Amendment of \$523,000 is required for the Sales Tax Capital Improvement Fund.

Second, \$2,200,000 was budgeted for the North Municipal Complex Construction. After bids and financing for the project were received, the overall project budget was increased to \$3,200,000. The financing includes a Department of Local Affairs grant of \$489,000 and a Certificate of Participation Revenue of \$2,711,342. All these funds must be expended on this project. On April 13, 2021, a contract in the amount of \$2,820,154 was approved by the Board for Lefever Building Systems, Inc; subsequent change orders have been issued for a total contract of \$2,897,184. In addition, contracts have been issued to Kuhn Construction for site prep and grading, water service and utility access for a combined amount of \$354,688. Therefore, a Budget Amendment of \$1,000,000 is required for the Capital Improvement Fund.

Third, \$50,000 was budgeted for the 1<sup>st</sup> and Roosevelt Storm Drainage Outfall project. On September 14, 2021, the Board approved a contract to Denver Best Contract for \$68,864. The Storm Drainage Impact Fee Fund did have contingency appropriated; however, it was insufficient to cover the overage. Therefore, a Budget Amendment of \$3,800 is required in the Storm Drainage Impact Fund.

Revenue sources cover all expenditures and budget amendments requested within the fund.

#### Staff Recommendation

Staff recommends the approval of Resolution No. 913-22, a resolution appropriating additional sums of money for the 2021 fiscal year in the Town of Bennett Sales Tax Capital Improvement Fund, Capital Improvement Fund and Storm Drainage Impact Fee Fund.

1. Resolution No. 913-22

#### **RESOLUTION NO. 913-22**

A RESOLUTION APPROPRIATING SUMS OF MONEY IN ADDITION TO THOSE APPROPRIATED IN RESOLUTION NO. 852-20 FOR THE 2021 FISCAL YEAR FOR THE TOWN OF BENNETT SALES TAX CAPITAL IMPROVEMENT FUND, CAPITAL IMPROVEMENT FUND AND STORM DRAINAGE IMPACT FEE FUND

**WHEREAS**, pursuant to Sec. 4-2-30 of the Town of Bennett Code, the Board of Trustees adopted Resolution No. 852-20 that appropriated such sums of money as were deemed necessary to cover the items in its budget and to defray all projected expenses and liabilities of the Town during the fiscal year 2021; and

**WHEREAS**, the Town Treasurer and Town Administrator have deemed it necessary to revise the 2021 budget to more clearly reflect the amounts budgeted; and

**WHEREAS**, the Town Treasurer has certified that funding sources and revenues are available for appropriation in the various funds; and

**WHEREAS**, the Town Administrator has recommended that the various appropriations enumerated and this Resolution be made.

### NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN OF BENNETT, COLORADO:

**Section 1**. Appropriations in addition to those made in Resolution No. 852-20 shall be made for Fiscal Year 2021 as follows:

- a. For the fiscal year of 2021
  - i. From additional fund balance in the Sales Tax Capital Improvement Fund for the net amount of five-hundred and twenty-three thousand (\$523,000) for the completion of the Market Place Signalization.
  - ii. From additional revenue in the Capital Improvement Fund for the net amount of one million (\$1,000,000) for the completion of the North Municipal Complex building.
  - iii. From additional revenue and fund balance in the Storm Drainage Impact Fee Fund for the net amount of three-thousand eight hundred (\$3,800) for the completion to the First and Roosevelt Storm outfall project.

**Section 2.** All prior resolutions or parts of such resolutions, codes or parts of codes in conflict with the provisions of this resolution are hereby repealed.

INTRODUCED, READ, AND ADOPTED THIS 12th DAY OF APRIL 2022.

| TOWN OF BENNETT         |  |
|-------------------------|--|
| Royce D. Pindell, Mayor |  |

| ATTEST:                    |  |
|----------------------------|--|
|                            |  |
|                            |  |
| Christina Hart, Town Clerk |  |

### **Suggested Motion**

I move to approve Resolution No. 913-22 - A resolution appropriating sums of money in addition to those appropriated in Resolution No. 852-20 for the 2021 fiscal year for the Town of Bennett Sales Tax Capital Improvement Fund, Capital Improvement Fund, and Storm Drainage Impact Fee Fund.

### STAFF REPORT



TO: Mayor and Town of Bennett Board of Trustees

FROM: Melinda Culley, Town Attorney

DATE: April 12, 2022

SUBJECT: Amendments to the Town's Dynamic Braking Device Ordinance

#### Background

In 2021, the Board adopted Ordinance No. 730-21, which added a new section to the Bennett Municipal Code making it unlawful to use a dynamic braking device within the Town. The Colorado Department of Transportation (CDOT) has requested that the Town make certain amendments to the ordinance before it will agree to the placement of engine brake signs on State Highways 79 and 36. The changes include:

- Adding language that allows the use of a dynamic braking device in emergency situations and in an effort to avoid a collision.
- Stating that persons violating the statute shall be punished in accordance with Section 1-4-20 of the Town Code, which is the Town's general penalty ordinance. The maximum fine under that section is \$2,650 (adjusted for inflation) or imprisonment of up to 364 days.

#### **Staff Recommendation**

Staff recommends approving Ordinance No. 737-22, an ordinance amending Chapter 10 of the Bennett Municipal Code concerning Dynamic Braking Devices.

#### Attachments

1. Ordinance No. 737-22

#### **ORDINANCE NO. 737-22**

### AN ORDINANCE AMENDING CHAPTER 10 OF THE BENNETT MUNICIPAL CODE CONCERNING DYNAMIC BRAKING DEVICES

**WHEREAS**, the Board of Trustees previously adopted Ordinance No. 730-21, which added a new section to the Bennett Municipal Code making it unlawful to use a dynamic braking device within the Town; and

**WHEREAS**, the Board of Trustees desires to amend that section to include an exception for emergency situations and to address penalties for violating said section.

# NOW THEREFORE, BE IT ORDAINED BY THE BOARD OF TRUSTEES OF THE TOWN OF BENNETT, COLORADO:

Section 10-5-190 of the Bennett Municipal Code is hereby amended to read as follows (words to be added are underlined; words to be deleted are stricken through):

#### Sec. 10-5-190-10-9-50 - Dynamic braking devices.

- <u>a.</u> Except as provided herein, Nno person shall operate within the limits of the Town any motor vehicle with a dynamic braking device engaged. For purposes of this section, a *dynamic braking device* is a device used primarily on trucks for the conversion of the engine from an internal combustion engine to an air compressor for the purpose of braking without the use of wheel brakes.
- b. It shall be an affirmative defense to an alleged violation of this section if the motor vehicle is in an emergency situation and in an effort to avoid collision with any other vehicle, stationary object or moving object, dynamic braking is required for purposes of avoiding said collision. Should the Municipal Court determine that dynamic braking, was used in conjunction with the avoidance of a collision as anticipated in this section, then the defendant shall be exonerated from any liability.
- <u>c.</u> <u>Any person who violates this section commits a violation that may be</u> punishable up to the maximum allowed under Section 1-4-20 of this Code.
- <u>Section 2.</u> If any article, section, paragraph, sentence, clause, or phrase of this ordinance is held to be unconstitutional or invalid for any reason, such decision shall not affect the validity or constitutionality of the remaining portions of this ordinance. The Board of Trustees hereby declares that it would have passed this ordinance and each part or parts hereof irrespective of the fact that any one part or parts be declared unconstitutional or invalid.
- Section 3. The repeal or modification of any provision of any prior ordinance by this ordinance shall not release, extinguish, alter, modify, or change in whole or in part any penalty, forfeiture or liability, either civil or criminal, which shall have been incurred under such provision, and each provision shall be treated and held as still remaining in force for the purpose of sustaining any

judgment, decree, or order which can or may be rendered, entered, or made in such actions, suits, proceedings, or prosecutions.

**Section 4.** All other ordinances or portions thereof inconsistent or conflicting with this ordinance or any portion hereof are hereby repealed to the extent of such inconsistency or conflict.

# INTRODUCED, READ, ADOPTED, APPROVED, AND ORDERED PUBLISHED BY TITLE ONLY THIS $12^{\rm th}$ DAY OF APRIL 2022.

|                            | TOWN OF BENNETT, COLORADO |
|----------------------------|---------------------------|
| ATTEST:                    | Royce D. Pindell, Mayor   |
| Christina Hart. Town Clerk |                           |

### **Suggested Motion**

I move to approve Ordinance No. 737-22 – An ordinance amending Chapter 10 of the Bennett Municipal Code concerning dynamic braking devices.



SS

**OATH OF OFFICE** 

| COUNTY OF ARAPAHOE )                                 |  |
|--|--|
| I, <u>Kevin A. Barden</u> , do solemnly              | swear or affirm, that I will support the Constitution and                  |
| the laws of the United States and of the State       | of Colorado, and the Ordinances of the Town of Bennett,                    |
| and that I will faithfully perform all of the duties | pertaining to the Office of Trustee of the Town of Bennett,                |
| Colorado to the best of my ability.                  |  |
|  |  |
|  |  |
|  | - <u></u>  |
|  | Kevin A. Barden<br>Trustee   |
|  |  |
|  | Subscribed and sworn to before me this 12 <sup>th</sup> day of April 2022. |
| Oath Administered by:                                |  |
|  |  |
|  | Christina Hart   |
|  | Town Clerk   |
|  |  |

STATE OF COLORADO COUNTY OF ADAMS



### IN AND FOR THE TOWN OF BENNETT AND THE STATE OF COLORADO

| I, Steve Dambroski, do solemnly swear or affirm, that I will support the Constitution the laws of the United States and of the State of Colorado, and the Ordinances of the Town of Beand that I will faithfully perform all of the duties pertaining to the Office of Trustee of the Town of Beach Colorado to the best of my ability.  Steve Dambroski Trustee |        |
|--|--------|
| and that I will faithfully perform all of the duties pertaining to the Office of Trustee of the Town of Be Colorado to the best of my ability.   | n and  |
| Colorado to the best of my ability.  Steve Dambroski   | nnett, |
| Steve Dambroski  | nnett, |
|  |        |
|  |        |
|  |        |
|  |        |
| Trustee  |        |
| Subscribed and sworn to before me this 12 <sup>th</sup> day of April 2022.   |        |
| Oath Administered by:  |        |
|  |        |
| Christina Hart   |        |
| Town Clerk   |        |

STATE OF COLORADO



SS

**OATH OF OFFICE** 

| COUNTY OF ARAPAHOE )                                   |  |
|--|--|
| I, <u>Darvin M. Harrell</u> , do solemnly              | swear or affirm, that I will support the Constitution and                  |
| the laws of the United States and of the State o       | f Colorado, and the Ordinances of the Town of Bennett,                     |
| and that I will faithfully perform all of the duties p | ertaining to the Office of Trustee of the Town of Bennett,                 |
| Colorado to the best of my ability.                    |  |
|  |  |
|  |  |
|  | Darvin M. Harrell<br>Trustee   |
|  | Subscribed and sworn to before me this 12 <sup>th</sup> day of April 2022. |
| Oath Administered by:                                  |  |
|  |  |
|  | Christina Hart   |
|  | Town Clerk   |
|  |  |

STATE OF COLORADO COUNTY OF ADAMS

### **Suggested Motion**

| I move to appoint Trustee | $_{	extstyle }$ as Mayor Pro Tem for the Town of Bennett Board of |
|---------------------------|---|
| Trustees.                 |   |

### **STAFF REPORT**



TO: Mayor and Town of Bennett Board of Trustees

FROM: Christina Hart, Town Clerk

DATE: April 12, 2022

SUBJECT: 2022 Appointment of Town Officials

#### Background

Chapter 2, Article V of the Bennett Municipal Code (BMC) authorizes the Board of Trustees, after each biennial election and in accordance with state statute, to appoint Town officials for the Town of Bennett, including Town Clerk, Town Treasurer, Town Attorney and Municipal Court Judge. The current officials and their positions are as follows:

Town Clerk Christina Hart
Town Treasurer Danette Ruvalcaba

Town Attorney Kelly P.C
Presiding Municipal Court Judge Shawn Day

Sec. 2-5-509(c) of the BMC also authorizes the Board of Trustees to appoint a Town Clerk Pro Tem, who in the absence of the Town Clerk shall perform the duties of the Town Clerk.

Town Clerk Pro Tem Taeler Houlberg
Second Clerk Pro Tem Rachel Summers

#### Staff Recommendation

Staff recommends the Board of Trustees appoint the following individuals or entities to the positions listed below:

Town Clerk
 Town Clerk Pro Tem
 Second Clerk Pro Tem
 Town Treasurer
 Christina Hart
 Taeler Houlberg
 Rachel Summers
 Danette Ruvalcaba

Town AttorneyPresiding Muinicipal Court JudgeKelly P.C.Shawn Day

#### **Attachments**

- 1. Oath of Office Town Clerk, Christina Hart
- 2. Oath of Office Town Clerk Pro Tem, Taeler Houlberg
- 3. Oath of Office Second Clerk Pro Tem, Rachel Summers
- 4. Oath of Office Town Treasurer, Danette Ruvalcaba
- 5. Oath of Office Kelly P.C., Town Attorney
- 6. Oath of Office Presiding Municipal Court Judge, Shawn Day



SS

**OATH OF OFFICE** 

| COUNTY OF ARAPAHOE )                             |  |
|--|--|
| I, <u>Christina Hart</u> do solemnly s           | swear or affirm that I will support the Constitution and the               |
| aws of the United States and of the State of     | of Colorado, and the Ordinances of the Town of Bennett,                    |
| and that I will faithfully perform all of the du | ties pertaining to the office of Town Clerk of the Town of                 |
| Bennett, Colorado to the best of my ability.     |  |
|  |  |
|  |  |
|  | Christina Hart<br>Town Clerk   |
|  | Subscribed and sworn to before me this 12 <sup>th</sup> Day of April 2022. |
| Oath Administered By:                            |  |
|  | Royce D. Pindell<br>Mayor  |

STATE OF COLORADO COUNTY OF ADAMS



SS

**OATH OF OFFICE** 

| COUNTY OF ARAPAHOE                              | )  |
|---|--|
| I, <u>Taeler Houlberg,</u> do solem             | nly swear or affirm that I will support the Constitution and the |
| laws of the United States and of the State      | e of Colorado, and the Ordinances of the Town of Bennett,        |
| and that I will faithfully perform all of the o | duties pertaining to the office of Town Clerk Pro Tem of the     |
| Town of Bennett, Colorado to the best of n      | ny ability.  |
|   |  |
|   |  |
|   | Taeler Houlberg  |
|   | Town Clerk Pro Tem   |
|   | Subscribed and sworn to before me this                           |
|   | 12 <sup>th</sup> Day of April 2022.                              |
|   |  |
| Oath Administered By:                           |  |
|   |  |
|   | Christina Hart   |
|   | Town Clerk   |

)

STATE OF COLORADO COUNTY OF ADAMS



SS

**OATH OF OFFICE** 

| COUNTY OF ARAPAHOE )                                 |  |
|--|--|
| I, <u>Rachel Summers,</u> do solemni                 | y swear or affirm that I will support the Constitution and |
| the laws of the United States and of the State       | of Colorado, and the Ordinances of the Town of Bennett,    |
| and that I will faithfully perform all of the duties | s pertaining to the office as Second Town Clerk Pro Tem    |
| of the Town of Bennett, Colorado to the best of      | of my ability.   |
|  |  |
|  |  |
|  | Rachel Summers   |
|  | Second Town Clerk Pro Tem                                  |
|  | Subscribed and sworn to before me this                     |
|  | 12 <sup>th</sup> Day of April 2022.                        |
|  |  |
| Oath Administered By:                                |  |
|  |  |
|  | Christina Hart   |
|  | Town Clerk   |

STATE OF COLORADO

**COUNTY OF ADAMS** 



SS

**OATH OF OFFICE** 

| COUNTY OF ARAPAHOE )                              |  |
|---|--|
| I, <u>Danette Ruvalcaba,</u> do solemr            | nly swear or affirm that I will support the Constitution and               |
| the laws of the United States and of the State    | of Colorado, and the Ordinances of the Town of Bennett,                    |
| and that I will faithfully perform all of the dut | ies pertaining to the office of Treasurer of the Town of                   |
| Bennett, Colorado to the best of my ability.      |  |
|   |  |
|   |  |
|   | Danette Ruvalcaba  |
|   | Town Treasurer   |
|   | Subscribed and sworn to before me this 12 <sup>th</sup> Day of April 2022. |
| Oath Administered By:                             |  |
|   | Christina Hart   |
|   | Town Clerk   |

)

STATE OF COLORADO

**COUNTY OF ADAMS** 



SS

**OATH OF OFFICE** 

| COUNTY OF ARAPAHOE )                           |   |
|--|---|
| Constitution and the laws of the United States | C., do solemnly swear or affirm that I will support the s and of the State of Colorado, and the Ordinances of the rm all of the duties pertaining to the office of Town Attorney of my ability. |
|  | Molindo Cullov Kolly D.C.   |
|  | Melinda Culley, Kelly P.C.<br>Town Attorney   |
|  | Subscribed and sworn to before me this 12 <sup>th</sup> Day of April 2022.  |
| Oath Administered By:                          |   |
|  | Christina Hart Town Clerk   |

)

STATE OF COLORADO COUNTY OF ADAMS



SS

**OATH OF OFFICE** 

STATE OF COLORADO COUNTY OF ADAMS

| COUNTY OF ARAPAHOE )                                |  |
|---|--|
| I, <u>Shawn Day,</u> do solemnly swea               | ar or affirm that I will support the Constitution and the laws             |
| of the United States and of the State of Colora     | ado, and the Ordinances of the Town of Bennett, and that                   |
| I will faithfully perform all of the duties pertain | ing to the office of Presiding Judge for Bennett Municipal                 |
| Court of the Town of Bennett, Colorado to the       | e best of my ability.  |
|   |  |
|   |  |
|   | Shawn Day  |
|   | Presiding Municipal Judge Bennett Municipal Court                          |
|   | Subscribed and sworn to before me this 12 <sup>th</sup> Day of April 2022. |
|   |  |
| Oath Administered By:                               |  |
|   |  |
|   | Christina Hart<br>Town Clerk   |
|   | I OWIT OIGIN   |

#### **Suggested Motion**

I move to appoint Christina Hart as the Town Clerk for the Town of Bennett.

I move to appoint Taeler Houlberg as the Town Clerk Pro Tem for the Town of Bennett.

I move to appoint Rachel Summers as the Second Clerk Pro Tem for the Town of Bennett.

I move to appoint Danette Ruvalcaba as the Town Treasurer for the Town of Bennett.

I move to appoint Kelly, P.C. as the Town Attorney(s) for the Town of Bennett.

I move to appoint Shawn Day as the Presiding Municipal Court Judge for the Town of Bennett.

### STAFF REPORT



TO: Mayor and Town of Bennett Board of Trustees

FROM: Christina Hart, Town Clerk

DATE: April 12, 2022

SUBJECT: Town of Bennett Planning and Zoning Appointments

#### Background

The terms of two Commissioners expired on January 1, 2021. Commissioner(s) Martin Metsker and Rachel Connor have both indicated their willingness to accept the appointment and continue to serve the community. Should the Trustees approve the reappointments, the Planning and Zoning Commission will continue to have a full board of seven members.

#### Staff Recommendation

Staff recommends the Board of Trustees reappoint Rachel Connor and Martin Metsker to the Town of Bennett Planning and Zoning Commission with a term ending on December 31, 2025.

#### Attachments

- 1. Rachel Connor Application
- 2. Martin Metsker Application
- 3. Oath of Office Rachel Connor
- 4. Oath of Office Martin Metsker

#### Town of Bennett Planning Commission Appointment Application

Thank you for your interest in serving on the Town of Bennett Planning Commission.

In the Town of Bennett, the Commission consists of seven (7) members. The Planning Commission serves as an advisory body to the Board of Trustees. The commission reviews annexations, rezonings, subdivisions, planned unit developments and a long-range comprehensive plan. Roles and responsibilities are outlined in Chapter 16 of the Bennett Municipal Code. (https://library.municode.com/co/bennett/codes/municipal\_code)

The Commission generally meets on the 3rd Monday of each month at 6:00pm. Planning Commissioners are paid \$150.00 per month. You must be a resident of the Town of Bennett to apply.

A background check will be required for each candidate and will be sent via email after an application is received.

| F 11*                     |      |      |
|---------------------------|------|------|
| Email *                   |      |      |
| rachel.glass@hotmail.com  |      |      |
|                           |      | <br> |
|                           |      |      |
|                           |      |      |
| Name *                    |      |      |
| First and Last Name       |      |      |
| Rachel Connor             |      |      |
|                           | <br> |      |
|                           |      |      |
|                           |      |      |
| Email *                   |      |      |
| rachel.glass@hotmail.com  |      |      |
| Tacher.grass@notifian.com | <br> | <br> |
|                           |      |      |
|                           |      |      |
| Phone number *            |      |      |
|                           |      |      |
| 303-601-0065              | <br> | <br> |
|                           |      |      |
|                           |      |      |
|                           |      |      |

Street Address (No P.O. Boxes Please) \*

1155 Viewridge Rd, Bennett, CO 80102

| Occupation *   |
|--|
| Attorney/Recruiter   |
|  |
| Name of Company or Firm (If none write N/A) *                                    |
| Friedman Williams Group  |
|  |
| Drier Werk Evperience  |
| Prior Work Experience  |
| Aschenberg Law; Friedman Williams Group; Modern Family Law; Brown Dunning Walker |
|  |
| Education *  |
| High School Diploma or GED   |
| O Some college   |
| Bachelors Degree   |
| Post Secondary Degree  |
| Other:   |
|  |
|  |
| How many years have you lived in Bennett? *                                      |
| 10   |
|  |
| Have you previously served on any Town of Bennett board or commission? *         |
| Yes  |
| ○ No   |
| Pag  |

| If so, what board or commission and what years did you serve?   |            |                  |            |           |  |
|---|------------|------------------|------------|-----------|--|
| Planning and Zoning   |            |                  |            |           |  |
| Referred by:  |            |                  |            |           |  |
| Please list any previous train appointed to the Planning Co   | ommission. | *                | ce that yo | u believe | e would be helpful to you if                                   |
| The Town of Bennett uses a<br>member (i.e., zoom, Google<br>your level of comfort with th   | and Micros | oft suites inclu | ding gma   |           | needed as a commission<br>cel, docusign, etc.) Please indicate |
|   | 1          | 2 3              | 4          | 5         |  |
| Little Comfort and Skills   | 0          | 0 0              | •          | 0         | Highly Comfortable and Skilled                                 |
| Are you aware of the time commitment for the Planning Commission, and do you have the personal time to devote to this commitment? Do you have any conflicts with meetings falling generally on the 3rd Monday of the month? *  Yes and no conflicts |            |                  |            |           |  |
| Why are you interested in serving on the Planning Commission? *  Desire to serve the community and directly affect development within the community   |            |                  |            |           |  |

What do you believe are the major concerns facing the Planning Commission today? \*

Effective, efficient, and properly planned growth within the community

Why are you the most qualified person for the office? \*

Incumbent; attorney with background in real estate development and understanding of land use and statute

What is your perspective on the Town's Comprehensive Plan? \*

It is effective and the growth within the community has been well planned

Are you aware of the rate of growth for Bennett? What is your opinion about growth in Bennett? How would you rate Bennett's success in managing growth? \*

Growth in Bennett is exciting and is being well-planned. Traffic is of some concern.

The Town's development regulations and review process include some architectural design review for commercial, industrial, and residential developments. What do you believe the Town's role should be in this process? \*

The town should maintain the aesthetic of the surrounding areas and close review of the design documents; however adhere to the statute and codes

Please tell us anything else you'd like to share.

I am honored to serve the Bennett community and would be happy to continue with my service.

This form was created inside of Town of Bennett.

Google Forms

#### Town of Bennett Planning Commission Appointment Application

Thank you for your interest in serving on the Town of Bennett Planning Commission.

In the Town of Bennett, the Commission consists of seven (7) members. The Planning Commission serves as an advisory body to the Board of Trustees. The commission reviews annexations, rezonings, subdivisions, planned unit developments and a long-range comprehensive plan. Roles and responsibilities are outlined in Chapter 16 of the Bennett Municipal Code. (https://library.municode.com/co/bennett/codes/municipal\_code)

The Commission generally meets on the 3rd Monday of each month at 6:00pm. Planning Commissioners are paid \$150.00 per month. You must be a resident of the Town of Bennett to apply.

A background check will be required for each candidate and will be sent via email after an application is received.

| Email *                        |      |      |
|--------------------------------|------|------|
| Email                          |      |      |
| mmetsker@bennett.co.us         |      |      |
|                                |      |      |
|                                |      |      |
|                                |      |      |
| Name *                         |      |      |
| First and Last Name            |      |      |
| Martin Metsker                 |      |      |
|                                |      |      |
|                                |      |      |
|                                |      |      |
| Email *                        |      |      |
| mmetsker@bennett.co.us         |      |      |
| Time toker (aberine tr. 50. do | <br> | <br> |
|                                |      |      |
|                                |      |      |
| Phone number *                 |      |      |
|                                |      |      |
| 720-854-9456                   | <br> | <br> |
|                                |      |      |
|                                |      |      |
|                                |      |      |

Street Address (No P.O. Boxes Please) \*

743 Centennial Way Page 41

| Occupation *   |
|--|
| Civil Engineer   |
|  |
| Name of Company or Firm (If none write N/A) *                            |
| Terracina Design   |
|  |
| Prior Work Experience  |
| Land Surveyor  |
|  |
|  |
| Education *  |
| High School Diploma or GED   |
| O Some college   |
| Bachelors Degree   |
| O Post Secondary Degree  |
| Other:   |
|  |
|  |
| How many years have you lived in Bennett? *                              |
| 19   |
|  |
| Have you previously served on any Town of Bennett board or commission? * |
| Yes  |
| ○ No   |
| Pa   |

| If so, what board or commission and what years did you serve? |   |            |             |            |            |   |
|---|---|------------|-------------|------------|------------|---|
| Town Board and Planning Comm                                  | ission  |            |             |            |            |   |
|   |   |            |             |            |            |   |
| Referred by:  |   |            |             |            |            |   |
| My Good Friend Grider.  |   |            |             |            |            |   |
|   |   |            |             |            |            |   |
| Please list any previous traini                               | ng, expe  | rtise or e | experienc   | ce that yo | ou believe | e would be helpful to you if                                      |
| appointed to the Planning Co                                  |   |            |             |            |            |   |
| I have been a consulting enginee                              | r in land d   | evelopme   | ent for ove | r 20 years |            |   |
|   |   |            |             |            |            |   |
| The Town of Bennett uses as                                   | •   |            |             |            |            |   |
| your level of comfort with the                                |   |            |             |            | and ex     | cel, docusign, etc.) Please indicate                              |
|   | 1   | 2          | 3           | 4          | 5          |   |
| Little Comfort and Skills                                     | $\circ$   | $\circ$    | $\circ$     | $\circ$    | •          | Highly Comfortable and Skilled                                    |
|   |   |            |             |            |            | <b>3</b> ,  |
|   |   |            |             | _          |            |   |
| Are you aware of the time co to devote to this commitmer      |   |            |             | •          |            | nd do you have the personal time<br>sfalling generally on the 3rd |
| Monday of the month? *  |   |            |             |            |            |   |
| Understand the commitment and                                 | no confli   | cts        |             |            |            |   |
|   |   |            |             |            |            |   |
| Why are you interested in se                                  | Why are you interested in serving on the Planning Commission? *               |            |             |            |            |   |
| Continue to serve the community                               | Continue to serve the community in a manner I feel I am qualified to do that. |            |             |            |            |   |

What do you believe are the major concerns facing the Planning Commission today? \*

Hybrid meetings and town growth.

Why are you the most qualified person for the office? \*

My career experience in development and my previous experience on Planning Commission, and Town Board.

What is your perspective on the Town's Comprehensive Plan? \*

Great document, it was done in a manner that is different than other Comp Plans in the area. I believe it does a great job of establishing guidelines for growth without being overly difficult to interpret and follow.

Are you aware of the rate of growth for Bennett? What is your opinion about growth in Bennett? How would you rate Bennett's success in managing growth? \*

So far the town is doing great. Growth is inevitable so embrace it and benefit from it.

The Town's development regulations and review process include some architectural design review for commercial, industrial, and residential developments. What do you believe the Town's role should be in this process? \*

The town needs to maintain its role in this review process. The highly successful communities I have been involved in have had significant input from both the developer and the municipality for architectural design review.

Please tell us anything else you'd like to share.

The Town staff is doing a great job, and I look forward to continuing working with them.

This form was created inside of Town of Bennett.

Google Forms



## IN AND FOR THE TOWN OF BENNETT AND THE STATE OF COLORADO

| STATE OF COLORADO ) COUNTY OF ADAMS )           | ss <u>OATH OF OFFICE</u>                                    |
|---|---|
| COUNTY OF ARAPAHOE )                            |   |
| I, <u>Rachel Connor</u> , do solemnly s         | wear or affirm that I will support the Constitution and the |
| laws of the United States and of the State of   | Colorado, and the Ordinances of the Town of Bennett,        |
| and that I will faithfully perform all of the d | uties pertaining to the office of Planning and Zoning       |
| Commissioner of the Town of Bennett, Colora     | do to the best of my ability.                               |
|   |   |
|   |   |
|   | Rachel Connor   |
|   | Planning and Zoning Commission                              |
|   |   |
|   | Subscribed and sworn to before me this                      |
|   | 12th day of April, 2022.                                    |
| Oath Administered By:                           |   |
|   |   |
|   | Christina Hart,   |
|   | Town Clerk  |



### IN AND FOR THE TOWN OF BENNETT AND THE STATE OF COLORADO

| COUNTY OF ADAMS  COUNTY OF ARAPAHOE          | ) SS <u>OATH OF OFFICE</u><br>)                                  |
|--|--|
| I, <u>Martin Metsker</u> , do solemr         | nly swear or affirm that I will support the Constitution and the |
| laws of the United States and of the Stat    | e of Colorado, and the Ordinances of the Town of Bennett,        |
| and that I will faithfully perform all of tl | he duties pertaining to the office of Planning and Zoning        |
| Commissioner of the Town of Bennett, Co      | plorado to the best of my ability.                               |
|  |  |
|  |  |
|  | Martin Metsker   |
|  | Planning and Zoning Commission                                   |
|  |  |
|  | Subscribed and sworn to before me this                           |
|  | 12th day of April, 2022.   |
| Oath Administered By:                        |  |
|  |  |
|  | Christina Hart,  |
|  | Town Clerk   |

STATE OF COLORADO

#### **Suggested Motion**

I move to appoint Rachel Connor to the Town of Bennett Planning and Zoning Commission with a term ending on December 31, 2025.

I move to appoint Martin Metsker to the Town of Bennett Planning and Zoning Commission with a term ending on December 31, 2025.

### QUASI-JUDICIAL PUBLIC HEARING SCRIPT (Board of Trustees)

MAYOR:

I will now open the public hearing on the following application: An application for Case No. 21.24 Bennett Crossing Filing No. 5 Final Plat.

The purpose of the hearing is to provide a public forum for all interested parties who wish to comment on an application before the Trustees. If you wish to speak please write your name and address on the sign-up sheet or in the chat box and you will be called on.

The Procedure for the public hearing will be as follows:

FIRST, there will be a presentation by the Town staff.

**NEXT**, we will have a presentation by the applicant.

After these two presentations we will allow people who signed up to speak for up to 3 minutes each. Please DO NOT REPEAT points made by others. It is fine to say, "I agree with the previous speaker's comments". Please direct your comments to the Trustees, not the applicant or Town staff.

After receiving public comments, we will allow the applicant an opportunity to respond.

**NEXT**, the Trustees may ask questions of anyone who testified.

I will then close the public hearing and no further testimony or other evidence will be received. The Trustees will discuss the matter and may take some kind of action.

Public hearings are recorded for the public record. All testimony must be presented, after you give your full name and address.

MAYOR:

Do we have proper notification?

[Town Clerk to confirm on record notice has been provided]

Do any Trustees have any disclosures?

[Trustees to disclose conflicts of interests, ex parte contacts, etc]

Town staff, please introduce the applicant and provide your staff report.

[Staff presentation]

Will the applicant or the applicant's representative present the application?

[Applicant presentation]

Do any of the Trustees have questions of the applicant or Town staff?

[Question and Answer]

MAYOR:

I will now open the public comment portion of the public hearing. For those wishing to speak, please clearly state your name and address for the record.

Page 48

Has anyone signed up to speak at this public hearing?

#### [If more than one person has signed in, call them in order.]

Is there any interested party in the audience that has not signed up but who wishes to speak regarding the application?

[Additional public comment]

If there is no more public comment, I will now close the public comment portion of the public hearing.

**MAYOR:** Does the applicant wish to respond to any of the comments?

[Opportunity for applicant to provide any rebuttal evidence]

MAYOR: Before we turn to Trustee questions and deliberation, I want to state that the documents included within the record for this public hearing include all application materials submitted by the applicant; all materials

included in the Board of Trustee packets; any PowerPoint or other presentations given tonight; all written referral and public comments received regarding the application; the public comment sign-up sheet; the public posting log and photographs of the notice, and the Town's subdivision and zoning ordinances and

other applicable regulations. Does anyone have any objection to inclusion of these items in the record?

MAYOR: I will now close the public hearing and the Trustees will deliberate on the evidence presented. During deliberations, Trustees may ask questions of Town staff, but no further public comment or other testimony or

evidence will be received.

Who would like to begin?

Who is next?

Any other questions or comments

[If anyone believes the applicable criteria have not been met, then please explain why so we have

those reasons for the record.]

**MAYOR:** We have a draft Resolution in front of us and I would entertain a motion.

#### STAFF REPORT



TO: Mayor and Town of Bennett Board of Trustees

FROM: Steve Hebert, Planning and Economic Development Manager

DATE: April 12, 2022

SUBJECT: Case No. 21.24 – Bennett Crossing Filing No. 5 Final Plat

**Applicant/Representative(s):** Lennar, Joseph Huey/CWC Consulting, Bryan Clerico **Location:** Southeast Corner of South 1<sup>st</sup> Street/CO Highway 79 and Edward Avenue

Purpose: Final Plat for 243 Single-family Detached Lots and Two Tracts for Future Development

#### Background

The applicant has submitted a final plat application to subdivide 83.9 acres for 243 single-family detached lots; various tracts for open space, landscaping, transportation and storm drainage; and two tracts for future development. The property is located at the southeast corner of South 1st Street/CO Highway 79 and Edward Avenue and immediately south of the LGI's Bennett Crossing Filing 2 residential neighborhood.

The property is zoned PD as part of the Bennett Crossing Outline Development Plan (ODP) and lies within Planning Areas 4, 5 and 6 of the ODP. The subarea zones include High Density Residential (HDR), Medium Density Residential (MDR) and Mixed Use (MU) in the Bennett Crossing Outline Development Plan (ODP). (See the zoning map on Page 3.)

The map below shows the property in relation to the surrounding area.





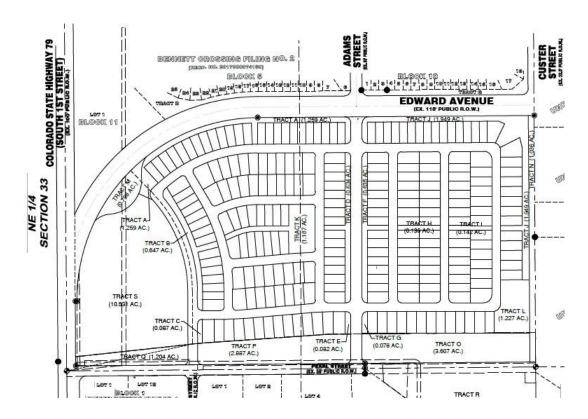


Looking South from Edward Ave.

Looking Northeast from Pearl and S. 1st St.

#### Proposed Lot Layout

The map below shows the proposed lot layout and street configuration.



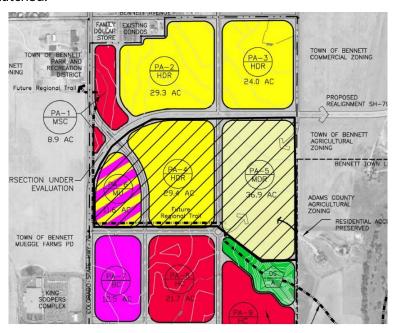
Access to the subdivision will be via existing Edward Avenue on the north side and an improved Pearl Street on the south side of the subdivision. An extension of Adams Street will eventually connect

Edward Avenue to Pearl Street. Tract K, with 1.187 acres near the center of the subdivision, and Tract L, with 1.227 acres at the southeast corner of the subdivision, are set aside for future parks. Tracts R and S are reserved for future development. Several other tracts are reserved for stormwater drainage, open space, landscaped areas, transportation and utilities. See the final plat document in the packet for more details on lot, tract, right-of-way and easement locations and dimensions.

| LAND USE TABLE   |                    |  |  |  |
|--|--------------------|--|--|--|
| GROSS ACREAGE  | 83.904 ACRES       |  |  |  |
| NET ACREAGE (DEDICATED R.O.W. EXCLUDED)  | 68.973 ACRES       |  |  |  |
| GROSS DENSITY (DWELLING UNITS/ACREAGE OF ALL LOTS AND DEVELOPED TRACTS)                            | 4.680 D.U./ACRE    |  |  |  |
| NET DENSITY (DWELLING UNITS/RESIDENTIAL LOT AREA)  | 6.869 D.U./ACRE    |  |  |  |
| NUMBER OF LOTS (RESIDENTIAL)   | 243                |  |  |  |
| NUMBER OF TRACTS (FUTURE USE)  | 4                  |  |  |  |
| NUMBER OF TRACTS (DEVELOPED)   | 15                 |  |  |  |
| NUMBER OF TRACTS   | 19                 |  |  |  |
| SMALLEST LOT (RESIDENTIAL)   | 5,400 SQUARE FEET  |  |  |  |
| LARGEST LOT (RESIDENTIAL)  | 10,907 SQUARE FEET |  |  |  |
| AVERAGE LOT SIZE (RESIDENTIAL)   | 6,342 SQUARE FEET  |  |  |  |
| NUMBER OF BUILDABLE LOTS   | 243                |  |  |  |
| NET ACREAGE FOR FUTURE USE   | 17.848 ACRES       |  |  |  |
| NET ACREAGE FOR PUBLIC STREETS   | 14.931 ACRES       |  |  |  |
| NET ACREAGE DEVELOPED FOR PRIVATE USES (PARKS, OPEN SPACES AND RECREATION CENTERS, PRIVATE DRIVES) | 8.049 ACRES        |  |  |  |
| NET ACREAGE DEVELOPED FOR PUBLIC USES (STORMWATER DRAINAGE - TOWN OF BENNETT)                      | 7.698 ACRES        |  |  |  |

#### Zoning and Land Use Regulations

Below is a subsection of the Bennett Crossing Outline Development Plan. The Bennett Crossing Filing No. 5 area is crosshatched.



The zoning for Filing 5 consists of High Density Residential (HDR) in bright yellow, Medium Density Residential (MDR) in light yellow, Mixed Use (MU) in purple and yellow. The 243 single-family lots of

Filing 5 are in the HDR and MDR subareas. Tract R is in the southern end of the MDR zone and Tract S is the MU zone. The surrounding zoning and land use are summarized in the table below.

| Direction | Zone District                    | Current Land Use                     |
|-----------|----------------------------------|--------------------------------------|
| North     | High Density Residential         | LGI's Bennett Crossing neighborhood  |
| East      | Agricultural                     | Single-family residential and vacant |
| South     | PD – Bennett Crossing Commercial | Vacant                               |
| West      | PD – Muegge Farms Commercial     | Vacant                               |

The table below summarizes the minimum and maximum standards in High Density Residential and Medium Density Residential zone districts and how the proposed subdivision plat compares.

| Standard                    | HDR Zone | MDR Zone | Proposed       |
|-----------------------------|----------|----------|----------------|
| Min. Lot Area/Dwelling Unit | 2,400    | 3,500    | 5,400 Sq. Ft.  |
| Min. Lot Width              | 40 ft.   | 25 ft.   | 45 ft.         |
| Smallest Lot Size           |          |          | 5,400 Sq. Ft.  |
| Largest Lot Size            |          |          | 10,907 Sq. Ft. |
| Average Lot Size            |          |          | 6,342 Sq. Ft.  |

The standards for the Mixed Use (MU) subarea zone district will be applied when Tract S is developed.

#### **Public Services and Utilities**

#### Water

Water service will be provided by the Town of Bennett. See the Town Engineer's memorandum.

#### Sanitary Sewer

Sanitary sewer service will be provided by the Town of Bennett. See the Town Engineer's memorandum.

#### Stormwater Management

Stormwater will be accommodated by the Bennett Crossing regional stormwater system. See the Town Engineer's memorandum.

#### **Access and Traffic**

Access will be via Edwards Avenue on the north and Pearl Street on the south, with Adams Street being extended to connect those two streets. There will also be access along the west side of the single-neighborhood with the extension of Cedar Street from the south. Edward Avenue will eventually be built as a four-lane road as part of the CO Highway 79 bypass. Tract M reserves right-of-way for a future roundabout as part of the bypass project. Tract N will be reserved on the east side of the subdivision for the future extension of Custer Street.

#### Fire and Rescue

Bennett-Watkins Fire Rescue (BWFR) will provide service. The applicant should meet directly with BWFR directly to review specific site and building plans to assure conformance with International Fire Code standards. See the fire district's response.

#### Gas, Electricity and Telecommunications

Natural gas will be provided by Colorado Natural Gas, electricity by CORE Electric Cooperative and telecommunications by Eastern Slope Technologies (ESRTA) or Comcast.

#### **Public Land Dedication Requirements**

#### Park Land and Public Facilities

The required land dedication for parks and public facilities of ten percent (8.39 acres), per Sec. 16-5-510 of the municipal code, will be achieved for this first phase of 243 lots through the dedication of the park tracts, the various open space and landscaped area tracts and transportation tracts. If Tracts R and S are further subdivided in the future, additional public land may be dedicated.

#### Bennett School District 29J

The Bennett School District 29J has requested cash-in-lieu of land dedication, which will be payable pursuant to the Town of Bennett/School District IGA and the municipal code in effect at the time of building permit issuance or subdivision agreement.

#### Staff Analysis and Findings

Per Section 16-4-380 of the Bennett Municipal Code, the Town shall use the following criteria to evaluate the applicant's final plat application:

A. The final plat incorporates recommended changes, modifications and conditions attached to the sketch plan unless otherwise approved by the Planning Commission.

Staff Finding: The final plat is consistent with the previous sketch plan reviewed by the Planning and Zoning Commission in February 2021.

- B. All applicable technical standards in accordance with this Chapter and adopted Town documents have been met.
  - 1. To establish appropriate standards for subdivision design that will:
    - a. Encourage the development of sound, economical and stable neighborhoods and healthy living environments, in conformance with the goals and policies of the Comprehensive Plan.
    - b. Provide lots of adequate size, configuration and design for the purpose for which they are intended to be used.
    - c. Promote superior design and design flexibility.
    - d. Preserve the significant natural features and environmental quality of the Town.
    - e. Guide the physical development of the Town in ways that complement the Town's character and culture.
    - f. Promote a cohesive sense of community among new and current residents, precluding neighborhood design or restrictions that in any way isolate any neighborhood from the rest of the community.
    - g. Provide complete and accurate public land records.

Staff Finding: The proposed final plat will accommodate new development that meets the standards of good subdivision design. Tracts K and L are reserved for future parks. There are several tracts that will accommodate future sidewalks and trail connections. Various other tracts will accommodate open space, landscaping, stormwater and utilities.

2. To establish standards for utilities and other public services that will:

- a. Provide an efficient, adequate and economical supply of utilities and services to the land proposed for development without adverse effects to property that is currently served.
- b. Ensure that adequate stormwater drainage, sewage disposal, water supply and other utilities, services and improvements needed as a consequence of the subdivision of the land are provided.
- c. Provide for the reasonable extension of utilities and services to other lands that may be developed in the future.
- d. Provide the equitable distribution of the cost of new and expanded public services needed to support new land development.

Staff Finding: The proposed final plat, future subdivision agreement and construction documents will accommodate the extension of utilities and public services to serve the new residential neighborhood.

- 3. To ensure the provision of adequate and safe traffic circulation that will:
  - a. Minimize traffic hazards through appropriate street design, providing safe and convenient vehicular and pedestrian traffic circulation systems.
  - b. Provide adequate vehicular access to abutting properties.
  - c. Provide streets of adequate capacity and appropriate design and function.

Staff Finding: Staff finds the proposed subdivision will accommodate future vehicular and pedestrian access to the single-family residential lots as well as the remaining tracts.

- 4. To ensure adequate public facilities that will:
  - a. Provide for the recreational, cultural, educational and other public facility needs of the community.
  - b. Facilitate effective law enforcement and fire protection.

Staff Finding: The proposed final plat reserves two tracts for parks and provides a series of internal tracts for sidewalk and trails that accommodate pedestrian connections to the neighborhood and the surrounding community. The applicant will be required to pay cash-in-lieu of school land dedication, as well as the standard Town impact fees for public facilities

5. To contribute to the proper development of the community in accordance with the goals and policies of the Comprehensive Plan as it may be updated from time to time.

Staff Finding: The proposed plat is consistent with the principles in the 2021 Town of Bennett Comprehensive Plan related to:

- Mixed land uses
- Access to healthy living
- Access to open space, trails and parks
- Contiguous development
- A variety of transportation choices
- C. Compliance with Zoning Regulations

Staff Finding: All lots meet the standards in the Bennett Crossing Outline Development Plan, as noted above.

#### Referral Agency Review and Comments

The proposed Bennett Crossing Filing No. 5 Final Plat was sent to several referral agencies for comment, including:

- 1. Town Planning
- 2. Town Engineer
- 3. Town Traffic Engineer
- 4. Town Attorney
- 5. Bennett-Watkins Fire Rescue (BWFR)
- 6. CORE Electric Cooperative (IREA)
- 7. Colorado Natural Gas (CNG)
- 8. Colorado Department of Transportation (CDOT)
- 9. Bennett School District 29J

Each of the agencies had comments or recommendations that are either reflected on the final plat document or will be addressed at later stages of the review process such as the site plan or building permit. General cleanup of the document to include all agency comments will be completed before recording.

#### **Public Comment**

Notice of the March 21, 2022 Planning and Zoning Commission hearing and the April 12, 2022 Board of Trustees hearing was published in the Eastern Colorado News, posted on the subject property and sent to all property owners within 300 feet of the property. No comments, other than those from the referral agencies, have been received to date.

#### Planning and Zoning Commission Recommendation

The Planning and Zoning Commission reviewed Case No. 21.24 on March 21, 2022 and adopted Resolution No. 2022-08, recommending approval of the Bennett Crossing Filing No. 5 Final Plat.

#### Staff Recommendation

Staff finds the proposed final plat is in compliance with the Subdivision Regulations in Chapter 16, Article IV of the Bennett Municipal Code. Staff also finds the plat has been processed according to Section 16-4-360 and meets the approval criteria in 16-4-380. Based upon these findings and the Planning and Zoning Commission's recommendation, Staff recommends the Board of Trustees adopt Resolution No. 912-22, approving Case No. 21.24 – Bennett Crossing Filing No. 5 Final Plat, with the following conditions:

1. Before recording the plat, the applicant shall update plat notes related to tracts, easements and maintenance in a manner directed by the Town Engineer and make other minor modifications as directed by Town Staff, Engineer and Attorney.

#### Attachments

- 1. Staff PowerPoint Presentation (PDF)
- 2. Land Use Application
- 3. Letter of Intent/Narrative
- 4. Bennett Crossing Filing No. 5 Subdivision Final Plat
- 5. Bennett Crossing Outline Development Plan
- 6. Combined Staff and Referral Agency Comments
- 7. Bennett Crossing Filing No. 5 Traffic Study
- 8. Planning and Zoning Commission Resolution 2022-08
- 9. Resolution No. 912-22

# Case No. 21.24 Bennett Crossing Filing No. 5 Final Plat

**Town Board of Trustees** 

April 12, 2022

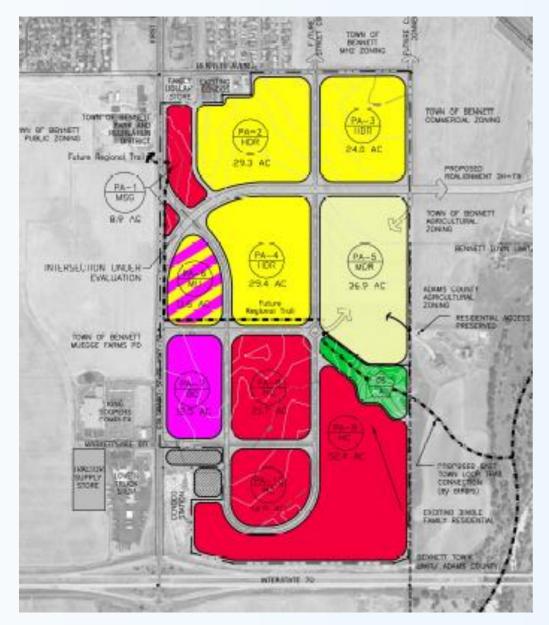
Steve Hebert, Planning & Economic Development Manager

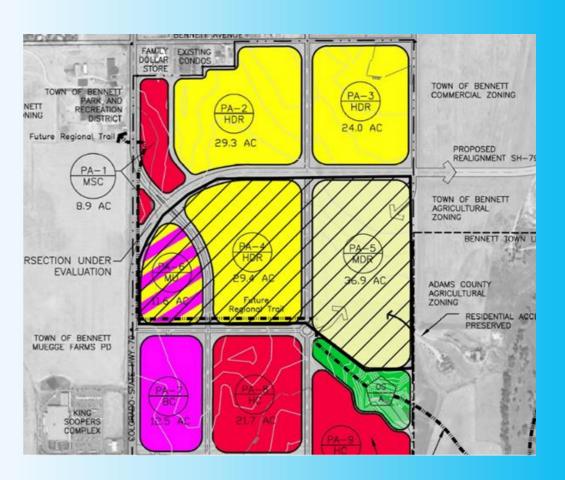
# Proposed Bennett Crossing Filing No. 5 Final Plat

- 83.9 acres in Bennett Crossing
- Southeast corner of S. 1st St./CO 79 and Edward Ave.
- Zoned Planned Development (PD) in Bennett Crossing Outline Development Plan (ODP)
- 3 different zone districts (High Density Residential, Medium Density Residential, Mixed Use)



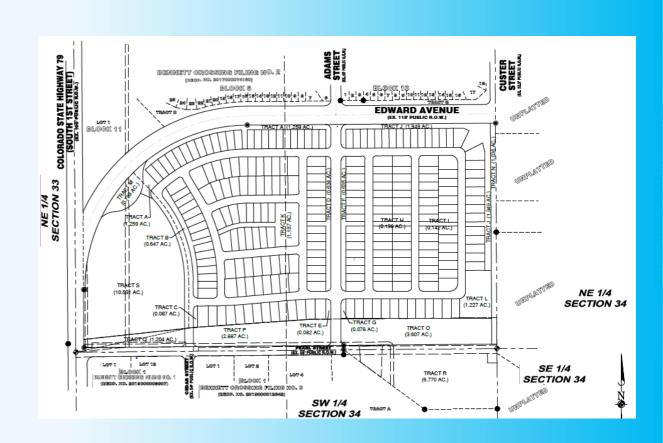
# Bennett Crossing Outline Development Plan

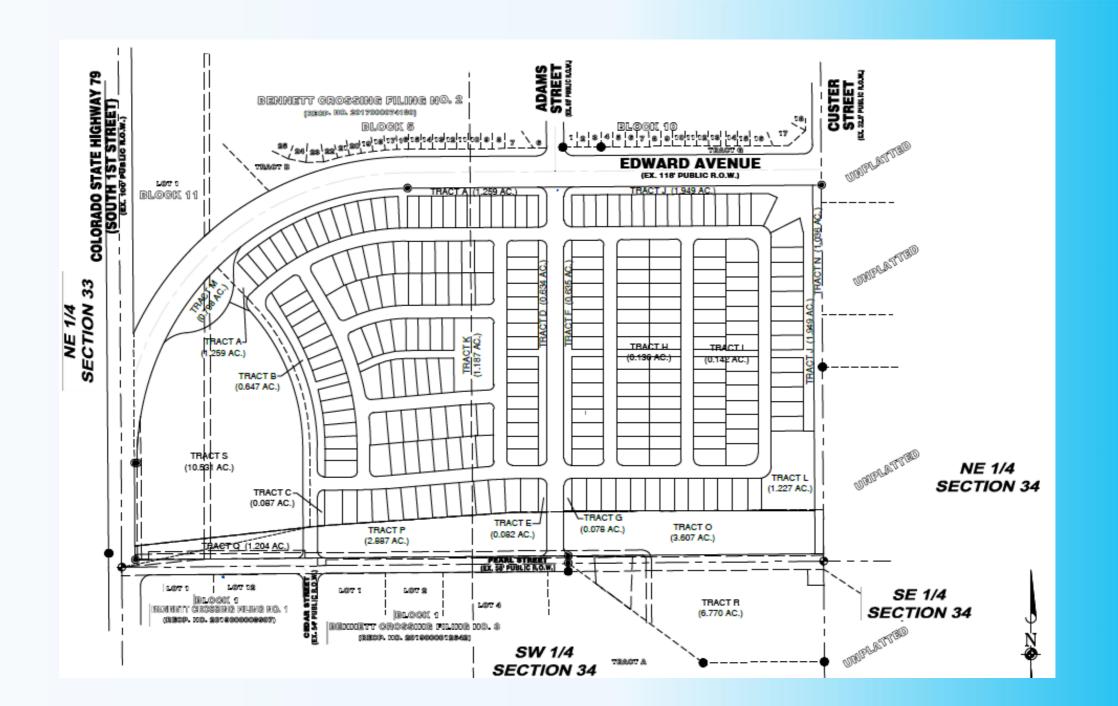




# Proposed Bennett Crossing Filing No. 5 Final Plat

- 243 single-family lots
- Two tracts (R & S) for future development
- Smallest lot 5,400 sq. ft.
- Largest lot 10,907 sq. ft.
- Average lot size is 6,342 sq. ft.
- Minimum lot width 45 ft.
- 2.4 acres of parks
- Several open space, landscape and drainage tracts





| LAND USE TABLE   |                    |  |  |  |
|--|--------------------|--|--|--|
| GROSS ACREAGE  | 83.904 ACRES       |  |  |  |
| NET ACREAGE (DEDICATED R.O.W. EXCLUDED)  | 68.973 ACRES       |  |  |  |
| GROSS DENSITY (DWELLING UNITS/ACREAGE OF ALL LOTS AND DEVELOPED TRACTS)                            | 4.680 D.U./ACRE    |  |  |  |
| NET DENSITY (DWELLING UNITS/RESIDENTIAL LOT AREA)  | 6.869 D.U./ACRE    |  |  |  |
| NUMBER OF LOTS (RESIDENTIAL)   | 243                |  |  |  |
| NUMBER OF TRACTS (FUTURE USE)  | 4                  |  |  |  |
| NUMBER OF TRACTS (DEVELOPED)   | 15                 |  |  |  |
| NUMBER OF TRACTS   | 19                 |  |  |  |
| SMALLEST LOT (RESIDENTIAL)   | 5,400 SQUARE FEET  |  |  |  |
| LARGEST LOT (RESIDENTIAL)  | 10,907 SQUARE FEET |  |  |  |
| AVERAGE LOT SIZE (RESIDENTIAL)   | 6,342 SQUARE FEET  |  |  |  |
| NUMBER OF BUILDABLE LOTS   | 243                |  |  |  |
| NET ACREAGE FOR FUTURE USE   | 17.848 ACRES       |  |  |  |
| NET ACREAGE FOR PUBLIC STREETS   | 14.931 ACRES       |  |  |  |
| NET ACREAGE DEVELOPED FOR PRIVATE USES (PARKS, OPEN SPACES AND RECREATION CENTERS, PRIVATE DRIVES) | 8.049 ACRES        |  |  |  |
| NET ACREAGE DEVELOPED FOR PUBLIC USES (STORMWATER DRAINAGE - TOWN OF BENNETT)                      | 7.698 ACRES        |  |  |  |

| Standard                    | HDR Zone | MDR Zone | Proposed       |
|-----------------------------|----------|----------|----------------|
| Min. Lot Area/Dwelling Unit | 2,400    | 3,500    | 5,400 Sq. Ft.  |
| Min. Lot Width              | 40 ft.   | 25 ft.   | 45 ft.         |
| Smallest Lot Size           |          |          | 5,400 Sq. Ft.  |
| Largest Lot Size            |          |          | 10,907 Sq. Ft. |
| Average Lot Size            |          |          | 6,342 Sq. Ft.  |

# Availability of Public Infrastructure

- Access Edward Ave., improved Pearl St., new local streets
- Water and Sewer Town of Bennett
- Stormwater Off-site conveyance to a regional system
- Fire Protection Bennett-Watkins Fire Rescue
- Law Enforcement Adams County Sheriff
- Electricity CORE Electric Cooperative
- Natural Gas Colorado Natural Gas
- Telecom Eastern Slope Technologies or Comcast
- Bennett School District Cash-in-lieu

# Staff Findings on Case No. 21.24

Per Section 16-4-380 of the Bennett Municipal Code, the Town shall use the following criteria to evaluate the applicant's final plat application:

- Generally consistent with the Sketch Plan, with updates and improvements.
- All applicable technical standards in accordance with the Subdivision Regulations and adopted Town documents will be met.
- The proposed lot configuration will accommodate new development that meets the standards of good subdivision design.
- The final plat document will accommodate extension of utilities and public services to serve future development.
- Public facilities will include improved parks, trails, stormwater and transportation facilities.
- All lots meet the standards of Bennett Crossing ODP, and related sub-area zone districts in the ODP.

# Planning and Zoning Commission Recommendation

On March 21, 2022, the Planning and Zoning Commission reviewed Case No. 21.24 and adopted Resolution No. 2022-08, recommending approval of the Bennett Crossing Filing No. 5 Final Plat, subject to the following condition:

 Before recording the plat, the applicant shall update plat notes related to tracts, easements and maintenance in a manner directed by the Town Engineer and make other minor modifications as directed by Town Staff, Engineer and Attorney.

# Staff Recommendation

Staff recommends Board of Trustees adopt Resolution No. 912-22 approving the Bennett Crossing Filing No. 5 Final Plat, with the following conditions:

1. Before recording the plat, the applicant shall update plat notes related to tracts, easements and maintenance in a manner directed by the Town Engineer and make other minor modifications as directed by Town Staff, Engineer and Attorney.

(See Proposed Resolution)

| Town of Bo                                  | Town of Bennett Land Use Application Form  |   |                            |  |  |  |  |
|---|--|---|----------------------------|--|--|--|--|
| TO BE COMPLETED BY APPLICANT                |  |   |                            |  |  |  |  |
| Application<br>Type: Final Plat             |  |   | Other                      |  |  |  |  |
| Primary Contact Name: Bryan Cleric          | n- Primary   | contact   |                            |  |  |  |  |
| Name of Firm: CWC Consulting Group          |  |   |                            |  |  |  |  |
| Address: 9360 Teddy Lane Suite              |  |   |                            |  |  |  |  |
| City: Lone Tree                             | State: CO  | Zip: 80124  | Phone: 303-395-2700        |  |  |  |  |
| Email: bryanc@cwc-consulting.co             | om   | e Allikali aa   |                            |  |  |  |  |
| Owner Name: Lennar/Joseph Hue               | y- Applicar  | nt  |                            |  |  |  |  |
| Address: 9193 S. Jamaica Ave                |  |   |                            |  |  |  |  |
| City: Englewood                             | State: CO  | Zip:80112   | Phone: 720-369-3835        |  |  |  |  |
| Email: Joseph. Huey@Lennar.con              | n  |   |                            |  |  |  |  |
| Mineral Estate Holder/Lease:                |  |   |                            |  |  |  |  |
| Name of Firm:                               | ,  |   | :                          |  |  |  |  |
| Address:                                    | and the second s | a to the state of |                            |  |  |  |  |
| City:                                       | State:   | Zip:  | Phone:                     |  |  |  |  |
| Parcel#: 01815342000014                     | Su   | bdivision Name: Benr  | nett Crossing Filing No. 5 |  |  |  |  |
| Site Address: N/A                           |  |   |                            |  |  |  |  |
| Nearest Major Intersection: Pearl Ave/SH 79 |  |   |                            |  |  |  |  |
| Legal Description: See Cover Sheet          |  |   |                            |  |  |  |  |
| Current Zoning: HDR/MDR                     |  | Proposed # lots/u   |                            |  |  |  |  |
| Total Acreage: 83.09                        |  | Gross Floor Area:   | N/A                        |  |  |  |  |
| Proposed Gross Densities (du/ac): 4.3       |  |   |                            |  |  |  |  |
| Additional Notes:                           |  |   |                            |  |  |  |  |
|   |  |   |                            |  |  |  |  |
|   |  |   |                            |  |  |  |  |

All Submittal Requirements must accompany this application. All applicable fees must be paid at the time of application. Any extraordinary cost incurred by the Town of Bennett in reviewing and processing this application is the responsibility of the applicant.

An executed cost agreement must be attached to this application pursuant to Sec. 16-1-325 of the Bennett Municipal Code.

I understand this is an application only, it must be approved by the Town, and any required building permits must be obtained before the property can be used in accordance with the request. I hereby acknowledge all of the above information is correct.

Applicant's Signature: Date: ZI July Z|

#### **FUNDS DEPOSIT AGREEMENT**

Colorado.

20\_\_.

welcome neighbors.

| A. |    | e undersigned Landowner and The Town of Bennett hereby deposit with Bennett, the following, ich is to be held and disbursed by Bennett subject to the terms and conditions hereof:   |
|----|----|--|
|    |    | Check written upon the Account of Landowner, in the amount of \$25,000, payable to "Town of Bennett", and such additional funds as may be deposited subsequently (all such funds are referred to herein as the "deposited funds").   |
| В. |    | e deposited funds shall be subject to the following instructions:  Bennett shall place the deposited funds in a separate checking account in its bank subject to the terms and requirements of these instructions.   |
|    | 2. | Upon Bennett's receipt of a billing authorized pursuant to the "Cost Agreement" between Landowner and Bennett, Bennett shall promptly submit a copy thereof to Landowner. Backup documentation for each billing shall be furnished to the Landowner upon request. Upon approval of the billing by Landowner, Bennett shall disburse moneys, from the deposited funds, in payment of such billing. The Landowner's failure to respond to the billing, within 15 days after the date the billing is submitted to the Landowner by Bennett, shall constitute approval to make the disbursement. |
|    | 3. | Any amounts remaining in the deposited funds following completion or termination of the work shall be returned to Landowner, and all parties shall be relieved from any further liability with regard to this Agreement.   |
|    | 4. | This Agreement may be altered, amended, modified or revoked only in writing signed by all parties hereto. Bennett agrees to hold the deposited funds described above under the specific terms and conditions of this Agreement.  |
|    | 5. | This Agreement shall bind and inure to the benefit of the parties hereto, their heirs, personal representatives, successors and assigns.   |

6. This Agreement shall be construed and enforced in accordance with the laws of the State of

WHEREFORE, this Funds Deposit Agreement is executed effective this \_\_\_\_\_\_ day of \_\_\_\_\_\_\_,

#### **COST AGREEMENT**

THIS AGREEMENT is made by and between <u>Lennar Colorado</u>, <u>LLC</u> ("Landowner") and the Town of Bennett, Colorado, a Colorado municipal corporation ("Bennett").

#### **RECITALS:**

A. Landowner and Bennett have been discussing Landowner's request concerning certain development activities for certain property owned by Landowner ("the Property"), as set forth on Exhibit A, attached hereto and incorporated herein.

B. The parties recognize that Landowner's request will place an extraordinary burden on the resources of Bennett, and that this Agreement will facilitate Bennett's ability to evaluate and process Landowner's request in a timely fashion, and accordingly, the parties recognize that this Agreement will be mutually beneficial.

C. The parties desire to provide for a method by which Landowner will help offset the burden placed on the resources of Bennett by Landowner's request.

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein and for other good and valuable consideration, the parties do hereby stipulate and agree as follows:

- Consultant and Other Costs. Bennett has retained, or will retain, the services of certain
  consultants, including planners, engineers, and attorneys, to assist it in evaluating Landowner's
  request and to assist it in negotiations; reviews of maps, plans and other documents; drafting of
  reports, notices and other documents; consultation, and advice. In addition to these consultant
  costs, Bennett also will incur certain other related costs, including but not limited to legal
  publication costs and administrative costs. Estimates of the costs related to each type of land
  use request are set forth on Exhibit B.
- 2. Funds Deposit. At the time of execution of this Agreement, Landowner agrees to deposit with Bennett the sum of \$ 25,000 , which is equal to the estimated costs shown in Exhibit B for the land use request of Landowner. This deposit, and any additional amounts deposited with Bennett pursuant to this Agreement, shall be used to pay the costs provided for in paragraph 1 above as they become due, in accordance with the Funds Deposit Agreement attached hereto and incorporated herein as Exhibit C. When the deposit is eighty-five (85%) depleted prior to the completion of the review, Landowner shall promptly deposit additional monies with Bennett in a mutually agreeable amount. The parties understand and agree that the amount deposited with Bennett is an estimate of costs only, and that Landowner shall promptly pay the costs provided for in Paragraph 1 through the initial deposit and additional deposits, if necessary. If such additional monies are not deposited when necessary, suspension or termination of work on the request may result until such time as the additional monies are deposited. Additional funds shall be deposited as necessary to cover outstanding balances prior to the recording of any approved final documents. Additionally, if a negative balance exists at any time and additional funds are not deposited within 30 days after written notice from Bennett, then the Town may certify to the County Treasurer any amount due pursuant to this paragraph as a lien on the Property for which the application is submitted to be due and payable with the

real estate taxes for the Town. If at any time negotiations on the request terminate, or if upon conclusion of the review, evaluation and processing, any funds remain after payment of the actual costs and expenses incurred by the Town, then any such monies deposited by Landowner and remaining shall be refunded to Landowner.

3. **No Acquired Rights**. Landowner agrees that it does not acquire any rights by virtue of the negotiations or work on the matters contemplated herein, until and unless Bennett grants any and all approvals required by law. Any and all negotiations and work concerning the Landowner's request concerning the Property shall be final only upon approval by the appropriate actions of the Bennett Board of Trustees and other governmental entities having jurisdiction, upon the completion of appropriate actions of Landowner, and upon expiration of any applicable time periods required for finality under law.

#### 4. Miscellaneous.

- (a) In the event of any litigation arising from this Agreement, the prevailing party shall be entitled to its reasonable attorneys' fees and court costs.
- (b) This Agreement supersedes all prior negotiations between the parties concerning matters addressed herein.
- (c) This Agreement shall not be modified except in writing executed by each of the parties.

| This Agreement is executed effective this               | day of                           |
|---|----------------------------------|
| THE TOWN OF BENNETT, a municipal corpora                | tion                             |
| Ву:   |                                  |
| lts:  |                                  |
| STATE OF COLORADO )                                     |                                  |
| ) SS  |                                  |
| COUNTY OF)  |                                  |
| The above and foregoing signature of me this day of, 20 | was subscribed under oath before |
| Witness my hand and official seal.                      |                                  |
|   |                                  |
| Notary Public   |                                  |
| My commission expires                                   | <u></u>                          |

Telephone:\_

# EXHIBIT A PROPERTY DESCRIPTION

welcome neighbors.

THIS AGREEMENT is made by and between <u>Lennar Colorado</u>, <u>LLC</u> ("Landowner") and the Town of Bennett, Colorado, a Colorado municipal corporation ("Bennett").

#### **RECITALS:**

A. Landowner and Bennett have been discussing Landowner's request concerning certain development activities for certain property owned by Landowner ("the Property"), as set forth on Exhibit A, attached hereto and incorporated herein.

B. The parties recognize that Landowner's request will place an extraordinary burden on the resources of Bennett, and that this Agreement will facilitate Bennett's ability to evaluate and process Landowner's request in a timely fashion, and accordingly, the parties recognize that this Agreement will be mutually beneficial.

C. The parties desire to provide for a method by which Landowner will help offset the burden placed on the resources of Bennett by Landowner's request.

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein and for other good and valuable consideration, the parties do hereby stipulate and agree as follows:

- Consultant and Other Costs. Bennett has retained, or will retain, the services of certain consultants, including planners, engineers, and attorneys, to assist it in evaluating Landowner's request and to assist it in negotiations; reviews of maps, plans and other documents; drafting of reports, notices and other documents; consultation, and advice. In addition to these consultant costs, Bennett also will incur certain other related costs, including but not limited to legal publication costs and administrative costs. Estimates of the costs related to each type of land use request are set forth on Exhibit B.
- 2. **Funds Deposit**. At the time of execution of this Agreement, Landowner agrees to deposit with Bennett the sum of \$ 12,882 \_\_\_, which is equal to the estimated costs shown in Exhibit B for the land use request of Landowner. This deposit, and any additional amounts deposited with Bennett pursuant to this Agreement, shall be used to pay the costs provided for in paragraph 1 above as they become due, in accordance with the Funds Deposit Agreement attached hereto and incorporated herein as Exhibit C. When the deposit is eighty-five (85%) depleted prior to the completion of the review, Landowner shall promptly deposit additional monies with Bennett in a mutually agreeable amount. The parties understand and agree that the amount deposited with Bennett is an estimate of costs only, and that Landowner shall promptly pay the costs provided for in Paragraph 1 through the initial deposit and additional deposits, if necessary. If such additional monies are not deposited when necessary, suspension or termination of work on the request may result until such time as the additional monies are deposited. Additional funds shall be deposited as necessary to cover outstanding balances prior to the recording of any approved final documents. Additionally, if a negative balance exists at any time and additional funds are not deposited within 30 days after written notice from Bennett, then the Town may certify to the County Treasurer any amount due pursuant to this paragraph as a lien on the Property for which the application is submitted to be due and payable with the

real estate taxes for the Town. If at any time negotiations on the request terminate, or if upon conclusion of the review, evaluation and processing, any funds remain after payment of the actual costs and expenses incurred by the Town, then any such monies deposited by Landowner and remaining shall be refunded to Landowner.

3. No Acquired Rights. Landowner agrees that it does not acquire any rights by virtue of the negotiations or work on the matters contemplated herein, until and unless Bennett grants any and all approvals required by law. Any and all negotiations and work concerning the Landowner's request concerning the Property shall be final only upon approval by the appropriate actions of the Bennett Board of Trustees and other governmental entities having jurisdiction, upon the completion of appropriate actions of Landowner, and upon expiration of any applicable time periods required for finality under law.

#### 4. Miscellaneous.

- (a) In the event of any litigation arising from this Agreement, the prevailing party shall be entitled to its reasonable attorneys' fees and court costs.
- (b) This Agreement supersedes all prior negotiations between the parties concerning matters addressed herein.
- (c) This Agreement shall not be modified except in writing executed by each of the parties.

| This Agreement is executed effective            | ve this day of  | ······································ |
|---|-----------------|--|
| THE TOWN OF BENNETT, a municip                  | pal corporation |  |
| Ву:   |                 |  |
| lts:  |                 |  |
| STATE OF COLORADO                               | )               |  |
|   | ) SS            |  |
| COUNTY OF                                       | )               |  |
| The above and foregoing signatur me this day of |                 | was subscribed under oath before       |
| Witness my hand and official seal.              |                 |  |
| Notary Public                                   |                 |  |
| My commission expires                           |                 |  |

| Dage 78  |
|--|
| ANDOWNER:  |
| Y: JOHN CHENKY   |
| tle: VP LAND ACQUISITION   |
| TATE OF COLORADO )   |
| OUNTY OF <u>Jouglas</u> )  he above and foregoing signature of <u>John Chanag</u> was subscribed under oath before he this <u>215+</u> day of <u>July</u> , 20 <u>71</u> |
| /itness my hand and official seal.   |
| JENNIFER S THORNBLOOM NOTARY PUBLIC - STATE OF COLORADO Notary ID #20144027146 My Commission Expires 7/10/2022   |
| otary Public   |
| ly commission expires $7-10-37$  |
| and Owner Name:  |

Mailing Address:

Telephone:\_\_\_\_\_

# EXHIBIT A PROPERTY DESCRIPTION

#### **FUNDS DEPOSIT AGREEMENT**



welcome neighbors.

| Α. | The undersigned Landowner and The Town of Bennett hereby deposit with Bennett, the following, |
|----|---|
|    | which is to be held and disbursed by Bennett subject to the terms and conditions hereof:      |

Check written upon the Account of Landowner, in the amount of \$12,882, payable to "Town of Bennett", and such additional funds as may be deposited subsequently (all such funds are referred to herein as the "deposited funds").

- B. The deposited funds shall be subject to the following instructions:
  - 1. Bennett shall place the deposited funds in a separate checking account in its bank subject to the terms and requirements of these instructions.
  - 2. Upon Bennett's receipt of a billing authorized pursuant to the "Cost Agreement" between Landowner and Bennett, Bennett shall promptly submit a copy thereof to Landowner. Backup documentation for each billing shall be furnished to the Landowner upon request. Upon approval of the billing by Landowner, Bennett shall disburse moneys, from the deposited funds, in payment of such billing. The Landowner's failure to respond to the billing, within 15 days after the date the billing is submitted to the Landowner by Bennett, shall constitute approval to make the disbursement.
  - 3. Any amounts remaining in the deposited funds following completion or termination of the work shall be returned to Landowner, and all parties shall be relieved from any further liability with regard to this Agreement.
  - 4. This Agreement may be altered, amended, modified or revoked only in writing signed by all parties hereto. Bennett agrees to hold the deposited funds described above under the specific terms and conditions of this Agreement.
  - 5. This Agreement shall bind and inure to the benefit of the parties hereto, their heirs, personal representatives, successors and assigns.
  - 6. This Agreement shall be construed and enforced in accordance with the laws of the State of Colorado.

| WHEREFORE, this Funds Deposit Agreement is executed effective this |  |
|--|--|
| 20   |  |

| LANDOWNER:                                      |  |
|---|--|
| By:   | CHENTY TIME                              |
| Title: V  | LAND ACQUISITION                         |
| The above and foregoing signature of            |  |
| Ву:   |  |
| Its:  |  |
| STATE OF COLORADO                               | )<br>) SS                                |
| COUNTY OF                                       | )  |
| The above and foregoing signature of day of, 20 | was subscribed under oath before me this |
| Witness my hand and official seal.              |  |

**Notary Public** 





July 21, 2021

Town of Bennett Attn: Planning Department 207 Muegge Way Bennett, CO 80102

RE: Final Plat- Bennett Crossing Filing No. 5

To Whom It May Concern:

CWC Consulting Group (CWC) is submitting this letter of intent on behalf of our client, Lennar, to provide notice of our intent to process a Final Plat though the Town for Bennet Crossing Filing No. 5.

This latest filing of Bennett Crossing is located in Planning Area 4 and Planning Area 5 north of Pearl Avenue and South of Edward Avenue. The project is split into two separate phases with Phase 1 including 123 single family residential lots encompassing Planning Area 4 and Phase 2 including 120 single family residential lots encompassing Planning Area 5. The gross project boundary contains 83.90 acres including both phases and also includes: Tract S (Planning Area 6) which is not being developed at this time, Tract R which is on the south side of Pearl Avenue and Tracts Q, P and O where the existing drainage channel north of Pearl Avenue is located. The southern infrastructure in the Pearl Avenue corridor will be constructed in both Phase 1 and Phase 2 per the approved Bennett Crossing Filing 1 and Filing 3 plans.

Phase 1 is located on the west side of the project and abuts Planning Area 6, a future mixed-use area, on the west end. The 45' wide lots along Planning Area 6, adjacent to the park and along Edward Avenue are the smallest lot size that will be offered within the development. Larger 55'-60' wide lots are offered along the south adjacent to the existing drainageway that will remain. The interior lots are predominantly 50' wide. This Phase will contain two points of access, one located at the south which will connect to Pearl Avenue which will be extended to Cedar Street and the other to the north which will connect to the existing Edward Avenue. It is our understanding that the Town will expand Edward Avenue in the future and also install a roundabout to the west at the intersection of HWY 79. The roundabout is not expected to interfere with Bennett Crossing Filing 5 based on preliminary information obtained on the geometry. A 1.2 acre park in Tract K is located near the middle of Phase 1 and an interconnecting trail system is provided to provide pedestrian access off site. Landscape buffers are placed along the north end and the west end of the project. The ultimate detention and water quality pond designed as part of Bennett Crossing Filing 1 will be constructed during Phase 1 of this project per that approved plan.

Phase 2 is located on the east side of the project and abuts agricultural located to the east. The 45' wide lots along Edward Avenue are the smallest lot size that will be offered within the development. Larger 55' wide lots are offered along the east end and also along the south adjacent to the existing drainageway that will remain. The interior lots are predominantly 50' wide. Phase 2 will extend Pearl Avenue further east to Adams Street. Adams Street will become a through street from Pearl Avenue on the south to Edward Avenue on the north which will provide a third point of access to the project. A 3.6 acre park in Tract O is located at the southeast corner of Phase 2 and an interconnecting trail system is provided to provide pedestrian access off site. Landscape buffers are placed along the north end and the east end of the project.

The water is served to the project from a stub in Pearl Ave to the south and Edward Avenue to the north. The water in Pearl Avenue will be extended with the project in Phase 1 and Phase 2 per the approved Bennett Crossing Filing 3 plans. The sanitary sewer will be split such that Phase 1 will flow to the west to the existing sanitary sewer in Planning Area 6 and Phase 2 will flow to the north to the Mitchell Property sanitary sewer. Discussions will take place with the Town concerning off-site improvements that will be required for this to occur. The storm drainage all flows to an off-site detention pond located to the east that was designed in the Bennett Crossing Filing 1 plans. The pond will be constructed per that plan with the addition of a new forebay during Phase 1. The drainage design developed with this project accounts for future construction of Edward Avenue, SH 79, the roundabout at that intersection and Pearl Avenue extension. Future landscape design will provide more information on parks, open space connections and utility maintenance paths.

We greatly appreciate the opportunity to submit this project to the Town of Bennett and look forward to working together with the Town and the development group to incorporate our visions moving forward.

Respectfully,

Bryan Clerico, P.E.

Rum Vernes

## LOCATION MAP

(NOT TO SCALE)

## PURPOSE STATEMENT

THIS BENNETT CROSSING FILING NO. 5 PLAT IS INTENDED TO SUBDIVIDE 83.904 ACRES INTO 243 RESIDENTIAL LOTS AND 19 TRACTS (4 FOR FUTURE USE), DEDICATE RIGHT-OF-WAY AND GRANT EASEMENTS.

#### OWNERSHIP AND DEDICATION

KNOW ALL PERSONS BY THESE PRESENTS, THAT THE UNDERSIGNED, GAYESKI CAPITAL EQUITIES, LLC, A COLORADO LIMITED LIABILITY COMPANY, BEING THE OWNER OF THE LAND SHOWN ON THIS FINAL PLAT AND DESCRIBED AS FOLLOWS:

PARCEL A OF SPECIAL WARRANTY DEED DESCRIBED IN THE DOCUMENT RECORDED UNDER RECEPTION NO. 2014000037662:

A PARCEL OF LAND LOCATED IN THE WEST HALF OF SECTION 34, TOWNSHIP 3 SOUTH, **RANGE 63 WEST OF** 

THE 6TH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE PARTICULARLY

**DESCRIBED AS FOLLOWS:** 

BASIS OF BEARINGS: THE NORTHERLY LINE OF THE NORTHWEST QUARTER OF SECTION 34,

RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN BEARS NORTH 89°33'30"EAST;

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 34; THENCE NORTH 89°33'30" EAST, ALONG THE NORTHERLY LINE OF THE NORTHWEST

QUARTER OF SAID SECTION

34, A DISTANCE OF 960.00 FEET TO THE POINT OF BEGINNING; THENCE NORTH 89°33'30" EAST, CONTINUING ALONG SAID NORTHERLY LINE, A DISTANCE

THE NORTH QUARTER CORNER OF SAID SECTION 34; THENCE SOUTH 00°08'12" WEST, ALONG THE EASTERLY LINE OF THE NORTHWEST

QUARTER OF SAID SECTION 34, A DISTANCE OF 2701.52 FEET TO THE CENTER QUARTER CORNER OF SAID SECTION 34; THENCE SOUTH 00°09'06" WEST, ALONG THE EASTERLY LINE OF THE SOUTHWEST

QUARTER OF SAID SECTION

34, A DISTANCE OF 772.96 FEET THENCE NORTH 89°43'33" WEST, A DISTANCE OF 2592.56 FEET;

THENCE NORTH 00°17'18" EAST, ALONG A LINE 50.00 FEET EASTERLY OF AND PARALLEL

LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 34, A DISTANCE OF 761.66 FEET; THENCE NORTH 00°05'40" EAST, ALONG A LINE 50.00 FEET EASTERLY OF AND PARALLEL

LINE OF THE NORTHWEST QUARTER OF SAID SECTION 34, A DISTANCE OF 2380,43 FEET: THENCE NORTH 89°33 '30" EAST, A DISTANCE OF 612.80 FEET;

THENCE NORTH 00°26'30" WEST, A DISTANCE OF 81.99 FEET;

THENCE NORTH 89°33'30" EAST, A DISTANCE OF 300.00 FEET

THENCE NORTH 00°26'30" WEST, A DISTANCE OF 218.00 FEET TO THE POINT OF BEGINNING; EXCEPT BENNETT CROSSING FILING NO. 1 RECORDED UNDER RECEPTION NO. 2019000008907;

EXCEPT BENNETT CROSSING FILING NO. 2 RECORDED UNDER RECEPTION NO. 2017000074180:

EXCEPT BENNETT CROSSING FILING NO. 3 RECORDED UNDER RECEPTION NO. 2019000012642:

MORE PARTICULARLY DESCRIBED AS FOLLOWS (SURVEYOR'S DESCRIPTION)

BEARINGS ARE BASED UPON THE SOUTH LINE OF THE NORTHWEST ONE-QUARTER OF SAID SECTION 34 FROM THE WEST ONE-QUARTER CORNER OF SAID SECTION 34 MONUMENTED BY A 3.25" ALUMINUM CAP. 0.4' DOWN IN A RANGE BOX WITH LID MARKED "SURVEY", STAMPED "T3S, 1/4, 33|34, R63W, PLS 26715, 2009" TO THE CENTER QUARTER CORNER OF SAID SECTION 34 MONUMENTED BY A 2.5" ALUMINUM CAP, 0.1' ABOVE GROUND SURFACE, STAMPED "CHARLES H RUSSELL, T3S, C1/4, \*, 34, R63W, 1994, LS 23519" BEARING NORTH 89°30'11" EAST, A DISTANCE OF 2640.73 FEET (N89°30'11"E 2640.73' PER BENNETT CROSSING FILING NOS. 1 AND 3).

BEGINNING AT THE SOUTHEAST CORNER OF SAID BENNETT CROSSING FILING NO. 2;

THENCE SOUTH 00°22'07" EAST ALONG THE EAST LINE OF SAID NORTHWEST ONE-QUARTER OF SECTION 34, A DISTANCE OF 1414.27 FEET TO SAID CENTER QUARTER CORNER OF

THENCE SOUTH 00°22'02" EAST ALONG THE EAST LINE OF THE SOUTHWEST ONE-QUARTER OF SAID SECTION 34, A DISTANCE OF 377.74 FEET TO THE NORTH LINE OF SAID BENNETT **CROSSING FILING NO. 3**;

THENCE THE FOLLOWING FOUR (4) COURSES ALONG THE NORTH LINE OF SAID BENNETT CROSSING FILING NO. 3:

- SOUTH 89°29'22" WEST, A DISTANCE OF 456.23 FEET;
- NORTH 53°33'51" WEST, A DISTANCE OF 631.33 FEET;
- NORTH 00°30'40" WEST, A DISTANCE OF 27.00 FEET;
- SOUTH 89°30'11" WEST, A DISTANCE OF 942.53 FEET TO THE NORTHEAST CORNER OF SAID BENNETT CROSSING FILING NO. 1;

## OWNERSHIP AND DEDICATION (CONTINUED)

THENCE SOUTH 89°30'11" WEST ALONG THE NORTH LINE OF SAID BENNETT CROSSING FILING NO. 1, A DISTANCE OF 686.42 FEET TO THE EASTERLY RIGHT-OF-WAY LINE OF COLORADO STATE HIGHWAY 79 (SOUTH 1ST STREET);

THENCE NORTH 00°24'47" WEST ALONG SAID EASTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 363.16 FEET TO THE SOUTHWEST CORNER OF SAID BENNETT CROSSING FILING NO. 2; THENCE ALONG THE SOUTH LINE OF SAID BENNETT CROSSING FILING NO. 2 THE FOLLOWING THREE (3) COURSES:

- NORTH 89°35'13" EAST, A DISTANCE OF 9.00 FEET TO A POINT OF NON-TANGENT CURVE;
- 1611.37 FEET ALONG THE ARC OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 1026.00 FEET AND A CENTRAL ANGLE OF 89°59'07", SUBTENDED BY A CHORD WHICH BEARS NORTH 44°34'47" EAST, A DISTANCE OF 1450.80 FEET;
- NORTH 89°34'20" EAST, A DISTANCE OF 1557.07 FEET TO THE POINT OF

SAID PARCEL CONTAINS AN AREA OF 3,654,846 SQUARE FEET, OR 83.904 ACRES, MORE OR LESS. ALL LINEAL DISTANCE UNITS ARE REPRESENTED IN U.S. SURVEY FEET.

HAVE LAID OUT, SUBDIVIDED AND PLATTED SAID LAND AS PER THE DRAWING CONTAINED UNDER THE NAME AND STYLE OF BENNETT CROSSING FILING NO. 5, A SUBDIVISION OF A PART OF THE TOWN OF BENNETT, COUNTY OF ADAMS, STATE OF COLORADO, AND BY THESE PRESENTS TO HEREBY DEDICATE TO THE TOWN OF BENNETT THE STREETS AND AVENUES AS SHOWN ON THIS PLAT FOR THE PUBLIC USE THEREOF FOREVER AND DOES FURTHER DEDICATE TO THE USE OF THE TOWN OF BENNETT AND ALL SERVING PUBLIC UTILITIES (AND OTHER APPROPRIATE ENTITIES) THOSE PORTIONS OF SAID REAL PROPERTY WHICH ARE SO DESIGNATED AS UTIUTY EASEMENTS AND TRANSPORTATION EASEMENTS AS SHOWN. ACCESS EASEMENTS ARE HEREBY DEDICATED TO THE TOWN OF BENNETT ACROSS ALL TRACTS SHOWN HERON. IT IS EXPRESSLY UNDERSTOOD AND AGREED BY THE UNDERSIGNED THAT ALL EXPENSES AND COSTS INVOLVED IN CONSTRUCTION AND INSTALLING SANITARY SEWER SYSTEM WORKS AND LINES, WATER SYSTEM WORKS AND LINES, GAS SERVICE LINES, ELECTRICAL SERVICE WORKS AND LINES, LANDSCAPING, CURBS, GUTTERS, STREET PAVEMENT, SIDEWALKS, AND OTHER SUCH UTILITIES AND SERVICES SHALL BE GUARANTEED AND PAID FOR BY THE SUBDIVIDER AND ARRANGEMENTS MADE BY THE SUBDIVIDER, THEREOF WHICH ARE APPROVED BY THE TOWN OF BENNETT, COLORADO, AND SUCH SUMS SHALL NOT BE PAID BY THE TOWN OF BENNETT, AND THAT ANY ITEM SO CONSTRUCTED OR INSTALLED WHEN ACCEPTED BY THE TOWN OF BENNETT SHALL BECOME THE SOLE PROPERTY OF SAID TOWN OF BENNETT, COLORADO, EXCEPT PRIVATE ROADWAY CURBS, GUTTER AND PAVEMENT AND ITEMS OWNED BY MUNICIPALITY FRANCHISED UTILITIES AND/OR OTHER SERVING PUBLIC ENTITIES, WHICH WHEN CONSTRUCTED OR INSTALLED SHALL REMAIN AND/OR BECOME THE PROPERTY OF SUCH MUNICIPALITY FRANCHISED UTILITIES AND/OR OTHER SERVING PUBLIC UTILITIES AND SHALL NOT BECOME THE PROPERTY OF THE TOWN OF BENNETT, COLORADO.

\*\*\*SEE SHEET 2 FOR NOTES, SURVEYOR'S NOTES AND TABLES.\*\*\*

DAY OF

**EXECUTED THIS** 

MY COMMISSION EXPIRES:

**DEPUTY** 

FINAL PLAT COVER SHEET AND CERTIFICATES-

FINAL PLAT NOTES, SURVEYOR'S NOTES AND TABLES-FINAL PLAT DETAIL SHEETS-

FINAL PLAT TRACT SHEET-

SHEET 2 SHEETS 3 THROUGH 18

SHEET 19

SHEET 1

A.D., 2022.

#### OWNERSHIP AND DEDICATION (CONTINUED)

| BY: GAYESKI CAPITAL EQUITIES, LLC, A COLO             | DRADO LIMITED LIABILITY COMPANY  |
|---|--|
| <pre><name></name></pre>                              | GISTERED AGENT   |
| ACKNOWLEDGEMENT THE FOREGOING OWNERSHIP AND DEDICAT   | ION WAS ACKNOWLEDGED BEFORE ME THIS  |
| DAY OF, 2022, GAYESKI CAPITAL EQUITIES, LLC, A COLORA | BY <name> AS AUTHORIZED SIGNATORY FOR DO LIMITED LIABILITY COMPANY.</name> |
| WITNESS MY HAND AND SEAL:                             |  |
| NOTARY PUBLIC   |  |

#### SURVEYOR'S CERTIFICATE

I, ERIC DAVID CARSON, A DULY LICENSED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THERE ARE NO ROADS, PIPELINES, IRRIGATION DITCHES OR OTHER EASEMENTS IN EVIDENCE OR KNOWN BY ME TO EXIST ON OR ACROSS THE HEREIN BEFORE DESCRIBED PROPERTY EXCEPT AS SHOWN ON THIS PLAT. I FURTHER CERTIFY THAT I HAVE PERFORMED THE SURVEY SHOWN HEREON, OR SUCH SURVEY WAS PREPARED UNDER MY DIRECT RESPONSIBILITY AND SUPERVISION, THAT THIS PLAT ACCURATELY REPRESENTS SAID SURVEY, AND THAT ALL MONUMENTS EXIST AS SHOWN

ERIC DAVID CARSON COLORADO PROFESSIONAL LAND SURVEYOR NO. 37890 FOR AND ON BEHALF OF CWC CONSULTING GROUP, INC. EMAIL: ERICC@CWC-CONSULTING.COM

### TOWN APPROVAL

THIS IS TO CERTIFY THAT THE PLAT OF BENNETT CROSSING FILING NO. 5 WAS APPROVED

| ON THE       | DAY OF          |   | , 2022, BY RESOLUT | TION NO.       |
|--------------|-----------------|---|--------------------|----------------|
| BEHALF OF    | THE TOWN OF B   | , AND THAT THE M.<br>ENNETT, HEREBY ACKI<br>SED BY ALL PURPOSES I | NOWLEDGES SAID PI  | _AT UPON WHICH |
| MAYOR        |                 |   | ATTEST: TOWN CLER  | K              |
|              | CLERK AN        | ID RECORDER'S   | CERTIFICATE        | _              |
| THIS FINAL P | LAT WAS FILED F | OR RECORD IN THE OF   | FICE OF THE COUNTY | CLERK AND      |
| RECORDER (   | OF ADAMS COUN   | TY, COLORADO, AT  | O'CLOCK            | M. THIS        |
|              | DAY OF          | ,   |                    |                |
| 2022, AT REC | EPTION NO       |   | ·                  |                |
| CLERK AND F  | RECORDER        | <del></del>   |                    |                |

SHEET NO. OF 19 SHEETS

F OF SECTION : NOTES PORTION OF SHEET ENNE  $\Box$ 

SECTION TABLES

F OF AND

PLAT ONE-HALF (

CROSS FINAL THE WEST ( SURVEYOR'S

S

OF 2-5

**N** 

FILING

3. BEARINGS ARE BASED UPON THE SOUTH LINE OF THE NORTHWEST ONE-QUARTER OF SAID SECTION 34 FROM THE WEST ONE-QUARTER CORNER OF SAID SECTION 34 MONUMENTED BY A 3.25" ALUMINUM CAP, 0.4' DOWN IN A RANGE BOX WITH LID MARKED "SURVEY", STAMPED "T3S, 1/4, 33|34, R63W, PLS 26715, 2009" TO THE CENTER QUARTER CORNER OF SAID SECTION 34 MONUMENTED BY A 2.5" ALUMINUM CAP, 0.1' ABOVE GROUND SURFACE, STAMPED "CHARLES H RUSSELL, T3S, C1/4, \*, 34, R63W, 1994, LS 23519" BEARING NORTH 89°30'11" EAST, A DISTANCE OF 2640.73 FEET (N89°30'11"E 2640.73' PER BENNETT CROSSING FILING NOS. 1 AND 3).

SURVEYOR'S NOTES

MEASURED.

RECENT TITLE COMMITMENT OR REPORT.

1. DISTANCES ARE MARKED IN U.S. SURVEY FEET AND DECIMAL PLACES THEREOF. NO

DIMENSION SHALL BE ASSUMED BY SCALE MEASUREMENT HEREON. DISTANCES AND/OR

BEARINGS SHOWN IN PARENTHESIS (0.00') ARE RECORD OR DEED VALUES, NOT FIELD

2. THIS LAND SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY CWC CONSULTING

GROUP, INC. TO DETERMINE OWNERSHIP OF THIS TRACT, VERIFY THE DESCRIPTION

SHOWN, VERIFY THE COMPATIBILITY OF THIS DESCRIPTION WITH THAT OF ADJACENT

TRACTS, OR VERIFY EASEMENTS OF RECORD. REFERENCE IS MADE TO FIDELITY NATIONAL

TITLE ORDER NO. N0029846-030-TH, AMENDMENT NO. 2, WITH A COMMITMENT DATE OF

JULY 20, 2021 FROM WHICH THIS SURVEY IS BASED. THIS PROPERTY IS SUBJECT TO ALL

COVENANTS AND RESTRICTIONS RELATING TO THE USE AND CHARACTER OF THE LAND

AND ALL MATTERS APPEARING OF PUBLIC RECORD AND AS MAY BE DISCLOSED BY A MORE

- 4. EASEMENTS AND PUBLIC DOCUMENTS SHOWN OR NOTED HEREON WERE EXAMINED AS TO LOCATION AND PURPOSE AND WERE NOT EXAMINED AS TO RESERVATIONS, RESTRICTIONS, CONDITIONS, OBLIGATIONS, TERMS, OR AS TO THE RIGHT TO GRANT THE SAME.
- 5. ALL REFERENCES HEREON TO BOOKS, PAGES, MAPS AND RECEPTION NUMBERS ARE PUBLIC DOCUMENTS FILED IN THE RECORDS OF THE ADAMS COUNTY CLERK AND RECORDER'S OFFICE.
- 6. ANY PERSON WHO KNOWINGLY REMOVES, ALTERS OR DEFACES ANY PUBLIC LAND SURVEY MONUMENT OR LAND MONUMENT OR ACCESSORY, COMMITS A CLASS TWO (2) MISDEMEANOR PURSUANT TO STATE STATUTE 18-4-508, C.R.S.
- 7. DEFINITION: CERTIFY, CERTIFICATION A PROFESSIONAL'S OPINION BASED ON HIS OR HER OBSERVATION OF CONDITIONS, KNOWLEDGE, INFORMATION AND BELIEFS. IT IS EXPRESSLY UNDERSTOOD THAT THE PROFESSIONAL'S CERTIFICATION OF A CONDITION'S EXISTENCE RELIEVES NO OTHER PARTY OF ANY RESPONSIBILITY OR OBLIGATION HE OR SHE HAS ACCEPTED BY CONTRACT OR CUSTOM.
- 8. CWC CONSULTING GROUP, INC. DOES NOT WARRANT THAT THE PARCEL, AS DESCRIBED HEREON, COMPLIES WITH COLORADO SENATE BILL 35. (30-28-101).
- 9. ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.

| SHEET 4 SHEET 6 SHEET 7-18                   | HEET8    |
|--|----------|
| SHEET 12 SHEET 11 SHEET 10 S<br>SHEET 13     | SHEET 9  |
| SHEET 14 SHEET 15 SHEET 16 SHEET 17 SHEET 17 | SHEET 18 |
| KEY MAP SHE                                  | ET 3     |

(NOT TO SCALE)

#### **NOTES**

- 1. THE PROPERTY IS LOCATED WITHIN "OTHER AREAS ZONE X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.) AS IDENTIFIED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP - COMMUNITY PANEL NUMBERED 08001C0981H WITH AN EFFECTIVE DATE OF MARCH 5, 2007.
- 2. TRACTS A THROUGH N, INCLUSIVE, SHALL BE OWNED AND MAINTAINED BY THE HOA, ITS SUCCESSORS OR ASSIGNS. THE UNDERSIGNED GRANTS THE TOWN OF BENNETT A PERPETUAL RIGHT OF INGRESS AND EGRESS FROM AND TO SAID TRACTS. THE TOWN SHALL HAVE THE RIGHT, BUT NOT THE OBLIGATION, TO MAINTAIN, OPERATE, REPAIR AND RECONSTRUCT THE TRACT AND RELATED FACILITIES WHEN THE OWNER(S) FAIL TO ADEQUATELY MAINTAIN SUCH TRACTS AND RELATED FACILITIES, WHICH MAINTENANCE, OPERATION AND RECONSTRUCTION SHALL BE AT THE COST OF THE HOA.
- 3. THE POLICY OF THE TOWN REQUIRES THAT ALL MAINTENANCE ACCESS SHALL BE PROVIDED TO ALL STORM DRAINAGE FACILITIES TO ASSURE CONTINUOUS OPERATIONAL CAPABILITY OF THE SYSTEM. THE PROPERTY OWNERS SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL DRAINAGE FACILITIES INCLUDING INLETS, PIPES, CULVERTS, CHANNELS, DITCHES, HYDRAULIC STRUCTURES, AND DETENTION BASINS LOCATED ON THEIR LAND UNLESS MODIFIED BY THE SUBDIVISION IMPROVEMENTS AGREEMENT. SHOULD THE OWNER FAIL TO MAINTAIN SAID FACILITIES, THE TOWN OF BENNETT SHALL HAVE THE RIGHT BUT NOT THE OBLIGATION TO ENTER SAID LAND FOR THE SOLE PURPOSE OF OPERATIONS AND MAINTENANCE. ALL SUCH MAINTENANCE COSTS WILL BE ASSESSED TO THE PROPERTY OWNERS.
- 4. SURFACED ACCESS ROADS CAPABLE OF WITHSTANDING THE IMPOSED LOADS OF FIRE APPARATUS AND ALL REQUIRED FIRE HYDRANTS SHALL BE INSTALLED AND MADE SERVICEABLE PRIOR TO AND DURING CONSTRUCTION.
- 5. ALL INTERNAL ROADS AND DRAINAGE FACILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH STREET CONSTRUCTION PLANS, PAVEMENT DESIGN, GRADING AND EROSION CONTROL PLAN, AND A FINAL DRAINAGE PLAN SUBMITTED TO AND APPROVED BY THE TOWN OF BENNETT AND ALL APPLICABLE TOWN ADOPTED STANDARDS AND SPECIFICATIONS.
- 6. THIS PLAN HAS BEEN APPROVED BY THE TOWN OF BENNETT AND CREATES A VESTED PROPERTY RIGHT PURSUANT TO C.R.S. 24-68-101, ET SEQ., AS AMENDED, AND THE TOWN OF BENNETT DEVELOPMENT STANDARDS AND REGULATIONS.
- 7. NOTICE IS GIVEN THAT THIS SUBDIVISION WILL BE SUBJECT TO RECORDED DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS. THE TOWN OF BENNETT IS NOT RESPONSIBLE FOR ENFORCEMENT OF THE RECORDED COVENANTS, CONDITIONS AND RESTRICTIONS THAT MAY BE FILED AGAINST THE SUBDIVISION PLAT.
- 8. FOR CORNER LOTS, THE SIDE SETBACK SHALL BE USED FOR THE CHAMFERED OR RADIUS LOT CORNER.
- 9. NON-EXCLUSIVE UTILITY EASEMENTS LOCATED AS SHOWN ARE HEREBY GRANTED FOR THE INSTALLATION. MAINTENANCE. AND OPERATION OF UTILITIES AND DRAINAGE FACILITIES, INCLUDING, BUT NOT LIMITED TO STREET LIGHTS, ELECTRIC LINES, GAS LINES, CABLE TELEVISION LINES, FIBER OPTIC LINES, AND TELEPHONE LINES, AS WELL AS PERPETUAL RIGHT FOR INGRESS AND EGRESS FOR INSTALLATION, MAINTENANCE, AND REPLACEMENT OF SUCH LINES. WINDOW WELLS, PATIOS, DECKS, STAIRS, RETAINING WALLS, AND THEIR COMPONENTS MAY NOT ENCROACH INTO THE REQUIRED UTILITY

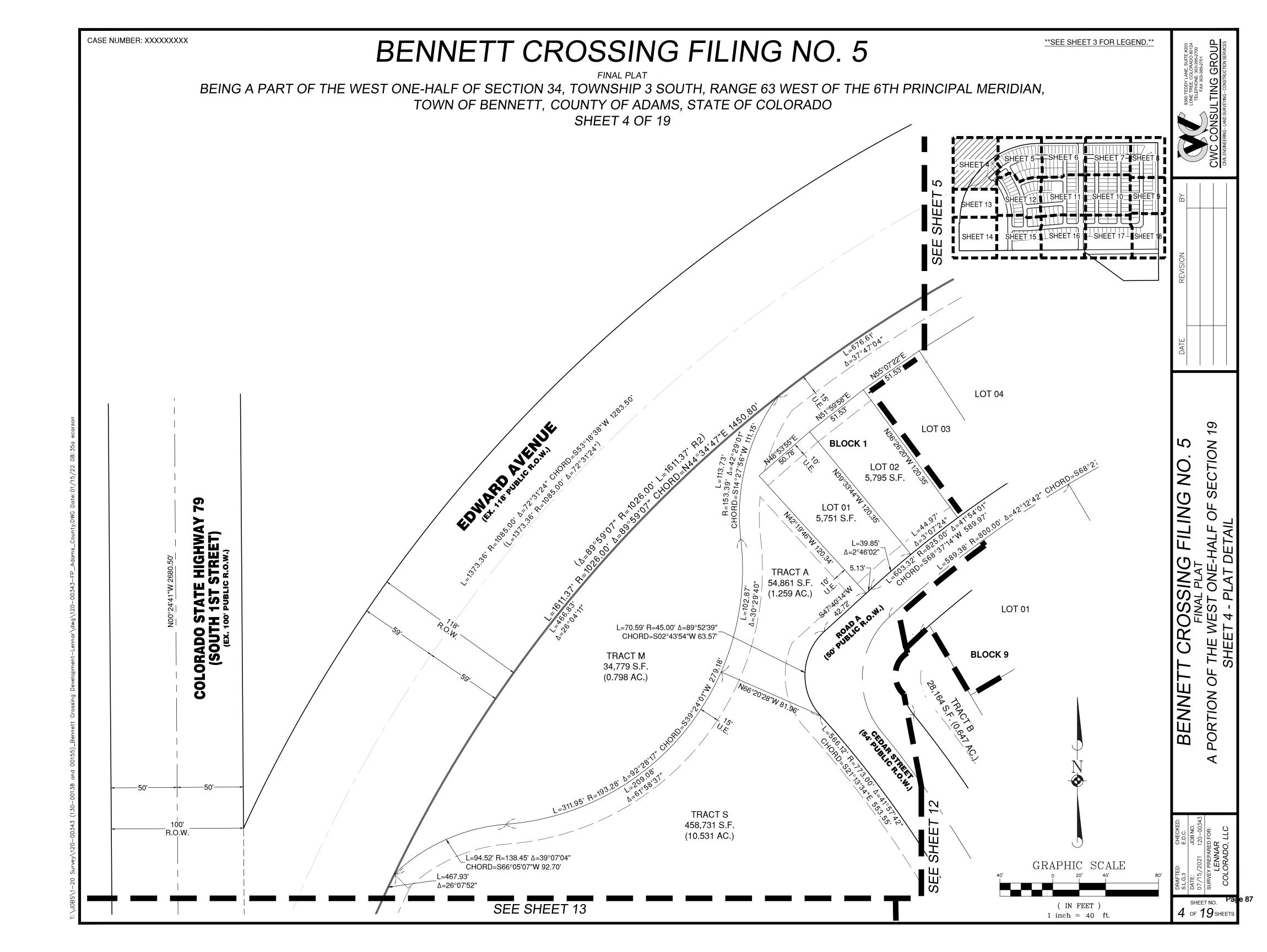
10. SIGHT DISTANCE EASEMENTS ARE HEREBY DEDICATED TO THE TOWN OF BENNETT FOR SIGHT DISTANCE PURPOSES TOGETHER WITH THE FOLLOWING RESTRICTIONS OVER SAID EASEMENTS: NO OBJECT WITHIN THE SIGHT DISTANCE EASEMENT SHALL BE MORE THAN THIRTY-SIX (36) INCHES ABOVE THE FLOWLINE OF THE ADJACENT STREET. SUCH OBJECTS SHALL INCLUDE BUT NOT BE LIMITED TO BUILDINGS, VEGETATION, AND UTILITY CABINETS. PARKING IS ALSO RESTRICTED WITHIN THE EASEMENT.

