

1st Floor, Suite W2000
Brighton, CO 80601-8204
PHONE 720.523.6800
FAX 720.523.6998

PLANNED UNIT DEVELOPMENT – MAJOR AMENDMENT

Application submittals must include all documents on this checklist as well as this page. Please use the reference guide (pg. 2) included in this packet for more information on each submittal item.

All submittals shall include one (1) hard copy of all documents and one (1) electronic copy with all documents combined in a single PDF.

- 1. Development Application Form (pg. 3)
- 2. Application Fees (see table)
- 3. Written Explanation of the Project
- 4. Site Plan Showing Proposed Development
- 5. Proof of Ownership (warranty deed or title policy)
- 6. Legal Description
- 7. Certificate of Taxes Paid

Application Fees	Amount	Due
PUD Major Amendment	\$2,200	With application submittal
Tri County Health	\$210 (With anniestica anhaeittel
Tri-County Health	\$210 (with public utilities)	With application submittal
*made payable to Tri	\$360 (with individual septic system)	
County Health		
Copying	\$5 per page	Prior to public hearing
Recording	\$13 (first page), \$10 (each additional page if larger than legal size), \$5 (each additional page if legal size)	

Planned Unit Development – Major Amendment Guide to Development Application Submittal

All development application submittals shall consist of one (1) hard copy of each document and one (1) electronic copy (USB or CD) with all documents combined in a single PDF. Application submittals that do not conform to these guidelines shall not be accepted.

3. Explanation of the Project:

 A clear and concise, yet thorough, description of the proposal. Please include, if applicable, timeframe, purpose of project, and improvements that will be made to the site

4. Site Plan Showing Proposed Development:

- A detailed drawing of existing and proposed improvements
- Including:
 - o Streets, roads, and intersections
 - o Driveways, access points, and parking areas
 - Existing and proposed structures, wells, and septic systems,
 - o Easements, utility lines, and no build or hazardous areas
 - Scale, north arrow, and date of preparation
- An Improvement Location Certificate or Survey <u>may be required</u> during the official review

5. Proof of Ownership:

- A deed may be found in the Office of the Clerk and Recorder
- A title commitment is prepared by a professional title company

6. Legal Description:

- Geographical description used to locate and identify a property
- Visit http://gisapp.adcogov.org/quicksearch/ to find the legal description for your property

7. Certificate of Taxes Paid:

- All taxes on the subject property must be paid in full. Please contact the Adams County Treasurer's Office
- Or http://adcogov.org/index.aspx?NID=812

Community & Economic Development Department www.adcogov.org



4430 South Adams County Parkway 1st Floor, Suite W2000 Brighton, CO 80601-8204 PHONE 720.523.6800 FAX 720.523.6998

Application Type	:	
Subd	eptual Review Preliminary PUD livision, Preliminary Final PUD livision, Final Rezone Correction/ Vacation Special Use	Temporary Use Variance Conditional Use Other:
PROJECT NAME:		
APPLICANT		
Name(s):		Phone #:
Address:		
City, State, Zip:		
2nd Phone #:		Email:
OWNER		
Name(s):		Phone #:
Address:		
City, State, Zip:		
2nd Phone #:		Email:
TECHNICAL REP	PRESENTATIVE (Consultant, Engir	neer, Surveyor, Architect, etc.)
Name:		Phone #:
Address:		
City, State, Zip:		
2nd Phone #:		Email:

DESCRIPTION OF SITE

Address:	
City, State, Zip:	
Area (acres or square feet):	
Tax Assessor Parcel Number	
Existing Zoning:	
Existing Land Use:	
Proposed Land Use:	
Have you attended	d a Conceptual Review? YES NO
If Yes, please list I	PRE#:
under the author pertinent requirem Fee is non-refund	at I am making this application as owner of the above described property or acting ity of the owner (attached authorization, if not owner). I am familiar with all tents, procedures, and fees of the County. I understand that the Application Review dable. All statements made on this form and additional application materials are my knowledge and belief.
Name:	Date:
	Owner's Printed Name
Name:	Joseph DelZotto
	Owner's Signature

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REZONING (Zoning Map Amendment)

Application submittals must include all documents on this checklist as well as this page. Please use the reference guide (pg. 2) included in this packet for more information on each submittal item.

All submittals shall include one (1) hard copy of all documents and one (1) electronic copy with all documents combined in a single PDF. For hard copies, each document shall be labeled or tabbed with the corresponding checklist number.

Development Application Form (pg. 4)
Application Fees (see table)
Written Explanation of the Project
Site Plan Showing Proposed Development, including:
a. Proposed Building Envelope
b. Parking Areas
c. Site Access
d. Landscape Areas
Trip Generation Letter
Preliminary Drainage Analysis
Neighborhood Meeting Summary
Proof of Ownership (warranty deed or title policy)
Proof of Water and Sewer Services
. Legal Description
. Certificate of Taxes Paid
Certificate of Notice to Mineral Estate Owners/and Lessees (pg. 6)
Certificate of Surface Development (pg. 7)

Applications Fees	Amount	Due
Application	\$1,500	At application submittal
*made payable to Adams County	,	The application submittal
Tri-County Health	\$150 (public utilities)	At application submittal
*made payable to Tri-County Health	\$210 (individual septic)	Tit application submittal

Rezoning Guide to Development Application Submittal

All development application submittals shall consist of one (1) hard copy of each document and one (1) electronic copy (USB) with all documents combined in a single PDF. Application submittals that do not conform to these guidelines shall not be accepted.

3. Written Explanation of the Project:

 A clear and concise, yet thorough, description of the proposal. Please include, if applicable, timeframe, purpose of project, and improvements that will be made to the site

4. Site Plan Showing Proposed Development:

- A detailed drawing of existing and proposed improvements
- Including:
 - o Streets, roads, and intersections
 - Driveways, access points, and parking areas
 - Existing and proposed structures, wells, and septic systems,
 - Easements, utility lines, and no build or hazardous areas
 - Scale, north arrow, and date of preparation
- An Improvement Location Certificate or Survey <u>may be required</u> during the official review

5. Trip Generation Letter:

 Shall be determined based upon the methodologies of the most current, Institute of Transportation Engineers (ITE) Trip Generation Manual for the weekday AM peak hour and weekday PM peak hour

6. Preliminary Drainage Analysis:

 A general narrative discussing the pertinent drainage characteristics and problems, and proposed drainage characteristics if the subdivision is approved

7. Neighborhood Meeting Summary:

- Please refer to Section 2-01-02 of the Adams County Development Standards and Regulations for the specific requirements regarding time, location, and notice
- A written summary shall be prepared including the materials submittal presented at the meeting, any issues identified at the meeting, and how those issues have been addressed

8. Proof of Ownership:

- A deed may be found in the Office of the Clerk and Recorder
- A title commitment is prepared by a professional title company

9. Proof of Water:

- Public utilities-A written statement from the appropriate water district indicating that they will provide service to the property OR a copy of a current bill from the service provider
- Private utilities- Well permit(s) information can be obtained from the Colorado State Division of Water Resources at (303) 866-3587

Proof of Sewer:

- Public utilities-A written statement from the appropriate sanitation district indicating that they will provide service to the property OR a copy of a current bill from the service provider
- Private utilities-A written statement from Tri-County Health indicating the viability of obtaining Onsite Wastewater Treatment Systems

10. Legal Description:

- Geographical description used to locate and identify a property
- Visit http://gisapp.adcogov.org/quicksearch/ to find the legal description for your property

11. Certificate of Taxes Paid:

- All taxes on the subject property must be paid in full. Please contact the Adams County Treasurer's Office
- Or http://adcogov.org/index.aspx?NID=812

12. and 13. Certificate of Notice to Mineral Estate Owners/ Certificate of Surface Development:

- The State of Colorado requires notification to mineral rights owners of applications for surface development (i.e. zoning, plats, etc.)
- Mineral or Surface right owners may be found in the title commitment for the subject property
- You may also search the Office of the Clerk and Recorder for any recorded deeds, easements, or other documents.

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DEVELOPMENT APPLICATION FORM

Application Typ	e:		
Sub	nceptual Review Preliminary PUD odivision, Preliminary Final PUD odivision, Final Rezone t Correction/ Vacation Special Use	☐ Variand	onal Use
PROJECT NAME	E: Sherrelwood Village Filing No. 2		
APPLICANT			
Name(s):	Delwest Development Corp/Craig Fitchett	Phone #:	720-708-4065
Address:	155 S Madison St. Suite 326		
City, State, Zip:	Denver, CO 80209		
2nd Phone #:	720-276-6098	Email:	cfitchett@delwest.com
OWNER			
Name(s):	Joseph DelZotto	Phone #:	720-708-7065
Address:	155 S Madison St., Suite 326		
City, State, Zip:	Denver, CO 80209		
2nd Phone #:	303-888-8048	Email:	jad@delwest.com
TECHNICAL REI	PRESENTATIVE (Consultant, Engir	neer, Surve	yor, Architect, etc.)
Name:	Tom Girard	Phone #:	303-829-9005
Address:	1950 W Littleton Blvd. Suite 109		
City, State, Zip:	Littleton, CO 80120		
2nd Phone #:	303-730-5976	Email:	girard@corecivil.com

DESCRIPTION OF SITE

Address:	7840 Pecos St., 7996 Pecos St., 8000 Pecos St.
City, State, Zip:	Denver, CO 80221
Area (acres or square feet):	450,875 sq ft/ 10.351 acres
Tax Assessor Parcel Number	7840 Pecos St - 017193310016; 7996 Pecos St 0171933100009 and 8000 Pecos St 0171928400003
Existing Zoning:	7996 and 8000 Pecos - R-1-C; 7840 Pecos St PUD
Existing Land Use:	7996 Pecos - vacant; 8000 Pecos - abandoned school; 7840 Pecos - PUD
Proposed Land Use:	PUD with additional 48 townhomes
Have you attended	d a Conceptual Review? YES X NO NO
If Yes, please list	PRE#: 201900091
under the author pertinent requirement refundations.	at I am making this application as owner of the above described property or acting rity of the owner (attached authorization, if not owner). I am familiar with all nents, procedures, and fees of the County. I understand that the Application Review dable. All statements made on this form and additional application materials are my knowledge and belief.
Name:	705FPH D 6170110 Date: 12/23/19
Name:	Owner's Printed Name Owner's Signature



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SUBDIVISION-MAJOR / PRELIMINARY

Application submittals must include all documents on this checklist as well as this page. Please use the reference guide (pg. 3) included in this packet for more information on each submittal item.

All submittals shall include one (1) hard copy of all documents and one (1) electronic copy with all documents combined in a single PDF. For hard copies, each document shall be labeled or tabbed with the corresponding checklist number.

- 1. Development Application Form (pg. 4)
- 2. Application Fees (pg. 2)
- 3. Written Explanation of the Project
- 4. Site Plan Showing Proposed Development
- 5. Copy of Plat prepared by Registered Land Surveyor (pg. 7)
- 6. School Impact Analysis (contact applicable District)
- 7. Fire Protection Report (contact applicable District)
- 8. Proof of Ownership (title policy dated within 30 days of submittal)
- 9. Proof of Water and Sewer Services
- 10. Proof of Utilities (e.g. electric, gas)
- 11. Legal Description
- 12. Statement of Taxes Paid
- 13. Certificate of Notice to Mineral Estate Owners/and Lessees (pg. 12)
- 14. Certificate of Surface Development (pg. 13)

Required Engineering Documents, 2 hard copies

- 1. Preliminary Drainage Report
- 2. Preliminary Traffic Impact Study
- 3. Preliminary Erosion and Sediment Control Plans
- 4. Preliminary Construction/ Engineering Design Plans continued on next page...

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Application Fees	Amount	Due
Major Subdivision	\$1,300	With application submittal
(preliminary plat)		
*made payable to Adams		
County		
Tri-County Health	\$210 (with central utilities)	With application submittal
* made payable to Tri-	\$360 (with individual septic system)	
County Health Department		
Soil Conservation	\$100 (less than 5 lots)	With application submittal
*made payable to Soil	\$150 (more than 5 lots)	
Conservation District		
Colorado Geological	\$600 (1-3 dwellings and >100 acres)	With application submittal
Survey	\$900 (< 3 dwellings and > 100 acres)	
*made payable to Colorado	\$1,550 (between 100 and 500 acres)	
Geological Survey	\$2,500 (500 acres or more)	
Engineering Review	\$1,000 (less than 5 lots)	With application submittal
*made payable to Adams	\$2,500 (5-25 lots)	
County	\$7,500 (greater than 25 lots)	

Major Subdivision (Preliminary Plat) - Guide to Development Application Submittal

The submittal documents for all Land Use/Development Applications are listed below. Detailed explanations of the submittal documents are also provided.

All development application submittals shall comprise of one (1) electronic copy (USB) and one (1) hard copy of each document. Application submittals that do not conform to these guidelines shall not be accepted.

3. Written Explanation of the Project:

 A clear and concise, yet thorough, description of the proposal. Please include, if applicable, timeframe, purpose of project, and improvements that will be made to the site

4. Site Plan Showing Proposed Development:

- A detailed drawing of existing and proposed improvements
- Including:
 - o Streets, roads, and intersections
 - o Driveways, access points, and parking areas
 - o Existing and proposed structures, wells, and septic systems,
 - Easements, utility lines, and no build or hazardous areas
 - Scale, north arrow, and date of preparation
- An Improvement Location Certificate or Survey <u>may be required</u> during the official review

5. Copy of Plat Prepared by Registered Land Surveyor

 A map or maps together with supporting documentation of certain described land providing permanent and accurate record of the legal description, dedications, exact size, shape, and location of lots, blocks, streets, easements, and parcels

6. School Impact Analysis:

- Contact the applicable school district for the analysis
- Should include the increase in elementary, middle, and high school students and the existing school sites and structure of the applicable district in which the subdivision is proposed to be located

7. Fire Protection Report:

• Shall discuss the adequacy of protection within the propose subdivision and be approved by the appropriate fire district

8. Proof of Ownership:

- A deed may be found in the Office of the Clerk and Recorder
- A title commitment is prepared by a professional title company

9. Proof of Water:

- Public utilities A written statement from the appropriate water district indicating that they will provide service to the property OR a copy of a current bill from the service provider
- Private utilities Well permit(s) information can be obtained from the Colorado State Division of Water Resources at (303) 866-3587

Proof of Sewer:

- Public utilities A written statement from the appropriate sanitation district indicating that they will provide service to the property
 OR a copy of a current bill from the service provider
- Private utilities A written statement from Tri-County Health indicating the viability of obtaining Onsite Wastewater Treatment Systems

10. Proof of Utilities (Gas, Electric, etc):

- A written statement from the appropriate utility provider indicating that they will provide service to the property
- Copy of a current bill from the service provider

11. Legal Description:

- Geographical description used to locate and identify a property
- Visit http://gisapp.adcogov.org/quicksearch/ to find the legal description for your property

12. Statement of Taxes Paid:

- All taxes on the subject property must be paid in full. Please contact the Adams County Treasurer's Office
- Or https://adcotax.com/treasurer/web/

13-14. Certificate of Notice to Mineral Estate Owners/ Certificate of Surface Development:

- The State of Colorado requires notification to mineral rights owners of applications for surface development (i.e. zoning, plats, etc.)
- Mineral or Surface right owners may be found in the title commitment for the subject property
- You may also search the Office of the Clerk and Recorder for any recorded deeds, easements, or other documents.

Required Engineering Documents

1. Level 1-Storm Drainage Plan:

- A level 1 Storm Drainage Plan is a preliminary design plan showing existing and proposed site drainage features or improvements and, is intended to show how the storm drainage will be mitigated.
- See Appendix B of the Development Standards for a plan preparation checklist

Level 2-Storm Drainage Study (SDS):

- A level 2 SDS is a preliminary design report that describes the existing and proposed drainage features and, includes a hydrologic analysis of the proposed site. A Level 2 SDS also includes a drainage plan.
- See Appendix B of the Development Standards for a plan preparation checklist

Level 3-Storm Drainage Study (SDS):

• A level 3 SDS is a preliminary design report that describes the existing and proposed drainage features, includes a hydrologic

- analysis of the proposed site and hydraulic analysis of all proposed drainage mitigation measures. A Level 3 SDS also includes a drainage plan and construction plans for all drainage mitigation features.
- See Appendix B of the Development Standards for a plan preparation checklist

2. Traffic Impact Study:

- Intended to forecast and mitigate the transportation and traffic impacts of a proposed land use development or redevelopment project
- See Chapter 8 of the Adams County Development Standards for requirements

3. Erosion and Sediment Control Plans:

- Erosion and Sediment Control (ESC) plans are construction plans showing the proposed Best Management Practices (BMP) that will be used to mitigate erosion and the transport of sediment from a site under construction.
- ESC plans are often done in three (3) phases: Initial, Interim and, Final.
- These plans must also include installation details for each of the BMP's.

4. Construction / Engineering Design Plans:

- A set of maps and/or drawings showing how a proposed development is to be constructed.
- The plans must include:
 - o site maps of the existing conditions and proposed improvements,
 - o installation/construction details for all proposed improvements,
 - survey control (horizontal and vertical) for locating the improvements and,
 - o all necessary specification for the products to be used.
- Construction plans are often broken out for specific improvements; for example: site plan, grading plan, waterline improvement plans, roadways improvements plans, etc.