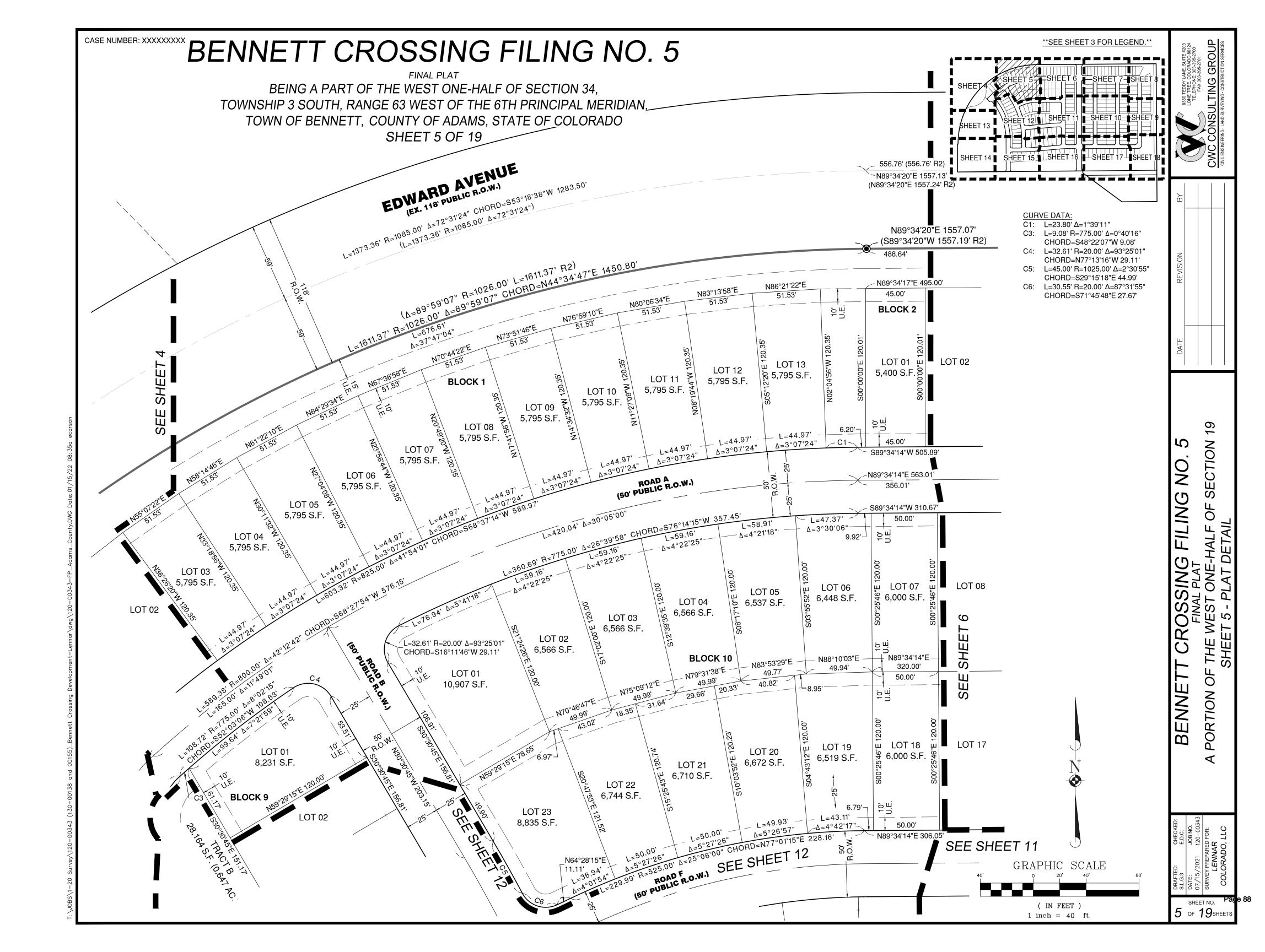
| LAND USE TABLE   |                    |  |
|--|--------------------|--|
| GROSS ACREAGE  | 83.904 ACRES       |  |
| NET ACREAGE (DEDICATED R.O.W. EXCLUDED)  | 68.973 ACRES       |  |
| GROSS DENSITY (DWELLING UNITS/ACREAGE OF ALL LOTS AND DEVELOPED TRACTS)                            | 4.680 D.U./ACRE    |  |
| NET DENSITY (DWELLING UNITS/RESIDENTIAL LOT AREA)  | 6.869 D.U./ACRE    |  |
| NUMBER OF LOTS (RESIDENTIAL)   | 243                |  |
| NUMBER OF TRACTS (FUTURE USE)  | 4                  |  |
| NUMBER OF TRACTS (DEVELOPED)   | 15                 |  |
| NUMBER OF TRACTS   | 19                 |  |
| SMALLEST LOT (RESIDENTIAL)   | 5,400 SQUARE FEET  |  |
| LARGEST LOT (RESIDENTIAL)  | 10,907 SQUARE FEET |  |
| AVERAGE LOT SIZE (RESIDENTIAL)   | 6,342 SQUARE FEET  |  |
| NUMBER OF BUILDABLE LOTS   | 243                |  |
| NET ACREAGE FOR FUTURE USE   | 17.848 ACRES       |  |
| NET ACREAGE FOR PUBLIC STREETS   | 14.931 ACRES       |  |
| NET ACREAGE DEVELOPED FOR PRIVATE USES (PARKS, OPEN SPACES AND RECREATION CENTERS, PRIVATE DRIVES) | 8.049 ACRES        |  |
| NET ACREAGE DEVELOPED FOR PUBLIC USES (STORMWATER DRAINAGE - TOWN OF BENNETT)                      | 7.698 ACRES        |  |

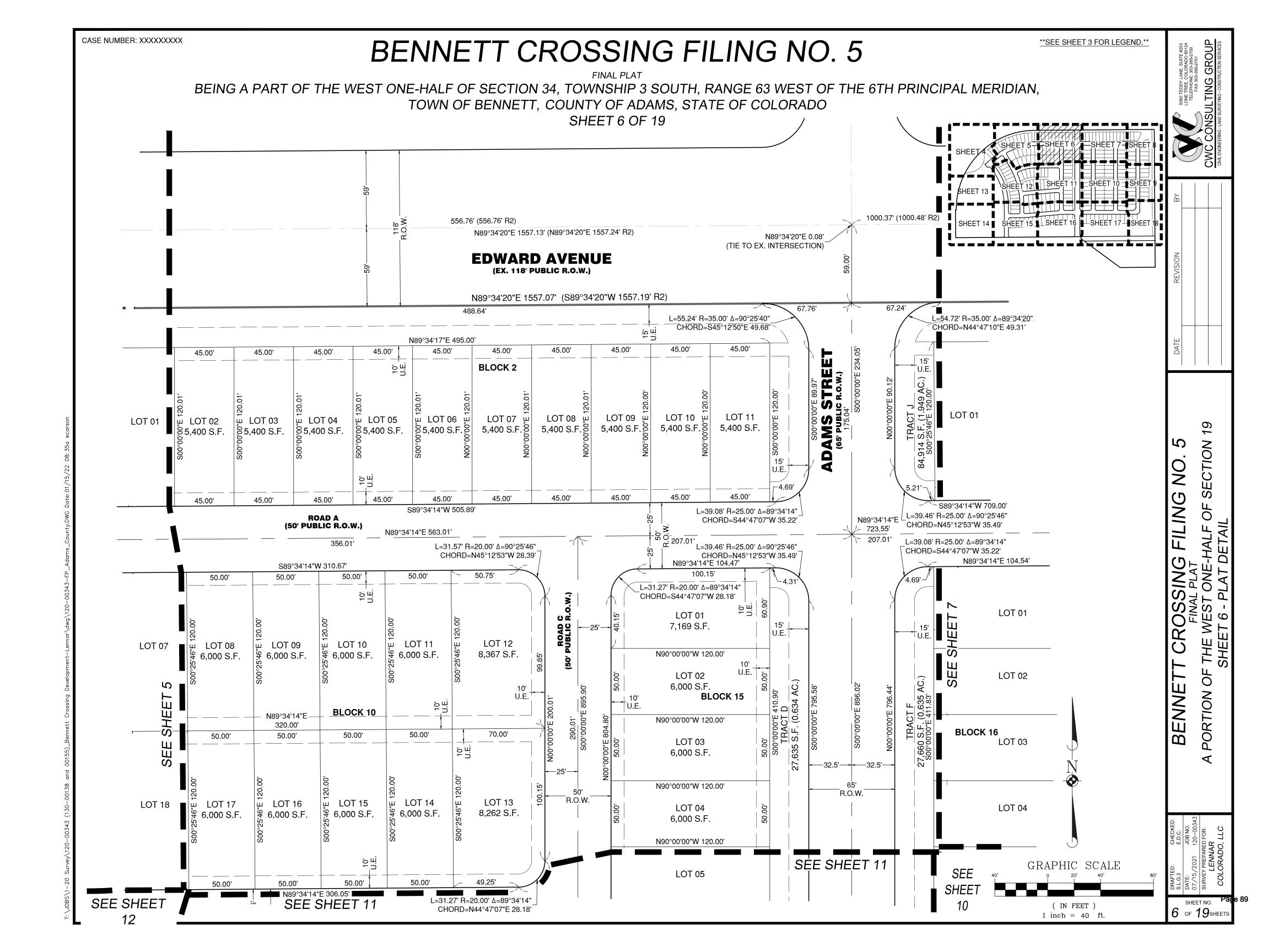
| TRACT SUMMARY TABLE |  |   |                 |
|---------------------|--|---|-----------------|
| LABEL               | PROPOSED USE   | OWNERSHIP/<br>MAINTENANCE                                 | AREA<br>(ACRES) |
| TRACT A             | DRAINAGE, OPEN SPACE<br>& LANDSCAPED AREA              | H.O.A.  | 1.259           |
| TRACT B             | OPEN SPACE &<br>LANDSCAPED AREA                        | H.O.A.  | 0.647           |
| TRACT C             | OPEN SPACE &<br>LANDSCAPED AREA                        | H.O.A.  | 0.087           |
| TRACT D             | OPEN SPACE &<br>LANDSCAPED AREA                        | H.O.A.  | 0.634           |
| TRACT E             | OPEN SPACE &<br>LANDSCAPED AREA                        | H.O.A.  | 0.082           |
| TRACT F             | DRAINAGE, OPEN SPACE & LANDSCAPED AREA                 | H.O.A.  | 0.635           |
| TRACT G             | OPEN SPACE &<br>LANDSCAPED AREA                        | H.O.A.  | 0.078           |
| TRACT H             | DRAINAGE, OPEN SPACE & LANDSCAPED AREA                 | H.O.A.  | 0.136           |
| TRACT I             | DRAINAGE, OPEN SPACE & LANDSCAPED AREA                 | H.O.A.  | 0.142           |
| TRACT J             | DRAINAGE, OPEN SPACE & LANDSCAPED AREA                 | H.O.A.  | 1.949           |
| TRACT K             | PARK   | H.O.A.  | 1.187           |
| TRACT L             | PARK   | H.O.A.  | 1.227           |
| TRACT M             | TRANSPORTATION, UTILITIES, OPEN SPACE & LANDSCAPE AREA | TOWN OF BENNETT   | 0.798           |
| TRACT N             | TRANSPORTATION, UTILITIES, OPEN SPACE & LANDSCAPE AREA | TOWN OF BENNETT   | 1.036           |
| TRACT O             | OPEN SPACE & STORMWATER DRAINAGE                       | GAYESKI CAPITAL<br>EQUITIES, LLC/<br>METRO DISTRICT NO. 2 | 3.607           |
| TRACT P             | OPEN SPACE & STORMWATER DRAINAGE                       | GAYESKI CAPITAL<br>EQUITIES, LLC/<br>METRO DISTRICT NO. 2 | 2.887           |
| TRACT Q             | OPEN SPACE & STORMWATER DRAINAGE                       | GAYESKI CAPITAL<br>EQUITIES, LLC/<br>METRO DISTRICT NO. 2 | 1.204           |
| TRACT R             | FUTURE USE   | GAYESKI CAPITAL<br>EQUITIES, LLC                          | 6.770           |
| TRACT S             | FUTURE USE   | GAYESKI CAPITAL<br>EQUITIES, LLC                          | 10.531          |
| TOTAL:              |  |   | 34.896          |

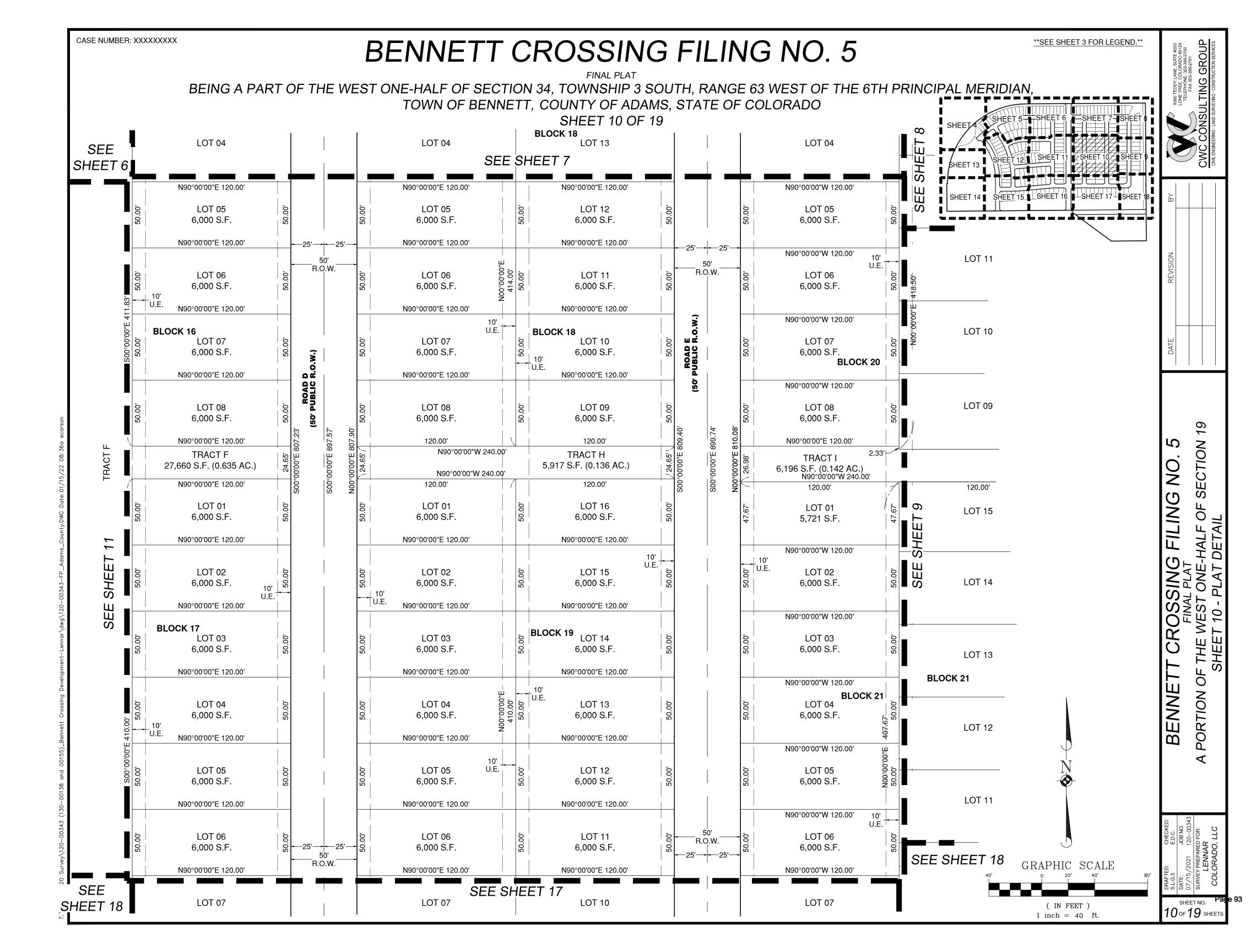
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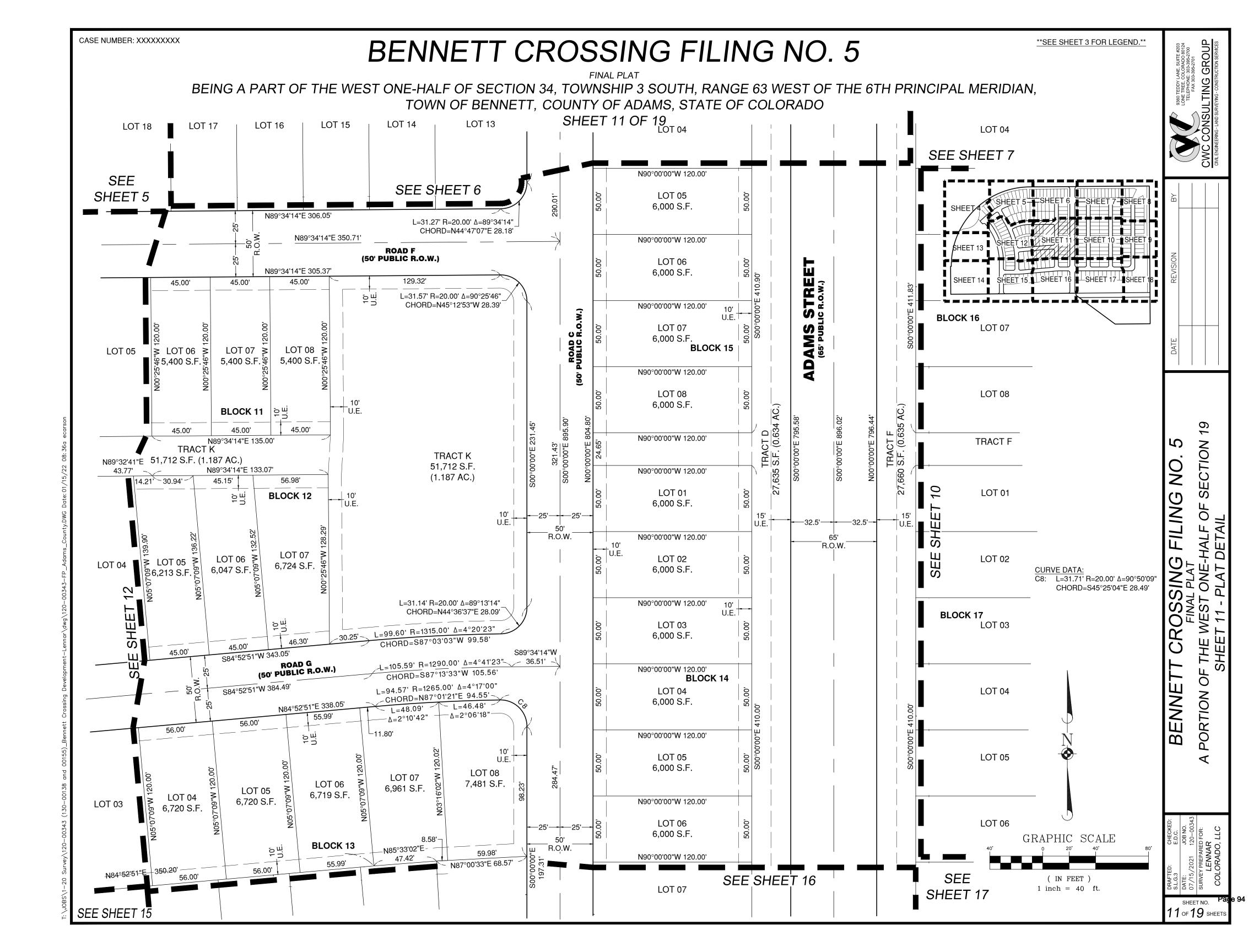
2 of 19 sheets

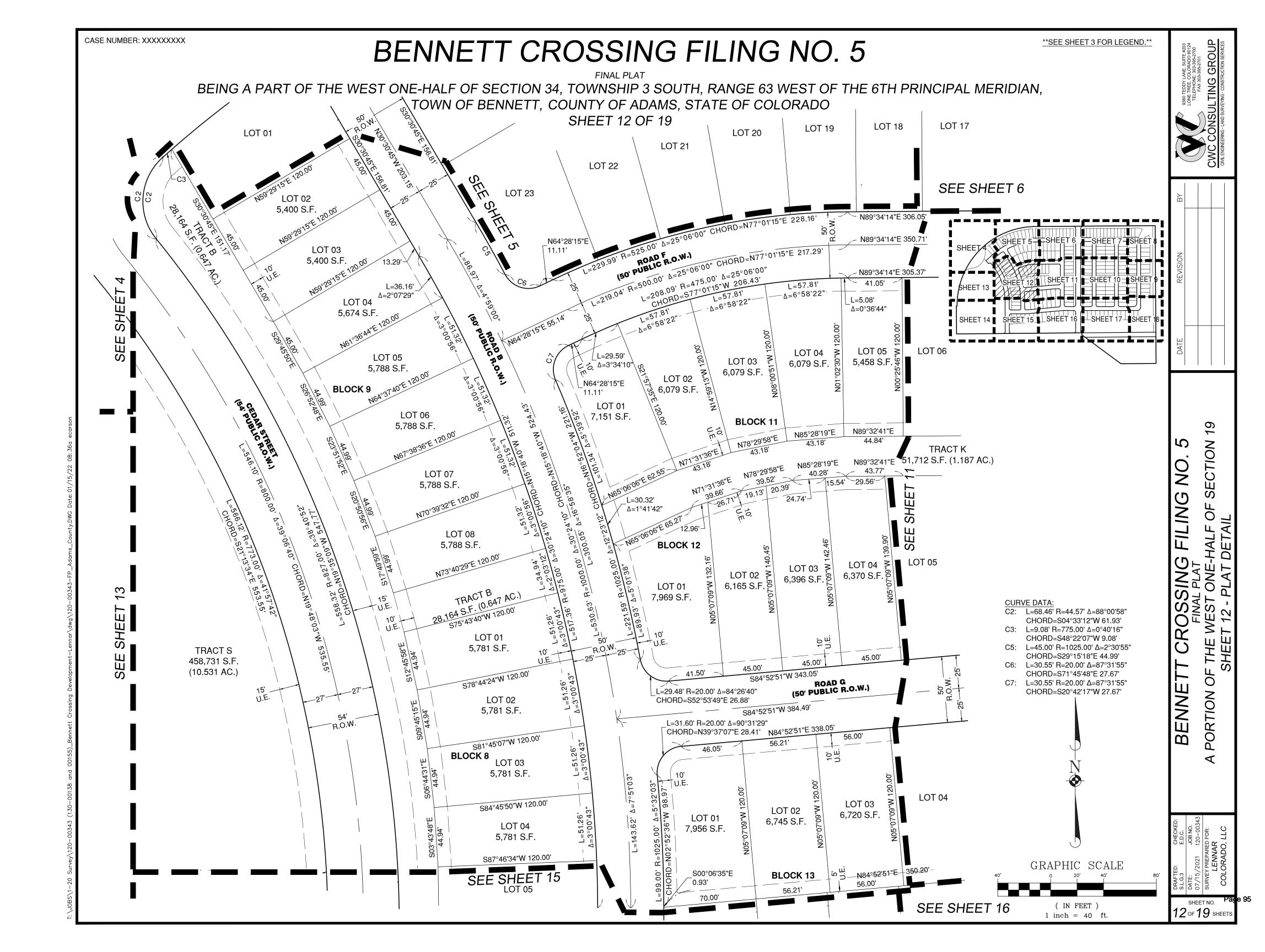


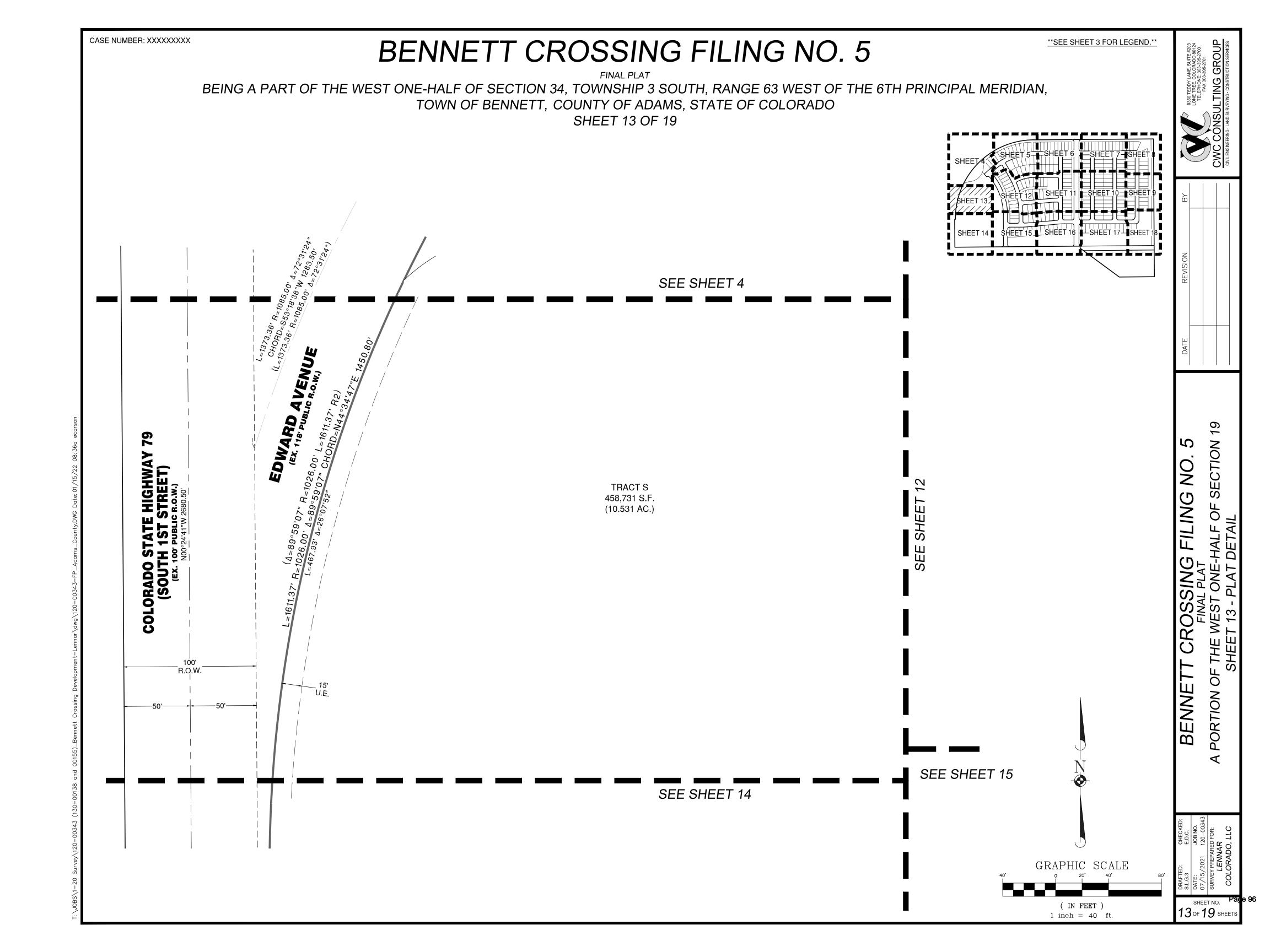


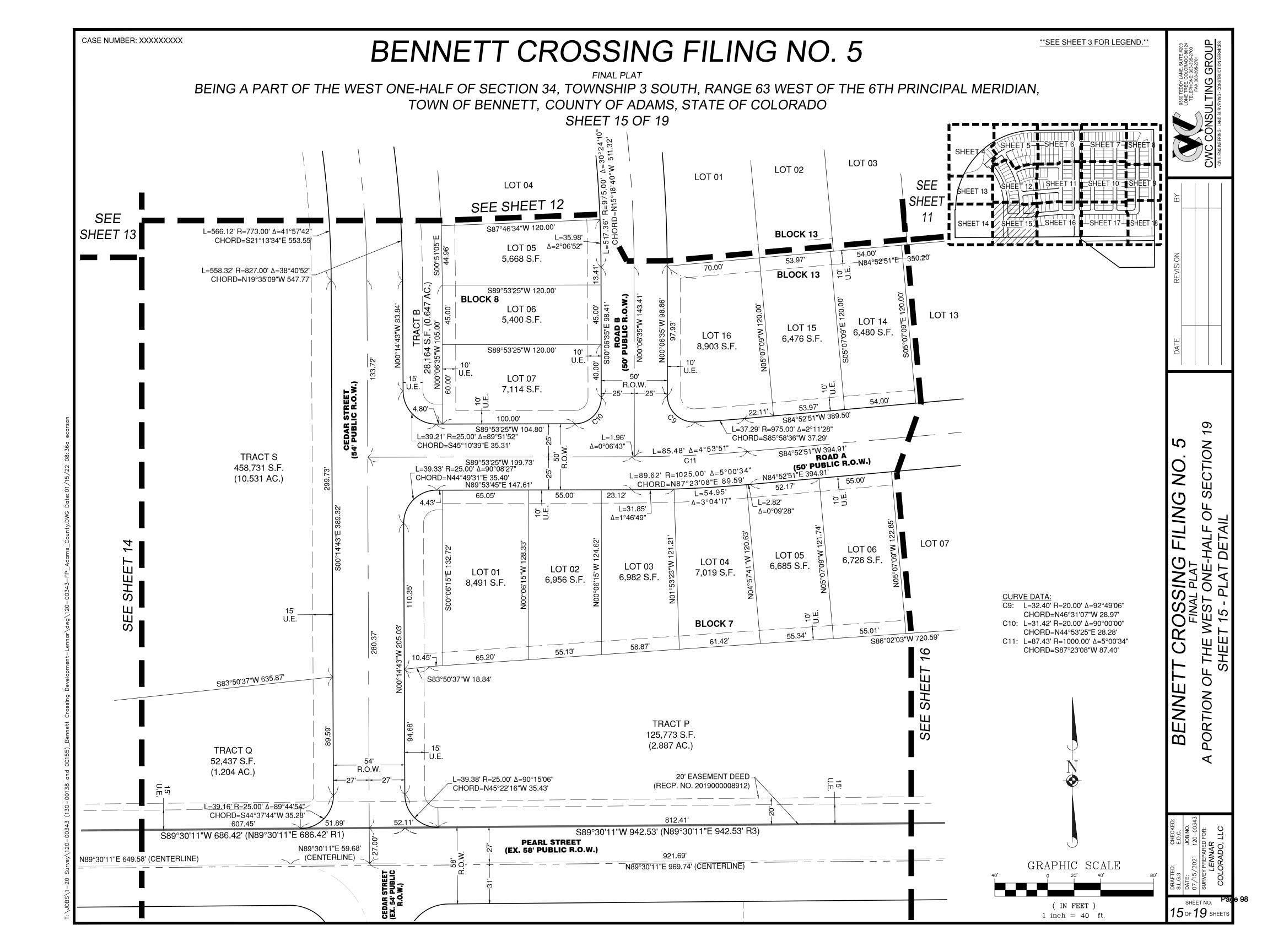


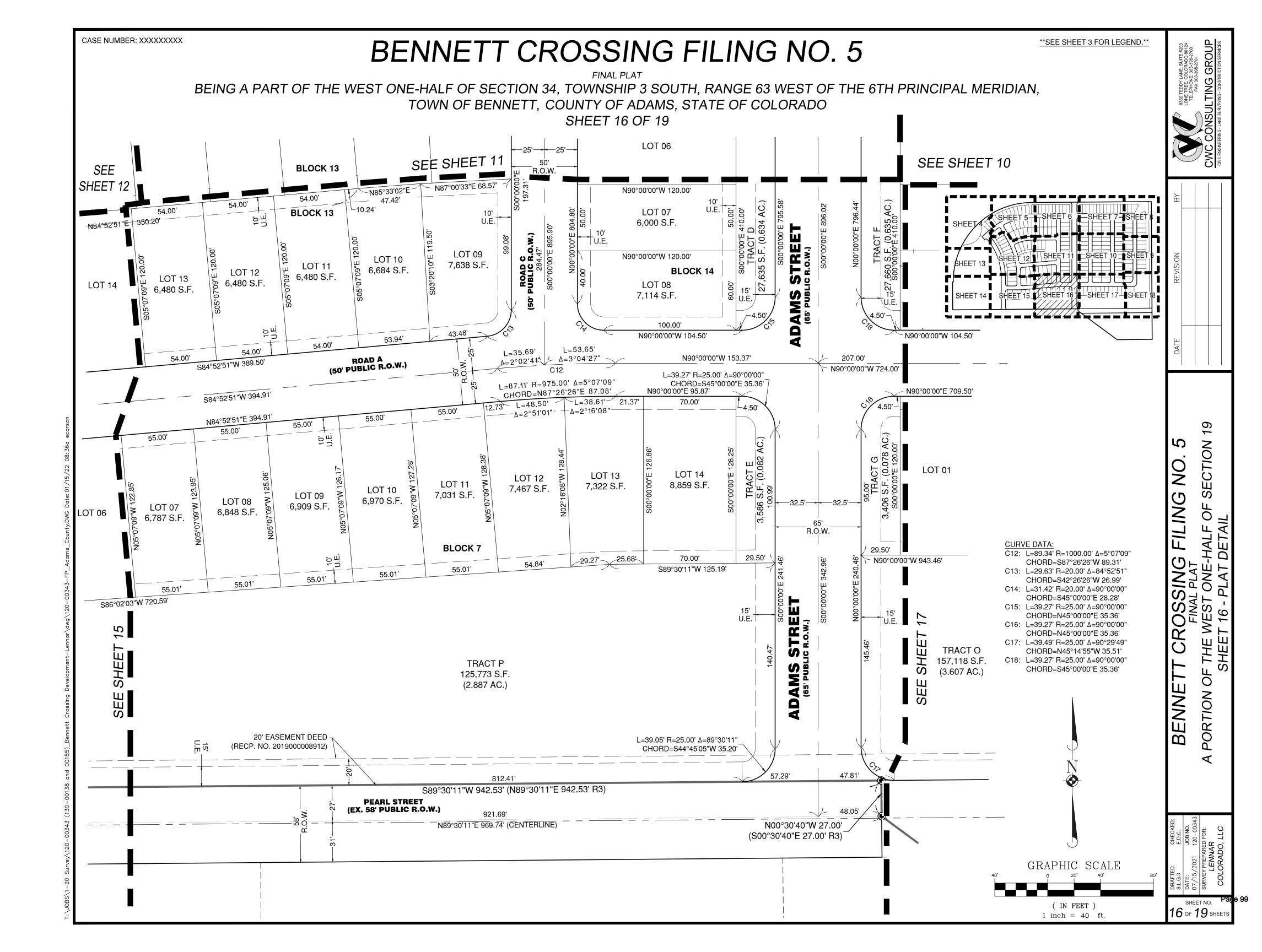


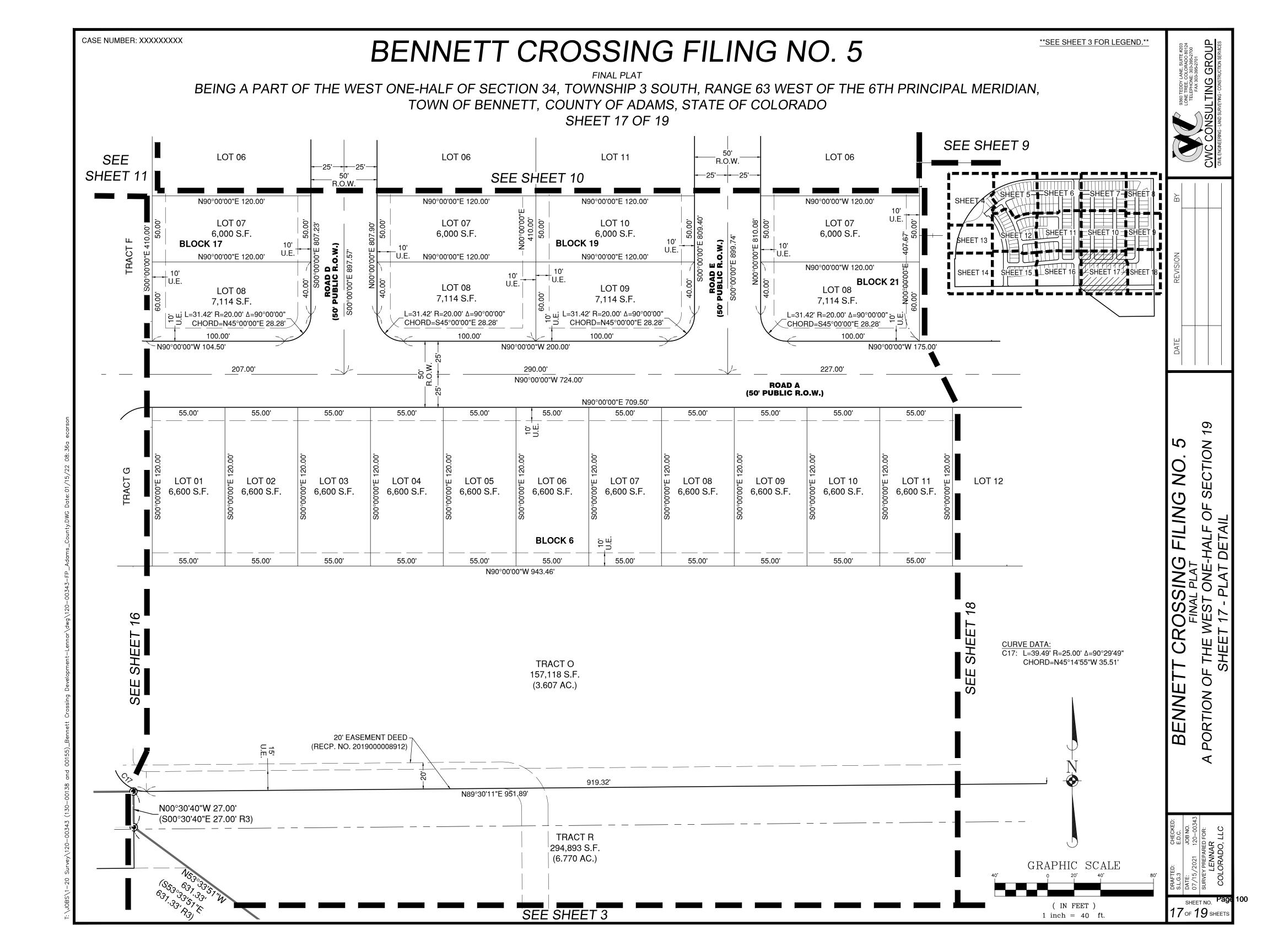


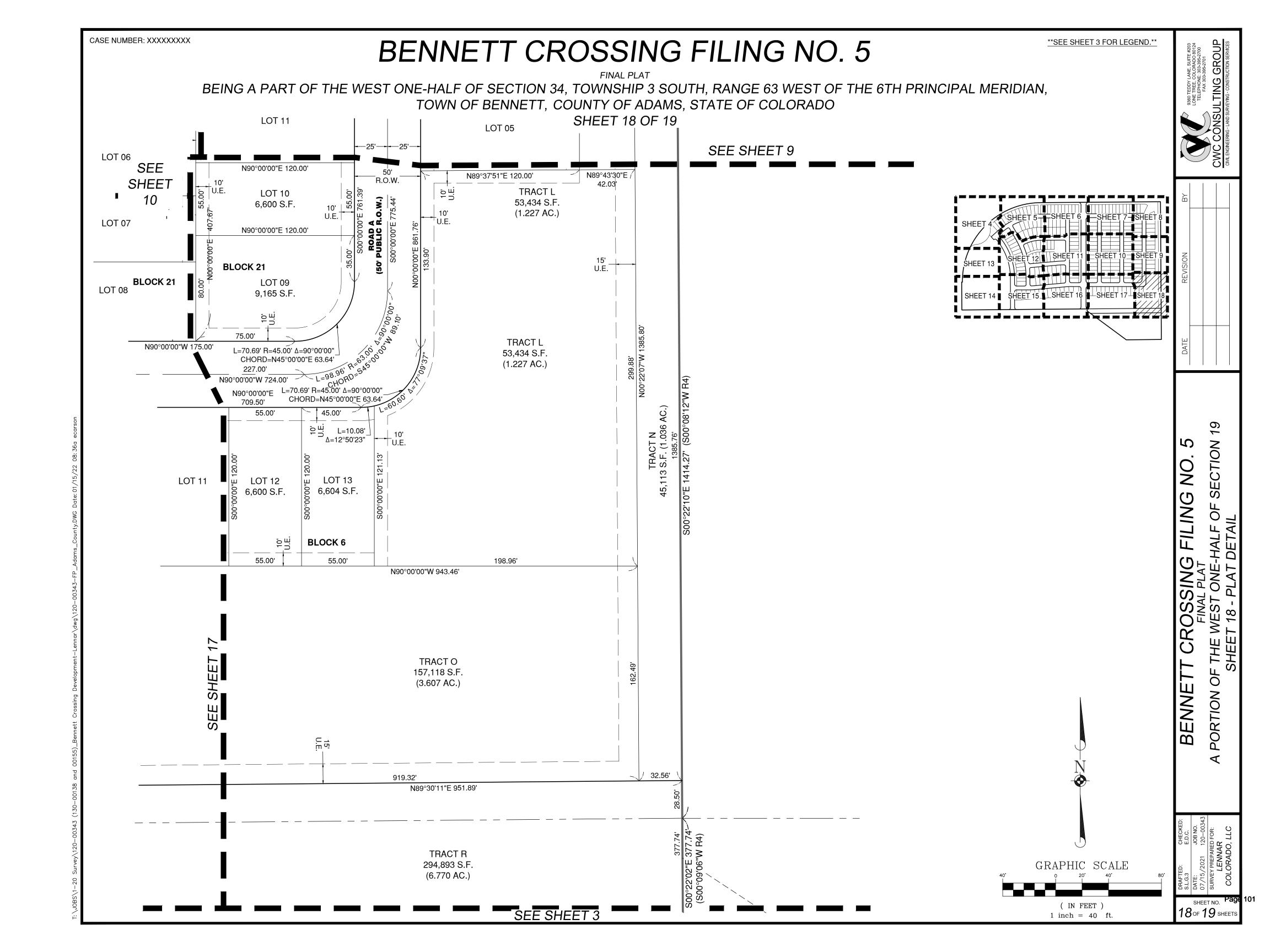










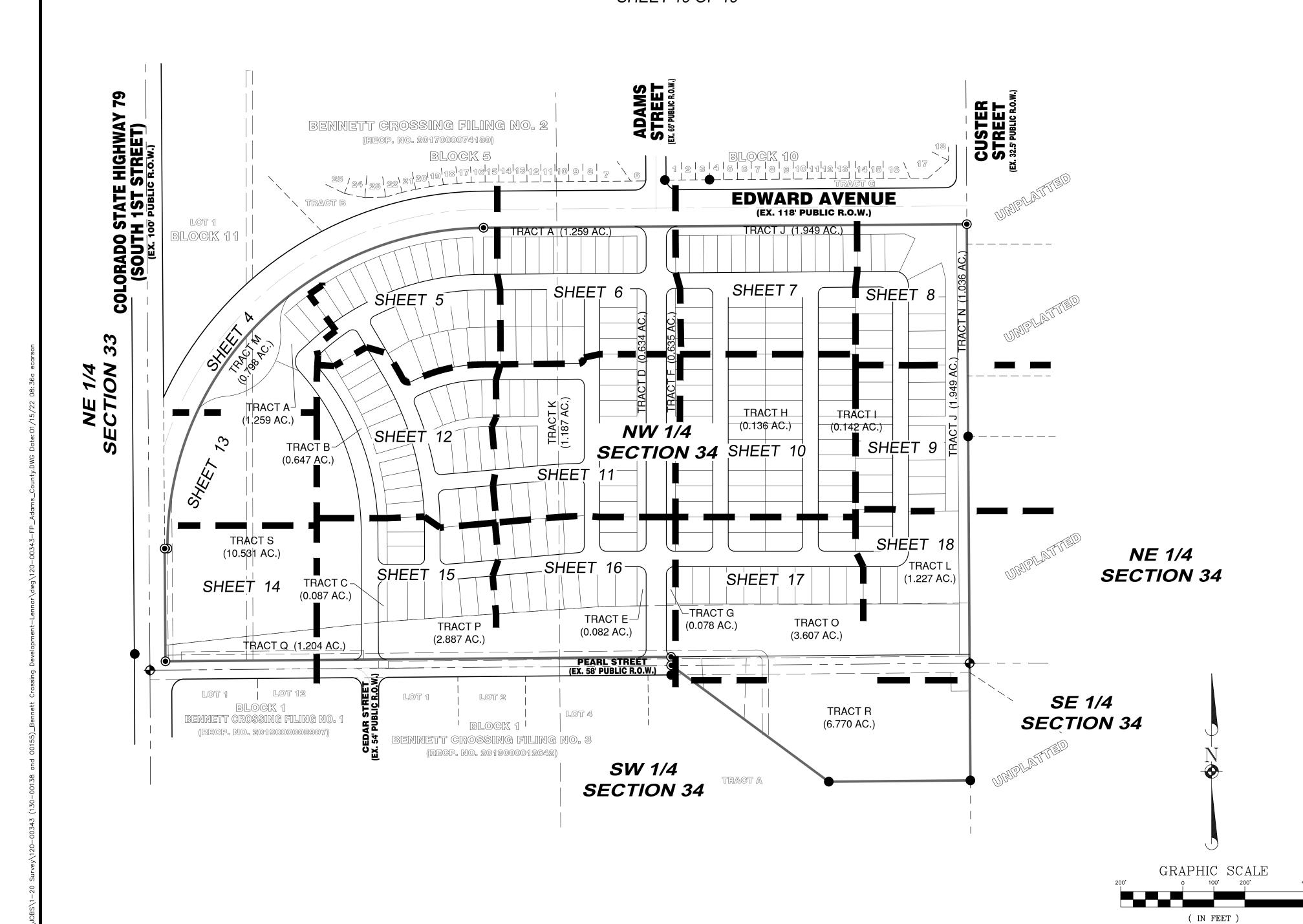


CASE NUMBER: XXXXXXXXX

# BENNETT CROSSING FILING NO. 5

FINAL PLAT

BEING A PART OF THE WEST ONE-HALF OF SECTION 34, TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN, TOWN OF BENNETT, COUNTY OF ADAMS, STATE OF COLORADO SHEET 19 OF 19



9360 TEDDY LANE, SUITE:
LONE TREE, COLORADO 8
TELEPHONE: 303-395-27
FAX 303-395-2701

CWC CONSULTING GRO

CIVIL ENGINEERING · LAND SURVEVING · CONSTRUCTION SER

1 inch = 200 ft.

## **BENNETT CROSSING**

A parcel in the W 1/2 of Section 34, Township 3 South, Range 63 west of the 6th Principal Meridian, Town of Bennett, County of Adams, State of Colorado

#### Parcel One: A parcel of land located in the West Half of Section 34, Township 3 South, Range 63 West of the 6<sup>th</sup>

Basis of bearings: The Northerly line of the Northwest Quarter of Section 34, Township 3, Range 63 West of the 6th Principal Meridian Bears North 89°33'30"East;

Principal Meridian, County of Adams, State of Colorado, being more particularly described as follows:

#### Commencing at the Northwest corner of said Section 34;

Thence North 89°33'30" East, along the Northerly line of the Northwest Quarter of said Section 34, a distance of 960.00 feet to the point of beginning;

Thence North 89°33'30" East, continuing along said Northerly line, a distance of 1682.85 feet to the North Quarter corner of said Section 34;

Thence South 00°08'12" West, along the Easterly line of the Northwest Quarter of said Section 34, a distance of 2701.52 feet to the center Quarter corner of said Section 34;

Thence South 00°09'06" West, along the Easterly line of the Southwest Quarter of said Section 34, a

distance of 772.96 feet; Thence North 89°43'33" West, a distance of 2592.56 feet;

Thence North 00° I7'18" East, along a line 50.00 feet Easterly of and parallel with the Westerly line of

the Southwest Quarter of said Section 34, a distance of 761.66 feet; Thence North 00°05'40" East, along a line 50.00 feet Easterly of and parallel with the Westerly line of

the Northwest Quarter of said Section 34, a distance of 2380.43 feet; Thence North 89°33'30" East, a distance of 612.80 feet;

Thence North 00°26'30" West, a distance of 81.99 feet;

Thence North 89°33'30" East, a distance of 300.00 feet;

Thence North 00°26'30" West, a distance of 218.00 feet to the point of beginning.

#### Parcel Two:

A parcel of land located in the Southwest Quarter of Section 34, Township 3 South, Range 63 West of the 6th Principal Meridian, County of Adams, State of Colorado, being more particularly described as

Basis of bearings: The Northerly line of the Northwest Quarter of Section 34, Township 3, Range 63 West of the 6th Principal Meridian Bears North 89°33'30"East;

#### Commencing at the Northwest corner of said Section 34;

Thence South 00'05'40" West, along the Westerly line of the Northwest Quarter of said Section 34, a distance of 2679.88 feet to the West Quarter corner of said Section 34;

Thence South 00° I7'18" West, along the Westerly line of the Southwest Quarter of said Section 34, a distance of 1091.57 feet:

Thence South 89°42'42" East, a distance of 50.00 feet to the Easterly right of way of Colorado State Highway 79 and the point of beginning; Thence North 00°17'18" East, along said Easterly right of way, a distance of 330.00 feet;

Thence South 89'43'33" East, a distance of 2592.56 feet to the Easterly line of the Southwest Quarter of

Thence South 00'09'06" West, along said Easterly line, a distance of 330.00 feet;

Thence North 89'43'33" West, a distance of 2593.34 feet to the point of beginning,

(Note: the above described parcel is also known as Lot I, Root Subdivision, as per the plat recorded November 16, 1971 at Reception No. 941954)

#### Parcel Three:

A parcel of land located in the Southwest Quarter of Section 34, Township 3 South, Range 63 West of the 6th Principal Meridian, County of Adams, State of Colorado, being more particularly described as

Basis of bearings: The Northerly line of the Northwest Quarter of Section 34, Township 3, Range 63 West of the 6th Principal Meridian Bears North 89"33'30"East;

#### Commencing at the Northwest corner of said Section 34;

Thence South 00'05'40" West, along the Westerly line of the Northwest Quarter of said Section 34, a distance of 2679.88 feet to the West Quarter corner of said Section 34;

Thence South 00'17'18" West, along the Westerly line of the Southwest Quarter of said Section 34, a distance of I091.57 feet;

Thence South 89'42 '42" East, a distance of 50.00 feet to the point of beginning; Thence South 89'43 '33" East, a distance of 2593.34 feet to the Easterly line of the Southwest Quarter of

Thence South 00'09'06" West, along said Easterly line, a distance of 1295.61 feet to the Northerly right of way of Interstate Highway 70 as described in Book 742 at Page 443 of the Adams County records; Thence along said Northerly right of way the following three (3) courses:

- I. South 73'18'00" West, a distance of 169.30 feet;
- 2. South 89'59'30" West, a distance of 1700.00 feet;
- 3. North 75'36'00" West, a distance of 447.69 feet;
- Thence North 00' II '00" East, a distance of 892.33 feet; Thence North 89'49'00" West, a distance of 298.74 feet to the Easterly right of way of Colorado
- State Highway 79;
- Thence North 00'17'18" East, along said Easterly right of way, a distance of 352.29 feet to the point of beginning.

Assessor's Parcel Nos. 0181534200007,018150030001 and 0181534300001 Commonly Known as Vacant Land and 1773 Silverheels Road, Bennett, Colorado

Except for Lot 1 and a portion of Lot 2 of Bennett Crossing Filing No. 4

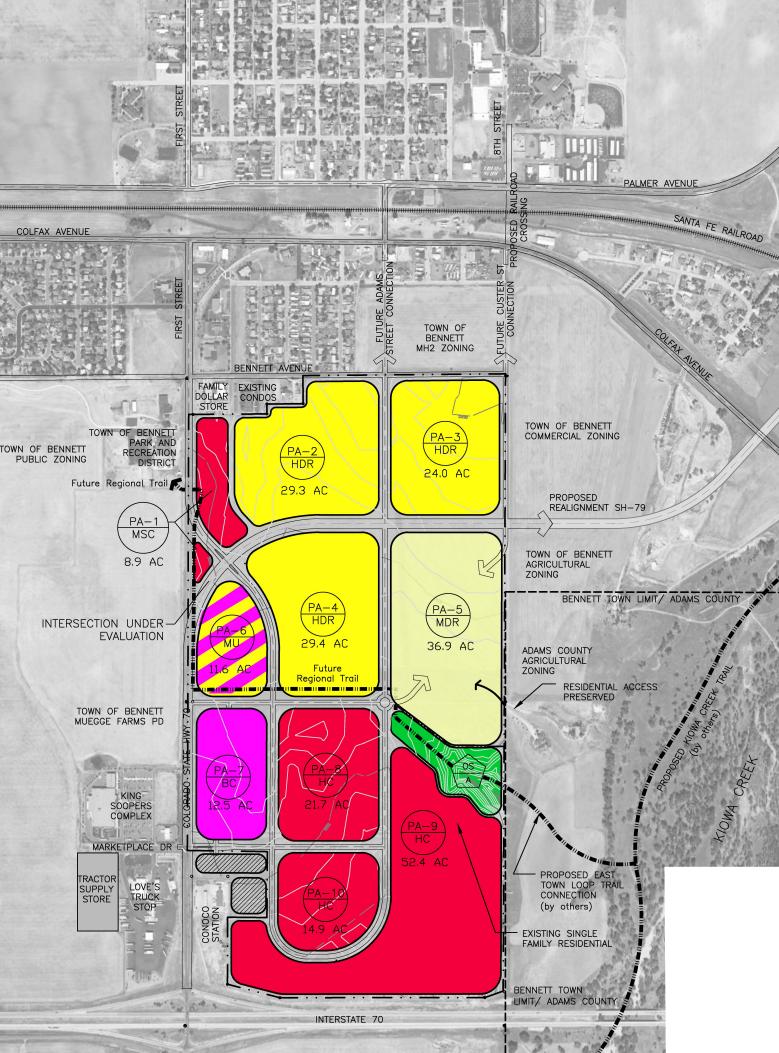
#### OUTLINE DEVELOPMENT PLAN -- AMENDMENT No. 1



Remove a portion of PA-7 and PA-9 (Lot 1 and a portion of Lot 2 of Bennett Crossing Filing No. 4). This area is now included in the Bennett Crossing Southwest Outline Development Plan, recorded December 21, 2021 at Reception No. 2021000148119. All of Lot 4, Filing No. 4 remains in this Bennett Crossing ODP

Update J. Services: by adding (13) Crematorium as a permitted use in Sheet 6: the HC Planning Areas

This amendment only affects properties in the Bennett Crossing Filing No. 3 subdivision plat.



■||■||■||■||■|| Future Regional Trail

#### **BENNETT CROSSING PD ZONING SUMMARY TABLE**

| PLANNING AREA       | AREA (Acre) +/- | ZONING | ZONING DESCRIPTION                  |
|---------------------|-----------------|--------|-------------------------------------|
| PA-1                | 8.9             | MSC    | Main Street Commercial District     |
| PA-2                | 29.3            | HDR    | High Density Residential District   |
| PA-3                | 24.0            | HDR    | High Density Residential District   |
| PA-4                | 29.4            | HDR    | High Density Residential District   |
| PA-5                | 36.9            | MDR    | Medium Density Residential District |
| PA-6                | 11.6            | MU     | Mixed Use District                  |
| PA-7                | 12.5            | ВС     | <b>Business Commercial District</b> |
| PA-8                | 21.7            | НС     | Highway Commercial District         |
| PA-9                | 52.4            | НС     | Highway Commercial District         |
| PA-10               | 14.9            | НС     | Highway Commercial District         |
| Total Planning Area | 241.6           |        |                                     |
| Open Space          | 8.8             |        |                                     |
| Public ROW          | 37.0            |        |                                     |
| Total PD Area       | 287.4           |        |                                     |

## **TOWN APPROVAL** THIS OUTLINE DEVELOPMENT PLAN WAS APPROVED BY THE BOARD OF TRUSTEES FOR THE TOWN OF BENNETT, COLORADO ON THE \_ BENNETT MAYOR ATTEST: TOWN CLERK ACCEPTANCE BLOCK AND NOTARY BY SIGNING THIS OUTLINE DEVELOPMENT PLAN THE OWNER ACKNOWLEDGES AND ACCEPTS ALL OF THE REQUIREMENTS AND INTENT SET FORTH HEREIN. OWNER, Gayeski Capital Equities, LLC, by Larry Gayeski, Manager STATE OF COLORADO ) SS THE ABOVE AND FOREGOING SIGNATURE OF WAS SUBSCRIBED AND SWORN TO BEFORE ME THIS DAY OF WITNESS MY HAND AND OFFICIAL SEAL. MY COMMISSION EXPIRES ON: Notary Public **COUNTY CLERK AND RECORDER CERTIFICATE:** THIS MAP WAS FILED FOR RECORD IN THE OFFICE OF THE COUNTY CLERK AND RECORDER OF ADAMS COUNTY. .M. THIS \_\_\_ O'CLOCK, \_\_\_\_ COLORADO, AT RECEPTION NUMBER ADAMS COUNTY CLERK AND RECORDER

## **BENNETT CROSSING OUTLINE DEVELOPMENT PLAN AMENDMENT NO. 1**

#### **ZONE DISTRICT PLAN**

## LEGENI

- Planning Area Land Use Designation

Open Space Planning Area Open Space Designation

#### **TABLE OF CONTENTS**

Zone District Plan

DEPUTY

Sheets 2-5: Development Standards and Guidlines

Land Use Matrix Tables Sheet 6:

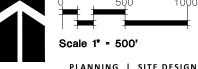
Gayeski Capital Equitities, LLC 905 W. 124th Avenue, Suite 200 303-457-9700

PLANNER / LANDSCAPE ARCHITECT Plan West Inc. 767 Santa Fe Drive 303-741-1411

job no. **2014/14** date 01-11-2022 revisions

Jansen Strawn Consulting Engineers 45 W. 2nd Avenue **Denver. CO 80223** 

sheet 1 of 6







## **BENNETT CROSSING**

A parcel in the W 1/2 of Section 34, Township 3 South, Range 63 west of the 6th Principal Meridian,
Town of Bennett, County of Adams, State of Colorado

# **BENNETT CROSSING**Planned Development

OUTLINE DEVELOPMENT PLAN

#### INTRODUCTION

#### Overview

The Bennett Crossing property comprises the eastern side of the Town's Front Door along SH 79 from I-70. When fully developed, the 292 acre Bennett Crossing property will have a positive impact on the Town's environment and economic stability. Principles and goals for the long-term sustainable growth of the town are based on Bennett maintaining a small-town, rural character. While specific details pertaining to the *rural character* are not defined, the Bennett Crossing PD represents a strong commitment to the following general principles for the future growth of the Town:

- 1. Create a comfortable, pedestrian environment to reinforce a healthy resident population.
- 2. Provide the opportunity for alternative housing types to serve a diverse population of current and future residents.
- 3. Continue to attract commercial and retail uses and developments generated by the traffic on Interstate 70.
- 4. Promote development that will offer additional goods, services, and employment opportunities for the residents of Bennett and the region.

#### Intent

Building on the historic *Kiowa Crossing*, the railroad crossing of the Kiowa Creek, Bennett Crossing is planned to create the crossing, or transition, from interstate influences to the small town, rural character of Bennett. The Planned Development zoning is intended to provide the opportunity for development of highway retail and commercial uses along with small town living. The commercial uses and services are intended to financially benefit residents of Bennett that would not otherwise be sustainable without the regional influences from I-70 and SH 79.

The Bennett Crossing ODP maximizes a synergistic relationship of well-coordinated land uses between Planning Areas. Similar planning areas are located adjacent to land uses with complementary services and complementary markets. Commercial/retail uses will capitalize on their proximity to I-70. The new residential neighborhoods are planned to be an extension of the Town's existing residential community.

The regional trail network is connected through Bennett Crossing with links to the existing trail to the northwest and future connections to the southeast. Bennett Crossing will provide direct and easy access to the perimeter regional trails system. The connections will help integrate the future commercial, retail and residential development into the expanding Town of Bennett.

#### Planned Development Zoning

The Bennett Crossing Planned Development (PD) is intended to provide the framework for mixed use development in support of the Town's goals for sustainable growth. The Bennett Crossing PD includes a mix of residential, retail, office, commercial, and light industrial uses along with trails and open space. The wide range of proposed uses will combine employment opportunities, services and housing while striving to preserve the rural lifestyle and setting. The Bennett Crossing PD provides Development Standards that will assure maximum flexibility and promote innovative development to help enhance the character and quality of the Town of Bennett, while respecting the provisions of the Town's new zoning ordinance.

The intent of this Development Guide is to establish specific criteria for the comprehensive development and improvement of the property. The standards will help guide the development in an orderly manner to provide the residents of Bennett a comfortable place to live, work, play, and shop.

The Bennett Crossing Planned Development is intended to be compatible with the **Town of Bennett Comprehensive Plan**. As a result, this document has incorporated the Comprehensive Plan guiding principles as core values, including the following:

- Develop town and neighborhood centers with mixed land use and greater land density to shorten distances between homes, workplaces, schools, shopping, places of worship, cultural facilities, and recreation and social activities.
- Design new developments in a manner to blend with the rural setting and preserve natural features and areas designated for agricultural production.
  Ensure that affordable housing and access to healthy living is available for people of all
- ages and income levels.
  Offer access to open space, trails and parks to provide more opportunities for walking, biking, recreation, and contact with nature.
- Foster a distinctive, attractive community that retains our young people to support future community governance.
- Preserve open space, farmland, and areas that have environmental significance to the region.
   New development should be contiguous or nearly so to existing infrastructure and
- New development should be contiguous, or nearly so, to existing infrastructure and services.
- Provide a variety of transportation choices including bicycle trails; sidewalks; and mass transit to reduce the dependence upon automobiles; and create streets that are safe for use by automobiles, pedestrians, and bicyclists.

#### LAND USE PLANNING OVERVIEW

#### **Overall Development Program**

The purpose of the Bennett Crossing Outline Development Plan and Guidelines is to establish standards for the comprehensive development and improvement of the property. The guidelines and standards contained in this Outline Development Plan are intended to establish the criteria that will carry out the goals of this planned development. They are also intended to ensure a long-term, unified, high-quality community for the Town, its residents and all users.

The proposed design concept for the Bennett Crossing PD incorporates the preferred realignment of Colorado State Highway 79 described as the preferred alternative in the SH 79 and Kiowa-Bennett Corridor PEL Study (November 2013) and proposes a general network of internal roadways that divide the property into a series of planning areas. These planning areas represent the proposed zoning that is described in this Development Guide, including the permitted uses and lot and building standards. The proposed internal roads illustrated in this document are designed using the current Town of Bennett road standards. The existing two

access easements to the two residences east of the property will be maintained throughout development. All development will be subject to the Final Development Plan (FDP) process as detailed in the Zoning section of the Town of Bennett Municipal Code, as amended.

#### **Residential Development**

Planning Areas 1 through 5 are planned primarily as an extension of the existing residential neighborhoods in the Town of Bennett. A variety of residential types will provide the opportunity for diverse housing in the Town. The opportunity for mixed density housing is intended to serve the current and future demand for comfortable places to live in Bennett. Limited commercial and retail uses in the residential planning areas are intended to be of a complementary scale that will serve the Town and regional resident population. Pedestrian friendly neighborhoods will be created with main entries and front doors of residential homes and buildings along local streets, parking lots will be a complementary scale to the proposed development and dispersed throughout as needed. Sidewalks will connect neighbors with the adjacent and surrounding goods, services, employment opportunities, civic centers, and neighbors. Vehicular and pedestrian connections to the existing infrastructure and the regional trails system will help make the new residential developments in Bennett Crossing become an integral extension of the existing town.

Specific development guidelines with development and design criteria are part of each specific planning area

#### Retail, Commercial, and Industrial

Planning Areas 7 through 10 are intended to maximize the benefit of the following:

- 1) Visibility from Interstate 70 frontage
- 2) Direct access to and from I-70
- 3) Proposed improvements to State Highway 79.

The highway-generated commercial, light industrial and retail uses will provide goods and services to the residents of Bennett and the region. Many of the proposed and anticipated uses would not be supported with the limited local residential populations. Land uses that support an expanded employment base are included to help build diverse and sustainable development for the Bennett community. A wide range of uses are proposed to help attract mixed use development that will benefit from synergistic and complementary markets, needs, and services

Pedestrian connections to the town and regional trails will link the commercial and retail development to the existing town. Easy, unimpaired access and parking are essential components of successful highway-oriented commercial development. Streets, parking lots, and service areas should be designed to support a variety of vehicle types.

Building and development along I-70, SH 79, and Marketplace Drive should present an attractive design and image as the gateway into the Town of Bennett. Service, storage, and parking should be screened to present attractive development character.

Specific Development Guidelines and Standards are part of each specific planning area and are contained in this ODP-PD Development Standards and Guidelines.

#### **SITE ANALYSIS**

#### **Existing Conditions**

The 292.62 Acres that make up the Bennett Crossing PD is the combination of three parcels (PPI# 0181534200007, 0181500003001, 0181534300001). The legal descriptions for each are included on the ODP Map. The property includes the following zoning districts per the Official Zoning Map (Ordinance No. 647-14) - Low Density Residential (R1), High Density Residential (R3), and Commercial (C). There is currently one residence on the property with access along a dirt drive from SH-79. Two access easements serve the two residences located to the east of the property. Access to these residences will remain. The dilapidated remains of an old farm compound is located in the south east edge of the site. Historical records of the farmstead have not been identified.

#### **Historic and Archeological Resources**

Per the <u>SH 79 and Kiowa-Bennett Corridor PEL Study</u> (November 2013), there are no significant historic or archeological resources within the boundary of the Bennett Crossing property.

#### **Environmentally Significant Areas**

Kiowa Creek passes to the east of the Bennett Crossing PD, with the limit of the FEMA Floodway just east of the property boundary. Per the <u>SH 79 and Kiowa-Bennett Corridor PEL Study</u> (November 2013), there are no environmentally significant areas associated with the Bennett Crossing property, including floodplain, wetlands, wildlife migration routes and sensitive vegetation.

### GENERAL CONDITIONS

#### Planning Area Boundaries

The boundaries and acreage of all Planning Areas within the Bennett Crossing PD Development are shown on the Development Plan. Changes in the boundaries and area of Planning Areas shall be permitted as follows:

The size of any Planning Area may increase or decrease by administrative amendment for no more than 10% as determined by the Town's Zoning Administrator after final determination of: internal street alignments, arterial street alignments, 100-year floodplain boundary, park and open space and buffer zone areas. The final boundary of any Planning Area will be established when the final plat is prepared for that area.

Amendments to planning areas shall be subject to the Town of Bennett Municipal Code, as amended.

#### Schedule of Development, Proposed Phasing and Vesting

Commercial and residential development as represented in the Bennett Crossing PD Development Plan are anticipated to be phased over numerous years based on market demands. Vested property rights of the Bennett Crossing ODP shall occur with the approval of a site specific Final Development Plan (FDP) for any part of the Bennett Crossing ODP as outlined in the Bennett Land Use Code, Article I, Division 5, and Vested Property Rights.

#### Special Financing Districts

It is anticipated that the development of Bennett Crossing will require the formation of Metropolitan District(s) to help finance the costs of new public infrastructure and certain ongoing maintenance costs where appropriate. Creation of the Metro Districts will be in accordance with the Colorado State Statutes and Town of Bennett regulations.

#### **DEFINITIONS**

All terms not specifically defined in the Bennett Crossing PD Development Plan, shall have the meanings ascribed to them as detailed in Article II, Zoning of the Town of Bennett Land Use Code, as amended, unless specifically noted below.

#### Flex Office

Flex Office allows a flexible land use for office, product research and development, the assembly and fabrication of goods and products, wholesale and retail sales, and warehousing for distribution of products in a storefront/office styled building. Flex Office assembly and fabrication is limited to goods produced with little if any noise, vibration, glare, and/or air and water pollution produced on the exterior of the buildings.

#### **Patio Home**

A single family detached or attached residential unit typically one story, constructed on a small lot with minimal building setbacks. Patio homes are usually designed around private outdoor living areas such as a deck, patio, or courtyard to maximize livable area and minimize outdoor maintenance. Patio Homes can be clustered around common car courts, private streets, alleys, or public streets. Outside areas available to the public may be included in a common area maintenance agreement.

#### ownhome

One and two story residential units of three or more dwelling units attached, side-by-side by a common wall or party wall. Where such a unit is located on a platted lot, the property line shall be the center of the common wall or party wall. The owner of a townhome unit may have an undivided interest in common areas and elements appurtenant to such units.

#### **END OF SECTION**

#### DEVELOPMENT STANDARDS and GUIDELINES

#### INTRODUCTION

Following are descriptions of the 10 Planning Areas including: An Intent Statement, Development Program, Land Uses, Standards (Quantitative) and Guidelines (Qualitative):

#### MAIN STREET COMMERCIAL DISTRICT ( MSC)

(Related to Town of Bennett Commercial District w/ Main Street Overlay) Planning Area 1

#### ntent

The Town of Bennett's Downtown Main Street Concept Plan outlines a desire to create a central gathering place and a sense of place that defines the Town. The Bennett Crossing Main Street District is intended to build on the recommendations outlined in the Downtown Planning Study and the Main Street Overlay District. The Main Street District in Bennett Crossing is located on the east side of South First Street from the proposed intersection of SH 79 and South First Street to just south of the Bennett Avenue (the Northwest limits of Bennett Crossing).

Development is intended to promote a strong pedestrian environment where structures are located at or near the right-of-way of South First Street where possible. Front doors, active facades and public spaces are intended to help frame the street and start to build an active pedestrian presence along South First Street. A vertical mix of retail, commercial, office, and residential uses are encouraged to promote pedestrian activity. Sidewalks are intended to connect new developments with the existing neighborhoods to provide a continuous pedestrian corridor in the Main Street District. The intent is to promote mixed uses to create a dynamic Main Street Character as a pedestrian active and friendly, central gathering place and inviting small town identity for the Town of Bennett. Vertical mixed use with retail and commercial uses on the first floor and residential on upper floor is encouraged but not required. Architecture is intended to complement the small town, rural character found in the existing historic buildings of Bennett.

#### **Development Program**

the commercial buildings

The development intent is to attract business that will benefit from the combination of local and regional residents as well as highway travelers that are looking for services in a small town setting. The Main Street character along South First Street, expected to be phased over time, should include the following where possible:

- 1. Front doors/facades located on or near the right-of-way to create a street edge,
- 2. Sidewalks that are continuous along South First Street in front of the buildings,
- 3. On-street parking along South First Street to promote convenient short term access to the adjacent commercial and retail business,
  4. Larger parking lots and service access are encouraged to be located in the rear of

The Main Street Commercial District is intended to utilize the recommendations outlined in the **2010 Town of Bennett Downtown Study** where possible. Infill development is planned to meet current and future market demand to provide goods and services to the Town and region. The intersection of South First Street and the realigned SH 79 is currently under review with the Town, CDOT, and adjacent property owners. A final design is expected to evolve over time. Prior to a final intersection design, Bennett Crossing will reserve property to accommodate a range of intersection configurations. Bennett Crossing will work with the Town to refine uniform details and phasing for South First Street that will meet market needs and create a uniform Main Street character for South First Street from SH 79 to E. Colfax Avenue.

#### **Land Uses Permitted in MSC**

Development Standards and Guidelines and other uses that are similar and compatible with the intent of this section as determined by the Zoning Administrator.

The permitted uses are listed in the Land Use Matrix -- Table 1-1 in the appendix of these

#### LOT AND BUILDING STANDARDS IN MSC-MAIN STREET COMMERCIAL-

The lot and building requirements are shown in the following table:

| STANDARDS                                 | MSC      |
|---|----------|
| Maximum Height (Principal Structure)      | 50 Ft    |
| (Accessory Structure)                     | 30 Ft    |
| Minimum Lot Area / Dwelling Unit          | NA       |
| Minimum Lot Width                         | NA       |
| Maximum Lot Coverage (Building & Parking) | 80%      |
| Minimum Floor Area / Dwelling Unit        | 500 Sf   |
| Maximum Density                           | 20 du/ac |

#### **SETBACKS**

| Min   | imum Setback       | from South First Street & SH 79 ROW ** | **                             |
|-------|--------------------|--|--------------------------------|
|       | Front Setback      | Principal Structure                    | 0 to 150 Ft *                  |
|       |                    | Accessory Structure                    | NA **                          |
|       | Side Setback       | Principal Structure                    | 0 to 10 Ft***                  |
|       |                    | Accessory Structure                    | NA **                          |
|       | Rear Setback       | Principal Structure                    | 15 Ft                          |
|       |                    | Accessory Structure                    | 5 Ft                           |
| All E | Buildings setback  | s from SH 79                           | 20 Ft                          |
| Parl  | king Lot setback f | rom S. First Street & SH 79            | 10 feet with landscaped buffer |

#### Notes -- See setback figures in the appendix

| * | Principal Structures are encouraged to be located at the ROW or set back up to a 10' to encourage sidewalk cafés, or other pedestrian plazas when S. First Street is constructed with curb, gutter, and sidewalks by the Town. Parking may be allowed in a front setback if required by the business operations. Front setback parking may include four rows of parking in a 150 foot setback with appropriate screening, landscaping, and pedestrian connections to adjacent commercial development along South First Street. See exhibits in the appendix.   |
|---|--|
|   | Country and Countr |

- \*\* Accessory structures are not permitted along South First Street
- \* Side setback may be 0 feet if a shared wall or shared use. Reduced side yard requirements to maximize development potential
- South First Street and State Highway 79 are the same in Planning Area 1 until SH 79 is relocated and constructed. The conditions and standard remain the same for S. First Street and SH79.

#### **DEVELOPMENT GUIDELINES**

#### Connectivity

- Development in the Main Street District shall provide sidewalks along the entire frontage of the development.
- Each development shall extend the walk to the edge of their property or include an easement for a future connections.
  Connections to existing properties located in the Main Street District shall make every
- effort to connect to the existing pedestrian sidewalks.

## Walks shall be connected to the walks along South First Street.

# BENNETT CROSSING OUTLINE DEVELPMENT PLAN AMENDMENT NO. 1

#### **DEVELOPMENT STANDARDS AND GUIDLINES**

Gayeski Capital Equitities, LLC 905 W. 124th Avenue, Suite 200 Westminster, CO 80234

PLANNER / LANDSCAPE ARCHITECT
C Plan West Inc.
10 767 Santa Fe Drive
Denver, CO 80204

job no. **2014/14** date 01-11-2022 revisions

ENGINEER

Jansen Strawn Consulting Engineers
45 W. 2nd Avenue
Denver, CO 80223
303-561-3333

sheet 2 of 6



## BENNETT CROSSING

A parcel in the W 1/2 of Section 34, Township 3 South, Range 63 west of the 6th Principal Meridian, Town of Bennett, County of Adams, State of Colorado

#### **Building Orientation and Site Design**

- All buildings will be articulated on all four sides with attention to materials, entrances, window patterns and detailing.
- Building Front doors/facades shall be oriented toward South First Street.
- Outdoor cafés and dining area are encouraged but not required.
- First floor retail and upper floor commercial or residential is encouraged but not required.
- Service shall be from the rear along alleys where possible.
- Trash collection shall be screened and accessed from the rear, away from South First Street.
- On-street parking shall be planned along South First Street in conjunction with the redevelopment of South First Street improvements by the Town.

#### **END OF SECTION**

#### HIGH DENSITY RESIDENTIAL DISTRICT (HDR)

Planning Areas 2, 3, and 4

#### Intent

Located just south of the existing development in the Town of Bennett, planning areas 2 and 3 are intended to be an extension of the Town's central residential neighborhoods. Planning Area 4 is centrally located in Bennett Crossing. Located south of the proposed SH 79 realignment medium density residential to the east, mixed use to the west and commercial to the south, PA 4 will benefit from convenient proximity to Town, future Main Street commercial along South First Street, the highway commercial and access to I-70. The intent of PA 2, 3, and 4 is to provide the opportunity for housing as an integral part of the expanding housing base for current and future residents of Bennett. A number of housing types are proposed to provide the opportunity for a place to live in Town at a reasonable cost to meet a diverse and growing demographic in Bennett. The residential neighborhoods in Bennett Crossing will be convenient to retail goods, parks, civic services, and employment that will support responsible growth within the small town, rural character of Bennett.

#### **Development Program**

The design intent is to create safe, pedestrian oriented residential neighborhoods with the opportunity for higher density. Building orientation should face front doors to the public streets to reinforce the pedestrian environment. Walks need to connect the users with the surrounding services. Private streets and parking lots, when used, should be dispersed throughout the neighborhood development to reinforce the pedestrian scale. Parking should be connected to the residential and non-residential uses with walks. Appropriate landscaping should reinforce the pedestrian and neighborhood rural character. Parks, outdoor picnic areas, tot-lots and other outdoor living areas shall be provided as community gathering places for the residents and their guests within Planning Areas 2, 3 and 4 in accordance with Town of Bennett requirements, as attractive, safe, and inviting components of the new Bennett Crossing residential community.

The Bennett Crossing HDR zoning will permit a range of development styles, and lot sizes. Residential development can include single-family detached, two-family, patio homes, townhomes, and multi-family residential uses.

#### Land Uses Permitted in High Density Residential - HDR District

The permitted uses are as listed in the Land Use Matrix -- Table 1-1 in the appendix of these development standards and other uses that are similar and compatible with the intent of this section as determined by the Zoning Administrator:

- Mobile Home Parks are allowed as a conditional use subject to the Town's rules and regulations for mobile home parks.
- Concrete or asphalt construction production is permitted with a temporary use permit in accordance with the Town of Bennett municipal code and subject to a specific project, stipulated time limit, proximity to adjacent development and an approved site plan.

## LOT AND BUILDING STANDARDS FOR THE HDR-HIGH DENSITY RESIDENTIAL DISTRICT

The lot and building requirements are contained in the following table:

| STANDARDS                                   | HDR  |
|---|--|
| Maximum Height (Principal Structure)        | 40 Ft  |
| (Accessory Structure)                       | 18 Ft  |
| Minimum Lot Area / Dwelling Unit            | 2,400 SF for SFD<br>N/A for other<br>residential |
| Minimum Lot Width                           | 40 Ft for SFD<br>None for other<br>residential   |
| Maximum Lot Coverage (Building and Parking) | 75%  |
| Minimum Floor Area / Dwelling Unit          | 600 SF   |
| Density Maximum                             | 20 du per acre                                   |

#### SETBACKS

|                               | a a   |                                    |
|-------------------------------|---|------------------------------------|
| Minimum Building and Parking  | Setback from SH79   |                                    |
| All building setbacks fi      | rom SH 79 – Front, Side, and Rear                             | 20 Ft                              |
| Parking lot setbacks          |   | 10 foot with<br>landscaped buffer* |
| Minimum Setbacks from interio | or lot lines and local street ROW                             |                                    |
| Front Setback                 | Principal Structure   | 10 Ft                              |
|                               | Accessory Structure   | 20 Ft                              |
| Garage Setback                | From face of garage door to edge of sidewalk along any street | 20 Ft                              |
| Side Setback                  | Principal Structure   | 5 Ft                               |
|                               | Accessory Structure   | 0 Ft/5 Ft *                        |
| Rear Setback                  | Principal Structure   | 15 Ft                              |
|                               | Accessory Structure   | 0 Ft/5 Ft *                        |
| Garage alley                  | Setback from garage door to paved edge of an alley            | 6 Ft                               |
| Parking Lot from the Street   |   | 6' with landscaped buffer          |

#### Minimum Setbacks from Residential Collectors Principal Structure w/ alley loaded Front Setback 10 Ft **Accessory Structures** 20 Ft Garage Setback No garages along Residential N/A collectors Principal Structure 5 Ft Side Setback 10 Ft Accessory Structure Principal Structure 20 Ft Rear Setback Minimum Setback from SH 79 All Buildings setbacks from SH 79 20 Ft Parking lots 6 feet with landscaped buffer

#### Notes -- See setback figures in the appendix

- O foot setback provided there are no openings in the side facing the adjacent lot, otherwise a 5' side setback is required

  Alleys, when used, are required to be a minimum of 18' wide. The minimum distance from the garage door shall be between is 2' to 6' to provide adequate room to maneuver and to discourage parallel parking in the alley that may block traffic.
- \*\* Parking lots are required to be screened to obstruct the view of cars and lots from SH 79. See parking lot screening in setback figures.

#### **DEVELOPMENT GUIDELINES**

#### Connectivity

- Residential neighborhoods in Planning Areas 2, 3, and 4 should provide sidewalks through the neighborhoods.
- Residential neighborhoods in Planning Areas 2 and 3 should connect to the adjacent streets in the Town and adjacent developments with at least one location for a future vehicular and pedestrian connection to E. Colfax Avenue. The connection to be provided at the time of development of the adjacent property.
- Provide trail or walk connections to regional trails in and adjacent to Bennett Crossing.

#### Building Orientation and Site Design

- All buildings will be articulated on all four sides with attention to materials, entrances, window patterns and detailing.
- Front doors/facades of houses should be oriented toward public streets, public courtyards, or open space.
- Multifamily buildings should have at least one façade facing the public street or open space with a pedestrian entry/front doors.
- Multifamily main entries should be oriented toward shared courtyards and common area.
- Parks/playgrounds/tot lots should be strategically located within each neighborhood.
  Alleys are encouraged to create pedestrian-friendly streetscapes but not required.
- Surface parking lots for multi-family residential should be dispersed throughout the development and connected to the residential units with walks. Avoid large, uninterrupted parking lots.
- Parking lots for multi-family residential building types should be designed to provide a landscape island for every continuous10 spaces.

**END OF SECTION** 

#### MEDIUM DENSITY RESIDENTIAL DISTRICT (MDR)

Planning Area 5

#### ntent

Perched above the Kiowa Creek floodplain, the Medium Density Residential District of Bennett Crossing, Planning Area 5, allows single-family detached, two-family, patio homes, and townhome dwelling units in a variety of home styles and lot sizes for current and future residents of Bennett. The housing is intended to meet the need for home ownership to a growing small town community. The intent is to create a medium density residential neighborhood that is in close proximity to existing services in the Town of Bennett.

#### **Development Program**

The design intent is to create safe, pedestrian oriented residential neighborhoods. Walks and trails should be connected to regional trails and provide convenient connection to the Town, South First Street retail/commercial, school campus, recreation centers, existing and future retail and commercial services. The open space and flood plain along Kiowa Creek should be recognized and utilized as a visual amenity. Interior streets should be designed as local streets with homes and front doors facing the street. Alley loaded neighborhood design is encouraged but not required. Parks, outdoor picnic areas, tot-lots and other outdoor living areas shall be provided as community gathering places for the residents and their guests within Planning Area 5, in accordance with the Town of Bennett requirements, as attractive, safe and inviting components of the new Bennett Crossing residential community.

#### Land Uses Permitted in MDR - Medium Density Residential

The permitted uses are contained in the Land Use Matrix -- Table 1-1 in the appendix of these Development Standards and other uses that are similar and compatible with the intent of this section as determined by the Zoning Administrator:

- Mobile Home Parks are allowed as a conditional use subject to the Town's rules and regulations for mobile home parks.
- Concrete or asphalt construction production is permitted with a temporary use permit in accordance with the Town's procedures for temporary uses.

#### Lot and Building Standards in MDR-Medium Density Residential District

The lot and building requirements are contained in the following table:

| STANDARDS          |                             | MDR            |
|--------------------|-----------------------------|----------------|
| Maximum Height     | (Principal Structure)       | 35 Ft          |
|                    | (Accessory Structure)       | 18 Ft          |
| Minimum Lot Area / | Dwelling Unit               | 3,500 SF       |
| Minimum Lot Width  |                             | 25 Ft          |
| Maximum Lot Cove   | rage (Building and Parking) | 70%            |
| Minimum Floor Area | a / Dwelling Unit           | 800 SF         |
| Density – Maximum  |                             | 12 du per acre |

#### SETBACKS -- MDR

|          | Front Setback        | Principal Structure                                | 10 F1            |
|----------|----------------------|--|------------------|
|          | 1 TOTAL SELDACK      | '  |                  |
|          |                      | Accessory Structure                                | 10 F             |
|          | Garage               | From face of garage door to inside                 |                  |
|          | Setback              | edge of sidewalk                                   | 20 F             |
|          | Side Setback         | Principal Structure                                | 5 F              |
|          |                      | Accessory Structure                                | 0 Ft/5 Ft        |
|          | Rear Setback         | Principal Structure                                | 10 F             |
|          |                      | Accessory Structure                                | 0 Ft/5 Ft        |
|          | Garage alley         | Setback from garage door to paved edge of an alley | 2' -6 F          |
| Minim    | num Setback fror     | m SH 79  |                  |
| All Buil | ldings setbacks fror | m SH 79  | 20 F             |
| Parkin   | a Lot                |  | 6 feet with      |
| i andin  | 9 =01                |  | landscaped buffe |

#### Notes -- See setback figures in the appendix

| * | 0 foot setback provided there are no openings in the side facing the adjacent lot, otherwise a 5' side setback is required |
|---|--|
|   | Alleys are required to be a minimum of 18' wide. The distance from the garage  |
|   | door shall be between 2' to 6' to discourage parallel parking in the alley that may  |
|   | block through traffic.   |

#### **DEVELOPMENT GUIDELINES**

#### Connectivity

- Residential neighborhoods in Planning Area 5 should provide sidewalks through the neighborhood.
- Planning Area 5 should connect to the adjacent developments at major intersections and regional trails in Bennett Crossing.

#### **Building Orientation and Site Design**

- Front doors/facades of houses should be oriented toward public streets, public courtvards, or open space.
- A view of the Kiowa Creek should be provided from at least one public vantage point or public open space in the neighborhood
- Parks/playgrounds/tot lots should be strategically located within each Neighborhood.
- Surface parking lots for townhomes should be kept to a minimum. Parking should be within garages or carports as part of the lot development. Guest parking should be provided by on-street parking.
- Parking lots for townhome residential building types should be designed to provide a landscape island for every 10 spaces.
- Internal Streets should be designed to accommodate on-street parking.
- Alleys are encouraged to create pedestrian friendly streetscape but not required.

**END OF SECTION** 

# BENNETT CROSSING OUTLINE DEVELPMENT PLAN AMENDMENT NO. 1

#### DEVELOPMENT STANDARDS AND GUIDLINES

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PLANNER / LANDSCAPE ARCHITECT

Plan West Inc.

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colorado

date 01-11-2022 revisions

ENGINEER

Jansen Strawn Consulting Engineers
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sheet 3 of 6



## **BENNETT CROSSING**

A parcel in the W 1/2 of Section 34, Township 3 South, Range 63 west of the 6th Principal Meridian, Town of Bennett, County of Adams, State of Colorado

#### MIXED USE DISTRICT (MU)

Planning Area 6

#### Intent

Planning Area 6 in Bennett Crossing is strategically located at the future intersection of the relocated State Highway 79 and the Town of Bennett's planned Main Street District along S. South First Street. This intersection is planned to be the gateway intersection into the Town. Located about halfway between State Highway 79 and Colfax Avenue, Planning Area 6 has the potential to attract commercial, office and retail users as well as medium to high density attached housing. The relocation of State Highway 79, as a long-term improvement, requires flexible land use planning for this critical planning area. The mixed use planning and development guidelines define the framework on how supporting uses can be combined to help assure the financial success of the development as a critical gateway into the Town of Bennett.

#### **DEVELOPMENT PROGRAM**

The design intent is to promote development with an attractive image at this prominent intersection into the Town of Bennett. Uses may be commercial, retail, or residential. The development program is to create a pedestrian friendly environment that will be visually and physically connected to the surrounding developments. Development should capitalize on the high visibility with architecture that is complementary to the Town of Bennett and the direct easy access to Town and I-70. Sidewalks will connect to the adjacent developments and regional trail systems. Horizontal and vertical mixed use development is encouraged but not

#### **Residential and Commercial Mixed Use**

If residential land uses are developed in the Mixed Use planning area, support retail, commercial and services will be limited to principal uses that are compatible with the residential neighborhood. If residential uses are not developed in a mixed use planning area, a list of additional permitted uses and the design standards for non-residential uses apply.

#### **Residential Land Uses**

The residential land use pattern should incorporate a traditional design theme that creates pedestrian-friendly streets and public outdoor spaces. Parking areas should be dispersed to promote a vibrant pedestrian neighborhood character. Building frontages are encouraged to be street oriented to promote a pedestrian friendly environment and activate the neighborhood

#### Commercial Land Uses in support of Residential Development

Where commercial development and residential uses are combined, the commercial and residential uses may be located in the same building or on adjacent lots. First-floor retail with upper floor residential or office is permitted and encouraged but not required. The intent is to create the opportunity to develop a sustainable, active neighborhood where the commercial uses provide products, services, and employment opportunities to the residential community and the residential uses provide consumers and employees to the commercial uses.

#### Land Uses In MU Mixed Use Planning Area

The permitted uses are listed in the Land Use Matrix -- Table 1-1 in the appendix of these development standards and other uses that are similar and compatible with the intent of this section as determined by the Zoning Administrator:

#### Lot and Building Standards

The lot and building requirements for commercial, retail and residential uses are contained in the following table: See setback figures in the appendix

| STANDARDS-COMMERCIAL & RETAIL              | USES MU   |
|--|-----------|
| Maximum Height (Principal Structure)       | 50 Ft     |
| (Accessory Structure)                      | 30 F      |
| Minimum Lot Area / Dwelling Unit           | NA        |
| Minimum Lot Width                          | NA        |
| Maximum Lot Coverage (Building and Parking | g) 75%    |
| Maximum Floor Area Ratio- Commercial       | 0.50:1.00 |
| Maximum Floor Area Ratio – Industrial      | 0.30:1.00 |
| Maximum Floor Area Ratio – Industrial      |           |

#### SETBACKS - COMMERCIAL AND RETAIL USES

Minimum Setback on interior lot lines and local street ROW

|    | Front Setback     | Principal Structure          | 10 Ft                  |
|----|-------------------|------------------------------|------------------------|
|    |                   | Accessory Structure          | 15 Ft                  |
|    | Side Setback      | Principal Structure          | 10 Ft                  |
|    |                   | Accessory Structure          | 5 Ft                   |
|    | Rear Setback      | Principal Structure          | 15 Ft                  |
|    |                   | Accessory Structure          | 5 Ft                   |
|    | Parking           | Subject to buffer and screen | 6 Ft*                  |
| *  | See Parking lot   | screen details               |                        |
| Mi | nimum Setback fr  | om SH79                      |                        |
|    | All buildings set | backs- Front, Side and Rear  | 20 Ft                  |
|    | Parking Lots      |                              | 6 feet with landscaped |
|    | J J               |                              | buffer                 |
| Sī | TANDARDS - RI     | ESIDENTIAL                   | MU                     |
| Ma | aximum Height     | (Principal Structure)        | 40 Ft                  |
|    |                   | (Accessory Structure)        | 18 Ft                  |
| Mi | nimum Lot Area /  | Dwelling Unit                | NA                     |
| Mi | nimum Lot Width   |                              | NA                     |
| Ma | aximum Density (I | DU/Acre)                     | 20 DU/AC               |
| Ma | aximum Lot Cover  | age (Building and Parking    | 75%                    |
| De | ensity – Maximum  |                              | 20 du per acre         |
|    |                   |                              |                        |

#### SETBACKS - RESIDENTIAL

|       |                    | 0_1_10110 11_012_111111                |                               |
|-------|--------------------|--|-------------------------------|
| Minin | num Setback on ir  | nterior lot lines and local street ROW |                               |
|       | Front Setback      | Principal Structure                    | 10 Ft                         |
|       |                    | Accessory Structure                    | 10 Ft                         |
|       |                    | Garage Door Face to sidewalk           | NA                            |
|       | Side Setback       | Principal Structure                    | 10 Ft                         |
|       |                    | Accessory Structure                    | 5 Ft                          |
|       | Rear Setback       | Principal Structure                    | 10 Ft                         |
|       |                    | Accessory Structure                    | 5 Ft                          |
|       | Parking            | Subject to buffer and screen           | 6 Ft*                         |
| *     | See Parking lot    | screen details                         | -                             |
| Minin | num Setback from   | SH79                                   |                               |
|       | All buildings sett | packs- Front, Side and Rear            | 20 Ft                         |
|       | Parking Lots       |  | 6 feet with landscaped buffer |

#### **DEVELOPMENT GUIDELINES**

#### Connectivity

- Retail, commercial, and residential uses should provide pedestrian connections to allow visitors and users to walk between the various developments.
- Regional Trail connections shall be provided along the south edge of Planning Area 6.

#### **Building Orientation and Site Design**

- All buildings will be articulated on all four sides with attention to materials, entrances, window patterns and detailing.
- Sidewalks in front of in-line commercial should be a minimum of 10 feet wide to provide a comfortable and adequate pedestrian environment.
- Shared parking is encouraged to maximize density and efficiency and reduce total
- Parking, loading docks, and trash collection should be screened from prominent views to maximize an attractive image along SH 79.

#### **END OF SECTION**

#### **BUSINESS COMMERCIAL DISTRICT (BC)**

Planning Area 7

The signalized intersection of Highway 79 and Marketplace Drive will become the commercial gateway into the Town of Bennett from I-70. King Soopers and Love's Truck Stop defines the highway commercial to the west. Planning Area 7 in Bennett Crossing will add supporting commercial and retail to the east and become the primary access to the future I-70 highway commercial uses. The PA 7 Business Commercial District provides the opportunity to attract a variety of small to mid-sized retail, commercial, office, and service uses that will attract additional traffic from I-70, expanding the services provided to the current visitors. A broader base of uses will provide additional products and services to the residents of Bennett that will position Bennett as a premier small town destination on the eastern plains of Colorado. Bennett Crossing will work with the Town of Bennett and the adjacent commercial and retail developments to help create a unified and recognized gateway at this intersection.

#### **Development Program**

Creative site planning and design will help define an attractive commercial image and character at the entry to the Town of Bennett. Site planning in the Business Commercial Planning Area 7 should orient primary architectural facades toward State Highway 79 and along Marketplace Drive. The commercial and retail users shall maintain a high level of visibility from SH 79, offer simple, safe vehicular access and circulation patterns to the one time visitor stopping from I-70 as well as the local and regional residents on a standard shopping trip. Site design shall encourage a pedestrian environment within each development and safe and attractive pedestrian connections between the adjacent developments in Bennett Crossing and the Town

#### Land Uses Permitted in BC

The permitted uses are contained in the Land Use Matrix -- Table 1-1 in the Appendix of these development standards and other uses that are similar and compatible with the intent of this section as determined by the Zoning Administrator:

### Lot and Building Standards in BC - Business Commercial District

The lot and building requirements are contained in the following table.

| STANDARDS                                   | ВС        |
|---|-----------|
| Maximum Height (Principal Structure)        | 50 Ft     |
| (Accessory Structure)                       | 30 Ft     |
| Minimum Lot Area                            | NA        |
| Minimum Lot Width                           | NA        |
| Maximum Lot Coverage (Building and Parking) | 80%       |
| Maximum F.A.R                               | 0.50:1.00 |

#### **SETBACKS BUSINESS COMMERCIAL**

| n Setback on interior lot lines and loca | I street ROW  |
|--|---|
| Principal Structure                      | 5 F1  |
| Accessory Structure                      | 10 Ft   |
| Principal Structure                      | 0 for shared PL   |
| k  | or 10 Ft  |
| Accessory Structure                      | 5 F1  |
| Principal Structure                      | 20 Ft   |
| Accessory Structure                      | 20 Ft   |
| Lots                                     | 6 feet with landscape   |
|  | buffer  |
| Setback from SH 79                       | ,   |
| gs                                       | 20 Ft.  |
| ots                                      | 6 feet with   |
|  | landscaped buffer   |
|  | Accessory Structure Principal Structure  k  Accessory Structure Principal Structure Accessory Structure accessory Structure Structure Accessory Structure Structure Structure Structure Structure Structure Structure Structure |

#### See setback figures in the appendix

**DEVELOPMENT GUIDELINES** 

- Individual retail and commercial uses should provide pedestrian connections to allow
- patrons the opportunity to walk between the buildings and developments. Connections should be provided to the regional trail.

#### **Building Orientation and Site Design**

- All buildings will be articulated on all four sides with attention to materials, entrances, window patterns and detailing.
- Building Front doors/facades should have a strong architectural orientation toward SH
- 79 and Marketplace Drive . Sidewalks in front of in-line commercial should be a minimum of 8 feet wide to provide
- a comfortable pedestrian environment • Shared parking is encouraged to maximize density and efficiency and reduce total
- parking spaces required.
- Outdoor dining areas are encouraged but not required.
- Truck loading and service areas should be screened from prominent views to maximize an attractive image along SH 79 and Marketplace Drive. The edge along SH 79 will include a unified landscape design as an introduction to the Town.

#### **END OF SECTION**

#### HIGHWAY COMMERCIAL (HC)

Planning Areas 8, 9 and 10

The Highway Commercial Planning Areas are intended to complement and build on the existing highway retail development located to the west of State Highway 79. The intent is to include flexible development parcels that can meet the needs of medium to large format users. Land uses include commercial services, retail outlets, light industrial manufacturing/assembly and distribution that will build a synergistic development campus on the I-70 corridor. Development of the Highway Commercial Planning Areas is intended to provide a long-term employment base in the Town while providing services and products to the residents and the long distance interstate traveler.

The visibility and direct access from I-70 and the SH-79 interchange will attract a variety of potential users and developments. The intent is to promote the combination of retail and commercial uses with some limited industrial uses to the regional market and I-70 long distance commuters, while creating an employment base for the residents of Bennett. The location on the I-70 corridor is expected to provide convenient access for the distribution of products and services to the region.

#### **Development Program**

The development program is to provide flexible development opportunities with easy access, circulation, and parking for a cross section of motorized vehicles that includes automobiles, trucks, recreational vehicles, trailers in tow, and others. The program is to provide clear and easy access to a broad market in a comfortable, well organized site development. Pedestrian connections to the adjacent Planning Areas and developments will help promote synergistic commercial development for the diversified user and help assure the development as a longterm asset to the Town.

#### Land Uses Permitted in HC-Highway Commercial District

The permitted uses are contained in the Land Use Matrix -- Table 1-1 in the appendix of these development standards and other uses that are similar and compatible with the intent of this section as determined by the Zoning Administrator:

#### Lot and Building Standards in HC-Highway Commercial

The lot and building requirements are contained in the following table:

| STANDARD   | НС                         |
|--|----------------------------|
| Maximum Height (Principal Structure)                           | 60 F                       |
| (Accessory Structure)  | 30 F                       |
| Minimum Lot Area   | NA                         |
| Minimum Lot Width  | N/A                        |
| Maximum Lot Coverage (Buildings and Parking)                   | 80%                        |
| Maximum FAR (Commercial)                                       | 0.5:1.00                   |
| Maximum FAR (Light Industrial)                                 | 0.3:1.00                   |
| The existing home along the eastern ridge will be permitted to | remain as a non-conforming |
| use  |                            |

#### **SETBACKS**

| Front               | Principal Structure                          | 20 Ft |
|---------------------|--|-------|
|                     | Accessory Structure                          | 10 Ft |
| Side                | Principal Structure                          | 20 Ft |
|                     | Accessory Structure                          | 10 Ft |
| Rear                | Principal Structure                          | 20 Ft |
|                     | Accessory Structure                          | 5 Ft  |
| Parking lot setback | With landscaped screen from I-70             | 10 Ft |
| Minimum Setba       | ack on interior lots and local street ROW    | 1     |
| Front               | Principal Structure                          | 20 Ft |
|                     | Accessory Structure                          | 20 Ft |
| Side                | Principal Structure                          | 5 Ft  |
|                     | Accessory Structure                          | 5 Ft  |
| Rear                | Principal Structure                          | 20 Ft |
|                     | Accessory Structure                          | 20 Ft |
| Parking lot setback | With landscaped screen from adjacent street. | 6 Ft  |

#### **DEVELOPMENT GUIDELINES**

Minimum Setback from I-70

#### Connectivity

• Development in PA 8, 9 and 10 should provide pedestrian connections to the adjacent developments, regional trail and open space

#### **Building Orientation and Site Design**

- All buildings will be articulated on all four sides with attention to materials, entrances, window patterns and detailing.
- Building Front doors/facades should be oriented toward the adjacent public streets.
- Flex office should screen loading and service from view. Office and showroom should face the public street
- Loading docks, outdoor storage, and service areas should be screened from I-70, internal collector and interior streets with screening that matches or complements the
- Circulation should be designed with appropriate signage to separate automobiles from service and long-haul trucks where possible.

#### **END OF SECTION**

## **BENNETT CROSSING OUTLINE DEVELPMENT PLAN AMENDMENT NO. 1**

## **DEVELOPMENT STANDARDS AND GUIDLINES**

Gayeski Capital Equitities, LLC 905 W. 124th Avenue, Suite 200 tminster, CO 80234 303-457-9700

303-561-3333

Plan West Inc. 767 Santa Fe Drive

job no. **2014/14** date 01-11-2022

Jansen Strawn Consulting Engineer Denver, CO 80223





## **BENNETT CROSSING**

A parcel in the W 1/2 of Section 34, Township 3 South, Range 63 west of the 6th Principal Meridian, Town of Bennett, County of Adams, State of Colorado

#### **OPEN SPACE AND TRAILS (OS)**

Open space Planning Area

#### Intent

Open Space Areas are intended to provide buffers, passive recreation, pedestrian trails and drainage corridors to preserve the unique character of the site, provide an amenity to the Town, and satisfy the requirements of development.

#### **Development Program**

Open Space is intended to provide passive recreational amenities. Park development is planned to be by individual residential neighborhood development.

#### Land Uses Permitted in the Open Space – OS District

The following uses and other uses that are similar and compatible with the intent of this section as determined by the Zoning Administrator:

- trails and trailheads
- picnic area with shelters and passive recreational site furniture
- nature center
- open space, native and improved
- parking as an accessory use to other uses permitted in the OS District
- waterway, ponds, water quality and detention facilities
- wells and pump stations

#### Regional Trail

A regional trail will be provided through Bennett Crossing as illustrated on the Outline
Development Plan. The regional trail will connect to the Town's regional trail network
to the west of the recreation center on South First Street and the regional tail planned
for the Kiowa Creek open space. Actual alignment to be determined at the time of
development.

#### **DEVELOPMENT GUIDELINES**

Setbacks and development criteria to be determined during the site plan review associated with development

#### **END OF SECTION**

#### TOWN OF BENNETT MUNICIPAL CODE STANDARDS

The following Town standards, as amended, apply as noted. Additional design guidelines as adopted by the Town of Bennett shall apply.

#### Parking Standards

The Bennett Crossing PD incorporates the Parking Standards, Division 6 of Article II, Zoning of the Town of Bennett Land Use Code, as amended, unless specifically noted below:

- Congregate care, memory care, assisted living shall be one space per 3 rooms, the number of bedrooms per unit does not apply
- Retirement home, group home, and nursing home shall be 1 space per 2 units (the number of bedrooms per unit does not apply
- Independent living shall be 1 space per independent living unit

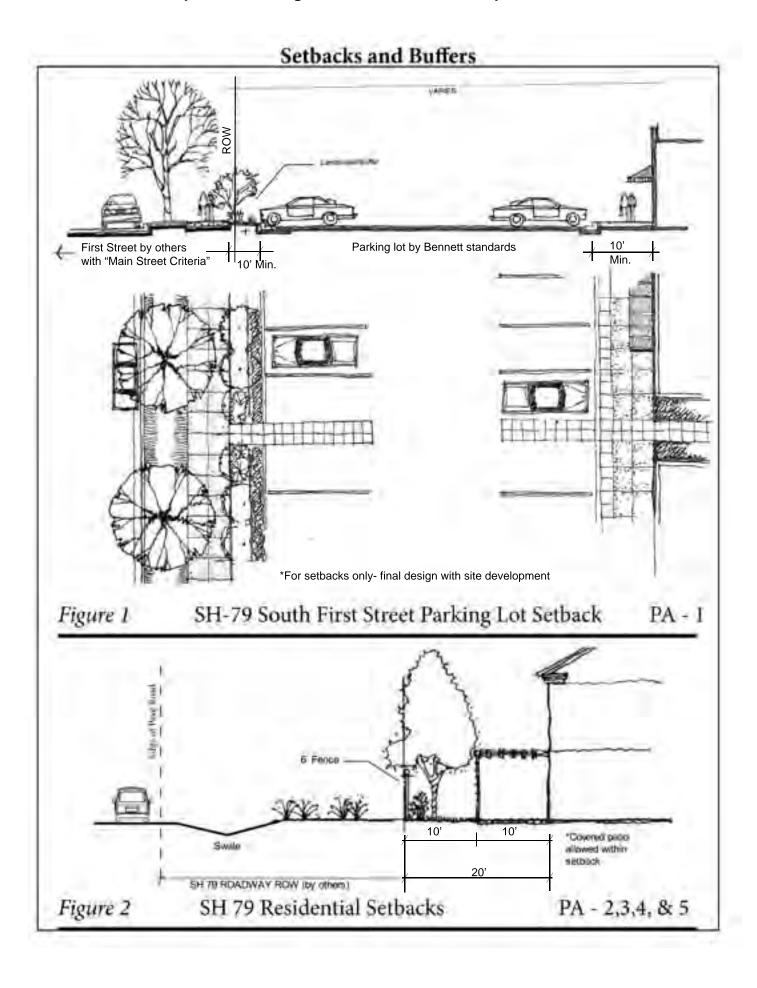
#### Landscape Standards

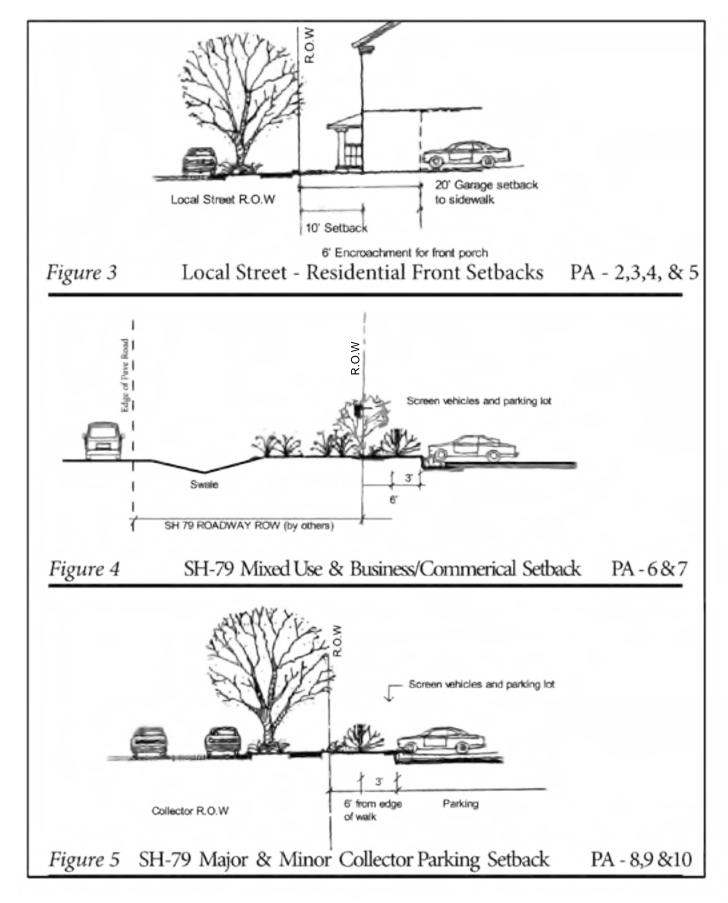
The Bennett Crossing PD incorporates the Landscape Standards, Division 7 of Article II, Zoning of the Town of Bennett Municipal Land Us Code, as amended, unless specifically noted.

#### **Lighting Standards**

The Bennett Crossing PD incorporates the Lighting Standards Division 8 of Article II, Zoning of the Town of Bennett Municipal Land Use Code, as amended, unless specifically noted.

**END OF SECTION** 





# BENNETT CROSSING OUTLINE DEVELPMENT PLAN AMENDMENT NO. 1

#### **DEVELOPMENT STANDARDS AND GUIDLINES**

TOWN OF BENNETT OWNER PLANNER / LANDSCAPE ARCHITECT Gayeski Capital Equitities, LLC 905 W. 124th Avenue, Suite 200 767 Santa Fe Drive job no. **2014/14** Westminster, CO 80234 Denver, CO 80204 303-741-1411 date 01-11-2022 revisions ENGINEER Jansen Strawn Consulting Engineers sheet 5 of 6 45 W. 2nd Avenue Denver, CO 80223

303-561-3333



## **BENNETT CROSSING**

A parcel in the W 1/2 of Section 34, Township 3 South, Range 63 west of the 6th Principal Meridian, Town of Bennett, County of Adams, State of Colorado

#### Bennett Crossing Planned Development

| Land Use Categories   | MSC | MDR | HDR | MU  | ВС  | HC  |
|---|-----|-----|-----|-----|-----|-----|
| A. AGRICULTURAL USE   |     |     |     |     |     |     |
| (1) Auction arena or livestock sales  |     |     |     |     |     |     |
| (2) Crop production   | TU* | TU* | TU* | TU* | TU* | TU* |
| (3) Greenhouse/nursery  |     |     |     | С   | Р   | Р   |
| (4) Poultry hatcheries, fish hatcheries, commercial ranching and dairy farms or animals raised or kept for profit or production |     |     |     |     |     |     |

- Temporary Use by Town of Bennett
- TU\* Grazing limited to PA 9 only

#### Temporary Use until development R. ANIMAL SERVICES

| D. ANIMAL SERVICES                         |   |  |   |   |   |
|--|---|--|---|---|---|
| (1) Animal boarding (kennels) and training |   |  |   |   | С |
| (2) Animal hospital, large                 |   |  |   |   | С |
| (3) Animal hospital, small                 | Р |  | Р | Р | Р |
| (4) Riding academies and stables           |   |  |   |   | С |
| (5) Veterinary offices or clinics          | Р |  | Р | Р | Р |

#### C. EDUCATIONAL USES

| (1) Day care center, adult or child               | С | С | С | Р | Р | Р |
|---|---|---|---|---|---|---|
| (2) Elementary and secondary education school     | С | Р | Р | Р |   |   |
| (3) Postsecondary colleges and universities       | С |   |   | Р | Р |   |
| (4) Private business, trade and vocational school | Р |   |   | Р | Р | Р |

| D. INDUSTRIAL USES   |   |  |   |   |   |
|--|---|--|---|---|---|
| (1) Commercial steam cleaning/laundry operations   |   |  | С | С | Р |
| (2) Commercial trash removal companies without trash storage or trash transfer operations  |   |  |   |   | С |
| (3) Concrete or asphalt products production  |   |  |   |   | Т |
| (4) Custom crafts (such as ceramics, furniture making and stained glass production)  | С |  | Р | Р | Р |
| Flex Office with drive in service, shop, assembly, showroom, and office. See definitions for Bennett Crossing                                    |   |  |   | Р | Р |
| (5) General machine shops  |   |  |   |   | Р |
| (6) General research and development   | С |  | Р | Р | Р |
| (7) Laboratory: medical, dental, optical, scientific   | С |  | Р | Р | Р |
| (8) Light trade and technical uses   | С |  | Р | Р | Р |
| (9) Manufacturing, assembly, finishing or fabrication; primary   |   |  |   |   | Р |
| (10) Manufacturing, assembly, finishing or fabrication; secondary  |   |  |   |   | Р |
| (11) Meat processing plant   |   |  |   |   |   |
| (12) Outdoor storage, except self- storage/mini- storage   |   |  |   |   | Р |
| (13) Publishing plant  |   |  |   |   | Р |
| (14) Recycling facilities  |   |  |   |   | С |
| (15) Refining or initial processing of basic raw materials   |   |  |   |   | С |
| (16) Refuse collection facilities  |   |  |   |   |   |
| (17) Self-storage, mini-storage  |   |  |   |   | Р |
| (18) Soil amendments packaging and processing such as peat moss, top soil and composted manure; but excluding raw manure or chemical fertilizers |   |  |   |   |   |
| (19) Warehousing and distribution  |   |  |   |   | Р |
| (20) Waste-related uses, trash transfer station  |   |  |   |   | С |
| (21) Wholesale establishments, including accessory offices   |   |  | С | Р | Р |

| MSC | Main Street Commercial     |
|-----|----------------------------|
| MDR | Medium Density Residential |
| HDR | High Density Residential   |
| MU  | Mixed Use                  |
| BC  | Business Commercial        |
| HC  | Highway Commercial         |

|   | Bennet | tt Cross | ing Plai | nned De | velopm | ent |
|---|--------|----------|----------|---------|--------|-----|
| Land Use Categories   | MSC    | MDR      | HDR      | MU      | ВС     | НС  |
| E. INSTITUTIONAL USES   |        |          |          |         |        |     |
| (1) Cemetery  |        |          |          |         |        |     |
| (2) Charitable institutions   | Р      |          |          | Р       | Р      | Р   |
| (3) Clubs and lodges,   | Р      |          |          | Р       | Р      | Р   |
| (4) Cultural facilities, including a library or museum                                      | Р      |          | Р        | Р       | Р      | Р   |
| (5) Events center   | Р      |          |          | Р       | Р      | Р   |
| (6) Facilities owned or operated by government organizations other than Town                | С      | С        | С        | С       | С      | С   |
| (7) Facilities owned or operated by Town  | Р      | Р        | Р        | Р       | Р      | Р   |
| (8) Hospitals   |        |          |          | Р       | Р      | Р   |
| Clinic  | Р      |          |          | Р       | Р      | Р   |
| (9) Religious institutions  | Р      | Р        | Р        | Р       | Р      | Р   |
| (10) Zoos, arboretum, botanical gardens, community gardens                                  |        | С        | С        | С       | С      | С   |
| Community gardens   | С      | Р        | Р        | Р       | Р      | Р   |
| F. RECREATION USES  |        |          |          |         |        |     |
| (1) Golf course and driving range   |        | С        | С        | С       | С      | С   |
| (2) Indoor commercial recreation or entertainment, including bowling alleys, movie theaters | Р      |          |          | Р       | Р      | Р   |

| F. RECREATION USES   |   |   |   |     |     |     |
|--|---|---|---|-----|-----|-----|
| (1) Golf course and driving range  |   | С | С | С   | С   | С   |
| (2) Indoor commercial recreation or entertainment, including bowling alleys, movie theaters  | Р |   |   | Р   | Р   | Р   |
| athletic club, private or public   | Р |   |   | Р   | Р   | Р   |
| (3) Outdoor commercial recreation, including miniature golf, amusement parks   |   |   |   | P** | P** | P** |
| (4) Outdoor playing fields   |   | Р | Р |     |     | Р   |
| (5) Parks, both active and passive, and trails   |   | Р | Р | Р   | Р   | Р   |
| Outdoor plaza, pedestrian courtyard for public gathering place   | Р | Р | Р | Р   | Р   | Р   |
| (6) Recreation facilities owned or operated by the Town or other government organization with supporting accessory uses, whether publically or privately owned or operated but in no event shall accessory uses occupy more than 10% of the gross floor area of the facility | Р | Р | Р | Р   | Р   | Р   |
| (7) Shooting range, indoor   |   |   |   |     | С   | С   |
| (8) Shooting range, outdoor  |   |   |   |     |     |     |

#### Amusement parks are include as a conditional use

#### G. RESIDENTIAL USES

| (1) Assisted living facility or nursing home                                 | Р    | С | Р | Р | Р | С |   |
|--|------|---|---|---|---|---|---|
| congregate care, retirement community, memory care facility and services     | Р    | С | Р | Р | Р | С |   |
| (2) Bed and breakfast establishments   | Р    |   |   | Р | Р |   |   |
| (3) Group home for elderly, developmentally disabled or mentally ill persons |      | Р | Р | Р |   |   |   |
| (4) Group home for juvenile offenders  |      |   |   |   |   |   |   |
| (5) Group home, other  |      | С | С | С |   |   |   |
| (6) Home occupations   | Р    | Р | Р | Р |   |   |   |
| (7) Hotels and motels  | P*** |   |   | Р | Р | Р |   |
| (8) Manufactured homes   |      | Р | Р | Р |   |   |   |
| (9) Mobile homes   |      | С | С | С |   |   |   |
| (10) Multi-family dwelling   | С    |   | Р | Р |   |   |   |
| (11) Rooming, lodging or boarding houses                                     | Р    |   |   |   |   |   |   |
| (12) Single-family dwelling  |      | Р | Р |   |   |   |   |
| (13) Two-family dwelling   |      | Р | Р |   |   |   |   |
|  | -    | - | - | - | - |   | _ |

#### Specialty Hotel or motel in Main Street Commercial limited to 50 rooms H. FOOD AND BEVERAGE SERVICE

| (1) Ba | ar, tavern, nightclub   | Р |  | Р | Р | Р |
|--------|---|---|--|---|---|---|
| (2) Bı | rewery with tap room  | Р |  | Р | Р | Р |
| (3) Fa | st food   |   |  | Р | Р | Р |
| (4) Fa | st food with drive-thru   |   |  | Р | Р | Р |
| (5) Re | estaurant, other  | Р |  | Р | Р | Р |
| (6)    | Quick Serve, coffee shop, bakery, and similar food services with drive-thru | Р |  | Р | Р | Р |

| I. RETAIL USES  |     |  |    |    |    |
|---|-----|--|----|----|----|
| (1) Building materials supply                             |     |  |    |    | Р  |
| (2) Outdoor retail display and sales                      |     |  | P* | P* | P* |
| (3) Pawnshops   |     |  | С  | С  | С  |
| (4) Retail business, other (<5000 sq. ft.)                | Р   |  | Р  | Р  | Р  |
| (5) Retail business, other (>5000 sq. ft. <25000 sq. ft.) | P** |  | Р  | Р  | Р  |
| (6) Retail business, other (>25000 sq. ft.)               |     |  | С  | Р  | Р  |
| (7) Sexually oriented business                            |     |  |    |    |    |

Outdoor display and sales as an accessory use to a permitted use P\*\* Retail in MSC is permitted up to 10,000 sf

#### Bennett Crossing Planned Development

| Land Use Categories   | MSC | MDR | HDR | MU | ВС | НС |
|---|-----|-----|-----|----|----|----|
| J. SERVICES   | 1   |     |     |    |    |    |
| (1) Dry cleaning  |     |     |     | Р  |    |    |
| (2) Financial services (such as banks, savings and loan and brokerages) with drive-in facilities    | Р   |     |     | Р  | Р  | Р  |
| (3) Financial services (such as banks, savings and loan and brokerages) with no drive-in facilities | Р   |     |     | Р  | Р  | Р  |
| (4) Funeral homes and mortuaries  | Р   |     |     | Ρ  | Ρ  | Р  |
| (5) Limited equipment rental  |     |     |     | С  | Р  | Р  |
| (6) Offices; administrative business and professional, except health-related                        | Р   |     |     | Р  | Р  | Р  |
| (7) Offices; medical, dental or other health-related, including urgent care facilities              | Р   |     |     | Р  | Р  | Р  |
| (8) Personal services, other (<5000 sq. ft.)  | Р   |     |     | Р  | Р  | Р  |
| (9) Personal services, other (>5000 sq. ft. <25000 sq. ft.)   | P*  |     |     | Р  | Р  | Р  |
| (10) Personal services, other (>25000 sq. ft.)  |     |     |     | С  | Р  | Р  |
| (11) Repair, furniture and major household appliance  | Р   |     |     | С  | Р  | Р  |
| (12) Repair, other except vehicle- related repair   | Р   |     |     | С  | Р  | Р  |
| (13) Crematoriums   |     |     |     |    |    | Р  |
| P* Limited to no more than 10,000 sf in MS  | C   |     |     |    |    |    |

#### K. TRANSPORTATION FACILITIES

| (1) Ambulance service   |  | С | С | Р |
|---|--|---|---|---|
| (2) Heliports/helistops   |  | С | С | С |
| (3) Overnight campground and travel trailer parking                       |  |   |   | С |
| (4) Passenger terminal and transit facilities                             |  | Р | Р | Р |
| (5) Private automobile parking lots or parking garages as a principal use |  |   |   | Р |
| (6) Public automobile park 'n ride (commuter) lots                        |  | Р | Р | Р |

#### L. UTILITIES AND TELECOMMUNICATIONS

| L. UTILITIES AND TELECOMMUNICATIONS  |   |   |   |   |   |   |
|--|---|---|---|---|---|---|
| (1) Overhead electric transmission lines and distribution feeder lines over 110 kV | С | С | С | С | С | С |
| (2) Public utilities, major  |   |   |   | С | С | Р |
| (3) Public utilities, minor  | Р | Р | Р | Р | Р | Р |
| (4) Telecommunications facilities, including towers                                | С | С | С | С | С | С |
|  |   |   |   |   |   |   |

#### M. VEHICLE-RELATED SALES AND SERVICE

| (1) Automobile rentals  |  | С | Р  | Р |
|---|--|---|----|---|
| (2) Automobile washing facility   |  | С | Р  | Р |
| (3) Major vehicle/equipment repair (includes auto body repair, paint shops and incidental sales of parts) |  |   |    | Р |
| (4) Minor vehicle repair (includes minor repair where vehicles are not stored in an inoperable condition) |  | С | Р  | Р |
| (5) Motor vehicle dealer/sales, new and used (includes RVs, trailers, mobile homes                        |  |   | P^ | Р |
| (6) Service stations (minor repairs included)   |  | Р | Р  | Р |
| (7) Truck stops   |  |   |    | С |
| (8) Vehicle/equipment sales and rentals (other than motor vehicles)                                       |  |   | С  | Р |
| (9) Vehicle or automobile wrecking or salvage yard, including outdoor storage of inoperable vehicles      |  |   |    |   |
| (10) Vehicle storage (operable vehicles only)   |  |   |    | С |
| (11) Vehicle towing services  |  |   |    | Р |

Motor vehicle sales office with no more than 20 cars on-site.

## **BENNETT CROSSING OUTLINE DEVELPMENT PLAN AMENDMENT NO. 1**

**LAND USE MATRIX TABLES** 

Gayeski Capital Equitities, LLC

905 W. 124th Avenue, Suite 200 Westminster, CO 80234

PLANNER / LANDSCAPE ARCHITECT Plan West Inc. Denver, CO 80204 303-741-1411

job no. **2014/14** date 01-11-2022 revisions

TOWN OF BENNETT

ENGINEER Jansen Strawn Consulting Engineers 45 W. 2nd Avenue Denver, CO 80223 303-561-3333

sheet 6 of 6



### **PURPOSE STATEMENT**

THIS BENNETT CROSSING FILING NO. 5 PLAT IS INTENDED TO SUBDIVIDE 83.904 ACRES INTO 243 RESIDENTIAL LOTS AND 19 TRACTS (4 FOR FUTURE USE), DEDICATE RIGHT-OF-WAY AND GRANT EASEMENTS.

### OWNERSHIP AND DEDICATION

KNOW ALL PERSONS BY THESE PRESENTS, THAT THE UNDERSIGNED, GAYESKI CAPITAL EQUITIES, LLC, A COLORADO LIMITED LIABILITY COMPANY, BEING THE OWNER OF THE LAND SHOWN ON THIS FINAL PLAT AND DESCRIBED AS FOLLOWS:

PARCEL A OF SPECIAL WARRANTY DEED DESCRIBED IN THE DOCUMENT RECORDED UNDER RECEPTION NO. 2014000037662:

A PARCEL OF LAND LOCATED IN THE WEST HALF OF SECTION 34, TOWNSHIP 3 SOUTH, **RANGE 63 WEST OF** 

THE 6TH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE **PARTICULARLY** 

**DESCRIBED AS FOLLOWS:** 

BASIS OF BEARINGS: THE NORTHERLY LINE OF THE NORTHWEST QUARTER OF SECTION 34,

RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN BEARS NORTH 89°33'30"EAST;

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 34;

THENCE NORTH 89°33'30" EAST, ALONG THE NORTHERLY LINE OF THE NORTHWEST QUARTER OF SAID SECTION

34, A DISTANCE OF 960.00 FEET TO THE POINT OF BEGINNING;

THENCE NORTH 89°33'30" EAST, CONTINUING ALONG SAID NORTHERLY LINE, A DISTANCE

THE NORTH QUARTER CORNER OF SAID SECTION 34;

THENCE SOUTH 00°08'12" WEST, ALONG THE EASTERLY LINE OF THE NORTHWEST QUARTER OF SAID SECTION

34, A DISTANCE OF 2701.52 FEET TO THE CENTER QUARTER CORNER OF SAID SECTION 34; THENCE SOUTH 00°09'06" WEST, ALONG THE EASTERLY LINE OF THE SOUTHWEST

QUARTER OF SAID SECTION 34, A DISTANCE OF 772.96 FEET

THENCE NORTH 89°43'33" WEST, A DISTANCE OF 2592.56 FEET;

THENCE NORTH 00°17'18" EAST, ALONG A LINE 50.00 FEET EASTERLY OF AND PARALLEL

LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 34, A DISTANCE OF 761.66 FEET THENCE NORTH 00°05'40" EAST, ALONG A LINE 50.00 FEET EASTERLY OF AND PARALLEL

LINE OF THE NORTHWEST QUARTER OF SAID SECTION 34, A DISTANCE OF 2380.43 FEET; THENCE NORTH 89°33 '30" EAST, A DISTANCE OF 612.80 FEET;

THENCE NORTH 00°26'30" WEST, A DISTANCE OF 81.99 FEET:

THENCE NORTH 89°33'30" EAST, A DISTANCE OF 300.00 FEET

THENCE NORTH 00°26'30" WEST, A DISTANCE OF 218.00 FEET TO THE POINT OF BEGINNING; EXCEPT BENNETT CROSSING FILING NO. 1 RECORDED UNDER RECEPTION NO. 2019000008907;

EXCEPT BENNETT CROSSING FILING NO. 2 RECORDED UNDER RECEPTION NO. 2017000074180:

EXCEPT BENNETT CROSSING FILING NO. 3 RECORDED UNDER RECEPTION NO. 2019000012642:

MORE PARTICULARLY DESCRIBED AS FOLLOWS (SURVEYOR'S DESCRIPTION)

BEARINGS ARE BASED UPON THE SOUTH LINE OF THE NORTHWEST ONE-QUARTER OF SAID SECTION 34 FROM THE WEST ONE-QUARTER CORNER OF SAID SECTION 34 MONUMENTED BY A 3.25" ALUMINUM CAP. 0.4' DOWN IN A RANGE BOX WITH LID MARKED "SURVEY", STAMPED "T3S, 1/4, 33|34, R63W, PLS 26715, 2009" TO THE CENTER QUARTER CORNER OF SAID SECTION 34 MONUMENTED BY A 2.5" ALUMINUM CAP, 0.1' ABOVE GROUND SURFACE, STAMPED "CHARLES H RUSSELL, T3S, C1/4, \*, 34, R63W, 1994, LS 23519" BEARING NORTH 89°30'11" EAST, A DISTANCE OF 2640.73 FEET (N89°30'11"E 2640.73' PER BENNETT CROSSING FILING NOS. 1 AND 3).

BEGINNING AT THE SOUTHEAST CORNER OF SAID BENNETT CROSSING FILING NO. 2:

THENCE SOUTH 00°22'07" EAST ALONG THE EAST LINE OF SAID NORTHWEST ONE-QUARTER OF SECTION 34. A DISTANCE OF 1414.27 FEET TO SAID CENTER QUARTER CORNER OF

THENCE SOUTH 00°22'02" EAST ALONG THE EAST LINE OF THE SOUTHWEST ONE-QUARTER OF SAID SECTION 34, A DISTANCE OF 377.74 FEET TO THE NORTH LINE OF SAID BENNETT **CROSSING FILING NO. 3:** 

THENCE THE FOLLOWING FOUR (4) COURSES ALONG THE NORTH LINE OF SAID BENNETT CROSSING FILING NO. 3:

- SOUTH 89°29'22" WEST, A DISTANCE OF 456.23 FEET;
- NORTH 53°33'51" WEST, A DISTANCE OF 631.33 FEET;
- NORTH 00°30'40" WEST, A DISTANCE OF 27.00 FEET;
- SOUTH 89°30'11" WEST, A DISTANCE OF 942.53 FEET TO THE NORTHEAST CORNER OF SAID BENNETT CROSSING FILING NO. 1;



LOCATION MAP

(NOT TO SCALE)

# OWNERSHIP AND DEDICATION (CONTINUED)

THENCE SOUTH 89°30'11" WEST ALONG THE NORTH LINE OF SAID BENNETT CROSSING FILING NO. 1, A DISTANCE OF 686.42 FEET TO THE EASTERLY RIGHT-OF-WAY LINE OF COLORADO STATE HIGHWAY 79 (SOUTH 1ST STREET);

THENCE NORTH 00°24'47" WEST ALONG SAID EASTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 363.16 FEET TO THE SOUTHWEST CORNER OF SAID BENNETT CROSSING FILING NO. 2; THENCE ALONG THE SOUTH LINE OF SAID BENNETT CROSSING FILING NO. 2 THE FOLLOWING THREE (3) COURSES:

- NORTH 89°35'13" EAST, A DISTANCE OF 9.00 FEET TO A POINT OF NON-TANGENT CURVE;
- 1611.37 FEET ALONG THE ARC OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 1026.00 FEET AND A CENTRAL ANGLE OF 89°59'07", SUBTENDED BY A CHORD WHICH BEARS NORTH 44°34'47" EAST, A DISTANCE OF 1450.80 FEET;
- NORTH 89°34'20" EAST, A DISTANCE OF 1557.07 FEET TO THE POINT OF

SAID PARCEL CONTAINS AN AREA OF 3.654,846 SQUARE FEET, OR 83,904 ACRES, MORE OR LESS. ALL LINEAL DISTANCE UNITS ARE REPRESENTED IN U.S. SURVEY FEET.

HAVE LAID OUT, SUBDIVIDED AND PLATTED SAID LAND AS PER THE DRAWING CONTAINED UNDER THE NAME AND STYLE OF BENNETT CROSSING FILING NO. 5, A SUBDIVISION OF A PART OF THE TOWN OF BENNETT, COUNTY OF ADAMS, STATE OF COLORADO, AND BY THESE PRESENTS TO HEREBY DEDICATE TO THE TOWN OF BENNETT THE STREETS AND AVENUES AS SHOWN ON THIS PLAT FOR THE PUBLIC USE THEREOF FOREVER AND DOES FURTHER DEDICATE TO THE USE OF THE TOWN OF BENNETT AND ALL SERVING PUBLIC UTILITIES (AND OTHER APPROPRIATE ENTITIES) THOSE PORTIONS OF SAID REAL PROPERTY WHICH ARE SO DESIGNATED AS UTIUTY EASEMENTS AND TRANSPORTATION EASEMENTS AS SHOWN. ACCESS EASEMENTS ARE HEREBY DEDICATED TO THE TOWN OF BENNETT ACROSS ALL TRACTS SHOWN HERON. IT IS EXPRESSLY UNDERSTOOD AND AGREED BY THE UNDERSIGNED THAT ALL EXPENSES AND COSTS INVOLVED IN CONSTRUCTION AND INSTALLING SANITARY SEWER SYSTEM WORKS AND LINES, WATER SYSTEM WORKS AND LINES, GAS SERVICE LINES, ELECTRICAL SERVICE WORKS AND LINES, LANDSCAPING, CURBS, GUTTERS, STREET PAVEMENT, SIDEWALKS, AND OTHER SUCH UTILITIES AND SERVICES SHALL BE GUARANTEED AND PAID FOR BY THE SUBDIVIDER AND ARRANGEMENTS MADE BY THE SUBDIVIDER, THEREOF WHICH ARE APPROVED BY THE TOWN OF BENNETT, COLORADO, AND SUCH SUMS SHALL NOT BE PAID BY THE TOWN OF BENNETT, AND THAT ANY ITEM SO CONSTRUCTED OR INSTALLED WHEN ACCEPTED BY THE TOWN OF BENNETT SHALL BECOME THE SOLE PROPERTY OF SAID TOWN OF BENNETT, COLORADO, EXCEPT PRIVATE ROADWAY CURBS, GUTTER AND PAVEMENT AND ITEMS OWNED BY MUNICIPALITY FRANCHISED UTILITIES AND/OR OTHER SERVING PUBLIC ENTITIES, WHICH WHEN CONSTRUCTED OR INSTALLED SHALL REMAIN AND/OR BECOME THE PROPERTY OF SUCH MUNICIPALITY FRANCHISED UTILITIES AND/OR OTHER SERVING PUBLIC UTILITIES AND SHALL NOT BECOME THE PROPERTY OF THE TOWN

OF BENNETT, COLORADO.

\*\*\*SEE SHEET 2 FOR NOTES, SURVEYOR'S NOTES AND TABLES.\*\*\*

**NOTARY PUBLIC** 

MY COMMISSION EXPIRES:

CLERK AND RECORDER

**DEPUTY** 

FINAL PLAT COVER SHEET AND CERTIFICATES-FINAL PLAT NOTES, SURVEYOR'S NOTES AND TABLES-

FINAL PLAT DETAIL SHEETS-

SHEET 2 SHEETS 3 THROUGH 18

# OWNERSHIP AND DEDICATION (CONTINUED)

| BY: GAYESKI CAPITAL EQUITIES, LLC             | S, A COLORADO LIMITED LIABILITY COMPANY  |
|---|--|
| <name></name>                                 | _ AS REGISTERED AGENT  |
| ACKNOWLEDGEMENT THE FOREGOING OWNERSHIP AND I | DEDICATION WAS ACKNOWLEDGED BEFORE ME THIS   |
|   | , 2021, BY <name> AS AUTHORIZED SIGNATORY FOR COLORADO LIMITED LIABILITY COMPANY.</name> |
| WITNESS MY HAND AND SEAL:                     |  |

| SURVEYOR'S | CERTIFICATE |
|------------|-------------|

I, ERIC DAVID CARSON, A DULY LICENSED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THERE ARE NO ROADS, PIPELINES, IRRIGATION DITCHES OR OTHER EASEMENTS IN EVIDENCE OR KNOWN BY ME TO EXIST ON OR ACROSS THE HEREIN BEFORE DESCRIBED PROPERTY EXCEPT AS SHOWN ON THIS PLAT. I FURTHER CERTIFY THAT I HAVE PERFORMED THE SURVEY SHOWN HEREON, OR SUCH SURVEY WAS PREPARED UNDER MY DIRECT RESPONSIBILITY AND SUPERVISION, THAT THIS PLAT ACCURATELY REPRESENTS SAID SURVEY, AND THAT ALL MONUMENTS EXIST AS SHOWN

ERIC DAVID CARSON COLORADO PROFESSIONAL LAND SURVEYOR NO. 37890 FOR AND ON BEHALF OF CWC CONSULTING GROUP, INC. EMAIL: ERICC@CWC-CONSULTING.COM

### TOWN APPROVAL

THIS IS TO CERTIFY THAT THE PLAT OF BENNETT CROSSING FILING NO. 5 WAS APPROVED

| ON THE DAY OF                     | , 2021, BY RESOLUTION NO.   |
|-----------------------------------|---|
| BEHALF OF THE TOWN OF BENNET      | ND THAT THE MAYOR OF THE TOWN OF BENNETT ON T, HEREBY ACKNOWLEDGES SAID PLAT UPON WHICH ALL PURPOSES INDICATED THEREON. |
| MAYOR                             | ATTEST: TOWN CLERK  |
| CLERK AND RE                      | CORDER'S CERTIFICATE  |
| THIS FINAL PLAT WAS FILED FOR REC | CORD IN THE OFFICE OF THE COUNTY CLERK AND  |
| RECORDER OF ADAMS COUNTY, COL     | ORADO, ATO'CLOCKM. THIS   |
| DAY OF                            | <del>,</del>  |
| 2021, AT RECEPTION NO             | ·   |

of 18 sheets

### **NOTES**

- 1. THE PROPERTY IS LOCATED WITHIN "OTHER AREAS ZONE X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.) AS IDENTIFIED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP - COMMUNITY PANEL NUMBERED 08001C0981H WITH AN EFFECTIVE DATE OF MARCH 5, 2007.
- 2. TRACTS A THROUGH N, INCLUSIVE, SHALL BE OWNED AND MAINTAINED BY THE HOA, ITS SUCCESSORS OR ASSIGNS. THE UNDERSIGNED GRANTS THE TOWN OF BENNETT A PERPETUAL RIGHT OF INGRESS AND EGRESS FROM AND TO SAID TRACTS. THE TOWN SHALL HAVE THE RIGHT, BUT NOT THE OBLIGATION, TO MAINTAIN, OPERATE, REPAIR AND RECONSTRUCT THE TRACT AND RELATED FACILITIES WHEN THE OWNER(S) FAIL TO ADEQUATELY MAINTAIN SUCH TRACTS AND RELATED FACILITIES, WHICH MAINTENANCE, OPERATION AND RECONSTRUCTION SHALL BE AT THE COST OF THE HOA.
- 3. THE POLICY OF THE TOWN REQUIRES THAT ALL MAINTENANCE ACCESS SHALL BE PROVIDED TO ALL STORM DRAINAGE FACILITIES TO ASSURE CONTINUOUS OPERATIONAL CAPABILITY OF THE SYSTEM. THE PROPERTY OWNERS SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL DRAINAGE FACILITIES INCLUDING INLETS, PIPES, CULVERTS, CHANNELS, DITCHES, HYDRAULIC STRUCTURES, AND DETENTION BASINS LOCATED ON THEIR LAND UNLESS MODIFIED BY THE SUBDIVISION IMPROVEMENTS AGREEMENT. SHOULD THE OWNER FAIL TO MAINTAIN SAID FACILITIES, THE TOWN OF BENNETT SHALL HAVE THE RIGHT BUT NOT THE OBLIGATION TO ENTER SAID LAND FOR THE SOLE PURPOSE OF OPERATIONS AND MAINTENANCE. ALL SUCH MAINTENANCE COSTS WILL BE ASSESSED TO THE PROPERTY OWNERS.
- 4. SURFACED ACCESS ROADS CAPABLE OF WITHSTANDING THE IMPOSED LOADS OF FIRE APPARATUS AND ALL REQUIRED FIRE HYDRANTS SHALL BE INSTALLED AND MADE SERVICEABLE PRIOR TO AND DURING CONSTRUCTION.
- 5. ALL INTERNAL ROADS AND DRAINAGE FACILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH STREET CONSTRUCTION PLANS, PAVEMENT DESIGN, GRADING AND EROSION CONTROL PLAN, AND A FINAL DRAINAGE PLAN SUBMITTED TO AND APPROVED BY THE TOWN OF BENNETT AND ALL APPLICABLE TOWN ADOPTED STANDARDS AND SPECIFICATIONS.
- 6. THIS PLAN HAS BEEN APPROVED BY THE TOWN OF BENNETT AND CREATES A VESTED PROPERTY RIGHT PURSUANT TO C.R.S. 24-68-101, ET SEQ., AS AMENDED, AND THE TOWN OF BENNETT DEVELOPMENT STANDARDS AND REGULATIONS.
- 7. NOTICE IS GIVEN THAT THIS SUBDIVISION WILL BE SUBJECT TO RECORDED DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS. THE TOWN OF BENNETT IS NOT RESPONSIBLE FOR ENFORCEMENT OF THE RECORDED COVENANTS, CONDITIONS AND RESTRICTIONS THAT MAY BE FILED AGAINST THE SUBDIVISION PLAT.
- 8. FOR CORNER LOTS, THE SIDE SETBACK SHALL BE USED FOR THE CHAMFERED OR RADIUS LOT CORNER.
- 9. NON-EXCLUSIVE UTILITY EASEMENTS LOCATED AS SHOWN ARE HEREBY GRANTED FOR THE INSTALLATION, MAINTENANCE, AND OPERATION OF UTILITIES AND DRAINAGE FACILITIES, INCLUDING, BUT NOT LIMITED TO STREET LIGHTS, ELECTRIC LINES, GAS LINES, CABLE TELEVISION LINES, FIBER OPTIC LINES, AND TELEPHONE LINES, AS WELL AS PERPETUAL RIGHT FOR INGRESS AND EGRESS FOR INSTALLATION, MAINTENANCE, AND REPLACEMENT OF SUCH LINES, WINDOW WELLS, PATIOS, DECKS, STAIRS, RETAINING WALLS, AND THEIR COMPONENTS MAY NOT ENCROACH INTO THE REQUIRED UTILITY

10. SIGHT DISTANCE EASEMENTS ARE HEREBY DEDICATED TO THE TOWN OF BENNETT FOR SIGHT DISTANCE PURPOSES TOGETHER WITH THE FOLLOWING RESTRICTIONS OVER SAID EASEMENTS: NO OBJECT WITHIN THE SIGHT DISTANCE EASEMENT SHALL BE MORE THAN THIRTY-SIX (36) INCHES ABOVE THE FLOWLINE OF THE ADJACENT STREET. SUCH OBJECTS SHALL INCLUDE BUT NOT BE LIMITED TO BUILDINGS, VEGETATION, AND UTILITY CABINETS. PARKING IS ALSO RESTRICTED WITHIN THE EASEMENT.

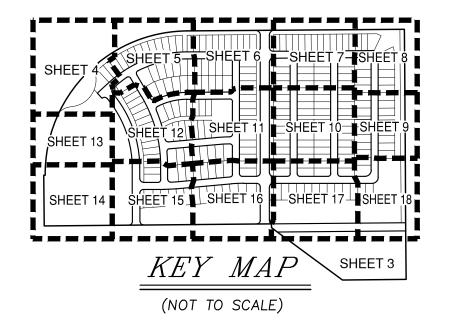
| LAND USE TABLE   |                    |  |
|--|--------------------|--|
| GROSS ACREAGE  | 83.904 ACRES       |  |
| NET ACREAGE (DEDICATED R.O.W. EXCLUDED)  | 68.973 ACRES       |  |
| GROSS DENSITY (DWELLING UNITS/ACREAGE OF ALL LOTS AND DEVELOPED TRACTS)                            | 4.680 D.U./ACRE    |  |
| NET DENSITY (DWELLING UNITS/RESIDENTIAL LOT AREA)  | 6.869 D.U./ACRE    |  |
| NUMBER OF LOTS (RESIDENTIAL)   | 243                |  |
| NUMBER OF TRACTS (FUTURE USE)  | 4                  |  |
| NUMBER OF TRACTS (DEVELOPED)   | 15                 |  |
| NUMBER OF TRACTS   | 19                 |  |
| SMALLEST LOT (RESIDENTIAL)   | 5,400 SQUARE FEET  |  |
| LARGEST LOT (RESIDENTIAL)  | 10,907 SQUARE FEET |  |
| AVERAGE LOT SIZE (RESIDENTIAL)   | 6,342 SQUARE FEET  |  |
| NUMBER OF BUILDABLE LOTS   | 243                |  |
| NET ACREAGE FOR FUTURE USE   | 17.848 ACRES       |  |
| NET ACREAGE FOR PUBLIC STREETS   | 14.931 ACRES       |  |
| NET ACREAGE DEVELOPED FOR PRIVATE USES (PARKS, OPEN SPACES AND RECREATION CENTERS, PRIVATE DRIVES) | 8.049 ACRES        |  |
| NET ACREAGE DEVELOPED FOR PUBLIC USES (STORMWATER DRAINAGE - TOWN OF BENNETT)                      | 7.698 ACRES        |  |

# Add a sheet, showing the entire subdivision and labeling Tracts A-S.

| LABEL   | PROPOSED USE                              | OWNERSHIP/<br>MAINTENANCE                                 | AREA<br>(ACRES) |
|---------|---|---|-----------------|
| TRACT A | DRAINAGE, OPEN SPACE<br>& LANDSCAPED AREA | H.O.A.  | 1.238           |
| TRACT B | OPEN SPACE & LANDSCAPED AREA              | H.O.A.  | 0.653           |
| TRACT C | OPEN SPACE &<br>LANDSCAPED AREA           | H.O.A.  | 0.087           |
| TRACT D | OPEN SPACE & LANDSCAPED AREA              | H.O.A.  | 0.634           |
| TRACT E | OPEN SPACE &<br>LANDSCAPED AREA           | H.O.A.  | 0.082           |
| TRACT F | DRAINAGE, OPEN SPACE & LANDSCAPED AREA    | H.O.A.  | 0.635           |
| TRACT G | OPEN SPACE &<br>LANDSCAPED AREA           | H.O.A.  | 0.078           |
| TRACT H | DRAINAGE, OPEN SPACE & LANDSCAPED AREA    | H.O.A.  | 0.136           |
| TRACT I | DRAINAGE, OPEN SPACE & LANDSCAPED AREA    | H.O.A.  | 0.142           |
| TRACT J | DRAINAGE, OPEN SPACE & LANDSCAPED AREA    | H.O.A.  | 1.949           |
| TRACT K | PARK                                      | H.O.A.  | 1.187           |
| TRACT L | PARK                                      | H.O.A.  | 1.227           |
| TRACT M | FUTURE USE                                | GAYESKI CAPITAL<br>EQUITIES, LLC                          | 0.798           |
| TRACT N | FUTURE USE                                | GAYESKI CAPITAL<br>EQUITIES, LLC                          | 1.036           |
| TRACT O | OPEN SPACE & STORMWATER DRAINAGE          | GAYESKI CAPITAL<br>EQUITIES, LLC/<br>METRO DISTRICT NO. 2 | 3.607           |
| TRACT P | OPEN SPACE & STORMWATER DRAINAGE          | GAYESKI CAPITAL<br>EQUITIES, LLC/<br>METRO DISTRICT NO. 2 | 2.887           |
| TRACT Q | OPEN SPACE & STORMWATER DRAINAGE          | GAYESKI CAPITAL<br>EQUITIES, LLC/<br>METRO DISTRICT NO. 2 | 1.204           |
| TRACT R | FUTURE USE                                | GAYESKI CAPITAL<br>EQUITIES, LLC                          | 5.504           |
| TRACT S | FUTURE USE                                | GAYESKI CAPITAL<br>EQUITIES, LLC                          | 10.510          |
| TOTAL:  |   |   | 33.594          |

### SURVEYOR'S NOTES

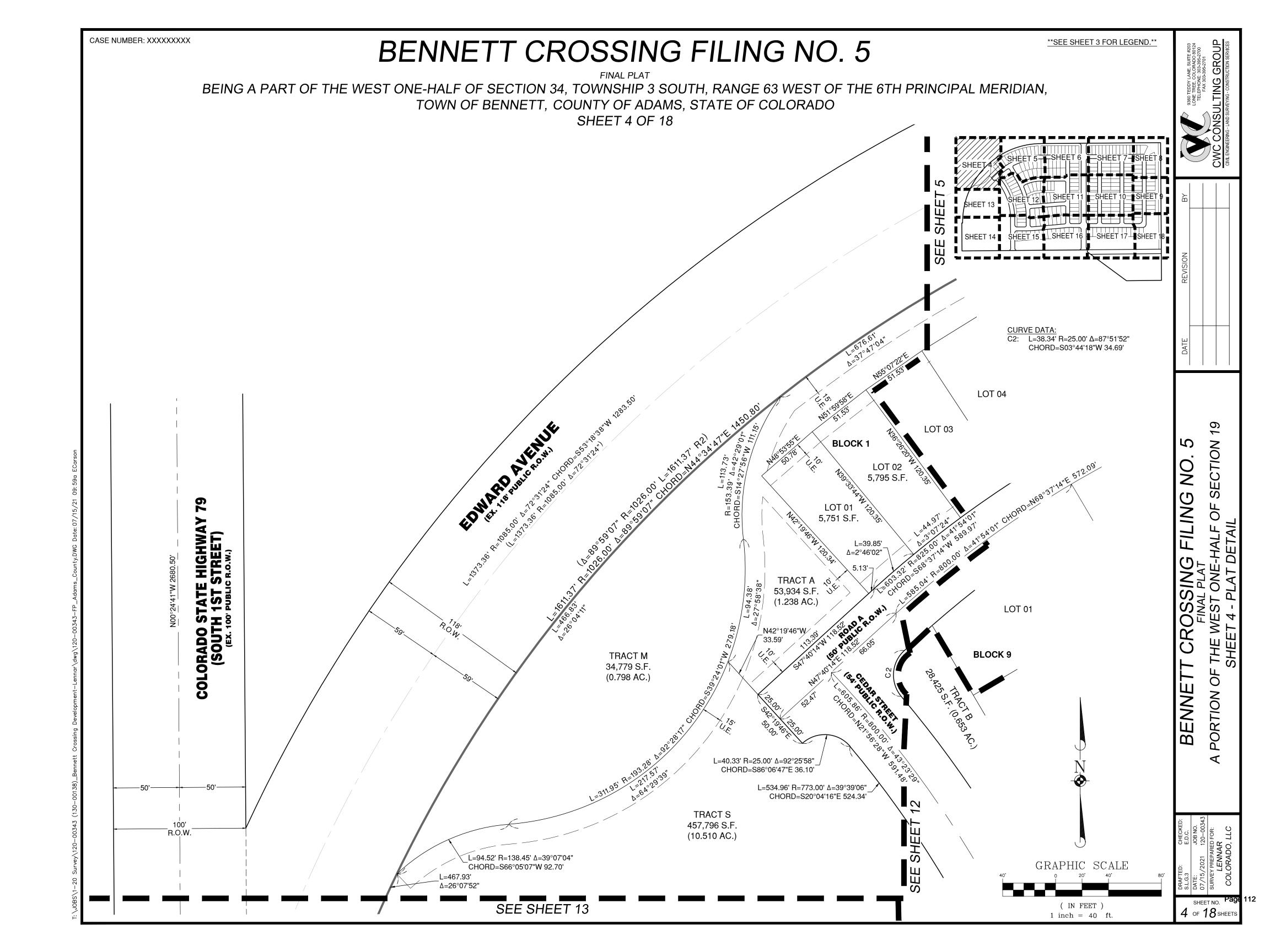
- 1. DISTANCES ARE MARKED IN U.S. SURVEY FEET AND DECIMAL PLACES THEREOF. NO DIMENSION SHALL BE ASSUMED BY SCALE MEASUREMENT HEREON. DISTANCES AND/OR BEARINGS SHOWN IN PARENTHESIS (0.00') ARE RECORD OR DEED VALUES, NOT FIELD MEASURED.
- 2. THIS LAND SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY CWC CONSULTING GROUP, INC. TO DETERMINE OWNERSHIP OF THIS TRACT, VERIFY THE DESCRIPTION SHOWN, VERIFY THE COMPATIBILITY OF THIS DESCRIPTION WITH THAT OF ADJACENT TRACTS, OR VERIFY EASEMENTS OF RECORD. REFERENCE IS MADE TO FIDELITY NATIONAL TITLE ORDER NO. N0029846-030-TH-LP, WITH A COMMITMENT DATE OF OCTOBER 29, 2020 FROM WHICH THIS SURVEY IS BASED. THIS PROPERTY IS SUBJECT TO ALL COVENANTS AND RESTRICTIONS RELATING TO THE USE AND CHARACTER OF THE LAND AND ALL MATTERS APPEARING OF PUBLIC RECORD AND AS MAY BE DISCLOSED BY A MORE RECENT TITLE COMMITMENT OR REPORT.
- 3. BEARINGS ARE BASED UPON THE SOUTH LINE OF THE NORTHWEST ONE-QUARTER OF SAID SECTION 34 FROM THE WEST ONE-QUARTER CORNER OF SAID SECTION 34 MONUMENTED BY A 3.25" ALUMINUM CAP, 0.4' DOWN IN A RANGE BOX WITH LID MARKED "SURVEY", STAMPED "T3S, 1/4, 33|34, R63W, PLS 26715, 2009" TO THE CENTER QUARTER CORNER OF SAID SECTION 34 MONUMENTED BY A 2.5" ALUMINUM CAP, 0.1' ABOVE GROUND SURFACE, STAMPED "CHARLES H RUSSELL, T3S, C1/4, \*, 34, R63W, 1994, LS 23519" BEARING NORTH 89°30'11" EAST, A DISTANCE OF 2640.73 FEET (N89°30'11"E 2640.73' PER BENNETT CROSSING FILING NOS. 1 AND 3).
- 4. EASEMENTS AND PUBLIC DOCUMENTS SHOWN OR NOTED HEREON WERE EXAMINED AS TO LOCATION AND PURPOSE AND WERE NOT EXAMINED AS TO RESERVATIONS, RESTRICTIONS, CONDITIONS, OBLIGATIONS, TERMS, OR AS TO THE RIGHT TO GRANT THE SAME.
- 5. ALL REFERENCES HEREON TO BOOKS, PAGES, MAPS AND RECEPTION NUMBERS ARE PUBLIC DOCUMENTS FILED IN THE RECORDS OF THE ADAMS COUNTY CLERK AND RECORDER'S OFFICE.
- 6. ANY PERSON WHO KNOWINGLY REMOVES, ALTERS OR DEFACES ANY PUBLIC LAND SURVEY MONUMENT OR LAND MONUMENT OR ACCESSORY, COMMITS A CLASS TWO (2) MISDEMEANOR PURSUANT TO STATE STATUTE 18-4-508, C.R.S.
- 7. DEFINITION: CERTIFY, CERTIFICATION A PROFESSIONAL'S OPINION BASED ON HIS OR HER OBSERVATION OF CONDITIONS, KNOWLEDGE, INFORMATION AND BELIEFS. IT IS EXPRESSLY UNDERSTOOD THAT THE PROFESSIONAL'S CERTIFICATION OF A CONDITION'S EXISTENCE RELIEVES NO OTHER PARTY OF ANY RESPONSIBILITY OR OBLIGATION HE OR SHE HAS ACCEPTED BY CONTRACT OR CUSTOM.
- 8. CWC CONSULTING GROUP, INC. DOES NOT WARRANT THAT THE PARCEL, AS DESCRIBED HEREON, COMPLIES WITH COLORADO SENATE BILL 35, (30-28-101).
- 9. ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.

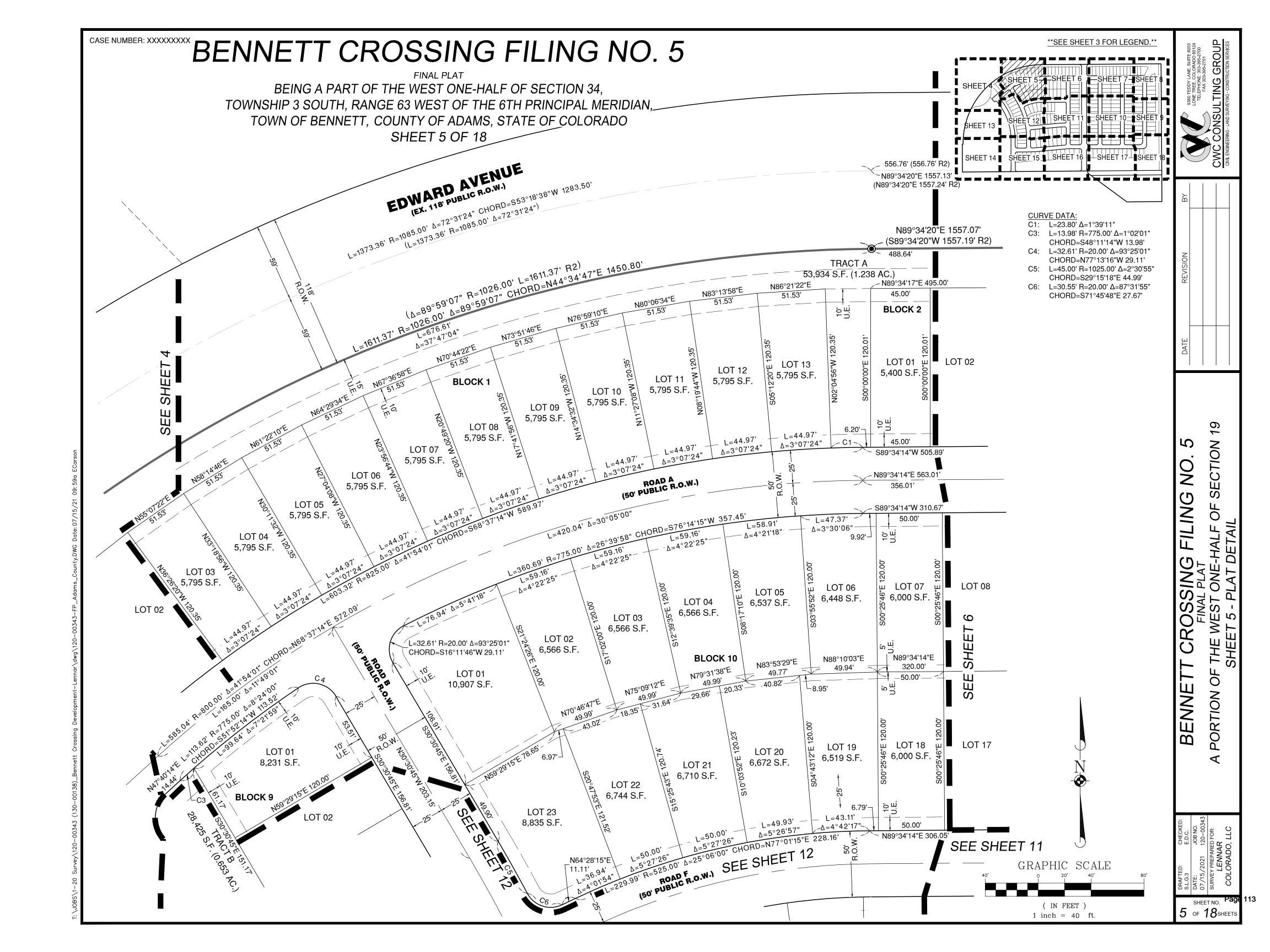


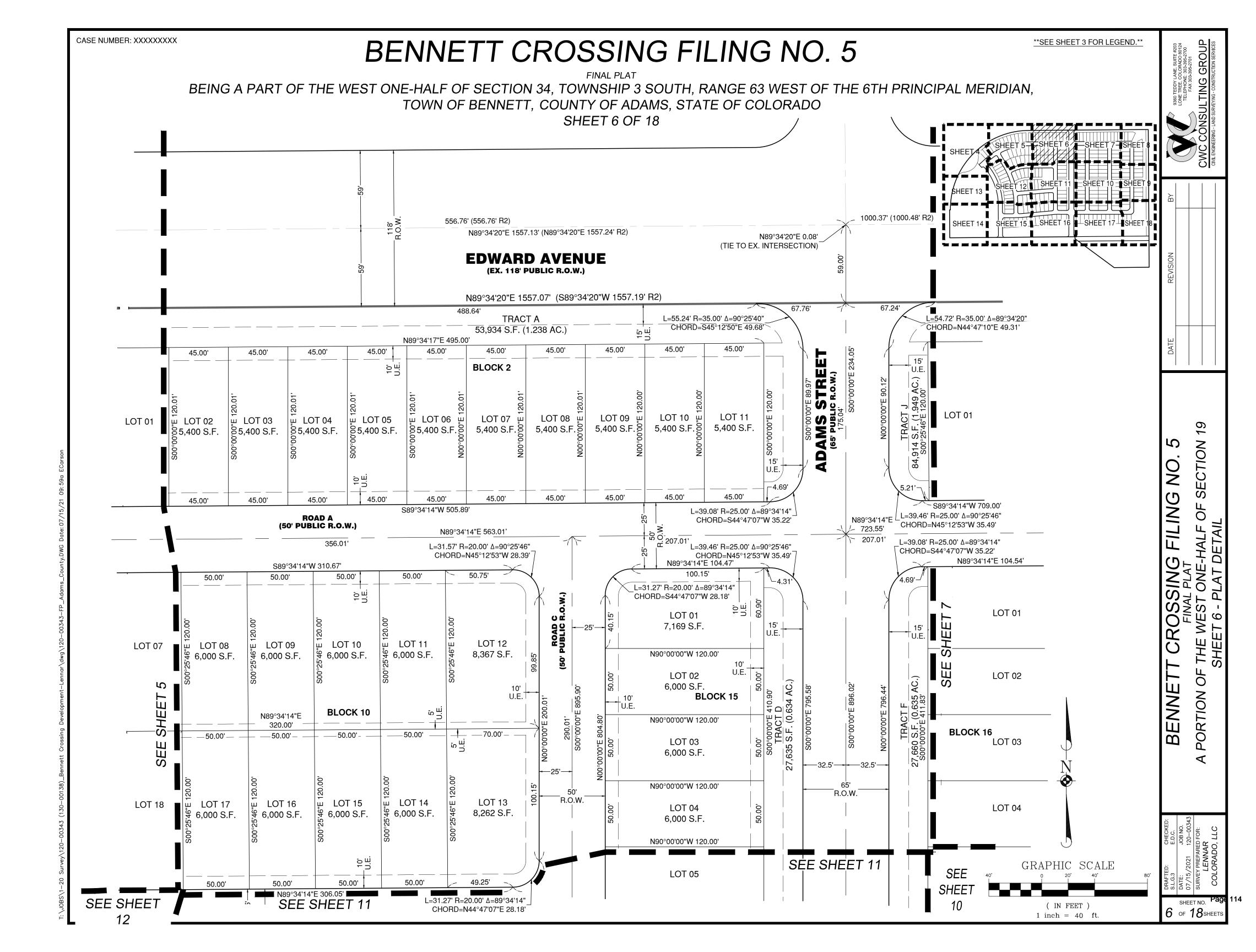
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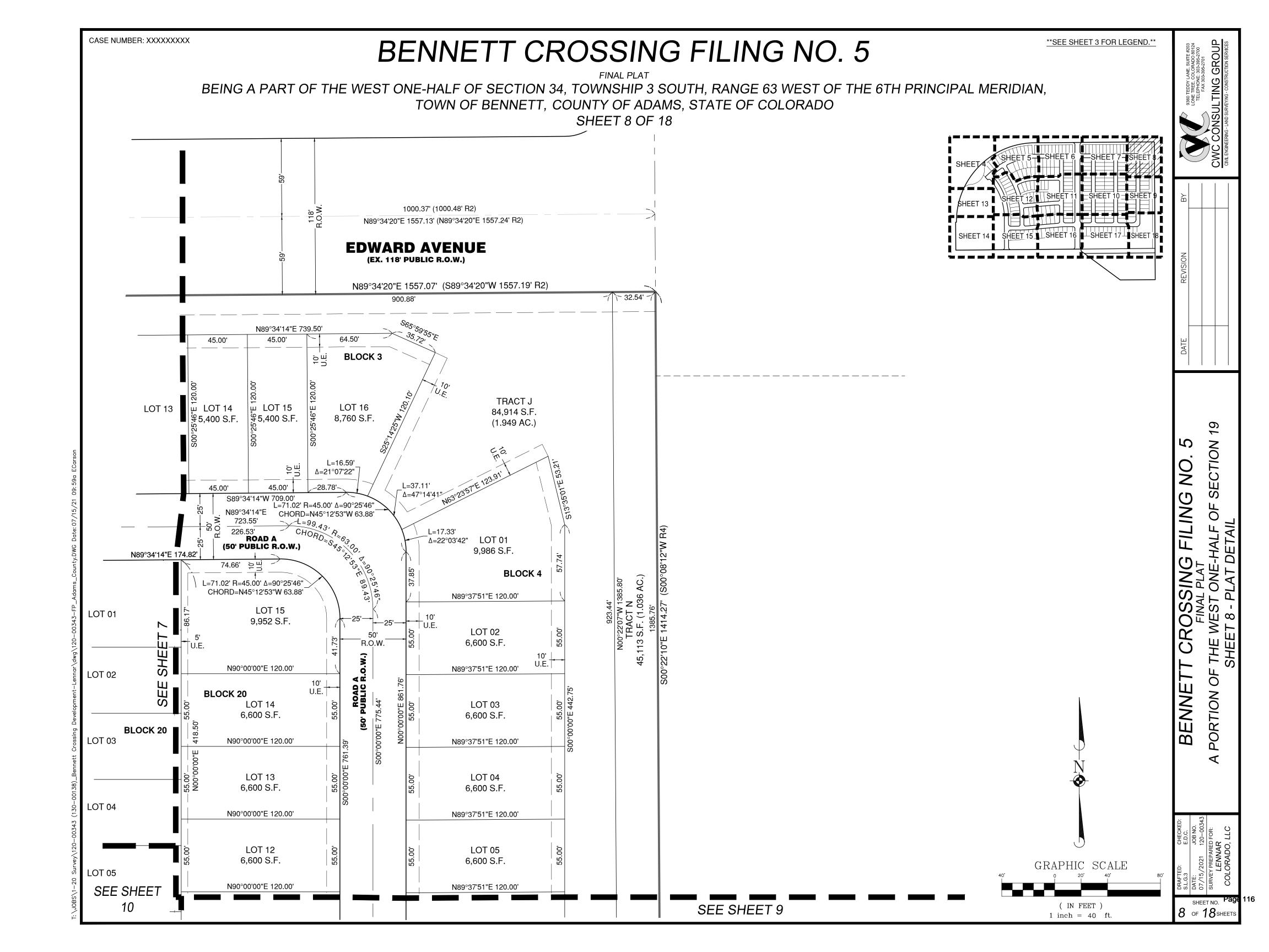
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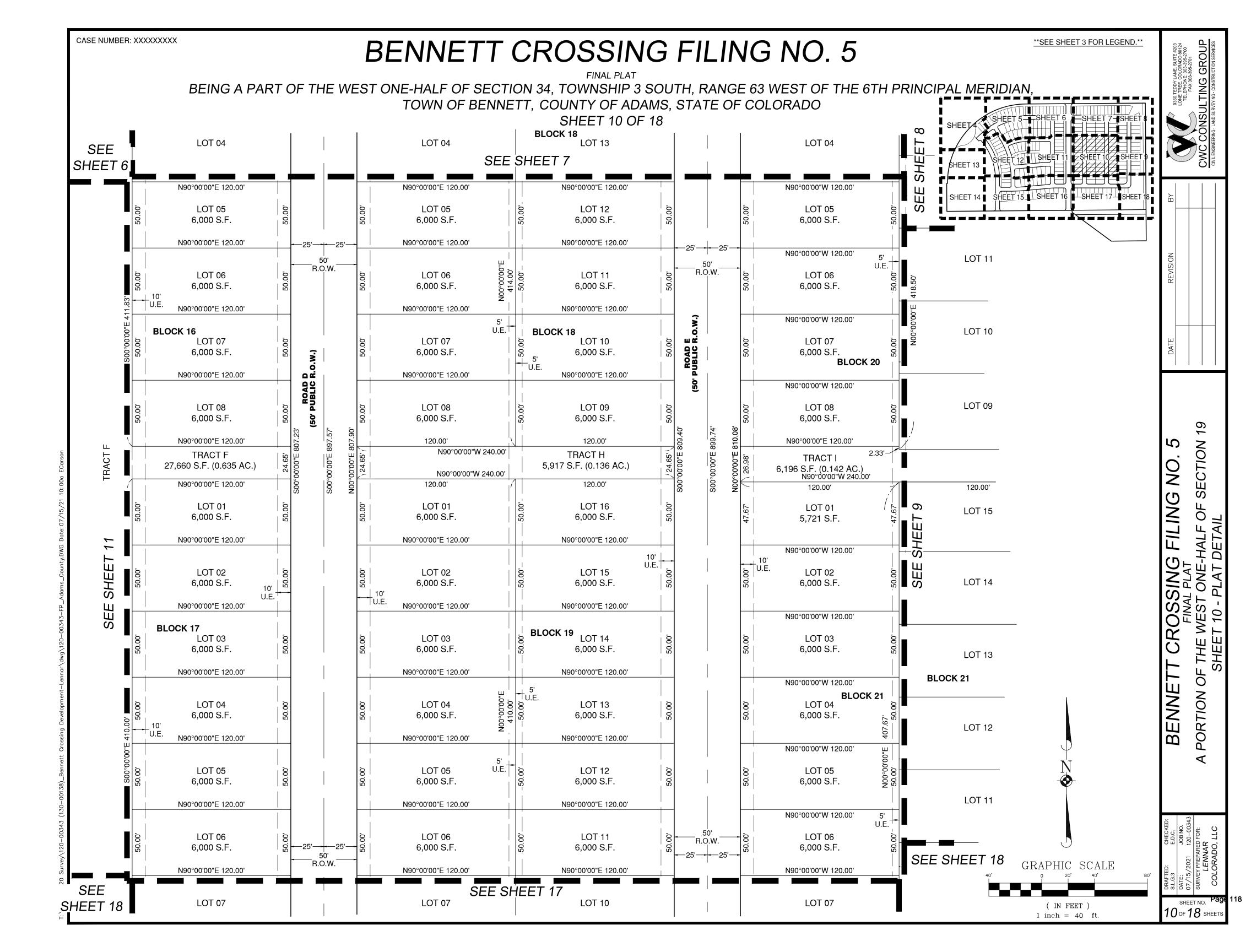


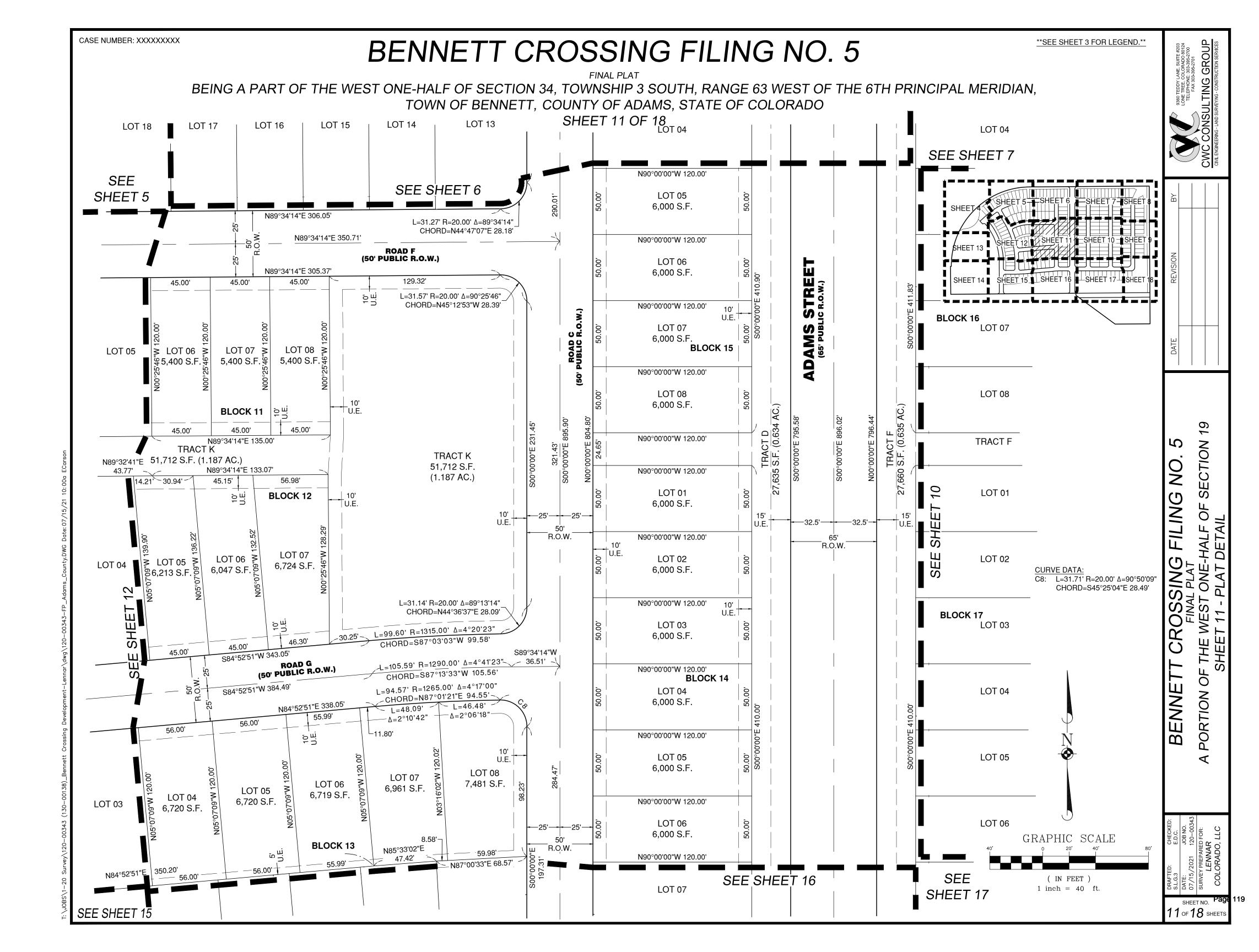


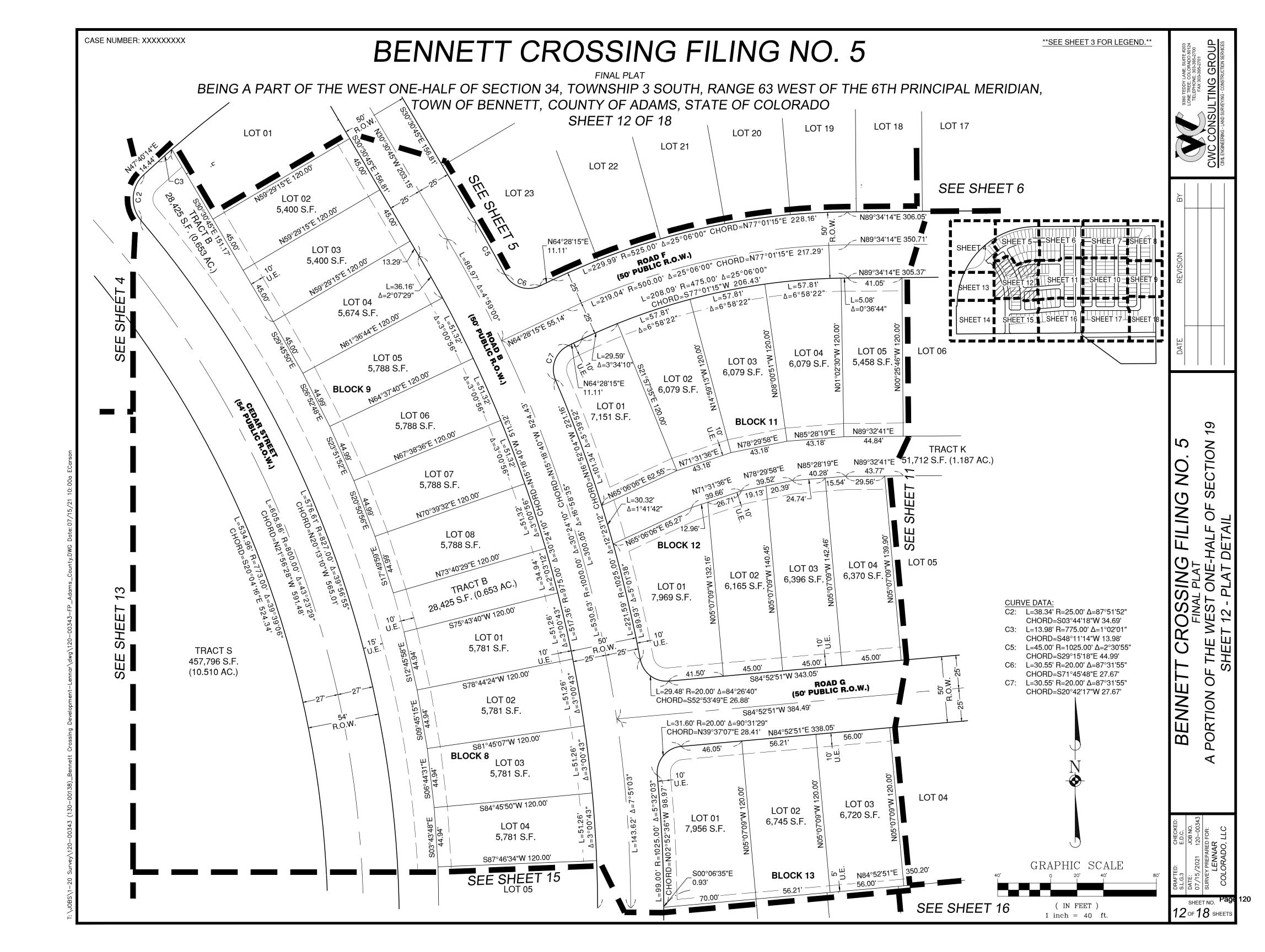


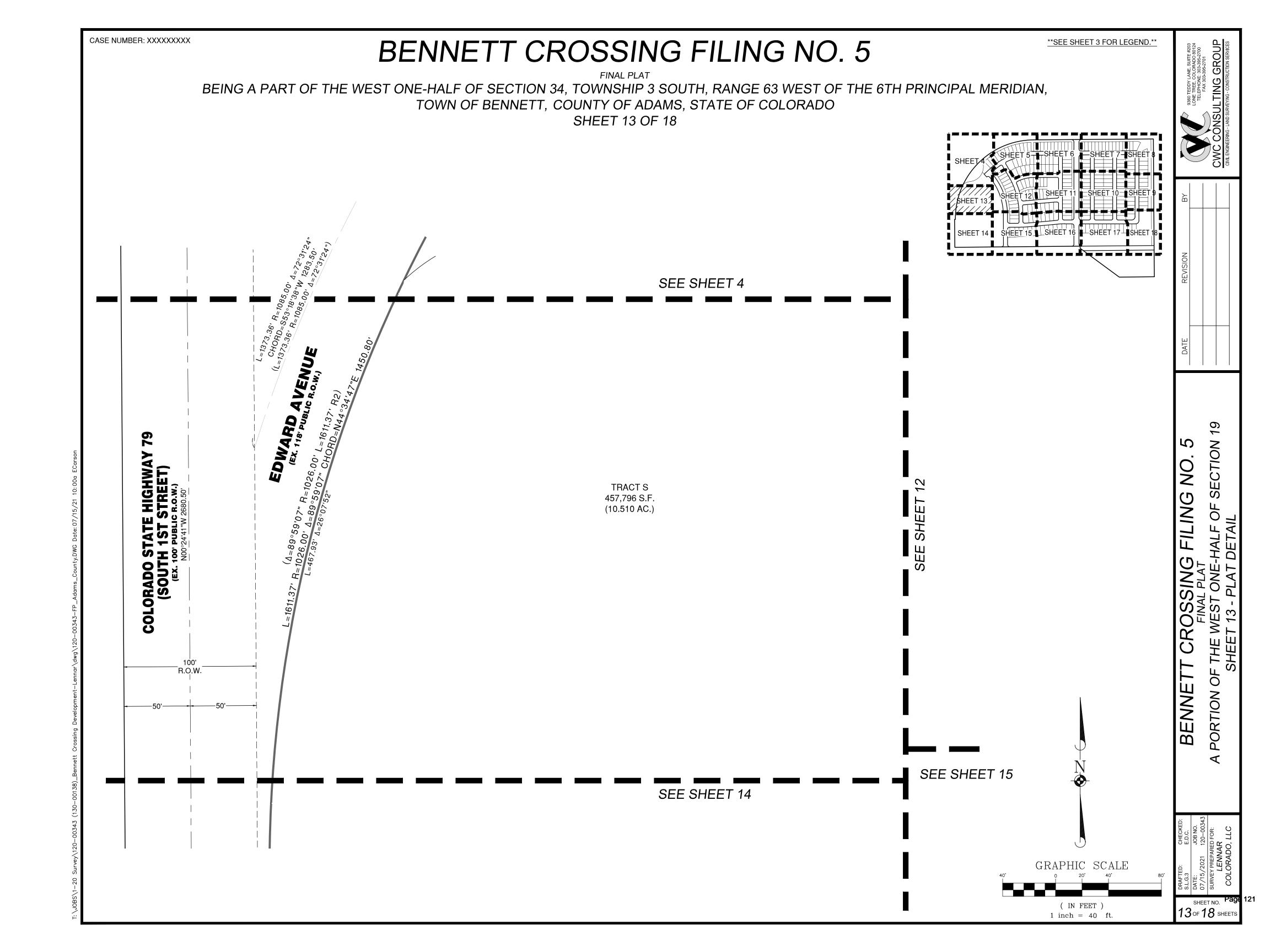
1 inch = 40 ft.

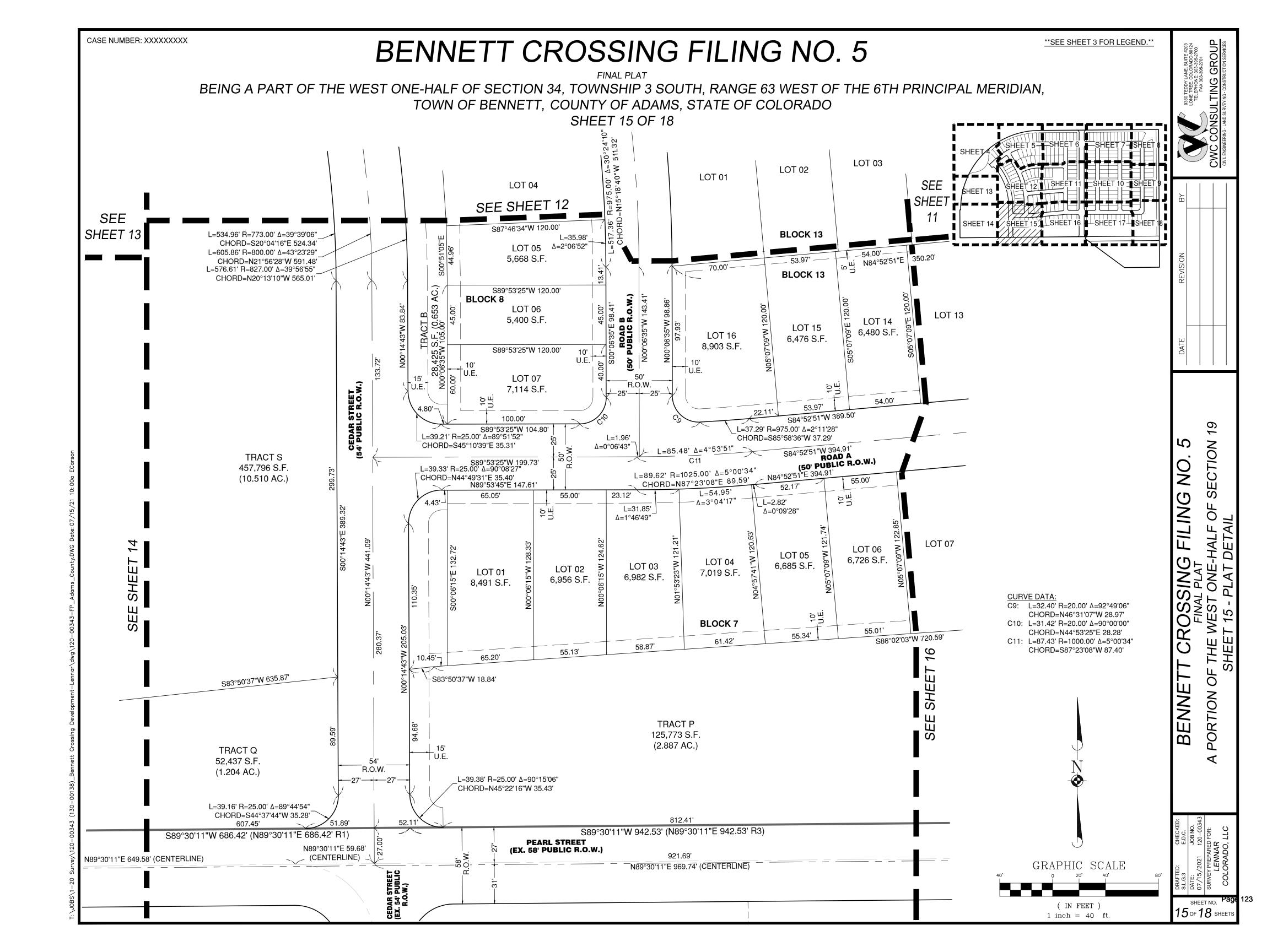


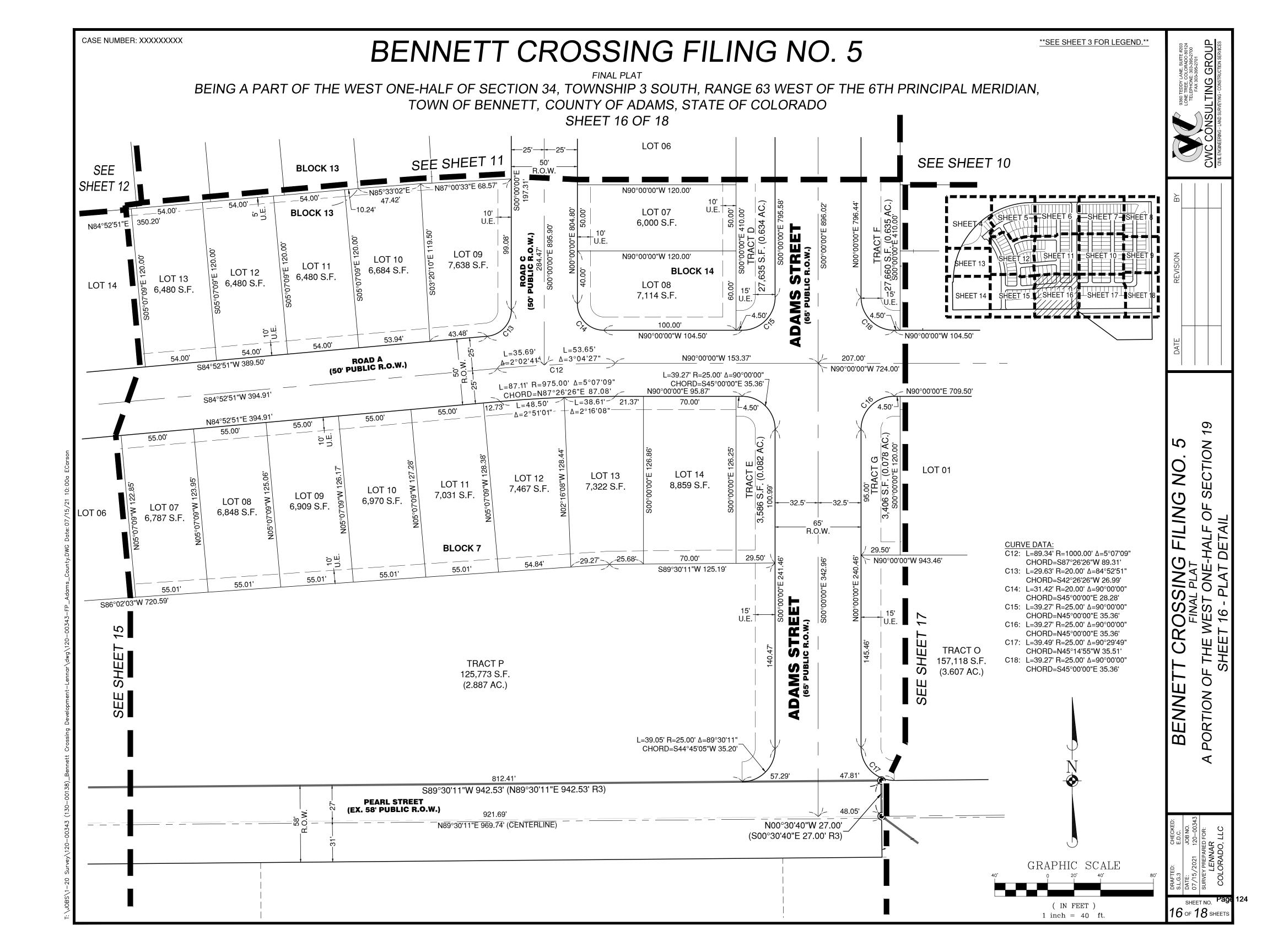


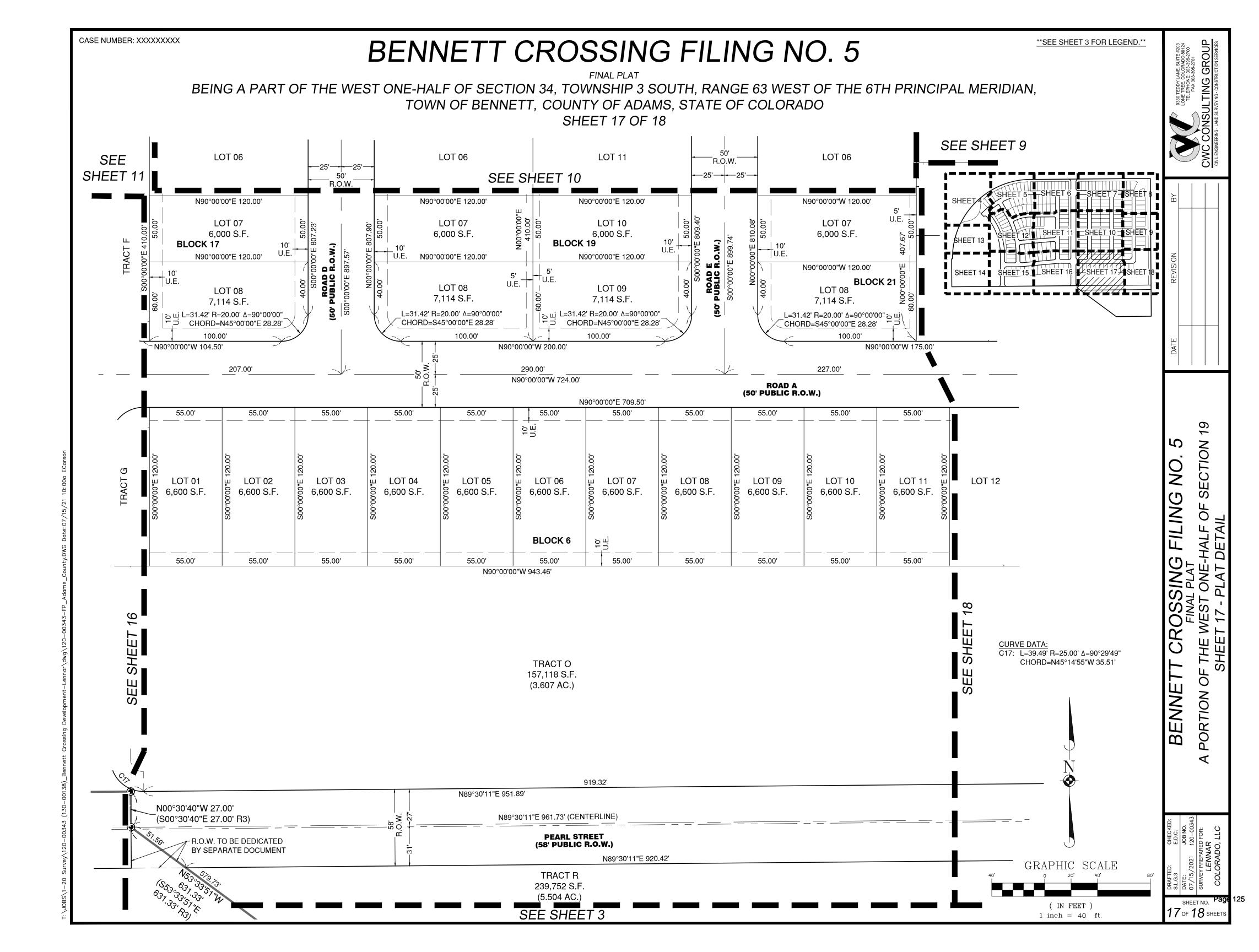


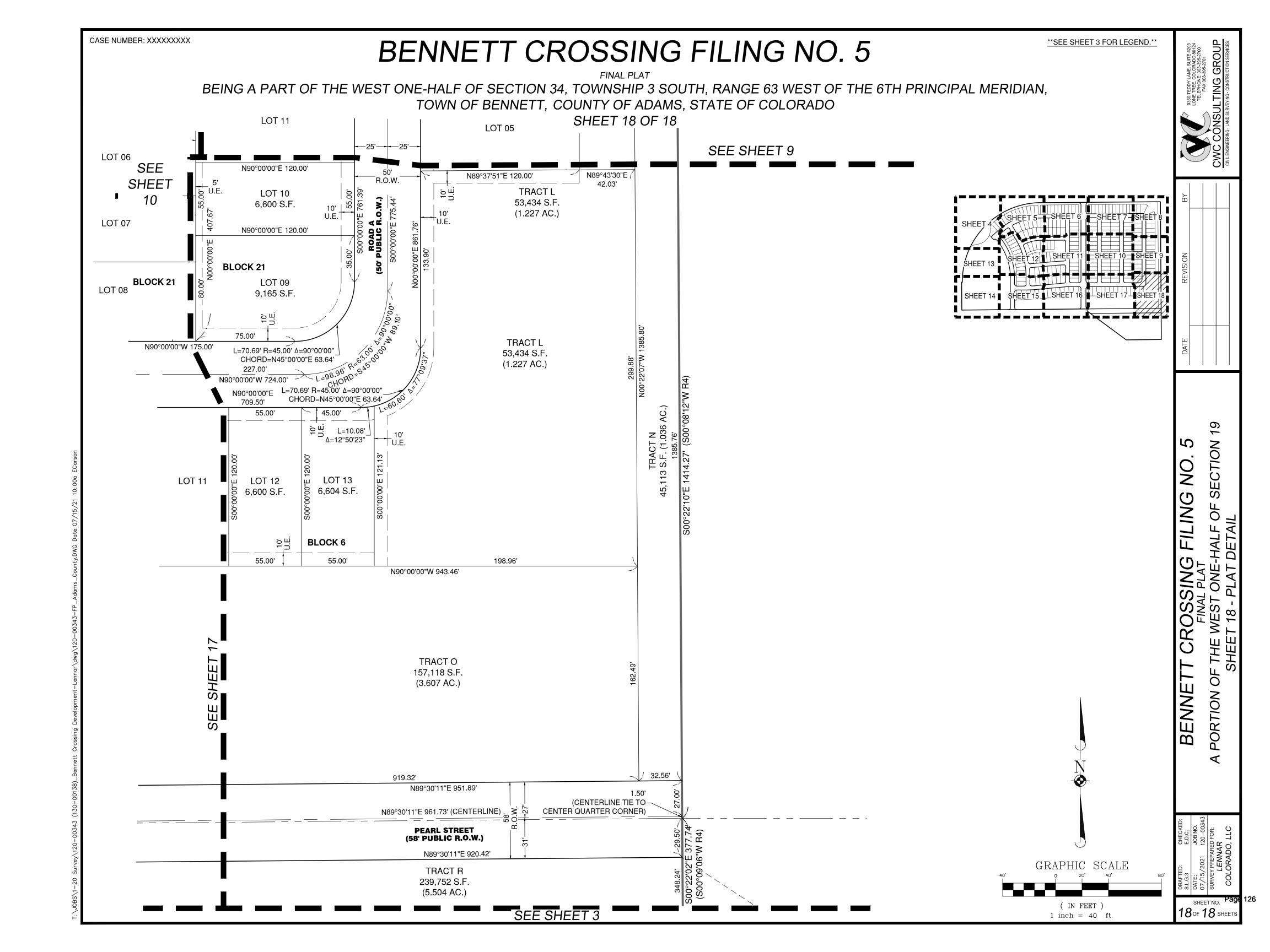














# **Engineering Review Memo**

To: Stephen Hebert, AICP, Bennett Planning & Economic Development Manager

From: Dan Giroux, PE, Engineering Consultant to the Town

Date: Tuesday, September 22, 2021

Case: Bennett Crossing Filing 5 Residential / Final Plat

Town of Bennett Land Use Case 21.24

Subject: Civil Engineering Review

Per the request of the Town of Bennett, Terramax, Inc. has reviewed the 1st submittal of Final Plat application materials, for the proposed Bennett Crossing Filing 5 residential subdivision development.

This review does not constitute a contractual offer to the applicant, and does not relieve the applicant from meeting the Town's requirement that the development comply with all Town Codes and Standards. All prior comments on the development application, including prior Bennett Crossing Filing 5 review comments, are still in force, until acceptably addressed.

Although every attempt has been made to be diligent, thorough and comprehensive, by the nature of review, and relative time invested versus design and plan development, the Town must reserve the right to make original comments and revision requests in subsequent submittals, even for information already submitted, until final application approval.

I have the following comments to offer on the application materials:

### **General & Final Plat**

- The Final Plat sheet indexing keys do not appear to be consistent, or accurate for the actual sheet numbers.
- The Final Plat should provide a Tract sheet index table or column for ease of navigation and reference.
- The Tracts M and N should be Town ownership, although interim HOA or Metro District maintenance may be required.
  - The Use definition and listing for these Tracts can be determined in conjunction with Town staff, anticipated to be Transportation, but with other uses potentially listed.
- The Town may require Tract(s) for water system facilities, potable or non-potable, to be determined for need, size, location and access by the Town Water Supply Specialist.
  - The land requirements, if needed, to be factored into the overall subdivision development Public Land Dedication balance.