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DEVELOPMENT APPLICATION FORM

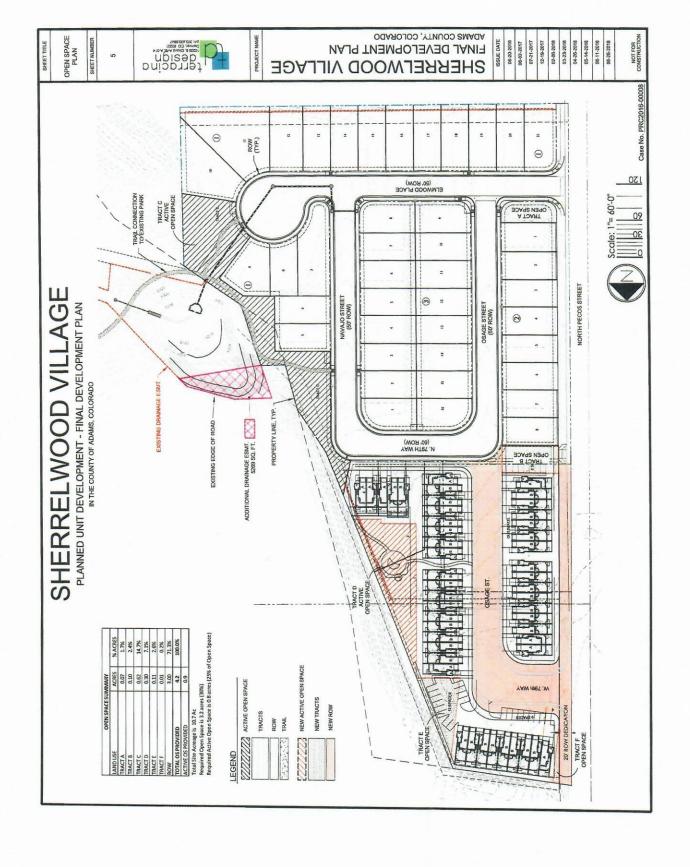
Application Typ	pe:	
Sub Sub	onceptual Review Preliminary PUD Temporary Use ubdivision, Preliminary Final PUD Variance ubdivision, Final Rezone Conditional Use lat Correction/ Vacation Special Use Other:	
PROJECT NAME	ME: Sherrelwood Village Filing 2	
APPLICANT		
Name(s):	Delwest Development Corp/Craig Fitchett Phone #: 720-708-4	065
Address:	155 S Madison St. Suite 326	
City, State, Zip:	Denver, CO 80209	
2nd Phone #:	720-276-6098 Email: cfitchett@d	lelwest.com
OWNER		
Name(s):	Joe DelZotto Phone #: 720-708-40	065
Address:	155 S Madison St. Suite 326	
City, State, Zip:	Denver, CO 80209	
2nd Phone #:	303-888-8048 Email: jad@delwe	st.com
TECHNICAL REI	EPRESENTATIVE (Consultant, Engineer, Surveyor, Archi	ect, etc.)
Name:	Tom Girard Phone #: 303-829-9	005
Address:	1950 W Littleton Blvd. Suite 109	
City, State, Zip:	Littleton, CO 80120	
2nd Phone #:	303-730-5976 Email: girard@cor	ecivil.com

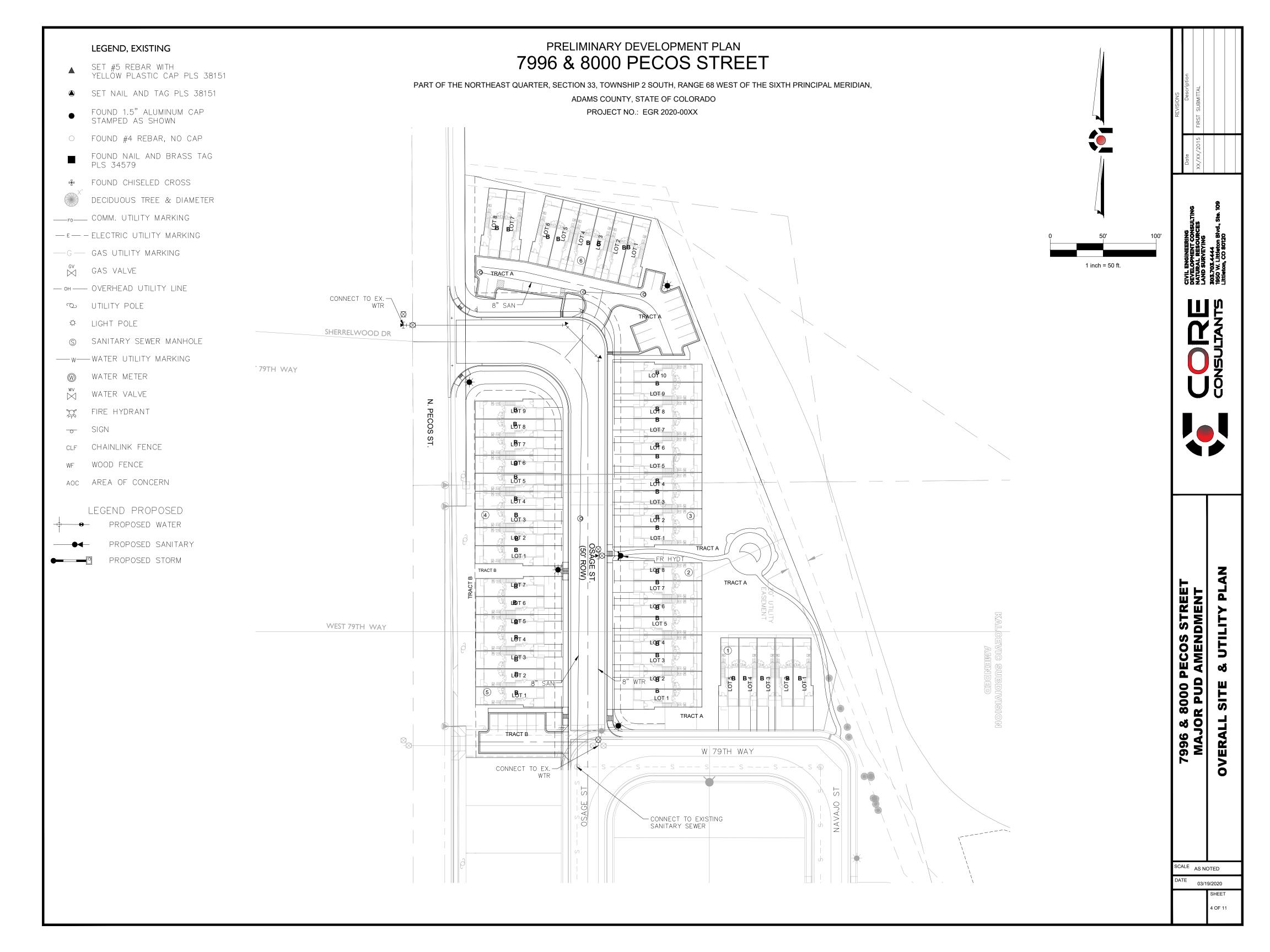
DESCRIPTION OF SITE

Address:	7840 Pecos, 7996 Pecos and 8000 Pecos
City, State, Zip:	Denver, CO 80221
Area (acres or square feet):	450,875 sq ft/ 10.351 acres
Tax Assessor Parcel Number	7840 Pecos - 017193310016; 7996 Pecos - 0171933100009 and 8000 Pecos St 0171928400003
Existing Zoning:	7996 and 8000 Pecos - R-1-C; 7840 Pecos- PUD
Existing Land Use:	7996 Pecos - Vacant; 8000 Pecos - abandoned school; 7840 Pecos PUD
Proposed Land Use:	PUD with 48 additional townhomes
Have you attende	ed a Conceptual Review? YES X NO NO
If Yes, please list	PRE#: 201900091
under the author pertinent requirer Fee is non-refundation	nat I am making this application as owner of the above described property or acting rity of the owner (attached authorization, if not owner). I am familiar with all nents, procedures, and fees of the County. I understand that the Application Review dable. All statements made on this form and additional application materials are f my knowledge and belief.
Name:	Joe Delzotto Date: 5/14/20
Name:	Owner's Printed Name Owner's Signature

Delwest Development Corporation is proposing to amend their current Sherrelwood Village subdivision to include approximately 48 new townhomes on 2.2 Acres of additional land adjacent and to the north of the single family houses we are currently building. Delwest purchased 7996 and 8000 Pecos St for several reasons:

- 1. To offer a lower more "workforce" focused priced housing solution for the community than a new traditional single family home.
- 2. We can incorporate the traffic signal at Elmwood Drive into our street design. It improves access to the current subdivision by creating a loop, with 2 access points on Pecos St and especially enhances ingress and egress to and from southbound traffic.
- 3. Delwest has repurposed several Westminster Schools blighted properties. We will be demolishing a vacant, blighted building, the former Children's Outreach Project, and building new attainable housing stock.
- 4. Delwest is working with Hyland Hills to bring some new improvements to Sherrelwood Park, in exchange for using offsite detention.





SHERRELWOOD VILLAGE

PART OF THE NORTHEAST QUARTER SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, CAUORADO

SHEET I OF 3

EGAL DESCRIPTION AND DEDICATION STATEMENT

KNOW ALL PEOFLER' THESE PRESENTS THAT THE UNDESSIGNED WARRANT THEY ARE THE COMPANGE A PARCEL OF LAWD STILATED IN THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, AAAGE 48 WEST OF THE SIXTH P.M., MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTH QUARTER CORMER OF SAID SECTION 13, THENCE IN 18 97 19 THE CALONG SAID NORTH LINE AD DISTANCE OF A PROPER TO A POINT ON THE DATE IN THE POINT OF REGION HIGH COMPANION. BEMBINGS FOR THIS DESCRIPTION ARE BASED ON THE MORTH LINE OF THE MORTHEAST OQUARTED (SECTION 31). FOWNSHIP 25 COUTT, ANDER GE WEST OF THE SKITH OF PAIR, BENNE ASHWED TO BEEN IN 93*1097°E. ROOM THE MORTH QUARTES CORNER OS AND SECTION. IT BEING A 31-44, AURININI-FOR IN BANGES GOX, RE 32519 TO THE MORTHEST CORNERS OF SAID SECTION 31 SENIOL A 31-47 ALJININIUM CAP IN BANGE BOX, RE 3726 WITH ALL BEARBANGS CONTAINED BEIGN BEIGN THERETO.

139 IN THE RECORDS OF THE ADAPS COUNTY CLERK AND RECORDER, A DISTANCE OF 1299-36 FET TO A POINT ON THE WEST LINE OF THAT PARCEL, OF LAND RECORDED IN BOOK 1331 AT PAGE 93, SAID ADAMS COUNTY RECORDS. THENCE ALONG THE WEST LINES OF SAID PARCEL OF LAND, THE FOLLOWING TWO (2) COURSES:

THENCE N 89'3030" E, ALONG THE NORTH LINE OF SUD NORTHEAST QUARTER, ALSO BENET THE RECORDED IN BOOK 334 AT PAGE 139 IN THE RECORDS OF THE ADAMS COUNTY CLERK AND RECORDER, A DISTANCE OF

1. \$21*38'59" E, A DISTANCE OF 266.92 FEET;

2. S 33"40"19" E, A DISTANCE OF 83.13 FEET TO A POINT ON THE WEST LINE OF LOT 2, KALCEVIC SUBDIVISION AMENDED, AS RECORDED AT RECEPTION NO. BIO41161, SAID ADAMS COUNTY RECORDS:

THENCE ALONG THE WEST LINES OF LOT 2 AND LOT 1, SAID KALCEVIC SUBDIVISION AMENDED, THE FOLLOWING FOUR (4) COURSES:

1. S 14"37"52" E, A DISTANCE OF 76.08 FEET;

2. N 88*03'04" E, A DISTANCE OF 39.50 FEET;

3. S 17*49'46" E, A DISTANCE OF 104.05 FEET; 4. \$ 55*05'47" E, A DISTANCE OF 112.26 FEET;

THENESS OF 1972"E, A DORANCE OF 255.27 FEET TO A FOUNT ON THE ROBITH LINE OF THE ENWINDON PARK SLIBBINISHON, AS RECORDED AT RECEPTION NO. CO 1979; JAU ADANS COUNTY RECORDS:
THENCES 59724"W, ALONG THE NORTH LUNE OF SAID ENWINDON PARK
SLIBBINISHOON, NO DISTANCE OF SAIL SE FEET TO A POINT ON THE ESST LINE OF THE PECOS TREET RIGHT-GAWW;

THENCE NO'0'13" F, ALONG SAID BAT LINE OF THE PECOS STREET RICHT.OFWAY, A DISTANCE OF SAGAL REFT OT THE SOUTHWEST CORNER OF THAT EXCEPTION PARCEL. RECORDED IN BOOK TAS, AT PACE 180 OF SAID ADANS COUNT RECORDS. THENCE N 00'0153" E, ALONG A LINE BEING PARALLE, TO THE WEST LINE OF THE MONTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 200,00 FEET TO A POINT BEING 30.00 FEET SOUTH OF THE NORTH LINE OF THE MORTHEAST QUARTER OF SAID SECTION 33. THENCE N 89°30'30" E, ALONG THE SOUTH LINE OF SAID EXCEPTION PARCEL, A DISTANCE OF 208,00 FEET TO THE SOUTHEAST CORNER OF SAID EXCEPTION PARCEL.

THENCE N 00°01'53" E, ALONG THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY, A DISTANCE OF 20,00 FEET TO THE POINT OF BEGINNING. THENCE S 89 YOJG" W, ALONG A LINE BEING 30.00 FEET SOUTH OF AND PARALLEL TO THE NORTHLINE OF SKID SCFTION 33. A DISTANCE OF YEAR OF SECTION 34. A DISTANCE OF YARD FEET TO THE NORTHWAST CORNER OF SAID EXCEPTION PARCEL AND A POINT ON THE BAST LINE OF THE FECOS STREEP RIGHT-OF-WAY;

CONTAINING 358,190 SQUARE FEET, OR 8.223 ACRES, MORE OR LESS.

HAVELALD CUIT, PATTED AND SARDINDED THE SAME BYTO LOTS. TRACTS AND BLOCKS AS SHOWN ON THIS EATL UNGE THE MANE. AND STILE OF SHERBREWOOD VILLAGE AND BYTHERE PRESENTS OF HERERS DEDICATE TO THE COUNTY OF ADAMS. AND COUNCAIN OF HERERS PRESENTS OF THE WEBSILE OF THE MESSAGE. THE STREETS AND SASTERISTS AS SHOWN HEREON AND NOT HERROLATED. THE STREETS.

PUBLIC SERVICE COMPANY OF COLORADO NOTES
THEE SUBMENTANT BRONDES FOR THE INSTITUTION THE BURST OF THE BURST O



LAND USE TABLE

	-	
TYPE	AREA (SF)	AREA (AC)
TRACTS A - D	37,019	0.850
LOTS (45)	224,689	5.158
R.O.W DEDICATED	96,482	2215
TOTAL	358,190	8.223

TRACT USE TABLE

TRACT	USE	OWNERSHIP	MAINTENANCE
4	OPEN SPACE, UTILITY OWNER	OWNER	OWNER
6	OPEN SPACE, UTILITY EMERGENCY ACCESS	OWNER	OWNER
U	OPEN SPACE, UTILITY, OWNER DRAINAGE & ACCESS	OWNER	OWNER
٥	OPEN SPACE, UTILITY OWNER	OWNER	OWNER

THE PECES INVESTMENTS LLC, A COLORADO LIMITED LIABILITY COMPANY BY:

WATER AND SMATARY SEWER EAGENERYS ARE HEREBY GRANTED TO THE CITY OF THOUSTON, AS DIMENTIOL, HANDRITOL, RADRITOLL, HANDRITOL, AS DIMENTIOL, HANDRITOLL, FANDRITOLL, HANDRITOLL, HANDRITOLL,

CITY OF THORNTON NOTES

ITS OWNER PER ACKNOWLEDGEMENT

STATE OF COLORADO

THE FOREGOING WAS ACKNOWLEDGED BEFORE ME THIS 10⁴¹⁴ DAY SS COUNTY OF Denver

of Leatenber, 2018, AD. Derrell Schreiner WITNESS MY HAND AND OFFICIAL SEA!

COBE

MARY J. LICKEI
HOTARY PUBLIC
STATE OF COLUMNOTO
NOTARY ID \$ 1857418847
NY COMMISSION EXPRES APRIL 20. 20.

PLANNING COMMISSION APPROVAL
APPROVED BY THE ADAM'S COUNTY PLANNING COMMISSION ON THIS MY COMMISSION EXPIRES: 4/26/20

DAY

. 10 . AD. AT O'CLOCK M.

CHAIRPERSON

BOARD OF COUNTY COMMISSIONERS APPROVAL APPROVED BY THE ADAMS COUNTY BOARD OF COMMISSIONERS THIS TO DAY

. 20 1D, AD. AT O'CLOCK M. OF AUGUST 120 12 CHAIR

SURVEYOR'S CERTIFICATE

HERBER CERTIFF I WAS IN REPONSIBLE CHARGE OF THE SUNFEY WORK ODEN IN HERGON HER HER HERALTHON OF THE FALT, THE FOSTICING OF THE FALTED COINTS SHOWN HERGON HAVE AN ACCHARGATOR OF THE THE STANK IN FOOD OTN THEY THOUSAND (1000) FEET THAT TO ADJUSTHENTS AND ALL BOUNDARY THOUSHORTS AND CONTRIGL CORNERS SHOW HERGON WERE IN FACE AS DESCRIBED ON APRIL 13, 2015 COUNTY ATTORNAY

ADAMS COUNTY, COLORADO

MEIN' REC. 33, T 2 S, R 68 W, 6th PM SHERRELWOOD VILLAGE - FINAL PLAT

THOMAS M. GIRARD COLORADO PLS 38151 FOR AND ON BEHALF OF CORE CONSULTANTS, INC



ADAMS COUNTY CLERK AND RECORDER'S CERTIFICATE THIS PLAT WAS RIED FOR RECORD IN THE OFFICE OF THE ADAMS COUNTY

CLERK AND RECORDER IN THE STATE OF COLORADO AT3210 EM. ON THE 15 In Madin COUNTY CLERK AND RECORDER DAY OF Suplements, 2015.

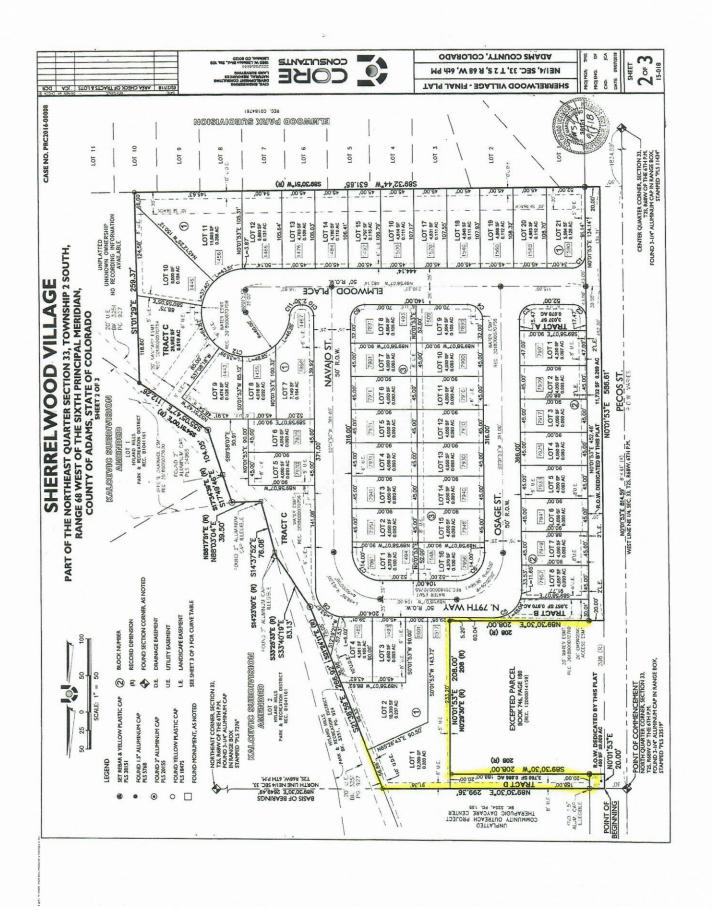
RECEPTION NO. 2014000015.940

Brigharlandstons

ر ا ا SHEET

15-018

TB Pgc Bann Marrin, Adv



PROJ MGR: TMG PROJ ENG: DATE: 04/06/2020

OF 15-018

PART OF THE NORTHEAST QUARTER SECTION 33 AND THE SOUTHEAST QUARTER OF SECTION 28, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN,

COUNTY OF ADAMS, STATE OF COLORADO

LEGAL DESCRIPTION AND DEDICATION STATEMENT

KNOW ALL PEOPLE BY THESE PRESENTS THAT THE UNDERSIGNED WARRANT THEY ARE THE OWNER OF A PARCEL OF LAND BEING TRACTS B & D, LOTS I THROUGH 4, BLOCK I, AND A PORTION OF LOT 8, BLOCK 2, SHERRELWOOD VILLAGE, A SUBDIVISION PLAT RECORDED AT RECEPTION NO. 2018000075940 TOGETHER WITH THAT PARCEL OF LAND, AS DESCRIBED IN THAT WARRANTY DEED RECORDED AT RECEPTION NO. 2019000073502 AND THAT PARCEL OF LAND, AS DESCRIBED IN THAT WARRANTY DEED RECORDED AT RECEPTION NO. 2019000075343 ALL IN THE RECORDS OF THE ADAMS COUNTY CLERK AND RECORDER'S OFFICE, LYING WITHIN THE SOUTHEAST QUARTER OF SECTION 28 AND THE NORTHEAST QUARTER OF SECTION 33, BOTH IN TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH P.M., BEING ASSUMED TO BEAR N 89°30'30" E, FROM THE NORTH QUARTER CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 23519" TO THE NORTHEAST CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 7276", WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE NORTH QUARTER CORNER OF SAID SECTION 33, THENCE N 89°30'30" E, ALONG THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 50.00 FEET TO A POINT ON THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY, AS DEDICATED BY THAT RESOLUTION RECORDED IN BOOK 3270 AT PAGE 279. SAID ADAMS COUNTY RECORDS AND THE POINT OF BEGINNING:

THENCE N 00° 14'47" W. ALONG THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY, AND ALONG A LINE BEING 50.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 28, A DISTANCE OF 293.01 FEET TO A POINT ON THE NORTH LINE OF SAID PARCEL OF LAND DESCRIBED IN BOOK 3254 AT PAGE 139:

THENCE S 82°41'00" E, ALONG SAID NORTH LINE, A DISTANCE OF 8.12 FEET TO THE WEST CORNER OF PARCEL D, AS DESCRIBED IN THAT QUIT CLAIM DEED RECORDED IN BOOK 3251 AT PAGE 924;

THENCE ALONG THE SOUTH AND WEST LINES OF SAID PARCEL D, THE FOLLOWING TWO (2) COURSES:

- 1. S 76°46'56" E, A DISTANCE OF 178.56 FEET;
- 2. S 21°38'59" E, ALONG THE EAST LINES OF SAID PARCEL DESCRIBED IN BOOK 3254 AT PAGE 139 AND SAID SHERRELWOOD VILLAGE PLAT, A DISTANCE OF 459.50 FEET TO THE EAST CORNER OF LOT 4, BLOCK I, SAID SHERRELWOOD VILLAGE PLAT;

THENCE S 12°19'21" W, ALONG THE SOUTHEAST LINE OF SAID LOT 4, A DISTANCE OF 57.53 FEET TO A POINT ON THE NORTH LINE OF WEST 79TH WAY RIGHT-OF-WAY, AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT AND A POINT OF NON-TANGENT CURVATURE;

THENCE ALONG THE NORTH LINE OF THE WEST 79TH WAY RIGHT-OF-WAY AND ALONG THE WEST LINE OF THE OSAGE STREET RIGHT-OF-WAY, AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT, THE FOLLOWING THREE (3) COURSES:

- I. ALONG THE ARC OF A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 38.00 FEET, A CENTRAL ANGLE OF 09°04'20" AND AN ARC LENGTH OF 6.02 FEET, THE CHORD OF WHICH BEARS N 85°25'57" W, A DISTANCE OF 6.01 FEET;
- 2. N 89°58'07" W, A DISTANCE OF 204.00 FEET TO A POINT OF CURVATURE;
- 3. ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 38.00 FEET, A CENTRAL ANGLE OF 90°00'00" AND AN ARC LENGTH OF 59.69 FEET;

THENCE N 00°01'53" E. A DISTANCE OF 11.47 FEET TO A POINT ON THE SOUTH LINE OF SAID TRACT B;

THENCE ALONG THE SOUTH AND WEST LINES OF SAID TRACT B THE FOLLOWING TWO (2) COURSES:

STREET RIGHT-OF-WAY, AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT; 2. N 00°01'53" E, ALONG SAID EAST LINE, A DISTANCE OF 30.01 FEET TO A POINT ON THE

N 89°58'07" W, A DISTANCE OF 90.00 FEET TO A POINT ON THE EAST LINE OF THE PECOS

SOUTH LINE OF THAT PARCEL OF LAND DESCRIBED IN SAID RECEPTION NO. 2019000073502;

THENCE ALONG THE SOUTH, EAST AND NORTH LINES OF SAID PARCEL OF LAND THE **FOLLOWING THREE (3) COURSES:**

- I. S 89°30'30" W, ALONG A LINE BEING PARALLEL TO THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 20.00 FEET TO A POINT BEING 30.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33;
- 2. N 00°01'53" E, ALONG A LINE BEING 30.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST OUARTER OF SAID SECTION 33. A DISTANCE OF 208.00 FEET TO A POINT BEING 20.00 FEET SOUTH OF THE NORTH LINE OF THE NORTHEAST OUARTER OF SAID SECTION 33:
- 3. N 89°30'30" E. ALONG A LINE BEING 20.00 FEET SOUTH OF AND PARALLEL TO THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 20.00 FEET TO A POINT BEING 50.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33. ALSO BEING A POINT ON THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY. AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT;

THENCE N 00°01'53" E, ALONG SAID EAST LINE AND ALONG A LINE BEING 50.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST OUARTER OF SAID SECTION 33 A DISTANCE OF 20.00 FEET TO THE POINT OF BEGINNING.

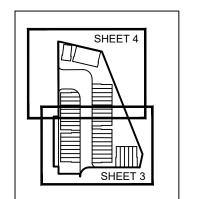
CONTAINING AN AREA OF 143.370 SOUARE FEET OR 3.291 ACRES. MORE OR LESS.

HAVE LAID OUT, PLATTED AND SUBDIVIDED THE SAME INTO LOTS, STREETS AND EASEMENTS AS SHOWN ON THIS PLAT UNDER THE NAME AND STYLE OF SHERRELWOOD VILLAGE AMENDED. ALL PUBLIC STREETS ARE HEREBY DEDICATED TO ADAMS COUNTY FOR PUBLIC USE. THE UNDERSIGNED DOES HEREBY DEDICATE, GRANT AND CONVEY TO ADAMS COUNTY THOSE PUBLIC EASEMENTS AS SHOWN ON THE PLAT; AND FURTHER RESTRICTS THE USE OF ALL PUBLIC EASEMENT TO ADAMS COUNTY AND/OR ITS ASSIGNS, PROVIDED HOWEVER, THAT THE SOLE RIGHT AND AUTHORITY TO RELEASE OR QUITCLAIM ALL OR ANY SUCH PUBLIC EASEMENTS SHALL REMAIN EXCLUSIVELY VESTED IN ADAMS COUNTY.

VICINITY MAP



KEY MAP



LAND USE TABLE

TYPE	AREA (SF)	AREA (AC)
TRACTS A & B	46,162	1.060
LOTS (45)	64,890	1.489
R.O.W DEDICATED	32,318	0.742
TOTAL	143,370	3.291

SHEET INDEX

SHEET 1 COVER

SHEET 2 OVERALL BOUNDARY

SHEET 3 DETAIL

SHEET 4 DETAIL

SHEET 5 NOTES AND TABLES

TRACT USE TABLE

TRACT	USE	OWNERSHIP	MAINTENANCE
A	OPEN SPACE, UTILITY, DRAINAGE & ACCESS	OWNER	OWNER
В	OPEN SPACE, UTILITY, DRAINAGE & ACCESS	OWNER	OWNER

PUBLIC SERVICE COMPANY OF COLORADO NOTES

THESE EASEMENTS ARE DEDICATED TO ADAMS COUNTY FOR THE BENEFIT OF THE APPLICABLE UTILITY PROVIDERS FOR THE INSTALLATION, MAINTENANCE, AND REPLACEMENT OF ELECTRIC, GAS, TELEVISION, CABLE, AND TELECOMMUNICATIONS FACILITIES (DRY UTILITIES). UTILITY EASEMENTS SHALL ALSO BE GRANTED WITHIN ANY ACCESS EASEMENTS AND PRIVATE STREETS IN THE SUBDIVISION. PERMANENT STRUCTURES, IMPROVEMENTS, OBJECTS, BUILDINGS, WELLS, WATER METERS AND OTHER OBJECTS THAT MAY INTERFERE WITH THE UTILITY FACILITIES OR USE THEREOF (INTERFERING OBJECTS) SHALL NOT BE PERMITTED WITHIN SAID UTILITY EASEMENTS AND THE UTILITY PROVIDERS, AS GRANTEES, MAY REMOVE ANY INTERFERING OBJECTS AT NO COSTS TO SUCH GRANTEES, INCLUDING, WITHOUT LIMITATION, VEGETATION. PUBLIC SERVICE COMPANY OF COLORADO (PSCo) AND ITS SUCCESSORS RESERVE THE RIGHT TO REQUIRE ADDITIONAL EASEMENTS AND TO REQUIRE THE PROPERTY OWNER TO GRANT PSCo AN EASEMENT ON ITS STANDARD FORM.

CITY OF THORNTON NOTES

WATER AND SANITARY SEWER EASEMENTS ARE HEREBY GRANTED TO THE CITY OF THORNTON, AS SHOWN ON THIS PLAT, FOR THE PURPOSE TO CONSTRUCT, MAINTAIN, REPAIR, REPLACE, INSPECT AND OPERATE MAINS, TRANSMISSION, DISTRIBUTION AND SERVICE LINES AND APPURTENANCES OR OTHER IMPROVEMENTS FOR WHICH THE EASEMENTS WERE GRANTED, TOGETHER WITH A RIGHT OF ACCESS, ON, ALONG AND IN ALL OF THE EASEMENTS, AS MAY BE NECESSARY TO ACCOMPLISH THE INTENDED PURPOSES OF THE EASEMENT. THESE EASEMENTS SHALL BE EXCLUSIVE, HOWEVER UTILITIES MAY CROSS THE EXCLUSIVE EASEMENTS AT SUBSTANTIALLY 90

DEGREES.
OWNER 7840 PECOS INVESTMENTS LLC, A COLORADO LIMITED LIABILITY COMPANY
BY:
ITS:
ACKNOWLEDGEMENT STATE OF
THE FOREGOING WAS ACKNOWLEDGED BEFORE ME THIS DAY
OF, 20, A.D.
BY:
WITNESS MY HAND AND OFFICIAL SEAL:
NOTARY PUBLIC:
MY COMMISSION EXPIRES:

PI ANNING	COMMISSION	APPROVAL

APPROVED BY THE ADAMS COUNTY PLANNING COMMISSION ON THIS DAY					
OF	, 20	_ , A.D. AT	_ O'CLOCK .	_ M.	

BOARD OF COUNTY COMMISSIONERS APPROVAL

APPROVED BY	APPROVED BY THE ADAMS COUNTY BOARD OF COMMISSIONERS THIS DAY				
OF	, 20, A.D. AT O'CLOCK _ M.				
CLIAID					

SURVEYOR'S CERTIFICATE

CHAIRPERSON

I HEREBY CERTIFY I WAS IN RESPONSIBLE CHARGE OF THE SURVEY WORK USED IN THE PREPARATION OF THIS PLAT; THE POSITIONS OF THE PLATTED POINTS SHOWN HEREON HAVE AN ACCURACY OF NOT LESS THAN (I) FOOT IN TEN THOUSAND (10,000) FEET PRIOR TO ADJUSTMENTS; AND ALL BOUNDARY MONUMENTS AND CONTROL CORNERS SHOWN HEREON WERE IN PLACE AS DESCRIBED IN APRIL 2020

THOMAS M. GIRARD COLORADO PLS 38151 FOR AND ON BEHALF OF CORE CONSULTANTS, INC

ADAMS COUNTY CLERK AND RECORDER'S CERTIFICATE

THIS PLAT WAS FILED FOR RECORD IN THE OFFICE OF THE ADAMS COUNTY
CLERK AND RECORDER IN THE STATE OF COLORADO ATM. ON THE
DAY OF, 20
COLINITY OF EBY, WHO BECORDED

COUNTY CLERK AND RECORDER

	RECEPTION NO.
BY DEPUTY:	

SHEET

PART OF THE NORTHEAST QUARTER SECTION 33 AND THE SOUTHEAST QUARTER OF SECTION 28,



 \mathbf{P} 6TH AMENDED V 28, T2S, R68W, 6 COLORADO O VILLAGE A 4 SECTION STATE OF RELWOOD V AND SE 1/4 S COUNTY, S $\overline{\mathbb{S}}$

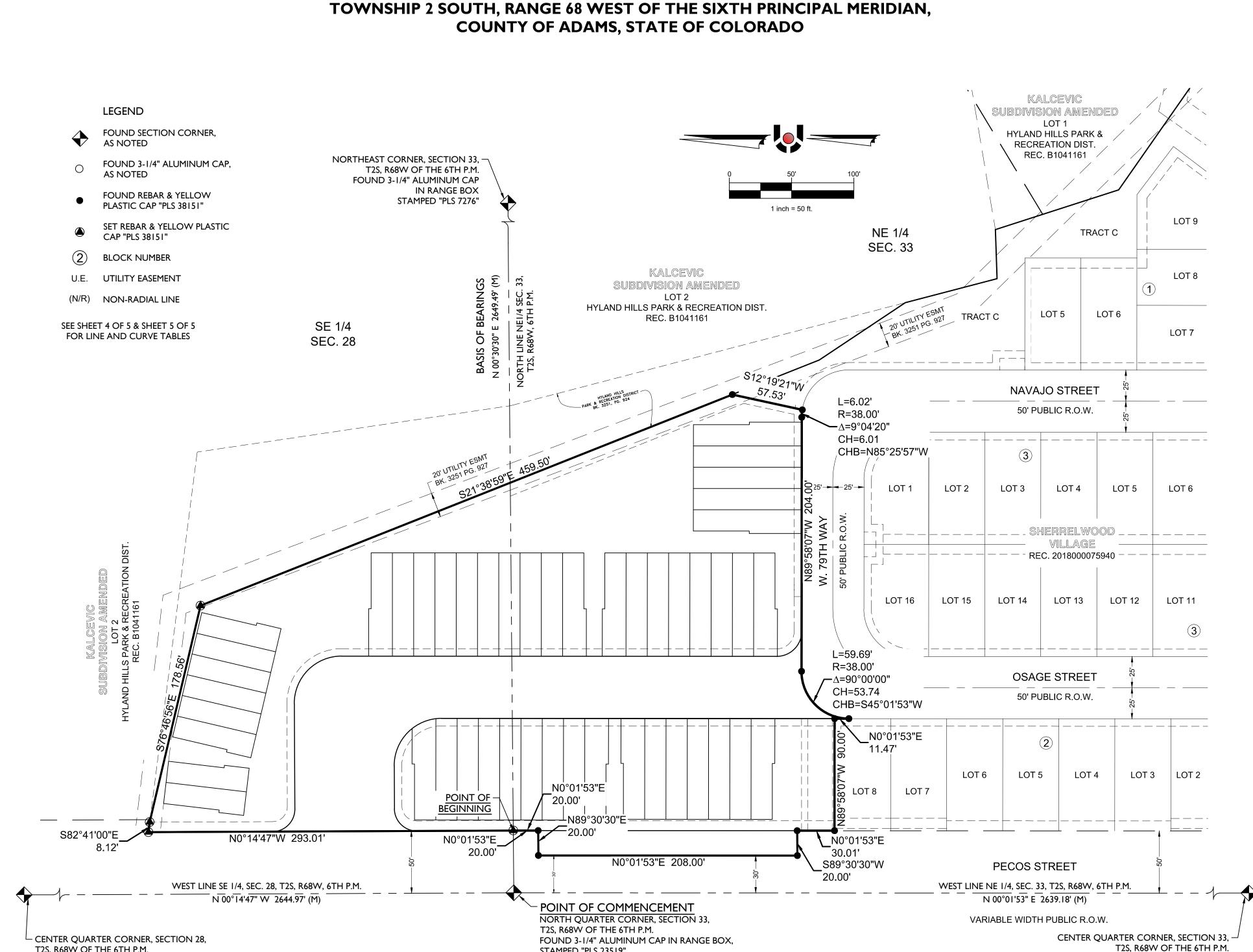
PROJ MGR: TMG PROJ ENG: DATE: 04/06/2020

SHEET **2** of **5**

15-018

FOUND 3-1/4" ALUMINUM CAP IN RANGE BOX,

STAMPED "PLS 11434"