### **Water Distribution System**

- The Town does not accept 10-inch potable water main per the Town's Standards.
  - The next available pipe size would be 12-inch diameter.
- Per Town Code, the subdivision developer must provide distribution system extensions to the
  extreme points of the property, to allow for future water distribution system extension and
  service.
- The Town recommends the developer consider purple pipe non-potable water within and through this development, to relieve reliance on potable water for proposed parks, streetscapes, and shared common areas.
  - The Town does not currently have non-potable water available to this location, but with the above irrigation areas piped for purple pipe, the Town will relieve the developer from full water impact fees for those locations and taps.

#### **Sanitary Sewer System**

- Per Town Code, the subdivision developer must provide collection system extensions to the extreme points of the property, to allow for future system extension and service.
- The Ash Street sanitary sewer main has capacity committed for upstream Bennett Crossing Filings 1 and 3 properties, as Platted lots for sale and development.
  - As a result, those upstream properties must be calculated as developed for sanitary sewer hydraulic flows.
  - This requirement may be relaxed if the Bennett Crossing master developer and property owner will commit, in writing, to surrender some of the capacity currently reserved for those lots.
- In addition, there are other collection system constraint points further downstream of Ash Street that will need to be evaluated by the developer for capacity, again, in light of other, prior Town development commitments.
  - The Town can share available system information for the analysis if not already in possession of the developer.
- The Ash Street sanitary sewer will require an all-weather, heavy-equipment capable service road for Town Public Works access and maintenance.

#### Access

- Per Town Code, the subdivision developer must provide transportation system extensions to the extreme points of the property, to allow for future system extension and service.
  - The Town has committed to 'right-of-way only' for Custer Street, per the Final Plat Tract.
  - The disposition of the final Pearl Street extension and improvements will need to be addressed with regards to future Custer, east residential driveways, and Tract R future uses and development.
  - The Edward Avenue 'future curve' from 79 to final alignment, west of Tract S, will require consideration and determination related to Tract S future development plans and commitments.
  - See Edward Avenue commentary below, this Access section of the comments.
- The Town is currently awaiting confirmation from CDOT in support of the proposed traffic circle position, layout, dimensions/geometry and configuration.
  - The current traffic circle concept was developed with and presented to CDOT in 2020 to favorable response; the Town is seeking a formal written letter or memo of support.
- Edward Avenue bulk grading import for the full length of the property frontage should be completed in order to avoid significant future import adjacent to occupied residential homes.

- The currently proposed Edward Avenue right-of-way 'low area' and interim stormwater drainage grading are not acceptable.
- Noise analysis, reduction and mitigation along Edward Avenue should be addressed via study, and narrative commentary, including any indicated improvements.
- Using previously escrowed Bennett Crossing Filing 2 developer improvement funds, the Town may pursue extension of Edward Avenue east to Custer Street, and Custer Street north to Bennett Avenue, via the Filing 5 developer's design team, and possibly contractor forces.
- The northwest Road A Cedar Street 'future intersection' configuration is not allowable due to the proximity of the Edward Avenue traffic circle.
- Additionally, future traffic circle headlight 'splash' should be considered and addressed via subdivision development layout, grading, fencing/screening, or other mitigation.
- Additional emergency vehicle access (EVA) points and routes may be required for extreme subdivision development limits, to be determined in conjunction with Bennett-Watkins Fire Rescue (BWFR).
  - These may include use of Tracts, with sidewalks, trails, or all-weather drives, with appropriate grading and landscape-break accommodations.

### **Stormwater Management**

- There is a CDOT SH 79 culvert along the west side of Tract S that was apparently mis-analyzed through previous Bennett Crossing stormwater studies.
  - The culvert was presented by the Bennett Crossing developer and consultants to drain southeast to northwest, from the Bennett Crossing 'side' to west of SH 79 / Muegge Farms 'side'.
  - Ensuing Muegge Farms' survey work and stormwater analysis have shown the culvert direction to be northwest to southeast, tributary to Bennett Crossing, and specifically the currently proposed Filing 5 Tract S.
  - The tributary area indicated also includes SH 79 right-of-way, ditch, and pavement areas.
  - Detailed tributary area information and flows are not available via the Town; information status for CDOT is unknown.
  - As a result, current significant ponding and poor stormwater conveyance through PA-6 / Tract S will need to be addressed with this subdivision development.
  - The stormwater system will need to be analyzed for this additional off-site tributary area, for routing through the system, including streets, channels, culverts, pond, outlet and overflow.
  - Storm sewer (as well as other Town utilities) outside street access areas will require maintenance vehicle drives.
  - Oversized trail sidewalks may serve as maintenance drives.

Steve, this concludes my engineering review of the application and supporting submittal materials for the proposed Bennett Crossing Filing 5 Residential Final Plat by the applicant. Please let me know if you have any questions, or require additional information pertaining to the submitted information, or my review.

# **STATE OF COLORADO**

#### Traffic & Safety

Region 1 2829 W. Howard Place Denver, Colorado 80204



| Project Name:           | Bennett Crossing - Lennar |          |              |  |
|-------------------------|---------------------------|----------|--------------|--|
|                         |                           | Highway: | Mile Marker: |  |
| Print Date:             | 10/29/2021                | 079      |              |  |
| Orainage Comments:      |                           |          |              |  |
| SBL - 10/27/2021        |                           |          |              |  |
| No comments at this tim | ne.                       |          |              |  |
| SBL - 9/7/2021          |                           |          |              |  |
| No comments at this tim | ne.                       |          |              |  |
|                         |                           |          |              |  |

A detention and water quality pond was designed and approved with Bennett Crossing Filing No. 1 and is to be constructed with Phase 1 of this project per those plans. The Bennett Crossing pond will be located off-site east of the Site on property owned by the current landowner for this project. Edward Avenue currently is built as a half street and Filing No. 5 is obligated to convey the south half of the road and direct flows to the ultimate off-site pond. The full buildout of Edward Avenue and the roundabout are accounted for in the Filing No. 5 design. Storm sewer stubs are provided for future inlets in Edward Avenue. The east half of SH 79 is also accounted for in the Filing No. 5 flows. When Edward Avenue full street section is constructed, including the future roundabout, the drainage channels will be filled in and Edward Avenue runoff will be collected in a future storm sewer specific to that future project. Any storm sewer west of the existing Edward Avenue high point and associated with Edward Ave/SH 79 half street that fronts Bennett Crossing Filing No. 5 Tract S (Planning Area 6) is assumed to be conveyed either within the ROW or through Bennett Crossing Tract S (Planning Area 6) to the existing drainage channel north of Pearl Avenue. The storm sewer stubs provided are sized for the ultimate Edward Avenue buildout.

#### **Environmental Comments:**

FHU modeled the location and created some noise contours in 2018. The results from the existing and future condition noise modeling efforts are illustrated with noise contour lines in Figure 2 and Figure 3 in the attached Noise Contour Memo. Any sensitive land uses closer to 1st Street or SH 79 than indicated by the respective contour line may be incompatible with traffic noise levels unless supplemental traffic noise abatement is provided.

We would like the applicant to demonstrate that the proposed residential lots would not be impacted by traffic noise based on the noise contours as shown in the 3/13/2018 Town of Bennett SH79 Traffic Noise Contours (FHU Reference Number 118052-01) memo.

8/30/2021:

Required -

Arch/History:

Since this is a permit, a file search for Arch and History is required. If the file search identifies anything, a more extensive report will be required. If nothing is identified, then the file search should be sufficient. For the file search contact:

Cultural File Search: <a href="http://www.historycolorado.org/oahp/file-search">http://www.historycolorado.org/oahp/file-search</a> email: hc\_filesearch@state.co.us

The applicant will need to demonstrate that the proposed residential lots would not be impacted by traffic noise based on the noise contours as shown in the 3/13/2018 Town of Bennett SH79 Traffic Noise Contours (FHU Reference Number 118052-01) memo.

The applicant is required to review the ECIS to determine the level of Paleo requirements/technical reports needed.

Info for Applicant:

The ECIS will be used to support HazMat requirements.

Non-historic 4f does not apply.

If any non-historic 6f properties will be impacted or disturbed applicant shall coordinate with Veronica McCall veronica.mccall@state.co.us

The Permittee shall complete a stormwater management plan (SWMP) which must be prepared with good engineering, hydrologic, and pollution control practices and include at a minimum the following components: qualified stormwater manager; spill prevention and response plan; materials handling; potential sources of pollution; implementation of control measures; site description; and site map.

In addition, the Permittee shall comply with all local/state/federal regulations and obtain all necessary permits. Permittee shall comply with CDOT's MS4 Permit. When working within a local MS4 jurisdictional boundary, the permittee shall obtain concurrence from the local MS4 that the local MS4 will provide construction stormwater oversight. The local MS4 concurrence documentation shall be retained with the SWMP.

10/18/2021: Same comments and needs as noted on 8/30/2021

#### Traffic Comments:

Figure 3a - SH79 southbound left turn decel lanes for Pearl Ave and Edwards Ave do meet length requirements per the access code.

The Bennett Access Control plan does not have a traffic signal at the intersection of SH79 and Pearl Ave.

#### EL - 10/28/2021

#### Resident Engineer Comments:

No comments at this time.

#### **Utilities Comments:**

**PMC 10/25/21:** It is recommended that the Developer understand the SUE requirements for their project, where applicable. Any work in CDOT Rights of Way will require a full SUE investigation if the anticipated excavation is greater than 2 feet in depth and a contiguous 1,000 square feet **OR** there is utility boring. Here is the link to the SUE Best Practices document from the Underground Damage Prevention Safety Commission.

https://ops.colorado.gov/sites/ops/files/2020-04/bestpracticesubsurfaceutilityengineering.pdf

It is recommended that the Developer engage the Utility owners as early as possible for any work within CDOT Rights of Way. With proposed utility installations the risk of utility impacts increases.

Any work regarding water lines must be approved by the water and fire districts. Some water districts have a lengthy design/review process. The Developer needs to consider how this could affect their design and construction schedules. Also some water districts may require only contractors from their pre-approved list to work on their lines. The Utility plans only show proposed water and sanitary storm lines; there were no fire hydrants shown. I also

did not see any proposed gas or electric facilities as part of the utility plan.

New installation of utilities within CDOT Rights of Way requires the PointMan mobile app to be used to capture as built data (please add this information in your general notes). Here is the link to that information. <a href="https://drive.google.com/file/d/1d8EKMrRY29XtMzJdUMYqGt">https://drive.google.com/file/d/1d8EKMrRY29XtMzJdUMYqGt</a> Tg5-MZ3qN/view?usp=sharing.

Any new traffic signals may require a meter when connecting the power, if applicable. The Developer will want to contact the power company in the area for any requirements. It is recommended that the Developer engage the power company as early as possible as each power company's procedures are different.

#### Permits Comments:

- Previous review from 8/26 was to the site plan & plat. I am at a loss if any of the previous remarks were acknowledged or addressed. Therefore those same remarks bear repeating.
- What is presented to us is a civil review of roadways and infrastructure outside of CDOT RoW. My only comment is to ask the Town to ensure all improvements in the future SH 79 RoW are to CDOT standards so that the eventual dedication has no substandard corrections. There are clearly less than full roadway improvements being made at this time.

#### RS 10-28-21

This plat shows the intention to dedicate & connect Pearl Street, Adams Street, and Custer Street to SH 79. Pearl Street was permitted as a right-in, right-out (#116022). Adams & Custer are on Edwards, not yet a dedicated CDOT RoW. However, for the same, CDOT design standards should be adhered to; to ensure the eventual dedication of RoW and roadway/intersection design has no issues.

The current version of the SH 79 Access Control Plan shows that either Adams or Custer will be signalized but not both. Under CDOT rules: Traffic Signals are only when warrants are met. Anticipating that warrants will eventually be met, the plat should include a note to reference the Subdivision Improvement Agreement, escrow, or other means to ensure the pro-rata share of the signal costs is obtained by the Town. At the time Edwards is dedicated as CDOT RoW, and assuming both Adams and Custer streets are fully built south of Edwards, CDOT will want a "no-build" access permit to assign the traffic count to be assigned to both of these intersections. The Town would also be advised to define for CDOT what public improvements located within the Edwards RoW may be deferred (i.e. street lights, sidewalks, etc.?) which would need to be permitted and accommodated after dedication as CDOT RoW if not built beforehand.

It is noted that Cedar Street is no longer anticipated to connect to SH 79, therefore no permit is called for. Developer would be advised that all utilities located in CDOT RoW must be fully documented and permitted according to SUE legislative requirements.

The table on sheet 2 of the plat Identifies Tracts N & M as "future use" and we believe this is a misrepresentation. Tract N (on sheets 8, 9 & 18) should be earmarked for Transportation & utility purposes, or in short: a future public roadway. Earlier conversations hinted that Tract M (sheet 4) may be considered as future RoW for a roundabout - but we are unclear - but suspect by its shape, that is also intended for possible roadway & associated utilities.

Because Edwards Avenue is intended to become a major truck route, the Town would be advised to require an appropriate noise buffer or other attenuation means for homes that will back onto this major roadway.

#### RS 08-26-21

### Other Comments:

Clearly show and identify the CDOT ROW as such. I have no other comments or concerns. 3rd party inspection required. **RLW Oct 14 2021** 

# **STATE OF COLORADO**

#### Traffic & Safety

Region 1 2829 W. Howard Place Denver. Colorado 80204



| Project Name:          | Bennett Crossing - Lennar |          |              |
|------------------------|---------------------------|----------|--------------|
|                        |                           | Highway: | Mile Marker: |
| Print Date:            | 9/10/2021                 | 079      |              |
| Orainage Comments:     |                           |          |              |
| SBL - 9/7/2021         |                           |          |              |
| No comments at this ti | me.                       |          |              |

A detention and water quality pond was designed and approved with Bennett Crossing Filing No. 1 and is to be constructed with Phase 1 of this project per those plans. The Bennett Crossing pond will be located off-site east of the Site on property owned by the current landowner for this project. Edward Avenue currently is built as a half street and Filing No. 5 is obligated to convey the south half of the road and direct flows to the ultimate off-site pond. The full buildout of Edward Avenue and the roundabout are accounted for in the Filing No. 5 design. Storm sewer stubs are provided for future inlets in Edward Avenue. The east half of SH 79 is also accounted for in the Filing No. 5 flows. When Edward Avenue full street section is constructed, including the future roundabout, the drainage channels will be filled in and Edward Avenue runoff will be collected in a future storm sewer specific to that future project. Any storm sewer west of the existing Edward Avenue high point and associated with Edward Ave/SH 79 half street that fronts Bennett Crossing Filing No. 5 Tract S (Planning Area 6) is assumed to be conveyed either within the ROW or through Bennett Crossing Tract S (Planning Area 6) to the existing drainage channel north of Pearl Avenue. The storm sewer stubs provided are sized for the ultimate Edward Avenue buildout.

#### **Environmental Comments:**

FHU modeled the location and created some noise contours in 2018. The results from the existing and future condition noise modeling efforts are illustrated with noise contour lines in Figure 2 and Figure 3 in the attached Noise Contour Memo. Any sensitive land uses closer to 1st Street or SH 79 than indicated by the respective contour line may be incompatible with traffic noise levels unless supplemental traffic noise abatement is provided.

We would like the applicant to demonstrate that the proposed residential lots would not be impacted by traffic noise based on the noise contours as shown in the 3/13/2018 Town of Bennett SH79 Traffic Noise Contours (FHU Reference Number 118052-01) memo.

8/30/2021:

Required -

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Since this is a permit, a file search for Arch and History is required. If the file search identifies anything, a more extensive report will be required. If nothing is identified, then the file search should be sufficient. For the file search contact:

Cultural File Search: http://www.historycolorado.org/oahp/file-search

email: hc\_filesearch@state.co.us

The applicant will need to demonstrate that the proposed residential lots would not be impacted by traffic noise

based on the noise contours as shown in the 3/13/2018 Town of Bennett SH79 Traffic Noise Contours (FHU Reference Number 118052-01) memo.

The applicant is required to review the ECIS to determine the level of Paleo requirements/technical reports needed.

Info for Applicant:

The ECIS will be used to support HazMat requirements.

Non-historic 4f does not apply.

If any non-historic 6f properties will be impacted or disturbed applicant shall coordinate with Veronica McCall veronica.mccall@state.co.us

The Permittee shall complete a stormwater management plan (SWMP) which must be prepared with good engineering, hydrologic, and pollution control practices and include at a minimum the following components: qualified stormwater manager; spill prevention and response plan; materials handling; potential sources of pollution; implementation of control measures; site description; and site map.

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#### Traffic Comments:

Figure 3a - SH79 southbound left turn decel lanes for Perl Ave and Edwards Ave do meet length requirements per the access code.

The decel lanes at the intersection of E Colfax Ave and SH79 do not meet code. The town of Bennett should collect money to bring these up to code.

The Bennett Access Control plan does not have a traffic signal at the intersection of SH79 and Pearl Ave. **EL - 09/8/2021** 

Growth rates and percentage of trucks does not match OTIS. How did you come up with this number?

ITE Trip Generation 10th Edition needs to be used for trip generation.

For figure 2 and 3 add arrows to the distribution so we can understand which way they are going at the intersection.

Confused on In and out movement. In movement seems to be moving away from the development. I usually think of that as out movement. Please clarify.

Latest version of Synchro and HCM methodology needs to be used for calculation. It looks like the latest HCM is used but thought I would mention it. It does provide slightly different results the new version of Synchro.

Verify volumes for west of SH-79. Civic Center is supposed to have more than showing in this report.

Perl is showing that it needs a left turn lane but is not listed in the recommendations of the report.

Pearl is not slated for a signal and might become a 3/4 movement intersection. This is based off of the Bennett Access Control Plan. Recommendation 2 sounds like it could get signalized. Clarify this language.

Jason Igo 1/29/2021

#### Resident Engineer Comments:

9/2/21 - No comments at this time.

#### 1/26/21 - No comments at this time.

#### Permits Comments:

This plat shows the intention to dedicate & connect Pearl Street, Adams Street, and Custer Street to SH 79. Pearl Street was permitted as a right-in, right-out (#116022). Adams & Custer are on Edwards, not yet a dedicated CDOT RoW. However, for the same, CDOT design standards should be adhered to; to ensure the eventual dedication of RoW and roadway/intersection design has no issues.

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It is noted that Cedar Street is no longer anticipated to connect to SH 79, therefore no permit is called for. Developer would be advised that all utilities located in CDOT RoW must be fully documented and permitted according to SUE legislative requirements.

The table on sheet 2 of the plat Identifies Tracts N & M as "future use" and we believe this is a misrepresentation. Tract N (on sheets 8, 9 & 18) should be earmarked for Transportation & utility purposes, or in short: a future public roadway. Earlier conversations hinted that Tract M (sheet 4) may be considered as future RoW for a roundabout - but we are unclear - but suspect by its shape, that is also intended for possible roadway & associated utilities.

Becausee Edwards Avenue is intended to become a major truck route, the Town would be advised to require an appropriate noise buffer or other attenuation means for homes that will back onto this major roadway.

#### RS 08-26-21

There is an approved PEL for SH 79, plus an Access Control Plan (ACP) still in the formative stage by the Town of Bennett. The realignment of SH 79 Access plus new locations along this segment has been discussed and analyzed to bring the plan to a point of 98% completeness. CDOT Access has respectfully used these documents as our guide in reviewing this proposal.

The PEL calls for a 118-ft RoW for the future SH 79. The plan appears to be consistent for showing the E-W RoW profile, however, it is lacking to show the roundabout inferred on the letter of intent, and the connections of both Cedar and Custer roadway-rights-of-way. The TIS provided is also lacking to ID these near and long term improvement-connections flanking this development.

The ACP shows Adams Street as a full movement, with a caveat for possible signalization. This needs to be reflected in the plat – public improvement portion and it is recommended that the Town secure a pro-rata share of funds for future signal (if warranted) from the development as an escrow. That would apply to both Adams, Cedar, and Custer Street signals if-when warranted. Signals at Marketplace are being worked out separately and this development may also have a pro-rata share as well.

Other public improvements in the Edwards RoW should be built to CDOT standards if this roadway is to become CDOT RoW. That would include pavement, sidewalks, crosswalks, signal plans, etc. The plat should have a note of the process-agreement outlining the procedure & timing of when the RoW will be dedicated to CDOT. Work in CDOT RoW is by permit, not applicable if it is Town RoW in the interim.

Given that Edwards Ave is earmarked to become a State Highway, a significant amount of truck and through-traffic will be passing by. The plan appears to lack the means to mitigate noise for the homes that will back onto the future-SH 79. The Town would be advised to include such a feature within the "landscaping" buffer.

Custer Street is shown on the ACP and PEL as an N-S street. Why is this plat not securing the dedication of RoW for Custer on the east side of this development? When will the RoW be dedicated and whose responsibility will it be to build the roadway and associated intersection improvements?

The same comment applies to Cedar Street on the west side. Why is the RoW not shown, when will the RoW be dedicated and whose responsibility will it be to build the roadway and associated intersection improvements? Where is the Roundabout that is mentioned in the letter of intent and why is it not shown on the plans?

Both Adams Street and future Custer Street connections to Edwards Ave should have permits tied to them, and inturn, be designed to accommodate the 20-yr traffic growth projection. This would be consistent with the CDOT Access Permit requirements and ensure the eventual dedication to CDOT as RoW has appropriate documentation and all requirements are met.

I have red-lined the letter of intent & sketch plan to point out where the plans are not in-sync and should be revised.

CDOT requests a revised submittal and summary as to if and how our concerns are addressed.

Two red-line files are attached: Letter of Intent Red-line & Red line of Sketch Plan-

RS 01-15-2021

At the appropriate time, CDOT would like to the Drainage Report.

MC 1-29-21

#### Other Comments:

No comments at this time. RLW Jan 21 2021

I have no comments or concerns. 3<sup>rd</sup> party inspection required. RLW Aug 27 2021

## Memorandum



To: Steve Hebert, AICP, Bennett Planning & Economic Development Manager

From: Gabrielle Renner, PE PTOE RSP1

**Town Traffic Engineer** 

Date: 9/8/2021

Re: Town Land Use Case 21.24: Bennett Crossing Filing 5 Final Plat

Town Traffic Engineering Review

The Bennett Crossing Filing 5 Final Plat application materials were submitted on July 20, 2021. The application materials were reviewed, and the following comments have been provided by the Town Traffic Engineer.

- Sheet key doesn't match the segmented sheets in Filing 5 Final Plat dated 7/15/2021.
- Road A, Road B, Road C, Road D, Road E, Road F, Road G
  - o Please confirm the planned cross-section for these roads.
- Adams Street 65' ROW
  - o Please confirm the planned cross-section for Adams Street.
  - Request no parking and detached sidewalk along Adams Street
- Cedar Street 54' ROW
  - There is no cross-section in the Town of Bennett Roadway Design & Construction Standards that has a 54' ROW.
  - Please confirm the planned cross-section for Cedar Street and provide justification if it does not meet the Town of Bennett's design standards.
- Pearl Street 58' ROW
  - There is no cross-section in the Town of Bennett Roadway Design & Construction Standards that has a 58' ROW.
  - Please confirm the planned cross-section for Pearl Street and provide justification if it does not meet the Town of Bennett's design standards.
- Sheet 4 show the termination of Road A and Cedar Street as shown in Figure 1. It is requested that the intersection of Road A and Cedar Street do not support Tract S. The proximity to the future reserved intersection in Tract M provides a safety concern for drivers to visualize where there are in relation to the two intersection locations. It is requested that shown intersection be converted to a "Knuckles" 90 degree identified on Drawing 4-41 in the Town of Bennett Roadway Design & Construction Standards similar to what is shown in Sheet 8.
  - Access to Tract S can be provided via the south Road A or midblock along Cedar Street per the Tract S traffic impact study will identify as adequate safe access.

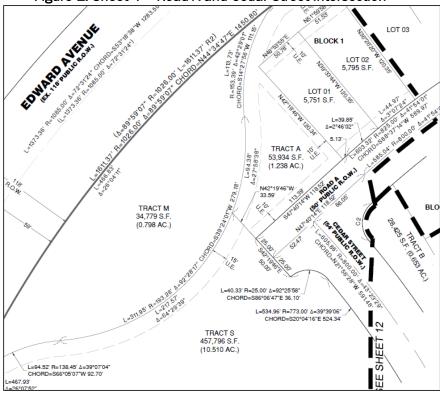


Figure 1: Sheet 4 - Road A and Cedar Street Intersection

- It is recommended to provide a visual barrier between future intersection in Tract M and Road A / Cedar Street for driver safety.
- How does Lot 1 work with the future intersection in Tract M and any proposed barriers that might be required from CDOT due to noise?
- Confirmation of crosswalks and internal traffic control needs to be provided.
- Confirm all roads and intersections support emergency vehicles or waste collector vehicles.
- The Traffic Impact Study (TIS) completed on July 20, 2021, was reviewed.
  - Unfortunately, while reviewing the TIS, it was noted that the original TIS completed for the whole Bennett Crossing in 2016 misrepresented PA-6/Tract S. It should be represented as multi-family for the trip generation. It would be preferred that background traffic incorporate the multi-family assumption that should have been included in the 2016 TIs.
  - The Access Control Plan identifies Pearl Street as full access till the SH 79 realignment. Year 2041 traffic analysis will need to evaluate Pearl Street / SH 79 as right-in / right-out with shifts of the development traffic.
  - The intersections of SH 79 (1st Street) / Bennett Avenue, SH 79 (1st Street) / Centennial Drive, and Cedar Street / Pearl Street need to be included in the analysis per the Town of Bennet Guidelines for TISs.
  - It is also recommended to include site traffic to utilize the future Market Place signal with the change of the Pearl Street / SH 79 access.
  - Geometry at the intersection of SH 79 (1<sup>st</sup> Street) / Bennett Avenue should include the new existing lane configuration that has not been updated in any aerials as shown in Figure 2. Figure 3 shows the lane configuration that will need to be utilized for Years 2025, 2030, and 2041.

Town Land Use Case 21.24: Bennett Crossing Filing 5 Final Plat 9/8/2021 pg. 3  $\,$ 



Figure 2: Existing SH 79 (1st Avenue) / Bennett Avenue Lane Configuration

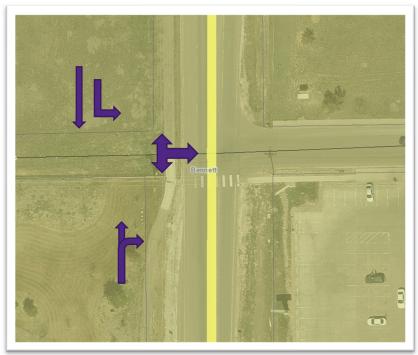
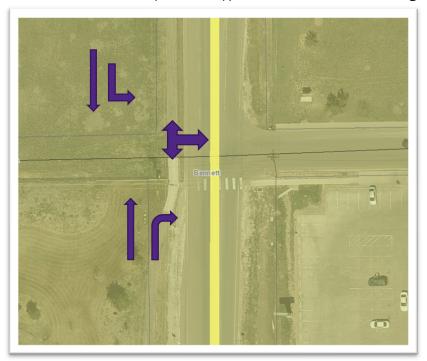


Figure 3: Future Years SH 79 (1st Avenue) / Bennett Avenue Lane Configuration



- Directional distribution of the site-generated traffic in Figures 7a and 7b are confusing.
  - The Figure 7a provides traffic generation to the west side of Edwards Avenue and that cannot be assumed to be built short term by Year 2025, Muegge Farms development can be assumed by Year 2030. It is also requested that the trip generation to the north be further developed to Colfax Avenue.
  - It is requested The Figure 7b provides the trip generation to the north be further developed to Colfax Avenue.
  - o Additional review of the TIS will pend based on revisions.

# **Jacobs**

### Memorandum

9191 Jamaica Street Englewood, CO 80112 United States T +1.303.771.0900

www.jacobs.com

Subject Bennett Crossing Filing 5 2<sup>nd</sup> Submittal Final Plat

Attention Steve Hebert, AICP, Bennett Planning & Economic Development Manager

Sara Aragon, Community Development Manager

From Mike Heugh, PE

Town Traffic Engineer

Date February 17, 2022

Copies to Dan Giroux, PE, Town Engineer

Bennett Crossing Filing 5 2<sup>nd</sup> Submittal Final Plat – Town Traffic Comments

The following comments on the 1<sup>st</sup> Submittal (dated 9/8/21) do not appear to be addressed. Without a response letter, I could not verify the reasoning for not addressing.

- 1. It is recommended to provide a visual barrier between future intersection in Tract M and Road A / Cedar Street for driver safety.
- 2. How does Lot 1 work with the future intersection in Tract M and any proposed barriers that might be required from CDOT due to noise? (CDOT comments stated they provided noise contours done by FHU.)
- 3. Confirmation of crosswalks and internal traffic control needs to be provided.
- 4. Confirm all roads and intersections support emergency vehicles or waste collector vehicles.
- 5. **New Comment:** CDOT mentioned this as well, but does the ROW shown for Edwards meet CDOT requirements for ROW once this becomes a CDOT facility.
- A revised TIS was not submitted with the 2<sup>nd</sup> submittal. Another review of the 7/20/21 document was done, and there are no additional comments to the ones submitted on 9/8/21.



# Bennett-Watkins Fire Rescue

District Office: 303-644-3572 Fax: 303-644-3401 355 4<sup>th</sup> Street, Bennett, CO 80102 Email: LifeSafety@BennettFireRescue.org

"Striving to Preserve Life and Property"

April 15th, 2021

Steve Hebert Town Planner Town of Bennett

Re: Bennett Crossing Fling 5 Final Plat - Case 21.24

Planner Hebert,

In regards to the submission for Bennett Crossing Fling 5 Final Plat – Case 21.24, Bennett-Watkins Fire Rescue (BWFR) has the following comments and considerations:

- The developer shall confer with Bennett Fire Protection District and ensure that the proposed development conforms to adopted (IFC) fire code standards.
- The developer shall ensure the proposed municipal water systems pertaining to hydrant distribution fire
  suppression is adequate to protect the proposed development as well as meet design expectations of both
  the Town of Bennett as well as Bennett-Watkins Fire Rescue. Considerations for design requirement shall
  include adopted codes and standards as well as ISO distribution and fire flow requirements.
- The applicant will be required to submit a separate site overview and fire hydrant model
   exhibit demonstrating the placement and distances of all fire hydrants throughout the
   development directly to the Fire District. This model will be reviewed for IFC Appendix C
   compliance. Separate fees and submission for this review are required directly with the Fire
   District.
- It is recommended that the developer work directly with Bennett-Watkins Fire Rescue, ISO, and Town of
  Bennett Staff to provide and review information pertaining to the needed fire flows for the proposed
  development. This information should be vetted against International Fire Code Requirements as well as ISO
  requirements. It is also likely that this information will also be required by the Town to include for hydraulic
  system modeling.
- Fire hydrant installation shall conforming to the painting and color coding system outlined in NFPA 291. The
  developer/install contactor is responsible for ensuring all hydrants are painted conforming to the
  TOB/BWFR standards.
- Areas of the development that include wildland-urban interface, greenbelts, or other open space
  areas are of particular concern for the Fire District. BWFR is interested in working with the
  developer to ensure that adequate access is provided to these areas should there be a need for
  vehicle access for wildfire suppression. As each development is unique, it is recommended that the
  developer work directly with BWFR to examine these interface areas and determine what access
  and service needs exist.

 Development access requirements are based on the adopted fire code applicable to the development. Two BWFR approved access points are required after the 30<sup>th</sup> dwelling unit is constructed. These access points are required to follow the remoteness guidelines, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the lot or area to be served, measured in a straight line between accesses. The only exception to this requirement is if all dwelling units are constructed with approved automatic sprinkler systems and approved by BWFR.

BWFR will incur unmet capital costs associated with new development. To address the needs of this
unmet capital cost, BWFR has partnered with the Town to enact a development fee policy which
establishes fees due for all new types of development. It is likely that fees will apply to the new
proposed development. If the developer has additional questions or concerns regarding Fire District
development fees or policies, they can contact the District Office at 303-644-3572.

Thank You

Caleb J. Connor Fire Marshal

Life Safety Division

Bennett-Watkins Fire Rescue

303-644-3572 - Headquarters / 720-893-7672 - Direct

www.BennettFireRescue.org



# LOCATION MAP

(NOT TO SCALE)

## PURPOSE STATEMENT

THIS BENNETT CROSSING FILING NO. 5 PLAT IS INTENDED TO SUBDIVIDE 83.904 ACRES INTO 243 RESIDENTIAL LOTS AND 19 TRACTS (4 FOR FUTURE USE), DEDICATE RIGHT-OF-WAY AND GRANT EASEMENTS.

## OWNERSHIP AND DEDICATION

KNOW ALL PERSONS BY THESE PRESENTS, THAT THE UNDERSIGNED, GAYESKI CAPITAL EQUITIES, LLC, A COLORADO LIMITED LIABILITY COMPANY, BEING THE OWNER OF THE LAND SHOWN ON THIS FINAL PLAT AND DESCRIBED AS FOLLOWS:

PARCEL A OF SPECIAL WARRANTY DEED DESCRIBED IN THE DOCUMENT RECORDED UNDER RECEPTION NO. 2014000037662:

A PARCEL OF LAND LOCATED IN THE WEST HALF OF SECTION 34, TOWNSHIP 3 SOUTH, **RANGE 63 WEST OF** 

THE 6TH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE **PARTICULARLY** 

**DESCRIBED AS FOLLOWS:** 

BASIS OF BEARINGS: THE NORTHERLY LINE OF THE NORTHWEST QUARTER OF SECTION 34,

RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN BEARS NORTH 89°33'30"EAST;

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 34;

THENCE NORTH 89°33'30" EAST, ALONG THE NORTHERLY LINE OF THE NORTHWEST QUARTER OF SAID SECTION

34, A DISTANCE OF 960.00 FEET TO THE POINT OF BEGINNING;

THENCE NORTH 89°33'30" EAST, CONTINUING ALONG SAID NORTHERLY LINE, A DISTANCE

THE NORTH QUARTER CORNER OF SAID SECTION 34;

THENCE SOUTH 00°08'12" WEST, ALONG THE EASTERLY LINE OF THE NORTHWEST QUARTER OF SAID SECTION

34, A DISTANCE OF 2701.52 FEET TO THE CENTER QUARTER CORNER OF SAID SECTION 34; THENCE SOUTH 00°09'06" WEST, ALONG THE EASTERLY LINE OF THE SOUTHWEST

QUARTER OF SAID SECTION 34, A DISTANCE OF 772.96 FEET

THENCE NORTH 89°43'33" WEST, A DISTANCE OF 2592.56 FEET;

THENCE NORTH 00°17'18" EAST, ALONG A LINE 50.00 FEET EASTERLY OF AND PARALLEL

LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 34, A DISTANCE OF 761.66 FEET; THENCE NORTH 00°05'40" EAST, ALONG A LINE 50.00 FEET EASTERLY OF AND PARALLEL

LINE OF THE NORTHWEST QUARTER OF SAID SECTION 34, A DISTANCE OF 2380,43 FEET: THENCE NORTH 89°33 '30" EAST, A DISTANCE OF 612.80 FEET;

THENCE NORTH 00°26'30" WEST, A DISTANCE OF 81.99 FEET;

THENCE NORTH 89°33'30" EAST, A DISTANCE OF 300.00 FEET

THENCE NORTH 00°26'30" WEST, A DISTANCE OF 218.00 FEET TO THE POINT OF BEGINNING; EXCEPT BENNETT CROSSING FILING NO. 1 RECORDED UNDER RECEPTION NO. 2019000008907;

EXCEPT BENNETT CROSSING FILING NO. 2 RECORDED UNDER RECEPTION NO. 2017000074180:

EXCEPT BENNETT CROSSING FILING NO. 3 RECORDED UNDER RECEPTION NO. 2019000012642:

MORE PARTICULARLY DESCRIBED AS FOLLOWS (SURVEYOR'S DESCRIPTION)

BEARINGS ARE BASED UPON THE SOUTH LINE OF THE NORTHWEST ONE-QUARTER OF SAID SECTION 34 FROM THE WEST ONE-QUARTER CORNER OF SAID SECTION 34 MONUMENTED BY A 3.25" ALUMINUM CAP, 0.4' DOWN IN A RANGE BOX WITH LID MARKED "SURVEY", STAMPED "T3S, 1/4, 33|34, R63W, PLS 26715, 2009" TO THE CENTER QUARTER CORNER OF SAID SECTION 34 MONUMENTED BY A 2.5" ALUMINUM CAP, 0.1' ABOVE GROUND SURFACE, STAMPED "CHARLES H RUSSELL, T3S, C1/4, \*, 34, R63W, 1994, LS 23519" BEARING NORTH 89°30'11" EAST, A DISTANCE OF 2640.73 FEET (N89°30'11"E 2640.73' PER BENNETT CROSSING FILING NOS. 1 AND 3).

BEGINNING AT THE SOUTHEAST CORNER OF SAID BENNETT CROSSING FILING NO. 2:

THENCE SOUTH 00°22'07" EAST ALONG THE EAST LINE OF SAID NORTHWEST ONE-QUARTER OF SECTION 34. A DISTANCE OF 1414.27 FEET TO SAID CENTER QUARTER CORNER OF

THENCE SOUTH 00°22'02" EAST ALONG THE EAST LINE OF THE SOUTHWEST ONE-QUARTER OF SAID SECTION 34, A DISTANCE OF 377.74 FEET TO THE NORTH LINE OF SAID BENNETT **CROSSING FILING NO. 3:** 

THENCE THE FOLLOWING FOUR (4) COURSES ALONG THE NORTH LINE OF SAID BENNETT CROSSING FILING NO. 3:

- SOUTH 89°29'22" WEST, A DISTANCE OF 456.23 FEET; NORTH 53°33'51" WEST, A DISTANCE OF 631.33 FEET;
- NORTH 00°30'40" WEST, A DISTANCE OF 27.00 FEET;
- SOUTH 89°30'11" WEST, A DISTANCE OF 942.53 FEET TO THE NORTHEAST CORNER OF SAID BENNETT CROSSING FILING NO. 1;

# OWNERSHIP AND DEDICATION (CONTINUED)

THENCE SOUTH 89°30'11" WEST ALONG THE NORTH LINE OF SAID BENNETT CROSSING FILING NO. 1, A DISTANCE OF 686.42 FEET TO THE EASTERLY RIGHT-OF-WAY LINE OF COLORADO STATE HIGHWAY 79 (SOUTH 1ST STREET);

THENCE NORTH 00°24'47" WEST ALONG SAID EASTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 363.16 FEET TO THE SOUTHWEST CORNER OF SAID BENNETT CROSSING FILING NO. 2: THENCE ALONG THE SOUTH LINE OF SAID BENNETT CROSSING FILING NO. 2 THE FOLLOWING THREE (3) COURSES:

- NORTH 89°35'13" EAST, A DISTANCE OF 9.00 FEET TO A POINT OF NON-TANGENT CURVE;
- 1611.37 FEET ALONG THE ARC OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 1026.00 FEET AND A CENTRAL ANGLE OF 89°59'07", SUBTENDED BY A CHORD WHICH BEARS NORTH 44°34'47" EAST, A DISTANCE OF 1450.80 FEET;
- NORTH 89°34'20" EAST, A DISTANCE OF 1557.07 FEET TO THE POINT OF

SAID PARCEL CONTAINS AN AREA OF 3,654,846 SQUARE FEET, OR 83.904 ACRES, MORE OR LESS. ALL LINEAL DISTANCE UNITS ARE REPRESENTED IN U.S. SURVEY FEET.

HAVE LAID OUT, SUBDIVIDED AND PLATTED SAID LAND AS PER THE DRAWING CONTAINED UNDER THE NAME AND STYLE OF BENNETT CROSSING FILING NO. 5, A SUBDIVISION OF A PART OF THE TOWN OF BENNETT, COUNTY OF ADAMS, STATE OF COLORADO, AND BY THESE PRESENTS TO HEREBY DEDICATE TO THE TOWN OF BENNETT THE STREETS AND AVENUES AS SHOWN ON THIS PLAT FOR THE PUBLIC USE THEREOF FOREVER AND DOES FURTHER DEDICATE TO THE USE OF THE TOWN OF BENNETT AND ALL SERVING PUBLIC UTILITIES (AND OTHER APPROPRIATE ENTITIES) THOSE PORTIONS OF SAID REAL PROPERTY WHICH ARE SO DESIGNATED AS UTIUTY EASEMENTS AND TRANSPORTATION EASEMENTS AS SHOWN. ACCESS EASEMENTS ARE HEREBY DEDICATED TO THE TOWN OF BENNETT ACROSS ALL TRACTS SHOWN HERON. IT IS EXPRESSLY UNDERSTOOD AND AGREED BY THE UNDERSIGNED THAT ALL EXPENSES AND COSTS INVOLVED IN CONSTRUCTION AND INSTALLING SANITARY SEWER SYSTEM WORKS AND LINES, WATER SYSTEM WORKS AND LINES, GAS SERVICE LINES, ELECTRICAL SERVICE WORKS AND LINES, LANDSCAPING, CURBS, GUTTERS, STREET PAVEMENT, SIDEWALKS, AND OTHER SUCH UTILITIES AND SERVICES SHALL BE GUARANTEED AND PAID FOR BY THE SUBDIVIDER AND ARRANGEMENTS MADE BY THE SUBDIVIDER, THEREOF WHICH ARE APPROVED BY THE TOWN OF BENNETT, COLORADO, AND SUCH SUMS SHALL NOT BE PAID BY THE TOWN OF BENNETT, AND THAT ANY ITEM SO CONSTRUCTED OR INSTALLED WHEN ACCEPTED BY THE TOWN OF BENNETT SHALL BECOME THE SOLE PROPERTY OF SAID TOWN OF BENNETT, COLORADO, EXCEPT PRIVATE ROADWAY CURBS, GUTTER AND PAVEMENT AND ITEMS OWNED BY MUNICIPALITY FRANCHISED UTILITIES AND/OR OTHER SERVING PUBLIC ENTITIES, WHICH WHEN CONSTRUCTED OR INSTALLED SHALL REMAIN AND/OR BECOME THE PROPERTY OF SUCH MUNICIPALITY FRANCHISED UTILITIES AND/OR OTHER SERVING PUBLIC UTILITIES AND SHALL NOT BECOME THE PROPERTY OF THE TOWN

OF BENNETT, COLORADO.

\*\*\*SEE SHEET 2 FOR NOTES, SURVEYOR'S NOTES AND TABLES.\*\*\*

FINAL PLAT COVER SHEET AND CERTIFICATES-FINAL PLAT NOTES, SURVEYOR'S NOTES AND TABLES-

FINAL PLAT DETAIL SHEETS-

SHEET 2 SHEETS 3 THROUGH 18

SHEET 1

## OWNERSHIP AND DEDICATION (CONTINUED)

| EXECUTED THIS       | DAY OF A.D., 2021.                                     |
|---------------------|--|
| BY: GAYESKI CAPITAL | EQUITIES, LLC, A COLORADO LIMITED LIABILITY COMPANY    |
|                     | AS REGISTERED AGENT                                    |
| <name></name>       |  |
| ACKNOWLEDGEMENT     |  |
| THE FOREGOING OWN   | IERSHIP AND DEDICATION WAS ACKNOWLEDGED BEFORE ME THIS |
|                     | , 2021, BY <name> AS AUTHORIZED SIGNATORY FOR</name>   |
| GAYESKI CAPITAL EQU | JITIES, LLC, A COLORADO LIMITED LIABILITY COMPANY.     |
| WITNESS MY HAND AN  | ID SEAL:   |
|                     |  |
| NOTARY PUBLIC       |  |
| MY COMMISSION EXPI  | RES:   |
| MY ADDRESS:         |  |
|                     | <del></del>  |
|                     | <del></del>  |

## SURVEYOR'S CERTIFICATE

I, ERIC DAVID CARSON, A DULY LICENSED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THERE ARE NO ROADS, PIPELINES, IRRIGATION DITCHES OR OTHER EASEMENTS IN EVIDENCE OR KNOWN BY ME TO EXIST ON OR ACROSS THE HEREIN BEFORE DESCRIBED PROPERTY EXCEPT AS SHOWN ON THIS PLAT. I FURTHER CERTIFY THAT I HAVE PERFORMED THE SURVEY SHOWN HEREON, OR SUCH SURVEY WAS PREPARED UNDER MY DIRECT RESPONSIBILITY AND SUPERVISION, THAT THIS PLAT ACCURATELY REPRESENTS SAID SURVEY, AND THAT ALL MONUMENTS EXIST AS SHOWN

ERIC DAVID CARSON COLORADO PROFESSIONAL LAND SURVEYOR NO. 37890 FOR AND ON BEHALF OF CWC CONSULTING GROUP, INC. EMAIL: ERICC@CWC-CONSULTING.COM

**DEPUTY** 

## TOWN APPROVAL

THIS IS TO CERTIFY THAT THE PLAT OF BENNETT CROSSING FILING NO. 5 WAS APPROVED

| ON THE        | _ DAY OF     | , 20  | 021, BY RESOLUT | ION NO.       |
|---------------|--------------|---|-----------------|---------------|
| BEHALF OF TI  | HE TOWN OF   | , AND THAT THE MAYOR<br>BENNETT, HEREBY ACKNOWI<br>RSED BY ALL PURPOSES INDIC | LEDGES SAID PL  | AT UPON WHICH |
| MAYOR         |              | ATTE  | ST: TOWN CLER   | <             |
|               | CLERK A      | ND RECORDER'S CE  | RTIFICATE       |               |
| THIS FINAL PL | AT WAS FILED | FOR RECORD IN THE OFFICE  | OF THE COUNTY   | CLERK AND     |
| RECORDER OF   | F ADAMS COUN | NTY, COLORADO, AT   | O'CLOCK         | M. THIS       |
|               | DAY OF       |   |                 |               |
| 2021, AT RECE | EPTION NO    |   | ·               |               |
| CLERK AND RI  | ECORDER      |   |                 |               |

F OF SECTION NOTES FILING

PORTION OF SHEET

P

NNE

Ш

 $\square$ 

SHEET NO. of 18 sheets

#### **NOTES**

- 1. THE PROPERTY IS LOCATED WITHIN "OTHER AREAS ZONE X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.) AS IDENTIFIED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP - COMMUNITY PANEL NUMBERED 08001C0981H WITH AN EFFECTIVE DATE OF MARCH 5, 2007.
- 2. TRACTS A THROUGH N, INCLUSIVE, SHALL BE OWNED AND MAINTAINED BY THE HOA, ITS SUCCESSORS OR ASSIGNS. THE UNDERSIGNED GRANTS THE TOWN OF BENNETT A PERPETUAL RIGHT OF INGRESS AND EGRESS FROM AND TO SAID TRACTS. THE TOWN SHALL HAVE THE RIGHT, BUT NOT THE OBLIGATION, TO MAINTAIN, OPERATE, REPAIR AND RECONSTRUCT THE TRACT AND RELATED FACILITIES WHEN THE OWNER(S) FAIL TO ADEQUATELY MAINTAIN SUCH TRACTS AND RELATED FACILITIES, WHICH MAINTENANCE, OPERATION AND RECONSTRUCTION SHALL BE AT THE COST OF THE HOA.
- 3. THE POLICY OF THE TOWN REQUIRES THAT ALL MAINTENANCE ACCESS SHALL BE PROVIDED TO ALL STORM DRAINAGE FACILITIES TO ASSURE CONTINUOUS OPERATIONAL CAPABILITY OF THE SYSTEM. THE PROPERTY OWNERS SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL DRAINAGE FACILITIES INCLUDING INLETS, PIPES, CULVERTS, CHANNELS, DITCHES, HYDRAULIC STRUCTURES, AND DETENTION BASINS LOCATED ON THEIR LAND UNLESS MODIFIED BY THE SUBDIVISION IMPROVEMENTS AGREEMENT. SHOULD THE OWNER FAIL TO MAINTAIN SAID FACILITIES, THE TOWN OF BENNETT SHALL HAVE THE RIGHT BUT NOT THE OBLIGATION TO ENTER SAID LAND FOR THE SOLE PURPOSE OF OPERATIONS AND MAINTENANCE. ALL SUCH MAINTENANCE COSTS WILL BE ASSESSED TO THE PROPERTY OWNERS.
- 4. SURFACED ACCESS ROADS CAPABLE OF WITHSTANDING THE IMPOSED LOADS OF FIRE APPARATUS AND ALL REQUIRED FIRE HYDRANTS SHALL BE INSTALLED AND MADE SERVICEABLE PRIOR TO AND DURING CONSTRUCTION.
- 5. ALL INTERNAL ROADS AND DRAINAGE FACILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH STREET CONSTRUCTION PLANS, PAVEMENT DESIGN, GRADING AND EROSION CONTROL PLAN, AND A FINAL DRAINAGE PLAN SUBMITTED TO AND APPROVED BY THE TOWN OF BENNETT AND ALL APPLICABLE TOWN ADOPTED STANDARDS AND SPECIFICATIONS.
- 6. THIS PLAN HAS BEEN APPROVED BY THE TOWN OF BENNETT AND CREATES A VESTED PROPERTY RIGHT PURSUANT TO C.R.S. 24-68-101, ET SEQ., AS AMENDED, AND THE TOWN OF BENNETT DEVELOPMENT STANDARDS AND REGULATIONS.
- 7. NOTICE IS GIVEN THAT THIS SUBDIVISION WILL BE SUBJECT TO RECORDED DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS. THE TOWN OF BENNETT IS NOT RESPONSIBLE FOR ENFORCEMENT OF THE RECORDED COVENANTS, CONDITIONS AND RESTRICTIONS THAT MAY BE FILED AGAINST THE SUBDIVISION PLAT.
- 8. FOR CORNER LOTS, THE SIDE SETBACK SHALL BE USED FOR THE CHAMFERED OR RADIUS LOT CORNER.
- 9. NON-EXCLUSIVE UTILITY EASEMENTS LOCATED AS SHOWN ARE HEREBY GRANTED FOR THE INSTALLATION. MAINTENANCE. AND OPERATION OF UTILITIES AND DRAINAGE FACILITIES, INCLUDING, BUT NOT LIMITED TO STREET LIGHTS, ELECTRIC LINES, GAS LINES, CABLE TELEVISION LINES, FIBER OPTIC LINES, AND TELEPHONE LINES, AS WELL AS PERPETUAL RIGHT FOR INGRESS AND EGRESS FOR INSTALLATION, MAINTENANCE, AND REPLACEMENT OF SUCH LINES, WINDOW WELLS, PATIOS, DECKS, STAIRS, RETAINING WALLS, AND THEIR COMPONENTS MAY NOT ENCROACH INTO THE REQUIRED UTILITY

10. SIGHT DISTANCE EASEMENTS ARE HEREBY DEDICATED TO THE TOWN OF BENNETT FOR SIGHT DISTANCE PURPOSES TOGETHER WITH THE FOLLOWING RESTRICTIONS OVER SAID EASEMENTS: NO OBJECT WITHIN THE SIGHT DISTANCE EASEMENT SHALL BE MORE THAN THIRTY-SIX (36) INCHES ABOVE THE FLOWLINE OF THE ADJACENT STREET. SUCH OBJECTS SHALL INCLUDE BUT NOT BE LIMITED TO BUILDINGS, VEGETATION, AND UTILITY CABINETS. PARKING IS ALSO RESTRICTED WITHIN THE EASEMENT.

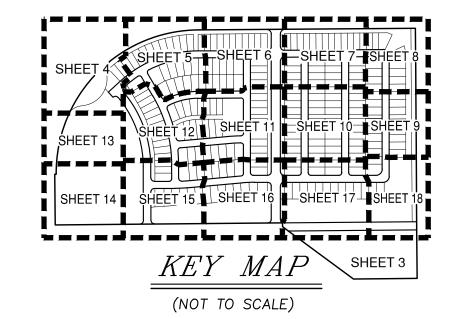
ADD NOTE AS A SEPARATE #. MONUMENTS, ORNAMENTAL COLUMNS, WINDOW WELLS, COUNTERFORTS, PATIOS, DECKS, RETAINING WALLS AND THEIR COMPONENTS ARE NOT PERMITTED TO ENCROACH INTO UTILITY EASEMENTS

| LAND USE TABLE   |                    |
|--|--------------------|
| GROSS ACREAGE  | 83.904 ACRES       |
| NET ACREAGE (DEDICATED R.O.W. EXCLUDED)  | 68.973 ACRES       |
| GROSS DENSITY (DWELLING UNITS/ACREAGE OF ALL LOTS AND DEVELOPED TRACTS)                            | 4.680 D.U./ACRE    |
| NET DENSITY (DWELLING UNITS/RESIDENTIAL LOT AREA)  | 6.869 D.U./ACRE    |
| NUMBER OF LOTS (RESIDENTIAL)   | 243                |
| NUMBER OF TRACTS (FUTURE USE)  | 4                  |
| NUMBER OF TRACTS (DEVELOPED)   | 15                 |
| NUMBER OF TRACTS   | 19                 |
| SMALLEST LOT (RESIDENTIAL)   | 5,400 SQUARE FEET  |
| LARGEST LOT (RESIDENTIAL)  | 10,907 SQUARE FEET |
| AVERAGE LOT SIZE (RESIDENTIAL)   | 6,342 SQUARE FEET  |
| NUMBER OF BUILDABLE LOTS   | 243                |
| NET ACREAGE FOR FUTURE USE   | 17.848 ACRES       |
| NET ACREAGE FOR PUBLIC STREETS   | 14.931 ACRES       |
| NET ACREAGE DEVELOPED FOR PRIVATE USES (PARKS, OPEN SPACES AND RECREATION CENTERS, PRIVATE DRIVES) | 8.049 ACRES        |
| NET ACREAGE DEVELOPED FOR PUBLIC USES (STORMWATER DRAINAGE - TOWN OF BENNETT)                      | 7.698 ACRES        |

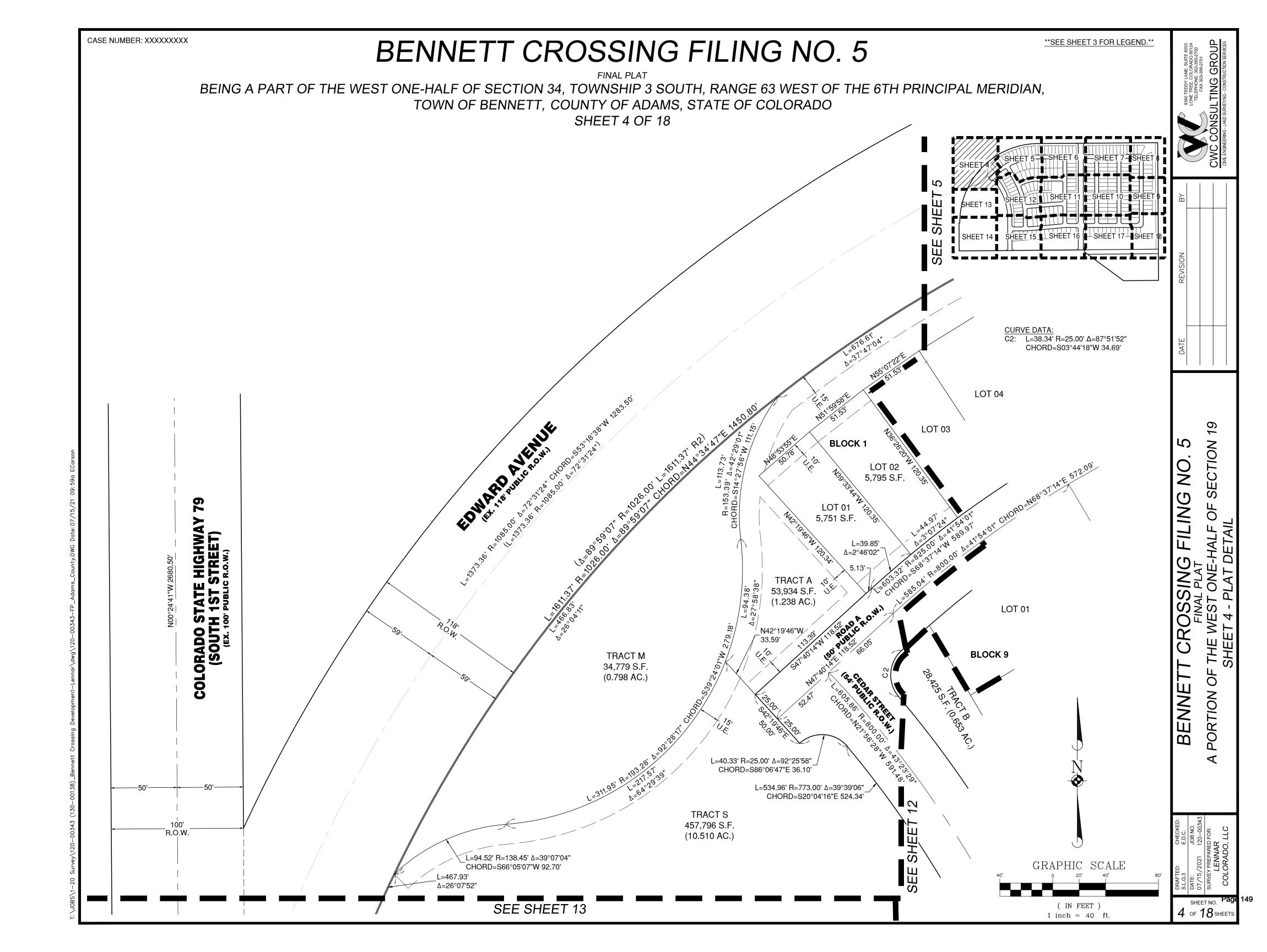
|         | TRACT SUMM                                | ARY TABLE   |                 |
|---------|---|---|-----------------|
| LABEL   | PROPOSED USE                              | OWNERSHIP/<br>MAINTENANCE                                 | AREA<br>(ACRES) |
| TRACT A | DRAINAGE, OPEN SPACE<br>& LANDSCAPED AREA | H.O.A.  | 1.238           |
| TRACT B | OPEN SPACE &<br>LANDSCAPED AREA           | H.O.A.  | 0.653           |
| TRACT C | OPEN SPACE &<br>LANDSCAPED AREA           | H.O.A.  | 0.087           |
| TRACT D | OPEN SPACE &<br>LANDSCAPED AREA           | H.O.A.  | 0.634           |
| TRACT E | OPEN SPACE &<br>LANDSCAPED AREA           | H.O.A.  | 0.082           |
| TRACT F | DRAINAGE, OPEN SPACE & LANDSCAPED AREA    | H.O.A.  | 0.635           |
| TRACT G | OPEN SPACE &<br>LANDSCAPED AREA           | H.O.A.  | 0.078           |
| TRACT H | DRAINAGE, OPEN SPACE & LANDSCAPED AREA    | H.O.A.  | 0.136           |
| TRACT I | DRAINAGE, OPEN SPACE & LANDSCAPED AREA    | H.O.A.  | 0.142           |
| TRACT J | DRAINAGE, OPEN SPACE & LANDSCAPED AREA    | H.O.A.  | 1.949           |
| TRACT K | PARK                                      | H.O.A.  | 1.187           |
| TRACT L | PARK                                      | H.O.A.  | 1.227           |
| TRACT M | FUTURE USE                                | GAYESKI CAPITAL<br>EQUITIES, LLC                          | 0.798           |
| TRACT N | FUTURE USE                                | GAYESKI CAPITAL<br>EQUITIES, LLC                          | 1.036           |
| TRACT O | OPEN SPACE & STORMWATER DRAINAGE          | GAYESKI CAPITAL<br>EQUITIES, LLC/<br>METRO DISTRICT NO. 2 | 3.607           |
| TRACT P | OPEN SPACE & STORMWATER DRAINAGE          | GAYESKI CAPITAL<br>EQUITIES, LLC/<br>METRO DISTRICT NO. 2 | 2.887           |
| TRACT Q | OPEN SPACE & STORMWATER DRAINAGE          | GAYESKI CAPITAL<br>EQUITIES, LLC/<br>METRO DISTRICT NO. 2 | 1.204           |
| TRACT R | FUTURE USE                                | GAYESKI CAPITAL<br>EQUITIES, LLC                          | 5.504           |
| TRACT S | FUTURE USE                                | GAYESKI CAPITAL<br>EQUITIES, LLC                          | 10.510          |
| TOTAL:  |   |   | 33.594          |

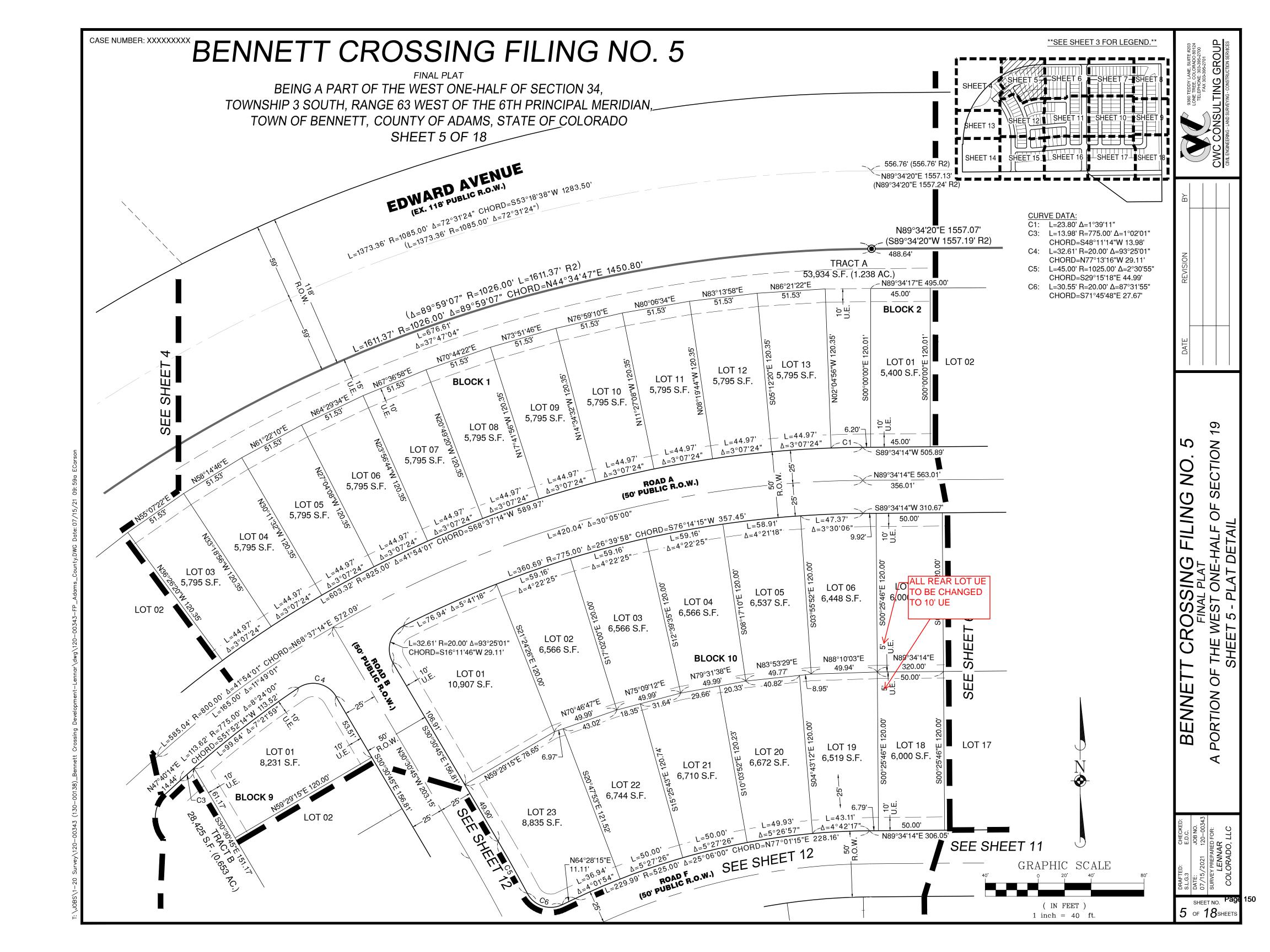
### SURVEYOR'S NOTES

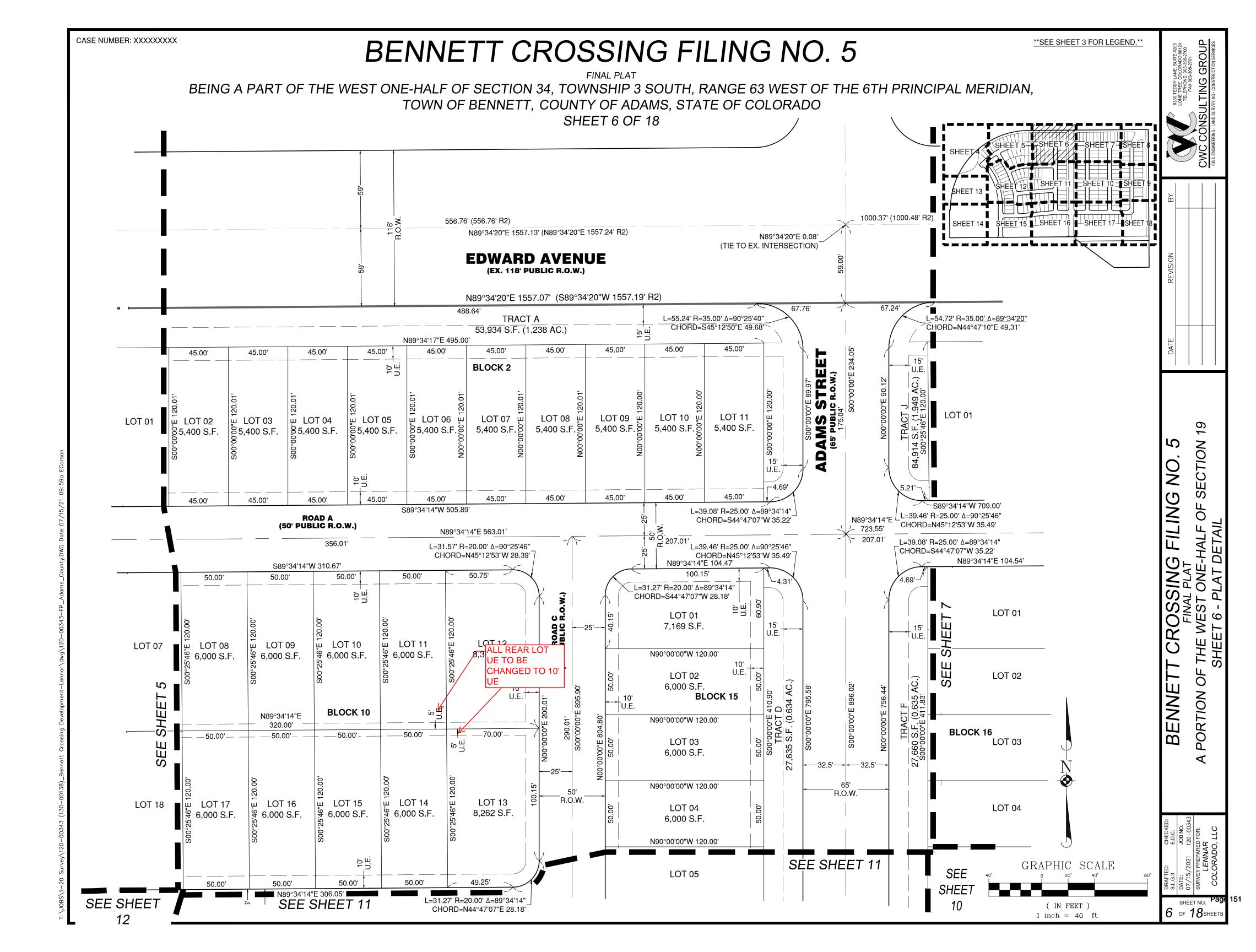
- 1. DISTANCES ARE MARKED IN U.S. SURVEY FEET AND DECIMAL PLACES THEREOF. NO DIMENSION SHALL BE ASSUMED BY SCALE MEASUREMENT HEREON. DISTANCES AND/OR BEARINGS SHOWN IN PARENTHESIS (0.00') ARE RECORD OR DEED VALUES, NOT FIELD MEASURED.
- 2. THIS LAND SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY CWC CONSULTING GROUP, INC. TO DETERMINE OWNERSHIP OF THIS TRACT, VERIFY THE DESCRIPTION SHOWN, VERIFY THE COMPATIBILITY OF THIS DESCRIPTION WITH THAT OF ADJACENT TRACTS, OR VERIFY EASEMENTS OF RECORD. REFERENCE IS MADE TO FIDELITY NATIONAL TITLE ORDER NO. N0029846-030-TH-LP, WITH A COMMITMENT DATE OF OCTOBER 29, 2020 FROM WHICH THIS SURVEY IS BASED. THIS PROPERTY IS SUBJECT TO ALL COVENANTS AND RESTRICTIONS RELATING TO THE USE AND CHARACTER OF THE LAND AND ALL MATTERS APPEARING OF PUBLIC RECORD AND AS MAY BE DISCLOSED BY A MORE RECENT TITLE COMMITMENT OR REPORT.
- 3. BEARINGS ARE BASED UPON THE SOUTH LINE OF THE NORTHWEST ONE-QUARTER OF SAID SECTION 34 FROM THE WEST ONE-QUARTER CORNER OF SAID SECTION 34 MONUMENTED BY A 3.25" ALUMINUM CAP, 0.4' DOWN IN A RANGE BOX WITH LID MARKED "SURVEY", STAMPED "T3S, 1/4, 33|34, R63W, PLS 26715, 2009" TO THE CENTER QUARTER CORNER OF SAID SECTION 34 MONUMENTED BY A 2.5" ALUMINUM CAP, 0.1' ABOVE GROUND SURFACE, STAMPED "CHARLES H RUSSELL, T3S, C1/4, \*, 34, R63W, 1994, LS 23519" BEARING NORTH 89°30'11" EAST, A DISTANCE OF 2640.73 FEET (N89°30'11"E 2640.73' PER BENNETT CROSSING FILING NOS. 1 AND 3).
- 4. EASEMENTS AND PUBLIC DOCUMENTS SHOWN OR NOTED HEREON WERE EXAMINED AS TO LOCATION AND PURPOSE AND WERE NOT EXAMINED AS TO RESERVATIONS, RESTRICTIONS, CONDITIONS, OBLIGATIONS, TERMS, OR AS TO THE RIGHT TO GRANT THE SAME.
- 5. ALL REFERENCES HEREON TO BOOKS, PAGES, MAPS AND RECEPTION NUMBERS ARE PUBLIC DOCUMENTS FILED IN THE RECORDS OF THE ADAMS COUNTY CLERK AND RECORDER'S OFFICE.
- 6. ANY PERSON WHO KNOWINGLY REMOVES, ALTERS OR DEFACES ANY PUBLIC LAND SURVEY MONUMENT OR LAND MONUMENT OR ACCESSORY, COMMITS A CLASS TWO (2) MISDEMEANOR PURSUANT TO STATE STATUTE 18-4-508, C.R.S.
- 7. DEFINITION: CERTIFY, CERTIFICATION A PROFESSIONAL'S OPINION BASED ON HIS OR HER OBSERVATION OF CONDITIONS, KNOWLEDGE, INFORMATION AND BELIEFS. IT IS EXPRESSLY UNDERSTOOD THAT THE PROFESSIONAL'S CERTIFICATION OF A CONDITION'S EXISTENCE RELIEVES NO OTHER PARTY OF ANY RESPONSIBILITY OR OBLIGATION HE OR SHE HAS ACCEPTED BY CONTRACT OR CUSTOM.
- 8. CWC CONSULTING GROUP, INC. DOES NOT WARRANT THAT THE PARCEL, AS DESCRIBED HEREON, COMPLIES WITH COLORADO SENATE BILL 35, (30-28-101).
- 9. ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.



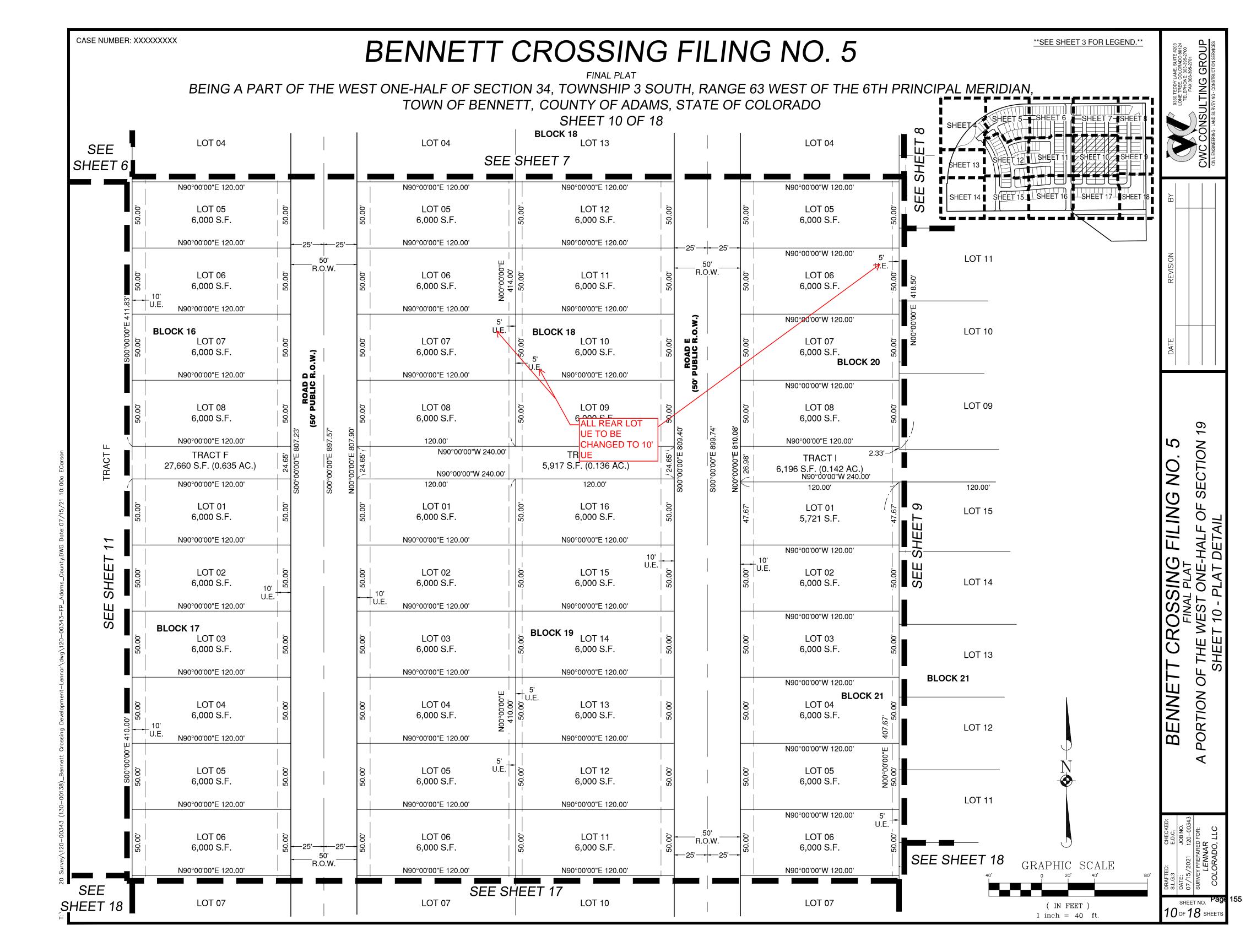
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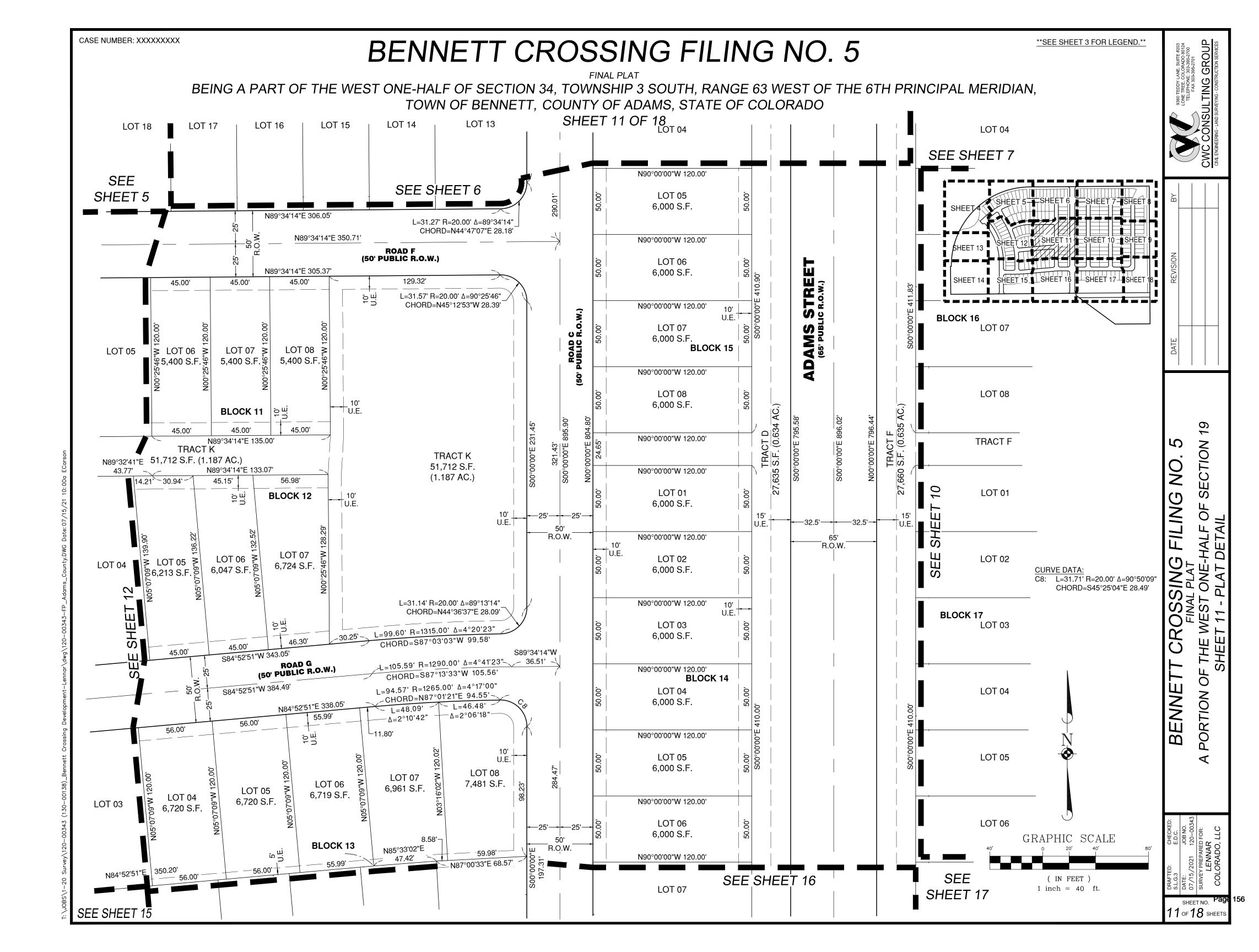


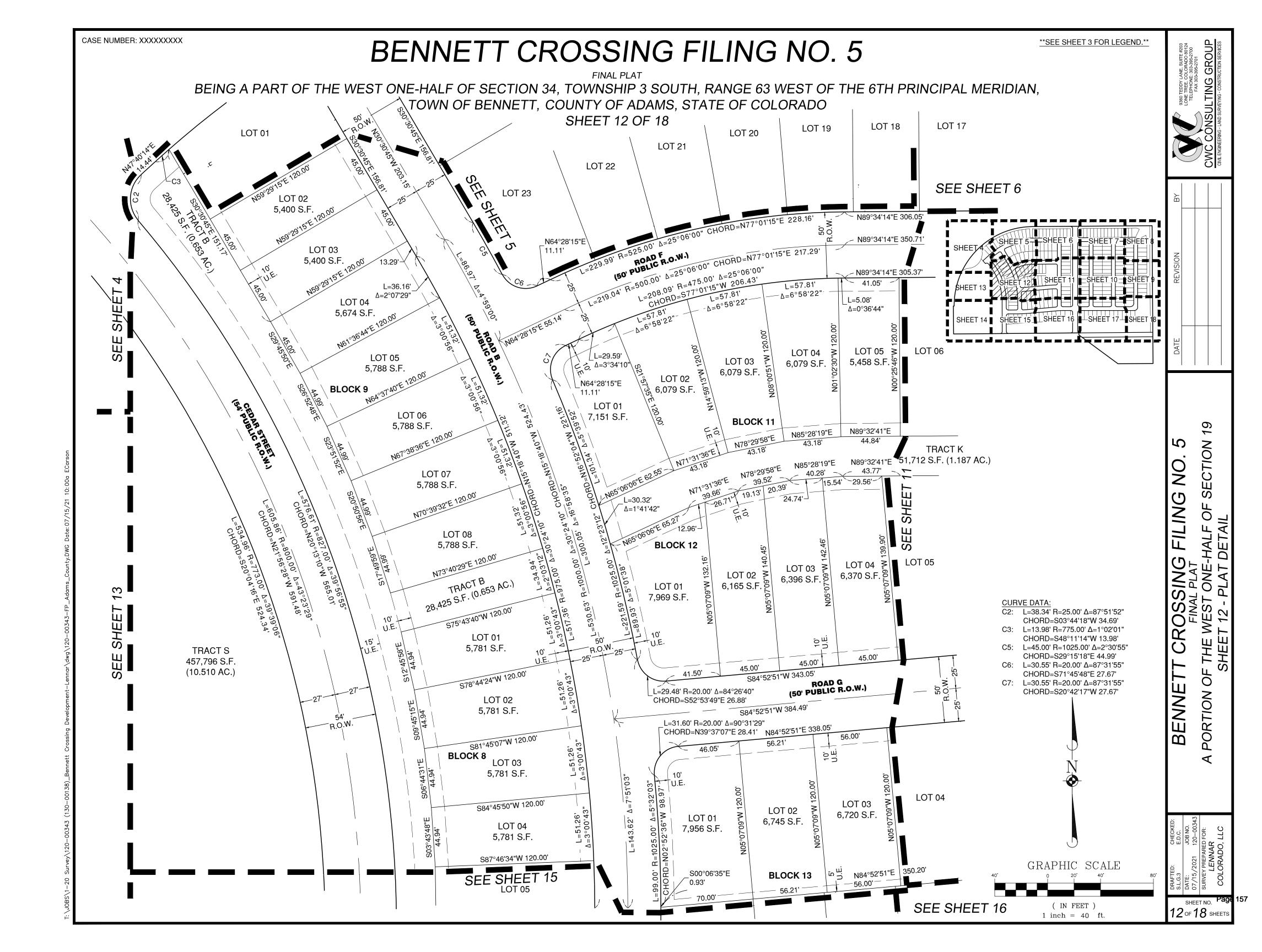


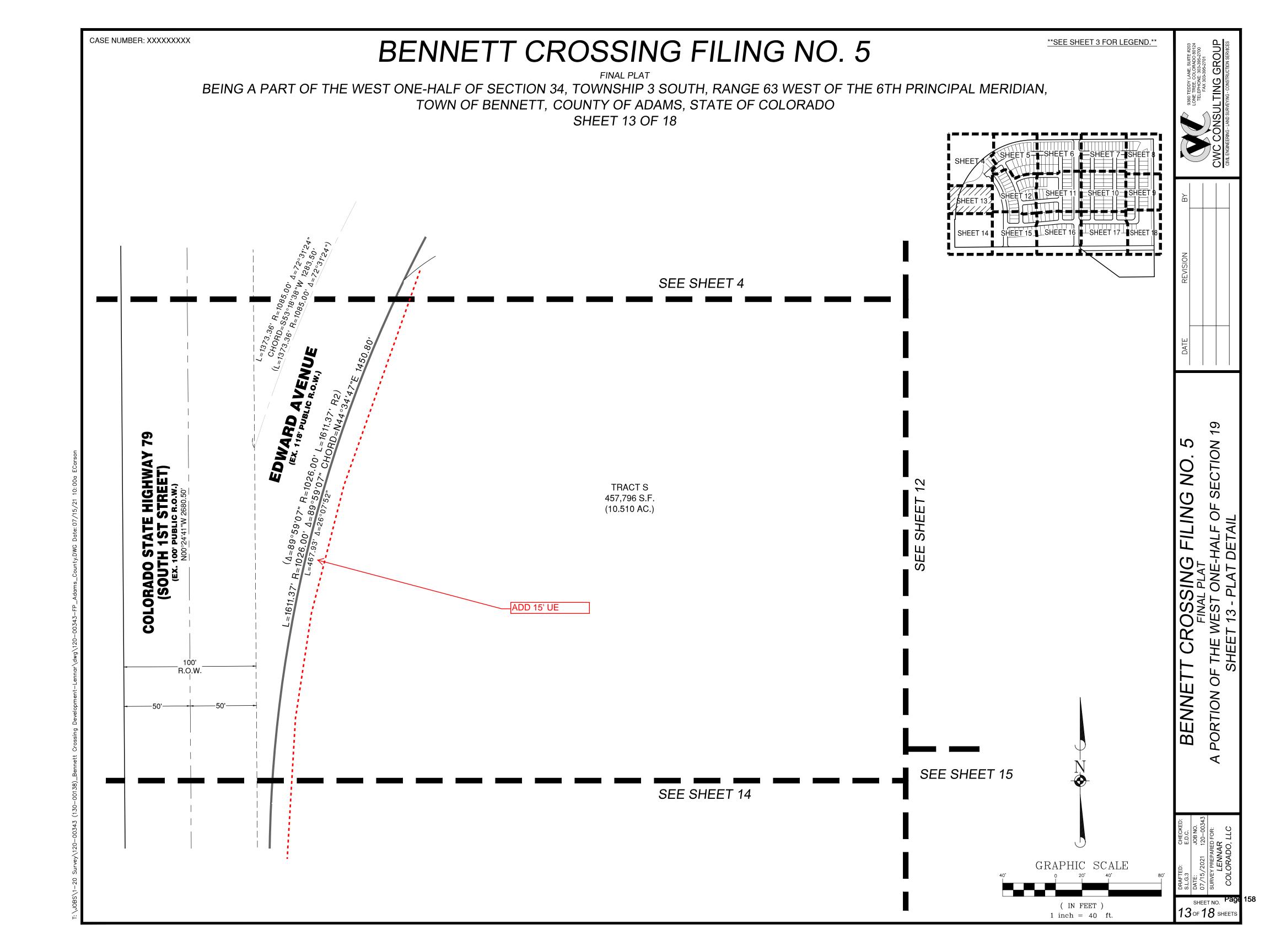


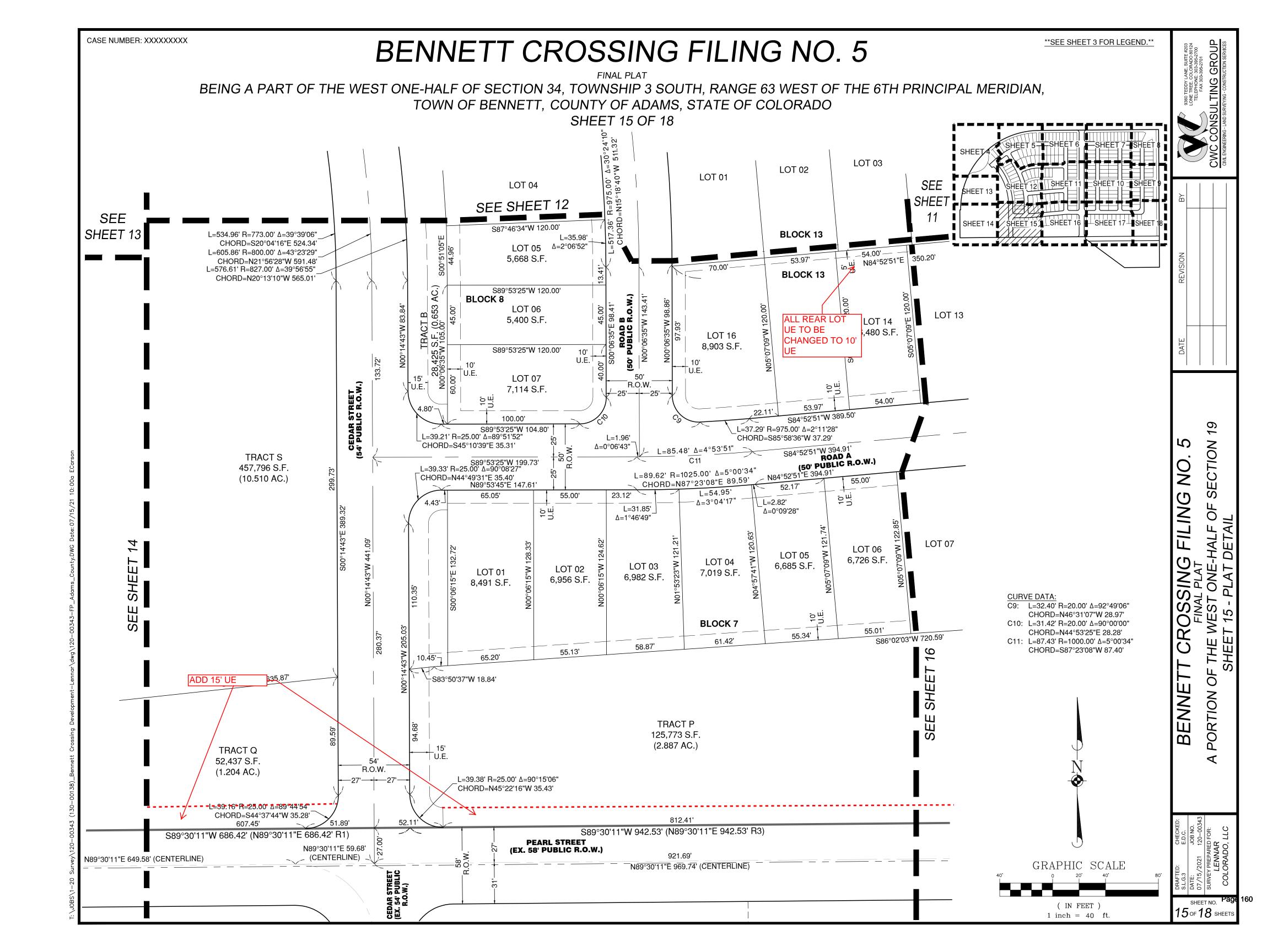
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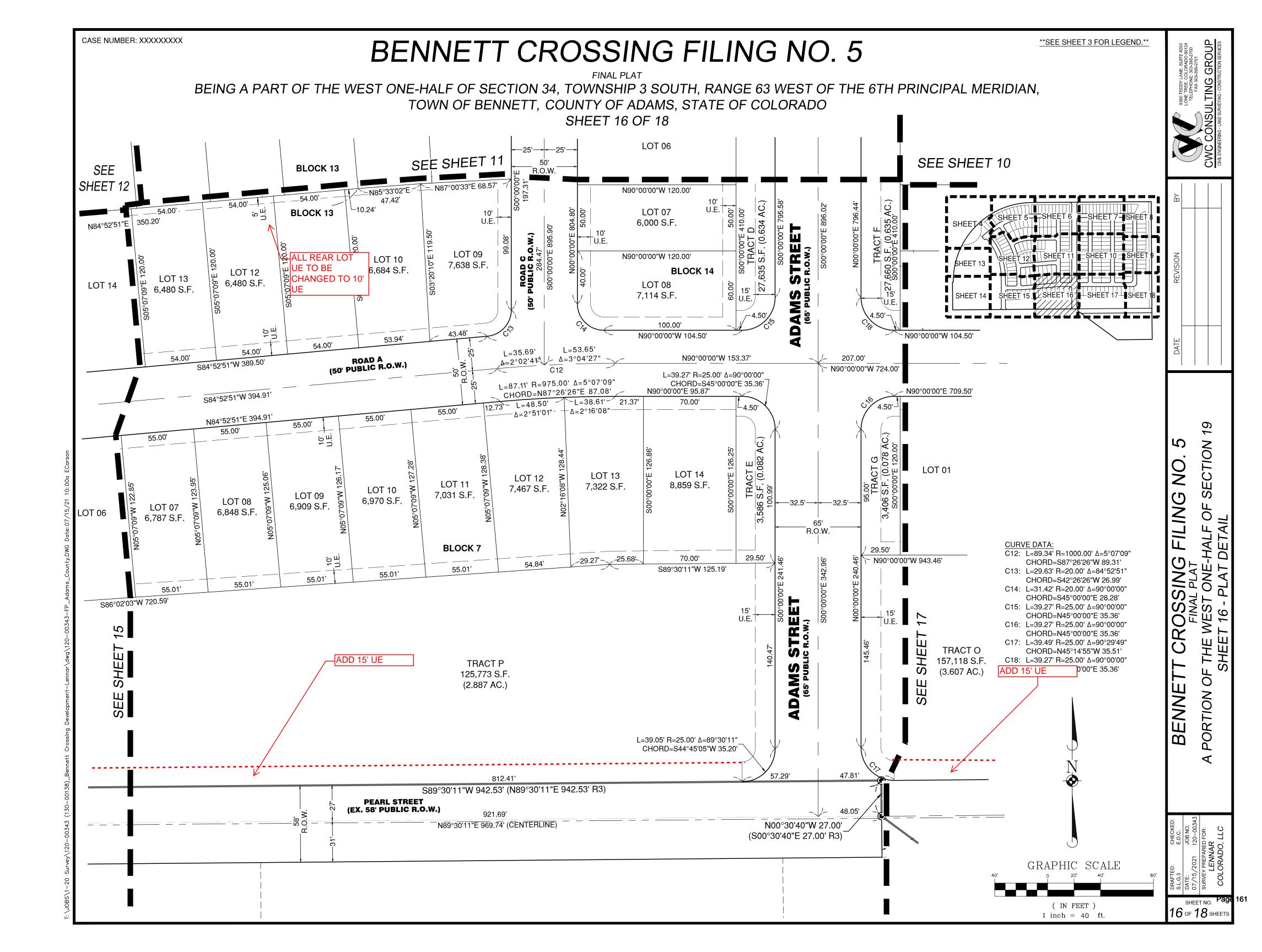


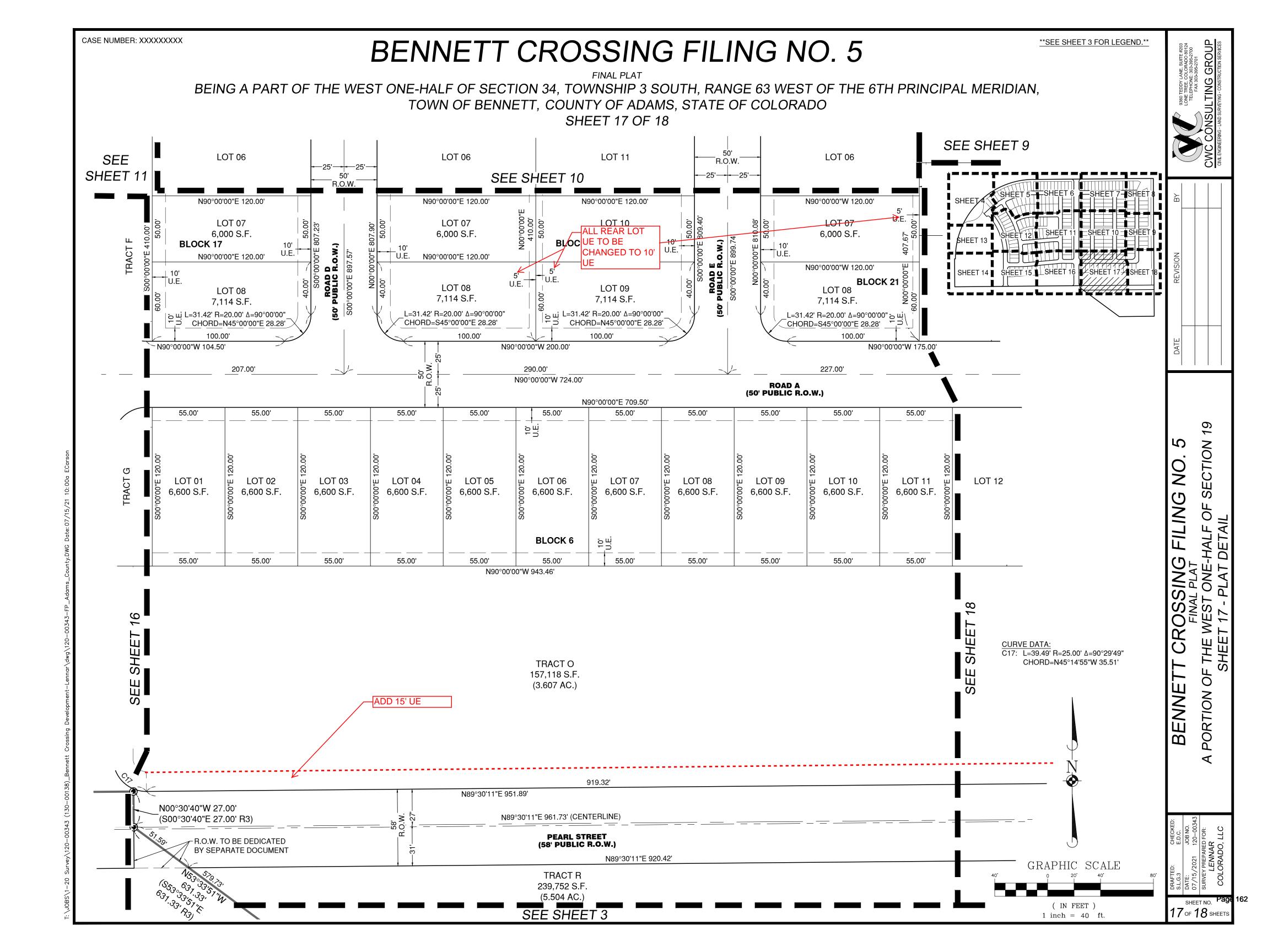


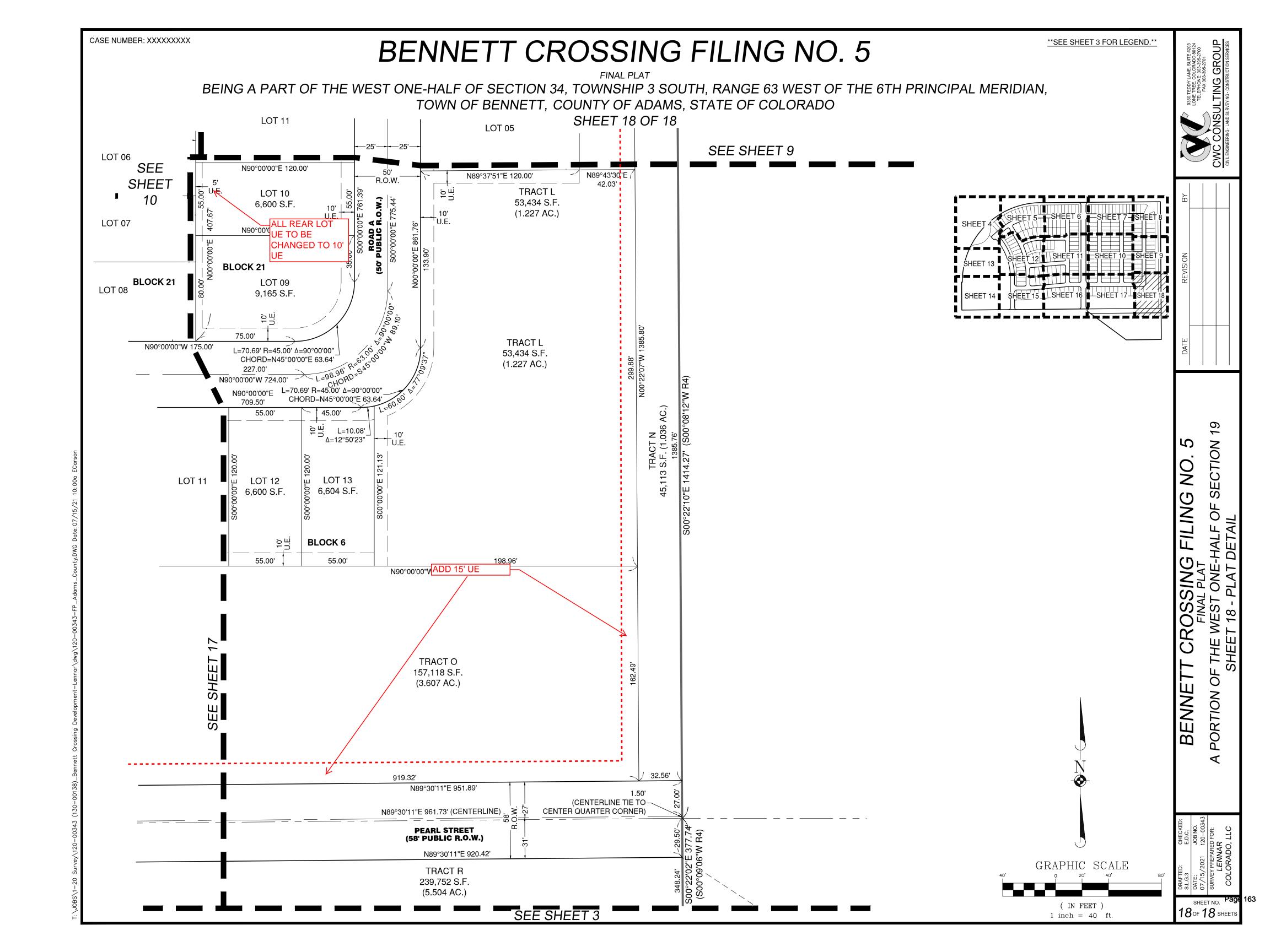














#### Steve Hebert <shebert@bennett.co.us>

#### **RE: Bennett Crossing Filing 5 Final Plat**

1 message

Brooks Kaufman < BKaufman@core.coop>

Mon, Aug 30, 2021 at 1:08 PM

To: Steve Hebert <shebert@bennett.co.us>

Cc: Sara Aragon <saragon@bennett.co.us>, Daniel Giroux <dangiroux@terramax.us>

**Dear Steve** 

The applicant will be required to provide additional utility easements to extend electrical feeders to the development and from the development, add the requested note on the sheet 2. In addition change the all the rear lot utility easements to 10 foot wide.

Respectfully

#### **Brooks Kaufman**

Lands and Rights of Way Manager

800.332.9540 MAIN

720.733.5493 **DIRECT** 

303.912.0765 MOBILE

IREA is now CORE Electric Cooperative. Learn more at www.core.coop.





Sent: Wednesday, August 18, 2021 8:54 AM

To: LBajelan@adcogov.org; ksmalley@adcogov.org; United States Postal Service <sarah.e.zawatzki@usps.gov>;

Bennett School District 29J <robinp@bsd29j.com>; kendrickplanning@gmail.com; Robin Price <rprice@bennett.co.us>; Daymon Johnson <djohnson@bennett.co.us>; Bennett Rec District <Director@bennettrec.org>; Victoria Flamini <VictoriaFlamini@bennettfirerescue.org>; Caleb Connor <calebconnor@bennettfirerescue.org>; Marilyn Cross - CDOT <Marilyn.Cross@state.co.us>; David Dixon - CDOT <David.dixon@state.co.us>; Adam Peake <apeake@summitutilitiesinc.com>; JGutierrez@summitutilitiesinc.com; Patw@esrta.coop; Regional Economic Advancement Partnership <Julio.lturreria@i-70reap.com>; Brooks Kaufman <BKaufman@Irea.Coop>; Jehn Water Consultants Inc <gburke@jehnwater.com>; melinda@kellypc.com; Daniel Giroux <dangiroux@terramax.us>; Gabrielle Renner <Gabrielle.Renner@wilsonco.com>; Steve Hebert <shebert@bennett.co.us>; Planning Town Of Bennett <planning@bennett.co.us>

Subject: Re: Bennett Crossing Filing 5 Final Plat

#### CAUTION:

This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good Morning Team,

I apologize for the inconvenience, I am not sure what happened to the previous link. Below is a link to the referral package.

https://www.dropbox.com/sh/ggkvhn7r60hyr0j/AACwyh9Sj6-TC1gCigyej1yTa?dl=0

Thank you!

Sara



Planning Department 207 Muegge Way | Bennett CO, 80102 (303)644-3249 | planning@bennett.co.us townofbennett.colorado.gov

On Thu, Aug 12, 2021 at 9:09 AM Town of Bennett Planning planning@bennett.co.us> wrote:

Good Morning,

Below is a link for Bennett Crossing Filing 5 Final Plat Referral package. Comments are due on September 2, 2021 and can be sent to planning@bennett.co.us or mailed to Town Hall. Please email Steve Hebert if you have any questions about this referral.

Bennett Crossing Filing 5 Final Plat

**Page 165** 

Thank you for your time and consideration in this matter.





# **BENNETT SCHOOL DISTRICT 29J**

September 2, 2021

Town of Bennett 207 Muegge Way Bennett, CO 80102

RE: Case No. 21.24 - Bennett Crossings Filing No. 5

Dear Steve;

Bennett School District 29J is pleased to review the Final Plat proposal for Bennett Crossings.

The proposed final plat application is for 83.9 acres being platted in 243 lots in two phases, the first is 123 lots and the second is 120 lots. The Application proposes residential development for property located within the School District's boundaries and, therefore, will have an impact on the School District's responsibility to provide adequate school facilities.

| Housing Unit Type | Density         |                | Elementary |          | Middle   |          | High     |          | Total    |          |
|-------------------|-----------------|----------------|------------|----------|----------|----------|----------|----------|----------|----------|
|                   |                 | Dwelling Units | Gen Rate   | Students | Gen Rate | Students | Gen Rate | Students | Gen Rate | Students |
| SFD               | 0-7.49 du/ac    | 243            | 0.36       | 87.48    | 0.18     | 43.74    | 0.24     | 58.32    | 0.775    | 100 54   |
| MF/Mid Density    | 7.5-14.99 du/ac |                | 0.17       |          | 0.08     |          | 0.24     | 30.32    | 0.775    | 189.54   |
| MF/High Density   | 15 du/ac +      |                | 0.09       |          | 0.04     |          | 0.06     |          | 0.364    |          |

|                   |                    |       |      | M                  |       |     |                    |              |      |                    |       |             |
|-------------------|--------------------|-------|------|--------------------|-------|-----|--------------------|--------------|------|--------------------|-------|-------------|
| Acres per Student | Elementary         |       |      | Middle             |       |     | High               | Water to the |      | Total              |       |             |
|                   | Number<br>Students | Acres |      | Number<br>Students | Acres |     | Number<br>Students | Acres        |      | Number<br>Students | Acres | cash        |
| 0.0597            | 87.48              |       | 5.22 | 43.74              | 2.    | .61 | 58.32              |              | 3.48 |                    |       | \$509,199.2 |

The School District respectfully requests 10 acres of building site ready land for a future district site. Town code is \$45,000.00 per acre at the time of this request. \$45,000.00 for 10 acres is equivalent to \$450,000.00. This would leave Bennett School District requesting the balance of \$59,199.21 in cash in lieu. Please reference the graph above to see how the \$509,199.21 was figured. This will assist in mitigating the impact the development will have on the schools.

We would like the opportunity to address the pedestrian crossing at the intersection of Adams and Edwards to ensure safe student travel.

The School District respectfully requests the opportunity to amend and supplement this letter, as appropriate, to update the Town Planning Department as to the School Districts' and the Developer's agreements concerning land dedication or cash in-lieu payment as a way to mitigate the impact the development will have on the schools.

# BENNETT SCHOOL DISTRICT 29J

The District looks forward to working with the developer to address the school dedication as they move through the final plat process.

Sincerely,

Mrs. Robin Purdy

School Superintendent

Mr. Keith Yaich

Chief Financial Officer

# BENNETT SCHOOL DISTRICT 29J

February 17, 2022

Town of Bennett 207 Muegge Way Bennett, CO 80102

RE: Case No. 21.24 - Bennett Crossings Filing No. 5

Dear Steve;

Bennett School District 29J is pleased to review the Final Plat proposal for Bennett Crossings Filing #5.

The proposed final plat application is for 83.9 acres being platted in 243 lots in two phases, the first is 123 lots and the second is 120 lots. The Application proposes residential development for property located within the School District's boundaries and, therefore, will have an impact on the School District's responsibility to provide adequate school facilities.

The School District respectfully requests \$505,218.87 cash-in-lieu of land as a way to mitigate the impact the development will have on the schools. A lump sum payment is acceptable at the time of the first building permit. We will be attaching the calculations that were agreed upon in the IGA for your reference.

The District looks forward to working with the Town and developer to address the school dedication as they move through the final plat process.

Sincerely,

Mrs. Robin Purdy

School Superintendent

Mr. Keith Yaich

Chief Financial Officer

Keithy@bsd29j.com

B29J - Student Yield, Land Dedication and Fee-In\_Lieu Calculators - Bennett Crossing #5

| Student Yield Calculator            | lator     |                       | Elementary         | ary      |                    | Middle        | High               |          | To                 | Total    |
|-------------------------------------|-----------|-----------------------|--------------------|----------|--------------------|---------------|--------------------|----------|--------------------|----------|
| Housing Unit Type                   | Density   | Dwelling<br>Units     | Generation<br>Rate | Students | Generation<br>Rate | Students      | Generation<br>Rate | Students | Generation<br>Rate | Students |
| Single Family<br>Detached           | 1 - 7.99  | 243                   | 0.29               | 70       | 0.15               | 36.45         | 0.16               | 39       | 0.6                | 145.8    |
| Single Family                       |           |                       |                    |          |                    |               |                    |          |                    |          |
| Attached (Condo,<br>Townhome, Plex) | 8 - 14.99 | 0                     | 0.14               | 0        | 0.06               | 0             | 0.08               | 0        | 0.28               | 0        |
| Multifamily (Apartments)            | 15+       | 0                     | 0.07               | 0        | 0.03               | 0             | 0.04               | 0        | 0.14               | 0        |
| Totals                              |           | 243                   |                    |          |                    |               |                    |          |                    | 145.8    |
| Acreage Calculator                  | Units     | Acreage<br>Multiplier | Acreage<br>Owed    |          | Fee<br>Multiplier  | Fee Owed      |                    |          |                    |          |
| Single Family Detached Units (SFD)  | 243       | 0.0162                | 3.9366             |          | \$2,079.09         | \$ 505,218.87 |                    |          |                    |          |
| Single Family Attached Units (SFA)  | 0         | 0.0075                | 0                  |          | \$964.84           | <b>♦</b>      |                    |          |                    |          |
| Multifamily Units (MF)              | 0         | 0.0038                | 0                  |          | \$482.42           | \$            |                    |          |                    |          |
| Totals                              |           |                       | 3.9366             |          | Or                 | \$ 505,218.87 |                    |          |                    |          |



#### Melinda A. Culley

(303) 298-1601 tel (303) 298-1627 fax melinda@kellypc.com

#### **MEMORANDUM**

TO: Steve Hebert, Planning & ED Manager

Sara Aragon, Community Development Manager

FROM: Melinda Culley /s/

DATE: August 25, 2021

RE: Bennett Crossing Filing No. 5

I reviewed the Final Plat for Bennett Crossing Filing No. 5 and have the following comments:

#### **General Comments**

- 1. Submit a current Adams County tax certificate for the property.
- 2. Add street names to the plat document.

#### Sheet 1

3. In the last paragraph of the Ownership and Dedication block, insert "storm drainage works and lines" after "sanitary sewer system works and lines."

#### Sheet 2

- 4. In note 2, replace "Bennett Development Standards and Regulations" with the "Bennett Municipal Code."
- 5. The notes indicate that the HOA will be responsible for maintaining all the tracts. Please provide a copy of the restrictions or covenants which will govern the use and maintenance of the parks and tracts.

| 6. | The Land Use Table indicates that 7.698 acres are for stormwater drainage for the Town. Review that number because the two stormwater drainage easements appear to cover approximately 8.5 acres. |
|----|---|
|    |   |
|    |   |
|    |   |

#### LSC TRANSPORTATION CONSULTANTS, INC.



1889 York Street **Denver, CO 80206** (303) 333-1105 FAX (303) 333-1107

E-mail: lsc@lscdenver.com

July 20, 2021

Mr. Joseph Huey Lennar 9193 S. Jamaica Street, 4th Floor Englewood, CO 80112

> Re: Bennett Crossing Filing 5 Bennett, CO LSC #210580

Dear Mr. Huey:

In response to your request, LSC Transportation Consultants, Inc. has prepared this Traffic Impact Analysis for the proposed Bennett Crossing Filing 5 development. As shown on Figure 1, the site is located east of S. 1st Street (SH 79) and north of Pearl Avenue in Bennett, Colorado.

#### REPORT CONTENTS

The report contains the following: the existing roadway and traffic conditions in the vicinity of the site including the lane geometries, traffic controls, posted speed limits, etc.; the existing weekday peak-hour traffic volumes; the existing daily traffic volumes in the area; an adjustment of the existing traffic for the ongoing pandemic; the typical weekday site-generated traffic volume projections for the site; the assignment of the projected traffic volumes to the area roadways; the projected short-term and long-term background and resulting total traffic volumes on the area roadways; the site's projected traffic impacts; and any recommended roadway improvements to mitigate the site's traffic impacts.

#### LAND USE AND ACCESS

The site is proposed to include 243 single-family dwelling units. Full movement access is proposed to Pearl Avenue and Edwards Avenue as shown in the conceptual site plan in Figure 2.

#### ROADWAY AND TRAFFIC CONDITIONS

#### **Area Roadways**

The major roadways in the site's vicinity are shown on Figure 1 and are described below.

1st Street (SH 79) is a north-south, two-lane state highway west of the site. It is classified by CDOT as NR-B (non-rural highway). The CDOT straight line diagram is attached. The intersections with E. Colfax Avenue (US 36), Edwards Avenue, and Pearl Avenue are stopsign controlled. The posted speed limit in the vicinity of the site is 45 mph. The existing

SH 79 alignment is expected to be shifted to the east after 2030 per the preferred realignment from the *SH 79 and Kiowa-Bennett Corridor PEL Study* by CDOT.

• **E. Colfax Avenue (US 36)** is an east-west, two-lane federal highway north of the site that is classified as a rural highway (R-B) by CDOT. The CDOT straight line diagram is attached. The intersection with S. 1<sup>st</sup> Street (SH 79) is stop-sign controlled. The posted speed limit in the vicinity of the site is 35 mph.

#### **Existing Traffic Conditions**

Figure 3a shows the existing lane geometries, traffic controls, posted speed limits, and traffic volumes in the site's vicinity on a typical weekday. The weekday peak-hour traffic volumes and daily traffic counts are from the attached traffic counts conducted by Counter Measures in June, 2021 and All Traffic Data in April, 2021.

Figure 3a also shows the existing turn lane lengths for the SH 79 intersections nearest to the site.

#### Adjustment for the Ongoing Pandemic

Figure 3b shows the existing traffic volumes adjusted for the ongoing pandemic. The traffic volumes at the 1<sup>st</sup> Street (SH 79)/E. Colfax Avenue (US 36) intersection (#1) are based on Figure 3b of the 2021 *Dollar General TIA* by LSC. The traffic volumes at Intersections #2 and #3 were balanced with the volumes from Intersection #1. The daily volumes on SH 79 are from or based on Figure 3b of the 2020 *Dollar General TIA* by LSc.

#### 2025, 2030, and 2041 Background Traffic

Figure 4 shows the estimated 2025 background traffic which assumes four years of growth at an annual rate of 3.7 percent on SH 79 based on the CDOT 20-year factor of 2.07 plus sitegenerated trips from Dollar General. Side road volumes at Intersections #2 and #3 were prorated between the volumes in Figure 3b (Existing) and those in Figure 6 (2041 background).

Figure 5 shows the estimated 2030 background traffic which assumes five years of growth at an annual rate of 3.0 percent plus site-generated trips from Dollar General. Side road volumes at Intersections #2 and #3 were prorated between the volumes in Figure 3b (Existing) and those in Figure 6 (2041 background).

Figure 6 shows the estimated 2041 background traffic which are based on the 2040 total traffic volumes from Figure 10 of the 2019 *Muegge Farms TIA* by LSC. The daily volumes were estimated based on the afternoon peak-hour volumes multiplied by 9.44.

Figures 4, 5, and 6 also show the estimated 2025, 2030, and 2041 traffic control and lane geometry, respectively.

#### Existing, 2025, 2030, and 2041 Background Levels of Service

Level of service (LOS) is a quantitative measure of the level of congestion or delay at an inter-page 174 section. Level of service is indicated on a scale from "A" to "F." LOS A is indicative of little

congestion or delay and LOS F is indicative of a high level of congestion or delay. Attached are specific level of service definitions for signalized and unsignalized intersections.

The intersections in Figures 3b, 4, 5, and 6 were analyzed to determine the existing, 2025, 2030, and 2041 background levels of service using Synchro. Table 1 shows the level of service analysis results. The level of service reports are attached.

- 1. 1<sup>st</sup> Street (SH 79)/E. Colfax Avenue (US 36): All movements at this unsignalized intersection currently operate at LOS "C" or better during both morning and afternoon peakhours and are expected to do so through 2041. The northbound left-turn movement could operate at LOS "E" in the afternoon peak-hour in 2030 prior to the shift of the SH 79 alignment to the east.
- 2. 1st Street (SH 79)/Edwards Avenue: All movements at this unsignalized intersection currently operate at LOS "C" or better during both morning and afternoon peak-hours. By 2025, all movements are expected to operate at LOS "C" or better with the following exception: The eastbound and westbound left-turn movements are expected to operate at LOS "E" and "F" in the afternoon peak-hour and are expected to do so during both peak-hours in 2030. By 2041 this intersection is expected to be converted to a modern roundabout and is expected to operate at an overall LOS "A" during the morning peak-hour and LOS "B" during the afternoon peak-hour.
- 3. 1<sup>st</sup> Street (SH 79)/Pearl Avenue: All movements at this unsignalized intersection are expected to operate at LOS "D" or better during both morning and afternoon peak-hours in 2025. By 2030, the westbound left-turn movement is expected to operate at LOS "E" during the morning peak-hour and LOS "F" during the afternoon peak-hour. By 2041, this intersection is expected to be signalized and operate at an overall LOS "A" during both peak-hours.
- **4. Edwards Avenue (SH 79)/Adams Street:** Several movements at this unsignalized intersection are expected to operate at LOS "E" or "F" during one or both peak-hours in 2041 without traffic signal control.
- **5. Pearl Avenue/Adams Street:** All movements at this unsignalized intersection are expected to operate at LOS "B" or better during both morning and afternoon peak-hours through 2041.

#### TRIP GENERATION

Table 1 shows the estimated average weekday, morning peak-hour, and afternoon peak-hour trip generation for the proposed site based on the rates from *Trip Generation*, 10<sup>th</sup> Edition, 2017 by the Institute of Transportation Engineers (ITE).

The site is projected to generate about 2,294 vehicle-trips on the average weekday, with about half entering and half exiting during a 24-hour period. During the morning peak-hour, which generally occurs for one hour between 6:30 and 8:30 a.m., about 45 vehicles would enter and about 135 vehicles would exit the site. During the afternoon peak-hour, which generally occurs for one hour between 4:00 and 6:00 p.m., about 152 vehicles would enter and about 89Page 175 vehicles would exit.

#### TRIP DISTRIBUTION

Figure 7a shows the estimated short-term directional distribution of the site-generated traffic volumes on the area roadways. Figure 7b shows the estimated long-term directional distribution of the site-generated traffic volumes on the area roadways. The estimates were based on the location of the site with respect to the regional population, employment, and activity centers; and the site's proposed land use. The long-term estimate assumes the SH 79 shift to the east has occurred.

#### TRIP ASSIGNMENT

Figure 8a shows the estimated short-term site-generated traffic volumes based on the directional distribution percentages (from Figure 7a) and the trip generation estimate (from Table 2).

Figure 8b shows the estimated long-term site-generated traffic volumes based on the directional distribution percentages (from Figure 7b) and the trip generation estimate (from Table 2).

#### 2025, 2030, AND 2041 TOTAL TRAFFIC

Figure 9 shows the estimated 2025 total traffic which is the sum of the 2025 background traffic volumes (from Figure 4) and the site-generated traffic volumes (from Figure 7a). Figure 9 also shows the recommended 2025 lane geometry and traffic control.

Figure 10 shows the estimated 2030 total traffic which is the sum of the 2030 background traffic volumes (from Figure 5) and the site-generated traffic volumes (from Figure 7a). Figure 10 also shows the recommended 2030 lane geometry and traffic control.

Figure 11a shows the estimated 2041 total traffic which is the sum of the 2030 background traffic volumes (from Figure 6) and the site-generated traffic volumes (from Figure 7b). Figure 11b shows the recommended 2041 lane geometry and traffic control.

#### PROJECTED LEVELS OF SERVICE

Level of service (LOS) is a quantitative measure of the level of congestion or delay at an intersection. Level of service is indicated on a scale from "A" to "F." LOS A is indicative of little congestion or delay and LOS F is indicative of a high level of congestion or delay. Attached are specific level of service definitions for signalized and unsignalized intersections.

The intersections in Figures 9 through 11b were analyzed to determine the 2025, 2030, and 2041 total levels of service. Table 1 shows the level of service analysis results. The level of service reports are attached.

1. 1<sup>st</sup> Street (SH 79)/E. Colfax Avenue (US 36): All movements at this unsignalized intersection are expected to operate at LOS "D" or better during both morning and afternoon peak-hours through 2041 with the recommended improvements. The northbound left-turn movement could operate at LOS "E" in the afternoon peak-hour in 2030 prior to the shift of the SH 79 alignment to the east.

- 2. 1<sup>st</sup> Street (SH 79)/Edwards Avenue: All movements at this unsignalized intersection are expected to operate at LOS "C" or better during both morning and afternoon peak-hours through 2030 with the following exception: The eastbound and westbound left-turn movements are expected to operate at LOS "F". By 2041 this intersection is expected to be converted to a modern roundabout and is expected to operate at an overall LOS "A" during the morning peak-hour and LOS "B" during the afternoon peak-hour.
- **3. 1**<sup>st</sup> **Street (SH 79)/Pearl Avenue:** All movements at this unsignalized intersection are expected to operate at LOS "D" or better during both morning and afternoon peak-hours through 2030 with the exception of the westbound left-turn movement which is expected to operate at LOS "F" in one or both peak-hours. By 2041, this intersection is expected to be signalized and operate at an overall LOS "A" during both peak-hours.
- **4. Edwards Avenue (SH 79)/Adams Street:** Several movements at this unsignalized intersection are expected to operate at LOS "E" or "F" during one or both peak-hours in 2041. As a signalized intersection it is expected to operate at an overall LOS "B" during both peak-hours.
- **5. Pearl Avenue/Adams Street:** All movements at this unsignalized intersection are expected to operate at LOS "B" or better during both morning and afternoon peak-hours through 2041.

#### CONCLUSIONS AND RECOMMENDATIONS

#### **Trip Generation**

1. The site is projected to generate about 2,294 vehicle-trips on the average weekday, with about half entering and half exiting during a 24-hour period. During the morning peakhour, about 45 vehicles would enter and about 135 vehicles would exit the site. During the afternoon peak-hour, about 152 vehicles would enter and about 89 vehicles would exit.

#### **Projected Levels of Service**

2. All movements at all of the intersections analyzed are expected to operate at LOS "D" or better during both morning and afternoon peak-hours through 2041 with the recommended improvements.

#### **Conclusions**

- 3. The impact of the Bennett Crossing Filing 5 development can be accommodated by the existing and planned roadway network with the recommended improvements.
- 4. The intersections of SH 79/Pearl Avenue and SH 79/Adams Street will require traffic signal control over time to maintain acceptable levels of service. This will require coordination between the Town and CDOT.

#### Recommendations

5. The 2025, 2030, and 2041 recommended improvements are shown in Figures 9 through 11b, respectively.

\* \* \* \* \*

We trust our findings will assist you in gaining approval of the proposed Bennett Crossing Filing 5 development. Please contact me if you have any questions or need further assistance.

Sincerely,

LSC TRANSPORTATION CONSULTANTS, INC.

By

Christopher S. McGranahan, PE, PTOE

Principal

CSM/wc

7-20-21

Enclosures: Tables 1 and 2

Figures 1 - 11b

SH 79 Straight Line Diagram

Colfax Avenue (US 36) Straight Line Diagram

Traffic Count Reports

Figure 3b from 2021 *Dollar General TIA* by LSC Figure 10 from 2019 *Muegge Farms TIA* by LSC

Level of Service Definitions Level of Service Reports

#### Table 1 Intersection Levels of Service Analysis Bennett Crossing, Filing No. 5 Bennett, CO LSC #210580; July, 2021

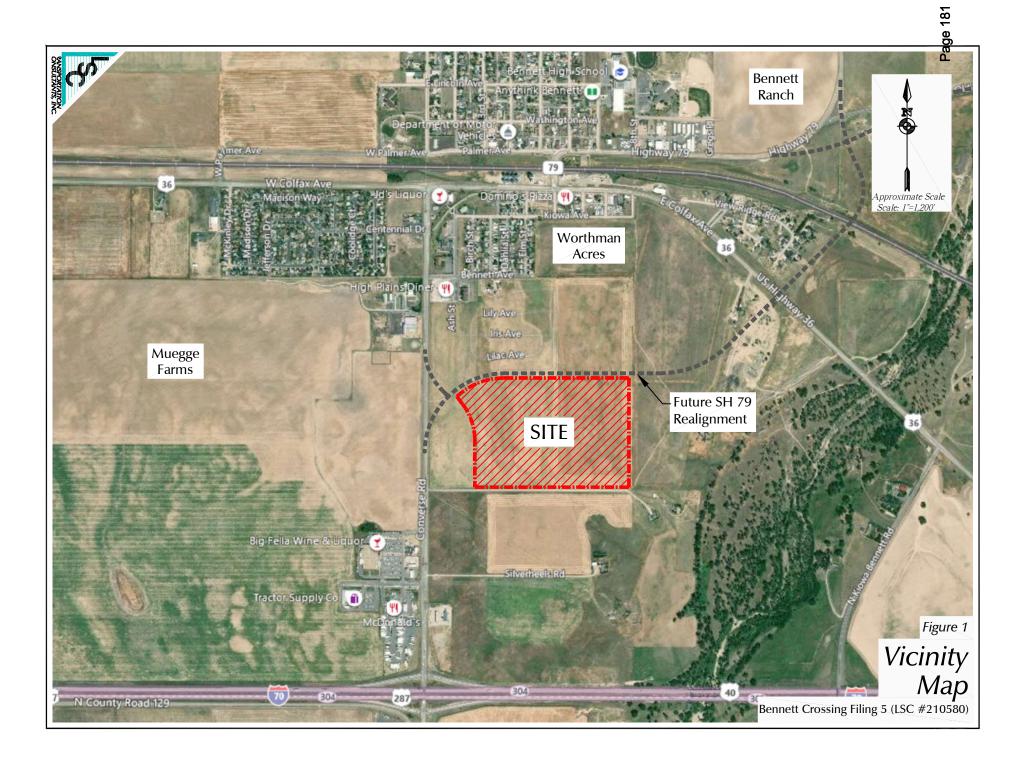
|   |                    |                           |                           |                           | LSC #21                   | 10580; Jul                | ly, 2021                  |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |
|---|--------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
|   |                    |                           | g Traffic                 | Backgrou                  | )25<br>und Traffic        | Total                     | 025<br>Traffic            | Backgrou                  | 030<br>und Traffic        | Total                     | Traffic                   | Backgro                   | 041<br>und Traffic        | Total                     | 041<br>Traffic            | Mitig                     | otal Traffic<br>gated     |
| Intersection No. & Location                                   | Traffic<br>Control | Level of<br>Service<br>AM | Level of<br>Service<br>PM |
|   |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |
| 1) S. 1 Street (SH 79)/Colfax Avenue (US 36)<br>NB Left       | TWSC               | С                         | С                         | С                         | С                         | С                         | D                         | D                         | Е                         | D                         | E                         | С                         | С                         | С                         | D                         |                           |                           |
| WB Left   |                    | A                         | A                         | A                         | A                         | A                         | A                         | A                         | A                         | A                         | A                         | A                         | A                         | A                         | A                         |                           |                           |
| Critical Movement Delay                                       |                    | 16.1                      | 17.5                      | 19.6                      | 23.6                      | 20.4                      | 25.6                      | 25.3                      | 37.2                      | 27.1                      | 42.4                      | 16.9                      | 23.4                      | 17.5                      | 25.6                      |                           |                           |
| 2) S. 1 Street (SH 79)/Edwards Avenue                         | TWSC               |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |
| NB Left   | 11100              |                           |                           | Α                         | Α                         | Α                         | Α                         | Α                         | Α                         | Α                         | Α                         |                           |                           |                           |                           |                           |                           |
| EB Left   |                    |                           |                           | С                         | E                         | D                         | E                         | E                         | F                         | F                         | F                         |                           |                           |                           |                           |                           |                           |
| EB Through/Right  |                    |                           |                           | В                         | В                         | В                         | С                         | В                         | В                         | С                         | С                         |                           |                           |                           |                           |                           |                           |
| WB Left   |                    | С                         | С                         | D                         | F                         | E                         | F                         | F                         | F                         | F                         | F                         |                           |                           |                           |                           |                           |                           |
| WB Right  |                    | A                         | В                         | В                         | В                         | В                         | C                         | В                         | C                         | В                         | C                         | -                         |                           |                           |                           |                           |                           |
| SB Left   |                    | A                         | A                         | Α                         | A                         | A                         | A                         | A                         | A                         | A                         | A                         |                           |                           |                           |                           |                           |                           |
| Critical Movement Delay                                       |                    | 15.0                      | 16.9                      | 34.5                      | 56.4                      | 47.6                      | 100.2                     | 209.1                     | >240                      | >240                      | >240                      |                           |                           |                           |                           |                           |                           |
|   | Roundabout         |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |
| EB Approach   |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | A                         | C                         | A                         | C                         |                           |                           |
| WB Approach   |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | A                         | A                         | A                         | A                         |                           |                           |
| SB Approach   |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | A<br>6.4                  | B<br>10.8                 | Α                         | A                         |                           |                           |
| Entire Intersection Delay (sec /veh) Entire Intersection LOS  |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | A                         | B                         | 9.4<br>A                  | 11.7<br>B                 |                           |                           |
| 3) S. 1 Street (SH 79)/Pearl Avenue                           | TWSC               |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |
| WB Left   | TWSC               |                           |                           | С                         | D                         | D                         | F                         | Е                         | F                         | F                         | F                         |                           |                           |                           |                           |                           |                           |
| WB Right  |                    |                           |                           | В                         | В                         | В                         | В                         | В                         | Ċ                         | В                         | Ċ                         |                           |                           |                           |                           |                           |                           |
| SB Left   |                    |                           |                           | A                         | A                         | A                         | A                         | A                         | В                         | A                         | В                         |                           |                           |                           |                           |                           |                           |
| Critical Movement Delay                                       |                    |                           |                           | 21.7                      | 32.4                      | 32.3                      | 55.7                      | 39.8                      | 109.4                     | 96.3                      | >240                      |                           |                           |                           |                           |                           |                           |
|   | Signalized         |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |
| WB Left   | OlgridiiZCu        |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | D                         | D                         | D                         | D                         |                           |                           |
| WB Right  |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | В                         | В                         | В                         | В                         |                           |                           |
| NB Through  |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | Ā                         | Ā                         | Ā                         | В                         |                           |                           |
| NB Right  |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | Α                         | Α                         | Α                         | Α                         |                           |                           |
| SB Left   |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | Α                         | Α                         | Α                         | Α                         |                           |                           |
| SB Through  |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | Α                         | Α                         | Α                         | Α                         |                           |                           |
| Entire Intersection Delay (sec /veh) Entire Intersection LOS  |                    |                           |                           | <br>                      | <br>                      |                           |                           |                           | <br>                      | <br>                      | <br>                      | 6.9<br>A                  | 8.4<br>A                  | 9.9<br>A                  | 10.5<br>B                 |                           |                           |
|   |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | ,,                        | ,,                        | _                         |                           |                           |
| Edwards Avenue (SH 79)/Adams Street     NB Left               | TWSC               |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | D                         | F                         | F                         | F                         |                           |                           |
| NB Through/Right  |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | D                         | E                         | D                         | F                         |                           |                           |
| EB Left   |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | Ā                         | Ā                         | Ā                         | A                         |                           |                           |
| WB Left   |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | Α                         | Α                         | Α                         | В                         |                           |                           |
| SB Left   |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | Е                         | F                         | E                         | F                         |                           |                           |
| SB Through/Right  |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | С                         | E                         | С                         | F                         |                           |                           |
| Critical Movement Delay                                       |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | 38.8                      | 145.2                     | 57.8                      | >240                      |                           |                           |
|   | Signalized         |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |
| EB Left   | -                  |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | Α                         | Α                         |
| EB Through  |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | Α                         | В                         |
| EB Right  |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | Α                         | Α                         |
| WB Left   |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | A                         | A                         |
| WB Through  |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | В                         | В                         |
| WB Right  |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | A                         | A                         |
| NB Left<br>NB Through/Right                                   |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | C<br>C                    | C<br>C                    |
| NB Through/Right<br>SB Left                                   |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | C                         | C                         |
| SB Through/Right  |                    | <br>                      | <br>                      | <br>                      |                           | <del></del>               | <br>                      |                           | <br>                      | <br>                      | <br>                      |                           | <b></b>                   | <br>                      | <br>                      | C                         | C                         |
| Entire Intersection Delay (sec /veh)                          |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | 13.2                      | 13.0                      |
| Entire Intersection Delay (sec /ven)  Entire Intersection LOS |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | 13.2<br>B                 | 13.0<br>B                 |
|   | _                  |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | -                         | _                         |
| 5) Pearl Avenue/Adams Street                                  | TWSC               |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | D                         | D                         | D                         | D                         |                           |                           |
| NB Approach   |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | В                         | В                         | В                         | В                         |                           |                           |
| EB Approach   |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | A                         | A                         | A                         | A                         |                           |                           |
| WB Approach<br>SB Approach                                    |                    |                           |                           |                           | <del></del>               |                           | <del></del>               |                           |                           | <del></del>               | <del></del>               | A<br>A                    | A<br>B                    | A<br>B                    | A<br>B                    |                           |                           |
| Critical Movement Delay                                       |                    | <br>                      | <br>                      | <br>                      | <br>                      |                           | <del></del>               | <br>                      | <br>                      | <br>                      | <br>                      | 10.7                      | 11.6                      | 12.2                      | 14.8                      |                           |                           |
| Official Movement Delay                                       |                    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | 10.7                      | 11.0                      | 14.4                      | 17.0                      |                           |                           |

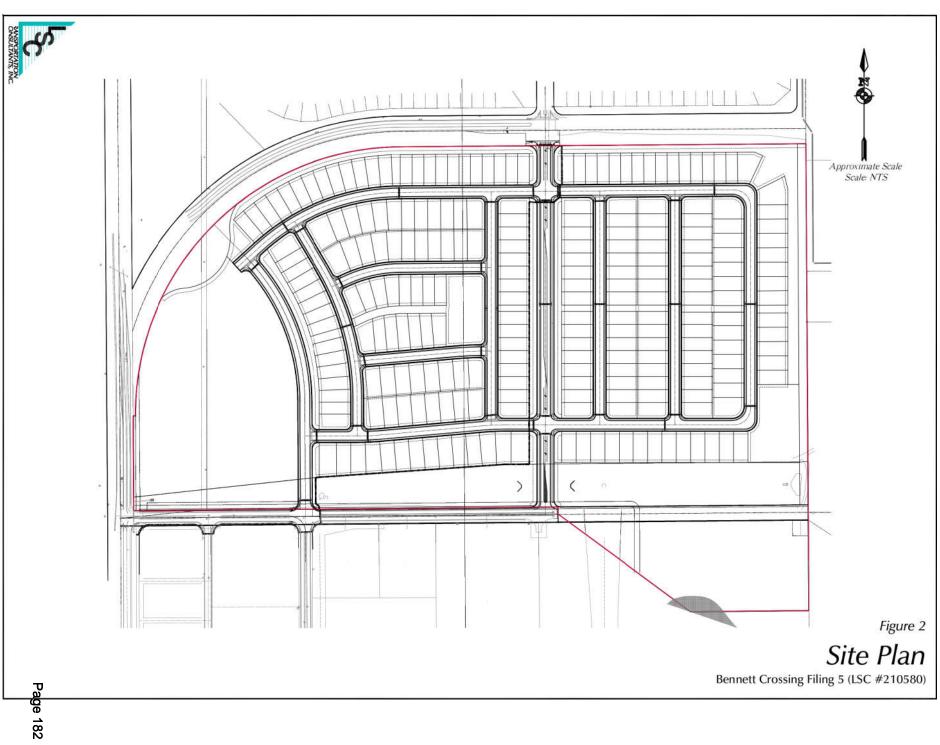
# Table 2 ESTIMATED TRAFFIC GENERATION Bennett Crossing Filing 5 Bennett, CO LSC #210580; July, 2021

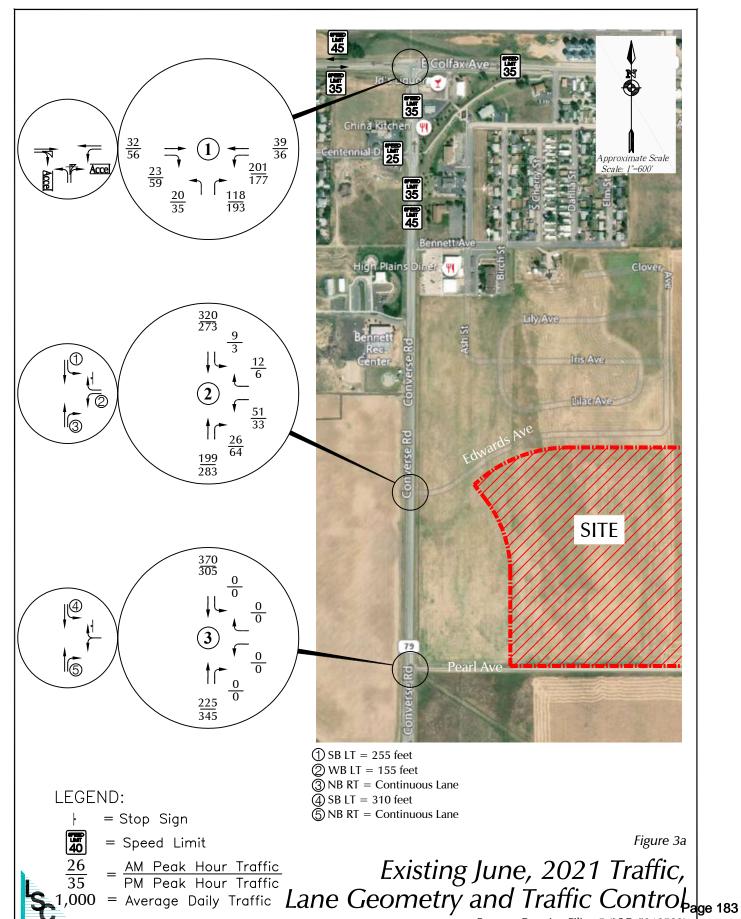
|  |                       |         | Trip Gen | eration R | ates <sup>(1)</sup> |         | V       | /ehicle - Tr | ips Ger | nerated   |        |
|--|-----------------------|---------|----------|-----------|---------------------|---------|---------|--------------|---------|-----------|--------|
|  |                       | Average | AM Pea   | ak Hour   | PM Pe               | ak Hour | Average | AM Peak      | Hour    | PM Peak - | - Hour |
| Trip Generating Category                                       | Quantity              | Weekday | ln       | Out       | ln                  | Out     | Weekday | ln           | Out     | In        | Out    |
| Currently Proposed Land Use Single-Family Detached Housing (2) | 243 DU <sup>(3)</sup> | 9.44    | 0.185    | 0.555     | 0.624               | 0.366   | 2,294   | 45           | 135     | 152       | 89     |

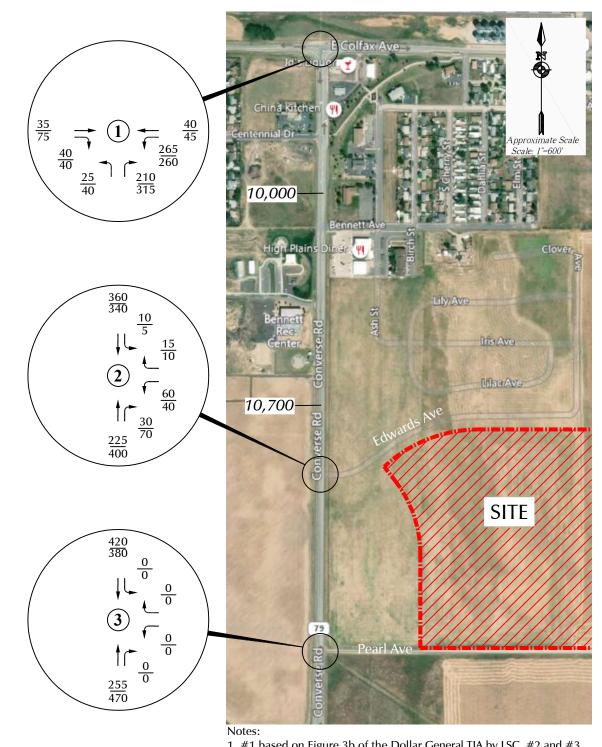
#### Notes:

- (1) Source: Trip Generation, Institute of Transportation Engineers, 10th Edition, 2017
- (2) ITE Land Use No. 210 Single-Family Detached Housing
- (3) DU = Dwelling Units









1. #1 based on Figure 3b of the Dollar General TIA by LSC. #2 and #3 balanced with the volumes in #1.

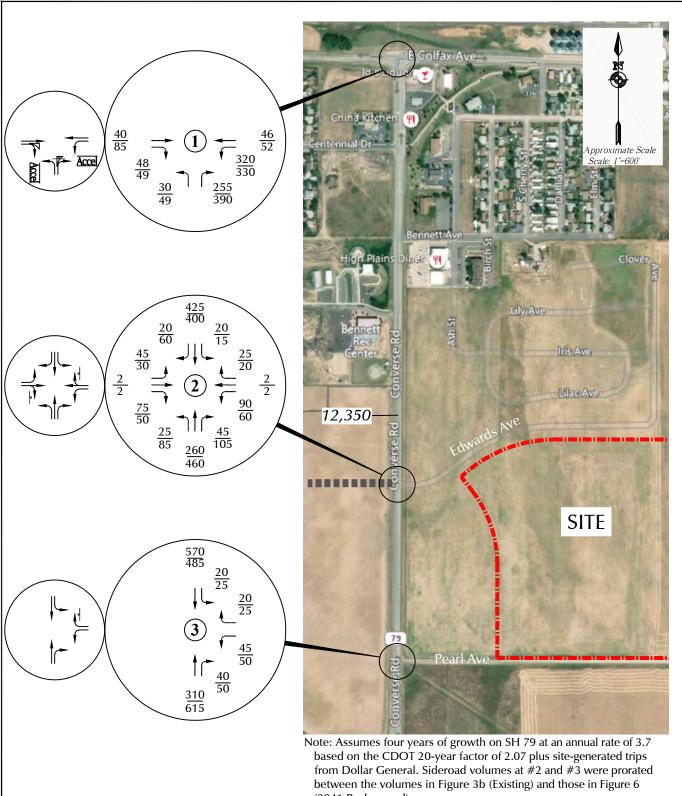
2. Daily volumes on SH 79 are from or based on Figure 3b of the Dollar General TIA by LSC.

LEGEND:

Figure 3b

AM Peak Hour Traffic PM Peak Hour Traffic 000 = Average Daily Traffic

Existing Traffic Adjusted for Pandemic<sub>Page 184</sub> Bennett Crossing Filing 5 (LSC #210580)

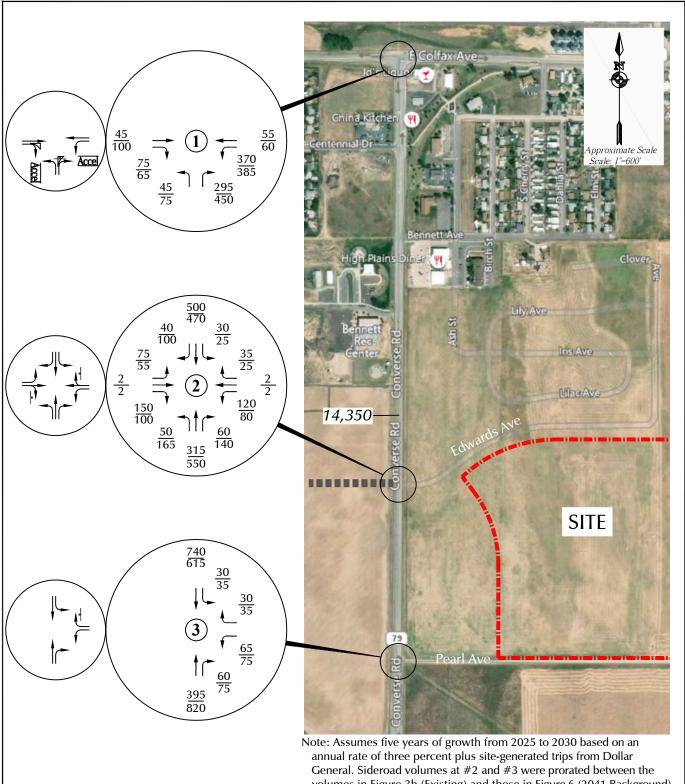


(2041 Background).

### LEGEND:

= Stop Sign

\frac{26}{35} = \frac{AM Peak Hour Traffic}{PM Peak Hour Traffic} \quad \text{Year 2025 Background Traffic,} \\ \text{Lane Geometry and Traffic Control}\_{\text{age 185}} \end{align\*}



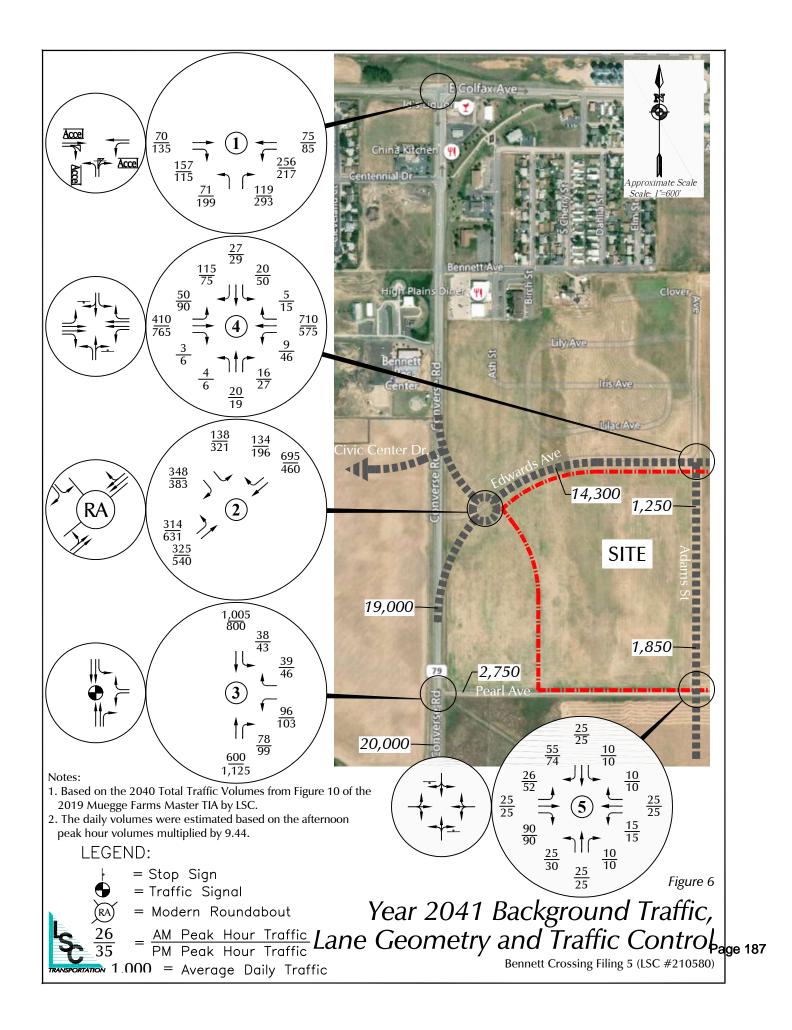
volumes in Figure 3b (Existing) and those in Figure 6 (2041 Background).

### LEGEND:

= Stop Sign

Figure 5

\frac{26}{35} = \frac{AM Peak Hour Traffic}{PM Peak Hour Traffic} \quad \text{Year 2030 Background Traffic,} \\ \text{Lane Geometry and Traffic Control}\_{\text{age 186}} \end{align\*}





LEGEND: 65% =

Percent Directional
Distribution

Figure 7a



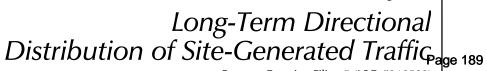




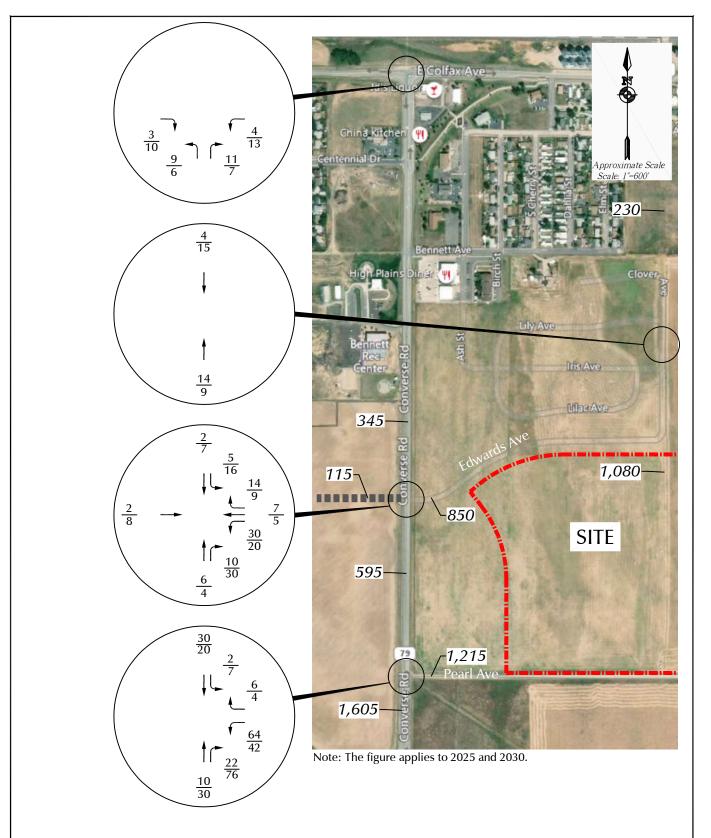
LEGEND: 65% =

Percent Directional
Distribution

Figure 7b





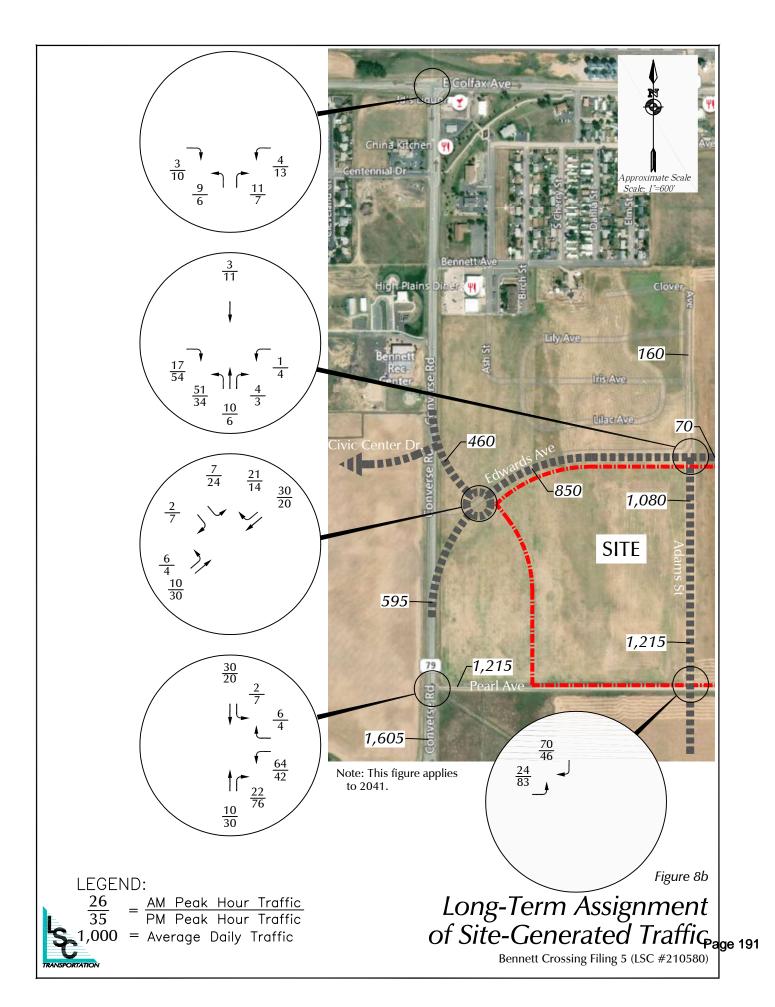


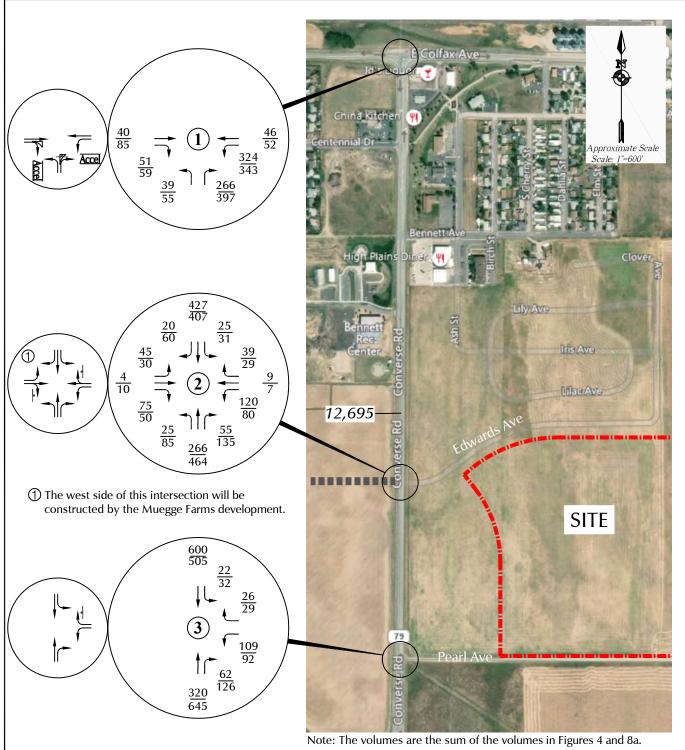
LEGEND:  $\frac{26}{35} = \frac{1}{35}$ AM Peak Hour Traffic PM Peak Hour Traffic

000 = Average Daily Traffic

Figure 8a

Short-Term Assignment of Site-Generated Traffic 190

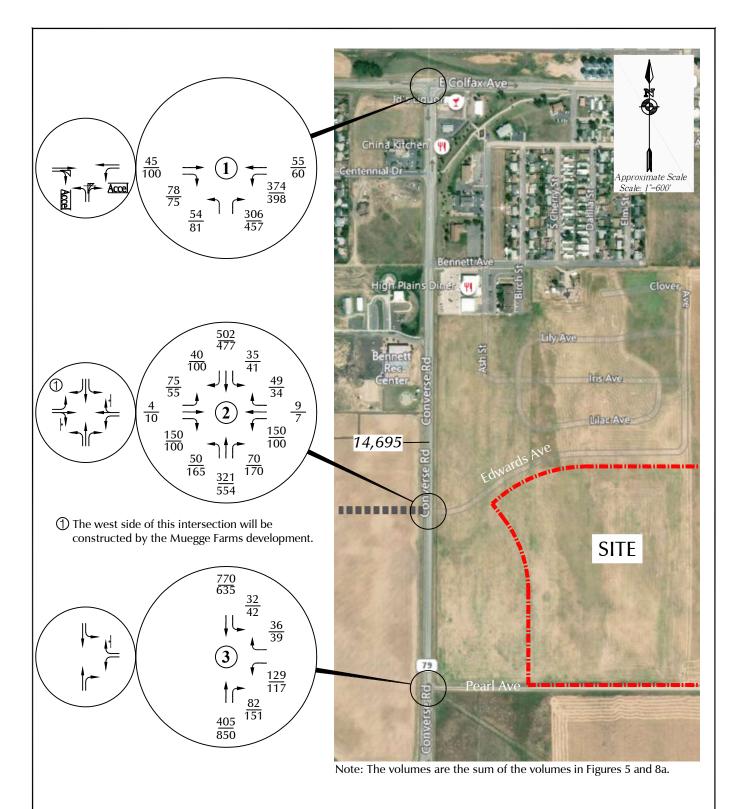




### LEGEND:

Figure 9

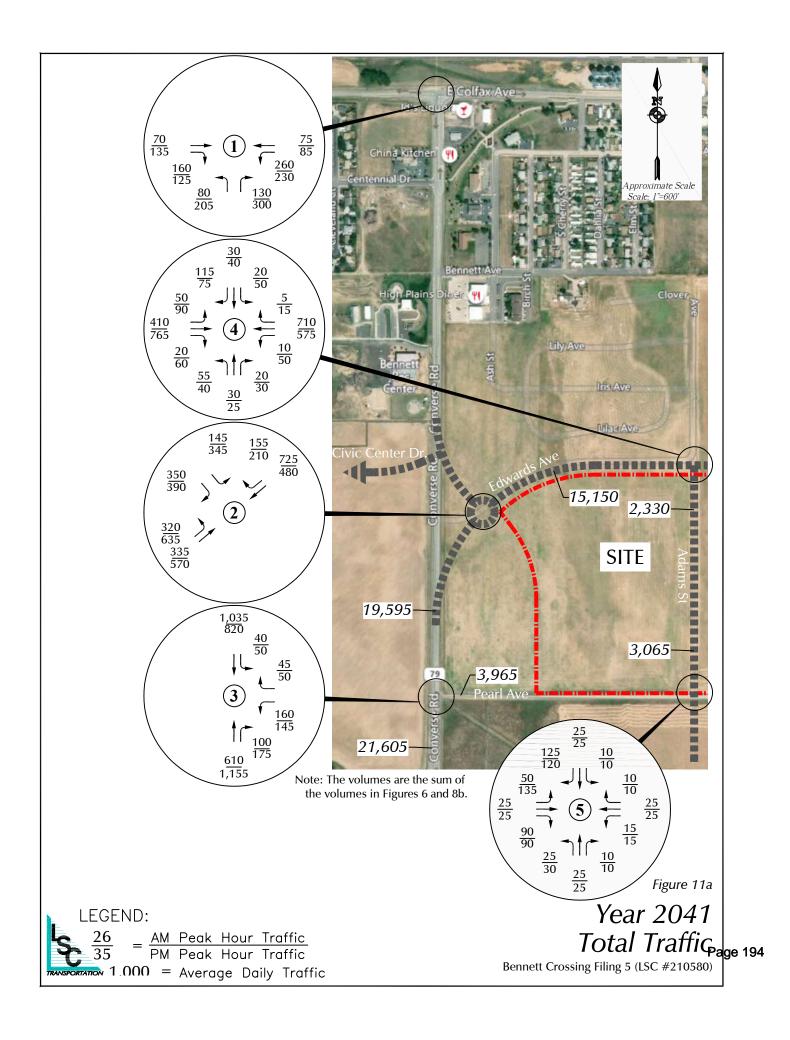
| Stop Sign | Stop

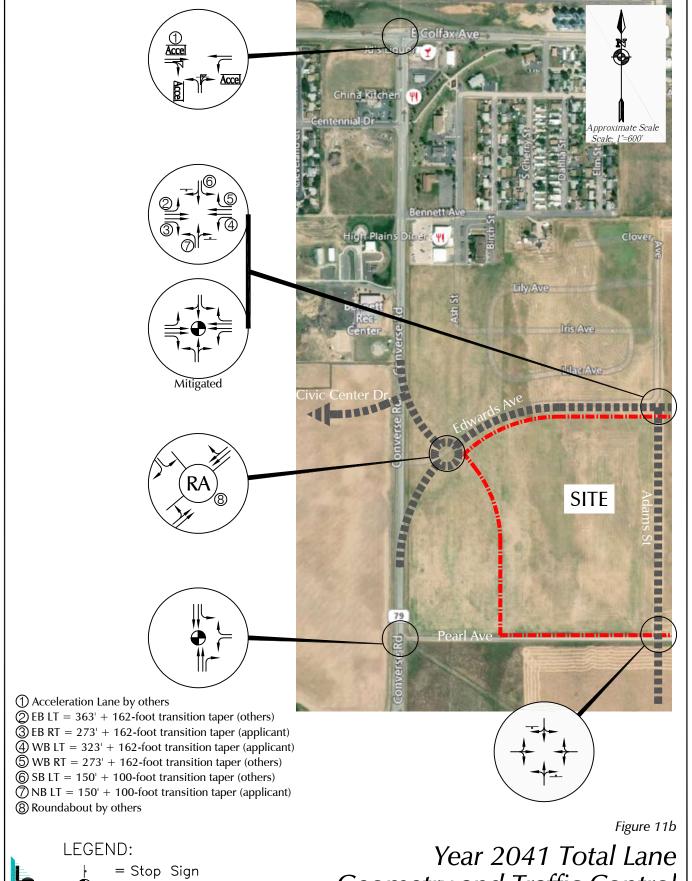


LEGEND:

Figure 10

| Stop Sign | 26 | AM | Peak | Hour | Traffic | Year 2030 | Total | Iraliic, | PM | Peak | Hour | Traffic | Lane | Geometry | and Traffic | Control | Bennett Crossing | Filing 5 (LSC #210580) | Bennett Crossing | Filing 5 (LSC #210580) | Property | Stop | Stop





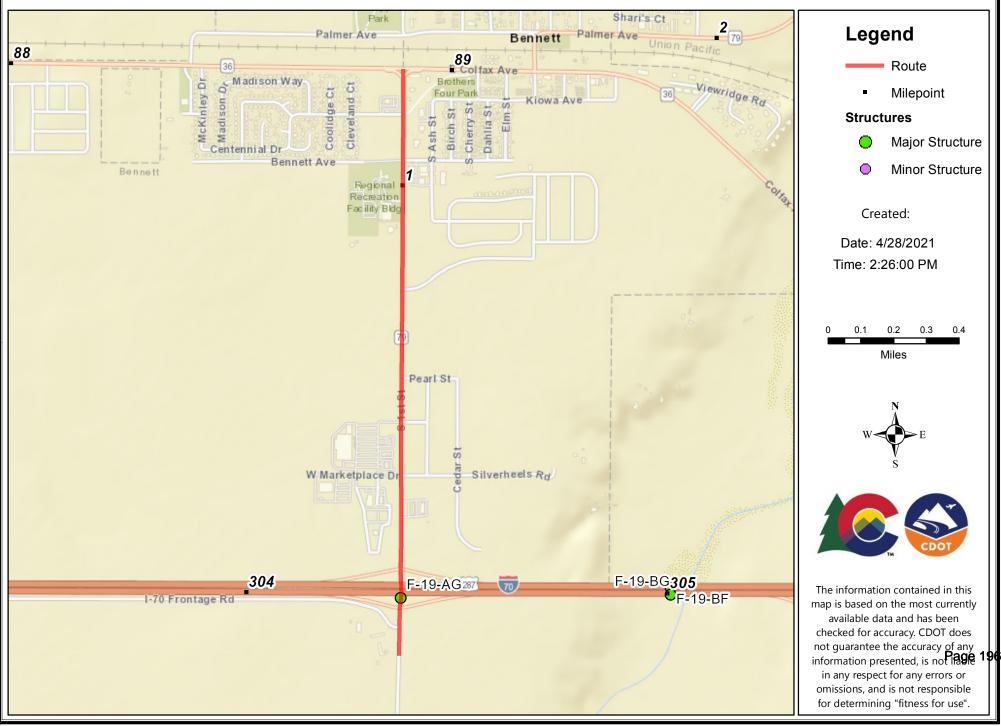


= Traffic Signal

= Modern Roundabout

Geometry and Traffic Control 195

# Route 079A From 0 to 2



| 0<br>I   | Ī | [            | I                      | 1<br>I     |                                  | 1  | I   | Í  |
|----------|---|--------------|------------------------|------------|----------------------------------|--|---|--|
|          |   |              |                        | ·          |                                  |  |   | ·  |
| Be<br>Rd |   |              |                        | :t Ave     | nial Dr                          |  |   |  |
| Fronta   |   |              |                        | Bennet     | Center <u>l</u>                  |  |   |  |
| AG AG    |   |              |                        | l          |                                  |  |   |  |
| F-19-    |   |              |                        |            |                                  |  |   |  |
|          |   |              |                        |            |                                  |  |   |  |
|          | · | NR-B: Non-Ru | ral Arterial           | •          |                                  |  | ·   |  |
|          |   | 5 Major Co   | ollector               | 1          |                                  |  |   |  |
|          | - | SH           |                        | 1          |                                  |  |   |  |
|          |   |              |                        |            |                                  |  |   |  |
|          |   | 45           |                        |            | 35                               |  |   |  |
|          |   |              |                        |            |                                  |  |   |  |
| 6600     |   | 11000        | ·                      |            | 5900                             |  |   |  |
| 0.44     |   | 1.08         |                        |            | 0.57                             |  |   |  |
|          |   |              |                        | -          |                                  |  |   |  |
|          |   |              | 5 Major Co<br>SH<br>45 | 6600 11000 | 5 Major Collector  SH  45  11000 | 5 Major Collector           SH           45         35           6600         11000         5900 | 5 Major Collector           SH         35           45         35           6600         11000         5900 | 5 Major Collector       SH       45     35       6600     11000     5900 |

It may appear that information is missing from the straight line diagram. If so, reduce the number of miles/page and re-submit the request.

#### Route 036C From 88 to 90 Legend Route Milepoint **Structures** Major Structure Roosevelt Ave Grant Ave Minor Structure Created: Lincoln Ave Date: 12/5/2020 Time: 9:13:39 AM Washington Ave Trupp Park Palmer Ave Bennett 0.1 0.2 0.3 88 89 Miles Madison V Ouosipe W Centennial Dr Madison Way Brothers Cleveland Ct Four Park Kiowa Ave Dahlia St Birch St Ash St Bennett Ave Bennett Ave

Regional .

Recreation Facility Bldg

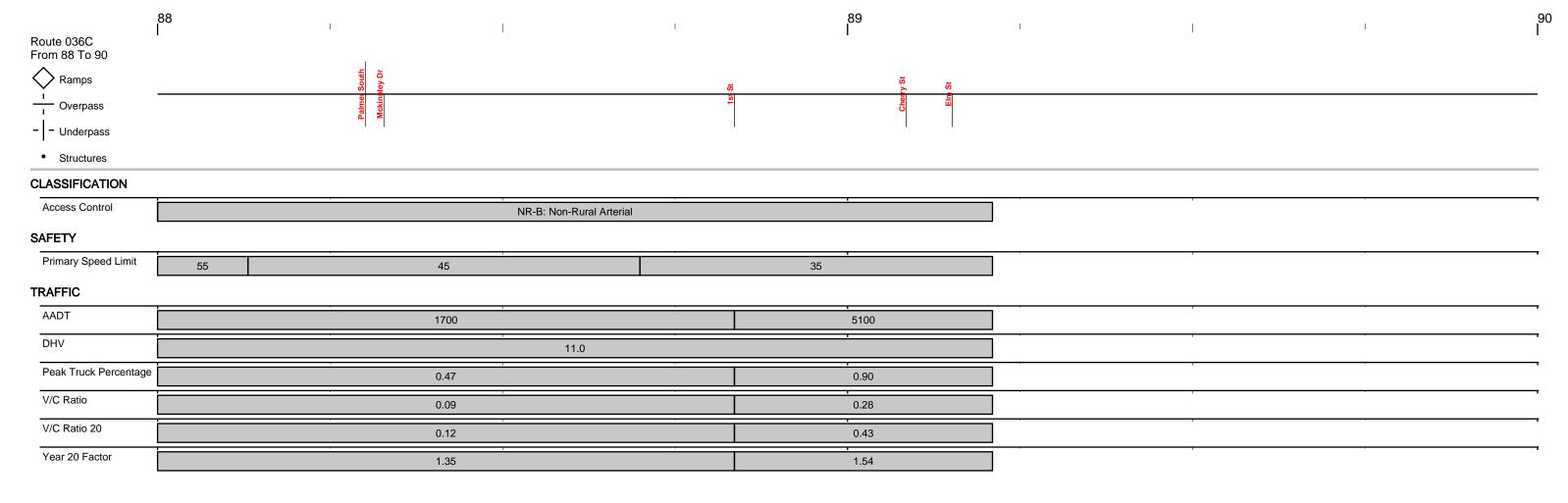
Bennett

Penrith Rd





The information contained in this map is based on the most currently available data and has been checked for accuracy. CDOT does not guarantee the accuracy of any information presented, is not lage 198 in any respect for any errors or omissions, and is not responsible for determining "fitness for use".



It may appear that information is missing from the straight line diagram. If so, reduce the number of miles/page and re-submit the request.

#### **COUNTER MEASURES INC.**

1889 YORK STREET DENVER.COLORADO 303-333-7409

N/S STREET: 1ST STREET E/W STREET: COLFAX AVENUE

CITY: BENNETT COUNTY: ADAMS

Groups Printed- VEHICLES

File Name : 1STCOLFAX Site Code : 00000013 Start Date : 6/16/2021 Page No : 1

|             |      |       |       |      |          |       |       | Printed- | VEHIC |       |       |      |      |       |        |      |       |
|-------------|------|-------|-------|------|----------|-------|-------|----------|-------|-------|-------|------|------|-------|--------|------|-------|
|             |      |       |       |      | C        | -     | AVENU | IE       |       | 1ST S |       |      | C    | _     | AVENU  | E    |       |
|             |      | South | bound |      |          | Westl | oound |          |       | North | oound |      |      | Eastb | ound   |      |       |
| Start Time  | Left | Thru  | Right | Peds | Left     | Thru  | Right | Peds     | Left  | Thru  | Right | Peds | Left | Thru  | Right  | Peds | Int.  |
|             |      |       |       |      |          |       |       |          |       |       |       |      |      |       | )      |      | Total |
| Factor      | 1.0  | 1.0   | 1.0   | 1.0  | 1.0      | 1.0   | 1.0   | 1.0      | 1.0   | 1.0   | 1.0   | 1.0  | 1.0  | 1.0   | 1.0    | 1.0  |       |
| 06:30 AM    | 0    | 0     | 0     | 0    | 26       | 7     | 0     | 0        | 7     | 0     | 12    | 0    | 0    | 8     | 0      | 0    | 60    |
| 06:45 AM    | 0    | 0     | 0     | 0    | 33       | 7     | 0     | 0        | 9     | 0     | 16    | 0    | 0    | 2     | 4      | 0    | 71    |
| Total       | 0    | 0     | 0     | 0    | 59       | 14    | 0     | 0        | 16    | 0     | 28    | 0    | 0    | 10    | 4      | 0    | 131   |
| 07.00.414   | •    | •     | •     | 0    | 0.5      | •     | •     | 0        | _     | •     | 40    | 0    | •    | •     | _      | 0    | 70    |
| 07:00 AM    | 0    | 0     | 0     | 0    | 35       | 8     | 0     | 0        | 5     | 0     | 18    | 0    | 0    | 8     | 5      | 0    | 79    |
| 07:15 AM    | 0    | 0     | 0     | 0    | 31       | 13    | 0     | 0        | 5     | 0     | 21    | 0    | 0    | 0     | 5      | 0    | 75    |
| 07:30 AM    | 0    | 0     | 0     | 0    | 44       | 13    | 0     | 0        | 3     | 0     | 28    | 0    | 0    | 9     | 7      | 0    | 104   |
| 07:45 AM    | 0    | 0     | 0     | 0    | 47       | 11    | 0     | 0        | 4     | 0     | 32    | 0    | 0    | 11    | 7      | 0    | 112   |
| Total       | 0    | 0     | 0     | 0    | 157      | 45    | 0     | 0        | 17    | 0     | 99    | 0    | 0    | 28    | 24     | 0    | 370   |
| 08:00 AM    | 0    | 0     | 0     | 0    | 59       | 7     | 0     | 0        | 8     | 0     | 31    | 0    | 0    | 6     | 3      | 0    | 114   |
| 08:15 AM    | 0    | 0     | 0     | 0    | 59<br>51 | 8     | 0     | 0        | 5     | 0     | 27    | 0    | 0    | 6     | 5<br>6 | 0    | 103   |
| 06.15 AW    | U    | U     | U     | U    | 51       | 0     | U     | υį       | 5     | U     | 21    | U    | U    | О     | О      | ΟŢ   | 103   |
| Total       | 0    | 0     | 0     | 0    | 110      | 15    | 0     | 0        | 13    | 0     | 58    | 0    | 0    | 12    | 9      | 0    | 217   |
| Total       | O    | Ü     | · ·   | ١    | 110      | .0    | Ū     | ١        | .0    | Ū     | 00    | 0    | Ū    |       | 0      | ١    | 211   |
|             |      |       |       |      |          |       |       |          |       |       |       |      |      |       |        |      |       |
|             |      |       |       |      |          |       |       |          |       |       |       |      |      |       |        |      |       |
| 04:00 PM    | 0    | 0     | 0     | 0    | 37       | 6     | 0     | 0        | 6     | 0     | 41    | 0    | 0    | 17    | 17     | 0    | 124   |
| 04:15 PM    | 0    | 0     | 0     | 0    | 41       | 9     | 0     | 0        | 9     | 0     | 39    | 0    | 0    | 14    | 18     | 0    | 130   |
| 04:30 PM    | 0    | 0     | 0     | 0    | 44       | 10    | 0     | 1        | 8     | 0     | 44    | 0    | 0    | 18    | 17     | 0    | 142   |
| 04:45 PM    | 0    | 0     | 0     | 0    | 41       | 6     | 0     | 0        | 13    | 0     | 49    | 1    | 0    | 13    | 12     | 0    | 135   |
| Total       | 0    | 0     | 0     | 0    | 163      | 31    | 0     | 1        | 36    | 0     | 173   | 1    | 0    | 62    | 64     | 0    | 531   |
|             |      |       |       |      |          |       |       |          |       |       |       | ,    |      |       |        | ·    |       |
| 05:00 PM    | 0    | 0     | 0     | 0    | 44       | 10    | 0     | 0        | 6     | 0     | 51    | 1    | 0    | 7     | 19     | 0    | 138   |
| 05:15 PM    | 0    | 0     | 0     | 0    | 48       | 10    | 0     | 0        | 8     | 0     | 49    | 0    | 0    | 18    | 11     | 0    | 144   |
| 05:30 PM    | 0    | 0     | 0     | 0    | 52       | 4     | 0     | 0        | 9     | 0     | 46    | 1    | 0    | 18    | 10     | 0    | 140   |
| 05:45 PM    | 0    | 0     | 0     | 0    | 37       | 4     | 0     | 0        | 11    | 0     | 62    | 0    | 0    | 15    | 5      | 0    | 134   |
| Total       | 0    | 0     | 0     | 0    | 181      | 28    | 0     | 0        | 34    | 0     | 208   | 2    | 0    | 58    | 45     | 0    | 556   |
|             |      |       |       |      |          |       |       |          |       |       |       |      |      |       |        |      |       |
| Grand Total | 0    | 0     | 0     | 0    | 670      | 133   | 0     | 1        | 116   | 0     | 566   | 3    | 0    | 170   | 146    | 0    | 1805  |
| Apprch %    | 0.0  | 0.0   | 0.0   | 0.0  | 83.3     | 16.5  | 0.0   | 0.1      | 16.9  | 0.0   | 82.6  | 0.4  | 0.0  | 53.8  | 46.2   | 0.0  |       |
| Total %     | 0.0  | 0.0   | 0.0   | 0.0  | 37.1     | 7.4   | 0.0   | 0.1      | 6.4   | 0.0   | 31.4  | 0.2  | 0.0  | 9.4   | 8.1    | 0.0  |       |
|             |      |       |       |      |          |       |       |          |       |       |       |      |      |       |        |      |       |

#### **COUNTER MEASURES INC.**

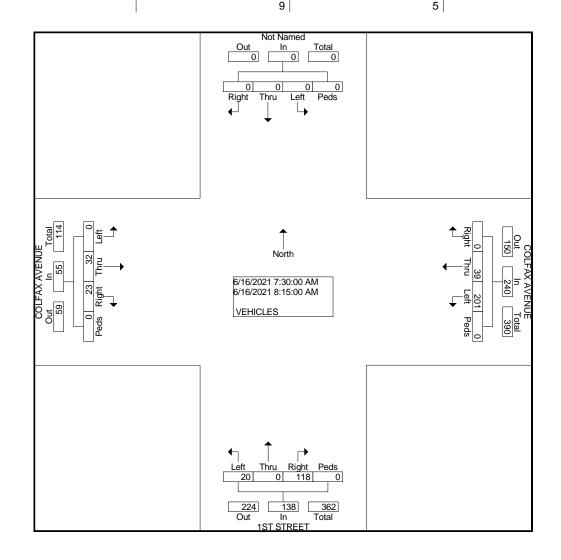
1889 YORK STREET DENVER.COLORADO 303-333-7409

N/S STREET: 1ST STREET E/W STREET: COLFAX AVENUE

CITY: BENNETT COUNTY: ADAMS

Factor

COLFAX AVENUE **COLFAX AVENUE** 1ST STREET Southbound Westbound Northbound Eastbound Rig Ped Start Thr Rig Ped App. Thr Rig Ped App. Thr Rig Ped App. Thr App. Int. Left Left Left Left Total ht Total Time ht Total ht ht Total Total u s u S u s u s Peak Hour From 06:30 AM to 08:15 AM - Peak 1 of 1 Intersecti 07:30 AM on 0 0 23 Volume 0 0 0 201 39 0 0 240 20 0 118 0 138 0 32 0 55 433 83. 16. 14. 85. 58. 41. 0.0 Percent 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 8 3 5 5 2 8 08:00 7 66 3 0 0 0 0 0 59 0 0 8 0 31 0 39 0 6 0 9 114 Volume 0.950 Peak Factor High Int. 6:15:00 AM MA 00:80 08:00 AM 07:45 AM Volume 0 0 0 0 66 0 59 8 31 0 39 7 0 0 0 0 0 11 18 Peak 0.90 0.88 0.76



File Name: 1STCOLFAX

4

Site Code : 00000013

Start Date : 6/16/2021

Page No : 2

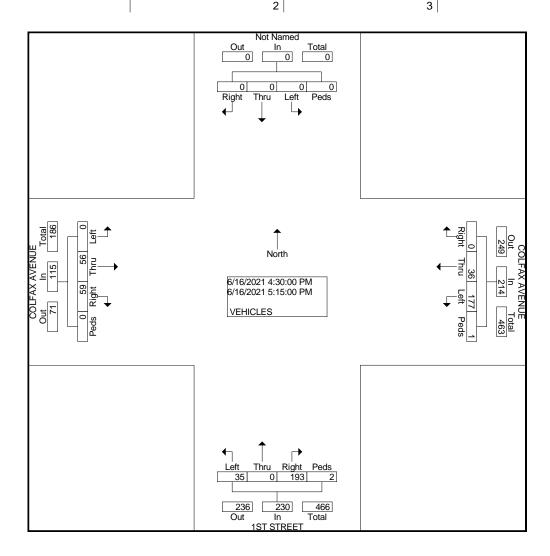
#### **COUNTER MEASURES INC.**

1889 YORK STREET DENVER.COLORADO 303-333-7409

N/S STREET: 1ST STREET E/W STREET: COLFAX AVENUE

CITY: BENNETT COUNTY: ADAMS

COLFAX AVENUE **COLFAX AVENUE** 1ST STREET Southbound Westbound Northbound Eastbound Rig Ped Start Thr Rig Ped App. Thr Rig Ped App. Thr Rig Ped App. Thr App. Int. Left Left Left Left Total ht Time ht Total ht ht Total Total Total u s u S u s u s Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1 Intersecti 04:30 PM on 0 0 0 Volume 0 0 177 36 0 1 214 35 0 193 2 230 0 56 59 0 115 559 51. 82. 16. 15. 83. 48. 0.0 Percent 0.0 0.0 0.0 0.0 0.0 0.5 0.9 0.0 0.0 7 8 2 9 3 05:15 8 0 49 144 0 0 0 0 0 48 10 0 0 58 0 57 0 18 11 0 29 Volume Peak 0.970 Factor High Int. 05:15 PM 04:45 PM 04:30 PM Volume 0 0 48 0 0 58 49 0 0 0 13 63 0 35 10 0 1 0 18 17 Peak 0.92 0.91 0.82 Factor 1



File Name: 1STCOLFAX

Site Code : 00000013

Start Date : 6/16/2021

Page No : 2

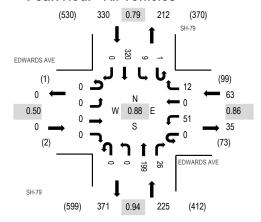


Location: 1 SH-79 & EDWARDS AVE AM

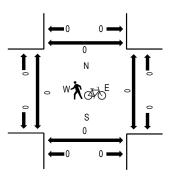
**Date:** Thursday, April 22, 2021 **Peak Hour:** 07:15 AM - 08:15 AM

Peak 15-Minutes: 07:45 AM - 08:00 AM

#### Peak Hour - All Vehicles



#### Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

#### **Traffic Counts**

| Interval    | El     | DWARI<br>Eastb |      | E     |        | WARD<br>Westb | S AVE<br>ound |    |        | SH-7 |      |       |        | SH-<br>South |      |       |       | Rolling | Ped  | estriar | n Crossin | ngs   |
|-------------|--------|----------------|------|-------|--------|---------------|---------------|----|--------|------|------|-------|--------|--------------|------|-------|-------|---------|------|---------|-----------|-------|
| Start Time  | U-Turn | Left           | Thru | Right | U-Turn | Left          | Thru Rig      | ht | U-Turn | Left | Thru | Right | U-Turn | Left         | Thru | Right | Total | Hour    | West | East    | South N   | North |
| <br>7:00 AM | 0      | 0              | 0    | 0     | 0      | 17            | 0             | 0  | 0      | 0    | 40   | 9     | 0      | 1            | 58   | 0     | 125   | 604     | 0    | 0       | 0         | 0     |
| 7:15 AM     | 0      | 0              | 0    | 0     | 0      | 19            | 0             | 1  | 0      | 0    | 49   | 10    | 0      | 0            | 78   | 0     | 157   | 618     | 0    | 0       | 0         | 0     |
| 7:30 AM     | 0      | 0              | 0    | 0     | 0      | 11            | 0             | 4  | 0      | 0    | 54   | 6     | 0      | 1            | 70   | 0     | 146   | 576     | 0    | 0       | 0         | 0     |
| 7:45 AM     | 0      | 0              | 0    | 0     | 0      | 10            | 0             | 7  | 0      | 0    | 48   | 6     | 0      | 4            | 101  | 0     | 176   | 518     | 0    | 0       | 0         | 0     |
| 8:00 AM     | 0      | 0              | 0    | 0     | 0      | 11            | 0             | 0  | 0      | 0    | 48   | 4     | 1      | 4            | 71   | 0     | 139   | 439     | 0    | 0       | 0         | 0     |
| 8:15 AM     | 0      | 0              | 0    | 1     | 0      | 4             | 0             | 2  | 0      | 0    | 50   | 7     | 0      | 3            | 47   | 1     | 115   |         | 0    | 0       | 0         | 0     |
| 8:30 AM     | 0      | 1              | 0    | 0     | 0      | 7             | 0             | 1  | 0      | 0    | 34   | 7     | 0      | 0            | 38   | 0     | 88    |         | 1    | 0       | 0         | 1     |
| 8:45 AM     | 0      | 0              | 0    | 0     | 0      | 5             | 0             | 0  | 0      | 0    | 30   | 10    | 0      | 1            | 51   | 0     | 97    |         | 0    | 0       | 0         | 0     |
| Count Total | 0      | 1              | 0    | 1     | 0      | 84            | 0             | 15 | 0      | 0    | 353  | 59    | 1      | 14           | 514  | 1     | 1,043 |         | 1    | 0       | 0         | 1     |
| Peak Hour   | 0      | 0              | 0    | 0     | 0      | 51            | 0             | 12 | 0      | 0    | 199  | 26    | 1      | ç            | 320  | )     | 0 618 | 3       | 0    | 0       | 0         | 0     |

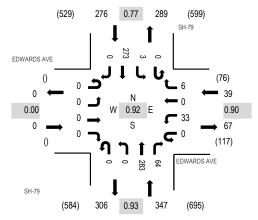


Location: 1 SH-79 & EDWARDS AVE PM

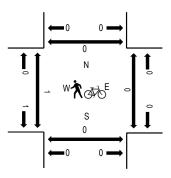
**Date:** Thursday, April 22, 2021 **Peak Hour:** 04:30 PM - 05:30 PM

Peak 15-Minutes: 05:15 PM - 05:30 PM

#### Peak Hour - All Vehicles



#### Peak Hour - Pedestrians/Bicycles on Crosswalk

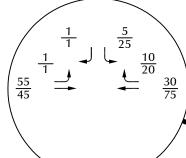


Note: Total study counts contained in parentheses.

#### **Traffic Counts**

|             | E      | DWARI | DS AV | E     | ED     | WARE  | OS AV | Ε     |        | SH-    | 79   |       |        | SH-    | 79   |       |       |         |      |         |           |       |
|-------------|--------|-------|-------|-------|--------|-------|-------|-------|--------|--------|------|-------|--------|--------|------|-------|-------|---------|------|---------|-----------|-------|
| Interval    |        | Eastb | ound  |       |        | Westb | ound  |       |        | Northb | ound |       |        | Southb | ound |       |       | Rolling | Ped  | estriar | n Crossin | igs   |
| Start Time  | U-Turn | Left  | Thru  | Right | U-Turn | Left  | Thru  | Right | U-Turn | Left   | Thru | Right | U-Turn | Left   | Thru | Right | Total | Hour    | West | East    | South N   | Vorth |
| 4:00 PM     | 0      | 0     | 0     | 0     | 0      | 7     | 0     | 3     | 0      | 0      | 66   | 6     | 0      | 0      | 61   | 0     | 143   | 644     | 0    | 0       | 0         | 0     |
| 4:15 PM     | 0      | 0     | 0     | 0     | 0      | 5     | 0     | 1     | 0      | 0      | 75   | 10    | 0      | 1      | 75   | 0     | 167   | 650     | 1    | 0       | 0         | 1     |
| 4:30 PM     | 0      | 0     | 0     | 0     | 0      | 6     | 0     | 3     | 0      | 0      | 64   | 13    | 0      | 0      | 91   | 0     | 177   | 662     | 0    | 0       | 0         | 0     |
| 4:45 PM     | 0      | 0     | 0     | 0     | 0      | 7     | 0     | 1     | 0      | 0      | 83   | 13    | 0      | 0      | 53   | 0     | 157   | 653     | 0    | 0       | 0         | 0     |
| 5:00 PM     | 0      | 0     | 0     | 0     | 0      | 9     | 0     | 1     | 0      | 0      | 65   | 19    | 0      | 1      | 54   | 0     | 149   | 656     | 0    | 0       | 0         | 0     |
| 5:15 PM     | 0      | 0     | 0     | 0     | 0      | 11    | 0     | 1     | 0      | 0      | 71   | 19    | 0      | 2      | 75   | 0     | 179   |         | 1    | 0       | 0         | 0     |
| 5:30 PM     | 0      | 0     | 0     | 0     | 0      | 9     | 0     | 1     | 0      | 0      | 81   | 12    | 0      | 3      | 62   | 0     | 168   |         | 0    | 0       | 0         | 0     |
| 5:45 PM     | 0      | 0     | 0     | 0     | 0      | 11    | 0     | 0     | 0      | 0      | 83   | 15    | 0      | 3      | 48   | 0     | 160   |         | 2    | 0       | 0         | 0     |
| Count Total | 0      | 0     | 0     | 0     | 0      | 65    |       | 0 11  | 0      | 0      | 588  | 107   | 0      | 10     | 519  | 0     | 1,300 |         | 4    | 0       | 0         | 1     |
| Peak Hour   | 0      | 0     | 0     | 0     | 0      | 33    | (     | ) 6   | 0      | 0      | 283  | 64    | 0      | 3      | 273  | (     | 662   | )       | 1    | 0       | 0         | 0     |



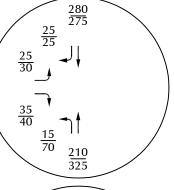






\* Based on Figure 3b of the 2020 Worthman Acres TIA by LSC with the through traffic volumes grown for one year at 3.7 percent based on CDOT 20-year factor of 2.07. Side road volumes assumed little or no growth.

\*\* East/west volumes based on the higher of the counts in Figure 3a and the 2017 count from Figure 3 of the Muegge Farms TIA by LSC grown for four years at annual rate of three percent. Volumes to/from the south were balanced with the other two intersections.