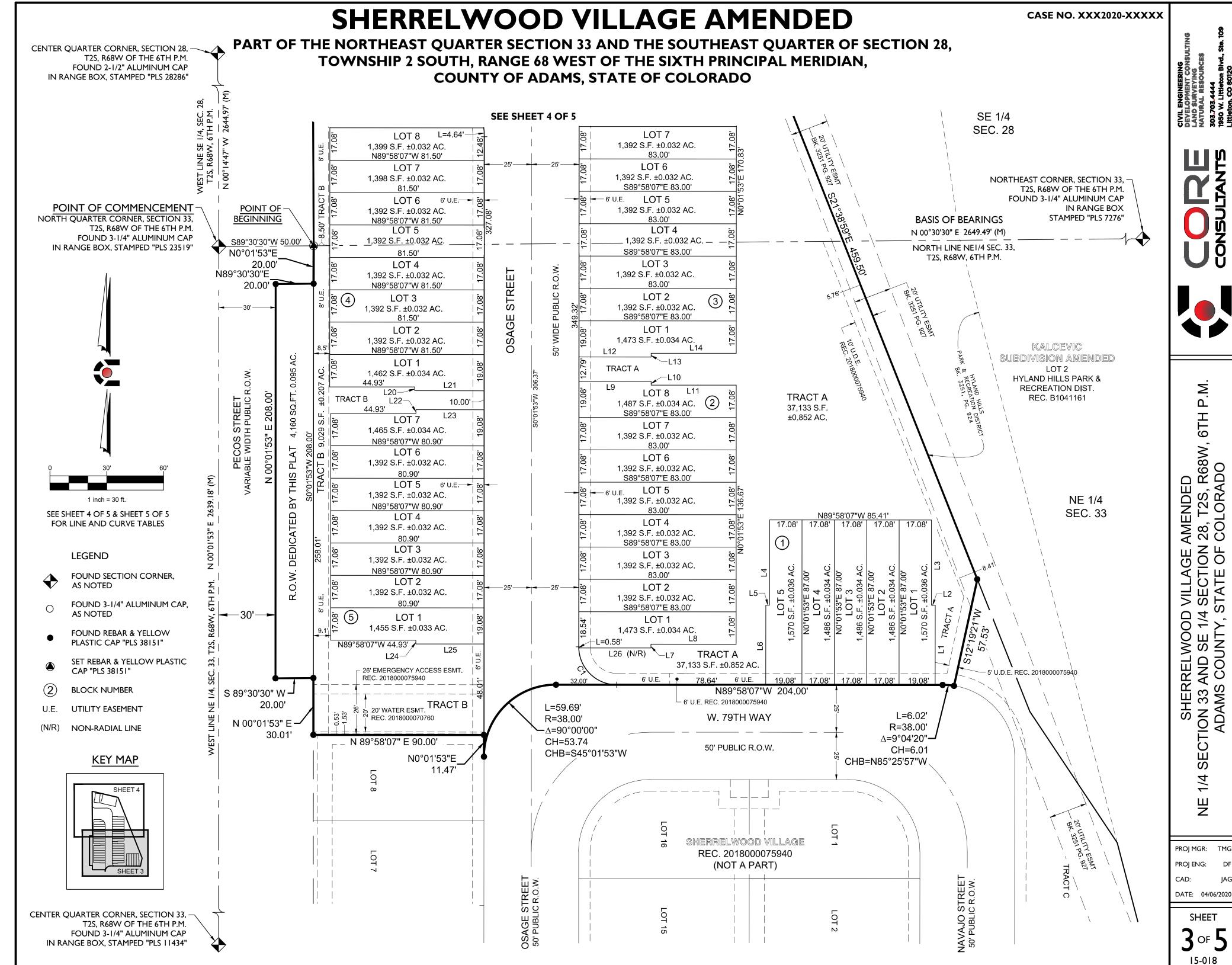


STAMPED "PLS 23519"

T2S, R68W OF THE 6TH P.M.

STAMPED "PLS 28286"

FOUND 2-1/2" ALUMINUM CAP IN RANGE BOX,







CTION (

DATE: 04/06/2020

4°5

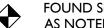
SHERRELWOOD VILLAGE AMENDED

PART OF THE NORTHEAST QUARTER SECTION 33 AND THE SOUTHEAST QUARTER OF SECTION 28, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, **COUNTY OF ADAMS, STATE OF COLORADO**

NOTES

- 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.
- 2. THIS SURVEY DOES NOT REPRESENT A TITLE SEARCH BY CORE CONSULTANTS, INC. FOR RECORD DOCUMENTS AND DETERMINATION OF OWNERSHIP, EASEMENTS OF RECORD, RIGHTS-OF-WAY AND ENCUMBRANCES, CORE CONSULTANTS, INC. RELIED UPON TITLE COMMITMENT ORDER NO. 01330-55373. PREPARED BY STEWART TITLE GUARANTY COMPANY, WITH AN EFFECTIVE DATE OF FEBRUARY 20, 2015 AT 5:30 PM
- 3. ANY PERSON WHO KNOWINGLY REMOVES, ALTERS OR DEFACES ANY PUBLIC LAND SURVEY MONUMENT OR LAND BOUNDARY MONUMENT OR ACCESSORY, COMMITS A CLASS TWO (2) MISDEMEANOR PURSUANT TO STATE STATUTE 18-4-508, C.R.S.
- BEARINGS FOR THIS SURVEY ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH P.M., BEING ASSUMED TO BEAR N 89°30'30" E, FROM THE THE NORTH QUARTER CORNER OF SAID SECTION 33, BEING A 3-1/4" ALUMINUM CAP IN RANGE BOX, STAMPED "PLS 23519", TO THE NORTHEAST CORNER OF SAID SECTION 33, BEING A 3-1/4" ALUMINUM CAP IN RANGE BOX, PLS 7276, WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.
- THE LINEAL UNIT USED IN THE PREPARATION OF THIS ALTA/NSPS LAND TITLE SURVEY IS THE U.S. SURVEY FOOT. PURSUANT TO C.R.S. 38-52-103(2) METRIC CONVERSION IS: ONE METER EQUALS 3937 / 1200 FEET.
- 6. DATE OF FIELD SURVEY: APRIL 9, 2020
- 7. THE GROSS LAND AREA OF THE SUBJECT PROPERTY IS 143,370 SQUARE FEET, OR 3.291 ACRES, MORE OR LESS.
- RIGHT-OF-WAY FOR INGRESS AND EGRESS FOR SERVICE AND EMERGENCY VEHICLES IS GRANTED OVER, ACROSS, ON, AND THROUGH ANY AND ALL PRIVATE ROADS, WAYS, AND FIRE LANES NOW OR HEREAFTER ESTABLISHED ON THE DESCRIBED PROPERTY. THE SAME ARE HEREBY DESIGNATED AS FIRE LANES AND EMERGENCY AND SERVICE VEHICLE ROADS, AND SHALL BE POSTED "NO PARKING - FIRE LANE"
- 9. THE PROPERTY LIES WITHIN ZONE X, "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, PER FEMA MAP NO. 08001C0584H, PANEL 584, REVISED MARCH 5, 2017.
- 10. REFER TO THE OPERATION AND MAINTENANCE MANUEL RECORDED FOR ADDITIONAL DRAINAGE GUIDELINES.
- 11. SIX-FOOT (6') WIDE UTILITY EASEMENTS ARE HEREBY DEDICATED ON PRIVATE PROPERTY ADJACENT TO THE FRONT LOT LINES OF EACH LOT IN THE SUBDIVISION. IN ADDITION, EIGHT-FOOT (8') WIDE DRY UTILITY EASEMENTS ARE HEREBY DEDICATED AROUND THE PERIMETER OF TRACTS, PARCELS AND/OR OPEN SPACE AREAS. THESE EASEMENTS ARE DEDICATED TO ADAMS COUNTY FOR THE BENEFIT OF THE APPLICABLE UTILITY PROVIDERS FOR THE INSTALLATION, MAINTENANCE, AND REPLACEMENT OF UTILITIES. UTILITY EASEMENTS SHALL ALSO BE GRANTED WITHIN ANY ACCESS EASEMENTS AND PRIVATE STREETS IN THE SUBDIVISION. PERMANENT STRUCTURES, IMPROVEMENTS, OBJECTS, BUILDINGS, WELLS, WATER METERS AND OTHER OBJECTS THAT MAY INTERFERE WITH THE UTILITY FACILITIES OR USE THEREOF (INTERFERING OBJECTS) SHALL NOT BE PERMITTED WITHIN SAID UTILITY EASEMENTS AND THE UTILITY PROVIDERS, AS GRANTEES, MAY REMOVE ANY INTERFERING OBJECTS AT NO COST TO SUCH GRANTEES, INCLUDING, WITHOUT LIMITATION, VEGETATION.
- 12. THE POLICY OF THE COUNTY REQUIRES THAT 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 DEVELOPMENT AGREEMENT. SHOULD THE OWNER FAIL TO MAINTAIN SAID FACILITIES, THE COUNTY SHALL HAVE THE RIGHT TO ENTER SAID LAND FOR THE SOLE PURPOSE OF OPERATIONS AND MAINTENANCE. ALL SUCH MAINTENANCE COST WILL BE ASSESSED TO THE PROPERTY OWNERS.

LEGEND



FOUND SECTION CORNER, **AS NOTED**

FOUND 3-1/4" ALUMINUM CAP, AS NOTED

FOUND REBAR & YELLOW PLASTIC CAP "PLS 38151"

SET REBAR & YELLOW PLASTIC CAP "PLS 38151"

BLOCK NUMBER

UTILITY EASEMENT

(N/R) NON-RADIAL LINE

LINE TABLE				LINE TA	BLE
LINE#	LENGTH	DIRECTION	LINE#	LENGTH	DIRECTION
L1	42.07'	S 0°01'53" W	L14	44.93'	N 89°58'07" W
L2	2.00'	S 89°58'07" E	L15	38.07'	N 89°58'07" W
L3	44.93'	S 0°01'53" W	L16	2.00'	N 0°01'53" E
L4	44.93'	N 0°01'53" E	L17	44.93'	N 89°58'07" W
L5	2.00'	S 89°58'07" E	L18	2.00'	N 0°01'53" E
L6	42.07'	N 0°01'53" E	L19	28.27'	S 89°58'07" E
L7	2.00'	S 0°01'53" W	L20	2.00'	N 0°01'53" E
L8	44.93'	N 89°58'07" W	L21	36.57'	S 89°58'07" E
L9	38.07'	N 89°58'07" W	L22	2.00'	S 0°01'53" W
L10	2.00'	S 0°01'53" W	L23	35.97'	S 89°58'07" E
L11	44.93'	N 89°58'07" W	L24	2.00'	S 0°01'53" W
L12	38.07'	N 89°58'07" W	L25	35.97'	S 89°58'07" E
L13	2.00'	S 0°01'53" W	L26	38.06'	N 89°58'07" W

	CURVE TABLE					
CURVE#	RADIUS	LENGTH	DELTA	CHORD BEARING	CHORD LENGTH	
C1	20.00'	31.42'	090°00'00"	S44°58'07"E	28.28'	
C2	18.00'	28.27'	090°00'00"	S44°45'13"W	25.46'	
C3	18.00'	28.27'	090°00'00"	S45°14'47"E	25.46'	
C4	38.00'	59.88'	090°17'34"	N45°06'54"W	53.88'	
C5	38.00'	59.87'	090°16'40"	N45°06'27"W	53.87'	





≥ 6TH 68W, ENDED, T2S, R6 **D** 4 WO(\propto

PROI MGR: TMG PROJ ENG:

SHEET

DATE: 04/06/2020

15-018

March 11, 2020

Adams County Planning & Development Department 4430 South Adams County Parkway Brighton, CO 80601-8216



To Whom It May Concern:

RE: Proposed Development at 8300 North Pecos: Sherrelwood Village/Elmwood North

The District welcomes both residential and commercial development within its boundaries and, while the District takes no position on the specific plans presented by Delwest Development Corp., we believe that a vibrant community should include a wide choice of housing optons. This project proposes to provide additional housing options to the community.

In reviewing the Delwest proposal for the development of the site, an extension to the single family homes in Roush Estates, we have determined that the proposed development would have no additional impact on the District. Using an average number of students generated by housing type, based on information provided by Delwest, the District has conservatively calculated the following student yield:

Townhomes

Number of Bedrooms	Number of New Units of that Size	Average Number of School-Aged Residents Per Unit	New School-Aged Residents
1-3	48	x 0.25	=12 (low end estimate)
1-3	48	x 0.49	= 24 (high end estimate)

Estimated Total Number of Students Generated by Proposed Development:

12 to 24

In considering the minimal impact to the District by new students who may reside in the development, the District believes it is important to focus on the quality of the development and the degree to which it will revitalize the community in the years ahead. The District believes development on the southeast side of the District will provide economic benefit for the citizens of the community and, in general, will have an overall positive impact on the existing neighborhood.

Sincerely,

Chief Operating Officer

James Duffy, Ed.D

Westminster Public Schools



ADAMS COUNTY FIRE RESCUE

FIRE PREVENTION BUREAU

7980 Elmwood Lane Denver, CO 80221

(303) 539-6862 / email: :fireprevention@acfpd.org

Melissa Hale 155 South Madison St Suite 326 Denver, CO 80209 720-819-1004 melissa@delwest.com

May 13, 2020

RE: 7840, 7996, and 8000 Pecos St Denver, CO 80221

Ms. Hale,

The addresses of 7840, 7996, and 8000 Pecos St Deriver, CO 80221 are within the Adams County Fire Protection District's jurisdiction and will be covered by its services. We will need to complete a site development plan review to go along with this letter. The site development plan review needs to include a full set of civil plans and an auto turn exhibit. If you have any questions regarding this location, please call 303-539-6862 and we will be able to answer your questions.

Sincerely,

Chris Wilder Fire Marshal

Adams County Fire Protection District

Gristyph L Wille

LAND TITLE GUARANTEE COMPANY



Date: October 08, 2019

Subject: Attached Title Policy DELWEST DEVELOPMENT CORP., A COLORADO CORPORATION for 8000 PECOS ST, DENVER, CO 80221

Enclosed please find the Owner's Title Insurance Policy for your purchase of the property listed above.

This title policy is the final step in your real estate transaction, and we want to take a moment to remind you of its importance. Please review all information in this document carefully and be sure to safeguard this policy along with your other legal documents.

Your owner's policy insures you as long as you own the property and requires no additional premium payments.

Please feel free to contact any member of our staff if you have questions or concerns regarding your policy, or you may contact Land Title Policy Team at (303) 850-4158 or finals@ltgc.com

As a Colorado-owned and operated title company for over 50 years, with offices throughout the state, we take pride in serving our customers one transaction at a time. We sincerely appreciate your business and welcome the opportunity to assist you with any future real estate needs. Not only will Land Title be able to provide you with the title services quickly and professionally, but you may also be entitled to a discount on title premiums if you sell or refinance the property described in the enclosed policy.

Thank you for giving us the opportunity to work with you on this transaction. We look forward to serving you again in the future.

Sincerely,

Land Title Guarantee Company

OWNER'S POLICY OF TITLE INSURANCE

ANY NOTICE OF CLAIM AND ANY OTHER NOTICE OR STATEMENT IN WRITING REQUIRED TO BE GIVEN TO THE COMPANY UNDER THIS POLICY MUST BE GIVEN TO THE COMPANY AT THE ADDRESS SHOWN IN SECTION 18 OF THE CONDITIONS.

COVERED RISKS

SUBJECT TO THE EXCLUSIONS FROM COVERAGE, THE EXCEPTIONS FROM COVERAGE CONTAINED IN SCHEDULE B AND THE CONDITIONS, OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, a Minnesota corporation, (the "Company"), insures, as of Date of Policy and, to the extent stated in Covered Risks 9 and 10, after Date of Policy, against loss or damage, not exceeding the Amount of Insurance, sustained or incurred by the Insured by reason of:

- 1. Title being vested other than as stated in Schedule A.
- 2. Any defect in or lien or encumbrance on the title; This covered Risk includes but is not limited to insurance against loss from
 - a. A defect in the Title caused by
 - (i) forgery, fraud, undue influence, duress, incompetency, incapacity, or impersonation;
 - (ii) failure of any person or Entity to have authorized a transfer or conveyance;
 - (iii) a document affecting Title not properly created, executed, witnessed, sealed, acknowledged, notarized, or delivered;
 - (iv) failure to perform those acts necessary to create a document by electronic means authorized by law;
 - (v) a document executed under a falsified, expired, or otherwise invalid power of attorney;
 - (vi) a document not properly filed, recorded, or indexed in the Public Records including failure to perform those acts by electronic means authorized by law; or
 - (vii) a defective judicial or administrative proceeding.
 - b. The lien of real estate taxes or assessments imposed on the Title by a governmental authority due or payable, but unpaid.
 - c. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land. The term "encroachment" includes encroachments of existing improvements located on the Land onto adjoining land, and encroachments onto the Land of existing improvements located on adjoining land.
- 3. Unmarketable Title.
- 4. No right of access to and from the Land.
- 5. The violation or enforcement of any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (a)the occupancy, use or enjoyment of the Land;
 - (b)the character, dimensions, or location of any improvement erected on the Land;
 - (c) the subdivision of land; or
 - (d)environmental protection

if a notice, describing any part of the Land, is recorded in the Public Records setting forth the violation or intention to enforce, but only to the extent of the violation or enforcement referred to in that notice.

- 6. An enforcement action based on the exercise of a governmental police power not covered by Covered Risk 5 if a notice of the enforcement action, describing any part of the Land, is recorded in the Public Records, but only to the extent of the enforcement referred to in that notice.
- 7. The exercise of the rights of eminent domain if a notice of the exercise, describing any part of the Land, is recorded in the Public Records.
- 8. Any taking by a governmental body that has occurred and is binding on the rights of a purchaser for value without Knowledge.
- 9. Title being vested other than as stated in Schedule A or being defective
 - (a)as a result of the avoidance in whole or in part, or from a court order providing an alternative remedy, of a transfer of all or any part of the title to or any interest in the Land occurring prior to the transaction vesting Title as shown in Schedule A because that prior transfer constituted a fraudulent or preferential transfer under federal bankruptcy, state insolvency, or similar creditors' rights laws; or
 - (b) because the instrument of transfer vesting Title as shown in Schedule A constitutes a preferential transfer under federal bankruptcy, state insolvency, or similar creditors' rights laws by reason of the failure of its recording in the Public Records
 - (i) to be timely, or
 - (ii) to impart notice of its existence to a purchaser for value or to a judgment or lien creditor.
- 10. Any defect in or lien or encumbrance on the Title or other matter included in Covered Risks 1 through 9 that has been created or attached or has been filed or recorded in the Public Records subsequent to Date of Policy and prior to the recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A. The Company will also pay the costs, attorneys' fees, and expenses incurred in defense of any matter insured against by this Policy, but only to the extent provided in the Conditions.