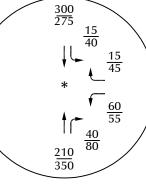


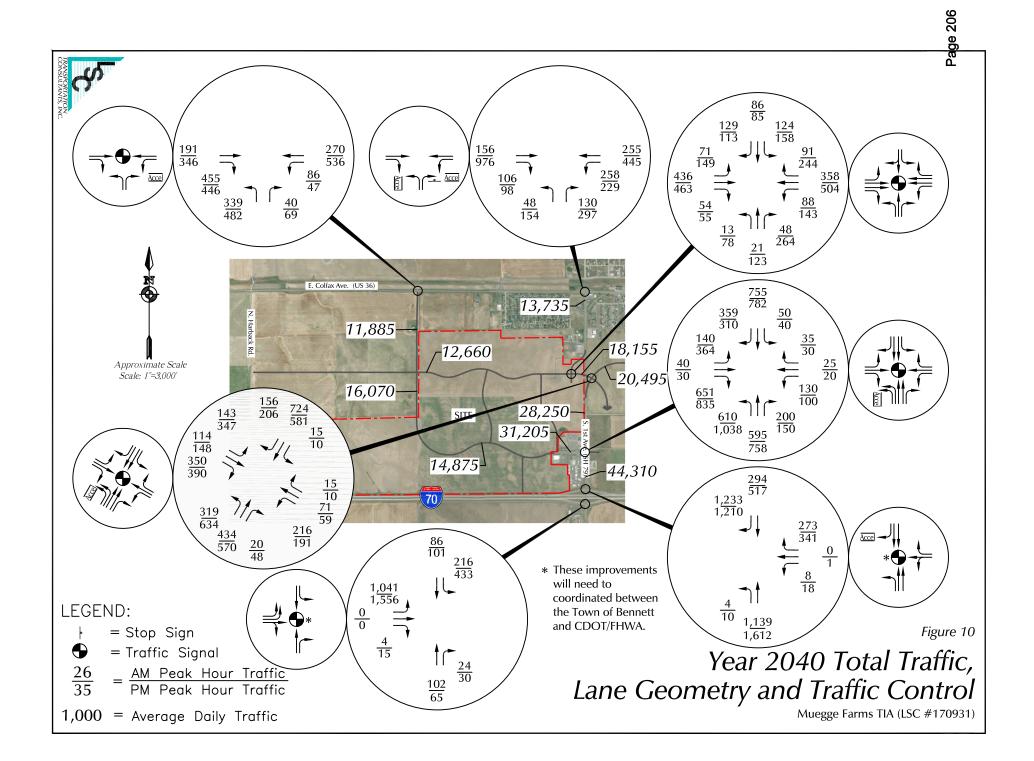
Figure 3b

# Existing Traffic, Adjusted for Pandemic

Dollar General - Bennett (LSC #210660)

### LEGEND:

 $\frac{26}{35}$  =  $\frac{AM \ Peak \ Hour \ Traffic}{PM \ Peak \ Hour \ Traffic}$ 1,000 = Average Daily Traffic



# **LEVEL OF SERVICE DEFINITIONS**

From Highway Capacity Manual, Transportation Research Board, 2016, 6th Edition

# SIGNALIZED INTERSECTION LEVEL OF SERVICE (LOS)

|     | <u>Average</u>            | SHOW ELVEL OF SERVICE (EOS)  |
|-----|---------------------------|--|
| LOS | Vehicle Delay sec/vehicle | Operational Characteristics  |
| 103 | 350/ VGI IIOIG            |  |
| A   | <10 seconds               | Describes operations with low control delay, up to 10 sec/veh. This LOS occurs when progression is extremely favorable and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values.  |
| В   | 10 to 20<br>seconds       | Describes operations with control delay greater than 10 seconds and up to 20 sec/veh. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.   |
| С   | 20 to 35<br>seconds       | Describes operations with control delay greater than 20 and up to 35 sec/veh. These higher delays may result from only fair progression, longer cycle length, or both. Individual cycle failures may begin to appear at this level. Cycle failure occurs when a given green phase does not serve queued vehicles, and overflows occur. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping. |
| D   | 35 to 55<br>seconds       | Describes operations with control delay greater than 35 and up to 55 sec/veh. At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, and high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.   |
| E   | 55 to 80<br>seconds       | Describes operations with control delay greater than 55 and up to 80 sec/veh. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent.  |
| F   | >80<br>seconds            | Describes operations with control delay in excess of 80 sec/veh. This level, considered unacceptable to most drivers, often occurs with over-saturation, that is, when arrival flow rates exceed the capacity of lane groups. It may also occur at high v/c ratios with many individual cycle failures. Poor progression and long cycle lengths may also contribute significantly to high delay levels.  |

### **LEVEL OF SERVICE DEFINITIONS**

From Highway Capacity Manual, Transportation Research Board, 2016, 6th Edition

# UNSIGNALIZED INTERSECTION LEVEL OF SERVICE (LOS) Applicable to Two-Way Stop Control, All-Way Stop Control, and Roundabouts

| LOS | Average<br>Vehicle Control<br>Delay | Operational Characteristics  |
|-----|-------------------------------------|--|
| A   | <10 seconds                         | Normally, vehicles on the stop-controlled approach only have to wait up to 10 seconds before being able to clear the intersection. Left-turning vehicles on the uncontrolled street do not have to wait to make their turn.  |
| В   | 10 to 15<br>seconds                 | Vehicles on the stop-controlled approach will experience delays before being able to clear the intersection. The delay could be up to 15 seconds. Left-turning vehicles on the uncontrolled street may have to wait to make their turn.  |
| С   | 15 to 25<br>seconds                 | Vehicles on the stop-controlled approach can expect delays in the range of 15 to 25 seconds before clearing the intersection.  Motorists may begin to take chances due to the long delays, thereby posing a safety risk to through traffic. Left-turning vehicles on the uncontrolled street will now be required to wait to make their turn causing a queue to be created in the turn lane.   |
| D   | 25 to 35<br>seconds                 | This is the point at which a traffic signal may be warranted for this intersection. The delays for the stop-controlled intersection are not considered to be excessive. The length of the queue may begin to block other public and private access points.   |
| E   | 35 to 50<br>seconds                 | The delays for all critical traffic movements are considered to be unacceptable. The length of the queues for the stop-controlled approaches as well as the left-turn movements are extremely long. There is a high probability that this intersection will meet traffic signal warrants. The ability to install a traffic signal is affected by the location of other existing traffic signals. Consideration may be given to restricting the accesses by eliminating the left-turn movements from and to the stop-controlled approach. |
| F   | >50 seconds                         | The delay for the critical traffic movements are probably in excess of 100 seconds. The length of the queues are extremely long. Motorists are selecting alternative routes due to the long delays. The only remedy for these long delays is installing a traffic signal or restricting the accesses. The potential for accidents at this intersection are extremely high due to motorist taking more risky chances. If the median permits, motorists begin making two-stage left-turns.   |

| Intersection           |         |         |        |          |        |      |
|------------------------|---------|---------|--------|----------|--------|------|
| Int Delay, s/veh       | 6.8     |         |        |          |        |      |
| Movement               | EBT     | EBR     | WBL    | WBT      | NBL    | NBR  |
| Lane Configurations    | <b></b> | 7       | ች      | <b>†</b> | ች      | 7    |
| Traffic Vol, veh/h     | 35      | 40      | 265    | 40       | 25     | 210  |
| Future Vol, veh/h      | 35      | 40      | 265    | 40       | 25     | 210  |
| Conflicting Peds, #/hr | 0       | 0       | 0      | 0        | 0      | 0    |
| Sign Control           | Free    | Free    | Free   | Free     | Stop   | Stop |
| RT Channelized         | -       | Free    | -      | None     | -      | Free |
| Storage Length         | _       | 175     | 175    | -        | 0      | 100  |
| Veh in Median Storage  |         | -       | -      | 0        | 0      | -    |
| Grade, %               | 0       | _       | _      | 0        | 0      | _    |
| Peak Hour Factor       | 92      | 92      | 92     | 92       | 92     | 92   |
|                        | 2       | 2       | 2      | 2        | 2      | 2    |
| Heavy Vehicles, %      | 38      |         |        |          |        |      |
| Mvmt Flow              | 38      | 43      | 288    | 43       | 27     | 228  |
|                        |         |         |        |          |        |      |
| Major/Minor N          | Najor1  | ľ       | Major2 | ľ        | Minor1 |      |
| Conflicting Flow All   | 0       | -       | 38     | 0        | 657    | -    |
| Stage 1                | -       | -       | -      | -        | 38     | -    |
| Stage 2                | -       | -       | -      | -        | 619    | -    |
| Critical Hdwy          | -       | -       | 4.12   | -        | 6.42   | -    |
| Critical Hdwy Stg 1    | -       | _       | _      | _        | 5.42   | _    |
| Critical Hdwy Stg 2    | -       | _       | _      | _        | 5.42   | -    |
| Follow-up Hdwy         | _       | _       | 2.218  | _        | 3.518  | _    |
| Pot Cap-1 Maneuver     | _       | 0       | 1572   | _        | 430    | 0    |
| Stage 1                | _       | 0       | -      | _        | 984    | 0    |
| Stage 2                | _       | 0       | _      | _        | 537    | 0    |
| Platoon blocked, %     | -       | U       |        |          | 331    | U    |
| Mov Cap-1 Maneuver     | -       | _       | 1572   | -        | 351    | _    |
|                        |         | -       |        | -        | 351    | -    |
| Mov Cap-2 Maneuver     | -       | -       | -      |          |        |      |
| Stage 1                | -       | -       | -      | -        | 984    | -    |
| Stage 2                | -       | -       | -      | -        | 439    | -    |
|                        |         |         |        |          |        |      |
| Approach               | EB      |         | WB     |          | NB     |      |
| HCM Control Delay, s   | 0       |         | 6.8    |          | 16.1   |      |
| HCM LOS                |         |         |        |          | С      |      |
|                        |         |         |        |          |        |      |
| N. A                   |         | IDI 4   | UDL C  | EST      | MAI    | MET  |
| Minor Lane/Major Mvm   | t N     | VBLn1 I | VBLn2  | EBT      | WBL    | WBT  |
| Capacity (veh/h)       |         | 351     | -      | -        | 1572   | -    |
| HCM Lane V/C Ratio     |         | 0.077   | -      | -        | 0.183  | -    |
| HCM Control Delay (s)  |         | 16.1    | 0      | -        | 7.8    | -    |
| HCM Lane LOS           |         | С       | Α      | -        | Α      | -    |
| HCM 95th %tile Q(veh)  |         | 0.2     | -      | -        | 0.7    | -    |
|                        |         |         |        |          |        |      |

| Intersection           |            |       |              |        |          |          |
|------------------------|------------|-------|--------------|--------|----------|----------|
| Int Delay, s/veh       | 1.6        |       |              |        |          |          |
| Movement               | WBL        | WBR   | NBT          | NBR    | SBL      | SBT      |
| Lane Configurations    | YVDL       | VVDIX | <u>ND1</u>   | T T    | JDL<br>Š | <u> </u> |
| Traffic Vol, veh/h     | 60         | 15    | <b>T</b> 225 | 30     | 10       | 360      |
| Future Vol, veh/h      | 60         | 15    | 225          | 30     | 10       | 360      |
| Conflicting Peds, #/hr | 0          | 0     | 0            | 0      | 0        | 0        |
| Sign Control           | Stop       | Stop  | Free         | Free   | Free     | Free     |
| RT Channelized         | 310p       | None  | -            | None   | -        | None     |
| Storage Length         | 0          | 0     | -            | 0      | 0        | -        |
| Veh in Median Storage  |            | -     | 0            | -      | -        | 0        |
| Grade, %               | 0          | -     | 0            | -      | -        | 0        |
| Peak Hour Factor       | 92         | 92    | 92           | 92     | 92       | 92       |
|                        |            | 2     |              |        |          |          |
| Heavy Vehicles, %      | 2          |       | 2            | 2      | 2        | 2        |
| Mvmt Flow              | 65         | 16    | 245          | 33     | 11       | 391      |
|                        |            |       |              |        |          |          |
| Major/Minor            | Minor1     | N     | Major1       |        | Major2   |          |
| Conflicting Flow All   | 658        | 245   | 0            | 0      | 278      | 0        |
| Stage 1                | 245        | -     | -            | -      | -        | -        |
| Stage 2                | 413        | _     | _            | -      | _        | -        |
| Critical Hdwy          | 6.42       | 6.22  | -            | _      | 4.12     | -        |
| Critical Hdwy Stg 1    | 5.42       | -     | _            | _      | -        | _        |
| Critical Hdwy Stg 2    | 5.42       | _     | _            | _      | _        | _        |
| Follow-up Hdwy         | 3.518      |       | _            | _      |          | _        |
| Pot Cap-1 Maneuver     | 429        | 794   | _            | _      | 1285     | _        |
| Stage 1                | 796        | - 7 7 |              | _      | 1200     | _        |
| Stage 2                | 668        |       | -            | -      | -        | -        |
| Platoon blocked, %     | 000        | -     | -            | -      | -        | _        |
|                        | 125        | 794   | -            | -      | 1285     | -        |
| Mov Cap-1 Maneuver     | 425<br>425 |       | -            | -      | 1280     | _        |
| Mov Cap-2 Maneuver     |            | -     | -            | -      | -        | -        |
| Stage 1                | 796        | -     | -            | -      | -        | -        |
| Stage 2                | 662        | -     | -            | -      | -        | -        |
|                        |            |       |              |        |          |          |
| Approach               | WB         |       | NB           |        | SB       |          |
| HCM Control Delay, s   | 13.9       |       | 0            |        | 0.2      |          |
| HCM LOS                | В          |       | _            |        |          |          |
|                        |            |       |              |        |          |          |
|                        |            |       |              |        |          |          |
| Minor Lane/Major Mvn   | nt         | NBT   | NBRV         | VBLn1V |          | SBL      |
| Capacity (veh/h)       |            | -     | -            | 120    | 794      | 1285     |
| HCM Lane V/C Ratio     |            | -     | -            | 0.153  |          | 0.008    |
| HCM Control Delay (s)  |            | -     | -            |        | 9.6      | 7.8      |
| HCM Lane LOS           |            | -     | -            | С      | Α        | Α        |
| HCM 95th %tile Q(veh   | )          | -     | -            | 0.5    | 0.1      | 0        |
|                        |            |       |              |        |          |          |

| Intersection           |          |       |        |          |        |      |
|------------------------|----------|-------|--------|----------|--------|------|
| Int Delay, s/veh       | 6.6      |       |        |          |        |      |
| Movement               | EBT      | EBR   | WBL    | WBT      | NBL    | NBR  |
| Lane Configurations    | <b>†</b> | 7     | ች      | <b>†</b> | ች      | 7    |
| Traffic Vol, veh/h     | 75       | 40    | 260    | 45       | 40     | 315  |
| Future Vol, veh/h      | 75       | 40    | 260    | 45       | 40     | 315  |
| Conflicting Peds, #/hr | 0        | 0     | 0      | 0        | 0      | 0    |
| Sign Control           | Free     | Free  | Free   | Free     | Stop   | Stop |
| RT Channelized         | -        | Free  | -      | None     |        | Free |
| Storage Length         | _        | 175   | 175    | -        | 0      | 100  |
| Veh in Median Storage  | e,# 0    | -     | -      | 0        | 0      | -    |
| Grade, %               | 0        | _     | _      | 0        | 0      | _    |
| Peak Hour Factor       | 92       | 92    | 92     | 92       | 92     | 92   |
| Heavy Vehicles, %      | 2        | 2     | 2      | 2        | 2      | 2    |
| Mvmt Flow              | 82       | 43    | 283    | 49       | 43     | 342  |
| IVIVIIIL I IOW         | 02       | 43    | 203    | 47       | 43     | 342  |
|                        |          |       |        |          |        |      |
| Major/Minor            | Major1   | ľ     | Major2 | ľ        | Minor1 |      |
| Conflicting Flow All   | 0        | -     | 82     | 0        | 697    | -    |
| Stage 1                | -        | -     | -      | -        | 82     | -    |
| Stage 2                | -        | -     | -      | -        | 615    | -    |
| Critical Hdwy          | -        | -     | 4.12   | -        | 6.42   | -    |
| Critical Hdwy Stg 1    | -        | -     | -      | -        | 5.42   | _    |
| Critical Hdwy Stg 2    | _        | _     | _      | -        | 5.42   | _    |
| Follow-up Hdwy         | _        | _     | 2.218  |          | 3.518  | _    |
| Pot Cap-1 Maneuver     | _        | 0     |        | -        | 407    | 0    |
| Stage 1                | _        | 0     | -      | _        | 941    | 0    |
| Stage 2                | _        | 0     | _      | _        | 539    | 0    |
| Platoon blocked, %     | _        | U     |        | _        | 337    | U    |
| Mov Cap-1 Maneuver     | _        | -     | 1515   | -        | 331    | _    |
| Mov Cap-1 Maneuver     | -        | -     | 1010   | -        | 331    |      |
|                        |          | -     | -      |          | 941    | _    |
| Stage 1                |          | -     |        |          |        |      |
| Stage 2                | -        | -     | -      | -        | 438    | -    |
|                        |          |       |        |          |        |      |
| Approach               | EB       |       | WB     |          | NB     |      |
| HCM Control Delay, s   | 0        |       | 6.8    |          | 17.5   |      |
| HCM LOS                |          |       |        |          | С      |      |
|                        |          |       |        |          |        |      |
|                        |          |       |        |          |        |      |
| Minor Lane/Major Mvn   | nt N     | VBLn1 | VBLn2  | EBT      | WBL    | WBT  |
| Capacity (veh/h)       |          | 331   | -      | -        | 1515   | -    |
| HCM Lane V/C Ratio     |          | 0.131 | -      | -        | 0.187  | -    |
| HCM Control Delay (s)  | )        | 17.5  | 0      | -        | 7.9    | -    |
| HCM Lane LOS           |          | С     | Α      | -        | Α      | -    |
| HCM 95th %tile Q(veh   | 1)       | 0.4   | -      | -        | 0.7    | -    |
|                        |          |       |        |          |        |      |

| Intersection           |           |       |             |        |           |              |
|------------------------|-----------|-------|-------------|--------|-----------|--------------|
| Int Delay, s/veh       | 0.9       |       |             |        |           |              |
| Movement               | WBL       | WBR   | NBT         | NBR    | SBL       | SBT          |
| Lane Configurations    | VVDL      | VV DK | ND1         | NDK    | JDL       | <u>301</u>   |
| Traffic Vol, veh/h     | 40        | 10    | <b>4</b> 00 | 70     | 5         | <b>T</b> 340 |
| Future Vol, veh/h      | 40        | 10    | 400         | 70     | 5         | 340          |
| Conflicting Peds, #/hr | 0         | 0     | 400         | 0      | 0         | 0            |
| Sign Control           | Stop      | Stop  | Free        | Free   | Free      | Free         |
| RT Channelized         | Siup<br>- | None  | -           | None   | riee<br>- | None         |
| Storage Length         | 0         | 0     | -           | 0      | 0         | None -       |
|                        |           | -     | 0           |        | -         | 0            |
| Veh in Median Storage  |           |       |             | -      |           |              |
| Grade, %               | 0         | -     | 0           | -      | -         | 0            |
| Peak Hour Factor       | 92        | 92    | 92          | 92     | 92        | 92           |
| Heavy Vehicles, %      | 2         | 2     | 2           | 2      | 2         | 2            |
| Mvmt Flow              | 43        | 11    | 435         | 76     | 5         | 370          |
|                        |           |       |             |        |           |              |
| Major/Minor            | Minor1    | N     | Major1      | ľ      | Major2    |              |
| Conflicting Flow All   | 815       | 435   | 0           | 0      | 511       | 0            |
| Stage 1                | 435       | -     | -           | -      | -         | -            |
| Stage 2                | 380       | -     | _           | _      | _         | _            |
| Critical Hdwy          | 6.42      | 6.22  | _           |        | 4.12      |              |
| Critical Hdwy Stg 1    | 5.42      | 0.22  | -           | -      | 4.12      | -            |
| Critical Hdwy Stg 2    | 5.42      |       | _           | -      | -         | -            |
|                        |           |       | -           | -      |           |              |
| Follow-up Hdwy         | 3.518     |       | -           | -      | 2.218     | -            |
| Pot Cap-1 Maneuver     | 347       | 621   | -           | -      | 1054      | -            |
| Stage 1                | 653       | -     | -           | -      | -         | -            |
| Stage 2                | 691       | -     | -           | -      | -         | -            |
| Platoon blocked, %     |           |       | -           | -      |           | -            |
| Mov Cap-1 Maneuver     | 345       | 621   | -           | -      | 1054      | -            |
| Mov Cap-2 Maneuver     | 345       | -     | -           | -      | -         | -            |
| Stage 1                | 653       | -     | -           | -      | -         | -            |
| Stage 2                | 688       | -     | -           | -      | -         | -            |
|                        |           |       |             |        |           |              |
| Approach               | WB        |       | NB          |        | SB        |              |
|                        | 15.7      |       | 0           |        | 0.1       |              |
| HCM Control Delay, s   |           |       | U           |        | 0.1       |              |
| HCM LOS                | С         |       |             |        |           |              |
|                        |           |       |             |        |           |              |
| Minor Lane/Major Mvm   | nt        | NBT   | NBRV        | VBLn1V | VBLn2     | SBL          |
| Capacity (veh/h)       |           | -     | _           | 345    | 621       | 1054         |
| HCM Lane V/C Ratio     |           | -     | _           | 0.126  |           |              |
| HCM Control Delay (s)  |           | -     | -           |        | 10.9      | 8.4          |
| HCM Lane LOS           |           | -     | -           | С      | В         | А            |
| HCM 95th %tile Q(veh   | )         | -     | -           | 0.4    | 0.1       | 0            |
|                        | ,         |       |             | 3.1    | 311       |              |

| Intersection           |         |         |        |         |        |      |
|------------------------|---------|---------|--------|---------|--------|------|
| Int Delay, s/veh       | 7.2     |         |        |         |        |      |
| Movement               | EBT     | EBR     | WBL    | WBT     | NBL    | NBR  |
| Lane Configurations    | <b></b> | 1       | ች      | <b></b> | ች      | 7    |
| Traffic Vol, veh/h     | 40      | 48      | 320    | 46      | 30     | 255  |
| Future Vol, veh/h      | 40      | 48      | 320    | 46      | 30     | 255  |
| Conflicting Peds, #/hr | 0       | 0       | 0      | 0       | 0      | 0    |
| Sign Control           | Free    | Free    | Free   | Free    | Stop   | Stop |
| RT Channelized         | -       | Free    | -      | None    | -      | Free |
| Storage Length         | _       | 175     | 175    | -       | 0      | 100  |
| Veh in Median Storage, |         | -       | -      | 0       | 0      | -    |
| Grade, %               | 0       | _       | _      | 0       | 0      | _    |
| Peak Hour Factor       | 92      | 92      | 92     | 92      | 92     | 92   |
| Heavy Vehicles, %      | 2       | 2       | 2      | 2       | 2      | 2    |
| Mvmt Flow              | 43      | 52      | 348    | 50      | 33     | 277  |
| IVIVIIIL FIOW          | 43      | 52      | 348    | 50      | 33     | 211  |
|                        |         |         |        |         |        |      |
| Major/Minor N          | /lajor1 | 1       | Major2 | N       | Minor1 |      |
| Conflicting Flow All   | 0       | -       | 43     | 0       | 789    | -    |
| Stage 1                | -       | -       | -      | -       | 43     | -    |
| Stage 2                | -       | -       | -      | -       | 746    | -    |
| Critical Hdwy          | -       | -       | 4.12   | -       | 6.42   | -    |
| Critical Hdwy Stg 1    | -       | -       | -      | -       | 5.42   | -    |
| Critical Hdwy Stg 2    | -       | -       | -      | -       | 5.42   | -    |
| Follow-up Hdwy         | -       | -       | 2.218  | -       | 3.518  | -    |
| Pot Cap-1 Maneuver     | -       | 0       | 1566   | -       | 359    | 0    |
| Stage 1                | -       | 0       | _      | _       | 979    | 0    |
| Stage 2                | _       | 0       | _      | _       | 469    | 0    |
| Platoon blocked, %     | _       |         |        | _       | .07    |      |
| Mov Cap-1 Maneuver     | -       | _       | 1566   | _       | 279    | _    |
| Mov Cap-2 Maneuver     | _       | _       | -      | _       | 279    | _    |
| Stage 1                | _       |         | _      | _       | 979    | _    |
| Stage 2                |         | _       | _      | _       | 365    | _    |
| Staye 2                | -       | -       |        | -       | 303    |      |
|                        |         |         |        |         |        |      |
| Approach               | EB      |         | WB     |         | NB     |      |
| HCM Control Delay, s   | 0       |         | 7      |         | 19.6   |      |
| HCM LOS                |         |         |        |         | С      |      |
|                        |         |         |        |         |        |      |
| Minor Long/Mairy M     |         | IDI1 I  | UDL 2  | EDT     | WDI    | MDT  |
| Minor Lane/Major Mvm   | t N     | VBLn1 N |        | EBT     | WBL    | WBT  |
| Capacity (veh/h)       |         | 279     | -      | -       | 1566   | -    |
| HCM Lane V/C Ratio     |         | 0.117   | -      | -       | 0.222  | -    |
| HCM Control Delay (s)  |         | 19.6    | 0      | -       | 8      | -    |
| HCM Lane LOS           |         | С       | Α      | -       | Α      | -    |
| HCM 95th %tile Q(veh)  |         | 0.4     | -      | -       | 0.9    | -    |
|                        |         |         |        |         |        |      |

| Intersection           |        |          |       |        |       |        |          |          |      |          |          |         |
|------------------------|--------|----------|-------|--------|-------|--------|----------|----------|------|----------|----------|---------|
| Int Delay, s/veh       | 5.5    |          |       |        |       |        |          |          |      |          |          |         |
| Movement               | EBL    | EBT      | EBR   | WBL    | WBT   | WBR    | NBL      | NBT      | NBR  | SBL      | SBT      | SBR     |
| Lane Configurations    | ሻ      | <b>1</b> | LDI   | ሻ      | 1     | WDIX   | <u> </u> | <u> </u> | T T  | <u> </u> | <u> </u> | JDIK ** |
| Traffic Vol, veh/h     | 45     | 2        | 75    | 90     | 2     | 25     | 25       | 260      | 45   | 20       | 425      | 20      |
| Future Vol, veh/h      | 45     | 2        | 75    | 90     | 2     | 25     | 25       | 260      | 45   | 20       | 425      | 20      |
| Conflicting Peds, #/hr | 0      | 0        | 0     | 0      | 0     | 0      | 0        | 0        | 0    | 0        | 0        | 0       |
| Sign Control           | Stop   | Stop     | Stop  | Stop   | Stop  | Stop   | Free     | Free     | Free | Free     | Free     | Free    |
| RT Channelized         | -      | -        | None  | -      | -     | None   | -        | -        | None | -        | -        | None    |
| Storage Length         | 0      | -        | -     | 0      | -     | -      | 0        | -        | 0    | 0        | -        | 0       |
| Veh in Median Storage  | 2,# -  | 0        | -     | -      | 0     | -      | -        | 0        | -    | -        | 0        | -       |
| Grade, %               | -      | 0        | -     | -      | 0     | -      | -        | 0        | -    | -        | 0        | -       |
| Peak Hour Factor       | 92     | 92       | 92    | 92     | 92    | 92     | 92       | 92       | 92   | 92       | 92       | 92      |
| Heavy Vehicles, %      | 2      | 2        | 2     | 2      | 2     | 2      | 2        | 2        | 2    | 2        | 2        | 2       |
| Mvmt Flow              | 49     | 2        | 82    | 98     | 2     | 27     | 27       | 283      | 49   | 22       | 462      | 22      |
|                        |        |          |       |        |       |        |          |          |      |          |          |         |
| Major/Minor I          | Minor2 |          |       | Minor1 |       |        | Major1   |          |      | Major2   |          |         |
| Conflicting Flow All   | 882    | 892      | 462   | 896    | 865   | 283    | 484      | 0        | 0    | 332      | 0        | 0       |
| Stage 1                | 506    | 506      | -     | 337    | 337   | -      | -        | -        | -    | -        | -        | -       |
| Stage 2                | 376    | 386      | -     | 559    | 528   | -      | -        | -        | -    | -        | -        | -       |
| Critical Hdwy          | 7.12   | 6.52     | 6.22  | 7.12   | 6.52  | 6.22   | 4.12     | -        | -    | 4.12     | -        | -       |
| Critical Hdwy Stg 1    | 6.12   | 5.52     | -     | 6.12   | 5.52  | -      | -        | -        | -    | -        | -        | -       |
| Critical Hdwy Stg 2    | 6.12   | 5.52     | -     | 6.12   | 5.52  | -      | -        | -        | -    | -        | -        | -       |
| Follow-up Hdwy         | 3.518  | 4.018    | 3.318 | 3.518  | 4.018 | 3.318  | 2.218    | -        | -    | 2.218    | -        | -       |
| Pot Cap-1 Maneuver     | 267    | 281      | 600   | 261    | 292   | 756    | 1079     | -        | -    | 1227     | -        | -       |
| Stage 1                | 549    | 540      | -     | 677    | 641   | -      | -        | -        | -    | -        | -        | -       |
| Stage 2                | 645    | 610      | -     | 513    | 528   | -      | -        | -        | -    | -        | -        | -       |
| Platoon blocked, %     |        |          | ,     |        |       |        |          | -        | -    | 40       | -        | -       |
| Mov Cap-1 Maneuver     | 248    | 269      | 600   | 217    | 279   | 756    | 1079     | -        | -    | 1227     | -        | -       |
| Mov Cap-2 Maneuver     | 248    | 269      | -     | 217    | 279   | -      | -        | -        | -    | -        | -        | -       |
| Stage 1                | 535    | 530      | -     | 660    | 625   | -      | -        | -        | -    | -        | -        | -       |
| Stage 2                | 604    | 595      | -     | 434    | 518   | -      | -        | -        | -    | -        | -        | -       |
|                        |        |          |       |        |       |        |          |          |      |          |          |         |
| Approach               | EB     |          |       | WB     |       |        | NB       |          |      | SB       |          |         |
| HCM Control Delay, s   | 16.2   |          |       | 29     |       |        | 0.6      |          |      | 0.3      |          |         |
| HCM LOS                | С      |          |       | D      |       |        |          |          |      |          |          |         |
|                        |        |          |       |        |       |        |          |          |      |          |          |         |
| Minor Lane/Major Mvm   | nt     | NBL      | NBT   | NBR    | EBLn1 | EBLn2V | VBLn1\   | VBLn2    | SBL  | SBT      | SBR      |         |
| Capacity (veh/h)       |        | 1079     | -     | -      | 248   | 581    | 217      | 671      | 1227 | -        | -        |         |
| HCM Lane V/C Ratio     |        | 0.025    | -     | -      |       | 0.144  |          | 0.044    |      | -        | -        |         |
| HCM Control Delay (s)  |        | 8.4      | -     | -      | 23    | 12.2   | 34.5     | 10.6     | 8    | -        | -        |         |
| HCM Lane LOS           |        | Α        | -     | -      | С     | В      | D        | В        | Α    | -        | -        |         |
| HCM 95th %tile Q(veh)  | )      | 0.1      | -     | -      | 0.7   | 0.5    | 2.2      | 0.1      | 0.1  | -        | -        |         |
|                        |        |          |       |        |       |        |          |          |      |          |          |         |

| Intersection           |           |       |              |          |          |              | ĺ |
|------------------------|-----------|-------|--------------|----------|----------|--------------|---|
| Int Delay, s/veh       | 1.4       |       |              |          |          |              |   |
| Movement               | WBL       | WBR   | NBT          | NBR      | SBL      | SBT          |   |
| Lane Configurations    | VVDL      | VVDIX | ND1          | NDK<br>7 | JDL<br>Š | <u> </u>     |   |
| Traffic Vol, veh/h     | 45        | 20    | <b>T</b> 310 | 40       | 20       | <b>T</b> 570 |   |
| Future Vol, veh/h      | 45        | 20    | 310          | 40       | 20       | 570          |   |
| Conflicting Peds, #/hr | 0         | 0     | 0            | 0        | 0        | 0            |   |
| Sign Control           | Stop      | Stop  | Free         | Free     | Free     | Free         |   |
| RT Channelized         | 310p<br>- | None  | -            | None     | -        | None         |   |
| Storage Length         | 100       | 0     | -            | 150      | 150      | None -       |   |
| Veh in Median Storage  |           | -     | 0            | 100      | 130      | 0            |   |
| Grade, %               | 0         | -     | 0            | -        | -        | 0            |   |
| Peak Hour Factor       | 92        | 92    | 92           | 92       | 92       | 92           |   |
|                        | 2         | 2     | 2            | 2        | 2        | 2            |   |
| Heavy Vehicles, %      |           |       |              |          |          |              |   |
| Mvmt Flow              | 49        | 22    | 337          | 43       | 22       | 620          |   |
|                        |           |       |              |          |          |              |   |
| Major/Minor            | Minor1    | N     | Major1       | 1        | Major2   |              |   |
| Conflicting Flow All   | 1001      | 337   | 0            | 0        | 380      | 0            |   |
| Stage 1                | 337       | -     | -            | -        | -        | -            |   |
| Stage 2                | 664       | -     | -            | -        | -        | -            |   |
| Critical Hdwy          | 6.42      | 6.22  | -            | -        | 4.12     | -            |   |
| Critical Hdwy Stg 1    | 5.42      | -     | -            | -        | -        | -            |   |
| Critical Hdwy Stg 2    | 5.42      | -     | -            | -        | -        | -            |   |
| Follow-up Hdwy         | 3.518     | 3.318 | -            | -        | 2.218    | -            |   |
| Pot Cap-1 Maneuver     | 269       | 705   | -            | -        | 1178     | -            |   |
| Stage 1                | 723       | -     | -            | -        | -        | -            |   |
| Stage 2                | 512       | -     | -            | -        | -        | -            |   |
| Platoon blocked, %     |           |       | -            | -        |          | _            |   |
| Mov Cap-1 Maneuver     | 264       | 705   | -            | -        | 1178     | -            |   |
| Mov Cap-2 Maneuver     | 264       | -     | _            | -        | -        | -            |   |
| Stage 1                | 723       | _     | -            | -        | _        | -            |   |
| Stage 2                | 502       | _     | _            | _        | _        | _            |   |
| Olago 2                | 002       |       |              |          |          |              |   |
|                        |           |       |              |          |          |              |   |
| Approach               | WB        |       | NB           |          | SB       |              |   |
| HCM Control Delay, s   | 18.2      |       | 0            |          | 0.3      |              |   |
| HCM LOS                | С         |       |              |          |          |              |   |
|                        |           |       |              |          |          |              |   |
| Minor Lane/Major Mvn   | nt        | NBT   | NRRV         | VBLn1V   | VRI n2   | SBL          |   |
| Capacity (veh/h)       |           | -     | -            |          | 705      | 1178         |   |
| HCM Lane V/C Ratio     |           | -     |              | 0.185    |          |              |   |
| HCM Control Delay (s)  | )         |       | _            |          | 10.3     | 8.1          |   |
| HCM Lane LOS           |           | -     | -            | C C      | В        | Α            |   |
| HCM 95th %tile Q(veh   | 1)        |       | -            |          | 0.1      | 0.1          |   |
|                        | .,        |       |              | 0.1      | 0.1      | 0.1          |   |

| Intersection           |          |        |        |         |        |      |
|------------------------|----------|--------|--------|---------|--------|------|
| Int Delay, s/veh       | 7.4      |        |        |         |        |      |
| Movement               | EBT      | EBR    | WBL    | WBT     | NBL    | NBR  |
| Lane Configurations    | <b>↑</b> | 1      | ች      | <b></b> | ች      | 7    |
| Traffic Vol, veh/h     | 85       | 49     | 330    | 52      | 49     | 390  |
| Future Vol, veh/h      | 85       | 49     | 330    | 52      | 49     | 390  |
| Conflicting Peds, #/hr | 0        | 0      | 0      | 0       | 0      | 0    |
| Sign Control           | Free     | Free   | Free   | Free    | Stop   | Stop |
| RT Channelized         | -        | Free   | -      | None    | -      | Free |
| Storage Length         | _        | 175    | 175    | -       | 0      | 100  |
| Veh in Median Storage  |          | -      | -      | 0       | 0      | -    |
| Grade, %               | 0        | _      | _      | 0       | 0      | _    |
| Peak Hour Factor       | 92       | 92     | 92     | 92      | 92     | 92   |
| Heavy Vehicles, %      | 2        | 2      | 2      | 2       | 2      | 2    |
|                        | 92       | 53     | 359    | 57      | 53     |      |
| Mvmt Flow              | 92       | 53     | 359    | 57      | 53     | 424  |
|                        |          |        |        |         |        |      |
| Major/Minor N          | Major1   | ľ      | Major2 | ľ       | Minor1 |      |
| Conflicting Flow All   | 0        | -      | 92     | 0       | 867    | -    |
| Stage 1                | -        | -      | -      | -       | 92     | -    |
| Stage 2                | -        | -      | -      | -       | 775    | -    |
| Critical Hdwy          | -        | -      | 4.12   | _       | 6.42   | -    |
| Critical Hdwy Stg 1    | -        | _      | _      | _       | 5.42   | _    |
| Critical Hdwy Stg 2    | _        | _      | -      | _       | 5.42   | _    |
| Follow-up Hdwy         | _        | _      | 2.218  |         | 3.518  | _    |
| Pot Cap-1 Maneuver     | _        | 0      | 1503   | _       | 323    | 0    |
| Stage 1                | _        | 0      | -      | _       | 932    | 0    |
| Stage 2                | _        | 0      | _      | _       | 454    | 0    |
| Platoon blocked, %     |          | U      | -      |         | 404    | U    |
|                        |          | _      | 1503   |         | 246    |      |
| Mov Cap-1 Maneuver     | -        |        |        | -       |        | -    |
| Mov Cap-2 Maneuver     | -        | -      | -      | -       | 246    | -    |
| Stage 1                | -        | -      | -      | -       | 932    | -    |
| Stage 2                | -        | -      | -      | -       | 345    | -    |
|                        |          |        |        |         |        |      |
| Approach               | EB       |        | WB     |         | NB     |      |
| HCM Control Delay, s   | 0        |        | 7      |         | 23.6   |      |
| HCM LOS                | U        |        | ,      |         | C      |      |
| HOW LOS                |          |        |        |         | U      |      |
|                        |          |        |        |         |        |      |
| Minor Lane/Major Mvm   | it N     | NBLn11 | VBLn2  | EBT     | WBL    | WBT  |
| Capacity (veh/h)       |          | 246    | -      | -       | 1503   | -    |
| HCM Lane V/C Ratio     |          | 0.217  | -      | -       | 0.239  | -    |
| HCM Control Delay (s)  |          | 23.6   | 0      | -       | 8.1    | -    |
| HCM Lane LOS           |          | С      | A      | -       | Α      | -    |
| HCM 95th %tile Q(veh)  |          | 0.8    | -      | -       | 0.9    | -    |
| _((***)                |          |        |        |         |        |      |

| Intersection           |        |             |       |           |          |          |        |         |      |        |          |      |
|------------------------|--------|-------------|-------|-----------|----------|----------|--------|---------|------|--------|----------|------|
| Int Delay, s/veh       | 4.9    |             |       |           |          |          |        |         |      |        |          |      |
| Movement               | EBL    | EBT         | EBR   | WBL       | WBT      | WBR      | NBL    | NBT     | NBR  | SBL    | SBT      | SBR  |
| Lane Configurations    | ች      | <b>1</b>    |       | ሻ         | <b>₽</b> |          | ች      | <b></b> | 7    | ሻ      | <b>†</b> | 7    |
| Traffic Vol, veh/h     | 30     | 2           | 50    | 60        | 2        | 20       | 85     | 460     | 105  | 15     | 400      | 60   |
| Future Vol, veh/h      | 30     | 2           | 50    | 60        | 2        | 20       | 85     | 460     | 105  | 15     | 400      | 60   |
| Conflicting Peds, #/hr | 0      | 0           | 0     | 0         | 0        | 0        | 0      | 0       | 0    | 0      | 0        | 0    |
| Sign Control           | Stop   | Stop        | Stop  | Stop      | Stop     | Stop     | Free   | Free    | Free | Free   | Free     | Free |
| RT Channelized         | -      | -           | None  | -         | -        | None     | -      | -       | None | -      | -        | None |
| Storage Length         | 0      | -           | -     | 0         | -        | -        | 0      | -       | 0    | 0      | -        | 0    |
| Veh in Median Storage  | e,# -  | 0           | -     | -         | 0        | -        | -      | 0       | -    | -      | 0        | -    |
| Grade, %               | -      | 0           | -     | -         | 0        | -        | -      | 0       | -    | -      | 0        | -    |
| Peak Hour Factor       | 92     | 92          | 92    | 92        | 92       | 92       | 92     | 92      | 92   | 92     | 92       | 92   |
| Heavy Vehicles, %      | 2      | 2           | 2     | 2         | 2        | 2        | 2      | 2       | 2    | 2      | 2        | 2    |
| Mvmt Flow              | 33     | 2           | 54    | 65        | 2        | 22       | 92     | 500     | 114  | 16     | 435      | 65   |
|                        |        |             |       |           |          |          |        |         |      |        |          |      |
| Major/Minor N          | Minor2 |             |       | Minor1    |          | 1        | Major1 |         | _    | Major2 |          |      |
| Conflicting Flow All   | 1220   | 1265        | 435   | 1212      | 1216     | 500      | 500    | 0       | 0    | 614    | 0        | 0    |
| Stage 1                | 467    | 467         | -     | 684       | 684      | -        | -      | -       | -    | -      | -        | -    |
| Stage 2                | 753    | 798         | _     | 528       | 532      | _        | _      | _       | -    | _      |          | _    |
| Critical Hdwy          | 7.12   | 6.52        | 6.22  | 7.12      | 6.52     | 6.22     | 4.12   | _       | -    | 4.12   | _        | _    |
| Critical Hdwy Stg 1    | 6.12   | 5.52        | -     | 6.12      | 5.52     | -        | -      | _       | -    | -      | _        | _    |
| Critical Hdwy Stg 2    | 6.12   | 5.52        | _     | 6.12      | 5.52     | -        | _      | _       | -    | _      | _        | _    |
| Follow-up Hdwy         | 3.518  | 4.018       | 3.318 | 3.518     | 4.018    | 3.318    | 2.218  | _       | _    | 2.218  | _        | _    |
| Pot Cap-1 Maneuver     | 157    | 169         | 621   | 159       | 181      | 571      | 1064   | _       | -    | 965    | _        | _    |
| Stage 1                | 576    | 562         | -     | 439       | 449      | -        | -      | _       | -    | -      | _        | _    |
| Stage 2                | 402    | 398         | _     | 534       | 526      | _        | -      | _       | -    | _      | _        | -    |
| Platoon blocked, %     | .02    | 0,0         |       |           | 020      |          |        | _       | -    |        | _        | _    |
| Mov Cap-1 Maneuver     | 138    | 152         | 621   | 132       | 163      | 571      | 1064   | -       | -    | 965    | -        | -    |
| Mov Cap-2 Maneuver     | 138    | 152         | -     | 132       | 163      | _        | -      | -       | _    | -      | -        | -    |
| Stage 1                | 526    | 552         | -     | 401       | 410      | -        | -      | _       | -    | -      | -        | -    |
| Stage 2                | 351    | 364         | -     | 477       | 517      | _        | -      | _       | _    | -      | _        | _    |
| - · · g                |        |             |       | ,         |          |          |        |         |      |        |          |      |
| Approach               | EB     |             |       | WB        |          |          | NB     |         |      | SB     |          |      |
| HCM Control Delay, s   | 22     |             |       | 44.8      |          |          | 1.1    |         |      | 0.3    |          |      |
| HCM LOS                | C      |             |       | 44.0<br>E |          |          | 1.1    |         |      | 0.5    |          |      |
| TOW LOS                |        |             |       |           |          |          |        |         |      |        |          |      |
| Minor Long/Major Mayer | .+     | NDI         | NDT   | NDD       | TDL n1   | EDI - 2V | MDI 51 | MDL ~2  | CDI  | CDT    | CDD      |      |
| Minor Lane/Major Mvm   | It     | NBL<br>1044 | NBT   |           |          | EBLn2V   |        |         | SBL  | SBT    | SBR      |      |
| Capacity (veh/h)       |        | 1064        | -     | -         | 138      | 555      | 132    | 465     | 965  | -      | -        |      |
| HCM Control Doloy (c)  |        | 0.087       | -     |           |          |          |        | 0.051   |      | -      | -        |      |
| HCM Long LOS           |        | 8.7         | -     | -         | 39       | 12.2     | 56.4   | 13.2    | 8.8  | -      | -        |      |
| HCM Lane LOS           | \      | A           | -     | -         | E        | В        | F      | В       | A    | -      | -        |      |
| HCM 95th %tile Q(veh)  | )      | 0.3         | -     | -         | 0.9      | 0.3      | 2.3    | 0.2     | 0.1  | -      | -        |      |

| Intersection   |            |               |                     |                      |                               |                     |
|--|------------|---------------|---------------------|----------------------|-------------------------------|---------------------|
| Int Delay, s/veh   | 1.8        |               |                     |                      |                               |                     |
| Movement   | WBL        | WBR           | NBT                 | NBR                  | SBL                           | SBT                 |
| Lane Configurations  | ሻ          | 7             | <b>↑</b>            | 7                    | <u> </u>                      | <u> </u>            |
| Traffic Vol, veh/h   | 50         | 25            | 615                 | 50                   | 25                            | 485                 |
| Future Vol, veh/h  | 50         | 25            | 615                 | 50                   | 25                            | 485                 |
| Conflicting Peds, #/hr   | 0          | 0             | 0                   | 0                    | 0                             | 0                   |
| Sign Control   | Stop       | Stop          | Free                | Free                 | Free                          | Free                |
| RT Channelized   | -          | None          | -                   | None                 | -                             | None                |
| Storage Length   | 100        | 0             | -                   | 150                  | 150                           | -                   |
| Veh in Median Storage  |            | -             | 0                   | -                    | -                             | 0                   |
| Grade, %   | 0          | _             | 0                   | _                    | _                             | 0                   |
| Peak Hour Factor   | 92         | 92            | 92                  | 92                   | 92                            | 92                  |
| Heavy Vehicles, %  | 2          | 2             | 2                   | 2                    | 2                             | 2                   |
| Mvmt Flow  | 54         | 27            | 668                 | 54                   | 27                            | 527                 |
|  |            |               |                     |                      |                               |                     |
| N A = ' = /N A' - =  | \ A!1      |               | 1-11                |                      | M-!0                          |                     |
|  | Minor1     |               | Major1              |                      | Major2                        |                     |
| Conflicting Flow All   | 1249       | 668           | 0                   | 0                    | 722                           | 0                   |
| Stage 1  | 668        | -             | -                   | -                    | -                             | -                   |
| Stage 2  | 581        | -             | -                   | -                    | -                             | -                   |
| Critical Hdwy  | 6.42       | 6.22          | -                   | -                    | 4.12                          | -                   |
| Critical Hdwy Stg 1  | 5.42       | -             | -                   | -                    | -                             | -                   |
| Critical Hdwy Stg 2  | 5.42       |               | -                   | -                    |                               | -                   |
| Follow-up Hdwy   | 3.518      |               | -                   | -                    | 2.218                         | -                   |
| Pot Cap-1 Maneuver   | 191        | 458           | -                   | -                    | 880                           | -                   |
| Stage 1  | 510        | -             | -                   | -                    | -                             | -                   |
| Stage 2  | 559        | -             | -                   | -                    | -                             | -                   |
| Platoon blocked, %   |            |               | -                   | -                    |                               | -                   |
| Mov Cap-1 Maneuver   | 185        | 458           | -                   | -                    | 880                           | -                   |
| Mov Cap-2 Maneuver   | 185        | -             | -                   | -                    | -                             | -                   |
| Stage 1  | 510        | -             | -                   | -                    | -                             | -                   |
| Stage 2  | 542        | -             | -                   | -                    | -                             | -                   |
|  |            |               |                     |                      |                               |                     |
|  |            |               | NB                  |                      | SB                            |                     |
| Approach   | WB         |               |                     |                      |                               |                     |
| Approach   | WB<br>26.1 |               |                     |                      | 0.5                           |                     |
| HCM Control Delay, s   | 26.1       |               | 0                   |                      | 0.5                           |                     |
|  |            |               |                     |                      | 0.5                           |                     |
| HCM Control Delay, s<br>HCM LOS  | 26.1<br>D  | NDT           | 0                   | VDL 4M               |                               | CDI                 |
| HCM Control Delay, s<br>HCM LOS<br>Minor Lane/Major Mvm  | 26.1<br>D  | NBT           | 0                   | VBLn1V               | VBLn2                         | SBL                 |
| HCM Control Delay, s<br>HCM LOS  Minor Lane/Major Mvm Capacity (veh/h)                                       | 26.1<br>D  | NBT<br>-      | 0<br>NBRV           | 185                  | VBLn2<br>458                  | 880                 |
| HCM Control Delay, s HCM LOS  Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio                       | 26.1<br>D  | NBT<br>-<br>- | 0<br>NBRV           | 185<br>0.294         | VBLn2<br>458<br>0.059         | 880<br>0.031        |
| HCM Control Delay, s HCM LOS  Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s) | 26.1<br>D  | -             | 0<br>NBRV<br>-<br>- | 185<br>0.294<br>32.4 | VBLn2<br>458<br>0.059<br>13.4 | 880<br>0.031<br>9.2 |
| HCM Control Delay, s HCM LOS  Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio                       | 26.1<br>D  | -             | 0<br>NBRV           | 185<br>0.294         | VBLn2<br>458<br>0.059         | 880<br>0.031        |

| Intersection           |          |        |        |          |        |      |
|------------------------|----------|--------|--------|----------|--------|------|
| Int Delay, s/veh       | 7.5      |        |        |          |        |      |
| Movement               | EBT      | EBR    | WBL    | WBT      | NBL    | NBR  |
| Lane Configurations    | <b>†</b> | 7      | ች      | <b>†</b> | ች      | 7    |
| Traffic Vol, veh/h     | 40       | 51     | 324    | 46       | 39     | 266  |
| Future Vol, veh/h      | 40       | 51     | 324    | 46       | 39     | 266  |
| Conflicting Peds, #/hr | 0        | 0      | 0      | 0        | 0      | 0    |
| Sign Control           | Free     | Free   | Free   | Free     | Stop   | Stop |
| RT Channelized         | -        | Free   | -      | None     | -      | Free |
| Storage Length         | _        | 175    | 175    | -        | 0      | 100  |
| Veh in Median Storage  |          | -      | -      | 0        | 0      | -    |
| Grade, %               | 0        | _      | _      | 0        | 0      | _    |
| Peak Hour Factor       | 92       | 92     | 92     | 92       | 92     | 92   |
|                        | 2        | 2      | 2      | 2        | 2      | 2    |
| Heavy Vehicles, %      |          |        |        |          |        |      |
| Mvmt Flow              | 43       | 55     | 352    | 50       | 42     | 289  |
|                        |          |        |        |          |        |      |
| Major/Minor            | Major1   | ľ      | Major2 |          | Minor1 |      |
| Conflicting Flow All   | 0        | -      | 43     | 0        | 797    | -    |
| Stage 1                | -        | -      | -      | -        | 43     | -    |
| Stage 2                | -        | -      | -      | -        | 754    | -    |
| Critical Hdwy          | _        | -      | 4.12   | _        | 6.42   | -    |
| Critical Hdwy Stg 1    | -        | _      | -      | _        | 5.42   | _    |
| Critical Hdwy Stg 2    | _        | _      | _      | _        | 5.42   | _    |
| Follow-up Hdwy         | _        |        | 2.218  | _        | 3.518  | _    |
| Pot Cap-1 Maneuver     | _        | 0      | 1566   | _        | 356    | 0    |
| Stage 1                | _        | 0      | 1300   | _        | 979    | 0    |
| Stage 2                |          | 0      | _      | _        | 465    | 0    |
| Platoon blocked, %     |          | U      | -      | -        | 400    | U    |
|                        | -        |        | 15//   | -        | 27/    |      |
| Mov Cap-1 Maneuver     | -        | -      | 1566   | -        | 276    | -    |
| Mov Cap-2 Maneuver     | -        | -      | -      | -        | 276    | -    |
| Stage 1                | -        | -      | -      | -        | 979    | -    |
| Stage 2                | -        | -      | -      | -        | 360    | -    |
|                        |          |        |        |          |        |      |
| Approach               | EB       |        | WB     |          | NB     |      |
| HCM Control Delay, s   | 0        |        | 7      |          | 20.4   |      |
| HCM LOS                | U        |        | ,      |          | C      |      |
| HOW LOS                |          |        |        |          | C      |      |
|                        |          |        |        |          |        |      |
| Minor Lane/Major Mvn   | nt N     | NBLn11 | NBLn2  | EBT      | WBL    | WBT  |
| Capacity (veh/h)       |          | 276    | -      | -        | 1566   | -    |
| HCM Lane V/C Ratio     |          | 0.154  | -      | -        | 0.225  | -    |
| HCM Control Delay (s)  |          | 20.4   | 0      | -        | 8      | -    |
| HCM Lane LOS           |          | С      | A      | -        | A      | -    |
| HCM 95th %tile Q(veh   | )        | 0.5    | -      | _        | 0.9    | -    |
| (\\                    | ,        |        |        |          |        |      |

| Intersection           |        |          |       |        |          |        |        |          |      |        |          |      |
|------------------------|--------|----------|-------|--------|----------|--------|--------|----------|------|--------|----------|------|
| Int Delay, s/veh       | 8      |          |       |        |          |        |        |          |      |        |          |      |
| Movement               | EBL    | EBT      | EBR   | WBL    | WBT      | WBR    | NBL    | NBT      | NBR  | SBL    | SBT      | SBR  |
| Lane Configurations    | ሻ      | <b>1</b> |       | ሻ      | <b>1</b> |        | ሻ      | <b>†</b> | 7    | *      | <b>↑</b> | 7    |
| Traffic Vol, veh/h     | 45     | 4        | 75    | 120    | 9        | 39     | 25     | 266      | 55   | 25     | 427      | 20   |
| Future Vol, veh/h      | 45     | 4        | 75    | 120    | 9        | 39     | 25     | 266      | 55   | 25     | 427      | 20   |
| Conflicting Peds, #/hr | 0      | 0        | 0     | 0      | 0        | 0      | 0      | 0        | 0    | 0      | 0        | 0    |
| Sign Control           | Stop   | Stop     | Stop  | Stop   | Stop     | Stop   | Free   | Free     | Free | Free   | Free     | Free |
| RT Channelized         | -      | -        | None  | -      | -        | None   | -      | -        | None | -      | -        | None |
| Storage Length         | 0      | -        | -     | 0      | -        | -      | 0      | -        | 0    | 0      | -        | 0    |
| Veh in Median Storage  | e,# -  | 0        | -     | -      | 0        | -      | -      | 0        | -    | -      | 0        | -    |
| Grade, %               | -      | 0        | -     | -      | 0        | -      | -      | 0        | -    | -      | 0        | -    |
| Peak Hour Factor       | 92     | 92       | 92    | 92     | 92       | 92     | 92     | 92       | 92   | 92     | 92       | 92   |
| Heavy Vehicles, %      | 2      | 2        | 2     | 2      | 2        | 2      | 2      | 2        | 2    | 2      | 2        | 2    |
| Mvmt Flow              | 49     | 4        | 82    | 130    | 10       | 42     | 27     | 289      | 60   | 27     | 464      | 22   |
|                        |        |          |       |        |          |        |        |          |      |        |          |      |
| Major/Minor N          | Minor2 |          |       | Minor1 |          | ا      | Major1 |          | 1    | Major2 |          |      |
| Conflicting Flow All   | 917    | 921      | 464   | 915    | 883      | 289    | 486    | 0        | 0    | 349    | 0        | 0    |
| Stage 1                | 518    | 518      | -     | 343    | 343      | -      | -      | -        | -    | -      | -        | -    |
| Stage 2                | 399    | 403      | -     | 572    | 540      | -      | -      | -        | -    | -      | -        | -    |
| Critical Hdwy          | 7.12   | 6.52     | 6.22  | 7.12   | 6.52     | 6.22   | 4.12   | -        | -    | 4.12   | -        | -    |
| Critical Hdwy Stg 1    | 6.12   | 5.52     | -     | 6.12   | 5.52     | -      | -      | -        | -    | -      | -        | -    |
| Critical Hdwy Stg 2    | 6.12   | 5.52     | -     | 6.12   | 5.52     | -      | -      | -        | -    | -      | -        | -    |
| Follow-up Hdwy         | 3.518  | 4.018    | 3.318 | 3.518  | 4.018    | 3.318  | 2.218  | -        | -    | 2.218  | -        | -    |
| Pot Cap-1 Maneuver     | 253    | 270      | 598   | 253    | 285      | 750    | 1077   | -        | -    | 1210   | -        | -    |
| Stage 1                | 541    | 533      | -     | 672    | 637      | -      | -      | -        | -    | -      | -        | -    |
| Stage 2                | 627    | 600      | -     | 505    | 521      | -      | -      | -        | -    | -      | -        | -    |
| Platoon blocked, %     |        |          |       |        |          |        |        | -        | -    | 40     | -        | -    |
| Mov Cap-1 Maneuver     | 224    | 258      | 598   | 208    | 272      | 750    | 1077   | -        | -    | 1210   | -        | -    |
| Mov Cap-2 Maneuver     | 224    | 258      | -     | 208    | 272      | -      | -      | -        | -    | -      | -        | -    |
| Stage 1                | 527    | 521      | -     | 655    | 621      | -      | -      | -        | -    | -      | -        | -    |
| Stage 2                | 568    | 585      | -     | 423    | 510      | -      | -      | -        | -    | -      | -        | -    |
|                        |        |          |       |        |          |        |        |          |      |        |          |      |
| Approach               | EB     |          |       | WB     |          |        | NB     |          |      | SB     |          |      |
| HCM Control Delay, s   | 17.3   |          |       | 37.4   |          |        | 0.6    |          |      | 0.4    |          |      |
| HCM LOS                | С      |          |       | Е      |          |        |        |          |      |        |          |      |
|                        |        |          |       |        |          |        |        |          |      |        |          |      |
| Minor Lane/Major Mvm   | nt     | NBL      | NBT   | NBR    | EBLn1    | EBLn2V | VBLn1V | VBLn2    | SBL  | SBT    | SBR      |      |
| Capacity (veh/h)       |        | 1077     | -     | -      | 224      | 561    | 208    |          | 1210 | -      | -        |      |
| HCM Lane V/C Ratio     |        | 0.025    | -     | -      |          | 0.153  |        |          |      | -      | -        |      |
| HCM Control Delay (s)  |        | 8.4      | -     | -      | 25.5     | 12.6   | 47.6   | 12       | 8    | -      | -        |      |
| HCM Lane LOS           |        | Α        | -     | -      | D        | В      | E      | В        | A    | -      | -        |      |
| HCM 95th %tile Q(veh)  | )      | 0.1      | -     | -      | 8.0      | 0.5    | 3.7    | 0.3      | 0.1  | -      | -        |      |
|                        |        |          |       |        |          |        |        |          |      |        |          |      |

| Intersection           |           |       |        |           |          |            |
|------------------------|-----------|-------|--------|-----------|----------|------------|
| Int Delay, s/veh       | 3.5       |       |        |           |          |            |
| Movement               | WBL       | WBR   | NBT    | NBR       | SBL      | SBT        |
| Lane Configurations    | VVDL<br>T | VVDIX |        | NDIX<br>7 | JDL      | <u>361</u> |
| Traffic Vol, veh/h     | 109       | 26    | 320    | 62        | 22       | 600        |
| Future Vol, veh/h      | 109       | 26    | 320    | 62        | 22       | 600        |
| Conflicting Peds, #/hr | 0         | 0     | 320    | 02        | 0        | 000        |
|                        |           |       |        |           |          |            |
| Sign Control           | Stop      | Stop  | Free   | Free      | Free     | Free       |
| RT Channelized         | 100       | None  |        | None      | -<br>1E0 | None       |
| Storage Length         | 100       | 0     | -      | 150       | 150      | -          |
| Veh in Median Storage  |           | -     | 0      | -         | -        | 0          |
| Grade, %               | 0         | -     | 0      | -         | -        | 0          |
| Peak Hour Factor       | 92        | 92    | 92     | 92        | 92       | 92         |
| Heavy Vehicles, %      | 2         | 2     | 2      | 2         | 2        | 2          |
| Mvmt Flow              | 118       | 28    | 348    | 67        | 24       | 652        |
|                        |           |       |        |           |          |            |
| Major/Minor            | Minor1    | N     | Major1 | ı         | Major2   |            |
| Conflicting Flow All   | 1048      | 348   | 0      | 0         | 415      | 0          |
| Stage 1                | 348       | 348   | U      | U         | 415      |            |
|                        |           |       | -      | -         |          | -          |
| Stage 2                | 700       | -     | -      | -         | -        | -          |
| Critical Hdwy          | 6.42      | 6.22  | -      | -         | 4.12     | -          |
| Critical Hdwy Stg 1    | 5.42      | -     | -      | -         | -        | -          |
| Critical Hdwy Stg 2    | 5.42      | -     | -      | -         | -        | -          |
| Follow-up Hdwy         | 3.518     |       | -      | -         | 2.218    | -          |
| Pot Cap-1 Maneuver     | 252       | 695   | -      | -         | 1144     | -          |
| Stage 1                | 715       | -     | -      | -         | -        | -          |
| Stage 2                | 493       | -     | -      | -         | -        | -          |
| Platoon blocked, %     |           |       | -      | -         |          | -          |
| Mov Cap-1 Maneuver     | 247       | 695   | -      | -         | 1144     | -          |
| Mov Cap-2 Maneuver     | 247       | -     | -      | -         | -        | -          |
| Stage 1                | 715       | -     | -      | -         | -        | -          |
| Stage 2                | 483       | -     | -      | -         | -        | -          |
| o laigo =              |           |       |        |           |          |            |
|                        |           |       |        |           |          |            |
| Approach               | WB        |       | NB     |           | SB       |            |
| HCM Control Delay, s   | 28.1      |       | 0      |           | 0.3      |            |
| HCM LOS                | D         |       |        |           |          |            |
|                        |           |       |        |           |          |            |
| Minor Lano/Major Mun   | nt .      | NBT   | NIDDW  | VBLn1V    | VDI no   | SBL        |
| Minor Lane/Major Mvm   | IL        |       | NDKV   |           |          |            |
| Capacity (veh/h)       |           | -     | -      | 247       | 695      | 1144       |
| HCM Lane V/C Ratio     |           | -     | -      |           | 0.041    | 0.021      |
| HCM Control Delay (s)  |           | -     | -      | 00        | 10.4     | 8.2        |
| HCM Lane LOS           |           | -     | -      | D         | В        | Α          |
| HCM 95th %tile Q(veh   | )         | -     | -      | 2.4       | 0.1      | 0.1        |
|                        |           |       |        |           |          |            |

| 7.9<br>EBT | EBR      | MDI   |  |   |                          |
|------------|----------|---|--|---|--------------------------|
|            | EBR      | MIDI  |  |   |                          |
|            |          | WBL   | WBT  | NBL   | NBR                      |
|            | 7        | *   | <b></b>  | *   | 7                        |
| 85         | 59       | 343   | 52   | 55  | 397                      |
| 85         | 59       | 343   | 52   | 55  | 397                      |
| 0          | 0        | 0   | 0  | 0   | 0                        |
|            |          |   |  |   | Stop                     |
| -          |          | -   |  | •   | Free                     |
| _          |          | 175   | -  |   | 100                      |
|            |          | -   |  |   | -                        |
|            |          |   |  |   | _                        |
|            |          |   |  |   | 92                       |
|            |          |   |  |   | 2                        |
|            |          |   |  |   | 432                      |
| 72         | 04       | 373   | 31   | 00  | 432                      |
|            |          |   |  |   |                          |
|            | <u> </u> |   |  |   |                          |
| 0          | -        | 92  | 0  |   | -                        |
| -          | -        | -   | -  | 92  | -                        |
| -          | -        | -   | -  | 803   | -                        |
| -          | -        | 4.12  | -  | 6.42  | -                        |
| -          | -        | -   | -  | 5.42  | -                        |
| -          | -        | -   | -  | 5.42  | -                        |
| -          | -        | 2.218   | -  |   | -                        |
| -          |          |   | -  |   | 0                        |
| -          |          | _   | -  |   | 0                        |
| -          |          | _   | _  |   | 0                        |
| _          |          |   | _  |   | · ·                      |
| _          | _        | 1503  | _  | 234   | _                        |
|            |          |   |  |   | _                        |
|            |          |   |  |   | _                        |
|            | _        | _   |  |   | _                        |
| -          | -        | -   | -  | JJZ   | -                        |
|            |          |   |  |   |                          |
| EB         |          | WB  |  | NB  |                          |
| 0          |          | 7.1   |  | 25.6  |                          |
|            |          |   |  | D   |                          |
|            |          |   |  |   |                          |
| nt N       | JDI 51 N | \IDI 52   | EDT  | WDI   | WDT                      |
| rit r      |          | NDL[1Z  |  |   | WBT                      |
|            |          | -   | -  |   | -                        |
|            |          | -   | -  |   | -                        |
| )          |          |   | -  |   | -                        |
|            |          | А   | -  |   | -                        |
| 1)         | 1        | -   | -  | 1   | -                        |
|            | Free     | Free Free - Free - 175 e, # 0 - 0 - 92 92 2 2 92 64  Major1 | Free Free Free - | Free Free Free Free - None - 175 175 - e, # 0 0 0 0 92 92 92 92 2 2 2 2 2 92 64 373 57  Major1 Major2 N 0 - 92 0 1503 0 0 1503 0 1503 1503 1503 | Free Free Free Free Stop |

| Intersection           |        |       |       |        |          |        |        |          |      |        |          |      |
|------------------------|--------|-------|-------|--------|----------|--------|--------|----------|------|--------|----------|------|
| Int Delay, s/veh       | 8.7    |       |       |        |          |        |        |          |      |        |          |      |
| Movement               | EBL    | EBT   | EBR   | WBL    | WBT      | WBR    | NBL    | NBT      | NBR  | SBL    | SBT      | SBR  |
| Lane Configurations    | ች      | ĵ.    |       | *      | <b>1</b> |        | *      | <b>†</b> | 7    | ች      | <b>†</b> | 1    |
| Traffic Vol, veh/h     | 30     | 10    | 50    | 80     | 7        | 29     | 85     | 464      | 135  | 31     | 407      | 60   |
| Future Vol, veh/h      | 30     | 10    | 50    | 80     | 7        | 29     | 85     | 464      | 135  | 31     | 407      | 60   |
| Conflicting Peds, #/hr | 0      | 0     | 0     | 0      | 0        | 0      | 0      | 0        | 0    | 0      | 0        | 0    |
| Sign Control           | Stop   | Stop  | Stop  | Stop   | Stop     | Stop   | Free   | Free     | Free | Free   | Free     | Free |
| RT Channelized         | -      | -     | None  | -      | -        | None   | -      | -        | None | -      | -        | None |
| Storage Length         | 0      | -     | -     | 0      | -        | -      | 0      | -        | 0    | 0      | -        | 0    |
| Veh in Median Storage  | 2,# -  | 0     | -     | -      | 0        | -      | -      | 0        | -    | -      | 0        | -    |
| Grade, %               | -      | 0     | -     | -      | 0        | -      | -      | 0        | -    | -      | 0        | -    |
| Peak Hour Factor       | 92     | 92    | 92    | 92     | 92       | 92     | 92     | 92       | 92   | 92     | 92       | 92   |
| Heavy Vehicles, %      | 2      | 2     | 2     | 2      | 2        | 2      | 2      | 2        | 2    | 2      | 2        | 2    |
| Mvmt Flow              | 33     | 11    | 54    | 87     | 8        | 32     | 92     | 504      | 147  | 34     | 442      | 65   |
|                        |        |       |       |        |          |        |        |          |      |        |          |      |
| Major/Minor I          | Minor2 |       |       | Minor1 |          |        | Major1 |          | N    | Major2 |          |      |
| Conflicting Flow All   | 1292   | 1345  | 442   | 1263   | 1263     | 504    | 507    | 0        | 0    | 651    | 0        | 0    |
| Stage 1                | 510    | 510   | -     | 688    | 688      | -      | -      | -        | -    | -      | -        | -    |
| Stage 2                | 782    | 835   | -     | 575    | 575      | -      | -      | -        | -    | -      | -        | -    |
| Critical Hdwy          | 7.12   | 6.52  | 6.22  | 7.12   | 6.52     | 6.22   | 4.12   | -        | -    | 4.12   | -        | -    |
| Critical Hdwy Stg 1    | 6.12   | 5.52  | -     | 6.12   | 5.52     | -      | -      | -        | -    | -      | -        | -    |
| Critical Hdwy Stg 2    | 6.12   | 5.52  | -     | 6.12   | 5.52     | -      | -      | -        | -    | -      | -        | -    |
| Follow-up Hdwy         | 3.518  | 4.018 | 3.318 | 3.518  | 4.018    | 3.318  | 2.218  | -        | -    | 2.218  | -        | -    |
| Pot Cap-1 Maneuver     | 140    | 151   | 615   | 147    | 170      | 568    | 1058   | -        | -    | 935    | -        | -    |
| Stage 1                | 546    | 538   | -     | 436    | 447      | -      | -      | -        | -    | -      | -        | -    |
| Stage 2                | 387    | 383   | -     | 503    | 503      | -      | -      | -        | -    | -      | -        | -    |
| Platoon blocked, %     |        |       |       |        |          |        |        | -        | -    |        | -        | -    |
| Mov Cap-1 Maneuver     | 116    | 133   | 615   | 114    | 150      | 568    | 1058   | -        | -    | 935    | -        | -    |
| Mov Cap-2 Maneuver     | 116    | 133   | -     | 114    | 150      | -      | -      | -        | -    | -      | -        | -    |
| Stage 1                | 498    | 519   | -     | 398    | 408      | -      | -      | -        | -    | -      | -        | -    |
| Stage 2                | 328    | 350   | -     | 433    | 485      | -      | -      | -        | -    | -      | -        | -    |
|                        |        |       |       |        |          |        |        |          |      |        |          |      |
| Approach               | EB     |       |       | WB     |          |        | NB     |          |      | SB     |          |      |
| HCM Control Delay, s   | 26.8   |       |       | 74     |          |        | 1.1    |          |      | 0.6    |          |      |
| HCM LOS                | D      |       |       | F      |          |        |        |          |      |        |          |      |
|                        |        |       |       |        |          |        |        |          |      |        |          |      |
| Minor Lane/Major Mvm   | nt     | NBL   | NBT   | NBR    | EBLn1    | EBLn2V | VBLn1V | VBLn2    | SBL  | SBT    | SBR      |      |
| Capacity (veh/h)       |        | 1058  | _     | -      |          | 383    | 114    | 368      | 935  | -      | _        |      |
| HCM Lane V/C Ratio     |        | 0.087 | _     |        | 0.281    |        | 0.763  |          |      | _      | _        |      |
| HCM Control Delay (s)  |        | 8.7   | -     | -      | 47.7     |        | 100.2  | 15.9     | 9    | -      | -        |      |
| HCM Lane LOS           |        | A     | -     | -      | E        | С      | F      | С        | Á    | -      | -        |      |
| HCM 95th %tile Q(veh)  | )      | 0.3   | -     | -      | 1.1      | 0.6    | 4.3    | 0.4      | 0.1  | -      | -        |      |
|                        |        |       |       |        |          |        |        |          |      |        |          |      |

| Intersection                                |           |             |        |               |               |          |
|---|-----------|-------------|--------|---------------|---------------|----------|
| Int Delay, s/veh                            | 4.1       |             |        |               |               |          |
| Movement                                    | WBL       | WBR         | NBT    | NBR           | SBL           | SBT      |
| Lane Configurations                         | VVDL      | VVDIX       | ND1    | TVDIC         | JDL<br>T      | <u> </u> |
| Traffic Vol, veh/h                          | 92        | 29          | 645    | 126           | 32            | 505      |
| Future Vol, veh/h                           | 92        | 29          | 645    | 126           | 32            | 505      |
| Conflicting Peds, #/hr                      | 0         | 0           | 0      | 0             | 0             | 0        |
| Sign Control                                | Stop      | Stop        | Free   | Free          | Free          | Free     |
| RT Channelized                              | Jiop<br>- | None        | -      | None          | -             | None     |
| Storage Length                              | 100       | 0           | _      | 150           | 150           | -        |
| Veh in Median Storage                       |           | -           | 0      | -             | -             | 0        |
| Grade, %                                    | , π 0     | -           | 0      | _             | _             | 0        |
| Peak Hour Factor                            | 92        | 92          | 92     | 92            | 92            | 92       |
| Heavy Vehicles, %                           | 2         | 2           | 2      | 2             | 2             | 2        |
| Mymt Flow                                   | 100       | 32          | 701    | 137           | 35            | 549      |
| IVIVIIIL FIUW                               | 100       | 32          | 701    | 137           | 33            | 349      |
|   |           |             |        |               |               |          |
| Major/Minor N                               | /linor1   | N           | Major1 | 1             | Major2        |          |
| Conflicting Flow All                        | 1320      | 701         | 0      | 0             | 838           | 0        |
| Stage 1                                     | 701       | -           | -      | -             | -             | -        |
| Stage 2                                     | 619       | -           | -      | -             | -             | -        |
| Critical Hdwy                               | 6.42      | 6.22        | -      | -             | 4.12          | -        |
| Critical Hdwy Stg 1                         | 5.42      | -           | -      | -             | -             | -        |
| Critical Hdwy Stg 2                         | 5.42      | -           | -      | -             | -             | -        |
|   | 3.518     | 3.318       | -      | -             | 2.218         | _        |
| Pot Cap-1 Maneuver                          | 173       | 439         | -      | -             | 796           | _        |
| Stage 1                                     | 492       | -           | _      | -             | -             | _        |
| Stage 2                                     | 537       | _           | -      | _             | -             | _        |
| Platoon blocked, %                          | 007       |             | _      | _             |               | _        |
| Mov Cap-1 Maneuver                          | 165       | 439         | _      | _             | 796           | _        |
| Mov Cap-2 Maneuver                          | 165       | -           | _      | _             | - 770         | _        |
| Stage 1                                     | 492       | _           |        |               |               |          |
| Stage 2                                     | 513       | -           | _      | _             | -             | -        |
| Staye 2                                     | 513       | -           | -      | -             | -             | -        |
|   |           |             |        |               |               |          |
| Approach                                    | WB        |             | NB     |               | SB            |          |
| HCM Control Delay, s                        | 45.7      |             | 0      |               | 0.6           |          |
| HCM LOS                                     | Ε         |             |        |               |               |          |
|   |           |             |        |               |               |          |
| Minor Lane/Major Mvm                        | +         | NBT         | NIDDW  | VBLn1V        | M/DI n2       | SBL      |
|   | ι         | INDI        |        | 165           |               |          |
| Camaalla ( / l- /l- )                       |           |             |        | 165           | 439           | 796      |
| Capacity (veh/h)                            |           | -           | -      |               |               | 0.044    |
| HCM Lane V/C Ratio                          |           | -           |        | 0.606         | 0.072         |          |
| HCM Lane V/C Ratio<br>HCM Control Delay (s) |           | -           | -      | 0.606<br>55.7 | 0.072<br>13.8 | 9.7      |
| HCM Lane V/C Ratio                          |           | -<br>-<br>- |        | 0.606         | 0.072         |          |

| Intersection           |          |         |         |         |        |      |
|------------------------|----------|---------|---------|---------|--------|------|
| Int Delay, s/veh       | 8.1      |         |         |         |        |      |
| Movement               | EBT      | EBR     | WBL     | WBT     | NBL    | NBR  |
| Lane Configurations    | <b>†</b> | 7       | ች       | <b></b> | *      | 7    |
| Traffic Vol, veh/h     | 45       | 75      | 370     | 55      | 45     | 295  |
| Future Vol, veh/h      | 45       | 75      | 370     | 55      | 45     | 295  |
| Conflicting Peds, #/hr |          | 0       | 0       | 0       | 0      | 0    |
| Sign Control           | Free     | Free    | Free    | Free    | Stop   | Stop |
| RT Channelized         | -        | Free    | -       | None    | -<br>- | Free |
| Storage Length         | _        | 175     | 175     | -       | 0      | 100  |
| Veh in Median Storag   |          | -       | 173     | 0       | 0      | -    |
| Grade, %               | 0        | -       | -       | 0       | 0      | -    |
|                        | 92       |         |         |         | 92     | 92   |
| Peak Hour Factor       |          | 92      | 92      | 92      |        |      |
| Heavy Vehicles, %      | 2        | 2       | 2       | 2       | 2      | 2    |
| Mvmt Flow              | 49       | 82      | 402     | 60      | 49     | 321  |
|                        |          |         |         |         |        |      |
| Major/Minor            | Major1   |         | Major2  | N       | Minor1 |      |
| Conflicting Flow All   | 0        | -       | 49      | 0       | 913    | -    |
| Stage 1                | _        | -       | -       | _       | 49     | -    |
| Stage 2                | _        | _       | _       | _       | 864    | _    |
| Critical Hdwy          | _        | _       | 4.12    | _       | 6.42   | _    |
| Critical Hdwy Stg 1    | _        |         | 4.12    | _       | 5.42   | _    |
|                        |          |         |         |         | 5.42   | _    |
| Critical Hdwy Stg 2    | -        | -       | -       | -       |        |      |
| Follow-up Hdwy         | -        |         | 2.218   |         | 3.518  | -    |
| Pot Cap-1 Maneuver     | -        | 0       |         | -       | 304    | 0    |
| Stage 1                | -        | 0       | -       | -       | 973    | 0    |
| Stage 2                | -        | 0       | -       | -       | 413    | 0    |
| Platoon blocked, %     | -        |         |         | -       |        |      |
| Mov Cap-1 Maneuver     | -        | -       | 1558    | -       | 226    | -    |
| Mov Cap-2 Maneuver     | -        | -       | -       | -       | 226    | -    |
| Stage 1                | -        | -       | -       | -       | 973    | -    |
| Stage 2                | -        | -       | -       | -       | 306    | -    |
| Olago 2                |          |         |         |         | 000    |      |
|                        |          |         |         |         |        |      |
| Approach               | EB       |         | WB      |         | NB     |      |
| HCM Control Delay, s   | 0        |         | 7.1     |         | 25.3   |      |
| HCM LOS                |          |         |         |         | D      |      |
|                        |          |         |         |         |        |      |
| Minor Lane/Major Mvr   | nt N     | NBLn1 i | \IRI n2 | EBT     | WBL    | WBT  |
|                        | nt ľ     |         | NDLIIZ  |         |        |      |
| Capacity (veh/h)       |          | 226     | -       | -       | 1558   | -    |
| HCM Lane V/C Ratio     |          | 0.216   | -       | -       | 0.258  | -    |
| HCM Control Delay (s   | 5)       | 25.3    | 0       | -       | 8.1    | -    |
| HCM Lane LOS           |          | D       | Α       | -       | Α      | -    |
| HCM 95th %tile Q(veh   | 1)       | 8.0     | -       | -       | 1      | -    |
|                        |          |         |         |         |        |      |

| Intersection           |        |       |          |         |       |          |         |          |        |        |          |          |             |
|------------------------|--------|-------|----------|---------|-------|----------|---------|----------|--------|--------|----------|----------|-------------|
| Int Delay, s/veh       | 23.2   |       |          |         |       |          |         |          |        |        |          |          |             |
| Movement               | EBL    | EBT   | EBR      | WBL     | WBT   | WBR      | NBL     | NBT      | NBR    | SBL    | SBT      | SBR      |             |
| Lane Configurations    | ሻ      | f)    |          | ሻ       | ĵ.    |          | ሻ       | <b>†</b> | 7      | ሻ      | <b>†</b> | 7        |             |
| Traffic Vol, veh/h     | 75     | 2     | 150      | 120     | 2     | 35       | 50      | 315      | 60     | 30     | 500      | 40       |             |
| Future Vol, veh/h      | 75     | 2     | 150      | 120     | 2     | 35       | 50      | 315      | 60     | 30     | 500      | 40       |             |
| Conflicting Peds, #/hr | 0      | 0     | 0        | 0       | 0     | 0        | 0       | 0        | 0      | 0      | 0        | 0        |             |
| Sign Control           | Stop   | Stop  | Stop     | Stop    | Stop  | Stop     | Free    | Free     | Free   | Free   | Free     | Free     |             |
| RT Channelized         | -      | -     | None     | -       | -     | None     | -       | -        | None   | -      | -        | None     |             |
| Storage Length         | 0      | -     | -        | 0       | -     | -        | 0       | -        | 0      | 0      | -        | 0        |             |
| Veh in Median Storage  | e,# -  | 0     | -        | -       | 0     | -        | -       | 0        | -      | -      | 0        | -        |             |
| Grade, %               | -      | 0     | -        | -       | 0     | -        | -       | 0        | -      | -      | 0        | -        |             |
| Peak Hour Factor       | 92     | 92    | 92       | 92      | 92    | 92       | 92      | 92       | 92     | 92     | 92       | 92       |             |
| leavy Vehicles, %      | 2      | 2     | 2        | 2       | 2     | 2        | 2       | 2        | 2      | 2      | 2        | 2        |             |
| /lvmt Flow             | 82     | 2     | 163      | 130     | 2     | 38       | 54      | 342      | 65     | 33     | 543      | 43       |             |
|                        |        | _     |          |         | _     |          |         |          |        |        |          |          |             |
| Major/Minor I          | Minor2 |       |          | Minor1  |       |          | Major1  |          | 1      | Major2 |          |          |             |
| Conflicting Flow All   | 1112   | 1124  | 543      | 1163    | 1102  | 342      | 586     | 0        | 0      | 407    | 0        | 0        |             |
| Stage 1                | 609    | 609   | -        | 450     | 450   | -        | -       | -        | _      | -      | -        | -        |             |
| Stage 2                | 503    | 515   | -        | 713     | 652   | _        | -       | _        | -      | _      | -        | _        |             |
| Critical Hdwy          | 7.12   | 6.52  | 6.22     | 7.12    | 6.52  | 6.22     | 4.12    | _        | -      | 4.12   | -        | _        |             |
| ritical Hdwy Stg 1     | 6.12   | 5.52  | -        | 6.12    | 5.52  | -        | -       | _        | -      | -      |          | _        |             |
| ritical Hdwy Stg 2     | 6.12   | 5.52  | -        | 6.12    | 5.52  | -        | -       | _        | -      | _      | -        | _        |             |
| ollow-up Hdwy          | 3.518  | 4.018 | 3.318    | 3.518   | 4.018 | 3.318    | 2.218   | _        | _      | 2.218  |          | _        |             |
| ot Cap-1 Maneuver      | 186    | 205   | 540      | 172     | 212   | 701      | 989     | _        | -      | 1152   | -        | _        |             |
| Stage 1                | 482    | 485   | _        | 589     | 572   | _        | -       | _        | _      | _      |          | _        |             |
| Stage 2                | 551    | 535   | -        | 423     | 464   | -        | -       | _        | -      | _      | -        | _        |             |
| Platoon blocked, %     |        |       |          |         |       |          |         | _        | -      |        |          | _        |             |
| Nov Cap-1 Maneuver     | 163    | 188   | 540      | ~ 112   | 195   | 701      | 989     | -        | _      | 1152   | _        | _        |             |
| Nov Cap-2 Maneuver     | 163    | 188   |          | ~ 112   | 195   | -        | -       | _        | -      | -      |          | _        |             |
| Stage 1                | 455    | 471   | -        | 557     | 541   | -        | -       | -        | -      | -      | -        | -        |             |
| Stage 2                | 491    | 506   | _        | 286     | 451   | _        | _       | _        | _      | _      | _        | _        |             |
| olugo 2                | .,.    |       |          | 200     |       |          |         |          |        |        |          |          |             |
| Approach               | EB     |       |          | WB      |       |          | NB      |          |        | SB     |          |          |             |
| HCM Control Delay, s   | 25.6   |       |          | 162.5   |       |          | 1       |          |        | 0.4    |          |          |             |
| HCM LOS                | D      |       |          | F       |       |          |         |          |        |        |          |          |             |
|                        |        |       |          |         |       |          |         |          |        |        |          |          |             |
| Minor Lane/Major Mvm   | nt _   | NBL   | NBT      | NBR     | EBLn1 | EBLn2\   | VBLn1\  | WBLn2    | SBL    | SBT    | SBR      |          |             |
| Capacity (veh/h)       |        | 989   | -        | -       | 163   | 527      | 112     | 615      | 1152   | -      | -        |          |             |
| HCM Lane V/C Ratio     |        | 0.055 | -        | -       |       |          |         | 0.065    |        | -      | -        |          |             |
| HCM Control Delay (s)  |        | 8.9   | -        | -       | 47.4  | 14.9     |         | 11.3     | 8.2    | -      | -        |          |             |
| HCM Lane LOS           |        | Α     | -        | -       | Е     | В        | F       | В        | Α      | -      | -        |          |             |
| HCM 95th %tile Q(veh)  | )      | 0.2   | -        | -       | 2.4   | 1.3      | 8.2     | 0.2      | 0.1    | -      | -        |          |             |
| Notes                  |        |       |          |         |       |          |         |          |        |        |          |          |             |
| -: Volume exceeds cap  | nacity | \$ D  | elay exc | raphs 2 | NNs   | +· Com   | nutatio | n Not D  | efined | *· \\  | maiory   | volumo   | in platoon  |
| volullie exceeds cap   | pacity | φ. Dt | ciay ext | ccus 3  | 003   | T. CUIII | φαιαιίθ | ט זטארוו | ciiieu | . All  | majur    | volullie | ιτι μιαιυυπ |

| Intersection           |        |       |          |         |        |          |
|------------------------|--------|-------|----------|---------|--------|----------|
| Int Delay, s/veh       | 2.4    |       |          |         |        |          |
| Movement               | WBL    | WBR   | NBT      | NBR     | SBL    | SBT      |
| Lane Configurations    | ች      | 7     | <b>†</b> | 7       | ሻ      | <b>†</b> |
| Traffic Vol, veh/h     | 65     | 30    | 395      | 60      | 30     | 740      |
| Future Vol, veh/h      | 65     | 30    | 395      | 60      | 30     | 740      |
| Conflicting Peds, #/hr | 0      | 0     | 0        | 0       | 0      | 0        |
| Sign Control           | Stop   | Stop  | Free     | Free    | Free   | Free     |
| RT Channelized         | -<br>- | None  | -        | None    | -      | None     |
| Storage Length         | 100    | 0     | _        | 150     | 150    | -        |
| Veh in Median Storage  |        | -     | 0        | -       | -      | 0        |
| Grade, %               | 0      | _     | 0        | _       |        | 0        |
| Peak Hour Factor       | 92     | 92    | 92       | 92      | 92     | 92       |
| Heavy Vehicles, %      | 2      | 2     | 2        | 2       | 2      | 2        |
| Mvmt Flow              | 71     | 33    | 429      | 65      | 33     | 804      |
| WWITH FIOW             | / 1    | 33    | 429      | 00      | აა     | 004      |
|                        |        |       |          |         |        |          |
| Major/Minor            | Minor1 | N     | Major1   | 1       | Major2 |          |
| Conflicting Flow All   | 1299   | 429   | 0        | 0       | 494    | 0        |
| Stage 1                | 429    | -     | -        | -       | -      | -        |
| Stage 2                | 870    | -     | -        | -       | -      | -        |
| Critical Hdwy          | 6.42   | 6.22  | -        | -       | 4.12   | -        |
| Critical Hdwy Stg 1    | 5.42   | -     | -        | -       | -      | -        |
| Critical Hdwy Stg 2    | 5.42   | -     | -        | -       | -      | -        |
| Follow-up Hdwy         | 3.518  | 3.318 | _        | _       | 2.218  | _        |
| Pot Cap-1 Maneuver     | 178    | 626   | _        | -       | 1070   | -        |
| Stage 1                | 657    | -     | _        | -       | -      | -        |
| Stage 2                | 410    | _     | _        | _       | _      | _        |
| Platoon blocked, %     | 110    |       | _        | _       |        | _        |
| Mov Cap-1 Maneuver     | 172    | 626   | _        | _       | 1070   | _        |
| Mov Cap 1 Maneuver     | 172    | - 020 | _        | _       | 1070   | _        |
| Stage 1                | 657    |       | -        | -       | _      | -        |
| · ·                    | 397    | -     | -        | _       | -      | -        |
| Stage 2                | 391    | -     | -        | -       | -      | -        |
|                        |        |       |          |         |        |          |
| Approach               | WB     |       | NB       |         | SB     |          |
| HCM Control Delay, s   | 30.7   |       | 0        |         | 0.3    |          |
| HCM LOS                | D      |       |          |         |        |          |
|                        |        |       |          |         |        |          |
| NA'                    |        | NET   | NEC      | VDI 411 | VDI C  | CDI      |
| Minor Lane/Major Mvn   | nt     | NBT   | NBKV     | VBLn1V  |        | SBL      |
| Capacity (veh/h)       |        | -     | -        | 172     | 626    | 1070     |
| HCM Lane V/C Ratio     |        | -     | -        | 0.411   |        | 0.03     |
| HCM Control Delay (s)  |        | -     | -        | 39.8    | 11.1   | 8.5      |
| HCM Lane LOS           |        | -     | -        | Е       | В      | Α        |
| HCM 95th %tile Q(veh   | )      | -     | -        | 1.8     | 0.2    | 0.1      |
|                        |        |       |          |         |        |          |

| Intersection           |          |       |        |          |           |      |
|------------------------|----------|-------|--------|----------|-----------|------|
| Int Delay, s/veh       | 9.7      |       |        |          |           |      |
| Movement               | EBT      | EBR   | WBL    | WBT      | NBL       | NBR  |
| Lane Configurations    | <b>†</b> | 7     | *      | <b>†</b> | ች         | 7    |
| Traffic Vol, veh/h     | 100      | 65    | 385    | 60       | 75        | 450  |
| Future Vol, veh/h      | 100      | 65    | 385    | 60       | 75        | 450  |
| Conflicting Peds, #/hr | 0        | 0     | 0      | 0        | 0         | 0    |
| Sign Control           | Free     | Free  | Free   | Free     | Stop      | Stop |
| RT Channelized         | -        | Free  | -      | None     | -         | Free |
| Storage Length         | _        | 175   | 175    | -        | 0         | 100  |
| Veh in Median Storage  |          | -     | -      | 0        | 0         | -    |
| Grade, %               | ο, π Ο   | -     | -      | 0        | 0         | _    |
| Peak Hour Factor       | 92       | 92    | 92     | 92       | 92        | 92   |
|                        |          | 2     | 2      | 2        |           |      |
| Heavy Vehicles, %      | 2        |       |        |          | 2         | 2    |
| Mvmt Flow              | 109      | 71    | 418    | 65       | 82        | 489  |
|                        |          |       |        |          |           |      |
| Major/Minor I          | Major1   | ľ     | Major2 | ľ        | Minor1    |      |
| Conflicting Flow All   | 0        | -     | 109    | 0        | 1010      | -    |
| Stage 1                | -        | -     | -      | -        | 109       | -    |
| Stage 2                | -        | -     | -      | -        | 901       | -    |
| Critical Hdwy          | -        | -     | 4.12   | _        | 6.42      | -    |
| Critical Hdwy Stg 1    | _        | _     | -      | -        | 5.42      | -    |
| Critical Hdwy Stg 2    | _        | _     | -      | -        | 5.42      | _    |
| Follow-up Hdwy         | -        | _     | 2.218  |          | 3.518     | _    |
| Pot Cap-1 Maneuver     | _        | 0     | 1481   | _        | 266       | 0    |
| Stage 1                | _        | 0     | -      | _        | 916       | 0    |
| Stage 2                | -        | 0     | -      | _        | 396       | 0    |
| Platoon blocked, %     |          | U     | -      |          | 390       | U    |
|                        | -        |       | 1 401  | -        | 101       |      |
| Mov Cap-1 Maneuver     | -        | -     | 1481   | -        | 191       | -    |
| Mov Cap-2 Maneuver     | -        | -     | -      | -        | 191       | -    |
| Stage 1                | -        | -     | -      | -        | 916       | -    |
| Stage 2                | -        | -     | -      | -        | 284       | -    |
|                        |          |       |        |          |           |      |
| Approach               | EB       |       | WB     |          | NB        |      |
| HCM Control Delay, s   | 0        |       | 7.3    |          | 37.2      |      |
| HCM LOS                | U        |       | 7.5    |          | 57.2<br>E |      |
| TIGIVI LOS             |          |       |        |          |           |      |
|                        |          |       |        |          |           |      |
| Minor Lane/Major Mvm   | nt N     | VBLn1 | VBLn2  | EBT      | WBL       | WBT  |
| Capacity (veh/h)       |          | 191   | -      | -        | 1481      | -    |
| HCM Lane V/C Ratio     |          | 0.427 | -      | -        | 0.283     | -    |
| HCM Control Delay (s)  |          | 37.2  | 0      | -        | 8.4       | -    |
| HCM Lane LOS           |          | E     | A      | -        | Α         | -    |
| HCM 95th %tile Q(veh)  | )        | 2     | -      | -        | 1.2       | -    |
| 2 22 70 2(1011)        |          |       |        |          |           |      |

| Intersection           |                       |        |          |         |       |                            |         |            |          |        |                                |        |              |  |
|------------------------|-----------------------|--------|----------|---------|-------|----------------------------|---------|------------|----------|--------|--------------------------------|--------|--------------|--|
| Int Delay, s/veh       | Int Delay, s/veh 30.3 |        |          |         |       |                            |         |            |          |        |                                |        |              |  |
| Movement               | EBL                   | EBT    | EBR      | WBL     | WBT   | WBR                        | NBL     | NBT        | NBR      | SBL    | SBT                            | SBR    |              |  |
| Lane Configurations    | ች                     | f)     |          | ሻ       | f)    |                            | ች       | <b></b>    | 7        | ሻ      | <b>†</b>                       | 7      |              |  |
| Traffic Vol, veh/h     | 55                    | 2      | 100      | 80      | 2     | 25                         | 165     | 550        | 140      | 25     | 470                            | 100    |              |  |
| Future Vol, veh/h      | 55                    | 2      | 100      | 80      | 2     | 25                         | 165     | 550        | 140      | 25     | 470                            | 100    |              |  |
| Conflicting Peds, #/hr | 0                     | 0      | 0        | 0       | 0     | 0                          | 0       | 0          | 0        | 0      | 0                              | 0      |              |  |
| Sign Control           | Stop                  | Stop   | Stop     | Stop    | Stop  | Stop                       | Free    | Free       | Free     | Free   | Free                           | Free   |              |  |
| RT Channelized         | -                     | -      | None     | -       | -     | None                       | -       | -          | None     | -      | -                              | None   |              |  |
| Storage Length         | 0                     | -      | -        | 0       | -     | -                          | 0       | -          | 0        | 0      | -                              | 0      |              |  |
| Veh in Median Storage  | e,# -                 | 0      | -        | -       | 0     | -                          | -       | 0          | -        | -      | 0                              | -      |              |  |
| Grade, %               | -                     | 0      | -        | -       | 0     | -                          | -       | 0          | -        | -      | 0                              | -      |              |  |
| Peak Hour Factor       | 92                    | 92     | 92       | 92      | 92    | 92                         | 92      | 92         | 92       | 92     | 92                             | 92     |              |  |
| Heavy Vehicles, %      | 2                     | 2      | 2        | 2       | 2     | 2                          | 2       | 2          | 2        | 2      | 2                              | 2      |              |  |
| Mvmt Flow              | 60                    | 2      | 109      | 87      | 2     | 27                         | 179     | 598        | 152      | 27     | 511                            | 109    |              |  |
|                        |                       |        |          |         |       |                            |         |            |          |        |                                |        |              |  |
| Major/Minor N          | Minor2                |        |          | Minor1  |       |                            | Major1  |            | <u> </u> | Major2 |                                |        |              |  |
| Conflicting Flow All   | 1612                  | 1673   | 511      | 1631    | 1630  | 598                        | 620     | 0          | 0        | 750    | 0                              | 0      |              |  |
| Stage 1                | 565                   | 565    | -        | 956     | 956   | -                          | -       | -          | -        | -      | -                              | -      |              |  |
| Stage 2                | 1047                  | 1108   | -        | 675     | 674   | -                          | -       | -          | -        | -      | -                              | -      |              |  |
| Critical Hdwy          | 7.12                  | 6.52   | 6.22     | 7.12    | 6.52  | 6.22                       | 4.12    | -          | -        | 4.12   | -                              | -      |              |  |
| Critical Hdwy Stg 1    | 6.12                  | 5.52   | -        | 6.12    | 5.52  | -                          | -       | -          | -        | -      | -                              | -      |              |  |
| Critical Hdwy Stg 2    | 6.12                  | 5.52   | -        | 6.12    | 5.52  | -                          | -       | -          | -        | -      | -                              | -      |              |  |
| Follow-up Hdwy         | 3.518                 | 4.018  | 3.318    | 3.518   | 4.018 | 3.318                      | 2.218   | -          | -        | 2.218  | -                              | -      |              |  |
| Pot Cap-1 Maneuver     | 84                    | 96     | 563      | ~ 81    | 102   | 502                        | 960     | -          | -        | 859    | -                              | -      |              |  |
| Stage 1                | 510                   | 508    | -        | 310     | 336   | -                          | -       | -          | -        | -      | -                              | -      |              |  |
| Stage 2                | 276                   | 286    | -        | 444     | 454   | -                          | -       | -          | -        | -      | -                              | -      |              |  |
| Platoon blocked, %     |                       |        |          |         |       |                            |         | -          | -        |        | -                              | -      |              |  |
| Mov Cap-1 Maneuver     | 65                    | 76     | 563      | ~ 54    | 80    | 502                        | 960     | -          | -        | 859    | -                              | -      |              |  |
| Mov Cap-2 Maneuver     | 65                    | 76     | -        | ~ 54    | 80    | -                          | -       | -          | -        | -      | -                              | -      |              |  |
| Stage 1                | 415                   | 492    | -        | 252     | 274   | -                          | -       | -          | -        | -      | -                              | -      |              |  |
| Stage 2                | 211                   | 233    | -        | 345     | 440   | -                          | -       | -          | -        | -      | -                              | -      |              |  |
|                        |                       |        |          |         |       |                            |         |            |          |        |                                |        |              |  |
| Approach               | EB                    |        |          | WB      |       |                            | NB      |            |          | SB     |                                |        |              |  |
| HCM Control Delay, s   | 77.5                  |        |          | \$ 354  |       |                            | 1.9     |            |          | 0.4    |                                |        |              |  |
| HCM LOS                | F                     |        |          | F       |       |                            |         |            |          |        |                                |        |              |  |
|                        |                       |        |          |         |       |                            |         |            |          |        |                                |        |              |  |
| Minor Lane/Major Mvm   | nt                    | NBL    | NBT      | NBR     | EBLn1 | EBLn2V                     | VBLn1\  | WBLn2      | SBL      | SBT    | SBR                            |        |              |  |
| Capacity (veh/h)       |                       | 960    | -        | -       | 65    | 500                        | 54      | 361        | 859      | -      | -                              |        |              |  |
| HCM Lane V/C Ratio     |                       | 0.187  | -        | -       |       | 0.222                      | 1.61    |            |          | -      | -                              |        |              |  |
| HCM Control Delay (s)  |                       | 9.6    | -        | -       | 194.8 | 14.2\$                     | 468.1   | 15.9       | 9.3      | -      | -                              |        |              |  |
| HCM Lane LOS           |                       | Α      | -        | -       | F     | В                          | F       | С          | Α        | -      | -                              |        |              |  |
| HCM 95th %tile Q(veh)  | )                     | 0.7    | -        | -       | 4.4   | 0.8                        | 8.1     | 0.3        | 0.1      | -      | -                              |        |              |  |
| Notes                  |                       |        |          |         |       |                            |         |            |          |        |                                |        |              |  |
| ~: Volume exceeds cap  | nacity                | \$· Da | elay exc | reeds 3 | 00s   | +: Computation Not Defined |         |            |          |        | *: All major volume in platoon |        |              |  |
| . Volume exceeds cap   | pacity                | ψ. Dt  | Jay CA   | ocus 3  | 003   | T. CUIII                   | ραιαιίο | וו ואטנ טי | ciiiicu  |        | major                          | volume | iii piatooii |  |

| Intersection           |           |       |         |        |           |          |
|------------------------|-----------|-------|---------|--------|-----------|----------|
| Int Delay, s/veh       | 5.6       |       |         |        |           |          |
| Movement               | WBL       | WBR   | NBT     | NBR    | SBL       | SBT      |
| Lane Configurations    | NDL       | VVDIX | ND1     | NDK 7  | JDL       | <u> </u> |
| Traffic Vol, veh/h     | 75        | 35    | 820     | 75     | 35        | 615      |
| Future Vol, veh/h      | 75        | 35    | 820     | 75     | 35        | 615      |
| Conflicting Peds, #/hr | 0         | 0     | 020     | 0      | 0         | 013      |
| Sign Control           | Stop      | Stop  | Free    | Free   | Free      | Free     |
| RT Channelized         | 310p<br>- | None  | -       | None   | riee<br>- | None     |
| Storage Length         | 100       | 0     | -       | 150    | 150       | None -   |
| Veh in Median Storage  |           | -     | 0       | 150    | 150       | 0        |
| Grade, %               | 0         | -     | 0       | -      | -         | 0        |
| Peak Hour Factor       | 92        | 92    | 92      | 92     | 92        | 92       |
|                        | 2         | 2     | 2       | 2      | 2         | 2        |
| Heavy Vehicles, %      |           |       |         |        |           |          |
| Mvmt Flow              | 82        | 38    | 891     | 82     | 38        | 668      |
|                        |           |       |         |        |           |          |
| Major/Minor            | Minor1    | ١     | /lajor1 | N      | Major2    |          |
| Conflicting Flow All   | 1635      | 891   | 0       | 0      | 973       | 0        |
| Stage 1                | 891       | -     | -       | -      | -         | -        |
| Stage 2                | 744       | -     | -       | -      | -         | -        |
| Critical Hdwy          | 6.42      | 6.22  | -       | -      | 4.12      | -        |
| Critical Hdwy Stg 1    | 5.42      | -     | -       | -      | -         | -        |
| Critical Hdwy Stg 2    | 5.42      | -     | -       | -      | -         | -        |
| Follow-up Hdwy         | 3.518     | 3.318 | -       | -      | 2.218     | -        |
| Pot Cap-1 Maneuver     | 111       | 341   | -       | -      | 709       | -        |
| Stage 1                | 401       | -     | -       | -      | -         | -        |
| Stage 2                | 470       | -     | -       | -      | -         | -        |
| Platoon blocked, %     |           |       | -       | -      |           | -        |
| Mov Cap-1 Maneuver     | 105       | 341   | _       | -      | 709       | -        |
| Mov Cap-2 Maneuver     | 105       | -     | _       | -      | -         | -        |
| Stage 1                | 401       | -     | -       | -      | -         | -        |
| Stage 2                | 445       | -     | _       | _      | _         | -        |
| olago 2                |           |       |         |        |           |          |
|                        |           |       |         |        |           |          |
| Approach               | WB        |       | NB      |        | SB        |          |
| HCM Control Delay, s   | 80        |       | 0       |        | 0.6       |          |
| HCM LOS                | F         |       |         |        |           |          |
|                        |           |       |         |        |           |          |
| Minor Lane/Major Mvmt  |           | NBT   | NRRV    | VBLn1V | VRI n2    | SBL      |
| Capacity (veh/h)       |           | -     | -       |        | 341       | 709      |
| HCM Lane V/C Ratio     |           | -     |         | 0.776  |           |          |
| HCM Control Delay (s)  | ١         |       |         | 109.4  | 16.9      | 10.4     |
| HCM Lane LOS           |           | _     | _       | F      | C         | В        |
| HCM 95th %tile Q(veh   | )         | _     |         | 4.3    | 0.4       | 0.2      |
| How four four Qiven    | 7         |       |         | 7.0    | 0.4       | U.Z      |

| Intersection           |          |       |        |         |        |      |
|------------------------|----------|-------|--------|---------|--------|------|
| Int Delay, s/veh       | 8.5      |       |        |         |        |      |
| Movement               | EBT      | EBR   | WBL    | WBT     | NBL    | NBR  |
| Lane Configurations    | <b>†</b> | 1     | ች      | <b></b> | ች      | 7    |
| Traffic Vol, veh/h     | 45       | 78    | 374    | 55      | 54     | 306  |
| Future Vol, veh/h      | 45       | 78    | 374    | 55      | 54     | 306  |
| Conflicting Peds, #/hr | 0        | 0     | 0      | 0       | 0      | 0    |
| Sign Control           | Free     | Free  | Free   | Free    | Stop   | Stop |
| RT Channelized         | -        | Free  | -      | None    | -      | Free |
| Storage Length         | _        | 175   | 175    | -       | 0      | 100  |
| Veh in Median Storage, |          | -     | -      | 0       | 0      | -    |
| Grade, %               | 0        | -     | _      | 0       | 0      | _    |
| Peak Hour Factor       | 92       | 92    | 92     | 92      | 92     | 92   |
|                        |          | 2     | 2      | 2       |        |      |
| Heavy Vehicles, %      | 2        |       |        |         | 2      | 2    |
| Mvmt Flow              | 49       | 85    | 407    | 60      | 59     | 333  |
|                        |          |       |        |         |        |      |
| Major/Minor N          | 1ajor1   | ľ     | Major2 | N       | Minor1 |      |
| Conflicting Flow All   | 0        | -     | 49     | 0       | 923    | -    |
| Stage 1                | -        | -     | -      | -       | 49     | -    |
| Stage 2                | -        | -     | -      | -       | 874    | -    |
| Critical Hdwy          | -        | _     | 4.12   | -       | 6.42   | -    |
| Critical Hdwy Stg 1    | -        |       | _      | _       | 5.42   | _    |
| Critical Hdwy Stg 2    | -        | -     | _      | _       | 5.42   | _    |
| Follow-up Hdwy         | _        | _     | 2.218  | _       | 3.518  | _    |
| Pot Cap-1 Maneuver     | _        | 0     | 1558   | _       | 299    | 0    |
| Stage 1                | _        | 0     | 1000   | _       | 973    | 0    |
| Stage 2                | _        | 0     | _      | _       | 408    | 0    |
| Platoon blocked, %     | -        | U     |        | _       | 400    | U    |
| Mov Cap-1 Maneuver     |          | _     | 1558   |         | 221    | _    |
|                        | -        |       |        | -       |        |      |
| Mov Cap-2 Maneuver     | -        | -     | -      | -       | 221    | -    |
| Stage 1                | -        | -     | -      | -       | 973    | -    |
| Stage 2                | -        | -     | -      | -       | 302    | -    |
|                        |          |       |        |         |        |      |
| Approach               | EB       |       | WB     |         | NB     |      |
| HCM Control Delay, s   | 0        |       | 7.1    |         | 27.1   |      |
| HCM LOS                | U        |       | 7.1    |         | D      |      |
| TIOWI LOO              |          |       |        |         | U      |      |
|                        |          |       |        |         |        |      |
| Minor Lane/Major Mvmt  | · N      | VBLn1 | VBLn2  | EBT     | WBL    | WBT  |
| Capacity (veh/h)       |          | 221   | -      | -       | 1558   | -    |
| HCM Lane V/C Ratio     |          | 0.266 | -      | -       | 0.261  | -    |
| HCM Control Delay (s)  |          | 27.1  | 0      | -       | 8.1    | -    |
| HCM Lane LOS           |          | D     | Α      | -       | Α      | -    |
| HCM 95th %tile Q(veh)  |          | 1     | -      | -       | 1.1    | -    |
| ,                      |          |       |        |         |        |      |

| Intersection           |        |        |          |         |                                      |          |         |          |         |        |          |          |              |
|------------------------|--------|--------|----------|---------|--------------------------------------|----------|---------|----------|---------|--------|----------|----------|--------------|
| Int Delay, s/veh       | 42.2   |        |          |         |                                      |          |         |          |         |        |          |          |              |
| Movement               | EBL    | EBT    | EBR      | WBL     | WBT                                  | WBR      | NBL     | NBT      | NBR     | SBL    | SBT      | SBR      |              |
| Lane Configurations    | *      | f)     |          | ሻ       | f)                                   |          | ች       | <b>1</b> | 7       | ሻ      | <b>†</b> | 7        |              |
| Traffic Vol, veh/h     | 75     | 4      | 150      | 150     | 9                                    | 49       | 50      | 321      | 70      | 35     | 502      | 40       |              |
| Future Vol, veh/h      | 75     | 4      | 150      | 150     | 9                                    | 49       | 50      | 321      | 70      | 35     | 502      | 40       |              |
| Conflicting Peds, #/hr | 0      | 0      | 0        | 0       | 0                                    | 0        | 0       | 0        | 0       | 0      | 0        | 0        |              |
| Sign Control           | Stop   | Stop   | Stop     | Stop    | Stop                                 | Stop     | Free    | Free     | Free    | Free   | Free     | Free     |              |
| RT Channelized         | · -    | -      | None     | -       | -                                    | None     | -       | -        | None    | -      | -        | None     |              |
| Storage Length         | 0      | -      | -        | 0       | -                                    | -        | 0       | -        | 0       | 0      | -        | 0        |              |
| Veh in Median Storage  | e,# -  | 0      | -        | -       | 0                                    | -        | -       | 0        | -       | -      | 0        | -        |              |
| Grade, %               | -      | 0      | -        | -       | 0                                    | -        | -       | 0        | -       | -      | 0        | -        |              |
| Peak Hour Factor       | 92     | 92     | 92       | 92      | 92                                   | 92       | 92      | 92       | 92      | 92     | 92       | 92       |              |
| Heavy Vehicles, %      | 2      | 2      | 2        | 2       | 2                                    | 2        | 2       | 2        | 2       | 2      | 2        | 2        |              |
| Mvmt Flow              | 82     | 4      | 163      | 163     | 10                                   | 53       | 54      | 349      | 76      | 38     | 546      | 43       |              |
|                        |        |        |          |         |                                      |          |         |          |         |        |          |          |              |
| Major/Minor I          | Minor2 |        |          | Minor1  |                                      |          | Major1  |          |         | Major2 |          |          |              |
| Conflicting Flow All   | 1149   | 1155   | 546      | 1184    | 1122                                 | 349      | 589     | 0        | 0       | 425    | 0        | 0        |              |
| Stage 1                | 622    | 622    | -        | 457     | 457                                  | -        | -       | -        | -       | -      | -        | -        |              |
| Stage 2                | 527    | 533    | -        | 727     | 665                                  | -        | -       | -        | -       | -      | -        | -        |              |
| Critical Hdwy          | 7.12   | 6.52   | 6.22     | 7.12    | 6.52                                 | 6.22     | 4.12    | -        | -       | 4.12   | -        | -        |              |
| Critical Hdwy Stg 1    | 6.12   | 5.52   | -        | 6.12    | 5.52                                 | -        | -       | -        | -       | -      | -        | -        |              |
| Critical Hdwy Stg 2    | 6.12   | 5.52   | -        | 6.12    | 5.52                                 | -        | -       | -        | -       | -      | -        | -        |              |
| Follow-up Hdwy         | 3.518  | 4.018  | 3.318    | 3.518   | 4.018                                | 3.318    | 2.218   | -        | -       | 2.218  | -        | -        |              |
| Pot Cap-1 Maneuver     | 176    | 197    | 538      | 166     | 206                                  | 694      | 986     | -        | -       | 1134   | -        | -        |              |
| Stage 1                | 474    | 479    | -        | 583     | 568                                  | -        | -       | -        | -       | -      | -        | -        |              |
| Stage 2                | 535    | 525    | -        | 415     | 458                                  | -        | -       | -        | -       | -      | -        | -        |              |
| Platoon blocked, %     |        |        |          |         |                                      |          |         | -        | -       |        | -        | -        |              |
| Mov Cap-1 Maneuver     | 146    | 180    | 538      | ~ 106   | 188                                  | 694      | 986     | -        | -       | 1134   | -        | -        |              |
| Mov Cap-2 Maneuver     | 146    | 180    | -        | ~ 106   | 188                                  | -        | -       | -        | -       | -      | -        | -        |              |
| Stage 1                | 448    | 463    | -        | 551     | 537                                  | -        | -       | -        | -       | -      | -        | -        |              |
| Stage 2                | 458    | 496    | -        | 277     | 442                                  | -        | -       | -        | -       | -      | -        | -        |              |
|                        |        |        |          |         |                                      |          |         |          |         |        |          |          |              |
| Approach               | EB     |        |          | WB      |                                      |          | NB      |          |         | SB     |          |          |              |
| HCM Control Delay, s   | 29.1   |        |          | 260     |                                      |          | 1       |          |         | 0.5    |          |          |              |
| HCM LOS                | D      |        |          | F       |                                      |          |         |          |         |        |          |          |              |
|                        |        |        |          |         |                                      |          |         |          |         |        |          |          |              |
| Minor Lane/Major Mvm   | nt_    | NBL    | NBT      | NBR     | EBLn1                                | EBLn2V   | WBLn1\  | WBLn2    | SBL     | SBT    | SBR      |          |              |
| Capacity (veh/h)       |        | 986    | -        | -       | 146                                  | 512      | 106     | 490      | 1134    | -      | -        |          |              |
| HCM Lane V/C Ratio     |        | 0.055  | -        | -       |                                      |          |         | 0.129    |         | -      | -        |          |              |
| HCM Control Delay (s)  |        | 8.9    | -        | -       | 57.1                                 | 15.4\$   | 355.4   | 13.4     | 8.3     | -      | -        |          |              |
| HCM Lane LOS           |        | Α      | -        | -       | F                                    | С        | F       | В        | Α       | -      | -        |          |              |
| HCM 95th %tile Q(veh)  | )      | 0.2    | -        | -       | 2.8                                  | 1.4      | 12.2    | 0.4      | 0.1     | -      | -        |          |              |
| Notes                  |        |        |          |         |                                      |          |         |          |         |        |          |          |              |
| ~: Volume exceeds cap  | nacity | \$. Da | elav evo | reeds 3 | eeds 300s +: Computation Not Defined |          |         |          |         |        | maiory   | volume i | in platoon   |
| . Volume exceeds ca    | pacity | ψ. D   | Jay CA   | ocus 3  | 003                                  | T. CUIII | ραιαιίο | II NOL D | ciiiicu | . All  | major    | volume   | iii piatooii |

| Intersection           |           |              |              |        |           |              |
|------------------------|-----------|--------------|--------------|--------|-----------|--------------|
| Int Delay, s/veh       | 9         |              |              |        |           |              |
| Movement               | WBL       | WBR          | NBT          | NBR    | SBL       | SBT          |
| Lane Configurations    | VVDL      | VVDIX        | NDT          | NDK 7  | JDL<br>Š  | <u> </u>     |
| Traffic Vol, veh/h     | 129       | 36           | <b>4</b> 05  | 82     | 32        | <b>7</b> 70  |
| Future Vol, veh/h      | 129       | 36           | 405          | 82     | 32        | 770          |
| Conflicting Peds, #/hr | 0         | 0            | 403          | 02     | 0         | 0            |
| Sign Control           | Stop      |              | Free         | Free   | Free      | Free         |
| RT Channelized         | Slop<br>- | Stop<br>None | riee<br>-    | None   | riee<br>- | None         |
| Storage Length         | 100       | 0            | -            | 150    | 150       | None -       |
| Veh in Median Storage  |           | -            | 0            | 150    | 150       | 0            |
| Grade, %               | 0         | -            | 0            | -      | -         | 0            |
| Peak Hour Factor       | 92        | 92           | 92           | 92     | 92        | 92           |
|                        |           |              |              |        |           |              |
| Heavy Vehicles, %      | 2         | 2            | 2            | 2      | 2         | 2            |
| Mvmt Flow              | 140       | 39           | 440          | 89     | 35        | 837          |
|                        |           |              |              |        |           |              |
| Major/Minor            | Minor1    | N            | Major1       | 1      | Major2    |              |
| Conflicting Flow All   | 1347      | 440          | 0            | 0      | 529       | 0            |
| Stage 1                | 440       | -            | _            | _      | -         | _            |
| Stage 2                | 907       | _            | _            | _      | _         | _            |
| Critical Hdwy          | 6.42      | 6.22         | _            | _      | 4.12      | _            |
| Critical Hdwy Stg 1    | 5.42      | -            | _            | _      | - 1112    | _            |
| Critical Hdwy Stg 2    | 5.42      | _            | _            | _      | _         | _            |
| Follow-up Hdwy         | 3.518     |              | _            | _      | 2.218     | _            |
| Pot Cap-1 Maneuver     | 167       | 617          | _            | _      | 1038      | _            |
| Stage 1                | 649       | -            | _            |        | 1030      | _            |
| Stage 2                | 394       | _            | <del>-</del> | _      | -         | <del>-</del> |
| Platoon blocked, %     | 374       | -            | -            | -      | -         | _            |
|                        | 161       | 617          | -            | -      | 1038      | -            |
| Mov Cap-1 Maneuver     |           |              | -            | -      |           | -            |
| Mov Cap-2 Maneuver     | 161       | -            | -            | -      | -         | -            |
| Stage 1                | 649       | -            | -            | -      | -         | -            |
| Stage 2                | 381       | -            | -            | -      | -         | -            |
|                        |           |              |              |        |           |              |
| Approach               | WB        |              | NB           |        | SB        |              |
| HCM Control Delay, s   | 77.7      |              | 0            |        | 0.3       |              |
| HCM LOS                | F         |              |              |        | 0.0       |              |
| 110111 200             | •         |              |              |        |           |              |
|                        |           |              |              |        |           |              |
| Minor Lane/Major Mvn   | nt        | NBT          | NBRV         | VBLn1V |           | SBL          |
| Capacity (veh/h)       |           | -            | -            |        | 617       | 1038         |
| HCM Lane V/C Ratio     |           | -            | -            | 0.871  | 0.063     | 0.034        |
| HCM Control Delay (s)  | )         | -            | -            | 96.3   | 11.2      | 8.6          |
| HCM Lane LOS           |           | -            | -            | F      | В         | Α            |
| HCM 95th %tile Q(veh   | )         | -            | -            | 6.1    | 0.2       | 0.1          |
|                        |           |              |              |        |           |              |

| Intersection           |          |          |         |          |        |      |
|------------------------|----------|----------|---------|----------|--------|------|
| Int Delay, s/veh       | 10.6     |          |         |          |        |      |
| Movement               | EBT      | EBR      | WBL     | WBT      | NBL    | NBR  |
| Lane Configurations    | <b>†</b> | 7        | ች       | <b>†</b> | ሻ      | 7    |
| Traffic Vol, veh/h     | 100      | 75       | 398     | 60       | 81     | 457  |
| Future Vol, veh/h      | 100      | 75       | 398     | 60       | 81     | 457  |
| Conflicting Peds, #/hr | 0        | 0        | 0       | 0        | 0      | 0    |
| Sign Control           | Free     | Free     | Free    | Free     | Stop   | Stop |
| RT Channelized         | -        | Free     | -       | None     | -      | Free |
| Storage Length         | _        | 175      | 175     | -        | 0      | 100  |
| Veh in Median Storage  |          | -        | -       | 0        | 0      | -    |
| Grade, %               | 0        | _        | _       | 0        | 0      | _    |
| Peak Hour Factor       | 92       | 92       | 92      | 92       | 92     | 92   |
| Heavy Vehicles, %      | 2        | 2        | 2       | 2        | 2      | 2    |
| Mvmt Flow              | 109      | 82       | 433     | 65       | 88     | 497  |
| IVIVIIIL FIOW          | 109      | 02       | 433     | 00       | 00     | 497  |
|                        |          |          |         |          |        |      |
| Major/Minor N          | /lajor1  | ľ        | Major2  | N        | Vinor1 |      |
| Conflicting Flow All   | 0        | -        | 109     | 0        | 1040   | -    |
| Stage 1                | -        | -        | -       | -        | 109    | -    |
| Stage 2                | -        | -        | -       | -        | 931    | -    |
| Critical Hdwy          | -        | -        | 4.12    | -        | 6.42   | -    |
| Critical Hdwy Stg 1    | -        | -        | -       | -        | 5.42   | -    |
| Critical Hdwy Stg 2    | -        | -        | -       | -        | 5.42   | -    |
| Follow-up Hdwy         | -        | -        | 2.218   | -        | 3.518  | -    |
| Pot Cap-1 Maneuver     | -        | 0        | 1481    | -        | 255    | 0    |
| Stage 1                | -        | 0        | -       | -        | 916    | 0    |
| Stage 2                | _        | 0        | _       | _        | 384    | 0    |
| Platoon blocked, %     | _        |          |         | _        | 00.    |      |
| Mov Cap-1 Maneuver     | -        | _        | 1481    | -        | 181    | _    |
| Mov Cap-2 Maneuver     | _        | _        | -       | _        | 181    | _    |
| Stage 1                | _        |          | _       | _        | 916    | _    |
| Stage 2                | _        | _        | _       |          | 272    | _    |
| Staye 2                | -        | -        |         |          | 212    |      |
|                        |          |          |         |          |        |      |
| Approach               | EB       |          | WB      |          | NB     |      |
| HCM Control Delay, s   | 0        |          | 7.3     |          | 42.4   |      |
| HCM LOS                |          |          |         |          | Е      |      |
|                        |          |          |         |          |        |      |
| Minor Long/Major M.    | + N      | IDI ~1 N | VIDI ~2 | EDT      | WDI    | WDT  |
| Minor Lane/Major Mvm   | t N      | VBLn1 N  | NRTU7   | EBT      | WBL    | WBT  |
| Capacity (veh/h)       |          | 181      | -       | -        | 1481   | -    |
| HCM Lane V/C Ratio     |          | 0.486    | -       | -        | 0.292  | -    |
| HCM Control Delay (s)  |          | 42.4     | 0       | -        | 8.4    | -    |
| HCM Lane LOS           |          | Е        | Α       | -        | Α      | -    |
| HCM 95th %tile Q(veh)  |          | 2.4      | -       | -        | 1.2    | -    |
| HCM 95th %tile Q(veh)  |          | 2.4      |         | -        | 1.2    | -    |

| Intersection           |        |          |          |         |            |        |          |          |        |        |          |          |            |
|------------------------|--------|----------|----------|---------|------------|--------|----------|----------|--------|--------|----------|----------|------------|
| Int Delay, s/veh       | 59.4   |          |          |         |            |        |          |          |        |        |          |          |            |
| Movement               | EBL    | EBT      | EBR      | WBL     | WBT        | WBR    | NBL      | NBT      | NBR    | SBL    | SBT      | SBR      |            |
| Lane Configurations    |        | f)       |          | ሻ       | f)         |        | ሻ        | <b>†</b> | 7      |        | <b>†</b> | 7        |            |
| Traffic Vol, veh/h     | 55     | 10       | 100      | 100     | 7          | 34     | 165      | 554      | 170    | 41     | 477      | 100      |            |
| Future Vol, veh/h      | 55     | 10       | 100      | 100     | 7          | 34     | 165      | 554      | 170    | 41     | 477      | 100      |            |
| Conflicting Peds, #/hr | 0      | 0        | 0        | 0       | 0          | 0      | 0        | 0        | 0      | 0      | 0        | 0        |            |
| Sign Control           | Stop   | Stop     | Stop     | Stop    | Stop       | Stop   | Free     | Free     | Free   | Free   | Free     | Free     |            |
| RT Channelized         | -      | -        | None     | -       | -          | None   | -        | -        | None   | -      | -        | None     |            |
| Storage Length         | 0      | -        | -        | 0       | -          | -      | 0        | -        | 0      | 0      | -        | 0        |            |
| Veh in Median Storage  | e,# -  | 0        | -        | -       | 0          | -      | -        | 0        | -      | -      | 0        | -        |            |
| Grade, %               | -      | 0        | -        | -       | 0          | -      | -        | 0        | -      | -      | 0        | -        |            |
| Peak Hour Factor       | 92     | 92       | 92       | 92      | 92         | 92     | 92       | 92       | 92     | 92     | 92       | 92       |            |
| Heavy Vehicles, %      | 2      | 2        | 2        | 2       | 2          | 2      | 2        | 2        | 2      | 2      | 2        | 2        |            |
| Vivmt Flow             | 60     | 11       | 109      | 109     | 8          | 37     | 179      | 602      | 185    | 45     | 518      | 109      |            |
|                        |        |          |          |         |            |        |          |          |        |        |          |          |            |
| Major/Minor I          | Minor2 |          |          | Minor1  |            |        | Major1   |          | ı      | Major2 |          |          |            |
| Conflicting Flow All   | 1683   | 1753     | 518      | 1683    | 1677       | 602    | 627      | 0        | 0      | 787    | 0        | 0        |            |
| Stage 1                | 608    | 608      | -        | 960     | 960        | -      | -        | -        | -      | -      | -        | -        |            |
| Stage 2                | 1075   | 1145     | _        | 723     | 717        | _      | _        | _        | -      | _      | _        | _        |            |
| Critical Hdwy          | 7.12   | 6.52     | 6.22     | 7.12    | 6.52       | 6.22   | 4.12     | _        | -      | 4.12   | _        | -        |            |
| Critical Hdwy Stg 1    | 6.12   | 5.52     | -        | 6.12    | 5.52       | -      | -        | _        | -      | -      | _        | _        |            |
| Critical Hdwy Stg 2    | 6.12   | 5.52     | _        | 6.12    | 5.52       | _      | -        | _        | -      | _      | _        | -        |            |
| Follow-up Hdwy         | 3.518  | 4.018    | 3.318    | 3.518   | 4.018      | 3.318  | 2.218    | _        | -      | 2.218  | _        | _        |            |
| Pot Cap-1 Maneuver     | 75     | 85       | 558      | ~ 75    | 95         | 500    | 955      | _        | _      | 832    | _        | _        |            |
| Stage 1                | 483    | 486      | -        | 308     | 335        | -      | -        | _        | _      | -      | _        | _        |            |
| Stage 2                | 266    | 274      | _        | 417     | 434        | _      | _        | _        | _      | _      | _        | _        |            |
| Platoon blocked, %     | 200    | -/ '     |          |         | 101        |        |          | _        | _      |        | _        | _        |            |
| Mov Cap-1 Maneuver     | ~ 53   | 65       | 558      | ~ 44    | 73         | 500    | 955      | _        | -      | 832    | _        | _        |            |
| Mov Cap-2 Maneuver     | ~ 53   | 65       | -        | ~ 44    | 73         | -      | -        | _        | _      | -      | _        | _        |            |
| Stage 1                | 393    | 460      | -        | 250     | 272        | -      | -        | -        | -      | -      | _        | -        |            |
| Stage 2                | 195    | 223      | _        | 310     | 411        | _      | _        | _        | _      | _      | _        | _        |            |
| Jugo Z                 | 170    |          |          | 310     | ,,,        |        |          |          |        |        |          |          |            |
| Approach               | EB     |          |          | WB      |            |        | NB       |          |        | SB     |          |          |            |
| HCM Control Delay, s   |        |          | \$       | 620.2   |            |        | 1.8      |          |        | 0.6    |          |          |            |
| HCM LOS                | F      |          | · ·      | F       |            |        |          |          |        | 3.0    |          |          |            |
| 200                    | •      |          |          | •       |            |        |          |          |        |        |          |          |            |
| Minor Lane/Major Mvm   | nt     | NBL      | NBT      | NBR     | EBLn1      | EBLn2V | VBLn1\   | WBLn2    | SBL    | SBT    | SBR      |          |            |
| Capacity (veh/h)       |        | 955      | -        | -       | 53         | 330    | 44       | 250      | 832    | _      | _        |          |            |
| HCM Lane V/C Ratio     |        | 0.188    | _        |         |            | 0.362  |          | 0.178    |        | _      | _        |          |            |
| HCM Control Delay (s)  |        | 9.6      | _        | _       | 289.6      |        | 865.3    | 22.5     | 9.6    | _      | _        |          |            |
| HCM Lane LOS           |        | 7.0<br>A | _        | _       | 207.0<br>F | C      | F        | C        | Α.     | _      | _        |          |            |
| HCM 95th %tile Q(veh   | )      | 0.7      | _        | _       | 5.2        | 1.6    | 11.6     | 0.6      | 0.2    | _      | _        |          |            |
| · ·                    | ,      | J.,      |          |         | J.2        |        |          | 3.3      |        |        |          |          |            |
| Notes                  | naoit. | ¢. D.    | alov avi | 20040 2 | 000        | Corr   | nutoti - | n Net D  | ofinad | *, AII | malar    | (oluma e | in plataar |
| ~: Volume exceeds ca   | pacity | \$: D6   | elay exc | ceeds 3 | UUS        | +: Com | putatio  | n Not D  | eimea  | : All  | major    | volume I | in platoon |

| Intersection          |                |          |          |           |        |          |                      |                                |
|-----------------------|----------------|----------|----------|-----------|--------|----------|----------------------|--------------------------------|
| Int Delay, s/veh      | 19.9           |          |          |           |        |          |                      |                                |
| Movement              | WBL            | WBR      | NBT      | NBR       | SBL    | SBT      |                      |                                |
| ane Configurations    | 7              | 7        | <b>↑</b> | 7         | 7      | <b>†</b> |                      |                                |
| raffic Vol, veh/h     | 117            | 39       | 850      | 151       | 42     | 635      |                      |                                |
| ıture Vol, veh/h      | 117            | 39       | 850      | 151       | 42     | 635      |                      |                                |
| onflicting Peds, #/hr | 0              | 0        | 0        | 0         | 0      | 0        |                      |                                |
| gn Control            | Stop           | Stop     | Free     | Free      | Free   | Free     |                      |                                |
| Channelized           | -              | None     | -        | None      | -      | None     |                      |                                |
| orage Length          | 100            | 0        | -        | 150       | 150    | -        |                      |                                |
| h in Median Storage   | e, # 0         | -        | 0        | -         | -      | 0        |                      |                                |
| rade, %               | 0              | -        | 0        | -         | -      | 0        |                      |                                |
| ak Hour Factor        | 92             | 92       | 92       | 92        | 92     | 92       |                      |                                |
| avy Vehicles, %       | 2              | 2        | 2        | 2         | 2      | 2        |                      |                                |
| mt Flow               | 127            | 42       | 924      | 164       | 46     | 690      |                      |                                |
|                       |                |          |          |           |        |          |                      |                                |
| jor/Minor             | Minor1         | N        | Major1   | N         | Major2 |          |                      |                                |
| nflicting Flow All    | 1706           | 924      | 0        |           | 1088   | 0        |                      |                                |
| Stage 1               | 924            | -        | -        | -         | -      | -        |                      |                                |
| Stage 2               | 782            | -        | _        | _         | _      | _        |                      |                                |
| tical Hdwy            | 6.42           | 6.22     | _        | _         | 4.12   | _        |                      |                                |
| ical Hdwy Stg 1       | 5.42           | -        | _        | _         | 1.12   | _        |                      |                                |
| cal Hdwy Stg 2        | 5.42           | _        | _        | _         | _      | _        |                      |                                |
| low-up Hdwy           | 3.518          |          | _        | _         | 2.218  | _        |                      |                                |
| t Cap-1 Maneuver      | ~ 100          | 327      | _        | _         | 641    | _        |                      |                                |
| Stage 1               | 387            | -        | _        | _         | -      | _        |                      |                                |
| Stage 2               | 451            | _        | _        | _         | _      | _        |                      |                                |
| toon blocked, %       | 101            |          | _        | _         |        | _        |                      |                                |
| v Cap-1 Maneuver      | ~ 93           | 327      | _        | _         | 641    | _        |                      |                                |
| ov Cap-1 Maneuver     | ~ 93           | JZ1<br>- | _        |           | - 041  | _        |                      |                                |
| Stage 1               | 387            | _        |          |           | _      | _        |                      |                                |
| Stage 2               | 419            | _        | _        | _         | _      | _        |                      |                                |
| Jiago Z               | 717            |          |          |           |        |          |                      |                                |
| proach                | WB             |          | NB       |           | SB     |          |                      |                                |
| oroach                |                |          |          |           |        |          |                      |                                |
| M Control Delay, s    |                |          | 0        |           | 0.7    |          |                      |                                |
| M LOS                 | F              |          |          |           |        |          |                      |                                |
| nor Long/Maior M.     | o <del>t</del> | NDT      | NDD      | MDI ~ 114 | VDL ~2 | CDI      | CDT                  |                                |
| nor Lane/Major Mvn    | III            | NBT      | MRKA     | VBLn1V    |        | SBL      | SBT                  |                                |
| pacity (veh/h)        |                | -        | -        | 93        | 327    | 641      | -                    |                                |
| M Lane V/C Ratio      |                | -        |          | 1.367     |        | 0.071    | -                    |                                |
| M Control Delay (s)   | )              | -        | -\$      | 301.5     | 17.6   | 11       | -                    |                                |
| M Lane LOS            |                | -        | -        | F         | С      | В        | -                    |                                |
| CM 95th %tile Q(veh   |                | -        | -        | 9.4       | 0.4    | 0.2      | -                    |                                |
| otes                  |                |          |          |           |        |          |                      |                                |
| Volume exceeds ca     | pacity         | \$: De   | elay exc | ceeds 30  | 00s    | +: Com   | putation Not Defined | *: All major volume in platoon |
|                       |                |          | ,        |           |        |          |                      |                                |

| Intersection           |                |         |         |                |        |        |
|------------------------|----------------|---------|---------|----------------|--------|--------|
| Int Delay, s/veh       | 6.8            |         |         |                |        |        |
| Movement               | EBT            | EBR     | WBL     | WBT            | NBL    | NBR    |
| Lane Configurations    | <u> </u>       | T T     | NDL     | <u>₩</u>       | NDL    | NDK ** |
| Traffic Vol, veh/h     | <b>T</b><br>70 | 157     | 256     | <b>T</b><br>75 | 71     | 119    |
|                        |                | 157     |         | 75             |        | 119    |
| Future Vol, veh/h      | 70             |         | 256     |                | 71     |        |
| Conflicting Peds, #/hr | 0              | 0       | 0       | 0              | 0      | 0      |
| Sign Control           | Free           | Free    | Free    | Free           | Stop   | Stop   |
| RT Channelized         | -              | Free    | -       | None           | -      | Free   |
| Storage Length         | -              | 175     | 175     | -              | 0      | 100    |
| Veh in Median Storage, | # 0            | -       | -       | 0              | 0      | -      |
| Grade, %               | 0              | -       | -       | 0              | 0      | -      |
| Peak Hour Factor       | 92             | 92      | 92      | 92             | 92     | 92     |
| Heavy Vehicles, %      | 2              | 2       | 2       | 2              | 2      | 2      |
| Mvmt Flow              | 76             | 171     | 278     | 82             | 77     | 129    |
|                        |                |         |         |                |        |        |
| Major/Minor            | laiar1         | N       | Majara  |                | Ninar1 |        |
|                        | 1ajor1         |         | Major2  |                | Minor1 |        |
| Conflicting Flow All   | 0              | -       | 76      | 0              | 714    | -      |
| Stage 1                | -              | -       | -       | -              | 76     | -      |
| Stage 2                | -              | -       | -       | -              | 638    | -      |
| Critical Hdwy          | -              | -       | 4.12    | -              | 6.42   | -      |
| Critical Hdwy Stg 1    | -              | -       | -       | -              | 5.42   | -      |
| Critical Hdwy Stg 2    | -              | -       | -       | -              | 5.42   | -      |
| Follow-up Hdwy         | -              | -       |         | -              | 3.518  | -      |
| Pot Cap-1 Maneuver     | -              | 0       | 1523    | -              | 398    | 0      |
| Stage 1                | -              | 0       | -       | -              | 947    | 0      |
| Stage 2                | -              | 0       | -       | -              | 526    | 0      |
| Platoon blocked, %     | -              |         |         | -              |        |        |
| Mov Cap-1 Maneuver     | _              | -       | 1523    | _              | 325    | -      |
| Mov Cap-2 Maneuver     | _              | -       | -       | _              | 379    | -      |
| Stage 1                | _              | _       | _       | _              | 947    | _      |
| Stage 2                | _              | _       | _       | _              | 430    | _      |
| Stage 2                |                |         |         |                | 730    |        |
|                        |                |         |         |                |        |        |
| Approach               | EB             |         | WB      |                | NB     |        |
| HCM Control Delay, s   | 0              |         | 6.1     |                | 16.9   |        |
| HCM LOS                |                |         |         |                | С      |        |
|                        |                |         |         |                |        |        |
| Minor Long/Major Muset |                | JDI1 N  | VIDI ~2 | <b>FDT</b>     | WDI    | WDT    |
| Minor Lane/Major Mvmt  | . 1            | VBLn1 N |         | EBT            | WBL    | WBT    |
| Capacity (veh/h)       |                | 379     | -       |                | 1523   | -      |
| HCM Lane V/C Ratio     |                | 0.204   | -       | -              | 0.183  | -      |
| HCM Control Delay (s)  |                | 16.9    | 0       | -              | 7.9    | -      |
| HCM Lane LOS           |                | С       | Α       | -              | Α      | -      |
| HCM 95th %tile Q(veh)  |                | 0.8     | -       | -              | 0.7    | -      |
|                        |                |         |         |                |        |        |

# **Operational Data**

## **Main Geometry (ft)**

## **Approach and Entry Geometry**

| Leg | Leg Names         | Approach<br>Bearing<br>(deg) | Grade<br>Separation<br>G | Half Width<br>V | Approach<br>Lanes<br>n | Entry<br>Width<br>E | Entry<br>Lanes<br>n | Flare<br>Length<br>L' | Entry<br>Radius<br>R | Entry<br>Angle<br>? |
|-----|-------------------|------------------------------|--------------------------|-----------------|------------------------|---------------------|---------------------|-----------------------|----------------------|---------------------|
| 1   | North Leg (1st)   | 0                            | 0                        | 24.00           | 2                      | 28.00               | 2                   | 90.00                 | 100.00               | 25.00               |
| 2   | SH 79 East Leg    | 90                           | 0                        | 24.00           | 2                      | 28.00               | 2                   | 90.00                 | 100.00               | 25.00               |
| 3   | South Leg         | 180                          | 0                        | 16.00           | 1                      | 16.00               | 1                   | 90.00                 | 100.00               | 25.00               |
| 4   | SH 79 West<br>Leg | 270                          | 0                        | 24.00           | 2                      | 28.00               | 2                   | 90.00                 | 100.00               | 25.00               |

### **Circulating and Exit Geometry**

| Leg | Leg Names         | Inscribed<br>Diameter<br>D | Circulating<br>Width<br>C | Circulating<br>Lanes<br>nc | Exit<br>Width<br>Ex | Exit<br>Lanes<br>nex | Exit<br>Half Width<br>Vx | Exit Half<br>Width Lanes<br>nvx |
|-----|-------------------|----------------------------|---------------------------|----------------------------|---------------------|----------------------|--------------------------|---------------------------------|
| 1   | North Leg (1st)   | 200.00                     | 28.00                     | 2                          | 28.00               | 1                    | 16.00                    | 1                               |
| 2   | SH 79 East Leg    | 200.00                     | 28.00                     | 2                          | 28.00               | 2                    | 24.00                    | 2                               |
| 3   | South Leg         | 200.00                     | 28.00                     | 2                          | 28.00               | 2                    | 16.00                    | 2                               |
| 4   | SH 79 West<br>Leg | 200.00                     | 28.00                     | 2                          | 28.00               | 2                    | 24.00                    | 2                               |

## **Traffic Flow Data (veh/hr)**

#### 2041 AM Peak Peak Hour Flows

|     |                   |        |        | Turning Flows |        | F      | low Modifie | rs             |                     |
|-----|-------------------|--------|--------|---------------|--------|--------|-------------|----------------|---------------------|
| Leg | Leg Names         | U-Turn | Exit-3 | Exit-2        | Exit-1 | Bypass | Trucks<br>% | Flow<br>Factor | Peak Hour<br>Factor |
| 1   | North Leg (1st)   | 0      | 138    | 0             | 348    | 0      | 5.0         | 1.00           | 0.9                 |
| 2   | SH 79 East Leg    | 0      | 0      | 695           | 134    | 0      | 5.0         | 1.00           | 0.9                 |
| 3   | South Leg         | 0      | 0      | 0             | 0      | 0      | 5.0         | 1.00           | 0.9                 |
| 4   | SH 79 West<br>Leg | 0      | 314    | 325           | 0      | 0      | 5.0         | 1.00           | 0.9                 |

# **Operational Results**

## 2041 AM Peak - 60 minutes

## **Flows and Capacity**

|     |                 |                |        | Fle     | ows (veh/l | nr)      |      | Capacity (veh/hr) |        |             |        |  |  |
|-----|-----------------|----------------|--------|---------|------------|----------|------|-------------------|--------|-------------|--------|--|--|
| Leg | Leg Names       | Bypass<br>Type | Arriva | al Flow | Opposi     | ing Flow | Exit | Сар               | acity  | Average VCR |        |  |  |
|     |                 | . 7   0        | Entry  | Bypass  | Entry      | Bypass   | Flow | Entry             | Bypass | Entry       | Bypass |  |  |
| 1   | North Leg (1st) | None           | 486    |         | 639        |          | 0    | 1577              |        | 0.3131      |        |  |  |
| 2   | SH 79 East Leg  | None           | 829    |         | 452        |          | 673  | 1701              |        | 0.4949      |        |  |  |
| 3   | South Leg       | None           | 0      |         | 0          |          | 448  | 0                 |        | 0.0000      |        |  |  |
| 4   | SH 79 West Leg  | None           | 639    |         | 0          |          | 833  | 2001              |        | 0.3240      |        |  |  |

| Log | Log Namos       | Bypass | Ave   | erage Delay (s | sec) | 95% Qu | eue (veh) | Level of Service |        |     |  |
|-----|-----------------|--------|-------|----------------|------|--------|-----------|------------------|--------|-----|--|
| Leg | Leg Names       | Type   | Entry | Bypass         | Leg  | Entry  | Bypass    | Entry            | Bypass | Leg |  |
| 1   | North Leg (1st) | None   | 6.72  |                | 6.72 | 1.82   |           | А                |        | Α   |  |
| 2   | SH 79 East Leg  | None   | 7.77  |                | 7.77 | 3.33   |           | Α                |        | Α   |  |
| 3   | South Leg       | None   | 0.00  |                | 0.00 | 0.00   |           | Α                |        | Α   |  |
| 4   | SH 79 West Leg  | None   | 7.31  |                | 7.31 | 2.56   |           | Α                |        | Α   |  |

## 2041 AM Peak - 15 minutes

### **Flows and Capacity**

|     |                 |                |        | Fle     | ows (veh/l    | nr)    |      | Capacity (veh/hr) |        |             |        |  |  |
|-----|-----------------|----------------|--------|---------|---------------|--------|------|-------------------|--------|-------------|--------|--|--|
| Leg | Leg Names       | Bypass<br>Type | Arriva | al Flow | Opposing Flow |        | Exit | Capacity          |        | Average VCR |        |  |  |
|     |                 | .,,,,,         | Entry  | Bypass  | Entry         | Bypass | Flow | Entry             | Bypass | Entry       | Bypass |  |  |
| 1   | North Leg (1st) | None           | 540    |         | 710           |        | 0    | 1530              |        | 0.3561      |        |  |  |
| 2   | SH 79 East Leg  | None           | 921    |         | 502           |        | 747  | 1668              |        | 0.5576      |        |  |  |
| 3   | South Leg       | None           | 0      |         | 0             |        | 431  | 0                 |        | 0.0000      |        |  |  |
| 4   | SH 79 West Leg  | None           | 710    |         | 0             |        | 925  | 2001              |        | 0.3584      |        |  |  |

| Log | Log Namoo       | Bypass | Ave   | erage Delay (s | sec) | 95% Qu | eue (veh) | Level of Service |        |     |  |
|-----|-----------------|--------|-------|----------------|------|--------|-----------|------------------|--------|-----|--|
| Leg | Leg Names       | Type   | Entry | Bypass         | Leg  | Entry  | Bypass    | Entry            | Bypass | Leg |  |
| 1   | North Leg (1st) | None   | 5.39  |                | 5.39 | 1.82   |           | Α                |        | Α   |  |
| 2   | SH 79 East Leg  | None   | 5.73  |                | 5.73 | 3.33   |           | Α                |        | Α   |  |
| 3   | South Leg       | None   | 0.00  |                | 0.00 | 0.00   |           | Α                |        | Α   |  |
| 4   | SH 79 West Leg  | None   | 5.80  |                | 5.80 | 2.56   |           | Α                |        | Α   |  |

## **Global Results**

## **Performance and Accidents**

#### 2041 AM Peak Global Performance

| Parameter       | Units   | Entries | Bypasses | Total |
|-----------------|---------|---------|----------|-------|
| Arrive Flows    | veh/hr  | 1954    |          | 1954  |
| Capacity        | veh/hr  | 5279    |          | 5279  |
| Average Delay   | sec/veh | 6.36    |          | 6.36  |
| L.O.S. (Signal) | A – F   | A       |          | Α     |
| L.O.S. (Unsig)  | A - F   | A       |          | Α     |
| Total Delay     | veh.hrs | 3.45    |          | 3.45  |

|                            | •     | •     | <b>†</b> | <i>&gt;</i> | <b>&gt;</b> | ļ          |
|----------------------------|-------|-------|----------|-------------|-------------|------------|
| Lane Group                 | WBL   | WBR   | NBT      | NBR         | SBL         | SBT        |
| Lane Configurations        | ኘ     | 7     | <b>^</b> | 7           | ሻ           | <b>†</b> † |
| Traffic Volume (vph)       | 96    | 39    | 600      | 78          | 38          | 1005       |
| Future Volume (vph)        | 96    | 39    | 600      | 78          | 38          | 1005       |
| Ideal Flow (vphpl)         | 1900  | 1900  | 1900     | 1900        | 1900        | 1900       |
| Storage Length (ft)        | 100   | 0     | 1700     | 150         | 150         | . 700      |
| Storage Lanes              | 1     | 1     |          | 130         | 1           |            |
| Taper Length (ft)          | 25    | •     |          | •           | 25          |            |
| Lane Util. Factor          | 1.00  | 1.00  | 0.95     | 1.00        | 1.00        | 0.95       |
| Frt                        | 1.00  | 0.850 | 0.75     | 0.850       | 1.00        | 0.75       |
| Flt Protected              | 0.950 | 0.000 |          | 0.000       | 0.950       |            |
| Satd. Flow (prot)          | 1770  | 1583  | 3539     | 1583        | 1770        | 3539       |
| Flt Permitted              | 0.950 | 1303  | 3337     | 1303        | 0.368       | JJJ7       |
| Satd. Flow (perm)          | 1770  | 1583  | 3539     | 1583        | 685         | 3539       |
| Right Turn on Red          | 1770  | Yes   | 3339     | Yes         | 000         | 3339       |
| - C                        |       | 42    |          | 85          |             |            |
| Satd. Flow (RTOR)          | 25    | 42    | 45       | 80          |             | 45         |
| Link Speed (mph)           |       |       | 45       |             |             |            |
| Link Distance (ft)         | 1481  |       | 398      |             |             | 1062       |
| Travel Time (s)            | 40.4  | 0.00  | 6.0      | 0.00        | 0.00        | 16.1       |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92     | 0.92        | 0.92        | 0.92       |
| Adj. Flow (vph)            | 104   | 42    | 652      | 85          | 41          | 1092       |
| Shared Lane Traffic (%)    |       |       |          |             |             | 4622       |
| Lane Group Flow (vph)      | 104   | 42    | 652      | 85          | 41          | 1092       |
| Enter Blocked Intersection | No    | No    | No       | No          | No          | No         |
| Lane Alignment             | Left  | Right | Left     | Right       | Left        | Left       |
| Median Width(ft)           | 12    |       | 12       |             |             | 12         |
| Link Offset(ft)            | 0     |       | 0        |             |             | 0          |
| Crosswalk Width(ft)        | 16    |       | 16       |             |             | 16         |
| Two way Left Turn Lane     |       |       |          |             |             |            |
| Headway Factor             | 1.00  | 1.00  | 1.00     | 1.00        | 1.00        | 1.00       |
| Turning Speed (mph)        | 15    | 9     |          | 9           | 15          |            |
| Number of Detectors        | 1     | 1     | 2        | 1           | 1           | 2          |
| Detector Template          | Left  | Right | Thru     | Right       | Left        | Thru       |
| Leading Detector (ft)      | 20    | 20    | 100      | 20          | 20          | 100        |
| Trailing Detector (ft)     | 0     | 0     | 0        | 0           | 0           | 0          |
| Detector 1 Position(ft)    | 0     | 0     | 0        | 0           | 0           | 0          |
| Detector 1 Size(ft)        | 20    | 20    | 6        | 20          | 20          | 6          |
| Detector 1 Type            | CI+Ex | CI+Ex | CI+Ex    | CI+Ex       | CI+Ex       | CI+Ex      |
| Detector 1 Channel         |       |       |          |             |             |            |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0      | 0.0         | 0.0         | 0.0        |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0      | 0.0         | 0.0         | 0.0        |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0      | 0.0         | 0.0         | 0.0        |
| Detector 2 Position(ft)    | 0.0   | 0.0   | 94       | 0.0         | 0.0         | 94         |
| Detector 2 Size(ft)        |       |       | 6        |             |             | 6          |
| Detector 2 Type            |       |       | CI+Ex    |             |             | CI+Ex      |
| Detector 2 Channel         |       |       | CITLA    |             |             | CITLA      |
| Detector 2 Extend (s)      |       |       | 0.0      |             |             | 0.0        |
|                            | Drot  | Dorm  |          | Dorm        | nmint       |            |
| Turn Type                  | Prot  | Perm  | NA       | Perm        | pm+pt       | NA         |
| Protected Phases           | 8     | 0     | 2        | 2           | 1           | 6          |
| Permitted Phases           |       | 8     |          | 2           | 6           |            |

|   | •            | •        | <b>†</b> | <i>&gt;</i> | <b>&gt;</b> | ļ           |         |
|---|--------------|----------|----------|-------------|-------------|-------------|---------|
| Lane Group                              | WBL          | WBR      | NBT      | NBR         | SBL         | SBT         |         |
| Detector Phase                          | 8            | 8        | 2        | 2           | 1           | 6           |         |
| Switch Phase                            |              |          |          |             |             |             |         |
| Minimum Initial (s)                     | 5.0          | 5.0      | 5.0      | 5.0         | 5.0         | 5.0         |         |
| Minimum Split (s)                       | 23.0         | 23.0     | 23.0     | 23.0        | 10.0        | 23.0        |         |
| Total Split (s)                         | 28.0         | 28.0     | 60.0     | 60.0        | 12.0        | 72.0        |         |
| Total Split (%)                         | 28.0%        | 28.0%    | 60.0%    | 60.0%       | 12.0%       | 72.0%       |         |
| Maximum Green (s)                       | 23.0         | 23.0     | 55.0     | 55.0        | 7.0         | 67.0        |         |
| Yellow Time (s)                         | 3.5          | 3.5      | 3.5      | 3.5         | 3.5         | 3.5         |         |
| All-Red Time (s)                        | 1.5          | 1.5      | 1.5      | 1.5         | 1.5         | 1.5         |         |
| Lost Time Adjust (s)                    | 0.0          | 0.0      | 0.0      | 0.0         | 0.0         | 0.0         |         |
| Total Lost Time (s)                     | 5.0          | 5.0      | 5.0      | 5.0         | 5.0         | 5.0         |         |
| Lead/Lag                                |              |          | Lag      | Lag         | Lead        |             |         |
| Lead-Lag Optimize?                      |              |          | Yes      | Yes         | Yes         |             |         |
| Vehicle Extension (s)                   | 3.0          | 3.0      | 3.0      | 3.0         | 3.0         | 3.0         |         |
| Recall Mode                             | None         | None     | C-Max    | C-Max       | None        | C-Max       |         |
| Walk Time (s)                           | 7.0          | 7.0      | 7.0      | 7.0         |             | 7.0         |         |
| Flash Dont Walk (s)                     | 11.0         | 11.0     | 11.0     | 11.0        |             | 11.0        |         |
| Pedestrian Calls (#/hr)                 | 0            | 0        | 0        | 0           |             | 0           |         |
| Act Effct Green (s)                     | 11.2         | 11.2     | 75.4     | 75.4        | 81.2        | 82.2        |         |
| Actuated g/C Ratio                      | 0.11         | 0.11     | 0.75     | 0.75        | 0.81        | 0.82        |         |
| v/c Ratio                               | 0.53         | 0.20     | 0.24     | 0.07        | 0.07        | 0.38        |         |
| Control Delay                           | 50.8         | 14.0     | 5.9      | 1.7         | 3.1         | 3.7         |         |
| Queue Delay                             | 0.0          | 0.0      | 0.0      | 0.0         | 0.0         | 0.0         |         |
| Total Delay                             | 50.8         | 14.0     | 5.9      | 1.7         | 3.1         | 3.7         |         |
| LOS                                     | D            | В        | Α        | А           | Α           | А           |         |
| Approach Delay                          | 40.2         |          | 5.4      |             |             | 3.6         |         |
| Approach LOS                            | D            |          | Α        |             |             | Α           |         |
| Intersection Summary                    |              |          |          |             |             |             |         |
| Area Type:                              | Other        |          |          |             |             |             |         |
| Cycle Length: 100                       |              |          |          |             |             |             |         |
| Actuated Cycle Length: 10               | 0            |          |          |             |             |             |         |
| Offset: 0 (0%), Referenced              |              | NBT and  | 6:SBTL   | Start of C  | Green       |             |         |
| Natural Cycle: 60                       |              |          | ,        |             |             |             |         |
| Control Type: Actuated-Co               | ordinated    |          |          |             |             |             |         |
| Maximum v/c Ratio: 0.53                 | o. aa.oa     |          |          |             |             |             |         |
| Intersection Signal Delay:              | 6.9          |          |          | lr          | ntersectio  | n I OS: A   |         |
| Intersection Capacity Utiliz            |              |          |          |             |             | of Service  | Α       |
| Analysis Period (min) 15                |              |          |          |             | 20 20 101   | 01 001 1100 | , , , , |
| -                                       |              |          |          |             |             |             |         |
| Splits and Phases: 3: S.                | 1st Street 8 | Pearl Av | /enue    |             |             |             |         |
| 1 | (D.)         |          |          |             |             |             |         |
| Ø1 Ø2 (                                 | (R)          |          |          |             |             |             |         |
| 12 s 60 s                               |              |          |          |             |             |             |         |

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| Intersection           |       |          |          |        |          |      |        |      |       |         |       |      |
|------------------------|-------|----------|----------|--------|----------|------|--------|------|-------|---------|-------|------|
| Int Delay, s/veh       | 3.9   |          |          |        |          |      |        |      |       |         |       |      |
| Movement               | EBL   | EBT      | EBR      | WBL    | WBT      | WBR  | NBL    | NBT  | NBR   | SBL     | SBT   | SBR  |
| Lane Configurations    | 7     | <b>^</b> | 7        | 1      | <b>^</b> | 7    | 7      | f)   |       | 7       | ĵ.    |      |
| Traffic Vol, veh/h     | 50    | 410      | 3        | 9      | 710      | 5    | 4      | 20   | 16    | 20      | 27    | 115  |
| Future Vol, veh/h      | 50    | 410      | 3        | 9      | 710      | 5    | 4      | 20   | 16    | 20      | 27    | 115  |
| Conflicting Peds, #/hr | 0     | 0        | 0        | 0      | 0        | 0    | 0      | 0    | 0     | 0       | 0     | 0    |
| Sign Control           | Free  | Free     | Free     | Free   | Free     | Free | Stop   | Stop | Stop  | Stop    | Stop  | Stop |
| RT Channelized         | -     | -        | None     | -      | -        | None | -      | -    | None  | -       | -     | None |
| Storage Length         | 200   | -        | 200      | 200    | -        | 200  | 150    | -    | -     | 150     | -     | -    |
| Veh in Median Storage, | # -   | 0        | -        | -      | 0        | -    | -      | 0    | -     | -       | 0     | -    |
| Grade, %               | -     | 0        | -        | -      | 0        | -    | -      | 0    | -     | -       | 0     | -    |
| Peak Hour Factor       | 92    | 92       | 92       | 92     | 92       | 92   | 92     | 92   | 92    | 92      | 92    | 92   |
| Heavy Vehicles, %      | 2     | 2        | 2        | 2      | 2        | 2    | 2      | 2    | 2     | 2       | 2     | 2    |
| Mvmt Flow              | 54    | 446      | 3        | 10     | 772      | 5    | 4      | 22   | 17    | 22      | 29    | 125  |
|                        |       |          |          |        |          |      |        |      |       |         |       |      |
| Major/Minor M          | ajor1 |          | <u> </u> | Major2 |          | 1    | Minor1 |      | N     | /linor2 |       |      |
| Conflicting Flow All   | 777   | 0        | 0        | 449    | 0        | 0    | 975    | 1351 | 223   | 1134    | 1349  | 386  |
| Stage 1                | -     | -        | -        | -      | -        | -    | 554    | 554  | -     | 792     | 792   | -    |
| Stage 2                | -     | -        | -        | -      | -        | -    | 421    | 797  | -     | 342     | 557   | -    |
| Critical Hdwy          | 4.14  | -        | -        | 4.14   | -        | -    | 7.54   | 6.54 | 6.94  | 7.54    | 6.54  | 6.94 |
| Critical Hdwy Stg 1    | -     | -        | -        | -      | -        | -    | 6.54   | 5.54 | -     | 6.54    | 5.54  | -    |
| Critical Hdwy Stg 2    | -     | -        | -        | -      | -        | -    | 6.54   | 5.54 | -     | 6.54    | 5.54  | -    |
| Follow-up Hdwy         | 2.22  | -        | -        | 2.22   | -        | -    | 3.52   | 4.02 | 3.32  | 3.52    | 4.02  | 3.32 |
| Pot Cap-1 Maneuver     | 835   | -        | -        | 1108   | -        | -    | 206    | 149  | 780   | 157     | 149   | 612  |
| Stage 1                | -     | -        | -        | -      | -        | -    | 484    | 512  | -     | 349     | 399   | -    |
| Stage 2                | -     | -        | -        | -      | -        | -    | 581    | 397  | -     | 646     | 510   | -    |
| Platoon blocked, %     |       | -        | -        |        | -        | -    |        |      |       |         |       |      |
| Mov Cap-1 Maneuver     | 835   | -        | -        | 1108   | -        | -    | 130    | 138  | 780   | 128     | 138   | 612  |
| Mov Cap-2 Maneuver     | -     | -        | -        | -      | -        | -    | 130    | 138  | -     | 128     | 138   | -    |
| Stage 1                | -     | -        | -        | -      | -        | -    | 453    | 479  | -     | 326     | 395   | -    |
| Stage 2                | -     | -        | -        | -      | -        | -    | 424    | 393  | -     | 564     | 477   | -    |
|                        |       |          |          |        |          |      |        |      |       |         |       |      |
| Approach               | EB    |          |          | WB     |          |      | NB     |      |       | SB      |       |      |
| HCM Control Delay, s   | 1     |          |          | 0.1    |          |      | 26     |      |       | 23.6    |       |      |
| HCM LOS                |       |          |          |        |          |      | D      |      |       | С       |       |      |
|                        |       |          |          |        |          |      |        |      |       |         |       |      |
| Minor Lane/Major Mvmt  |       | NBLn1 I  | NBLn2    | EBL    | EBT      | EBR  | WBL    | WBT  | WBR S | SBLn1   | SBLn2 |      |
| Capacity (veh/h)       |       | 130      | 218      | 835    | -        |      | 1108   | -    | -     | 128     | 370   |      |
| HCM Lane V/C Ratio     |       | 0.033    | 0.179    | 0.065  | -        |      | 0.009  | -    | -     | 0.17    | 0.417 |      |
| HCM Control Delay (s)  |       | 33.6     | 25.1     | 9.6    | -        | -    | 8.3    | -    | -     | 38.8    | 21.5  |      |
| HCM Lane LOS           |       | D        | D        | Α      | -        | -    | Α      | -    | -     | Ε       | С     |      |
| HCM 95th %tile Q(veh)  |       | 0.1      | 0.6      | 0.2    | -        | -    | 0      | -    | -     | 0.6     | 2     |      |
|                        |       |          |          |        |          |      |        |      |       |         |       |      |

| Intersection           |        |       |      |        |      |       |        |       |          |        |       |       |
|------------------------|--------|-------|------|--------|------|-------|--------|-------|----------|--------|-------|-------|
| Int Delay, s/veh       | 5.4    |       |      |        |      |       |        |       |          |        |       |       |
| Movement               | EBL    | EBT   | EBR  | WBL    | WBT  | WBR   | NBL    | NBT   | NBR      | SBL    | SBT   | SBR   |
| Lane Configurations    |        | 4     |      |        | 4    |       |        | 4     |          |        | 4     |       |
| Traffic Vol, veh/h     | 26     | 25    | 90   | 15     | 25   | 10    | 25     | 25    | 10       | 10     | 25    | 55    |
| Future Vol, veh/h      | 26     | 25    | 90   | 15     | 25   | 10    | 25     | 25    | 10       | 10     | 25    | 55    |
| Conflicting Peds, #/hr | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0     | 0        | 0      | 0     | 0     |
| Sign Control           | Free   | Free  | Free | Free   | Free | Free  | Stop   | Stop  | Stop     | Stop   | Stop  | Stop  |
| RT Channelized         | -      | -     | None | -      | -    | None  | -      | -     | None     | -      | -     | None  |
| Storage Length         | -      | -     | -    | -      | -    | -     | -      | -     | -        | -      | -     | -     |
| Veh in Median Storage  | -, # - | 0     | -    | -      | 0    | -     | -      | 0     | -        | -      | 0     | -     |
| Grade, %               | -      | 0     | -    | -      | 0    | -     | -      | 0     | -        | -      | 0     | -     |
| Peak Hour Factor       | 92     | 92    | 92   | 92     | 92   | 92    | 92     | 92    | 92       | 92     | 92    | 92    |
| Heavy Vehicles, %      | 2      | 2     | 2    | 2      | 2    | 2     | 2      | 2     | 2        | 2      | 2     | 2     |
| Mvmt Flow              | 28     | 27    | 98   | 16     | 27   | 11    | 27     | 27    | 11       | 11     | 27    | 60    |
|                        |        |       |      |        |      |       |        |       |          |        |       |       |
| Major/Minor N          | Major1 |       | N    | Major2 |      | 1     | Vinor1 |       | <u> </u> | Minor2 |       |       |
| Conflicting Flow All   | 38     | 0     | 0    | 125    | 0    | 0     | 240    | 202   | 76       | 216    | 246   | 33    |
| Stage 1                | -      | -     | -    | -      | -    | -     | 132    | 132   | -        | 65     | 65    | -     |
| Stage 2                | -      | -     | -    | -      | -    | -     | 108    | 70    | -        | 151    | 181   | -     |
| Critical Hdwy          | 4.12   | -     | -    | 4.12   | -    | -     | 7.12   | 6.52  | 6.22     | 7.12   | 6.52  | 6.22  |
| Critical Hdwy Stg 1    | -      | -     | -    | -      | -    | -     | 6.12   | 5.52  | -        | 6.12   | 5.52  | -     |
| Critical Hdwy Stg 2    | -      | -     | -    | -      | -    | -     | 6.12   | 5.52  | -        | 6.12   | 5.52  | -     |
| Follow-up Hdwy         | 2.218  | -     | -    | 2.218  | -    | -     | 3.518  | 4.018 | 3.318    | 3.518  | 4.018 | 3.318 |
| Pot Cap-1 Maneuver     | 1572   | -     | -    | 1462   | -    | -     | 714    | 694   | 985      | 740    | 656   | 1041  |
| Stage 1                | -      | -     | -    | -      | -    | -     | 871    | 787   | -        | 946    | 841   | -     |
| Stage 2                | -      | -     | -    | -      | -    | -     | 897    | 837   | -        | 851    | 750   | -     |
| Platoon blocked, %     |        | -     | -    |        | -    | -     |        |       |          |        |       |       |
| Mov Cap-1 Maneuver     | 1572   | -     | -    | 1462   | -    | -     | 636    | 673   | 985      | 693    | 636   | 1041  |
| Mov Cap-2 Maneuver     | -      | -     | -    | -      | -    | -     | 636    | 673   | -        | 693    | 636   | -     |
| Stage 1                | -      | -     | -    | -      | -    | -     | 854    | 772   | -        | 928    | 832   | -     |
| Stage 2                | -      | -     | -    | -      | -    | -     | 809    | 828   | -        | 797    | 736   | -     |
|                        |        |       |      |        |      |       |        |       |          |        |       |       |
| Approach               | EB     |       |      | WB     |      |       | NB     |       |          | SB     |       |       |
| HCM Control Delay, s   | 1.4    |       |      | 2.2    |      |       | 10.7   |       |          | 9.8    |       |       |
| HCM LOS                |        |       |      |        |      |       | В      |       |          | Α      |       |       |
|                        |        |       |      |        |      |       |        |       |          |        |       |       |
| Minor Lane/Major Mvm   | it N   | NBLn1 | EBL  | EBT    | EBR  | WBL   | WBT    | WBR S | SBLn1    |        |       |       |
| Capacity (veh/h)       |        | 693   | 1572 | -      | -    | 1462  | -      | -     | 844      |        |       |       |
| HCM Lane V/C Ratio     |        | 0.094 |      | -      |      | 0.011 | -      | -     | 0.116    |        |       |       |
| HCM Control Delay (s)  |        | 10.7  | 7.3  | 0      | -    | 7.5   | 0      | -     | 9.8      |        |       |       |
| HCM Lane LOS           |        | В     | Α    | Α      | -    | Α     | Α      | -     | Α        |        |       |       |
| HCM 95th %tile Q(veh)  |        | 0.3   | 0.1  | -      | -    | 0     | -      | -     | 0.4      |        |       |       |
|                        |        |       |      |        |      |       |        |       |          |        |       |       |

| Intersection           |              |        |                 |                |          |          |
|------------------------|--------------|--------|-----------------|----------------|----------|----------|
| Int Delay, s/veh       | 10           |        |                 |                |          |          |
| Movement               | EBT          | EBR    | WBL             | WBT            | NBL      | NBR      |
| Lane Configurations    | <u> </u>     | T T    | VVDL            | <u>₩</u>       | NDL      | NDK<br>7 |
| Traffic Vol., veh/h    | <b>T</b> 135 | 115    | <b>1</b><br>217 | <b>T</b><br>85 | 199      | 293      |
| Future Vol, veh/h      | 135          | 115    | 217             | 85             | 199      | 293      |
| ·                      |              |        |                 |                |          |          |
| Conflicting Peds, #/hr | 0            | 0      | 0               | 0              | O Cton   | O Cton   |
| Sign Control           | Free         | Free   | Free            | Free           | Stop     | Stop     |
| RT Channelized         | -            | Free   | -               | None           | -        | Free     |
| Storage Length         | -            | 175    | 175             | -              | 0        | 100      |
| Veh in Median Storage  |              | -      | -               | 0              | 0        | -        |
| Grade, %               | 0            | -      | -               | 0              | 0        | -        |
| Peak Hour Factor       | 92           | 92     | 92              | 92             | 92       | 92       |
| Heavy Vehicles, %      | 2            | 2      | 2               | 2              | 2        | 2        |
| Mvmt Flow              | 147          | 125    | 236             | 92             | 216      | 318      |
|                        |              |        |                 |                |          |          |
| Major/Minor            | Majar1       | N      | Malara          |                | \ linar1 |          |
|                        | Major1       |        | Major2          |                | Minor1   |          |
| Conflicting Flow All   | 0            | -      | 147             | 0              | 711      | -        |
| Stage 1                | -            | -      | -               | -              | 147      | -        |
| Stage 2                | -            | -      | -               | -              | 564      | -        |
| Critical Hdwy          | -            | -      | 4.12            | -              | 6.42     | -        |
| Critical Hdwy Stg 1    | -            | -      | -               | -              | 5.42     | -        |
| Critical Hdwy Stg 2    | -            | -      | -               | -              | 5.42     | -        |
| Follow-up Hdwy         | -            | -      | 2.218           | -              | 3.518    | -        |
| Pot Cap-1 Maneuver     | -            | 0      | 1435            | -              | 400      | 0        |
| Stage 1                | -            | 0      | -               | -              | 880      | 0        |
| Stage 2                | -            | 0      | -               | -              | 569      | 0        |
| Platoon blocked, %     | -            |        |                 | -              |          |          |
| Mov Cap-1 Maneuver     | -            | -      | 1435            | _              | 334      | _        |
| Mov Cap-2 Maneuver     | -            | _      | -               | _              | 408      | _        |
| Stage 1                | _            | _      | _               | _              | 880      | _        |
| Stage 2                | _            |        | _               | _              | 476      | _        |
| Stage 2                |              |        |                 |                | 470      |          |
|                        |              |        |                 |                |          |          |
| Approach               | EB           |        | WB              |                | NB       |          |
| HCM Control Delay, s   | 0            |        | 5.7             |                | 23.4     |          |
| HCM LOS                |              |        |                 |                | С        |          |
|                        |              |        |                 |                |          |          |
|                        |              | .D     | UDI C           |                | 14/5-    | 14/5-    |
| Minor Lane/Major Mvm   | nt N         | IBLn11 | NBLn2           | EBT            | WBL      | WBT      |
| Capacity (veh/h)       |              | 408    | -               |                | 1435     | -        |
| HCM Lane V/C Ratio     |              | 0.53   | -               | -              | 0.164    | -        |
| HCM Control Delay (s)  |              | 23.4   | 0               | -              | 8        | -        |
| HCM Lane LOS           |              | С      | Α               | -              | Α        | -        |
| HCM 95th %tile Q(veh   | )            | 3      | -               | -              | 0.6      | -        |
|                        |              |        |                 |                |          |          |

# **Operational Data**

## **Main Geometry (ft)**

## **Approach and Entry Geometry**

| Leg | Leg Names         | Approach<br>Bearing<br>(deg) | Grade<br>Separation<br>G | Half Width<br>V | Approach<br>Lanes<br>n | Entry<br>Width<br>E | Entry<br>Lanes<br>n | Flare<br>Length<br>L' | Entry<br>Radius<br>R | Entry<br>Angle<br>? |
|-----|-------------------|------------------------------|--------------------------|-----------------|------------------------|---------------------|---------------------|-----------------------|----------------------|---------------------|
| 1   | North Leg (1st)   | 0                            | 0                        | 24.00           | 2                      | 28.00               | 2                   | 90.00                 | 100.00               | 25.00               |
| 2   | SH 79 East Leg    | 90                           | 0                        | 24.00           | 2                      | 28.00               | 2                   | 90.00                 | 100.00               | 25.00               |
| 3   | South Leg         | 180                          | 0                        | 16.00           | 1                      | 16.00               | 1                   | 90.00                 | 100.00               | 25.00               |
| 4   | SH 79 West<br>Leg | 270                          | 0                        | 24.00           | 2                      | 28.00               | 2                   | 90.00                 | 100.00               | 25.00               |

## **Circulating and Exit Geometry**

| Leg | Leg Names         | Inscribed<br>Diameter<br>D | Circulating<br>Width<br>C | Circulating<br>Lanes<br>nc | Exit<br>Width<br>Ex | Exit<br>Lanes<br>nex | Exit<br>Half Width<br>Vx | Exit Half<br>Width Lanes<br>nvx |
|-----|-------------------|----------------------------|---------------------------|----------------------------|---------------------|----------------------|--------------------------|---------------------------------|
| 1   | North Leg (1st)   | 200.00                     | 28.00                     | 2                          | 28.00               | 1                    | 16.00                    | 1                               |
| 2   | SH 79 East Leg    | 200.00                     | 28.00                     | 2                          | 28.00               | 2                    | 24.00                    | 2                               |
| 3   | South Leg         | 200.00                     | 28.00                     | 2                          | 28.00               | 2                    | 16.00                    | 2                               |
| 4   | SH 79 West<br>Leg | 200.00                     | 28.00                     | 2                          | 28.00               | 2                    | 24.00                    | 2                               |

## **Traffic Flow Data (veh/hr)**

#### 2041 PM Peak Peak Hour Flows

|     |                   |        |        | Turning Flows | Flow Modifiers |        |             |                |                     |
|-----|-------------------|--------|--------|---------------|----------------|--------|-------------|----------------|---------------------|
| Leg | Leg Names         | U-Turn | Exit-3 | Exit-2        | Exit-1         | Bypass | Trucks<br>% | Flow<br>Factor | Peak Hour<br>Factor |
| 1   | North Leg (1st)   | 0      | 321    | 0             | 383            | 0      | 5.0         | 1.00           | 0.9                 |
| 2   | SH 79 East Leg    | 0      | 0      | 460           | 196            | 0      | 5.0         | 1.00           | 0.9                 |
| 3   | South Leg         | 0      | 0      | 0             | 0              | 0      | 5.0         | 1.00           | 0.9                 |
| 4   | SH 79 West<br>Leg | 0      | 631    | 540           | 0              | 0      | 5.0         | 1.00           | 0.9                 |

# **Operational Results**

## 2041 PM Peak - 60 minutes

## **Flows and Capacity**

|     | _               |                | Flows (veh/hr) |        |                   |        |      |          | Capacity (veh/hr) |             |        |  |
|-----|-----------------|----------------|----------------|--------|-------------------|--------|------|----------|-------------------|-------------|--------|--|
| Leg | Leg Names       | Bypass<br>Type | Arrival Flow   |        | low Opposing Flow |        | Exit | Capacity |                   | Average VCR |        |  |
|     |                 | .,,,,,         | Entry          | Bypass | Entry             | Bypass | Flow | Entry    | Bypass            | Entry       | Bypass |  |
| 1   | North Leg (1st) | None           | 704            |        | 1171              |        | 0    | 1225     |                   | 0.5959      |        |  |
| 2   | SH 79 East Leg  | None           | 656            |        | 952               |        | 923  | 1370     |                   | 0.4901      |        |  |
| 3   | South Leg       | None           | 0              |        | 0                 |        | 827  | 0        |                   | 0.0000      |        |  |
| 4   | SH 79 West Leg  | None           | 1171           |        | 0                 |        | 781  | 2001     |                   | 0.5967      |        |  |

| Log | Bypas           |      | Ave   | rage Delay (s | sec)  | 95% Qu | eue (veh) | Level of Service |        |     |
|-----|-----------------|------|-------|---------------|-------|--------|-----------|------------------|--------|-----|
| Leg | Leg Names       | Type | Entry | Bypass        | Leg   | Entry  | Bypass    | Entry            | Bypass | Leg |
| 1   | North Leg (1st) | None | 15.17 |               | 15.17 | 8.00   |           | С                |        | С   |
| 2   | SH 79 East Leg  | None | 9.82  |               | 9.82  | 4.04   |           | Α                |        | Α   |
| 3   | South Leg       | None | 0.00  |               | 0.00  | 0.00   |           | Α                |        | Α   |
| 4   | SH 79 West Leg  | None | 10.87 |               | 10.87 | 7.18   |           | В                |        | В   |

## 2041 PM Peak - 15 minutes

### **Flows and Capacity**

|     |                 |                | Flows (veh/hr) |        |                            |        |      | Capacity (veh/hr) |        |             |        |
|-----|-----------------|----------------|----------------|--------|----------------------------|--------|------|-------------------|--------|-------------|--------|
| Leg | Leg Names       | Bypass<br>Type | Arrival Flow   |        | Arrival Flow Opposing Flow |        | Exit | Capacity          |        | Average VCR |        |
|     |                 | .,,,,,         | Entry          | Bypass | Entry                      | Bypass | Flow | Entry             | Bypass | Entry       | Bypass |
| 1   | North Leg (1st) | None           | 782            |        | 1298                       |        | 0    | 1140              |        | 0.7039      |        |
| 2   | SH 79 East Leg  | None           | 729            |        | 1054                       |        | 1021 | 1302              |        | 0.5679      |        |
| 3   | South Leg       | None           | 0              |        | 0                          |        | 796  | 0                 |        | 0.0000      |        |
| 4   | SH 79 West Leg  | None           | 1301           |        | 0                          |        | 864  | 2001              |        | 0.6603      |        |

| Log | Log Namos       | Bypass | Average Delay (sec) |        |       | 95% Queue (veh) |        | Level of Service |        |     |
|-----|-----------------|--------|---------------------|--------|-------|-----------------|--------|------------------|--------|-----|
| Leg | Leg Names       | Type   | Entry               | Bypass | Leg   | Entry           | Bypass | Entry            | Bypass | Leg |
| 1   | North Leg (1st) | None   | 14.32               |        | 14.32 | 8.00            |        | В                |        | В   |
| 2   | SH 79 East Leg  | None   | 8.17                |        | 8.17  | 4.04            |        | Α                |        | Α   |
| 3   | South Leg       | None   | 0.00                |        | 0.00  | 0.00            |        | Α                |        | Α   |
| 4   | SH 79 West Leg  | None   | 8.51                |        | 8.51  | 7.18            |        | Α                |        | Α   |

## **Global Results**

## **Performance and Accidents**

#### 2041 PM Peak Global Performance

| Parameter       | Units   | Entries | Bypasses | Total |
|-----------------|---------|---------|----------|-------|
| Arrive Flows    | veh/hr  | 2531    |          | 2531  |
| Capacity        | veh/hr  | 4595    |          | 4595  |
| Average Delay   | sec/veh | 10.80   |          | 10.80 |
| L.O.S. (Signal) | A – F   | В       |          | В     |
| L.O.S. (Unsig)  | A – F   | В       |          | В     |
| Total Delay     | veh.hrs | 7.59    |          | 7.59  |

|                            | •     | •           | <b>†</b>    | <i>&gt;</i> | <b>/</b> | ļ        |
|----------------------------|-------|-------------|-------------|-------------|----------|----------|
| Lane Group                 | WBL   | WBR         | NBT         | NBR         | SBL      | SBT      |
| Lane Configurations        | 77    | <u>₩Ы</u> ₹ | <b>↑</b> ↑  | TVDIX       | JDL      | <b>*</b> |
| Traffic Volume (vph)       | 103   | 46          | <b>1125</b> | 99          | 43       | 800      |
| Future Volume (vph)        | 103   | 46          | 1125        | 99          | 43       | 800      |
| Ideal Flow (vphpl)         | 1900  | 1900        | 1900        | 1900        | 1900     | 1900     |
| Storage Length (ft)        | 1900  | 1900        | 1900        | 150         | 150      | 1900     |
|                            | 100   | 1           |             | 130         | 130      |          |
| Storage Lanes              | 25    | ı           |             | ı           | 25       |          |
| Taper Length (ft)          |       | 1.00        | 0.05        | 1.00        |          | 0.05     |
| Lane Util. Factor          | 1.00  | 1.00        | 0.95        | 1.00        | 1.00     | 0.95     |
| Frt                        | 0.050 | 0.850       |             | 0.850       | 0.050    |          |
| Flt Protected              | 0.950 | 4500        | 0500        | 4500        | 0.950    | 0500     |
| Satd. Flow (prot)          | 1770  | 1583        | 3539        | 1583        | 1770     | 3539     |
| Flt Permitted              | 0.950 |             |             |             | 0.177    |          |
| Satd. Flow (perm)          | 1770  | 1583        | 3539        | 1583        | 330      | 3539     |
| Right Turn on Red          |       | Yes         |             | Yes         |          |          |
| Satd. Flow (RTOR)          |       | 50          |             | 94          |          |          |
| Link Speed (mph)           | 25    |             | 45          |             |          | 45       |
| Link Distance (ft)         | 1481  |             | 398         |             |          | 1062     |
| Travel Time (s)            | 40.4  |             | 6.0         |             |          | 16.1     |
| Peak Hour Factor           | 0.92  | 0.92        | 0.92        | 0.92        | 0.92     | 0.92     |
| Adj. Flow (vph)            | 112   | 50          | 1223        | 108         | 47       | 870      |
| Shared Lane Traffic (%)    | 112   | 30          | 1220        | 100         | 77       | 070      |
| Lane Group Flow (vph)      | 112   | 50          | 1223        | 108         | 47       | 870      |
| Enter Blocked Intersection | No    | No          | No          | No          | No       | No       |
| Lane Alignment             | Left  |             | Left        |             | Left     | Left     |
| · ·                        |       | Right       |             | Right       | Leit     |          |
| Median Width(ft)           | 12    |             | 12          |             |          | 12       |
| Link Offset(ft)            | 0     |             | 0           |             |          | 0        |
| Crosswalk Width(ft)        | 16    |             | 16          |             |          | 16       |
| Two way Left Turn Lane     |       |             |             |             |          |          |
| Headway Factor             | 1.00  | 1.00        | 1.00        | 1.00        | 1.00     | 1.00     |
| Turning Speed (mph)        | 15    | 9           |             | 9           | 15       |          |
| Number of Detectors        | 1     | 1           | 2           | 1           | 1        | 2        |
| Detector Template          | Left  | Right       | Thru        | Right       | Left     | Thru     |
| Leading Detector (ft)      | 20    | 20          | 100         | 20          | 20       | 100      |
| Trailing Detector (ft)     | 0     | 0           | 0           | 0           | 0        | 0        |
| Detector 1 Position(ft)    | 0     | 0           | 0           | 0           | 0        | 0        |
| Detector 1 Size(ft)        | 20    | 20          | 6           | 20          | 20       | 6        |
| Detector 1 Type            | CI+Ex | CI+Ex       | Cl+Ex       | CI+Ex       | CI+Ex    | Cl+Ex    |
| Detector 1 Channel         | CITEX | CITEX       | CITEX       | CITEX       | CITEX    | CITEX    |
|                            | 0.0   | 0.0         | 0.0         | 0.0         | 0.0      | 0.0      |
| Detector 1 Extend (s)      |       |             | 0.0         | 0.0         | 0.0      |          |
| Detector 1 Queue (s)       | 0.0   | 0.0         | 0.0         | 0.0         | 0.0      | 0.0      |
| Detector 1 Delay (s)       | 0.0   | 0.0         | 0.0         | 0.0         | 0.0      | 0.0      |
| Detector 2 Position(ft)    |       |             | 94          |             |          | 94       |
| Detector 2 Size(ft)        |       |             | 6           |             |          | 6        |
| Detector 2 Type            |       |             | CI+Ex       |             |          | CI+Ex    |
| Detector 2 Channel         |       |             |             |             |          |          |
| Detector 2 Extend (s)      |       |             | 0.0         |             |          | 0.0      |
| Turn Type                  | Prot  | Perm        | NA          | Perm        | pm+pt    | NA       |
| Protected Phases           | 8     |             | 2           |             | 1        | 6        |
| Permitted Phases           |       | 8           |             | 2           | 6        |          |
| . ommod i nasos            |       | U           |             |             | U        |          |

|   | •             | •         | <b>†</b>        | <i>&gt;</i> | <b>/</b> | ļ          |
|---|---------------|-----------|-----------------|-------------|----------|------------|
| Lane Group                                  | WBL           | WBR       | NBT             | NBR         | SBL      | SBT        |
| Detector Phase                              | 8             | 8         | 2               | 2           | 1        | 6          |
| Switch Phase                                |               |           |                 |             |          |            |
| Minimum Initial (s)                         | 5.0           | 5.0       | 5.0             | 5.0         | 5.0      | 5.0        |
| Minimum Split (s)                           | 23.0          | 23.0      | 23.0            | 23.0        | 10.0     | 23.0       |
| Total Split (s)                             | 28.0          | 28.0      | 60.0            | 60.0        | 12.0     | 72.0       |
| Total Split (%)                             | 28.0%         | 28.0%     | 60.0%           | 60.0%       | 12.0%    | 72.0%      |
| Maximum Green (s)                           | 23.0          | 23.0      | 55.0            | 55.0        | 7.0      | 67.0       |
| Yellow Time (s)                             | 3.5           | 3.5       | 3.5             | 3.5         | 3.5      | 3.5        |
| All-Red Time (s)                            | 1.5           | 1.5       | 1.5             | 1.5         | 1.5      | 1.5        |
| Lost Time Adjust (s)                        | 0.0           | 0.0       | 0.0             | 0.0         | 0.0      | 0.0        |
| Total Lost Time (s)                         | 5.0           | 5.0       | 5.0             | 5.0         | 5.0      | 5.0        |
| Lead/Lag                                    |               |           | Lag             | Lag         | Lead     |            |
| Lead-Lag Optimize?                          | 2.0           | 2.0       | Yes             | Yes         | Yes      | 2.0        |
| Vehicle Extension (s)                       | 3.0           | 3.0       | 3.0             | 3.0         | 3.0      | 3.0        |
| Recall Mode                                 | None          | None      | C-Max           | C-Max       | None     | C-Max      |
| Walk Time (s)                               | 7.0           | 7.0       | 7.0             | 7.0         |          | 7.0        |
| Flash Dont Walk (s)                         | 11.0          | 11.0      | 11.0            | 11.0        |          | 11.0<br>0  |
| Pedestrian Calls (#/hr) Act Effct Green (s) | 11.6          | 0<br>11.6 | 71.5            | 71.5        | 78.4     | 78.4       |
| Actuated g/C Ratio                          | 0.12          | 0.12      | 0.72            | 0.72        | 0.78     | 0.78       |
| v/c Ratio                                   | 0.12          | 0.12      | 0.72            | 0.72        | 0.76     | 0.76       |
| Control Delay                               | 50.9          | 13.2      | 8.3             | 2.2         | 3.8      | 3.7        |
| Queue Delay                                 | 0.0           | 0.0       | 0.0             | 0.0         | 0.0      | 0.0        |
| Total Delay                                 | 50.9          | 13.2      | 8.3             | 2.2         | 3.8      | 3.7        |
| LOS   | J0.7          | 13.2<br>B | 0.5<br>A        | Α.2         | 3.0<br>A | 3.7<br>A   |
| Approach Delay                              | 39.3          | D         | 7.8             | А           | А        | 3.7        |
| Approach LOS                                | D             |           | Α.              |             |          | 3.7<br>A   |
|   | D             |           | 7.              |             |          | Α.         |
| Intersection Summary                        |               |           |                 |             |          |            |
| Area Type:                                  | Other         |           |                 |             |          |            |
| Cycle Length: 100                           | •             |           |                 |             |          |            |
| Actuated Cycle Length: 10                   |               | NDT       | L COTI          | 01 1 6      |          |            |
| Offset: 0 (0%), Referenced                  | to phase 2    | INB I and | 16:SBTL,        | Start of C  | reen     |            |
| Natural Cycle: 60                           |               |           |                 |             |          |            |
| Control Type: Actuated-Co                   | ordinated     |           |                 |             |          |            |
| Maximum v/c Ratio: 0.55                     | 0.4           |           |                 |             |          | - LOC A    |
| Intersection Signal Delay:                  |               |           |                 |             |          | n LOS: A   |
| Intersection Capacity Utiliz                | alion 49.8%   |           |                 | 10          | JU Level | of Service |
| Analysis Period (min) 15                    |               |           |                 |             |          |            |
| Splits and Phases: 3: S.                    | 1st Street 8  | Doorl A   | 10 <b>0</b> 110 |             |          |            |
| Spills and Phases. 3. 3.                    | 151 311 661 6 | reali A   | venue           |             |          |            |
| ▶ø1 <b>T</b> ø2(                            | (R)           |           |                 |             |          |            |
| 12 s 60 s                                   |               |           |                 |             |          |            |

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Ø6 (R) 🥊

| Intersection           |         |          |        |        |          |      |           |      |      |           |       |      |
|------------------------|---------|----------|--------|--------|----------|------|-----------|------|------|-----------|-------|------|
| Int Delay, s/veh       | 9.2     |          |        |        |          |      |           |      |      |           |       |      |
| Movement               | EBL     | EBT      | EBR    | WBL    | WBT      | WBR  | NBL       | NBT  | NBR  | SBL       | SBT   | SBR  |
| Lane Configurations    | ሻ       | <b>^</b> | 7      | ሻ      | <b>^</b> | 7    | ሻ         | f)   |      | ሻ         | 4     |      |
| Traffic Vol, veh/h     | 90      | 765      | 6      | 46     | 575      | 15   | 6         | 19   | 27   | 50        | 29    | 75   |
| Future Vol, veh/h      | 90      | 765      | 6      | 46     | 575      | 15   | 6         | 19   | 27   | 50        | 29    | 75   |
| Conflicting Peds, #/hr | 0       | 0        | 0      | 0      | 0        | 0    | 0         | 0    | 0    | 0         | 0     | 0    |
| Sign Control           | Free    | Free     | Free   | Free   | Free     | Free | Stop      | Stop | Stop | Stop      | Stop  | Stop |
| RT Channelized         | -       | -        | None   | -      | -        | None | -         | -    | None | -         | -     | None |
| Storage Length         | 200     | -        | 200    | 200    | -        | 200  | 150       | -    | -    | 150       | -     | -    |
| Veh in Median Storage, | , # -   | 0        | -      | -      | 0        | -    | -         | 0    | -    | -         | 0     | -    |
| Grade, %               | -       | 0        | -      | -      | 0        | -    | -         | 0    | -    | -         | 0     | -    |
| Peak Hour Factor       | 92      | 92       | 92     | 92     | 92       | 92   | 92        | 92   | 92   | 92        | 92    | 92   |
| Heavy Vehicles, %      | 2       | 2        | 2      | 2      | 2        | 2    | 2         | 2    | 2    | 2         | 2     | 2    |
| Mvmt Flow              | 98      | 832      | 7      | 50     | 625      | 16   | 7         | 21   | 29   | 54        | 32    | 82   |
|                        |         |          |        |        |          |      |           |      |      |           |       |      |
| Major/Minor N          | /lajor1 |          |        | Major2 |          | 1    | Minor1    |      |      | Minor2    |       |      |
| Conflicting Flow All   | 641     | 0        | 0      | 839    | 0        | 0    | 1457      | 1769 | 416  | 1348      | 1760  | 313  |
| Stage 1                | -       | -        | -      | -      | -        | -    | 1028      | 1028 | -    | 725       | 725   | -    |
| Stage 2                | -       | -        | -      | -      | -        | -    | 429       | 741  | -    | 623       | 1035  | -    |
| Critical Hdwy          | 4.14    | _        | -      | 4.14   | -        | -    | 7.54      | 6.54 | 6.94 | 7.54      | 6.54  | 6.94 |
| Critical Hdwy Stg 1    |         | -        | _      |        | -        | -    | 6.54      | 5.54 | -    | 6.54      | 5.54  |      |
| Critical Hdwy Stg 2    | -       | -        | -      | -      | -        | -    | 6.54      | 5.54 | -    | 6.54      | 5.54  | -    |
| Follow-up Hdwy         | 2.22    | -        | _      | 2.22   | -        | -    | 3.52      | 4.02 | 3.32 | 3.52      | 4.02  | 3.32 |
| Pot Cap-1 Maneuver     | 939     | -        | -      | 791    | -        | -    | 91        | 83   | 585  | 109       | 84    | 683  |
| Stage 1                | -       | -        | _      | -      | -        | _    | 251       | 310  | -    | 383       | 428   | -    |
| Stage 2                | -       | -        | -      | _      | -        | -    | 574       | 421  | -    | 440       | 307   | -    |
| Platoon blocked, %     |         | -        | -      |        | -        | _    |           |      |      |           |       |      |
| Mov Cap-1 Maneuver     | 939     | _        | -      | 791    | -        | -    | 46        | 70   | 585  | 71        | 71    | 683  |
| Mov Cap-2 Maneuver     | -       | -        | -      | -      | -        | -    | 46        | 70   | -    | 71        | 71    | -    |
| Stage 1                | -       | -        | -      | -      | -        | -    | 225       | 278  | -    | 343       | 401   | -    |
| Stage 2                | -       | -        | -      | -      | -        | -    | 436       | 394  | -    | 347       | 275   | -    |
| <u> </u>               |         |          |        |        |          |      |           |      |      |           |       |      |
| Approach               | EB      |          |        | WB     |          |      | NB        |      |      | SB        |       |      |
| HCM Control Delay, s   | 1       |          |        | 0.7    |          |      | 48.6      |      |      | 76.7      |       |      |
| HCM LOS                | I       |          |        | 0.7    |          |      | 40.0<br>E |      |      | 76.7<br>F |       |      |
| TIOWI LOG              |         |          |        |        |          |      |           |      |      | 1         |       |      |
| Minor Long/Maior M     |         | UDL 1 I  | NIDL 2 | EDI    | EDT      | EDD  | WDI       | WDT  | WDD  | CDI 1     | CDL O |      |
| Minor Lane/Major Mvmt  | t l     | VBLn1 I  |        | EBL    | EBT      | EBR  | WBL       | WBT  |      |           | SBLn2 |      |
| Capacity (veh/h)       |         | 46       | 145    | 939    | -        | -    | 791       | -    | -    | 71        | 201   |      |
| HCM Cantral Dalay (a)  |         |          | 0.345  |        | -        | -    | 0.063     | -    |      |           | 0.562 |      |
| HCM Control Delay (s)  |         | 95.8     | 42.4   | 9.3    | -        | -    | 9.9       | -    |      | 145.2     | 43.7  |      |
| HCM Lane LOS           |         | F        | E      | A      | -        | -    | A         | -    | -    | F         | E     |      |
| HCM 95th %tile Q(veh)  |         | 0.5      | 1.4    | 0.3    | -        | -    | 0.2       | -    | -    | 3.6       | 3     |      |

| Int Delay, s/veh 6  Movement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR                 |
|--|
| Movement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR                                     |
|  |
| Lane Configurations 💠 💠  |
| Traffic Vol, veh/h 52 25 90 15 25 10 30 25 10 10 25 74                                       |
| Future Vol, veh/h 52 25 90 15 25 10 30 25 10 10 25 74  |
| Conflicting Peds, #/hr 0 0 0 0 0 0 0 0 0 0 0   |
| Sign Control Free Free Free Free Free Free Stop Stop Stop Stop Stop Stop                     |
| RT Channelized None None None  |
| Storage Length   |
| Veh in Median Storage, # - 0 0 0 0   |
| Grade, % - 0 0 0 0   |
| Peak Hour Factor 92 92 92 92 92 92 92 92 92 92 92 92   |
| Heavy Vehicles, % 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2  |
| Mvmt Flow 57 27 98 16 27 11 33 27 11 11 27 80  |
|  |
| Major/Minor Major1 Major2 Minor1 Minor2  |
| Conflicting Flow All 38 0 0 125 0 0 308 260 76 274 304 33                                    |
| Stage 1 190 190 - 65 65  |
| Stage 2 118 70 - 209 239   |
| Critical Hdwy 4.12 4.12 7.12 6.52 6.22 7.12 6.52 6.22  |
| Critical Hdwy Stg 1 6.12 5.52 - 6.12 5.52  |
| Critical Hdwy Stg 2 6.12 5.52 - 6.12 5.52  |
| Follow-up Hdwy 2.218 2.218 3.518 4.018 3.318 3.518 4.018 3.318                               |
| Pot Cap-1 Maneuver 1572 - 1462 - 644 645 985 678 609 1041                                    |
| Stage 1 812 743 - 946 841  |
| Stage 2 887 837 - 793 708  |
| Platoon blocked, %   |
| Mov Cap-1 Maneuver 1572 1462 551 613 985 624 579 1041  |
| Mov Cap-2 Maneuver 551 613 - 624 579   |
| Stage 1 780 714 - 909 832  |
| Stage 2 783 828 - 725 680  |
|  |
| Approach EB WB NB SB   |
|  |
| HCM Control Delay, s       2.3       2.2       11.6       10         HCM LOS       B       B |
| HOWI LOS B   |
| MI I MI MI NOL A FOL FOT FOR WINL WINT WIND CO. 4  |
| Minor Lane/Major Mvmt NBLn1 EBL EBT EBR WBL WBT WBR SBLn1                                    |
| Capacity (veh/h) 617 1572 1462 837   |
| HCM Lane V/C Ratio 0.115 0.036 0.011 0.142   |
| HCM Control Delay (s) 11.6 7.4 0 - 7.5 0 - 10  |
| HCM Lane LOS B A A - A A - B   |
| HCM 95th %tile Q(veh) 0.4 0.1 0 0.5  |

| Intersection           |          |         |        |          |        |      |
|------------------------|----------|---------|--------|----------|--------|------|
| Int Delay, s/veh       | 7.1      |         |        |          |        |      |
| Movement               | EBT      | EBR     | WBL    | WBT      | NBL    | NBR  |
| Lane Configurations    | <b>†</b> | 7       | ች      | <b>↑</b> | *      | 7    |
| Traffic Vol, veh/h     | 70       | 160     | 260    | 75       | 80     | 130  |
| Future Vol, veh/h      | 70       | 160     | 260    | 75       | 80     | 130  |
| Conflicting Peds, #/hr | 0        | 0       | 0      | 0        | 0      | 0    |
| Sign Control           | Free     | Free    | Free   | Free     | Stop   | Stop |
| RT Channelized         | -        | Free    | -      | None     | -      | Free |
| Storage Length         | _        | 175     | 175    | -        | 0      | 100  |
| Veh in Median Storage  |          | -       | -      | 0        | 0      | -    |
| Grade, %               | 0        | _       | _      | 0        | 0      | _    |
| Peak Hour Factor       | 92       | 92      | 92     | 92       | 92     | 92   |
| Heavy Vehicles, %      | 2        | 2       | 2      | 2        | 2      | 2    |
| Mvmt Flow              | 76       | 174     | 283    | 82       | 87     | 141  |
| IVIVIIIL FIOW          | 70       | 1/4     | 203    | 02       | 0/     | 141  |
|                        |          |         |        |          |        |      |
| Major/Minor N          | Najor1   | 1       | Major2 | N        | Minor1 |      |
| Conflicting Flow All   | 0        | -       | 76     | 0        | 724    | -    |
| Stage 1                | -        | -       | -      | -        | 76     | -    |
| Stage 2                | -        | -       | -      | -        | 648    | -    |
| Critical Hdwy          | -        | -       | 4.12   | -        | 6.42   | -    |
| Critical Hdwy Stg 1    | -        | -       | -      | -        | 5.42   | -    |
| Critical Hdwy Stg 2    | -        | -       | -      | -        | 5.42   | -    |
| Follow-up Hdwy         | -        | -       | 2.218  | -        | 3.518  | -    |
| Pot Cap-1 Maneuver     | -        | 0       | 1523   | -        | 393    | 0    |
| Stage 1                | _        | 0       | _      | _        | 947    | 0    |
| Stage 2                | _        | 0       | _      | _        | 521    | 0    |
| Platoon blocked, %     |          | U       |        | _        | 021    | U    |
| Mov Cap-1 Maneuver     | _        | _       | 1523   | _        | 320    | _    |
| Mov Cap-1 Maneuver     | _        | _       | 1020   | _        | 374    | _    |
| Stage 1                | _        |         | _      |          | 947    | _    |
| · ·                    | _        | -       | -      | _        | 424    | _    |
| Stage 2                | -        | -       | -      | -        | 424    | -    |
|                        |          |         |        |          |        |      |
| Approach               | EB       |         | WB     |          | NB     |      |
| HCM Control Delay, s   | 0        |         | 6.1    |          | 17.5   |      |
| HCM LOS                |          |         |        |          | С      |      |
|                        |          |         |        |          |        |      |
| Minor Long/Maior M     |          | JDI1 I  | UDL 2  | EDT      | MDI    | WDT  |
| Minor Lane/Major Mvm   | t ľ      | VBLn1 N | NRTU7  | EBT      | WBL    | WBT  |
| Capacity (veh/h)       |          | 374     | -      | -        | 1523   | -    |
| HCM Lane V/C Ratio     |          | 0.233   | -      | -        | 0.186  | -    |
| HCM Control Delay (s)  |          | 17.5    | 0      | -        | 7.9    | -    |
| HCM Lane LOS           |          | С       | Α      | -        | Α      | -    |
| HCM 95th %tile Q(veh)  |          | 0.9     | -      | -        | 0.7    | -    |
|                        |          |         |        |          |        |      |

# **Operational Data**

# **Main Geometry (ft)**

# **Approach and Entry Geometry**

| Leg | Leg Names         | Approach<br>Bearing<br>(deg) | Grade<br>Separation<br>G | Half Width<br>V | Approach<br>Lanes<br>n | Entry<br>Width<br>E | Entry<br>Lanes<br>n | Flare<br>Length<br>L' | Entry<br>Radius<br>R | Entry<br>Angle<br>? |
|-----|-------------------|------------------------------|--------------------------|-----------------|------------------------|---------------------|---------------------|-----------------------|----------------------|---------------------|
| 1   | North Leg (1st)   | 0                            | 0                        | 24.00           | 2                      | 28.00               | 2                   | 90.00                 | 100.00               | 25.00               |
| 2   | SH 79 East Leg    | 90                           | 0                        | 24.00           | 2                      | 28.00               | 2                   | 90.00                 | 100.00               | 25.00               |
| 3   | South Leg         | 180                          | 0                        | 16.00           | 1                      | 16.00               | 1                   | 90.00                 | 100.00               | 25.00               |
| 4   | SH 79 West<br>Leg | 270                          | 0                        | 24.00           | 2                      | 28.00               | 2                   | 90.00                 | 100.00               | 25.00               |

### **Circulating and Exit Geometry**

| Leg | Leg Names         | Inscribed<br>Diameter<br>D | Circulating<br>Width<br>C | Circulating<br>Lanes<br>nc | Exit<br>Width<br>Ex | Exit<br>Lanes<br>nex | Exit<br>Half Width<br>Vx | Exit Half<br>Width Lanes<br>nvx |
|-----|-------------------|----------------------------|---------------------------|----------------------------|---------------------|----------------------|--------------------------|---------------------------------|
| 1   | North Leg (1st)   | 200.00                     | 28.00                     | 2                          | 28.00               | 1                    | 16.00                    | 1                               |
| 2   | SH 79 East Leg    | 200.00                     | 28.00                     | 2                          | 28.00               | 2                    | 24.00                    | 2                               |
| 3   | South Leg         | 200.00                     | 28.00                     | 2                          | 28.00               | 1                    | 16.00                    | 1                               |
| 4   | SH 79 West<br>Leg | 200.00                     | 28.00                     | 2                          | 28.00               | 2                    | 24.00                    | 2                               |

Project: Bennett Crossing Filing 5 Scheme: 2041 Total

Rodel-Win1 - Full Geometry

# Traffic Flow Data (veh/hr)

#### 2041 AM Peak Peak Hour Flows

|     |                   |        |        | Turning Flows |        | Flow Modifiers |             |                |                     |  |
|-----|-------------------|--------|--------|---------------|--------|----------------|-------------|----------------|---------------------|--|
| Leg | Leg Names         | U-Turn | Exit-3 | Exit-2        | Exit-1 | Bypass         | Trucks<br>% | Flow<br>Factor | Peak Hour<br>Factor |  |
| 1   | North Leg (1st)   | 0      | 145    | 0             | 350    | 0              | 5.0         | 1.00           | 0.9                 |  |
| 2   | SH 79 East Leg    | 0      | 0      | 480           | 210    | 0              | 5.0         | 1.00           | 0.9                 |  |
| 3   | South Leg         | 0      | 0      | 0             | 0      | 0              | 5.0         | 1.00           | 0.9                 |  |
| 4   | SH 79 West<br>Leg | 0      | 635    | 570           | 0      | 0              | 5.0         | 1.00           | 0.9                 |  |

# **Operational Results**

# 2041 AM Peak - 60 minutes

# **Flows and Capacity**

|               |                 | <b>D</b>     |       | Fle           | ows (veh/l | nr)    | Capacity (veh/hr) |       |             |        |        |
|---------------|-----------------|--------------|-------|---------------|------------|--------|-------------------|-------|-------------|--------|--------|
| Leg Leg Names | Bypass<br>Type  | Arrival Flow |       | Opposing Flow |            | Exit   | Capacity          |       | Average VCR |        |        |
|               |                 | . , , , ,    | Entry | Bypass        | Entry      | Bypass | Flow              | Entry | Bypass      | Entry  | Bypass |
| 1             | North Leg (1st) | None         | 495   |               | 1205       |        | 0                 | 1202  |             | 0.4228 |        |
| 2             | SH 79 East Leg  | None         | 690   |               | 780        |        | 920               | 1484  |             | 0.4746 |        |
| 3             | South Leg       | None         | 0     |               | 0          |        | 845               | 0     |             | 0.0000 |        |
| 4             | SH 79 West Leg  | None         | 1205  |               | 0          |        | 625               | 2001  |             | 0.6146 |        |

### Delays, Queues and Level of Service

| Log | Leg Names       | Bypass | Ave   | erage Delay (s | sec)  | 95% Qu | eue (veh) | Level of Service |        |     |
|-----|-----------------|--------|-------|----------------|-------|--------|-----------|------------------|--------|-----|
| Leg | Leg Names       | Type   | Entry | Bypass         | Leg   | Entry  | Bypass    | Entry            | Bypass | Leg |
| 1   | North Leg (1st) | None   | 9.60  |                | 9.60  | 3.15   |           | Α                |        | Α   |
| 2   | SH 79 East Leg  | None   | 9.14  |                | 9.14  | 3.76   |           | Α                |        | Α   |
| 3   | South Leg       | None   | 0.00  |                | 0.00  | 0.00   |           | Α                |        | Α   |
| 4   | SH 79 West Leg  | None   | 11.39 |                | 11.39 | 7.85   |           | В                |        | В   |

# 2041 AM Peak - 15 minutes

### **Flows and Capacity**

|               |                 | <b>D</b>     |       | Fle           | ows (veh/l | nr)    | Capacity (veh/hr) |       |             |        |        |
|---------------|-----------------|--------------|-------|---------------|------------|--------|-------------------|-------|-------------|--------|--------|
| Leg Leg Names | Bypass<br>Type  | Arrival Flow |       | Opposing Flow |            | Exit   | Capacity          |       | Average VCR |        |        |
|               |                 | .,,,,,       | Entry | Bypass        | Entry      | Bypass | Flow              | Entry | Bypass      | Entry  | Bypass |
| 1             | North Leg (1st) | None         | 550   |               | 1337       |        | 0                 | 1114  |             | 0.5009 |        |
| 2             | SH 79 East Leg  | None         | 767   |               | 865        |        | 1021              | 1427  |             | 0.5443 |        |
| 3             | South Leg       | None         | 0     |               | 0          |        | 814               | 0     |             | 0.0000 |        |
| 4             | SH 79 West Leg  | None         | 1339  |               | 0          |        | 694               | 2001  |             | 0.6801 |        |

# **Delays, Queues and Level of Service**

| Log | Log Namos       | Bypass | Ave   | erage Delay (s | sec) | 95% Qu | eue (veh) | Level of Service |        |     |
|-----|-----------------|--------|-------|----------------|------|--------|-----------|------------------|--------|-----|
| Leg | Leg Names       | Type   | Entry | Bypass         | Leg  | Entry  | Bypass    | Entry            | Bypass | Leg |
| 1   | North Leg (1st) | None   | 8.34  |                | 8.34 | 3.15   |           | Α                |        | Α   |
| 2   | SH 79 East Leg  | None   | 7.39  |                | 7.39 | 3.76   |           | Α                |        | Α   |
| 3   | South Leg       | None   | 0.00  |                | 0.00 | 0.00   |           | Α                |        | Α   |
| 4   | SH 79 West Leg  | None   | 9.01  |                | 9.01 | 7.85   |           | Α                |        | Α   |