Issued by: Land Title Guarantee Company 3033 East First Avenue Suite 600 Denver, Colorado 80206 (303)321-1880

GBRants

By Monroe President
Attest Down Wold Secretary

AMERICAN LAND TITLE ASSOCIATION

Senior Vice President

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AMERICAN LAND TITLE ASSOCIATION OWNER'S POLICY Adopted 6-17-06

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

- (1)(a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land: or
 - (iv) environmental protection; or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5. (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
- (2) Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
- (3) Defects, liens, encumbrances, adverse claims, or other matters
 - (a)created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b)not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d)attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10); or (e)resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
- (4)Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A. is
 - (a)a fraudulent conveyance or fraudulent transfer: or
 - (b)a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
- (5) Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

CONDITIONS

1. DEFINITION OF TERMS

The following terms when used in this policy mean:

- (a)"Amount of Insurance": The amount stated in Schedule A, as may be increased or decreased by endorsement to this policy, increased by Section 8(b) or decreased by Sections 10 and 11 of these Conditions.
- (b) "Date of Policy": The date designated as "Date of Policy" in Schedule A.
- (c) "Entity": A corporation, partnership, trust, limited liability company, or other similar legal entity.
- (d)"Insured": The Insured named in Schedule A.
 - (i) The term "Insured" also includes
 - (A)successors to the Title of the Insured by operation of law as distinguished from purchase, including heirs, devisees, survivors, personal representatives, or next of kin:
 - (B)successors to an Insured by dissolution, merger, consolidation, distribution, or reorganization;
 - (C)successors to an Insured by its conversion to another kind of Entity:
 - (D)a grantee of an Insured under a deed delivered without payment of actual valuable consideration conveying the Title
 - (1)if the stock, shares, memberships, or other equity interests of the grantee are wholly-owned by the named Insured.
 - (2) if the grantee wholly owns the named Insured,
 - (3)if the grantee is wholly-owned by an affiliated Entity of the named Insured, provided the affiliated Entity and the named Insured are both wholly-owned by the same person or Entity, or
 - (4)if the grantee is a trustee or beneficiary of a trust created by a written instrument established by the Insured named in Schedule A for estate planning purposes
 - (ii) With regard to (A), (B), (C), and (D) reserving, however, all rights and defensed as to any successor that the Company would have had against any predecessor Insured.
- (e) "Insured Claimant": An Insured claiming loss or damage.
- (f) "Knowledge" or "Known": Actual knowledge, not constructive knowledge or notice that may be imputed to an Insured by reason of the Public Records or any other records that impart constructive notice of matters affecting the Title.
- (g)"Land": The land described in Schedule A, and affixed improvements that by law constitute real property. The term "Land" does not include any property beyond the lines of the area described in Schedule A, nor any right, title, interest, estate, or easement in abutting streets, roads, avenue, alleys, lanes, ways, or waterways, but this does not modify or limit the extent that a right of access to and from the Land is insured by this policy.
- (h)"Mortgage": Mortgage, deed of trust, trust deed, or other security instrument, including one evidenced by electronic means authorized by law.
- (i) "Public Records": Records established under state statutes at Date of Policy for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without Knowledge. With respect to Covered Risk 5(d), "Public Records" shall also include environmental protection liens filed in the records of the clerk of the United States District Court for the district where the Land is located.
- (j) "Title": The estate or interest described in Schedule A. "Unmarketable Title": Title affected by an alleged or apparent matter that would permit a prospective purchaser or lessee of the Title or lender on the Title to be released from the obligation to purchase, lease, or lend if there is a contractual condition requiring the delivery of marketable title.

2. CONTINUATION OF INSURANCE

The coverage of this policy shall continue in force as of Date of Policy in favor of an Insured, but only so long as the Insured retains an estate or interest in the Land, or holds an obligation secured by a purchase money Mortgage given by a purchaser from the Insured, or only so long as the Insured shall have liability by reason of warranties in any transfer or conveyance of the Title. This policy shall not continue in force in favor of any purchaser from the Insured of either (i) an estate or interest in the Land, or (ii) an obligation secured by a purchase money Mortgage given to the Insured.

3. NOTICE OF CLAIM TO BE GIVEN BY INSURED CLAIMANT

The Insured shall notify the Company promptly in writing (i) in case of any litigation as set forth in Section 5(a) of these Conditions, (ii) in case Knowledge shall come to an Insured hereunder of any claim of title or interest that is adverse to the Title, as insured, and that might cause loss or damage for which the Company may be

liable by virtue of this policy, or (iii) if the Title, as insured, is rejected as Unmarketable Title. If the Company is prejudiced by the failure of the Insured Claimant to provide prompt notice, the Company's liability to the Insured Claimant under the policy shall be reduced to the extent of the prejudice.

4. PROOF OF LOSS

In the event the Company is unable to determine the amount of loss or damage, the Company may, at its option, require as a condition of payment that the Insured Claimant furnish a signed proof of loss. The proof of loss must describe the defect, lien, encumbrance, or other matter insured against by this policy that constitutes the basis of loss or damage and shall state, to the extent possible, the basis of calculating the amount of the loss or damage.

5. DEFENSE AND PROSECUTION OF ACTIONS

- (a) Upon written request by the Insured, and subject to the options contained in Section 7 of these Conditions, the Company, at its own cost and without unreasonable delay, shall provide for the defense of an Insured in litigation in which any third party asserts a claim covered by this policy adverse to the Insured. This obligation is limited to only those stated causes of action alleging matters insured against by this policy. The Company shall have the right to select counsel of its choice (subject to the right of the Insured to object for reasonable cause) to represent the Insured as to those stated causes of action. It shall not be liable for and will not pay the fees of any other counsel. The Company will not pay any fees, costs, or expenses incurred by the Insured in the defense of those causes of action that allege matters not insured against by this policy.
- (b) The Company shall have the right, in addition to the options contained in Section 7 of these Conditions, at its own cost, to institute and prosecute any action or proceeding or to do any other act that in its opinion may be necessary or desirable to establish the Title, as insured, or to prevent or reduce loss or damage to the Insured. The Company may take any appropriate action under the terms of this policy, whether or not it shall be liable to the Insured. The exercise of these rights shall not be an admission of liability or waiver of any provision of this policy. If the Company exercises its rights under this subsection, it must do so diligently.
- (c) Whenever the Company brings an action or asserts a defense as required or permitted by this policy, the Company may pursue the litigation to a final determination by a court of competent jurisdiction, and it expressly reserves the right, in its sole discretion, to appeal any adverse judgment or order.

6. DUTY OF INSURED CLAIMANT TO COOPERATE

- (a) In all cases where this policy permits or requires the Company to prosecute or provide for the defense of any action or proceeding and any appeals, the Insured shall secure to the Company the right to so prosecute or provide defense in the action or proceeding, including the right to use, at its option, the name of the Insured for this purpose. Whenever requested by the Company, the Insured, at the Company's expense, shall give the Company all reasonable aid (i) in securing evidence, obtaining witnesses, prosecuting or defending the action or proceeding, or effecting settlement, and (ii) in any other lawful act that in the opinion of the Company may be necessary or desirable to establish the Title or any other matter as insured. If the Company is prejudiced by the failure of the Insured to furnish the required cooperation, the Company's obligation to the Insured under the policy shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, with regard to the matter or matters requiring such cooperation.
- (b) The Company may reasonably require the Insured Claimant to submit to examination under oath by any authorized representative of the Company and to produce for examination, inspection, and copying, at such reasonable times and places as may be designated by the authorized representative of the Company, all records, in whatever medium maintained, including books, ledgers, checks, memoranda, correspondence, reports, e-mails, disks, tapes, and videos whether bearing a date before or after Date of Policy, that reasonably pertain to the loss or damage. Further, if requested by any authorized representative of the Company, the Insured Claimant shall grant its permission, in writing, for any authorized representative of the Company to examine, inspect, and copy all of these records in the custody or control of a third party that reasonably pertain to the loss or damage. All information designated as confidential by the Insured Claimant provided to the Company pursuant to this Section shall not be disclosed to others unless, in the reasonable judgment of the Company, it is necessary in the administration of the claim. Failure of the Insured Claimant to submit for examination under oath produce any reasonably requested information, or grant permission to secure reasonably necessary information from third parties as required in this subsection, unless prohibited by law or governmental regulation, shall terminate any liability of the Company under this policy as to that claim.

7. OPTIONS TO PAY OR OTHERWISE SETTLE CLAIMS; TERMINATION OF LIABILITY

In case of a claim under this policy, the Company shall have the following additional options:

- (a) To Pay or Tender Payment of the Amount of Insurance. To pay or tender payment of the Amount of Insurance under this policy together with any costs, attorneys' fees, and expenses incurred by the Insured Claimant that were authorized by the Company up to the time of payment or tender of payment and that the Company is obligated to pay. Upon the exercise by the Company of this option, all liability and obligations of the Company to the Insured under this policy, other than to make the payment required in the subsection, shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation.
- (b) To Pay or Otherwise Settle With Parties Other Than the Insured or With the Insured Claimant.
 - (i) To pay or otherwise settle with other parties for or in the name of an Insured Claimant any claim insured against under this policy. In addition, the Company will pay any costs, attorneys' fees, and expenses incurred by the Insured Claimant that were authorized by the Company up to the time of payment and that the Company is obligated to pay; or
 - (ii) To pay or otherwise settle with the Insured Claimant the loss or damage provided for under this policy, together with any costs, attorneys' fees, and expensed incurred by the Insured Claimant that were authorized by the Company up to the time of payment and that the Company is obligated to pay. Upon the exercise by the Company of either of the options provided for in subsections (b)(i) or (ii), the Company's obligations to the Insured under this policy for the claimed loss or damage, other than the payments required to be made, shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation.

8. DETERMINATION AND EXTENT OF LIABILITY

This policy is a contract of indemnity against actual monetary loss or damage sustained or incurred by the Insured Claimant who has suffered loss or damage by reason of matters insured against by this policy.

- (a) The extent of liability of the Company for loss or damage under this policy shall not exceed the lesser of
 - (i) the Amount of Insurance; or
 - (ii) the difference between the value of the Title as insured and the value of the Title subject to the risk insured against by this policy.

- (b) If the Company pursues its rights under Section 5 of these Conditions and is unsuccessful in establishing the Title, as insured,
 - (i) the Amount of Insurance shall be increased by 10%, and
 - (ii) the Insured Claimant shall have the right to have the loss or damage determined either as of the date the claim was made by the Insured Claimant or as of the date it is settled and paid.
- (c) In addition to the extent of liability under (a) and (b), the Company will also pay those costs, attorneys' fees, and expenses incurred in accordance with Sections 5 and 7 of these Conditions.

9. LIMITATION OF LIABILITY

- (a) If the Company establishes the Title, or removes the alleged defect, lien, or encumbrance, or cures the lack of a right of access to or from the Land, or cures the claim of Unmarketable Title, all as insured, in a reasonably diligent manner by any method, including litigation and the completion of any appeals, it shall have fully performed its obligations with respect to that matter and shall not be liable for any loss or damage caused to the Insured.
- (b) In the event of any litigation, including litigation by the Company or with the Company's consent, the Company shall have no liability for loss or damage until there has been a final determination by a court of competent jurisdiction, and disposition of all appeals, adverse to the Title, as insured.
- (c) The Company shall not be liable for loss or damage to the Insured for liability voluntarily assumed by the Insured in settling any claim or suit without the prior written consent of the Company.

10. REDUCTION OF INSURANCE; REDUCTION OR TERMINATION OF LIABILITY

All payments under this policy, except payments made for costs, attorneys' fees, and expenses, shall reduce the Amount of Insurance by the amount of the payment.

11. LIABILITY NONCUMULATIVE

The Amount of Insurance shall be reduced by any amount the Company pays under any policy insuring a Mortgage to which exception is taken in Schedule B or to which the Insured has agreed, assumed, or taken subject, or which is executed by an Insured after Date of Policy and which is a charge or lien on the Title, and the amount so paid shall be deemed a payment to the Insured under this policy.

12. PAYMENT OF LOSS

When liability and the extent of loss or damage have been definitely fixed in accordance with these Conditions, the payment shall be made within 30 days.

13. RIGHTS OF RECOVERY UPON PAYMENT OR SETTLEMENT

- (a) Whenever the Company shall have settled and paid a claim under this policy, it shall be subrogated and entitled to the rights of the Insured Claimant in the Title and all other rights and remedies in respect to the claim that the Insured Claimant has against any person or property, to the extent of the amount of any loss, costs, attorneys' fees, and expenses paid by the Company. If requested by the Company, the Insured Claimant shall execute documents to evidence the transfer to the Company of these rights and remedies. The Insured Claimant shall permit the Company to sue, compromise, or settle in the name of the Insured Claimant and to use the name of the Insured Claimant in any transaction or litigation involving these rights and remedies. If a payment on account of a claim does not fully cover the loss of the Insured Claimant, the Company shall defer the exercise of its right to recover until after the Insured Claimant shall have recovered its loss.
- (b) The Company's right of subrogation includes the rights of the Insured to indemnities, guaranties, other policies of insurance, or bonds, notwithstanding any terms or conditions contained in those instruments that address subrogation rights.

14. ARBITRATION

Either the Company or the Insurance May demand that the claim or controversy shall be submitted to arbitration pursuant to the Title Insurance Arbitration Rules of the American Land Title Association ("Rules"). Except as provided in the Rules, there shall be no joinder or consolidation with claims or controversies of other persons, Arbitrable matters may include, but are not limited to, any controversy or claim between the Company and the Insured arising out of or relating to this policy, any service in connection with its issuance or the breach of a policy provision, or to any other controversy or claim arising out of the transaction giving rise to this policy. All arbitrable matters when the Amount of Insurance is \$2,000,000 or less shall be arbitrated at the option of either the Company or the Insured. All arbitrable matters when the Amount of Insurance is in excess of \$2,000,000 shall be arbitrated only when agreed to by both the Company and the Insured. Arbitration pursuant to this policy and under the Rules shall be binding upon the parties. Judgment upon the award rendered by the Arbitrator(s) may be entered in any court of competent jurisdiction.

15. LIABILITY LIMITED TO THIS POLICY; POLICY ENTIRE CONTRACT

- (a) This policy together with all endorsements, if any, attached to it by the Company is the entire policy and contract between the Insured and the Company. In interpreting any provision of this policy, this policy shall be construed as a whole.
- (b) Any claim or loss or damage that arises out of the status of the Title or by any action asserting such claim shall be restricted to this policy.
- (c) Any amendment of or endorsement to this policy must be in writing and authenticated by an authorized person, or expressly incorporated by Schedule A of this policy.
- (d) Each endorsement to this policy issued at any time is made a part of this policy and is subject to all of its terms and provisions. Except as the endorsement expressly states, it does not (i) modify any of the terms and provisions of the policy, (ii) modify any prior endorsement, (iii) extend the Date of Policy, or (iv) increase the Amount of Insurance.

16. SEVERABILITY

In the event any provision of this policy, in whole or in part, is held invalid or unenforceable under applicable law, the policy shall be deemed not to include that provision or such part held to be invalid, but all other provisions shall remain in full force and effect.

17. CHOICE OF LAW; FORUM

(a) Choice of Law; The Insured acknowledges the Company has underwritten the risks covered by this policy and determined the premium charged therefor in reliance upon the law affecting interests in real property and applicable to the interpretation, rights, remedies, or enforcement of policies of title insurance of the jurisdiction where the Land is located. Therefore, the court or an arbitrator shall apply the law of the jurisdiction where the Land is located to determine the validity of claims against the Title that are adverse to the Insured and to interpret and enforce the terms of this policy. In neither case shall the court or arbitrator apply its conflicts of law principles to determine the applicable law.

(b) Choice of Forum; Any litigation or other proceeding brought by the Insured against the Company must be filed only in a state or federal court within the United States of America or its territories having appropriate jurisdiction.

18. NOTICES, WHERE SENT

Any notice of claim and any other notice or statement in writing required to be given to the Company under this policy must be given to the Company at: 400 Second Avenue South, Minneapolis, Minnesota 55401 (612)371-1111.

ANTI-FRAUD STATEMENT: Pursuant to CRS 10-1-128(6)(a), it is unlawful to knowingly provide false, incomplete, or misleading facts or information to an insurance company for the purpose of defrauding or attempting to defraud the company. Penalties may include imprisonment, fines, denial of insurance and civil damages. Any insurance company or agent of an insurance company who knowingly provides false, incomplete, or misleading facts or information to a policyholder or claimant for the purpose of defrauding or attempting to defraud the policyholder or claimant with regard to a settlement or award payable from insurance proceeds shall be reported to the Colorado division of insurance within the department of regulatory agencies.

This anti-fraud statement is affixed to and made a part of this policy.

Old Republic National Title Insurance Company Schedule A

Order Number: ABJ70617395 **Policy No.:** OX70617395.1610342

Amount of Insurance: \$400,000.00

Property Address:

8000 PECOS ST, DENVER, CO 80221

1. Policy Date:

September 10, 2019 at 5:00 P.M.

2. Name of Insured:

DELWEST DEVELOPMENT CORP., A COLORADO CORPORATION

3. The estate or interest in the Land described in this Schedule and which is covered by this policy is:

A Fee Simple

4. Title to the estate or interest covered by this policy at the date is vested in:

DELWEST DEVELOPMENT CORP., A COLORADO CORPORATION

5. The Land referred to in this Policy is described as follows:

BEGINNING AT THE NORTH ONE-QUARTER CORNER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST, 6TH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO;

THENCE NORTH 89° 55' 33" EAST, A DISTANCE OF 30.00 FEET TO A POINT, SAID POINT BEING THE TRUE POINT OF BEGINNING; THENCE THE FOLLOWING COURSES AND DISTANCES:

```
NORTH 0° 00' 00" EAST, 295.42 FEET; SOUTH 82° 26' 14" EAST, 20.18 FEET; SOUTH 82° 26' 14" EAST, 8.04 FEET; SOUTH 76° 32' 09" EAST, 178.58 FEET; SOUTH 21° 24' 11" EAST, 268.24 FEET; SOUTH 89° 55' 33" WEST 299.53 FEET TO THE TRUE POINT OF BEGINNING.
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EXCEPTING THAT PORTION DEEDED TO THE COUNTY OF ADAMS IN INSTRUMENT RECORDED FEBRUARY 5, 1987 IN BOOK 3270 AT PAGE 279.

(THE BEARINGS AND DISTANCES ARE DERIVED FROM THE KALCEVIC SUBDIVISION PLAT AS RECORDED AUGUST 23, 1984, UNDER RECEPTION NO. <u>B523787</u>, COUNTY OF ADAMS, STATE OF COLORADO)

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Old Republic National Title Insurance Company (Schedule B)

Order Number: ABJ70617395 **Policy No.:** OX70617395.1610342

This policy does not insure against loss or damage by reason of the following:

- 1. Any facts, rights, interests, or claims thereof, not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
- 2. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
- Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
- 4. Any lien, or right to a lien, for services, labor or material heretofore or hereafter furnished, imposed by law and not shown by the Public Records.
- 5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water.
- 6. TAXES AND ASSESSMENTS FOR THE YEAR 2019 AND SUBSEQUENT YEARS.
- 7. EXISTING LEASES AND TENANCIES, IF ANY.
- 8. TERMS, CONDITIONS, PROVISIONS, BURDENS, OBLIGATIONS AND EASEMENTS AS SET FORTH AND GRANTED IN EXCLUSIVE EASEMENT FOR PIPELINE RECORDED DECEMBER 29, 1986 UNDER RECEPTION NO. <u>B705776</u>.



Land Title Guarantee Company Customer Distribution



PREVENT FRAUD - Please remember to call a member of our closing team when initiating a wire transfer or providing wiring instructions.

Order Number: ABJ70612584-2 Date: 09/05/2019

Property Address: 7996 PECOS ST, DENVER, CO 80221

PLEASE CONTACT YOUR CLOSER OR CLOSER'S ASSISTANT FOR WIRE TRANSFER INSTRUCTIONS

Closer's Assistant For Closing Assistance

Derek Greenhouse 3033 EAST FIRST AVENUE, SUITE

600 DENVER, CO 80206

(303) 331-6239 (Work) (303) 393-4783 (Work Fax)

dgreenhouse@ltgc.com

Company License: CO44565

Valerie Fertig

3033 EAST FIRST AVENUE, SUITE

600

DENVER, CO 80206 (303) 331-6217 (Work) (303) 393-4739 (Work Fax)

vfertig@ltgc.com

Company License: CO44565

For Title Assistance

Sandy Johnson

5975 GREENWOOD PLAZA BLVD GREENWOOD VILLAGE, CO 80111

(303) 850-4126 (Work) sandyjohnson@ltgc.com

DELWEST DEVELOPMENT CORPORATION

Attention: JOSEPH DELZOTTO 155 S MADISON ST #326 Denver, CO 80209

Delivered via: No Commitment Delivery

ROBERT MARTIN LA JEUNESSE

409 S VIRGINIA AVE

FALLS CHURCH, VA 22046

Delivered via: US Postal Service

DELWEST CAPITAL GROUP

Attention: MARK K SHANER 155 S MADISON ST #326 **DENVER, CO 80209** (720) 708-4065 (Work)

m shaner@msn.com

Delivered via: Electronic Mail

LAND TITLE GUARANTEE COMPANY

Attention: TOM KIMBALL

3033 EAST FIRST AVENUE SUITE 600

DENVER, CO 80206 (303) 877-2127 (Work) (303) 877-2127 (Home) tkimball@ltgc.com

Delivered via: Electronic Mail

1031 EXCHANGE EXPERTS **DELWEST CAPITAL GROUP** Attention: JENNIFER Attention: BRIDGET BLEVINS

155 S MADISON ST #326 5445 DTC PARKWAY P4 DENVER, CO 80209 GREENWOOD VILLAGE, CO 80111

(720) 708-4065 (Work) (303) 531-5777 (Cell) jennifer@delwest.com (303) 694-0204 (Work) Delivered via: Electronic Mail (303) 694-0205 (Work Fax)

bridget@expert1031.com

Delivered via: Linked Commitment Delivery



Land Title Guarantee Company Estimate of Title Fees

Order Number: <u>ABJ70612584-2</u> Date: <u>09/05/2019</u>

Property Address: 7996 PECOS ST, DENVER, CO 80221

Parties: **DELWEST DEVELOPMENT CORP., A COLORADO**

CORPORATION

ROBERT MARTIN LAJEUNESSE

Visit Land Title's Website at www.ltgc.com for directions to any of our offices.

visit Land Title's Website at www.ngc.com for directions to any or our offices.			
Estimate of Title insurance Fees			
"ALTA" Owner's Policy 06-17-06 Reissue Rate	\$781.00		
Deletion of Standard Exception(s)	\$100.00		
Tax Certificate	\$26.00		
	Total \$907.00		
If Land Title Guarantee Company will be closing this transaction, the fees listed above will be collected at closing.			
Thank you for your order!			

Note: The documents linked in this commitment should be reviewed carefully. These documents, such as covenants conditions and restrictions, may affect the title, ownership and use of the property. You may wish to engage legal assistance in order to fully understand and be aware of the implications of the effect of these documents on your property.

Chain of Title Documents:

Adams county recorded 07/07/2015 under reception no. 2015000053449

ALTA COMMITMENT

Old Republic National Title Insurance Company

Schedule A

Order Number: <u>ABJ70612584-2</u>

Property Address:

7996 PECOS ST, DENVER, CO 80221

1. Effective Date:

04/05/2019 at 5:00 P.M.

2. Policy to be Issued and Proposed Insured:

"ALTA" Owner's Policy 06-17-06 Reissue Rate Proposed Insured: DELWEST DEVELOPMENT CORP., A COLORADO CORPORATION \$332,500.00

3. The estate or interest in the land described or referred to in this Commitment and covered herein is:

A FEE SIMPLE

4. Title to the estate or interest covered herein is at the effective date hereof vested in:

ROBERT MARTIN LAJEUNESSE

5. The Land referred to in this Commitment is described as follows:

A PARCEL OF LAND IN THE NORTHWEST CORNER OF THE NORTH HALF (N1/2) OF THE NORTHEAST QUARTER (NE1/4) OF SECTION THIRTY-THREE (33), TOWNSHIP TWO (2) SOUTH, RANGE SIXTY-EIGHT (68) WEST OF THE 6TH PRINCIPAL MERIDIAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEGINNING AT A POINT IN THE EAST LINE OF THE NORTH PECOS STREET AS IT EXISTED JUNE 30, 1948 TWENTY (20 FEET SOUTH OF THE NORTH LINE OF SAID SECTION THIRTY-THREE (33); THENCE SOUTH ALONG THE EAST LINE OF PECOS STREET AS IT EXISTED JUNE 30, 1948, A DISTANCE OF TWO HUNDRED EIGHT (208) FEET TO A POINT; THENCE EAST PARALLEL TO THE NORTH LINE OF SAID SECTION THIRTY-THREE (33) A DISTANCE OF TWO HUNDRED EIGHT (208) FEET TO A POINT; THENCE NORTH AT RIGHT ANGLES A DISTANCE OF TWO HUNDRED EIGHT (208) FEET MORE OR LESS TO A POINT TWENTY (20) FEET SOUTH OF THE NORTH LINE OF SAID SECTION THIRTY-THREE (33); THENCE WEST ALONG A LINE PARALLEL TO AND TWENTY (20) FEET SOUTH AT RIGHT ANGLES FROM THE NORTH LINE OF SAID SECTION THIRTY-THREE (33) TWO HUNDRED EIGHT (208) FEET MORE OR LESS TO THE POINT OF BEGINNING, COUNTY OF ADAMS, STATE OF COLORADO.

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ALTA COMMITMENT

Old Republic National Title Insurance Company Schedule B, Part I (Requirements)

Order Number: ABJ70612584-2

All of the following Requirements must be met:

This proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.

Pay the agreed amount for the estate or interest to be insured.

Pay the premiums, fees, and charges for the Policy to the Company.

Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.

- 1. (THIS ITEM WAS INTENTIONALLY DELETED)
- 2. PROVIDE LAND TITLE GUARANTEE COMPANY WITH A CURRENT SURVEY OF SUBJECT PROPERTY. UPON REVIEW, ADDITIONAL REQUIREMENTS AND/OR EXCEPTIONS MAY BE NECESSARY.

LAND TITLE IS NOT RESPONSIBLE FOR ORDERING SAID SURVEY.

SAID SURVEY MUST BE CERTIFIED TO LAND TITLE GUARANTEE COMPANY AND OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY.

3. WARRANTY DEED FROM ROBERT MARTIN LAJEUNESSE TO DELWEST DEVELOPMENT CORP., A COLORADO CORPORATION CONVEYING SUBJECT PROPERTY.

REQUIREMENTS TO DELETE THE PRE-PRINTED EXCEPTIONS IN THE OWNER'S POLICY TO BE ISSUED

A. ITEMS 1-3 OF THE PRE-PRINTED EXCEPTIONS WILL BE DELETED UPON RECEIPT OF AN APPROVED SURVEY. MATTERS DISCLOSED BY SAID SURVEY MAY BE ADDED TO SCHEDULE B, PART II HEREOF.

B. UPON THE APPROVAL OF THE COMPANY AND THE RECEIPT OF A NOTARIZED FINAL LIEN AFFIDAVIT, ITEM 4 OF THE PRE-PRINTED EXCEPTIONS, WILL BE AMENDED TO READ:

ITEM 4 OF THE PRE-PRINTED EXCEPTIONS IS DELETED AS TO ANY LIENS OR FUTURE LIENS RESULTING FROM WORK OR MATERIAL FURNISHED AT THE SPECIFIC, DIRECT REQUEST, AND WITH THE ACTUAL KNOWLEDGE OF ROBERT MARTIN LAJEUNESSE.

OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY SHALL HAVE NO LIABILITY FOR ANY LIENS ARISING FROM WORK OR MATERIAL FURNISHED AT THE SPECIFIC, DIRECT REQUEST, AND WITH THE ACTUAL KNOWLEDGE OF DELWEST DEVELOPMENT CORP., A COLORADO CORPORATION.

C. ITEM 5 OF THE PRE-PRINTED EXCEPTIONS WILL BE DELETED IF LAND TITLE GUARANTEE COMPANY CONDUCTS THE CLOSING OF THE CONTEMPLATED TRANSACTION(S) AND RECORDS THE DOCUMENTS IN CONNECTION THEREWITH.

D. UPON PROOF OF PAYMENT OF 2018 TAXES AND ASSESSMENTS, ITEM 6 OF THE PRE-PRINTED EXCEPTIONS WILL BE AMENDED TO READ:

TAXES AND ASSESSMENTS FOR THE YEAR 2019 AND SUBSEQUENT YEARS.

ALTA COMMITMENT

Old Republic National Title Insurance Company Schedule B, Part II

(Exceptions)

Order Number: ABJ70612584-2

This commitment does not republish any covenants, condition, restriction, or limitation contained in any document referred to in this commitment to the extent that the specific covenant, conditions, restriction, or limitation violates state or federal law based on race, color, religion, sex, sexual orientation, gender identity, handicap, familial status, or national origin.

- 1. Any facts, rights, interests, or claims thereof, not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
- 2. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
- Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
- 4. Any lien, or right to a lien, for services, labor or material heretofore or hereafter furnished, imposed by law and not shown by the Public Records.
- Defects, liens, encumbrances, adverse claims or other matters, if any, created, first appearing in the
 public records or attaching subsequent to the effective date hereof but prior to the date of the proposed
 insured acquires of record for value the estate or interest or mortgage thereon covered by this
 Commitment.
- 6. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
- 7. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water.
- 8. EXISTING LEASES AND TENANCIES, IF ANY.
- 9. RIGHTS OF THE PUBLIC IN AND TO ANY PORTION OF THE SUBJECT PROPERTY LYING WITHIN THE RIGHT OF WAY OF PECOS STREET.



LAND TITLE GUARANTEE COMPANY DISCLOSURE STATEMENTS

Note: Pursuant to CRS 10-11-122, notice is hereby given that:

- (A) The Subject real property may be located in a special taxing district.
- (B) A certificate of taxes due listing each taxing jurisdiction will be obtained from the county treasurer of the county in which the real property is located or that county treasurer's authorized agent unless the proposed insured provides written instructions to the contrary. (for an Owner's Policy of Title Insurance pertaining to a sale of residential real property).
- (C) The information regarding special districts and the boundaries of such districts may be obtained from the Board of County Commissioners, the County Clerk and Recorder, or the County Assessor.

Note: Effective September 1, 1997, CRS 30-10-406 requires that all documents received for recording or filing in the clerk and recorder's office shall contain a top margin of at least one inch and a left, right and bottom margin of at least one half of an inch. The clerk and recorder may refuse to record or file any document that does not conform, except that, the requirement for the top margin shall not apply to documents using forms on which space is provided for recording or filing information at the top margin of the document.

Note: Colorado Division of Insurance Regulations 8-1-2 requires that "Every title entity shall be responsible for all matters which appear of record prior to the time of recording whenever the title entity conducts the closing and is responsible for recording or filing of legal documents resulting from the transaction which was closed". Provided that Land Title Guarantee Company conducts the closing of the insured transaction and is responsible for recording the legal documents from the transaction, exception number 5 will not appear on the Owner's Title Policy and the Lenders Policy when issued.

Note: Affirmative mechanic's lien protection for the Owner may be available (typically by deletion of Exception no. 4 of Schedule B, Section 2 of the Commitment from the Owner's Policy to be issued) upon compliance with the following conditions:

- (A) The land described in Schedule A of this commitment must be a single family residence which includes a condominium or townhouse unit.
- (B) No labor or materials have been furnished by mechanics or material-men for purposes of construction on the land described in Schedule A of this Commitment within the past 6 months.
- (C) The Company must receive an appropriate affidavit indemnifying the Company against un-filed mechanic's and material-men's liens.
- (D) The Company must receive payment of the appropriate premium.
- (E) If there has been construction, improvements or major repairs undertaken on the property to be purchased within six months prior to the Date of Commitment, the requirements to obtain coverage for unrecorded liens will include: disclosure of certain construction information; financial information as to the seller, the builder and or the contractor; payment of the appropriate premium fully executed Indemnity Agreements satisfactory to the company, and, any additional requirements as may be necessary after an examination of the aforesaid information by the Company.

No coverage will be given under any circumstances for labor or material for which the insured has contracted for or agreed to pay.

Note: Pursuant to CRS 10-11-123, notice is hereby given:

This notice applies to owner's policy commitments disclosing that a mineral estate has been severed from the surface estate, in Schedule B-2.

- (A) That there is recorded evidence that a mineral estate has been severed, leased, or otherwise conveyed from the surface estate and that there is substantial likelihood that a third party holds some or all interest in oil, gas, other minerals, or geothermal energy in the property; and
- (B) That such mineral estate may include the right to enter and use the property without the surface owner's permission.

Note: Pursuant to CRS 10-1-128(6)(a), It is unlawful to knowingly provide false, incomplete, or misleading facts or information to an insurance company for the purpose of defrauding or attempting to defraud the company. Penalties may include imprisonment, fines, denial of insurance, and civil damages. Any insurance company or agent of an insurance company who knowingly provides false, incomplete, or misleading facts or information to a policyholder or claimant for the purpose of defrauding or attempting to defraud the policyholder or claimant with regard to a settlement or award payable from insurance proceeds shall be reported to the Colorado Division of Insurance within the Department of Regulatory Agencies.

Note: Pursuant to Colorado Division of Insurance Regulations 8-1-3, notice is hereby given of the availability of a closing protection letter for the lender, purchaser, lessee or seller in connection with this transaction.



JOINT NOTICE OF PRIVACY POLICY OF LAND TITLE GUARANTEE COMPANY, LAND TITLE GUARANTEE COMPANY OF SUMMIT COUNTY LAND TITLE INSURANCE CORPORATION AND OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY

This Statement is provided to you as a customer of Land Title Guarantee Company as agent for Land Title Insurance Corporation and Old Republic National Title Insurance Company.

We want you to know that we recognize and respect your privacy expectations and the requirements of federal and state privacy laws. Information security is one of our highest priorities. We recognize that maintaining your trust and confidence is the bedrock of our business. We maintain and regularly review internal and external safeguards against unauthorized access to your non-public personal information ("Personal Information").

In the course of our business, we may collect Personal Information about you from:

- applications or other forms we receive from you, including communications sent through TMX, our web-based transaction management system;
- your transactions with, or from the services being performed by us, our affiliates, or others;
- a consumer reporting agency, if such information is provided to us in connection with your transaction;

and

 The public records maintained by governmental entities that we obtain either directly from those entities, or from our affiliates and non-affiliates.

Our policies regarding the protection of the confidentiality and security of your Personal Information are as follows:

- We restrict access to all Personal Information about you to those employees who need to know that information in order to provide products and services to you.