Project: Bennett Crossing Filing 5 Scheme: 2041 Total

Rodel-Win1 - Full Geometry

# **Global Results**

# **Performance and Accidents**

#### 2041 AM Peak Global Performance

| Parameter       | Units   | Entries | Bypasses | Total |
|-----------------|---------|---------|----------|-------|
| Arrive Flows    | veh/hr  | 2390    |          | 2390  |
| Capacity        | veh/hr  | 4687    |          | 4687  |
| Average Delay   | sec/veh | 9.37    |          | 9.37  |
| L.O.S. (Signal) | A – F   | A       |          | Α     |
| L.O.S. (Unsig)  | A – F   | A       |          | Α     |
| Total Delay     | veh.hrs | 6.22    |          | 6.22  |

|                            | •           | •           | <b>†</b>   | ~           | <b>&gt;</b> | ļ          |
|----------------------------|-------------|-------------|------------|-------------|-------------|------------|
| Lane Group                 | WBL         | WBR         | NBT        | NBR         | SBL         | SBT        |
| Lane Configurations        | ች           | 7           | <b>^</b>   | 7           | *           | <b>^</b>   |
| Traffic Volume (vph)       | 160         | 45          | 610        | 100         | 40          | 1035       |
| Future Volume (vph)        | 160         | 45          | 610        | 100         | 40          | 1035       |
| Ideal Flow (vphpl)         | 1900        | 1900        | 1900       | 1900        | 1900        | 1900       |
| Storage Length (ft)        | 1900        | 0           | 1700       | 150         | 150         | 1700       |
|                            | 100         | 1           |            | 130         | 150         |            |
| Storage Lanes              | •           |             |            |             |             |            |
| Taper Length (ft)          | 25          | 1.00        | 0.05       | 1.00        | 25          | 0.05       |
| Lane Util. Factor          | 1.00        | 1.00        | 0.95       | 1.00        | 1.00        | 0.95       |
| Frt                        |             | 0.850       |            | 0.850       |             |            |
| Flt Protected              | 0.950       |             |            |             | 0.950       |            |
| Satd. Flow (prot)          | 1770        | 1583        | 3539       | 1583        | 1770        | 3539       |
| Flt Permitted              | 0.950       |             |            |             | 0.354       |            |
| Satd. Flow (perm)          | 1770        | 1583        | 3539       | 1583        | 659         | 3539       |
| Right Turn on Red          |             | Yes         |            | Yes         |             |            |
| Satd. Flow (RTOR)          |             | 49          |            | 109         |             |            |
| Link Speed (mph)           | 25          |             | 45         |             |             | 45         |
| Link Distance (ft)         | 1481        |             | 398        |             |             | 1062       |
| Travel Time (s)            | 40.4        |             | 6.0        |             |             | 16.1       |
| Peak Hour Factor           | 0.92        | 0.92        | 0.92       | 0.92        | 0.92        | 0.92       |
| Adj. Flow (vph)            | 174         | 49          | 663        | 109         | 43          | 1125       |
| Shared Lane Traffic (%)    | 174         | 47          | 003        | 107         | 40          | 1123       |
|                            | 171         | 40          | 642        | 100         | 42          | 1100       |
| Lane Group Flow (vph)      | 174         | 49          | 663        | 109         | 43          | 1125       |
| Enter Blocked Intersection | No          | No          | No         | No          | No          | No         |
| Lane Alignment             | Left        | Right       | Left       | Right       | Left        | Left       |
| Median Width(ft)           | 12          |             | 12         |             |             | 12         |
| Link Offset(ft)            | 0           |             | 0          |             |             | 0          |
| Crosswalk Width(ft)        | 16          |             | 16         |             |             | 16         |
| Two way Left Turn Lane     |             |             |            |             |             |            |
| Headway Factor             | 1.00        | 1.00        | 1.00       | 1.00        | 1.00        | 1.00       |
| Turning Speed (mph)        | 15          | 9           |            | 9           | 15          |            |
| Number of Detectors        | 1           | 1           | 2          | 1           | 1           | 2          |
| Detector Template          | Left        | Right       | Thru       | Right       | Left        | Thru       |
| Leading Detector (ft)      | 20          | 20          | 100        | 20          | 20          | 100        |
| Trailing Detector (ft)     | 0           | 0           | 0          | 0           | 0           | 0          |
| Detector 1 Position(ft)    | Ū           | 0           | 0          | 0           | 0           | 0          |
|                            | 0           |             |            |             |             |            |
| Detector 1 Size(ft)        | 20<br>CL Ev | 20<br>CL Ev | 6<br>CL Ev | 20<br>CL Ev | 20<br>CL Ev | 6<br>CL Ev |
| Detector 1 Type            | CI+Ex       | Cl+Ex       | CI+Ex      | CI+Ex       | Cl+Ex       | CI+Ex      |
| Detector 1 Channel         |             |             |            |             |             |            |
| Detector 1 Extend (s)      | 0.0         | 0.0         | 0.0        | 0.0         | 0.0         | 0.0        |
| Detector 1 Queue (s)       | 0.0         | 0.0         | 0.0        | 0.0         | 0.0         | 0.0        |
| Detector 1 Delay (s)       | 0.0         | 0.0         | 0.0        | 0.0         | 0.0         | 0.0        |
| Detector 2 Position(ft)    |             |             | 94         |             |             | 94         |
| Detector 2 Size(ft)        |             |             | 6          |             |             | 6          |
| Detector 2 Type            |             |             | CI+Ex      |             |             | CI+Ex      |
| Detector 2 Channel         |             |             |            |             |             |            |
| Detector 2 Extend (s)      |             |             | 0.0        |             |             | 0.0        |
| Turn Type                  | Perm        | Perm        | NA         | Perm        | pm+pt       | NA         |
| Protected Phases           | . 0/111     | . 01111     | 2          | . 01111     | 1           | 6          |
| Permitted Phases           | 8           | Q           |            | 2           | 6           | U          |
| remilled Fliases           | Ŏ           | 8           |            | 2           | 0           |            |

|  | •            | •         | <b>†</b> | /          | <b>&gt;</b> | ļ          |      |
|--|--------------|-----------|----------|------------|-------------|------------|------|
| Lane Group   | WBL          | WBR       | NBT      | NBR        | SBL         | SBT        |      |
| Detector Phase   | 8            | 8         | 2        | 2          | 1           | 6          |      |
| Switch Phase   |              |           |          |            |             |            |      |
| Minimum Initial (s)                                      | 5.0          | 5.0       | 5.0      | 5.0        | 5.0         | 5.0        |      |
| Minimum Split (s)  | 23.0         | 23.0      | 23.0     | 23.0       | 10.0        | 23.0       |      |
| Total Split (s)  | 28.0         | 28.0      | 60.0     | 60.0       | 12.0        | 72.0       |      |
| Total Split (%)  | 28.0%        | 28.0%     | 60.0%    | 60.0%      | 12.0%       | 72.0%      |      |
| Maximum Green (s)  | 23.0         | 23.0      | 55.0     | 55.0       | 7.0         | 67.0       |      |
| Yellow Time (s)  | 3.5          | 3.5       | 3.5      | 3.5        | 3.5         | 3.5        |      |
| All-Red Time (s)   | 1.5          | 1.5       | 1.5      | 1.5        | 1.5         | 1.5        |      |
| Lost Time Adjust (s)                                     | 0.0          | 0.0       | 0.0      | 0.0        | 0.0         | 0.0        |      |
| Total Lost Time (s)                                      | 5.0          | 5.0       | 5.0      | 5.0        | 5.0         | 5.0        |      |
| Lead/Lag   |              |           | Lag      | Lag        | Lead        |            |      |
| Lead-Lag Optimize?                                       |              |           | Yes      | Yes        | Yes         |            |      |
| Vehicle Extension (s)                                    | 3.0          | 3.0       | 3.0      | 3.0        | 3.0         | 3.0        |      |
| Recall Mode  | None         | None      | C-Max    | C-Max      | None        | C-Max      |      |
| Walk Time (s)  | 7.0          | 7.0       | 7.0      | 7.0        |             | 7.0        |      |
| Flash Dont Walk (s)                                      | 11.0         | 11.0      | 11.0     | 11.0       |             | 11.0       |      |
| Pedestrian Calls (#/hr)                                  | 0            | 0         | 0        | 0          | 740         | 0          |      |
| Act Effet Green (s)                                      | 15.1         | 15.1      | 68.0     | 68.0       | 74.9        | 74.9       |      |
| Actuated g/C Ratio                                       | 0.15         | 0.15      | 0.68     | 0.68       | 0.75        | 0.75       |      |
| v/c Ratio  | 0.65         | 0.17      | 0.28     | 0.10       | 0.08        | 0.42       |      |
| Control Delay  | 51.1         | 11.4      | 8.0      | 2.1        | 4.3         | 5.6        |      |
| Queue Delay  | 0.0          | 0.0       | 0.0      | 0.0        | 0.0         | 0.0        |      |
| Total Delay<br>LOS                                       | 51.1<br>D    | 11.4<br>B | 8.0<br>A | 2.1<br>A   | 4.3<br>A    | 5.6<br>A   |      |
| Approach Delay   | 42.4         | D         | 7.2      | А          | А           | 5.6        |      |
| Approach LOS   | 42.4<br>D    |           | 7.2<br>A |            |             | 3.0<br>A   |      |
| •  | D            |           | Α        |            |             | А          |      |
| Intersection Summary                                     |              |           |          |            |             |            |      |
| Area Type:   | Other        |           |          |            |             |            |      |
| Cycle Length: 100  | <b>^</b>     |           |          |            |             |            |      |
| Actuated Cycle Length: 100                               |              | NDT and   | / CDTI   | Charl of C | <b></b>     |            |      |
| Offset: 0 (0%), Referenced                               | to phase 2   | ing i and | 0:5B1L,  | Start or C | reen        |            |      |
| Natural Cycle: 60  | ordinated    |           |          |            |             |            |      |
| Control Type: Actuated-Co<br>Maximum v/c Ratio: 0.65     | orumateu     |           |          |            |             |            |      |
| viaximum v/c Railo: 0.65<br>Intersection Signal Delay: 9 | 0 0          |           |          | l,         | ntersectio  | n I OS: A  |      |
| Intersection Capacity Utilization                        |              |           |          |            |             | of Service | ٨    |
| Analysis Period (min) 15                                 | au011 43.0%  |           |          |            | 50 Level    | or service | A    |
| Analysis Feriou (IIIII) 13                               |              |           |          |            |             |            |      |
| Splits and Phases: 3: S.                                 | 1st Street 8 | Pearl A   | /enue    |            |             |            |      |
| \ \  | <b>D</b> 1   |           |          |            |             |            |      |
| Ø1 Ø2(   | K)           |           |          |            |             |            |      |
| 12 s 60 s  |              |           |          |            |             |            |      |
| ₩ Ø6 (R)   |              |           |          |            |             |            | ▼ Ø8 |

| Intersection           |        |          |       |        |          |      |        |      |       |        |       |      |
|------------------------|--------|----------|-------|--------|----------|------|--------|------|-------|--------|-------|------|
| Int Delay, s/veh       | 6.4    |          |       |        |          |      |        |      |       |        |       |      |
| Movement               | EBL    | EBT      | EBR   | WBL    | WBT      | WBR  | NBL    | NBT  | NBR   | SBL    | SBT   | SBR  |
| Lane Configurations    |        | <b>^</b> | 7     | ሻ      | <b>^</b> | 7    | ሻ      | ĵ.   |       | ሻ      | f)    |      |
| Traffic Vol, veh/h     | 50     | 410      | 20    | 10     | 710      | 5    | 55     | 30   | 20    | 20     | 30    | 115  |
| Future Vol, veh/h      | 50     | 410      | 20    | 10     | 710      | 5    | 55     | 30   | 20    | 20     | 30    | 115  |
| Conflicting Peds, #/hr | 0      | 0        | 0     | 0      | 0        | 0    | 0      | 0    | 0     | 0      | 0     | 0    |
| Sign Control           | Free   | Free     | Free  | Free   | Free     | Free | Stop   | Stop | Stop  | Stop   | Stop  | Stop |
| RT Channelized         | -      | -        | None  | -      | -        | None | -      | -    | None  | -      | -     | None |
| Storage Length         | 200    | -        | 200   | 200    | -        | 200  | 150    | -    | -     | 150    | -     | -    |
| Veh in Median Storage, | # -    | 0        | -     | -      | 0        | -    | -      | 0    | -     | -      | 0     | -    |
| Grade, %               | -      | 0        | -     | -      | 0        | -    | -      | 0    | -     | -      | 0     | -    |
| Peak Hour Factor       | 92     | 92       | 92    | 92     | 92       | 92   | 92     | 92   | 92    | 92     | 92    | 92   |
| Heavy Vehicles, %      | 2      | 2        | 2     | 2      | 2        | 2    | 2      | 2    | 2     | 2      | 2     | 2    |
| Mvmt Flow              | 54     | 446      | 22    | 11     | 772      | 5    | 60     | 33   | 22    | 22     | 33    | 125  |
|                        |        |          |       |        |          |      |        |      |       |        |       |      |
| Major/Minor M          | lajor1 |          | ١     | Major2 |          | N    | Minor1 |      | N     | Minor2 |       |      |
| Conflicting Flow All   | 777    | 0        | 0     | 468    | 0        | 0    | 979    | 1353 | 223   | 1142   | 1370  | 386  |
| Stage 1                | -      | -        | -     | -      | -        | -    | 554    | 554  | -     | 794    | 794   | -    |
| Stage 2                | -      | -        | -     | -      | -        | -    | 425    | 799  | -     | 348    | 576   | -    |
| Critical Hdwy          | 4.14   | -        | -     | 4.14   | -        | -    | 7.54   | 6.54 | 6.94  | 7.54   | 6.54  | 6.94 |
| Critical Hdwy Stg 1    | -      | -        | -     | -      | -        | -    | 6.54   | 5.54 | -     | 6.54   | 5.54  | -    |
| Critical Hdwy Stg 2    | -      | -        | -     | -      | -        | -    | 6.54   | 5.54 | -     | 6.54   | 5.54  | -    |
| Follow-up Hdwy         | 2.22   | -        | -     | 2.22   | -        | -    | 3.52   | 4.02 | 3.32  | 3.52   | 4.02  | 3.32 |
| Pot Cap-1 Maneuver     | 835    | -        | -     | 1090   | -        | -    | 204    | 149  | 780   | 155    | 145   | 612  |
| Stage 1                | -      | -        | -     | -      | -        | -    | 484    | 512  | -     | 348    | 398   | -    |
| Stage 2                | -      | -        | -     | -      | -        | -    | 578    | 396  | -     | 641    | 500   | -    |
| Platoon blocked, %     |        | -        | -     |        | -        | -    |        |      |       |        |       |      |
| Mov Cap-1 Maneuver     | 835    | -        | -     | 1090   | -        | -    | 125    | 138  | 780   | 117    | 134   | 612  |
| Mov Cap-2 Maneuver     | -      | -        | -     | -      | -        | -    | 125    | 138  | -     | 117    | 134   | -    |
| Stage 1                | -      | -        | -     | -      | -        | -    | 453    | 479  | -     | 325    | 394   | -    |
| Stage 2                | -      | -        | -     | -      | -        | -    | 418    | 392  | -     | 543    | 468   | -    |
|                        |        |          |       |        |          |      |        |      |       |        |       |      |
| Approach               | EB     |          |       | WB     |          |      | NB     |      |       | SB     |       |      |
| HCM Control Delay, s   | 1      |          |       | 0.1    |          |      | 43.9   |      |       | 25.7   |       |      |
| HCM LOS                |        |          |       |        |          |      | Ε      |      |       | D      |       |      |
|                        |        |          |       |        |          |      |        |      |       |        |       |      |
| Minor Lane/Major Mvmt  |        | NBLn1 i  | NBLn2 | EBL    | EBT      | EBR  | WBL    | WBT  | WBR S | SBLn1: | SBLn2 |      |
| Capacity (veh/h)       |        | 125      | 206   | 835    | -        | -    |        | -    | -     |        | 352   |      |
| HCM Lane V/C Ratio     |        |          | 0.264 |        | _        | _    | 0.01   | _    | _     | 0.186  |       |      |
| HCM Control Delay (s)  |        | 57.8     | 28.6  | 9.6    | -        | -    | 8.3    | -    | -     |        | 23.3  |      |
| HCM Lane LOS           |        | F        | D     | А      | -        | -    | A      | -    | -     | E      | С     |      |
| HCM 95th %tile Q(veh)  |        | 2.2      | 1     | 0.2    | -        | -    | 0      | -    | -     | 0.6    | 2.2   |      |
|                        |        |          |       |        |          |      |        |      |       |        |       |      |

| Intersection           |        |           |          |        |      |          |        |       |           |        |       |       |
|------------------------|--------|-----------|----------|--------|------|----------|--------|-------|-----------|--------|-------|-------|
| Int Delay, s/veh       | 6.5    |           |          |        |      |          |        |       |           |        |       |       |
| Movement               | EBL    | EBT       | EBR      | WBL    | WBT  | WBR      | NBL    | NBT   | NBR       | SBL    | SBT   | SBR   |
| Lane Configurations    |        | 4         |          |        | 4    |          |        | 4     |           |        | 4     |       |
| Traffic Vol, veh/h     | 50     | 25        | 90       | 15     | 25   | 10       | 25     | 25    | 10        | 10     | 25    | 125   |
| Future Vol, veh/h      | 50     | 25        | 90       | 15     | 25   | 10       | 25     | 25    | 10        | 10     | 25    | 125   |
| Conflicting Peds, #/hr | 0      | 0         | 0        | 0      | 0    | 0        | 0      | 0     | 0         | 0      | 0     | 0     |
| Sign Control           | Free   | Free      | Free     | Free   | Free | Free     | Stop   | Stop  | Stop      | Stop   | Stop  | Stop  |
| RT Channelized         | -      | -         | None     | -      | -    | None     | -      | -     | None      | -      | -     | None  |
| Storage Length         | -      | -         | -        | -      | -    | -        | -      | -     | -         | -      | -     | -     |
| Veh in Median Storage  | e,# -  | 0         | -        | -      | 0    | -        | -      | 0     | -         | -      | 0     | -     |
| Grade, %               | -      | 0         | -        | -      | 0    | -        | -      | 0     | -         | -      | 0     | -     |
| Peak Hour Factor       | 85     | 85        | 85       | 85     | 85   | 85       | 85     | 85    | 85        | 85     | 85    | 85    |
| Heavy Vehicles, %      | 2      | 2         | 2        | 2      | 2    | 2        | 2      | 2     | 2         | 2      | 2     | 2     |
| Mvmt Flow              | 59     | 29        | 106      | 18     | 29   | 12       | 29     | 29    | 12        | 12     | 29    | 147   |
|                        |        |           |          |        |      |          |        |       |           |        |       |       |
| Major/Minor N          | Major1 |           | 1        | Major2 |      | - 1      | Minor1 |       | - 1       | Minor2 |       |       |
| Conflicting Flow All   | 41     | 0         | 0        | 135    | 0    | 0        | 359    | 277   | 82        | 292    | 324   | 35    |
| Stage 1                | -      | -         | -        | -      | -    | -        | 200    | 200   | -         | 71     | 71    | -     |
| Stage 2                | -      | -         | -        | -      | -    | -        | 159    | 77    | -         | 221    | 253   | -     |
| Critical Hdwy          | 4.12   | -         | -        | 4.12   | -    | -        | 7.12   | 6.52  | 6.22      | 7.12   | 6.52  | 6.22  |
| Critical Hdwy Stg 1    | -      | -         | -        | -      | -    | -        | 6.12   | 5.52  | -         | 6.12   | 5.52  | -     |
| Critical Hdwy Stg 2    | -      | -         | -        | -      | -    | -        | 6.12   | 5.52  | -         | 6.12   | 5.52  | -     |
| Follow-up Hdwy         | 2.218  | -         | -        | 2.218  | -    | -        | 3.518  | 4.018 | 3.318     | 3.518  | 4.018 | 3.318 |
| Pot Cap-1 Maneuver     | 1568   | -         | -        | 1449   | -    | -        | 596    | 631   | 978       | 660    | 594   | 1038  |
| Stage 1                | -      | -         | -        | -      | -    | -        | 802    | 736   | -         | 939    | 836   | -     |
| Stage 2                | -      | -         | -        | -      | -    | -        | 843    | 831   | -         | 781    | 698   | -     |
| Platoon blocked, %     |        | -         | -        |        | -    | -        |        |       |           |        |       |       |
| Mov Cap-1 Maneuver     | 1568   | -         | -        | 1449   | -    | -        | 471    | 598   | 978       | 602    | 563   | 1038  |
| Mov Cap-2 Maneuver     | -      | -         | -        | -      | -    | -        | 471    | 598   | -         | 602    | 563   | -     |
| Stage 1                | -      | -         | -        | -      | -    | -        | 769    | 706   | -         | 901    | 825   | -     |
| Stage 2                | -      | -         | -        | -      | -    | -        | 689    | 820   | -         | 709    | 669   | -     |
|                        |        |           |          |        |      |          |        |       |           |        |       |       |
| Approach               | EB     |           |          | WB     |      |          | NB     |       |           | SB     |       |       |
| HCM Control Delay, s   | 2.2    |           |          | 2.3    |      |          | 12.2   |       |           | 10.2   |       |       |
| HCM LOS                |        |           |          |        |      |          | В      |       |           | В      |       |       |
|                        |        |           |          |        |      |          |        |       |           |        |       |       |
| Minor Lane/Major Mvm   | nt N   | NBLn1     | EBL      | EBT    | EBR  | WBL      | WBT    | WBR   | SRI n1    |        |       |       |
| Capacity (veh/h)       | it I   | 571       | 1568     | LDI    | LDIX | 1449     | -      | VVDIX | 882       |        |       |       |
| HCM Lane V/C Ratio     |        | 0.124     |          | -      |      | 0.012    | -      |       | 0.213     |        |       |       |
| HCM Control Delay (s)  |        | 12.2      | 7.4      | 0      | -    | 7.5      | 0      | -     | 10.2      |        |       |       |
| HCM Lane LOS           |        | 12.2<br>B | 7.4<br>A | A      | -    | 7.5<br>A | A      | -     | 10.2<br>B |        |       |       |
| HCM 95th %tile Q(veh)  | )      | 0.4       | 0.1      | -<br>- | -    | 0        | - A    | -     | 0.8       |        |       |       |
| 110W 73W 70W Q(VCH)    |        | 0.4       | 0.1      |        |      | - 0      |        |       | 0.0       |        |       |       |

| Intersection           |          |         |          |          |          |        |
|------------------------|----------|---------|----------|----------|----------|--------|
| Int Delay, s/veh       | 10.8     |         |          |          |          |        |
| Movement               | EBT      | EBR     | WBL      | WBT      | NBL      | NBR    |
| Lane Configurations    | <u> </u> | T T     | NDE<br>T | <u>₩</u> | NDL<br>1 | NDK    |
| Traffic Vol, veh/h     | 135      | 125     | 230      | 85       | 205      | 300    |
| Future Vol, veh/h      | 135      | 125     | 230      | 85       | 205      | 300    |
|                        | 0        | 0       | 230      | 0        |          |        |
| Conflicting Peds, #/hr |          |         |          |          | O Ctop   | O Ctop |
| Sign Control           | Free     | Free    | Free     | Free     | Stop     | Stop   |
| RT Channelized         | -        | Free    | 175      | None     | -        | Free   |
| Storage Length         | -        | 175     | 175      | -        | 0        | 100    |
| Veh in Median Storage  |          | -       | -        | 0        | 0        | -      |
| Grade, %               | 0        | -       | -        | 0        | 0        | -      |
| Peak Hour Factor       | 92       | 92      | 92       | 92       | 92       | 92     |
| Heavy Vehicles, %      | 2        | 2       | 2        | 2        | 2        | 2      |
| Mvmt Flow              | 147      | 136     | 250      | 92       | 223      | 326    |
|                        |          |         |          |          |          |        |
| Major/Minor            | Major1   | ľ       | Major2   | N        | Minor1   |        |
| Conflicting Flow All   | 0        |         | 147      | 0        | 739      | _      |
| Stage 1                | -        | -       | 147      | -        | 147      | _      |
|                        | -        | -       | -        | -        | 592      | -      |
| Stage 2                | -        | -       | 110      |          |          |        |
| Critical Hdwy          | -        | -       | 4.12     | -        | 6.42     | -      |
| Critical Hdwy Stg 1    | -        | -       | -        | -        | 5.42     | -      |
| Critical Hdwy Stg 2    | -        | -       | -        | -        | 5.42     | -      |
| Follow-up Hdwy         | -        |         |          | -        | 3.518    | -      |
| Pot Cap-1 Maneuver     | -        | 0       | 1435     | -        | 385      | 0      |
| Stage 1                | -        | 0       | -        | -        | 880      | 0      |
| Stage 2                | -        | 0       | -        | -        | 553      | 0      |
| Platoon blocked, %     | -        |         |          | -        |          |        |
| Mov Cap-1 Maneuver     | -        | -       | 1435     | -        | 318      | -      |
| Mov Cap-2 Maneuver     | -        | -       | -        | -        | 392      | -      |
| Stage 1                | -        | -       | -        | -        | 880      | -      |
| Stage 2                | -        | -       | -        | -        | 457      | -      |
| J. J. G.               |          |         |          |          |          |        |
|                        | - FD     |         | 14/5     |          | ND       |        |
| Approach               | EB       |         | WB       |          | NB       |        |
| HCM Control Delay, s   | 0        |         | 5.9      |          | 25.6     |        |
| HCM LOS                |          |         |          |          | D        |        |
|                        |          |         |          |          |          |        |
| Minor Lane/Major Mvm   | nt N     | NBLn1 N | VIRI n2  | EBT      | WBL      | WBT    |
|                        | ic I     | 392     |          |          |          |        |
| Capacity (veh/h)       |          |         | -        |          | 1435     | -      |
| HCM Cantral Dalay (a)  |          | 0.568   | -        |          | 0.174    | -      |
| HCM Control Delay (s)  |          | 25.6    | 0        | -        | 8        | -      |
| HCM Lane LOS           |          | D       | Α        | -        | A        | -      |
| HCM 95th %tile Q(veh   | )        | 3.4     | -        | -        | 0.6      | -      |
|                        |          |         |          |          |          |        |

# **Operational Data**

# **Main Geometry (ft)**

# **Approach and Entry Geometry**

| Leg | Leg Names         | Approach<br>Bearing<br>(deg) | Grade<br>Separation<br>G | Half Width<br>V | Approach<br>Lanes<br>n | Entry<br>Width<br>E | Entry<br>Lanes<br>n | Flare<br>Length<br>L' | Entry<br>Radius<br>R | Entry<br>Angle<br>? |
|-----|-------------------|------------------------------|--------------------------|-----------------|------------------------|---------------------|---------------------|-----------------------|----------------------|---------------------|
| 1   | North Leg (1st)   | 0                            | 0                        | 24.00           | 2                      | 28.00               | 2                   | 90.00                 | 100.00               | 25.00               |
| 2   | SH 79 East Leg    | 90                           | 0                        | 24.00           | 2                      | 28.00               | 2                   | 90.00                 | 100.00               | 25.00               |
| 3   | South Leg         | 180                          | 0                        | 16.00           | 1                      | 16.00               | 1                   | 90.00                 | 100.00               | 25.00               |
| 4   | SH 79 West<br>Leg | 270                          | 0                        | 24.00           | 2                      | 28.00               | 2                   | 90.00                 | 100.00               | 25.00               |

# **Circulating and Exit Geometry**

| Leg | Leg Names         | Inscribed<br>Diameter<br>D | Circulating<br>Width<br>C | Circulating<br>Lanes<br>nc | Exit<br>Width<br>Ex | Exit<br>Lanes<br>nex | Exit<br>Half Width<br>Vx | Exit Half<br>Width Lanes<br>nvx |
|-----|-------------------|----------------------------|---------------------------|----------------------------|---------------------|----------------------|--------------------------|---------------------------------|
| 1   | North Leg (1st)   | 200.00                     | 28.00                     | 2                          | 28.00               | 1                    | 16.00                    | 1                               |
| 2   | SH 79 East Leg    | 200.00                     | 28.00                     | 2                          | 28.00               | 2                    | 24.00                    | 2                               |
| 3   | South Leg         | 200.00                     | 28.00                     | 2                          | 28.00               | 1                    | 16.00                    | 1                               |
| 4   | SH 79 West<br>Leg | 200.00                     | 28.00                     | 2                          | 28.00               | 2                    | 24.00                    | 2                               |

# Traffic Flow Data (veh/hr)

#### 2041 PM Peak Peak Hour Flows

|     |                   |        |        | Turning Flows | S      |        | Flow Modifiers |                |                     |  |  |  |
|-----|-------------------|--------|--------|---------------|--------|--------|----------------|----------------|---------------------|--|--|--|
| Leg | Leg Names         | U-Turn | Exit-3 | Exit-2        | Exit-1 | Bypass | Trucks<br>%    | Flow<br>Factor | Peak Hour<br>Factor |  |  |  |
| 1   | North Leg (1st)   | 0      | 345    | 0             | 390    | 0      | 5.0            | 1.00           | 0.9                 |  |  |  |
| 2   | SH 79 East Leg    | 0      | 0      | 480           | 210    | 0      | 5.0            | 1.00           | 0.9                 |  |  |  |
| 3   | South Leg         | 0      | 0      | 0             | 0      | 0      | 5.0            | 1.00           | 0.9                 |  |  |  |
| 4   | SH 79 West<br>Leg | 0      | 635    | 570           | 0      | 0      | 5.0            | 1.00           | 0.9                 |  |  |  |

# **Operational Results**

# 2041 PM Peak - 60 minutes

# **Flows and Capacity**

|     |                 | Bypass<br>Type |        | Fle     | ows (veh/l | nr)      | Capacity (veh/hr) |          |        |             |        |
|-----|-----------------|----------------|--------|---------|------------|----------|-------------------|----------|--------|-------------|--------|
| Leg | Leg Leg Names   |                | Arriva | al Flow | Opposi     | ing Flow | Exit              | Capacity |        | Average VCR |        |
|     |                 | . , , , ,      | Entry  | Bypass  | Entry      | Bypass   | Flow              | Entry    | Bypass | Entry       | Bypass |
| 1   | North Leg (1st) | None           | 735    |         | 1204       |          | 0                 | 1202     |        | 0.6362      |        |
| 2   | SH 79 East Leg  | None           | 690    |         | 979        |          | 959               | 1351     |        | 0.5232      |        |
| 3   | South Leg       | None           | 0      |         | 0          |          | 845               | 0        |        | 0.0000      |        |
| 4   | SH 79 West Leg  | None           | 1205   |         | 0          |          | 824               | 2001     |        | 0.6146      |        |

### Delays, Queues and Level of Service

| Log | Log Namos       | Bypass | Ave   | erage Delay (s | sec)  | 95% Qu | eue (veh) | Level of Service |        |     |  |
|-----|-----------------|--------|-------|----------------|-------|--------|-----------|------------------|--------|-----|--|
| Leg | Leg Names       | Type   | Entry | Bypass         | Leg   | Entry  | Bypass    | Entry            | Bypass | Leg |  |
| 1   | North Leg (1st) | None   | 16.93 |                | 16.93 | 9.71   |           | С                |        | С   |  |
| 2   | SH 79 East Leg  | None   | 10.52 |                | 10.52 | 4.67   |           | В                |        | В   |  |
| 3   | South Leg       | None   | 0.00  |                | 0.00  | 0.00   |           | Α                |        | Α   |  |
| 4   | SH 79 West Leg  | None   | 11.39 |                | 11.39 | 7.85   |           | В                |        | В   |  |

# 2041 PM Peak - 15 minutes

### **Flows and Capacity**

|               |                 | Pungoo       |       | Fle    | ows (veh/l | nr)    |          | Capacity (veh/hr) |             |        |        |  |
|---------------|-----------------|--------------|-------|--------|------------|--------|----------|-------------------|-------------|--------|--------|--|
| Leg Leg Names | Bypass<br>Type  | Arrival Flow |       | Opposi | ng Flow    | Exit   | Capacity |                   | Average VCR |        |        |  |
|               |                 | .,,,,,       | Entry | Bypass | Entry      | Bypass | Flow     | Entry             | Bypass      | Entry  | Bypass |  |
| 1             | North Leg (1st) | None         | 817   |        | 1335       |        | 0        | 1115              |             | 0.7541 |        |  |
| 2             | SH 79 East Leg  | None         | 767   |        | 1084       |        | 1061     | 1282              |             | 0.6074 |        |  |
| 3             | South Leg       | None         | 0     |        | 0          |        | 814      | 0                 |             | 0.0000 |        |  |
| 4             | SH 79 West Leg  | None         | 1339  |        | 0          |        | 912      | 2001              |             | 0.6801 |        |  |

# **Delays, Queues and Level of Service**

| Log | Lan Namas       | Bypass | Ave   | rage Delay (s | sec)  | 95% Qu | eue (veh) | Level of Service |        |     |  |
|-----|-----------------|--------|-------|---------------|-------|--------|-----------|------------------|--------|-----|--|
| Leg | Leg Names       | Туре   | Entry | Bypass        | Leg   | Entry  | Bypass    | Entry            | Bypass | Leg |  |
| 1   | North Leg (1st) | None   | 16.50 |               | 16.50 | 9.71   |           | С                |        | С   |  |
| 2   | SH 79 East Leg  | None   | 8.88  |               | 8.88  | 4.67   |           | Α                |        | Α   |  |
| 3   | South Leg       | None   | 0.00  |               | 0.00  | 0.00   |           | Α                |        | Α   |  |
| 4   | SH 79 West Leg  | None   | 9.01  |               | 9.01  | 7.85   |           | Α                |        | Α   |  |

Project: Bennett Crossing Filing 5 Scheme: 2041 Total

Rodel-Win1 - Full Geometry

# **Global Results**

# **Performance and Accidents**

#### 2041 PM Peak Global Performance

| Parameter       | Units   | Entries | Bypasses | Total |
|-----------------|---------|---------|----------|-------|
| Arrive Flows    | veh/hr  | 2630    |          | 2630  |
| Capacity        | veh/hr  | 4555    |          | 4555  |
| Average Delay   | sec/veh | 11.71   |          | 11.71 |
| L.O.S. (Signal) | A – F   | В       |          | В     |
| L.O.S. (Unsig)  | A - F   | В       |          | В     |
| Total Delay     | veh.hrs | 8.55    |          | 8.55  |

|                                       | •     | •     | <b>†</b> | ~     | <b>&gt;</b> | ţ        |
|---------------------------------------|-------|-------|----------|-------|-------------|----------|
| Lane Group                            | WBL   | WBR   | NBT      | NBR   | SBL         | SBT      |
| Lane Configurations                   | ች     | 7     | <b>^</b> | 7     | *           | <b>^</b> |
| Traffic Volume (vph)                  | 145   | 50    | 1155     | 175   | 50          | 820      |
| Future Volume (vph)                   | 145   | 50    | 1155     | 175   | 50          | 820      |
| Ideal Flow (vphpl)                    | 1900  | 1900  | 1900     | 1900  | 1900        | 1900     |
| Storage Length (ft)                   | 100   | 0     | .,,,,,   | 150   | 150         | .,,,,,   |
| Storage Lanes                         | 100   | 1     |          | 130   | 130         |          |
| Taper Length (ft)                     | 25    |       |          |       | 25          |          |
| Lane Util. Factor                     | 1.00  | 1.00  | 0.95     | 1.00  | 1.00        | 0.95     |
| Frt                                   | 1.00  | 0.850 | 0.75     | 0.850 | 1.00        | 0.75     |
| Flt Protected                         | 0.950 | 0.000 |          | 0.000 | 0.950       |          |
| Satd. Flow (prot)                     | 1770  | 1583  | 3539     | 1583  | 1770        | 3539     |
| Flt Permitted                         | 0.950 | 1003  | 3037     | 1083  | 0.159       | 3039     |
| Satd. Flow (perm)                     | 1770  | 1583  | 3539     | 1583  | 296         | 3539     |
| · · · · · · · · · · · · · · · · · · · | 1770  |       | 3339     |       | 290         | 3039     |
| Right Turn on Red                     |       | Yes   |          | Yes   |             |          |
| Satd. Flow (RTOR)                     | 0.5   | 54    | 45       | 161   |             | 45       |
| Link Speed (mph)                      | 25    |       | 45       |       |             | 45       |
| Link Distance (ft)                    | 1481  |       | 398      |       |             | 1062     |
| Travel Time (s)                       | 40.4  |       | 6.0      |       |             | 16.1     |
| Peak Hour Factor                      | 0.92  | 0.92  | 0.92     | 0.92  | 0.92        | 0.92     |
| Adj. Flow (vph)                       | 158   | 54    | 1255     | 190   | 54          | 891      |
| Shared Lane Traffic (%)               |       |       |          |       |             |          |
| Lane Group Flow (vph)                 | 158   | 54    | 1255     | 190   | 54          | 891      |
| Enter Blocked Intersection            | No    | No    | No       | No    | No          | No       |
| Lane Alignment                        | Left  | Right | Left     | Right | Left        | Left     |
| Median Width(ft)                      | 12    |       | 12       |       |             | 12       |
| Link Offset(ft)                       | 0     |       | 0        |       |             | 0        |
| Crosswalk Width(ft)                   | 16    |       | 16       |       |             | 16       |
| Two way Left Turn Lane                |       |       |          |       |             |          |
| Headway Factor                        | 1.00  | 1.00  | 1.00     | 1.00  | 1.00        | 1.00     |
| Turning Speed (mph)                   | 15    | 9     |          | 9     | 15          |          |
| Number of Detectors                   | 1     | 1     | 2        | 1     | 1           | 2        |
| Detector Template                     | Left  | Right | Thru     | Right | Left        | Thru     |
| Leading Detector (ft)                 | 20    | 20    | 100      | 20    | 20          | 100      |
| Trailing Detector (ft)                | 0     | 0     | 0        | 0     | 0           | 0        |
| Detector 1 Position(ft)               | 0     | 0     | 0        | 0     | 0           | 0        |
| Detector 1 Size(ft)                   | 20    | 20    | 6        | 20    | 20          | 6        |
| Detector 1 Type                       | CI+Ex | Cl+Ex | Cl+Ex    | CI+Ex | Cl+Ex       | Cl+Ex    |
| Detector 1 Channel                    | UI+EX | OI+EX | CI+EX    | OI+EX | CI+EX       | CI+EX    |
|                                       | 0.0   | 0.0   | 0.0      | 0.0   | 0.0         | 0.0      |
| Detector 1 Extend (s)                 | 0.0   | 0.0   | 0.0      | 0.0   | 0.0         | 0.0      |
| Detector 1 Queue (s)                  | 0.0   | 0.0   | 0.0      | 0.0   | 0.0         | 0.0      |
| Detector 1 Delay (s)                  | 0.0   | 0.0   | 0.0      | 0.0   | 0.0         | 0.0      |
| Detector 2 Position(ft)               |       |       | 94       |       |             | 94       |
| Detector 2 Size(ft)                   |       |       | 6        |       |             | 6        |
| Detector 2 Type                       |       |       | CI+Ex    |       |             | CI+Ex    |
| Detector 2 Channel                    |       |       |          |       |             |          |
| Detector 2 Extend (s)                 |       |       | 0.0      |       |             | 0.0      |
| Turn Type                             | Prot  | Perm  | NA       | Perm  | pm+pt       | NA       |
| Protected Phases                      | 8     |       | 2        |       | 1           | 6        |
| Permitted Phases                      |       | 8     |          | 2     | 6           |          |

|  | •            | •         | <b>†</b>  | <i>&gt;</i> | <b>&gt;</b> | <b>↓</b>   |          |
|--|--------------|-----------|-----------|-------------|-------------|------------|----------|
| Lane Group   | WBL          | WBR       | NBT       | NBR         | SBL         | SBT        |          |
| Detector Phase                                       | 8            | 8         | 2         | 2           | 1           | 6          |          |
| Switch Phase   |              |           |           |             |             |            |          |
| Minimum Initial (s)                                  | 5.0          | 5.0       | 5.0       | 5.0         | 5.0         | 5.0        |          |
| Minimum Split (s)                                    | 23.0         | 23.0      | 23.0      | 23.0        | 10.0        | 23.0       |          |
| Total Split (s)                                      | 28.0         | 28.0      | 60.0      | 60.0        | 12.0        | 72.0       |          |
| Total Split (%)                                      | 28.0%        | 28.0%     | 60.0%     | 60.0%       | 12.0%       | 72.0%      |          |
| Maximum Green (s)                                    | 23.0         | 23.0      | 55.0      | 55.0        | 7.0         | 67.0       |          |
| Yellow Time (s)                                      | 3.5          | 3.5       | 3.5       | 3.5         | 3.5         | 3.5        |          |
| All-Red Time (s)                                     | 1.5          | 1.5       | 1.5       | 1.5         | 1.5         | 1.5        |          |
| Lost Time Adjust (s)                                 | 0.0          | 0.0       | 0.0       | 0.0         | 0.0         | 0.0        |          |
| Total Lost Time (s)                                  | 5.0          | 5.0       | 5.0       | 5.0         | 5.0         | 5.0        |          |
| Lead/Lag   | 0.0          | 0.0       | Lag       | Lag         | Lead        | 0.0        |          |
| Lead-Lag Optimize?                                   |              |           | Yes       | Yes         | Yes         |            |          |
| Vehicle Extension (s)                                | 3.0          | 3.0       | 3.0       | 3.0         | 3.0         | 3.0        |          |
| Recall Mode  | None         | None      | C-Max     | C-Max       | None        | C-Max      |          |
| Walk Time (s)  | 7.0          | 7.0       | 7.0       | 7.0         | None        | 7.0        |          |
| Flash Dont Walk (s)                                  | 11.0         | 11.0      | 11.0      | 11.0        |             | 11.0       |          |
| Pedestrian Calls (#/hr)                              | 0            | 0         | 0         | 0           |             | 0          |          |
| Act Effct Green (s)                                  | 14.2         | 14.2      | 66.6      | 66.6        | 75.8        | 75.8       |          |
| Actuated g/C Ratio                                   | 0.14         | 0.14      | 0.67      | 0.67        | 0.76        | 0.76       |          |
| v/c Ratio  | 0.14         | 0.14      | 0.57      | 0.07        | 0.70        | 0.70       |          |
| Control Delay  | 51.1         | 11.7      | 11.0      | 2.5         | 4.9         | 4.7        |          |
| Queue Delay  | 0.0          | 0.0       | 0.0       | 0.0         | 0.0         | 0.0        |          |
| 9  | 51.1         | 11.7      | 11.0      | 2.5         | 4.9         | 4.7        |          |
| Total Delay<br>LOS                                   | D D          | 11.7<br>B | 11.0<br>B | Z.5         | 4.9<br>A    | 4.7<br>A   |          |
|  | 41.1         | D         | 9.8       | А           | А           | 4.7        |          |
| Approach LOS   |              |           | 9.8<br>A  |             |             | 4.7<br>A   |          |
| Approach LOS   | D            |           | А         |             |             | А          |          |
| Intersection Summary                                 | Othor        |           |           |             |             |            |          |
| Area Type:   | Other        |           |           |             |             |            |          |
| Cycle Length: 100                                    | <b>n</b>     |           |           |             |             |            |          |
| Actuated Cycle Length: 100                           |              | MDT one   | I 4.CDTI  | Ctart of C  | `roon       |            |          |
| Offset: 0 (0%), Referenced Natural Cycle: 60         | to priase 2  | INDI AIIU | I O.SBIL, | Start or C  | neen        |            |          |
| Control Type: Actuated-Co                            | ordinated    |           |           |             |             |            |          |
| Maximum v/c Ratio: 0.63                              | ordinated    |           |           |             |             |            |          |
| Intersection Signal Delay: 1                         | I            |           |           | lr          | atorcoctio  | n LOS: B   |          |
| Intersection Capacity Utilization                    |              |           |           |             |             | of Service | D        |
| Analysis Period (min) 15                             | aliuii 30.0% |           |           | К           | o Level     | oi service | D        |
| Analysis i enou (min) 15                             |              |           |           |             |             |            |          |
| Splits and Phases: 3: S.                             | 1st Street 8 | Pearl A   | venue     |             |             |            |          |
| ø <sub>1</sub> • • • • • • • • • • • • • • • • • • • | D)           |           |           |             |             |            |          |
| 12 s 60 s  | N)           |           |           |             |             |            |          |
| 12.3   |              |           |           |             |             |            | <b>*</b> |
| ₩ Ø6 (R)   |              |           |           |             |             |            | ÿ8       |

| ntersection          |        |          |          |          |          |        |          |        |        |        |           |         |           |
|----------------------|--------|----------|----------|----------|----------|--------|----------|--------|--------|--------|-----------|---------|-----------|
| nt Delay, s/veh      | 24.3   |          |          |          |          |        |          |        |        |        |           |         |           |
| Movement             | EBL    | EBT      | EBR      | WBL      | WBT      | WBR    | NBL      | NBT    | NBR    | SBL    | SBT       | SBR     |           |
| ane Configurations   | ሻ      | <b>^</b> | 7        | ሻ        | <b>^</b> | 7      | ሻ        | ĥ      |        | ሻ      | f)        |         |           |
| affic Vol, veh/h     | 90     | 765      | 60       | 50       | 575      | 15     | 40       | 25     | 30     | 50     | 40        | 75      |           |
| ture Vol, veh/h      | 90     | 765      | 60       | 50       | 575      | 15     | 40       | 25     | 30     | 50     | 40        | 75      |           |
| nflicting Peds, #/hr | 0      | 0        | 0        | 0        | 0        | 0      | 0        | 0      | 0      | 0      | 0         | 0       |           |
| jn Control           | Free   | Free     | Free     | Free     | Free     | Free   | Stop     | Stop   | Stop   | Stop   | Stop      | Stop    |           |
| Channelized          | -      | -        | None     | -        | -        | None   | -        | -      | None   | -      | -         | None    |           |
| rage Length          | 200    | -        | 200      | 200      | -        | 200    | 150      | -      | -      | 150    | -         | -       |           |
| h in Median Storage, | # -    | 0        | -        | -        | 0        | -      | -        | 0      | -      | -      | 0         | -       |           |
| ade, %               | -      | 0        | -        | -        | 0        | -      | -        | 0      | -      | -      | 0         | -       |           |
| ak Hour Factor       | 92     | 92       | 92       | 92       | 92       | 92     | 92       | 92     | 92     | 92     | 92        | 92      |           |
| avy Vehicles, %      | 2      | 2        | 2        | 2        | 2        | 2      | 2        | 2      | 2      | 2      | 2         | 2       |           |
| mt Flow              | 98     | 832      | 65       | 54       | 625      | 16     | 43       | 27     | 33     | 54     | 43        | 82      |           |
|                      |        |          |          |          |          |        |          |        |        |        |           |         |           |
| or/Minor M           | ajor1  |          |          | Major2   |          | ľ      | Minor1   |        |        | Minor2 |           |         |           |
| flicting Flow All    | 641    | 0        | 0        | 897      | 0        | 0      | 1470     | 1777   | 416    | 1359   | 1826      | 313     |           |
| Stage 1              | -      | -        | -        | -        | -        | -      | 1028     | 1028   | - 10   | 733    | 733       | -       |           |
| Stage 2              | _      | _        | _        | _        | _        | _      | 442      | 749    | _      | 626    | 1093      | _       |           |
| cal Hdwy             | 4.14   | _        |          | 4.14     | -        | _      | 7.54     | 6.54   | 6.94   | 7.54   | 6.54      | 6.94    |           |
| cal Hdwy Stg 1       | T.   T | _        | _        |          | _        | _      | 6.54     | 5.54   | 0.74   | 6.54   | 5.54      | -       |           |
| cal Hdwy Stg 2       | _      | -        |          | -        | _        | _      | 6.54     | 5.54   | _      | 6.54   | 5.54      | _       |           |
| ow-up Hdwy           | 2.22   |          |          | 2.22     |          | _      | 3.52     | 4.02   | 3.32   | 3.52   | 4.02      | 3.32    |           |
| Cap-1 Maneuver       | 939    |          | -        | 753      |          | -      | 89       | 82     | 585    | 107    | 76        | 683     |           |
| Stage 1              | 737    |          | -        | 755      |          |        | 251      | 310    | 505    | 378    | 424       | - 003   |           |
| Stage 2              | -      |          | -        |          |          | -      | 564      | 417    | -      | 439    | 288       | -       |           |
| toon blocked, %      | -      | -        | -        | -        | -        | -      | 504      | 417    |        | 437    | 200       | -       |           |
| v Cap-1 Maneuver     | 939    | -        | -        | 753      | -        | -      | ~ 31     | 68     | 585    | 61     | 63        | 683     |           |
| v Cap-1 Maneuver     | 939    | -        | -        | 700      | -        | -      | ~ 31     | 68     | 303    | 61     | 63        | 003     |           |
| Stage 1              | -      | -        | -        |          | -        | -      | 225      | 278    | -      | 339    | 393       | -       |           |
| Stage 2              | -      | -        | -        | -        | -        | -      | 410      | 387    | -      | 335    | 258       | _       |           |
| Slaye 2              | -      | -        | -        | -        | -        | -      | 410      | 307    | -      | ააა    | 200       | -       |           |
| oroooh               | ED     |          |          | MD       |          |        | MD       |        |        | CD     |           |         |           |
| proach               | EB     |          |          | WB       |          |        | NB       |        |        | SB     |           |         |           |
| M Control Delay, s   | 0.9    |          |          | 0.8      |          |        | 240.4    |        |        | 120.3  |           |         |           |
| M LOS                |        |          |          |          |          |        | F        |        |        | F      |           |         |           |
|                      |        |          |          |          |          |        |          |        |        |        |           |         |           |
| nor Lane/Major Mvmt  |        | NBLn1 I  |          | EBL      | EBT      | EBR    | WBL      | WBT    | WBR:   | SBLn1  |           |         |           |
| pacity (veh/h)       |        | 31       | 131      | 939      | -        | -      | 753      | -      | -      | 61     | 154       |         |           |
| M Lane V/C Ratio     |        |          | 0.456    |          | -        | -      | 0.072    | -      |        | 0.891  |           |         |           |
| M Control Delay (s)  | \$     | \$ 497.2 | 53.7     | 9.3      | -        | -      | 10.2     | -      | -      | 195.2  | 87.7      |         |           |
| M Lane LOS           |        | F        | F        | Α        | -        | -      | В        | -      | -      | F      | F         |         |           |
| M 95th %tile Q(veh)  |        | 4.9      | 2        | 0.3      | -        | -      | 0.2      | -      | -      | 4.1    | 5.3       |         |           |
| es                   |        |          |          |          |          |        |          |        |        |        |           |         |           |
| lume exceeds capa    | acity  | \$: De   | elay exc | ceeds 30 | 00s      | +: Com | putation | Not De | efined | *: All | l maior v | olume i | n platoon |
|                      |        |          |          |          |          |        |          |        |        |        |           |         |           |

| Intersection           |        |       |      |        |      |       |        |       |        |        |       |       |
|------------------------|--------|-------|------|--------|------|-------|--------|-------|--------|--------|-------|-------|
| Int Delay, s/veh       | 7.3    |       |      |        |      |       |        |       |        |        |       |       |
| Movement               | EBL    | EBT   | EBR  | WBL    | WBT  | WBR   | NBL    | NBT   | NBR    | SBL    | SBT   | SBR   |
| Lane Configurations    |        | 4     |      |        | 4    |       |        | 4     |        |        | 4     |       |
| Traffic Vol, veh/h     | 135    | 25    | 90   | 15     | 25   | 10    | 30     | 25    | 10     | 10     | 25    | 120   |
| Future Vol, veh/h      | 135    | 25    | 90   | 15     | 25   | 10    | 30     | 25    | 10     | 10     | 25    | 120   |
| Conflicting Peds, #/hr | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0     | 0      | 0      | 0     | 0     |
| Sign Control           | Free   | Free  | Free | Free   | Free | Free  | Stop   | Stop  | Stop   | Stop   | Stop  | Stop  |
| RT Channelized         | -      | -     | None | -      | -    | None  | -      | -     | None   | -      | -     | None  |
| Storage Length         | -      | -     | -    | -      | -    | -     | -      | -     | -      | -      | -     | -     |
| Veh in Median Storage  | ,# -   | 0     | -    | -      | 0    | -     | -      | 0     | -      | -      | 0     | -     |
| Grade, %               | -      | 0     | -    | -      | 0    | -     | -      | 0     | -      | -      | 0     | -     |
| Peak Hour Factor       | 92     | 92    | 92   | 92     | 92   | 92    | 92     | 92    | 92     | 92     | 92    | 92    |
| Heavy Vehicles, %      | 2      | 2     | 2    | 2      | 2    | 2     | 2      | 2     | 2      | 2      | 2     | 2     |
| Mvmt Flow              | 147    | 27    | 98   | 16     | 27   | 11    | 33     | 27    | 11     | 11     | 27    | 130   |
|                        |        |       |      |        |      |       |        |       |        |        |       |       |
| Major/Minor N          | Major1 |       |      | Major2 |      |       | Minor1 |       |        | Minor2 |       |       |
| Conflicting Flow All   | 38     | 0     | 0    | 125    | 0    | 0     | 513    | 440   | 76     | 454    | 484   | 33    |
| Stage 1                | -      | -     | -    | -      | -    | -     | 370    | 370   | -      | 65     | 65    | -     |
| Stage 2                | -      | -     | -    | -      | -    | -     | 143    | 70    | -      | 389    | 419   | -     |
| Critical Hdwy          | 4.12   | -     | -    | 4.12   | -    | -     | 7.12   | 6.52  | 6.22   | 7.12   | 6.52  | 6.22  |
| Critical Hdwy Stg 1    | -      | -     | -    | -      | -    | -     | 6.12   | 5.52  | -      | 6.12   | 5.52  | -     |
| Critical Hdwy Stg 2    | -      | -     | -    | -      | -    | -     | 6.12   | 5.52  | -      | 6.12   | 5.52  | -     |
| Follow-up Hdwy         | 2.218  | -     | -    | 2.218  | -    | -     | 3.518  | 4.018 | 3.318  | 3.518  | 4.018 | 3.318 |
| Pot Cap-1 Maneuver     | 1572   | -     | -    | 1462   | -    | -     | 472    | 511   | 985    | 516    | 483   | 1041  |
| Stage 1                | -      | -     | -    | -      | -    | -     | 650    | 620   | -      | 946    | 841   | -     |
| Stage 2                | -      | -     | -    | -      | -    | -     | 860    | 837   | -      | 635    | 590   | -     |
| Platoon blocked, %     |        | -     | -    |        | -    | -     |        |       |        |        |       |       |
| Mov Cap-1 Maneuver     | 1572   | -     | -    | 1462   | -    | -     | 360    | 454   | 985    | 446    | 429   | 1041  |
| Mov Cap-2 Maneuver     | -      | -     | -    | -      | -    | -     | 360    | 454   | -      | 446    | 429   | -     |
| Stage 1                | -      | -     | -    | -      | -    | -     | 584    | 557   | -      | 850    | 832   | -     |
| Stage 2                | -      | -     | -    | -      | -    | -     | 720    | 828   | -      | 536    | 530   | -     |
|                        |        |       |      |        |      |       |        |       |        |        |       |       |
| Approach               | EB     |       |      | WB     |      |       | NB     |       |        | SB     |       |       |
| HCM Control Delay, s   | 4.1    |       |      | 2.2    |      |       | 14.8   |       |        | 10.8   |       |       |
| HCM LOS                |        |       |      |        |      |       | В      |       |        | В      |       |       |
|                        |        |       |      |        |      |       |        |       |        |        |       |       |
| Minor Lane/Major Mvm   | t I    | NBLn1 | EBL  | EBT    | EBR  | WBL   | WBT    | WBR   | SBI n1 |        |       |       |
| Capacity (veh/h)       |        | 438   | 1572 | -      |      | 1462  | -      | -     |        |        |       |       |
| HCM Lane V/C Ratio     |        | 0.161 |      | _      |      | 0.011 | _      |       | 0.213  |        |       |       |
| HCM Control Delay (s)  |        | 14.8  | 7.5  | 0      | _    | 7.5   | 0      | _     |        |        |       |       |
| HCM Lane LOS           |        | В     | Α.   | A      | _    | Α.5   | A      | _     | В      |        |       |       |
| HCM 95th %tile Q(veh)  |        | 0.6   | 0.3  | -      | -    | 0     | -      | -     | 0.8    |        |       |       |
|                        |        | 5.5   | 3.3  |        |      |       |        |       | 0.0    |        |       |       |

|                            | ۶     | <b>→</b> | •     | €     | <b>←</b> | •     | •     | <b>†</b> | ~     | <b>/</b> | <b>↓</b> | -√    |
|----------------------------|-------|----------|-------|-------|----------|-------|-------|----------|-------|----------|----------|-------|
| Lane Group                 | EBL   | EBT      | EBR   | WBL   | WBT      | WBR   | NBL   | NBT      | NBR   | SBL      | SBT      | SBR   |
| Lane Configurations        | ሻ     | <b>^</b> | 7     | ች     | <b>^</b> | 7     | ሻ     | f)       |       | ሻ        | f.       |       |
| Traffic Volume (vph)       | 50    | 410      | 20    | 10    | 710      | 5     | 55    | 30       | 20    | 20       | 30       | 115   |
| Future Volume (vph)        | 50    | 410      | 20    | 10    | 710      | 5     | 55    | 30       | 20    | 20       | 30       | 115   |
| Ideal Flow (vphpl)         | 1900  | 1900     | 1900  | 1900  | 1900     | 1900  | 1900  | 1900     | 1900  | 1900     | 1900     | 1900  |
| Storage Length (ft)        | 200   |          | 200   | 200   |          | 200   | 150   |          | 0     | 150      |          | 0     |
| Storage Lanes              | 1     |          | 1     | 1     |          | 1     | 1     |          | 0     | 1        |          | 0     |
| Taper Length (ft)          | 25    |          |       | 25    |          |       | 25    |          |       | 25       |          |       |
| Lane Util. Factor          | 1.00  | 0.95     | 1.00  | 1.00  | 0.95     | 1.00  | 1.00  | 1.00     | 1.00  | 1.00     | 1.00     | 1.00  |
| Frt                        |       |          | 0.850 |       |          | 0.850 |       | 0.940    |       |          | 0.881    |       |
| Flt Protected              | 0.950 |          |       | 0.950 |          |       | 0.950 |          |       | 0.950    |          |       |
| Satd. Flow (prot)          | 1770  | 3539     | 1583  | 1770  | 3539     | 1583  | 1770  | 1751     | 0     | 1770     | 1641     | 0     |
| Flt Permitted              | 0.291 |          |       | 0.494 |          |       | 0.312 |          |       | 0.721    |          |       |
| Satd. Flow (perm)          | 542   | 3539     | 1583  | 920   | 3539     | 1583  | 581   | 1751     | 0     | 1343     | 1641     | 0     |
| Right Turn on Red          |       |          | Yes   |       |          | Yes   |       |          | Yes   |          |          | Yes   |
| Satd. Flow (RTOR)          |       |          | 131   |       |          | 131   |       | 22       |       |          | 125      |       |
| Link Speed (mph)           |       | 45       |       |       | 45       |       |       | 25       |       |          | 25       |       |
| Link Distance (ft)         |       | 1162     |       |       | 454      |       |       | 1294     |       |          | 780      |       |
| Travel Time (s)            |       | 17.6     |       |       | 6.9      |       |       | 35.3     |       |          | 21.3     |       |
| Peak Hour Factor           | 0.92  | 0.92     | 0.92  | 0.92  | 0.92     | 0.92  | 0.92  | 0.92     | 0.92  | 0.92     | 0.92     | 0.92  |
| Adj. Flow (vph)            | 54    | 446      | 22    | 11    | 772      | 5     | 60    | 33       | 22    | 22       | 33       | 125   |
| Shared Lane Traffic (%)    |       |          |       |       |          |       |       |          |       |          |          |       |
| Lane Group Flow (vph)      | 54    | 446      | 22    | 11    | 772      | 5     | 60    | 55       | 0     | 22       | 158      | 0     |
| Enter Blocked Intersection | No    | No       | No    | No    | No       | No    | No    | No       | No    | No       | No       | No    |
| Lane Alignment             | Left  | Left     | Right | Left  | Left     | Right | Left  | Left     | Right | Left     | Left     | Right |
| Median Width(ft)           |       | 12       |       |       | 12       |       |       | 12       |       |          | 12       |       |
| Link Offset(ft)            |       | 0        |       |       | 0        |       |       | 0        |       |          | 0        |       |
| Crosswalk Width(ft)        |       | 16       |       |       | 16       |       |       | 16       |       |          | 16       |       |
| Two way Left Turn Lane     |       |          |       |       |          |       |       |          |       |          |          |       |
| Headway Factor             | 1.00  | 1.00     | 1.00  | 1.00  | 1.00     | 1.00  | 1.00  | 1.00     | 1.00  | 1.00     | 1.00     | 1.00  |
| Turning Speed (mph)        | 15    |          | 9     | 15    |          | 9     | 15    |          | 9     | 15       |          | 9     |
| Number of Detectors        | 1     | 2        | 1     | 1     | 2        | 1     | 1     | 2        |       | 1        | 2        |       |
| Detector Template          | Left  | Thru     | Right | Left  | Thru     | Right | Left  | Thru     |       | Left     | Thru     |       |
| Leading Detector (ft)      | 20    | 100      | 20    | 20    | 100      | 20    | 20    | 100      |       | 20       | 100      |       |
| Trailing Detector (ft)     | 0     | 0        | 0     | 0     | 0        | 0     | 0     | 0        |       | 0        | 0        |       |
| Detector 1 Position(ft)    | 0     | 0        | 0     | 0     | 0        | 0     | 0     | 0        |       | 0        | 0        |       |
| Detector 1 Size(ft)        | 20    | 6        | 20    | 20    | 6        | 20    | 20    | 6        |       | 20       | 6        |       |
| Detector 1 Type            | CI+Ex | CI+Ex    | CI+Ex | CI+Ex | CI+Ex    | CI+Ex | CI+Ex | CI+Ex    |       | CI+Ex    | CI+Ex    |       |
| Detector 1 Channel         |       |          |       |       |          |       |       |          |       |          |          |       |
| Detector 1 Extend (s)      | 0.0   | 0.0      | 0.0   | 0.0   | 0.0      | 0.0   | 0.0   | 0.0      |       | 0.0      | 0.0      |       |
| Detector 1 Queue (s)       | 0.0   | 0.0      | 0.0   | 0.0   | 0.0      | 0.0   | 0.0   | 0.0      |       | 0.0      | 0.0      |       |
| Detector 1 Delay (s)       | 0.0   | 0.0      | 0.0   | 0.0   | 0.0      | 0.0   | 0.0   | 0.0      |       | 0.0      | 0.0      |       |
| Detector 2 Position(ft)    |       | 94       |       |       | 94       |       |       | 94       |       |          | 94       |       |
| Detector 2 Size(ft)        |       | 6        |       |       | 6        |       |       | 6        |       |          | 6        |       |
| Detector 2 Type            |       | CI+Ex    |       |       | CI+Ex    |       |       | CI+Ex    |       |          | CI+Ex    |       |
| Detector 2 Channel         |       |          |       |       |          |       |       |          |       |          |          |       |
| Detector 2 Extend (s)      |       | 0.0      |       |       | 0.0      |       |       | 0.0      |       |          | 0.0      |       |
| Turn Type                  | pm+pt | NA       | Perm  | pm+pt | NA       | Perm  | pm+pt | NA       |       | pm+pt    | NA       |       |
| Protected Phases           | 7     | 4        |       | 3     | 8        |       | 5     | 2        |       | 1        | 6        |       |
| Permitted Phases           | 4     |          | 4     | 8     |          | 8     | 2     |          |       | 6        |          |       |

|                         | •     | <b>→</b> | •     | •     | •     | •     | •     | <b>†</b> | <b>/</b> | -     | ţ     | 4   |
|-------------------------|-------|----------|-------|-------|-------|-------|-------|----------|----------|-------|-------|-----|
| Lane Group              | EBL   | EBT      | EBR   | WBL   | WBT   | WBR   | NBL   | NBT      | NBR      | SBL   | SBT   | SBR |
| Detector Phase          | 7     | 4        | 4     | 3     | 8     | 8     | 5     | 2        |          | 1     | 6     |     |
| Switch Phase            |       |          |       |       |       |       |       |          |          |       |       |     |
| Minimum Initial (s)     | 5.0   | 5.0      | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0      |          | 5.0   | 5.0   |     |
| Minimum Split (s)       | 10.0  | 23.0     | 23.0  | 10.0  | 23.0  | 23.0  | 10.0  | 23.0     |          | 10.0  | 23.0  |     |
| Total Split (s)         | 12.0  | 50.0     | 50.0  | 12.0  | 50.0  | 50.0  | 14.0  | 26.0     |          | 12.0  | 24.0  |     |
| Total Split (%)         | 12.0% | 50.0%    | 50.0% | 12.0% | 50.0% | 50.0% | 14.0% | 26.0%    |          | 12.0% | 24.0% |     |
| Maximum Green (s)       | 7.0   | 45.0     | 45.0  | 7.0   | 45.0  | 45.0  | 9.0   | 21.0     |          | 7.0   | 19.0  |     |
| Yellow Time (s)         | 3.5   | 3.5      | 3.5   | 3.5   | 3.5   | 3.5   | 3.5   | 3.5      |          | 3.5   | 3.5   |     |
| All-Red Time (s)        | 1.5   | 1.5      | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5      |          | 1.5   | 1.5   |     |
| Lost Time Adjust (s)    | 0.0   | 0.0      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0      |          | 0.0   | 0.0   |     |
| Total Lost Time (s)     | 5.0   | 5.0      | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0      |          | 5.0   | 5.0   |     |
| Lead/Lag                | Lead  | Lag      | Lag   | Lead  | Lag   | Lag   | Lead  | Lag      |          | Lead  | Lag   |     |
| Lead-Lag Optimize?      | Yes   | Yes      | Yes   | Yes   | Yes   | Yes   | Yes   | Yes      |          | Yes   | Yes   |     |
| Vehicle Extension (s)   | 3.0   | 3.0      | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0      |          | 3.0   | 3.0   |     |
| Recall Mode             | None  | C-Max    | C-Max | None  | C-Max | C-Max | None  | None     |          | None  | None  |     |
| Walk Time (s)           |       | 7.0      | 7.0   |       | 7.0   | 7.0   |       | 7.0      |          |       | 7.0   |     |
| Flash Dont Walk (s)     |       | 11.0     | 11.0  |       | 11.0  | 11.0  |       | 11.0     |          |       | 11.0  |     |
| Pedestrian Calls (#/hr) | 70.0  | 0        | 0     | (5.0  | 0     | 0     | 10.1  | 0        |          | 100   | 0     |     |
| Act Effct Green (s)     | 70.0  | 68.4     | 68.4  | 65.9  | 61.2  | 61.2  | 18.1  | 14.5     |          | 13.8  | 8.5   |     |
| Actuated g/C Ratio      | 0.70  | 0.68     | 0.68  | 0.66  | 0.61  | 0.61  | 0.18  | 0.14     |          | 0.14  | 0.08  |     |
| v/c Ratio               | 0.12  | 0.18     | 0.02  | 0.02  | 0.36  | 0.00  | 0.30  | 0.20     |          | 0.10  | 0.62  |     |
| Control Delay           | 6.8   | 7.7      | 0.1   | 6.7   | 12.3  | 0.0   | 34.0  | 26.3     |          | 30.1  | 23.4  |     |
| Queue Delay             | 0.0   | 0.0      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0      |          | 0.0   | 0.0   |     |
| Total Delay             | 6.8   | 7.7      | 0.1   | 6.7   | 12.3  | 0.0   | 34.0  | 26.3     |          | 30.1  | 23.4  |     |
| LOS                     | А     | A        | Α     | А     | В     | А     | С     | С        |          | С     | С     |     |
| Approach Delay          |       | 7.3      |       |       | 12.2  |       |       | 30.3     |          |       | 24.2  |     |
| Approach LOS            |       | Α        |       |       | В     |       |       | С        |          |       | С     |     |

**Intersection Summary** 

Area Type: Other

Cycle Length: 100 Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green

Natural Cycle: 70

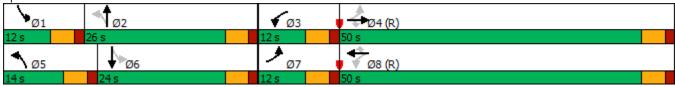
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 13.2 Intersection LOS: B
Intersection Capacity Utilization 53.3% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 4: Adams Street & Edwards Avenue



|                            | ۶     | <b>→</b> | •        | •     | <b>←</b> | •        | •     | †              | <b>/</b> | <b>/</b> | ţ          | ✓     |
|----------------------------|-------|----------|----------|-------|----------|----------|-------|----------------|----------|----------|------------|-------|
| Lane Group                 | EBL   | EBT      | EBR      | WBL   | WBT      | WBR      | NBL   | NBT            | NBR      | SBL      | SBT        | SBR   |
| Lane Configurations        | *     | <b>^</b> | 7        | ሻ     | <b>^</b> | 7        | 7     | <del>(</del> î |          | ሻ        | <b>f</b> a |       |
| Traffic Volume (vph)       | 90    | 765      | 60       | 50    | 575      | 15       | 40    | 25             | 30       | 50       | 40         | 75    |
| Future Volume (vph)        | 90    | 765      | 60       | 50    | 575      | 15       | 40    | 25             | 30       | 50       | 40         | 75    |
| Ideal Flow (vphpl)         | 1900  | 1900     | 1900     | 1900  | 1900     | 1900     | 1900  | 1900           | 1900     | 1900     | 1900       | 1900  |
| Storage Length (ft)        | 200   |          | 200      | 200   |          | 200      | 150   |                | 0        | 150      |            | 0     |
| Storage Lanes              | 1     |          | 1        | 1     |          | 1        | 1     |                | 0        | 1        |            | 0     |
| Taper Length (ft)          | 25    |          |          | 25    |          |          | 25    |                |          | 25       |            |       |
| Lane Util. Factor          | 1.00  | 0.95     | 1.00     | 1.00  | 0.95     | 1.00     | 1.00  | 1.00           | 1.00     | 1.00     | 1.00       | 1.00  |
| Frt                        |       |          | 0.850    |       |          | 0.850    |       | 0.917          |          |          | 0.902      |       |
| Flt Protected              | 0.950 |          |          | 0.950 |          |          | 0.950 |                |          | 0.950    |            |       |
| Satd. Flow (prot)          | 1770  | 3539     | 1583     | 1770  | 3539     | 1583     | 1770  | 1708           | 0        | 1770     | 1680       | 0     |
| Flt Permitted              | 0.380 |          |          | 0.297 |          |          | 0.659 |                |          | 0.626    |            |       |
| Satd. Flow (perm)          | 708   | 3539     | 1583     | 553   | 3539     | 1583     | 1228  | 1708           | 0        | 1166     | 1680       | 0     |
| Right Turn on Red          |       |          | Yes      |       |          | Yes      |       |                | Yes      |          |            | Yes   |
| Satd. Flow (RTOR)          |       |          | 131      |       |          | 131      |       | 33             |          |          | 82         |       |
| Link Speed (mph)           |       | 45       |          |       | 45       |          |       | 25             |          |          | 25         |       |
| Link Distance (ft)         |       | 1162     |          |       | 454      |          |       | 1294           |          |          | 780        |       |
| Travel Time (s)            |       | 17.6     |          |       | 6.9      |          |       | 35.3           |          |          | 21.3       |       |
| Peak Hour Factor           | 0.92  | 0.92     | 0.92     | 0.92  | 0.92     | 0.92     | 0.92  | 0.92           | 0.92     | 0.92     | 0.92       | 0.92  |
| Adj. Flow (vph)            | 98    | 832      | 65       | 54    | 625      | 16       | 43    | 27             | 33       | 54       | 43         | 82    |
| Shared Lane Traffic (%)    |       |          |          |       |          |          |       |                |          |          |            |       |
| Lane Group Flow (vph)      | 98    | 832      | 65       | 54    | 625      | 16       | 43    | 60             | 0        | 54       | 125        | 0     |
| Enter Blocked Intersection | No    | No       | No       | No    | No       | No       | No    | No             | No       | No       | No         | No    |
| Lane Alignment             | Left  | Left     | Right    | Left  | Left     | Right    | Left  | Left           | Right    | Left     | Left       | Right |
| Median Width(ft)           |       | 12       | <b>J</b> |       | 12       | <u> </u> |       | 12             | <u> </u> |          | 12         | 3     |
| Link Offset(ft)            |       | 0        |          |       | 0        |          |       | 0              |          |          | 0          |       |
| Crosswalk Width(ft)        |       | 16       |          |       | 16       |          |       | 16             |          |          | 16         |       |
| Two way Left Turn Lane     |       |          |          |       |          |          |       |                |          |          |            |       |
| Headway Factor             | 1.00  | 1.00     | 1.00     | 1.00  | 1.00     | 1.00     | 1.00  | 1.00           | 1.00     | 1.00     | 1.00       | 1.00  |
| Turning Speed (mph)        | 15    |          | 9        | 15    |          | 9        | 15    |                | 9        | 15       |            | 9     |
| Number of Detectors        | 1     | 2        | 1        | 1     | 2        | 1        | 1     | 2              |          | 1        | 2          |       |
| Detector Template          | Left  | Thru     | Right    | Left  | Thru     | Right    | Left  | Thru           |          | Left     | Thru       |       |
| Leading Detector (ft)      | 20    | 100      | 20       | 20    | 100      | 20       | 20    | 100            |          | 20       | 100        |       |
| Trailing Detector (ft)     | 0     | 0        | 0        | 0     | 0        | 0        | 0     | 0              |          | 0        | 0          |       |
| Detector 1 Position(ft)    | 0     | 0        | 0        | 0     | 0        | 0        | 0     | 0              |          | 0        | 0          |       |
| Detector 1 Size(ft)        | 20    | 6        | 20       | 20    | 6        | 20       | 20    | 6              |          | 20       | 6          |       |
| Detector 1 Type            | CI+Ex | CI+Ex    | CI+Ex    | CI+Ex | CI+Ex    | CI+Ex    | CI+Ex | CI+Ex          |          | CI+Ex    | CI+Ex      |       |
| Detector 1 Channel         |       |          |          |       |          |          |       |                |          |          |            |       |
| Detector 1 Extend (s)      | 0.0   | 0.0      | 0.0      | 0.0   | 0.0      | 0.0      | 0.0   | 0.0            |          | 0.0      | 0.0        |       |
| Detector 1 Queue (s)       | 0.0   | 0.0      | 0.0      | 0.0   | 0.0      | 0.0      | 0.0   | 0.0            |          | 0.0      | 0.0        |       |
| Detector 1 Delay (s)       | 0.0   | 0.0      | 0.0      | 0.0   | 0.0      | 0.0      | 0.0   | 0.0            |          | 0.0      | 0.0        |       |
| Detector 2 Position(ft)    |       | 94       |          |       | 94       |          |       | 94             |          |          | 94         |       |
| Detector 2 Size(ft)        |       | 6        |          |       | 6        |          |       | 6              |          |          | 6          |       |
| Detector 2 Type            |       | CI+Ex    |          |       | CI+Ex    |          |       | CI+Ex          |          |          | CI+Ex      |       |
| Detector 2 Channel         |       |          |          |       |          |          |       |                |          |          |            |       |
| Detector 2 Extend (s)      |       | 0.0      |          |       | 0.0      |          |       | 0.0            |          |          | 0.0        |       |
| Turn Type                  | pm+pt | NA       | Perm     | pm+pt | NA       | Perm     | pm+pt | NA             |          | pm+pt    | NA         |       |
| Protected Phases           | 7     | 4        |          | 3     | 8        |          | 5     | 2              |          | 1        | 6          |       |
| Permitted Phases           | 4     |          | 4        | 8     |          | 8        | 2     |                |          | 6        |            |       |

|                         | •     | -     | •     | •     | •     | •     | •     | <b>†</b> | <b>/</b> | -     | ţ     | 4   |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|----------|----------|-------|-------|-----|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT      | NBR      | SBL   | SBT   | SBR |
| Detector Phase          | 7     | 4     | 4     | 3     | 8     | 8     | 5     | 2        |          | 1     | 6     |     |
| Switch Phase            |       |       |       |       |       |       |       |          |          |       |       |     |
| Minimum Initial (s)     | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0      |          | 5.0   | 5.0   |     |
| Minimum Split (s)       | 10.0  | 23.0  | 23.0  | 10.0  | 23.0  | 23.0  | 10.0  | 23.0     |          | 10.0  | 23.0  |     |
| Total Split (s)         | 12.0  | 53.0  | 53.0  | 12.0  | 53.0  | 53.0  | 12.0  | 23.0     |          | 12.0  | 23.0  |     |
| Total Split (%)         | 12.0% | 53.0% | 53.0% | 12.0% | 53.0% | 53.0% | 12.0% | 23.0%    |          | 12.0% | 23.0% |     |
| Maximum Green (s)       | 7.0   | 48.0  | 48.0  | 7.0   | 48.0  | 48.0  | 7.0   | 18.0     |          | 7.0   | 18.0  |     |
| Yellow Time (s)         | 3.5   | 3.5   | 3.5   | 3.5   | 3.5   | 3.5   | 3.5   | 3.5      |          | 3.5   | 3.5   |     |
| All-Red Time (s)        | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5      |          | 1.5   | 1.5   |     |
| Lost Time Adjust (s)    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0      |          | 0.0   | 0.0   |     |
| Total Lost Time (s)     | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0      |          | 5.0   | 5.0   |     |
| Lead/Lag                | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   | Lead  | Lag      |          | Lead  | Lag   |     |
| Lead-Lag Optimize?      | Yes      |          | Yes   | Yes   |     |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0      |          | 3.0   | 3.0   |     |
| Recall Mode             | None  | C-Max | C-Max | None  | C-Max | C-Max | None  | None     |          | None  | None  |     |
| Walk Time (s)           |       | 7.0   | 7.0   |       | 7.0   | 7.0   |       | 7.0      |          |       | 7.0   |     |
| Flash Dont Walk (s)     |       | 11.0  | 11.0  |       | 11.0  | 11.0  |       | 11.0     |          |       | 11.0  |     |
| Pedestrian Calls (#/hr) |       | 0     | 0     |       | 0     | 0     |       | 0        |          |       | 0     |     |
| Act Effct Green (s)     | 68.7  | 62.5  | 62.5  | 67.1  | 61.7  | 61.7  | 14.0  | 8.5      |          | 15.1  | 10.9  |     |
| Actuated g/C Ratio      | 0.69  | 0.62  | 0.62  | 0.67  | 0.62  | 0.62  | 0.14  | 0.08     |          | 0.15  | 0.11  |     |
| v/c Ratio               | 0.17  | 0.38  | 0.06  | 0.12  | 0.29  | 0.02  | 0.21  | 0.34     |          | 0.25  | 0.49  |     |
| Control Delay           | 6.2   | 11.7  | 0.1   | 6.4   | 11.3  | 0.0   | 33.0  | 26.5     |          | 34.3  | 23.7  |     |
| Queue Delay             | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0      |          | 0.0   | 0.0   |     |
| Total Delay             | 6.2   | 11.7  | 0.1   | 6.4   | 11.3  | 0.0   | 33.0  | 26.5     |          | 34.3  | 23.7  |     |
| LOS                     | А     | В     | Α     | Α     | В     | Α     | С     | С        |          | С     | С     |     |
| Approach Delay          |       | 10.4  |       |       | 10.7  |       |       | 29.2     |          |       | 26.9  |     |
| Approach LOS            |       | В     |       |       | В     |       |       | С        |          |       | С     |     |

**Intersection Summary** 

Area Type: Other

Cycle Length: 100
Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green

Natural Cycle: 70

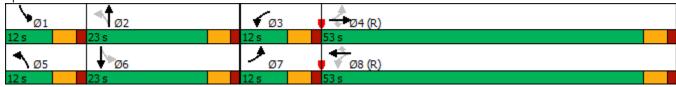
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.49

Intersection Signal Delay: 13.0 Intersection LOS: B
Intersection Capacity Utilization 47.3% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 4: Adams Street & Edwards Avenue



#### BENNETT PLANNING AND ZONING COMMISSION

#### **RESOLUTION NO. 2022-08**

#### A RESOLUTION RECOMMENDING APPROVAL OF THE FINAL PLAT FOR THE BENNETT CROSSING FILING NO. 5 SUBDIVISION

**WHEREAS**, there has been submitted to the Planning and Zoning Commission of the Town of Bennett a request for approval of a Final Plat for the Bennett Crossing Filing No. 5 Subdivision; and

WHEREAS, all materials related to the proposed Final Plat have been reviewed by Town Staff and found with conditions to be in compliance with Town of Bennett subdivision and zoning ordinances; and

**WHEREAS**, after a noticed public hearing, at which evidence and testimony were entered into the record, the Planning and Zoning Commission finds that the proposed Final Plat should be approved subject to certain conditions.

NOW, THEREFORE, BE IT RESOLVED BY THE PLANNING AND ZONING COMMISSION OF THE TOWN OF BENNETT, COLORADO:

<u>Section 1</u>. The Planning and Zoning Commission hereby recommends approval of the proposed Final Plat for the Bennett Crossing Filing No. 5 Subdivision, subject to the conditions set forth in Exhibit A, attached hereto and incorporated herein by reference.

PASSED AND ADOPTED THIS 21st DAY OF MARCH 2022.

ATTEST:

Christina Hart Town Clerk

Savannah Vickery, Secretary

Chairperson

# EXHIBIT A Bennett Crossing Filing No. 5 Final Plat Conditions of Approval

1. Before recording the plat, the applicant shall update plat notes related to tracts, easements and maintenance in a manner directed by the Town Engineer and make other minor modifications as directed by Town Staff, Engineer and Attorney.

#### **RESOLUTION NO. 912-22**

#### A RESOLUTION APPROVING A FINAL PLAT FOR BENNETT CROSSING FILING NO. 5

**WHEREAS**, there has been submitted to the Board of Trustee of the Town of Bennett a request for approval of a Final Plat for the Bennett Crossing Filing No. 5 Subdivision; and

**WHEREAS**, all materials related to the proposed Final Plat have been reviewed by Town Staff and the Bennett Planning and Zoning Commission and found to be in compliance with the Land Use and Development Regulations in Chapter 16 of the Bennett Municipal Code; and

**WHEREAS**, after a noticed public hearing, at which evidence and testimony were entered into the record, the Board of Trustees finds that the proposed Final Plat should be approved subject to certain conditions.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN OF BENNETT, COLORADO:

<u>Section 1</u>. The Board of Trustees hereby approves the proposed Final Plat for the Bennett Crossing Filing No. 5 Subdivision, subject to the conditions set forth on Exhibit A, attached hereto and incorporated herein by reference.

PASSED AND ADOPTED THIS 12th DAY OF APRIL 2022.

|                            | TOWN OF BENNETT         |
|----------------------------|-------------------------|
| ATTEST:                    | Royce D. Pindell, Mayor |
| Christina Hart, Town Clerk |                         |

# EXHIBIT A Bennett Crossing Filing No. 5 Subdivision Condition of Approval

1. Before recording the plat, the applicant shall update plat notes related to tracts, easements and maintenance in a manner directed by the Town Engineer and make other minor modifications as directed by Town Staff, Engineer and Attorney.

#### **Suggested Motion**

I move to approve Resolution No. 912-22 - A resolution recommending approval of the Final Plat, for the Bennett Crossing Filing No. 5 Subdivision with the following conditions before recording the final plat:

1. Before recording the plat, the applicant shall update plat notes related to tracts, easements and maintenance in a manner directed by the Town Engineer and make other minor modifications as directed by Town Staff, Engineer and Attorney.

# STAFF REPORT



TO: Mayor and Town of Bennett Board of Trustees

FROM: Dan Giroux, Town Engineer

DATE: April 12, 2022

SUBJECT: Bennett Ranch Sanitary Sewer Interceptor Upgrades

#### Background

On October 23, 2020, the Board of Trustees entered into a Subdivision Agreement (SA) regarding public improvements and other performance requirements and terms to support the Bennett Ranch Subdivision project. One of the key improvements required for the Bennett Ranch Subdivision development is a sanitary sewer main connecting the 174-acre subject property, east and northeast of the Bennett School District campus, to the Town's Wastewater Reclamation Facility, located at 4<sup>th</sup> Street and East 38<sup>th</sup> Avenue, and laying generally some 3,000 feet to the northwest. This sanitary sewer main traverses much of the northeast side of the Town, and Town staff could see the potential for additional Town benefits as the sewer connection was being conceived and designed.

Following progressive commitments on the part of the final homebuilder-developer, LGI Homes, the Town began investigating the depth and capacity feasibility of expanding, lowering and extending this key sanitary sewer improvement, towards relieving sewer system bottleneck stresses elsewhere in Town. These investigations and discussions culminated in October 2021 with the commissioning of an alignment study by AQUA Engineering, the Town's water & wastewater specialty engineering consultants. This study is nearing final completion, but was able to disclose, following survey and preliminary design iterations through February 2022, that the sewer improvement can be successfully extended south to the future intersection of Custer Avenue and Bennett Avenue.

The import of this extension is that a possible and now, planned, "Custer-8<sup>th</sup> Street" sanitary sewer bypass or interceptor main can remove significant wastewater flows from the Cordella Lift Station, Kiowa Street force main, and critical bottleneck sewer areas through the Brothers4 and Old Town areas of Bennett. The first step towards realizing this improvement is to enlarge and deepen the Bennett Ranch sanitary sewer main.

The Town enjoys the opportunity via Town Code to require or request of a developer that modifications be made to their design and construction to provide for additional Town benefit. In many cases, this is merely "upsizing" of a pipe to a next size, and the Town has and does request this type improvement regularly. In this case, however, the request indicated was to enlarge the pipeline, in some areas two sizes larger, to 18-inch diameter, and also to deepen the pipeline, so that more area can be captured and served by this sewer main.

The Town is liable for this additional improvement expense, to the extent it goes beyond what the developer requires for his own development uses and benefit. Fortunately, in this case, the homebuilder-developer, LGI Homes, has a strong 7-year relationship with the Town, and commitment to the community, and was accommodating to the request.

The request affects a total of 4,934 linear feet of the total 5,334 feet of the project, including 1,121 feet (21 percent) upsized two pipe sizes, 1,149 feet (22 percent) upsized one pipe size, and 2,664 feet (50 percent) placed at deeper elevations, for 93 percent of the subject pipe length. LGI procured a proposal from their General Contractor/utility contractor, Fiore & Sons, which amounted to \$182,583.92, or \$37.00 per linear foot affected, by sizing and/or depths, and including ancillary impacts such as additional manhole depths and sizes. Notably, since much of the additional manhole depths and sizes.

deepening areas became greater than 20 feet, this affected the construction means and methods, requiring significant additional effort, equipment, preparation and accommodation.

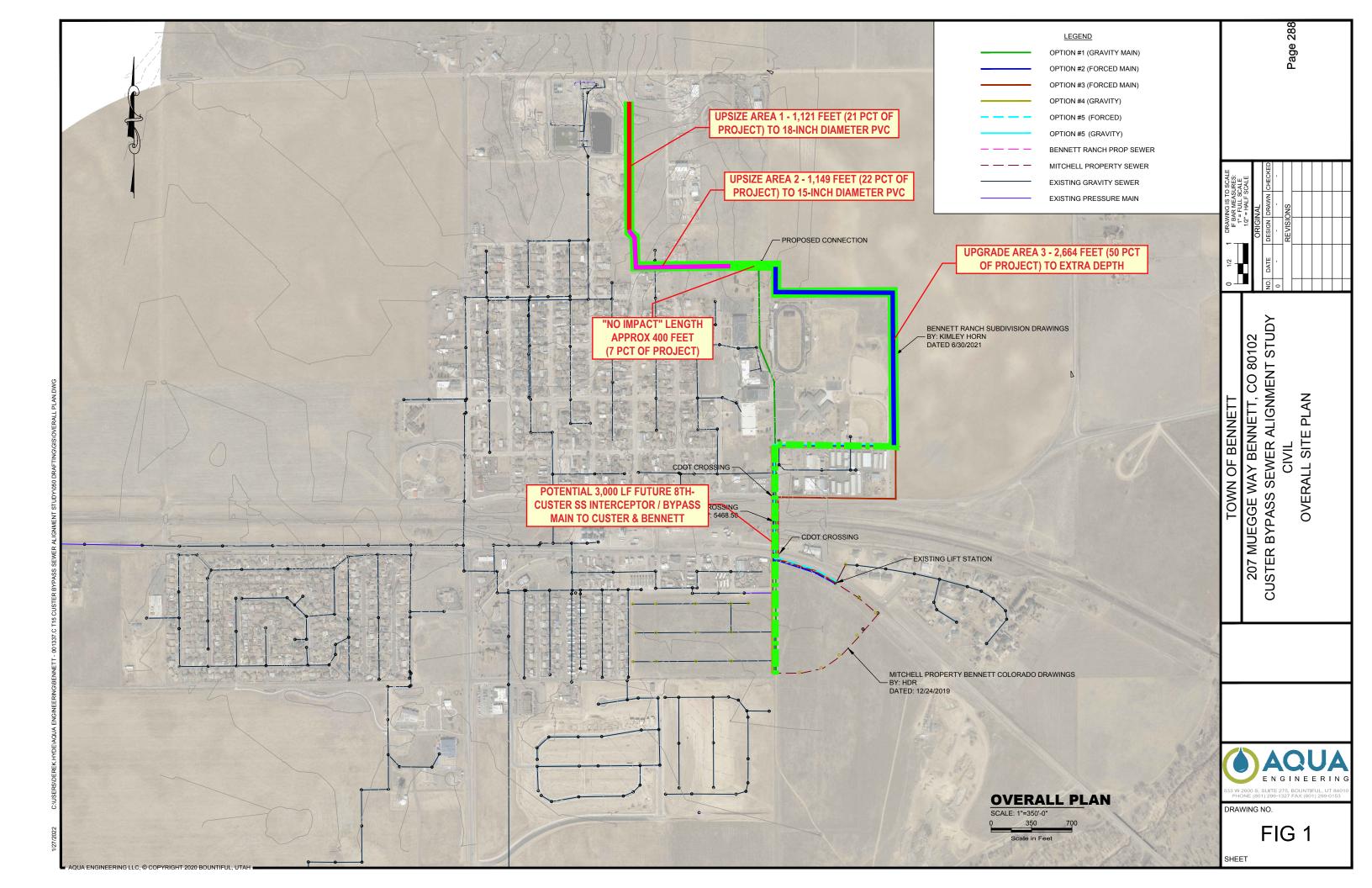
After further discussions with LGI, it was determined that the responsibility for this project would be undertaken by the Bennett Ranch Metro District. As such, an Intergovernmental Agreement (IGA) has between proposed between the Town and the Metro District outlining each party's responsibilities with respect to the project. Per the IGA, the Metro District will be the lead agency with respect to construction administration and management. Upon conditional acceptance of the improvements, the Town will be responsible for paying the Metro District \$182,583.92 as its share of the costs for the project. The funds for this project will come from the Town's Wastewater Capital Fund.

#### Staff Findings and Recommendation

Staff supports and strongly recommends adopting Resolution No. 911-22, a resolution approving an Intergovernmental Agreement for Town-requested sanitary sewer upgrades. Alternatively, the Board can provide Town staff direction on revisions to the proposed IGA.

#### Attachments

- 1. Bennett Ranch Sanitary Sewer Map Exhibit
- 2. Intergovernmental Agreement for Town-Requested Sanitary Sewer Upgrades
- 3. Resolution No. 911-22



#### INTERGOVERNMENTAL AGREEMENT

#### TOWN-REQUESTED SANITARY SEWER UPGRADE

| THIS AGREEMENT is made and entered into this day of                               | , 2022, by and      |
|---|---------------------|
| between the Town of Bennett, Colorado, a municipal corporation organized and exis | sting under and by  |
| virtue of the laws of the State of Colorado, whose address is 207 Muegge Way, Be  | ennett, Colorado,   |
| 80102 ("BENNETT"), Bennett Ranch Metropolitan District No. 1, a quasi-municip     | oal corporation and |
| political subdivision of the State of Colorado (the "DISTRICT") and LGI HOMES     | -COLORADO,          |
| LLC, a Colorado limited liability company ("LGI").                                |                     |

#### WITNESSETH:

| WHEREAS, BENNETT and LGI are parties to that certain Subdivision Agreement for                    |
|---|
| Bennett Ranch Filing No. 1 dated October 20, 2020 (the "Subdivision Agreement") recorded with the |
| Adams County Clerk and Recorder on October 23, 2020 at Reception No. 2020000109263, which         |
| was assigned to LGI pursuant to certain that Assignment of Subdivision Agreement dated            |
| recorded with the Adams County Clerk and Recorder on at   |
| Reception No; and   |

**WHEREAS,** the Subdivision Agreement requires LGI to construct public improvements to serve the Bennett Ranch Filing No. 1 Subdivision, which improvements include a sanitary sewer main that connects the Bennett Ranch Subdivision to the Town's Wastewater Reclamation Facility; and

**WHEREAS,** the parties wish to enlarge and increase the depth of the sanitary sewer main connecting Bennett Ranch Subdivision to BENNETT's Wastewater Reclamation Facility and to share in the construction costs of such improvements herein referred to as the "PROJECT", and

**WHEREAS,** the parties hereto desire to enter into this Agreement to define the roles and responsibilities of each of the parties regarding the construction of the PROJECT, and

**WHEREAS,** both parties are authorized to enter into intergovernmental agreements with one another, pursuant to C.R.S. § 29-1-203 and Colorado Constitution Article XIV, Sec. 18(2), for the purpose of achieving greater efficiencies for the provision of services to the public.

NOW THEREFORE, in consideration of the mutual promises and covenants contained herein, the parties hereto agree as follows:

- 1. <u>DESCRIPTION OF IMPROVEMENTS:</u> In general, the PROJECT's improvements shall consist of the enlargement and increase to the depth of the sanitary sewer main connecting Bennett Ranch Subdivision to BENNETT's Wastewater Reclamation Facility as detailed in the construction plans titled Utility Transmission Plan & Profile Bennett Ranch Subdivision dated February 23, 2022. BENNETT's share of the PROJECT costs shall be a lump sum payment of \$182,583.92 as detailed in Paragraph 4.
- **2. ACQUISITION OF ADDITIONAL RIGHT-OF-WAY:** No additional right-of-way is needed for the completion of the PROJECT.

shall be performed by Fiore & Sons, the contractor currently constructing the sanitary sewer main, as a change order to the current contract. The DISTRICT shall be the lead agency with regards to the administration of the construction of the improvements for the PROJECT. The DISTRICT shall have full authority in all contractual arrangements with the contractor, providers of geotechnical engineering and materials testing services, utility companies, and landowners whose cooperation and participation are required for completion of this PROJECT. The DISTRICT shall provide construction contract administration, construction observation, and other construction services. BENNETT shall have full access to the contract administration documents and to the construction site for the purpose of performing its inspections. BENNETT and the DISTRICT will work cooperatively on issues of clarification, resolution, and changes that may arise during construction, but agree that direction to the contractor shall come only from the DISTRICT.

BENNETT and the DISTRICT shall each designate a Project Manager to oversee day to day progress of the PROJECT and to act as their respective representatives on decisions related to clarification, resolution, and changes that may arise during construction. The following parties shall serve as the designated Project Managers:

DISTRICT:

BENNETT: Assistant Public Works Director Town of Bennett 207 Muegge Way Bennett, CO 80102

- **4. REIMBURSEMENT OF PROJECT COSTS:** BENNETT shall pay the DISTRICT \$182,583.92 as its share of the costs for the PROJECT. Such amount shall be paid by BENNETT after conditional acceptance (defined below) of the PROJECT by BENNETT and within thirty (30) days after receipt of a written invoice from the DISTRICT.
  - a. Each party shall bear its own legal, accounting, overhead and administrative costs related to completion of the PROJECT.
- **5.** CONDITIONAL AND FINAL ACCEPTANCE: The parties agree that the PROJECT constitutes a "public improvement" pursuant to the Subdivision Agreement for Bennett Ranch Filing No. 1 and that LGI is responsible for obtaining conditional and final acceptance for the PROJECT in accordance with the Subdivision Agreement.
- **6.** MAINTENANCE AND WARRANTY: For a two (2) year period from the date of conditional acceptance of the PROJECT, LGI shall warrant and maintain the PROJECT as provided in Section 1.7 of the Subdivision Agreement.

- 7. ENTIRE AGREEMENT; AMENDMENTS: This writing constitutes the entire Agreement between the parties hereto with respect to the subject matter herein, and shall be binding upon said parties, their officers, employees, agents and assigns and shall inure to the benefit of the respective successors and assigns of said parties. This Agreement may be amended only by written agreement approved by the parties.
- 8. NO JOINT VENTURE OR PARTNERSHIP: Nothing contained in this Agreement is intended to create a partnership or joint venture between BENNETT, the DISTRICT AND LGI with respect to construction of the PROJECT, and any implication to the contrary is hereby expressly disavowed. It is understood and agreed that this Agreement does not provide for the joint exercise by the parties of any activity, function or service, nor does it create a joint enterprise, nor does it authorize any party hereto to act as an agent of the other party hereto for any purpose whatsoever.
- 9. GOVERNING LAW AND VENUE: This Agreement shall be governed by the laws of the State of Colorado and venue shall lie in the County of Adams.
- 10. <u>NO WAIVER OF IMMUNITY</u>: No portion of this Agreement shall be deemed to constitute a waiver of any immunities the parties or their officers or employees may possess, nor shall any portion of this Agreement be deemed to have created a duty of care which did not previously exist with respect to any person not a party to this Agreement.
- and agreed that the enforcement of the terms and conditions of this Agreement, and all rights of action relating to such enforcement, shall be strictly reserved to the undersigned parties and nothing in this Agreement shall give or allow any claim or right of action whatsoever by any other person not included in the Agreement. It is the express intention of the undersigned parties that any entity other than the undersigned parties receiving services or benefits under this Agreement shall be considered to be an incidental beneficiary only.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement in duplicate of the day and year first hereinabove written.

| ATTEST:                           | TOWN OF BENNETT, COLORADO                    |  |  |  |  |
|-----------------------------------|--|--|--|--|--|
| By:<br>Christina Hart, Town Clerk | By: Royce D. Pindell, Mayor                  |  |  |  |  |
|                                   |  |  |  |  |  |
|                                   | BENNETT RANCH METROPOLITAN<br>DISTRICT NO. 1 |  |  |  |  |
| ATTEST:                           | Officer of District                          |  |  |  |  |

By: \_\_\_\_\_

# LGI HOMES – COLORADO, LLC

By: \_\_\_\_\_

| Its:  |               |                                 |  |  |  |  |
|---|---------------|---------------------------------|--|--|--|--|
|   |               |                                 |  |  |  |  |
| ACI   | KNOWLEDGEMENT |                                 |  |  |  |  |
| STATE OF COLORADO   | )             |                                 |  |  |  |  |
| COUNTY OF   | )ss<br>)      |                                 |  |  |  |  |
| before me this day of   |               | was subscribed and sworn to, 20 |  |  |  |  |
| Witness my hand and official seal.  My commission expires on: | ·             |                                 |  |  |  |  |
|   |               |                                 |  |  |  |  |
| (SEAL)  |               |                                 |  |  |  |  |
| (DLAL)  |               |                                 |  |  |  |  |

#### **RESOLUTION NO. 911-22**

# A RESOLUTION APPROVING AN INTERGOVERNMENTAL AGREEMENT FOR TOWN-REQUESTED SANITARY SEWER UPGRADES

WHEREAS, there has been proposed an Intergovernmental Agreement (IGA) between the Town and Bennett Ranch Metropolitan District No. 1 concerning plans to enlarge and increase the depth of the sanitary sewer main connecting the Bennett Ranch Subdivision to the Town's Wastewater Reclamation Facility; and

**WHEREAS,** the Board of Trustees finds that the IGA is in the best interest of the Town and its citizens.

# NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN OF BENNETT, COLORADO:

<u>Section 1.</u> The Intergovernmental Agreement for Town-requested Sanitary Sewer Upgrade (IGA) between the Town and Bennett Ranch Metropolitan District No. 1 is hereby approved in essentially the same form as the copy of such First Amendment accompanying this resolution.

Section 2. The Mayor is hereby authorized to execute the IGA, except that the Mayor is hereby further granted the authority to negotiate and approve such revisions to said IGA as the Mayor determine are necessary or desirable for the protection of the Town, so long as the essential terms and conditions of the IGA are not altered.

#### INTRODUCED, READ AND ADOPTED THIS 12th DAY OF APRIL 2022.

|                            | TOWN OF BENNETT         |
|----------------------------|-------------------------|
|                            | Davis D. Bindall Massa  |
|                            | Royce D. Pindell, Mayor |
| ATTEST:                    |                         |
|                            |                         |
|                            |                         |
| Christina Hart, Town Clerk |                         |

# **Suggested Motion**

I move to approve Resolution No. 911-22 - A resolution approving an Intergovernmental Agreement for Town-requested sanitary sewer upgrades.

# Board of Trustees: Organization and Committee Assignments

| Organization/Committee   | Description            | Meeting                   | Current N       | /lembers   | Changes April 2022 |           |
|--------------------------|------------------------|---------------------------|-----------------|------------|--------------------|-----------|
|                          |                        | Schedule                  | Member I        | Member II  | Member I           | Member II |
| <u>Organizations</u>     |                        |                           |                 |            |                    |           |
| Adams County             | Adams County           | Monthly                   | Pindell         | Harrell    |                    |           |
| Mayors/Managers          | Commissioners,         | 3 <sup>rd</sup> Friday    | (Mayor)         | (Mayor Pro |                    |           |
| Breakfast                | City/Town Mayors and   | 7:30 a.m.                 |                 | Tem)       |                    |           |
|                          | Managers meet          |                           | Stiles          |            |                    |           |
|                          | monthly at a breakfast |                           | (Administrator) | Barden     |                    |           |
|                          | meeting to network     |                           |                 | (Trustee)  |                    |           |
|                          | and communicate        |                           |                 |            |                    |           |
|                          | about shared issues.   |                           |                 |            |                    |           |
| Arapahoe County          | Adams County           | Quarterly                 | Pindell         | Harrell    |                    |           |
| Mayors/Managers          | Commissioners,         | 3 <sup>rd</sup> Friday    | (Mayor)         | (Mayor Pro |                    |           |
| Breakfast                | City/Town Mayors and   | 7:30 a.m.                 |                 | Tem)       |                    |           |
|                          | Managers meet          |                           | Stiles          |            |                    |           |
|                          | monthly at a breakfast |                           | (Administrator) |            |                    |           |
|                          | meeting to network     |                           |                 |            |                    |           |
|                          | and communicate        |                           |                 |            |                    |           |
|                          | about shared issues.   |                           |                 |            |                    |           |
| Regional Economic        | A group                | Monthly                   | Pindell         | Hebert     |                    |           |
| Advancement              | representing the       | 2 <sup>nd</sup> Thursday  | (Mayor)         | (EDP       |                    |           |
| Partnership (REAP)       | communities on the     | 11:45 a.m.                |                 | Manager)   |                    |           |
|                          | east I-70 corridor     |                           | Sus             |            |                    |           |
|                          | that exists to         |                           | (Trustee)       | Oakley     |                    |           |
|                          | promote economic       |                           |                 | (Trustee)  |                    |           |
|                          | development along      |                           |                 |            |                    |           |
|                          | the corridor.          |                           |                 |            |                    |           |
| I-70 Corridor Chamber of | The I-70 Corridor      | Monthly                   | Oakley          | White      |                    |           |
|                          |                        | 3 <sup>rd</sup> Wednesday | •               |            |                    |           |
| Commerce                 | Chamber of             | 12:00 noon                | (Trustee)       | (EDP)      |                    |           |
|                          | Commerce was           | 12:00 noon                |                 |            |                    |           |
|                          | formed in 1992 by      |                           |                 |            |                    |           |
|                          | interested citizens    |                           |                 |            |                    |           |
|                          | from the Eastern       |                           |                 |            |                    |           |
|                          | Colorado towns of      |                           |                 |            |                    | Pag       |
|                          | Watkins, Bennett,      |                           |                 |            |                    |           |
|                          | Strasburg, Byers, and  |                           |                 |            |                    |           |

# Board of Trustees: Organization and Committee Assignments

|                         |                        | <u> </u> |         | T         | <del>                                     </del> |         |         |
|-------------------------|------------------------|----------|---------|-----------|--|---------|---------|
|                         | Deer Trail to promote  |          |         |           |  |         |         |
|                         | business along the     |          |         |           |  |         |         |
|                         | corridor.              |          |         |           |  |         |         |
| Denver Regional Council | The Denver Regional    |          | Various | Vittum    | Pindell  | Pindell |         |
| of Governments (DRCOG)  | Council of             |          |         |           | (Alternate)                                      | (Mayor) |         |
|                         | Governments            |          |         |           |  |         |         |
|                         | (DRCOG) fosters        |          |         |           | Hebert   |         |         |
|                         | regional cooperation   |          |         |           | (Planning)                                       |         |         |
|                         | among county and       |          |         |           |  |         |         |
|                         | municipal              |          |         |           |  |         |         |
|                         | governments in the     |          |         |           |  |         |         |
|                         | Denver metropolitan    |          |         |           |  |         |         |
|                         | area.                  |          |         |           |  |         |         |
| Aurora Chamber of       | Chamber of             |          |         | White     | Harrell  |         |         |
| Commerce                | Commerce               |          |         | (EDP)     | (Mayor Pro                                       |         |         |
|                         | organization           |          |         | ,         | Tem)   |         |         |
|                         | representing           |          |         |           |  |         |         |
|                         | businesses in Aurora   |          |         |           | Sus  |         |         |
|                         | and the SE metro       |          |         |           | (Trustee)  |         |         |
|                         | area.                  |          |         |           | (110000)   |         |         |
| Colorado Municipal      | u.cu.                  |          |         | Pindell   | Stiles   |         |         |
| League (CML)            |                        |          |         | (Mayor)   | (Policy  |         |         |
| League (CiviL)          |                        |          |         | (iviayor) | Committee)                                       |         |         |
|                         |                        |          |         |           | Committee  |         |         |
|                         |                        |          |         |           |  |         |         |
| Committees              |                        |          |         |           |  |         |         |
| Water Committee         | Committee addressing   |          | Varies  | Bayley    | Metsker  | Bayley  | Metsker |
|                         | water and sewer        |          |         |           |  | • •     |         |
|                         | issues for the Town.   |          |         |           |  |         |         |
| Mosquito Committee      | Represents the Town    |          | Varies  | Price     |  |         |         |
| •                       | on Mosquito issues     |          |         | (PWD)     |  |         |         |
|                         | with Tri-County Health |          |         |           |  |         |         |
|                         | et al                  |          |         |           |  |         |         |
| Economic Development    | A committee            |          | Varies  | Pindell   | Hebert   |         |         |
| Committee Bennett       | addressing economic    |          |         | (Mayor)   | (EDP)  |         | Page    |
| Advisory Committee      | development            |          |         | (, 0)     | White  |         | 0       |

# Board of Trustees: Organization and Committee Assignments

|  | opportunities for the<br>Town. Bennett<br>Business Advisory<br>Committee.             |        |                    | Oakley<br>(Trustee)<br>Alternate |  |
|--|---|--------|--------------------|----------------------------------|--|
| Sales Tax Oversight Committee ( Streets) | Citizen Committee to<br>review and make<br>recommendations<br>regarding street issues | Varies | Sus<br>(Trustee)   | Smith<br>(Trustee)               |  |
| Bennett Gives Back Grant<br>Committee    | Committee to review grant applications and make recommendations to the Board          | Varies | Pindell<br>(Mayor) | Smith<br>(Trustee)               |  |