- We may share your Personal Information with affiliated contractors or service providers who provide services in the course of our business, but only to the extent necessary for these providers to perform their services and to provide these services to you as may be required by your transaction.
- We maintain physical, electronic and procedural safeguards that comply with federal standards to protect your Personal Information from unauthorized access or intrusion.
- Employees who violate our strict policies and procedures regarding privacy are subject to disciplinary action.
- We regularly assess security standards and procedures to protect against unauthorized access to Personal Information.

WE DO NOT DISCLOSE ANY PERSONAL INFORMATION ABOUT YOU WITH ANYONE FOR ANY PURPOSE THAT IS NOT STATED ABOVE OR PERMITTED BY LAW.

Consistent with applicable privacy laws, there are some situations in which Personal Information may be disclosed. We may disclose your Personal Information when you direct or give us permission; when we are required by law to do so, for example, if we are served a subpoena; or when we suspect fraudulent or criminal activities. We also may disclose your Personal Information when otherwise permitted by applicable privacy laws such as, for example, when disclosure is needed to enforce our rights arising out of any agreement, transaction or relationship with you.

Our policy regarding dispute resolution is as follows: Any controversy or claim arising out of or relating to our privacy policy, or the breach thereof, shall be settled by arbitration in accordance with the rules of the American Arbitration Association, and judgment upon the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof.



Commitment For Title Insurance Issued by Old Republic National Title Insurance Corporation

NOTICE

IMPORTANT—READ CAREFULLY: THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACONTRACTUAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY'S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I—Requirements; Schedule B, Part II—Exceptions; and the Commitment Conditions, Old Republic National Title Insurance Company, a Minnesota corporation (the "Company"), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Policy Amount and the name of the Proposed Insured. If all of the Schedule B, Part I—Requirements have not been met within 6 months after the Commitment Date, this Commitment terminates and the Company's liability and obligation end.

COMMITMENT CONDITIONS

1. DEFINITIONS

- (a) "Knowledge" or "Known": Actual or imputed knowledge, but not constructive notice imparted by the Public Records.
- (b)"Land": The land described in Schedule A and affixed improvements that by law constitute real property. The term "Land" does not include any property beyond the lines of the area described in Schedule A, nor any right, title, interest, estate, or easement in abutting streets, roads, avenues, alleys, lanes, ways, or waterways, but this does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.
- (c) "Mortgage": A mortgage, deed of trust, or other security instrument, including one evidenced by electronic means authorized by law.
- (d) "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.
- (e) "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.
- (f) "Proposed Policy Amount": Each dollar amount specified in Schedule A as the Proposed Policy Amount of each Policy to be issued pursuant to this Commitment
- (g)"Public Records": Records established under state statutes at the Commitment Date for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without Knowledge.
- (h) "Title": The estate or interest described in Schedule A.
- 2. If all of the Schedule B, Part I—Requirements have not been met within the time period specified in the Commitment to Issue Policy, Comitment terminates and the Company's liability and obligation end.
- 3. The Company's liability and obligation is limited by and this Commitment is not valid without:
 - (a)the Notice;
 - (b)the Commitment to Issue Policy;
 - (c) the Commitment Conditions;
 - (d)Schedule A;
 - (e)Schedule B, Part I—Requirements; and
 - (f) Schedule B, Part II—Exceptions; and
 - (g)a counter-signature by the Company or its issuing agent that may be in electronic form.

4. COMPANY'S RIGHT TO AMEND

The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company shall not be liable for any other amendment to this Commitment.

5. LIMITATIONS OF LIABILITY

- (a)The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:
 - i. comply with the Schedule B, Part I—Requirements;
 - ii. eliminate, with the Company's written consent, any Schedule B, Part II-Exceptions; or
 - iii. acquire the Title or create the Mortgage covered by this Commitment.
- (b) The Company shall not be liable under Commitment Condition 5(a) if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.
- (c) The Company will only have liability under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.
- (d)The Company's liability shall not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Conditions 5(a)(i) through 5(a)(iii) or the Proposed Policy Amount.
- (e) The Company shall not be liable for the content of the Transaction Identification Data, if any.

- (f) In no event shall the Company be obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I—Requirements have been met to the satisfaction of the Company.
- (g)In any event, the Company's liability is limited by the terms and provisions of the Policy.

6. LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT

- (a)Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.
- (b) Any claim must be based in contract and must be restricted solely to the terms and provisions of this Commitment.
- (c) Until the Policy is issued, this Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.
- (d)The deletion or modification of any Schedule B, Part II—Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.
- (e)Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.
- (f) When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.

7. IF THIS COMMITMENT HAS BEEN ISSUED BY AN ISSUING AGENT

The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for the purpose of providing closing or settlement services.

8. PRO-FORMA POLICY

The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

9. ARBITRATION

The Policy contains an arbitration clause. All arbitrable matters when the Proposed Policy Amount is \$2,000,000 or less shall be arbitrated at the option of either the Company or the Proposed Insured as the exclusive remedy of the parties. A Proposed Insured may review a copy of the arbitration rules at http://www.alta.org/arbitration.

IN WITNESS WHEREOF, Land Title Insurance Corporation has caused its corporate name and seal to be affixed by its duly authorized officers on the date shown in Schedule A to be valid when countersigned by a validating officer or other authorized signatory.

Issued by:

Land Title Guarantee Company 3033 East First Avenue Suite 600 Denver, Colorado 80206 303-321-1880



OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY

A Stock Company 400 Second Avenue South, Minneapolis, Minnesota 55401 (612) 371-1111

A R X

Secretary

Senior Vice President

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by Land Title Insurance Corporation. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; and Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

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City Hall 9500 Civic Center Drive Thornton, Colorado 80229-4326

City Development Department 303-538-7295 FAX 303-538-7373 www.cityofthornton.net

July 10, 2017

Jake Fischer
Project Engineer
Core Consultants
1950 W Littleton Blvd
Suite 109
Littleton, CO 80120

Re: City Water and Wastewater Service for the Roush School Site Development at 7840 Pecos Street

Dear Mr. Nash:

This letter is to confirm that currently there is adequate capacity in the City of Thornton (City) water and wastewater systems to serve the above-identified proposed development subject to the limitations stated below. However, please be aware that the City does not guarantee capacity for proposed developments indefinitely or capacity for future developments. System capacity must be verified at the time of development.

The extension of City water and wastewater mains and service connections necessary to serve this property shall be installed at the expense of the property owner/developer. The design and installation of all water and wastewater improvements shall conform to all ordinances and regulations, codes and specifications in effect at the time of development. Also, the property owner shall comply with the requirements of any utility extension agreements or other agreements that may affect this property. This property will need to comply with the most current ordinances applicable to water and sewer rates and charges.

System capacity can be affected by drought, emergency or lack of available water resources. The City has the authority to and may suspend the issuance of new water taps and connections to the City water mains for an indefinite period of time for these reasons, and/or take other emergency measures that may affect the availability of water service.

This letter is valid for a period of one (1) year from the date of this letter.

If you have any questions, please call me at 303-538-7207.

Sincerely,

Cassie Free

Development Engineering Manager

CF/eg

CC:

Ralph Mitchell, Utilities Operations Manager



WILL SERVE LETTER

April 26, 2019

Derrell Schreiner Delwest Development Corp 155 S. Monroe St Suite 326 Denver CO 80209.

Re: Sherrelwood Village

Dear Derrell,

This letter is to confirm that Xcel Energy is your utility provider for natural gas and electrical service. In accordance with our tariffs, on file with and approved by the Colorado Public Utilities Commission, gas and electric facilities can be made available to serve the project at Sherrelwood Village.

Your utility service(s) will be provided after the following steps are completed:

- Application submitted to Public Service's "Builders Call Line (BCL)" once your application is accepted you will be assigned a design department representative who will be your primary point of contact
- *Utility design is completed* you must provide your design representative with the site plan, the one line diagrams, and panel schedules for electric and gas loads if applicable
- All documents provided by design representative are signed and returned
- Payment is received
- Required easements are granted you must sign and return applicable easement documents to your Right-of-Way agent
- Site is ready for utility construction

A scheduled in-service date will be provided once these requirements have been met.

It is important to keep in mind that the terms and conditions of utility service, per our tariffs, require that you provide adequate space and an easement on your property for all gas and electric facilities required to serve your project, including but not limited to gas and electrical lines and meters, transformers, and pedestals. General guidelines for these requirements can be found at Site Requirements. https://www.xcelenergy.com/staticfiles/xe-responsive/Admin/Managed Documents
& PDFs/Xcel-Energy-Standard-For-Electric-Installation-and-Use.pdf
Easement requirements can be found at Utility Design and Layout.

Xcel Energy looks forward to working with you on your project and if I can be of further assistance, please contact me at the phone number or email listed below.

Sincerely,

Patrick Quinn Xcel Energy Planner

Mailing address: Public Service Company of Colorado 5460 W 60th Ave Arvada, CO 80003

EXHIBIT

SOUTHEAST QUARTER, SECTION 28 & NORTHEAST QUARTER, SECTION 33, ALL IN TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P.M., COUNTY OF ADAMS, COLORADO

LEGAL DESCRIPTION:

A PARCEL OF LAND BEING SHERRELWOOD VILLAGE, A SUBDIVISION PLAT RECORDED AT RECEPTION NO. 2018000075940 AND A PARCEL OF LAND DESCRIBED IN THAT DEED RECORDED AT RECEPTION NO. 2019000075343 TOGETHER WITH A PARCEL OF LAND DESCRIBED IN THAT DEED RECORDED AT RECEPTION NO. 2019000073502, ALL IN THE RECORDS OF THE ADAMS COUNTY CLERK AND RECORDER'S OFFICE, LYING WITHIN PORTIONS OF THE SOUTHEAST QUARTER OF SECTION 28 AND THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO. BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH P.M., BEING ASSUMED TO BEAR N 89°30'30" E, FROM THE NORTH QUARTER CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 23519" TO THE NORTHEAST CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 7276", WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE NORTH QUARTER CORNER OF SAID SECTION 33, THENCE N 89°30'30" E, ALONG THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 50.00 FEET TO A POINT ON THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY AS DEDICATED BY THAT RESOLUTION RECORDED IN BOOK 3270 AT PAGE 279, SAID ADAMS COUNTY RECORDS, ALSO BEING THE NORTHWEST CORNER OF SAID SHERRELWOOD VILLAGE PLAT AND THE SOUTHWEST CORNER OF THAT PARCEL OF LAND DESCRIBED IN SAID DEED, RECEPTION NO. 2019000075343 AND THE POINT OF BEGINNING;

THENCE N 00°14'47" W, ALONG THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY, AND THE WEST LINE OF SAID DEED, ALONG A LINE BEING 50.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 28, A DISTANCE OF 293.01 FEET TO THE NORTHWEST CORNER OF SAID DEED, RECEPTION NO. 2019000075343;

THENCE S 82°41'00" E, CONTINUING ALONG THE PECOS STREET ROW AND THE NORTH LINE OF SAID DEED, A DISTANCE OF 8.10 FEET TO A POINT ON THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY AND THE WEST CORNER OF PARCEL D, AS DESCRIBED IN THAT QUIT CLAIM DEED RECORDED IN BOOK 3251 AT PAGE 924, SAID COUNTY RECORDS;

THENCE ALONG THE SOUTH AND WEST LINES OF SAID PARCEL D THE FOLLOWING THREE (3) COURSES:

- 1. S 76°46'55" E, A DISTANCE OF 178.58 FEET;
- 2. S 21°38'59" E, ALONG THE EAST LINES OF SAID DEED, RECEPTION NO. 2019000075343 AND THE EAST LINE OF SAID SHERRELWOOD VILLAGE PLAT, A DISTANCE OF 534.54 FEET;
- 3. S 33°40'19" E, CONTINUING ALONG THE EAST LINE OF SAID SHERRELWOOD VILLAGE PLAT, A DISTANCE OF 83.13 FEET;

THENCE ALONG THE EAST AND SOUTH LINES OF SAID SHERRELWOOD VILLAGE PLAT, THE FOLLOWING SIX (6) COURSES:

- 1. S 14°37'52" E, A DISTANCE OF 76.08 FEET;
- 2. N 88°03'04" E, A DISTANCE OF 39.50 FEET
- 3. S 17°49'46" E, A DISTANCE OF 104.05 FEET;
- 4. S 55°05'47" E, A DISTANCE OF 112.26 FEET;
- S 01°01'29" E, A DISTANCE OF 259.37 FEET, TO A POINT ON THE NORTH LINE OF ELMWOOD PARK SUBDIVISION, A SUBDIVISION PLAT RECORDED AT RECEPTION NO. C0184761, SAID ADAMS COUNTY RECORDS;

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 15-018 DR: J. ANTON
DATE: 5/07/2020 DS: T. GIRARD
SHEET 1 OF 4 P.M. T. GIRARD



CIVIL ENGINEERING
DEVELOPMENT CONSULTING
NATURAL RESOURCES
LAND SURVEYING
303,703,4444

EXHIBIT

SOUTHEAST QUARTER, SECTION 28 & NORTHEAST QUARTER, SECTION 33, ALL IN TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P.M., COUNTY OF ADAMS, COLORADO

LEGAL DESCRIPTION CONTINUED:

6. S 89°32'44" W, ALONG SAID NORTH LINE, A DISTANCE OF 611.65 FEET TO THE SOUTHWEST CORNER OF SAID SHERRELWOOD VILLAGE PLAT, AND THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY, AS DEDICATED BY SAID PLAT, BEING 50.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33:

THENCE N 00°01'53" E, ALONG THE WEST LINE OF SAID SHERRELWOOD VILLAGE, AND THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY, BEING 50.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 586.62 FEET TO A POINT ON THE SOUTH LINE OF THAT PARCEL OF LAND DESCRIBED IN SAID WARRANTY DEED, RECEPTION NO. 2019000073502;

THENCE ALONG THE SOUTH, WEST AND NORTH LINES OF SAID DEED, ALSO BEING THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY, THE FOLLOWING THREE (3) COURSES:

- S 89°30'30" W, ALONG A LINE BEING PARALLEL TO THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 20.00 FEET TO A POINT BEING 30.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33;
- 2. N 00°01'53" E, ALONG A LINE BEING 30.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 208.00 FEET TO A POINT BEING 20.00 FEET SOUTH OF THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33;
- 3. N 89°30'30" E, ALONG A LINE BEING 20.00 FEET SOUTH OF AND PARALLEL TO THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 20.00 FEET TO A POINT BEING 50.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, ALSO BEING THE WEST LINE OF SAID SHERRELWOOD VILLAGE PLAT;

THENCE N 00°01'53" E, ALONG THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY, AND THE WEST LINE OF SAID SHERRELWOOD VILLAGE PLAT, BEING 50.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33 A DISTANCE OF 20.00 FEET TO THE NORTHWEST CORNER OF SAID SHERRELWOOD VILLAGE PLAT, AND THE POINT OF BEGINNING.

CONTAINING AN AREA OF 450,875 SQUARE FEET OR 10.351 ACRES, MORE OR LESS.

THOMAS M. GIRARD COLORADO PLS 38151 FOR AND ON BEHALF OF CORE CONSULTANTS, INC.



NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY. IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 15-018 DR: J. ANTON
DATE: 05/07/2020 DS: T. GIRARD
SHEET 2 OF 4 P.M. T. GIRARD

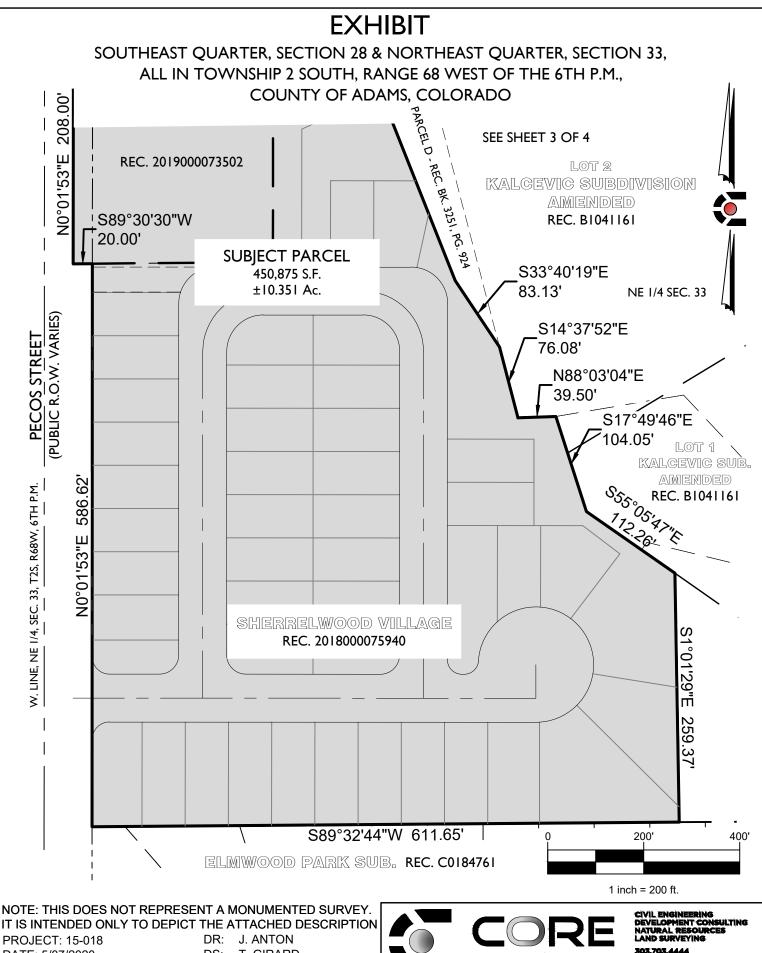


EXHIBIT SOUTHEAST QUARTER, SECTION 28 & NORTHEAST QUARTER, SECTION 33, ALL IN TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P.M., COUNTY OF ADAMS, COLORADO S82°41'00"E SE 1/4 SEC. 28 8.10' \$76°46'55"E 178.58" — 20' DEDICATED R.O.W. LOT 2 BK. 3270, PG. 279 KALGEVIC SUBDIVISION AMENDED R68W, 6TH P.M. REC. B1041161 293.07 REC. 2019000075343 (PUBLIC R.O.W. VARIES) T2S, PECOS STREET 28, SE 1/4, SEC. POINT OF COMMENCEMENT NE COR. SEC 33, -N 1/4 COR. SEC 33, FND. 3-1/4" ALUM. CAP FND. 3-1/4" ALUM. CAP STAMPED "PLS 7276" STAMPED "PLS 23519" POINT OF BEGINNING BASIS OF BEARINGS NW CORNER, N 89°30'30" E SHERRELWOOD VILLAGE N. LINE, NE 1/4, SEC. 33, N0°01'53"E T2S, R68W, 6TH P.M. N89°30'30"E 20.00' 50.00 SUBJECT PARCEL 00 N89°30'30"E LOT 2 450,875 S.F. 208. 20.00' KALCEVIC ±10.351 Ac. LINE, NE 1/4, SEC. 33, T2S, R68W, 6TH P.M. SUBDIVISION AMENDED N0°01'53"E REC. 2019000073502 REC. B1041161 S89°30'30"W NE 1/4 SEC. 33 20.00' S33°40'19"E 83.13' SHERRELWOOD VILLAGE REC. 2018000075940 S14°37'52"E Š. 76.08' N88°03'04"E 100' 200' 39.50' SEE SHEET 4 OF 4 1 inch = 100 ft. NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY. DEVELOPMENT CONSULTING NATURAL RESOURCES IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION PROJECT: 15-018 DR: J. ANTON DATE: 5/07/2020 DS: T. GIRARD

SHEET 3 OF 4

P.M. T. GIRARD

1950 W. Littleton Bi Littleton, CO 80120



DATE: 5/07/2020 DS: T. GIRARD SHEET 4 OF 4 P.M. T. GIRARD



1950 W. Littleton Bi Littleton, CO 80120



ADAMS COUNTY TREASURER

Certificate Of Taxes Due

Account Number R0060226 Parcel 0171928400003 Assessed To

CHILDRENS OUTREACH PROJECT C/O:THERAPUTIC DAYCARE CENTER 8000 PECOS DENVER, CO 80221

Certificate Number 2019-121043 Order Number 153730/ab70617395

Vendor ID 43

COLORADO COUNTY RECORD SYSTEMS LLC PO BOX 12102

\$499.86

\$49.99

DENVER, CO 80212

Legal Description Situs Address

 $SECT, TWN, RNG: 28-2-68 \ DESC: PT \ OF \ SE4 \ OF \ SEC \ 28 \ DESC \ AS \ FOLS \ BEG \ AT \ N4 \ COR \ OF \ SEC \ 33 \ TH \ E \ 30 \ FT \ TO \ TRUE \ POB \ TH \ N \ 295/42 \ FT \ TH \ S \ 82D \ 26M \ E \ 8/04 \ FT \ TH \ S \ 76D \ 32M \ E \ 178/58 \ FT \ TH \ S \ 21D \ 24M \ E \ 268/24 \ FT \ TH \ W \ 299/53 \ FT \ TO \ TRUE \ POB \ EXC \ RD \ 1/48A$ 8000 PECOS ST

Year	Tax	Interest	Fees	Payments	Balance
Special Assessment: STORM	WATER UTILITY FEE				
2018	\$499.86	\$0.00	\$0.00	\$0.00	\$499.86
Total Special Assessment: ST	ORMWATER UTILITY FEE				\$499.86
Special Assessment: TREASU	JRERS FEE SWU				
2018	\$49.99	\$0.00	\$0.00	\$0.00	\$49.99
Total Special Assessment: TREASURERS FEE SWU					\$49.99
GRAND TOTAL					\$549.85
Grand Total Due as of 04/19/2	2019				\$549.85

STORMWATER UTILITY FEE TREASURERS FEE SWU

Tax Billed at 2018 Rates for Tax Area 490 - 490

Authority	Mill Levy	Amount	Values	Actual	Assessed
RANGEVIEW LIBRARY DISTRICT	3.6660000	\$0.00	CHAR SOC SERV LND	\$161,172	\$11,600
ADAMS COUNTY FIRE PROTECTIO	16.6500000	\$0.00	CHAR SOC SERV	\$919,685	\$66,220
ADAMS COUNTY	26.8640000	\$0.00	IMPROV		
HYLAND HILLS PARK & RECREAT	5.4130000	\$0.00	Total	\$1,080,857	\$77,820
SD 50	66.5140000	\$0.00			
URBAN DRAINAGE SOUTH PLATTE	0.0940000*	\$0.00			
URBAN DRAINAGE & FLOOD CONT	0.7260000*	\$0.00			
Taxes Billed 2018 * Credit Levy	119.9270000	\$0.00			
Cledit Levy					

ALL TAX SALE AMOUNTS ARE SUBJECT TO CHANGE DUE TO ENDORSEMENT OF CURRENT TAXES BY THE LIENHOLDER OR TO ADVERTISING AND DISTRAINT WARRANT FEES. CHANGES MAY OCCUR AND THE TREASURER'S OFFICE WILL NEED TO BE CONTACTED PRIOR TO REMITTANCE AFTER AUGUST 1. TAX LIEN SALE REDEMPTION AMOUNTS MUST BE PAID BY CASH OR CASHIERS CHECK. SPECIAL TAXING DISTRICTS AND THE BOUNDARIES OF SUCH DISTRICTS MAY BE ON FILE WITH THE BOARD OF COUNTY COMMISSIONERS. THE COUNTY CLERK, OR THE COUNTY ASSESSOR.

This certificate does not include land or improvements assessed under a separate account number, personal property taxes, transfer tax or misc. tax collected on behalf of other entities, special or local improvement district assessments or mobile homes, unless specifically mentioned.

I, the undersigned, do hereby certify that the entire amount of taxes due upon the above described parcels of real property and all outstanding sales for unpaid taxes as shown by the records in my office from which the same may still be redeemed with the amount required for redemption are as noted herein. In witness whereof, I have hereunto set my hand and seal.

TREASURER, ADAMS COUNTY, Lisa L. Culpepper J.D..

4430 S. Adams County Parkway

Brighton, CO 80601

reasurer, Adams County, Lisa L. Culpepper J.D.





Account As of Date Parcel Number Owner

R0067193 08/06/2019 0171933100009 LA JEUNESSE ROBERT MARTIN

Legal: SECT,TWN,RNG:33-2-68 DESC: BEG AT A PT ON E LN N PECOS ST 20 FT S

OF N LN SEC 33 TH S ALG E LN PECOS ST 208 FT TH E 208 FT TH N AT R/A 208 FT M/L TO A PT 20 FT S OF N LN SD SEC TH W 208 FT M/L TO POB

1A

Situs 7996 PECOS ST

Address:

Year Tax Total Due
Total \$0.00 \$0.00

CERTIFICATION OF NOTICE TO MINERAL ESTATE OWNERS

I/We, Delwe	st Development Corp.		
(the "Applicant") by sign	ing below, hereb	by declare and certify as follows	
With respect to the prope Physical Address:			
Legal Description:	SECT, TWN, RNO	G:33-2-68 DESC: BEG AT A PT ON ELM N.D.	ECOS ST 20 FT S OF N LN SEC 33 TH S ALG E LN A PT 20 FT S OF N LN SD SEC TH W 208 FT M/L TO
Parcel #(s):	0171933100009		
(PLEASE CHECK ONE):			
to mineral es I/We have se Clerk and Re	tate owners purs	, 20, which are the second of the second	he Colorado Revised Statutes;
Date:	Applicant:	Delwest Development Corp.	
	By: Print Name: _ Address:	Craig Fitchett 155 S Madison St. Suite 326	
STATE OF COLORADO)	Denver, CO 80209	
COUNTY OF ADAMS)		
Subscribed and swor	n to before me th	nisday of	, 20, by
Witness my hand and			DEBRA L FARNEY NOTARY PUBLIC STATE OF COLORADO
My Commission expires:	7-14-23	Notary Public	Notary ID 19954007439 My Commission Expires 07/14/2023
After Recording Return T	o:	Name and Address of Person	Preparing Legal Description:

A recorded copy of this Certification shall be submitted to the Adams County Community and Economic Development Department with all applicable land use applications.

APPLICANT'S CERTIFICATION CONCERNING QUALIFYING SURFACE DEVELOPMENT. PURSUANT TO C.R.S. §24-65.5-103.3 (1)(b) Delwest Development Corp. I/We. (the "Applicant") by signing below, hereby declare and certify as follows: Concerning the property located at: Physical Address: 7996 Pecos St. Denver, CO 80209 SECT,TWN,RNG:33-2-68 DESC: BEG AT A PT ON E LN N PECOS ST 20 FT S OF N LN Legal Description: -SEC 33 TH S ALG E LN PECOS ST 208 FT TH E 208 FT TH N AT R/A 208 FT M/L TO A PT 20 FT S OF N LN SD SEC TH W 208 FT M/L TO POB 1A Parcel #(s): With respect to qualifying surface developments, that (PLEASE CHECK ONE): X No mineral estate owner has entered an appearance or filed an objection to the proposed application for development within thirty days after the initial public hearing on the application; or The Applicant and any mineral estate owners who have filed an objection to the proposed application for development or have otherwise filed an entry of appearance in the initial public hearing regarding such application no later than thirty days following the initial public hearing on the application have executed a surface use agreement related to the property included in the application for development, the provisions of which have been incorporated into the application for development or are evidenced by a memorandum or otherwise recorded in the records of the clerk and recorder of the county in which the property is located so as to provide notice to transferees of the Applicant, who shall be bound by such surface use agreements; or The application for development provides: Access to mineral operations, surface facilities, flowlines, and pipelines in support of such operations existing when the final public hearing on the application for development is held by means of public roads sufficient to withstand trucks and drilling equipment or thirty-foot-wide access easements; An oil and gas operations area and existing well site locations in (ii) accordance with section 24-65.5-103.5 of the Colorado Revised Statutes; and That the deposit for incremental drilling costs described in section 24-(iii) 65.5-103.7 of the Colorado Revised Statutes has been made. 12/23/19 Date: Delwest Development Corp Applicant: After Recording Return To: By: Print Name: Craig Fitchett Address: 155 S Madison St. Suite 326 Denver, CO 80209

STATE OF COLORADO)		
COUNTY OF ADAMS)		
Subscribed and sworn to before me this	day of	, 20, by
Witness my hand and official seal.		DEBRA L FARNEY NOTARY PUBLIC STATE OF COLORADO
My Commission expires: $7-14-23$	Notary Public	Notary ID 19954007439 My Commission Expires 07/14/2023

Name and Address of Person Preparing Legal Description:

A recorded copy of this Certification shall be submitted to the Adams County Community and Economic Development Department within thirty days after the initial public hearing on all applicable land use applications.

CERTIFICATION OF NOTICE TO MINERAL ESTATE OWNERS

	relopment Corp.
(the "Applicant") by signing I	below, hereby declare and certify as follows:
With respect to the property le	ocated at:
Physical Address:	8000 Pecos St. Denver, CO 80221
Legal Description:	SUB:PERL MACK MANOR SEVENTH FILING BLK:37 DESC: N 24 FT OF LOT 21 ALL LOTS 22 THRU 24
Parcel #(s): 01	171928400003
(PLEASE CHECK ONE):	
On the d	av of
before the initial	ay of, 20, which is not less than thirty days public hearing, notice of application for surface development was provided
to mineral estate	owners pursuant to section 24-65.5-103 of the Colorado Revised Statutes;
	or
I/We have search	ned the records of the Adams County Tax Assessor and the Adams County
Clerk and Record	der for the above identified parcel and have found that no mineral estate
owner is identified	ed therein.
Date: 12/23/19 A	Delivert Development Com
Date: A ₁	pplicant: Delwest Development Corp.
D.	Martin Harris Commencer Commence
By	rint Name: Chaig Fitchett
A	Denver, CO 80209
STATE OF COLORADO)	Beliver, CO 80209
j ,	
COUNTY OF ADAMS)	
Subscribed and sworn to	before me this 23 day of DEFMBER, 2019, by
Witness my hand and off	ficial seal. DEBRAL FARNEY
My Commission expires: 7-1	NOTARY DIELE
After Recording Return To:	Name and Address of Person Preparing Legal Description:

A recorded copy of this Certification shall be submitted to the Adams County Community and Economic Development Department with all applicable land use applications.

APPLICANT'S CERTIFICATION CONCERNING QUALIFYING SURFACE DEVELOPMENT, PURSUANT TO C.R.S. §24-65.5-103.3 (1)(b) Delwest Development Corp. I/We. , (the "Applicant") by signing below, hereby declare and certify as follows: Concerning the property located at: Physical Address: 8000 Pecos St. Denver, CO 80209 SUB:PERL MACK MANOR SEVENTH FILING BLK:37 DESC: N 24 FT OF LOT 21 ALL LOTS 22 THRU Legal Description: Parcel #(s): 0171928400003 With respect to qualifying surface developments, that (PLEASE CHECK ONE): X No mineral estate owner has entered an appearance or filed an objection to the proposed application for development within thirty days after the initial public hearing on the application; or The Applicant and any mineral estate owners who have filed an objection to the proposed application for development or have otherwise filed an entry of appearance in the initial public hearing regarding such application no later than thirty days following the initial public hearing on the application have executed a surface use agreement related to the property included in the application for development, the provisions of which have been incorporated into the application for development or are evidenced by a memorandum or otherwise recorded in the records of the clerk and recorder of the county in which the property is located so as to provide notice to transferees of the Applicant, who shall be bound by such surface use agreements; or The application for development provides: Access to mineral operations, surface facilities, flowlines, and pipelines in support of such operations existing when the final public hearing on the application for development is held by means of public roads sufficient to withstand trucks and drilling equipment or thirty-foot-wide access easements: An oil and gas operations area and existing well site locations in (ii) accordance with section 24-65.5-103.5 of the Colorado Revised Statutes; and That the deposit for incremental drilling costs described in section 24-(iii) 65.5-103.7 of the Colorado Revised Statutes has been made. Date: Delwest Development Corp Applicant: After Recording Return To: By: Print Name: Craig Fitchett Address: 155 S Madison St. Suite 326 Denver, CO 80209

Witness my hand and official seal. My Commission expires: $7-14-23$	Delha Hayen Notary Public	DEBRA L FARNEY NOTARY PUBLIC STATE OF COLORADO Notary ID 19954007439 My Commission Expires 07/14/2023
Subscribed and sworn to before me this	day of	, 20, by
COUNTY OF ADAMS)		
STATE OF COLORADO)		

Name and Address of Person Preparing Legal Description:

A recorded copy of this Certification shall be submitted to the Adams County Community and Economic Development Department within thirty days after the initial public hearing on all applicable land use applications.

DELWEST CORP. NEIGHBHORHOOD MEETING SUMMARY

Date & Time August 20, 2019 | 5:30 – 7:30 p.m.

Location: Sherrelwood Elementary School (Westminster Public Schools), 8095 Kalamath St, Denver, CO 80221

Notice: Delwest contracted with Land Title to mail approximately 390 residents of 8.5x5.5 postcard mailers to a neighborhood mailing list provided by Greg Barnes, Adams County Planner #3. (Please see map below for coverage area.)



Summary

Delwest representatives including W. Craig Fitchett, Director of Acquisitions & Development, Melissa Hale, Resident Coordinator, Bree Neely, Executive Vice President of Marketing & Communications, and Tracy Garcia, Executive Assistant, set up the meeting in the gymnasium of the Sherrelwood Elementary School. Directional signs were hung on the school's exterior doors.

Visual aids included several printed elevations of the proposed townhomes on tripods in a semi-circle (see attached for the elevations). Brochures of Delwest's neighboring subdivision,

Sherrelwood Village DBA Elmwood Estates, business cards and sign-in sheets were available on two side tables. Refreshments were also served. Seating was provided around the main display area.

Throughout the event, local residents were greeted personally and invited to look at the elevations and other materials, get something to eat and drink, and sign in. Many walked in and slowly circled the elevations before asking direct questions about Delwest, the existing development at Elmwood Estates, and the plans for Elmwood North. (See below for photos.)

At 6:15 p.m., Fitchett addressed the audience with a summation of Delwest building and development experience, interest in the neighborhood and ideas about developing the plot into townhomes.

After speaking, Fitchett opened the discussion for questions and many were raised, including:

- How parking would be addressed
- How traffic on Pecos and surrounding streets would be affected
- How many residents were expected to move into the neighborhood
- What the proposed price range would be
- What the proposed timeline would look like

After discussing these questions, the meeting got slightly derailed by a woman expressing her opinions on the development with a raised voice and aggressive posturing about various societal issues in the neighborhood, including the lack of school funding, the increase in traffic, the increase in housing prices, child hunger and changing demographics, among others.

A local couple spoke up to defend themselves from her statements, which included that "the neighborhood was full," by asking if they too had the right to a home in the neighborhood even though they had only been there for two years.

The debate between the two factions continued for a bit unabated, until Fitchett stepped in to refocus the discussion.

As the evening wore on and people felt that they had asked their questions and were relatively comfortable with Delwest and its plans, they made a point to shake hands on the way out. A group of engaged citizens also invited Delwest representatives to participate in a neighborhood Sherrelwood Park cleanup the following weekend. (See pictures below of the cleanup event).

At 7:30 p.m., Delwest shut the meeting down, escorted the remaining attendees out of the building, cleaned up the gymnasium, and concluded the event.



Facility Use Contract Number: 120743

This Facility Use Contract hereby grants DelWest Development Corporation use of the following Westminster Public Schools facilities for the dates and times listed on the contract. If applicable an invoice will be provided in addition to this contract; payment is due in full five (5) business days prior to the first event date. In the event the building is not open 10 minutes after contracted start time, please call (303) 426-3274 for assistance.

Event Details

Event Name: Elmwood Estates Community Meeting

Event Location: Sherrelwood Elementary

Room(s): Gymnasium/Cafeteria

Event Dates: 8/20/19 Exclusion Dates: None Event Times: 5:00 – 8:00 pm Contracted Times: 4:30 – 8:30 pm Number of Participants: 40

Event Requests

Equipment: None.

Personnel: Custodian to unlock/secure building.

Other: N/A

Contact Details

Name: Craig Fitchett

Phone Number: 720-708-4065 Cell Phone Number: 720-276-6098

Fax Number: 303-974-5239 Email: cfitchett@delwest.com Address: 155 South Madison Street

Denver, CO 80209

Insurance Information

Company: Clear Blue Specialty Ins. Co.

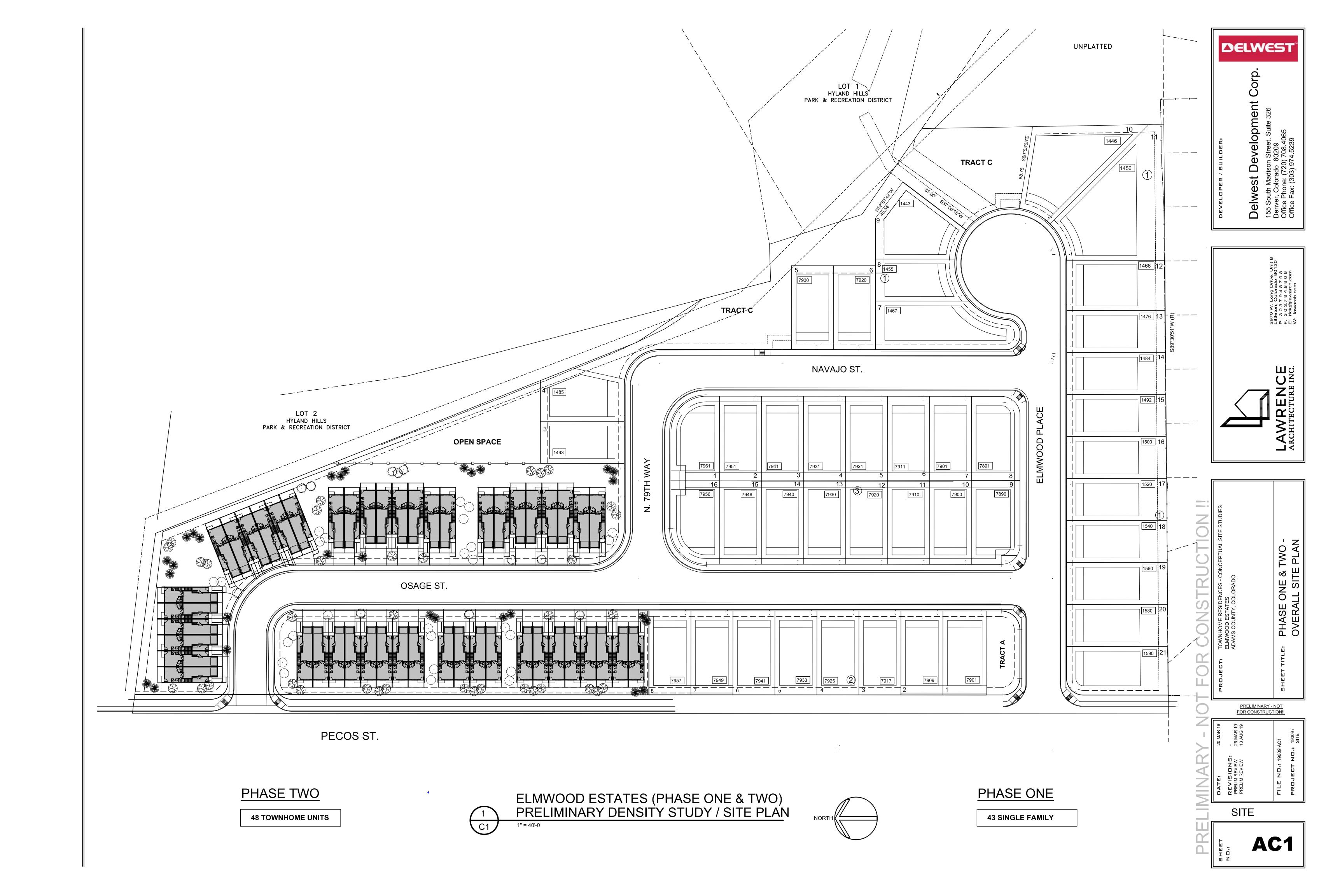
Policy Number: AC010001185

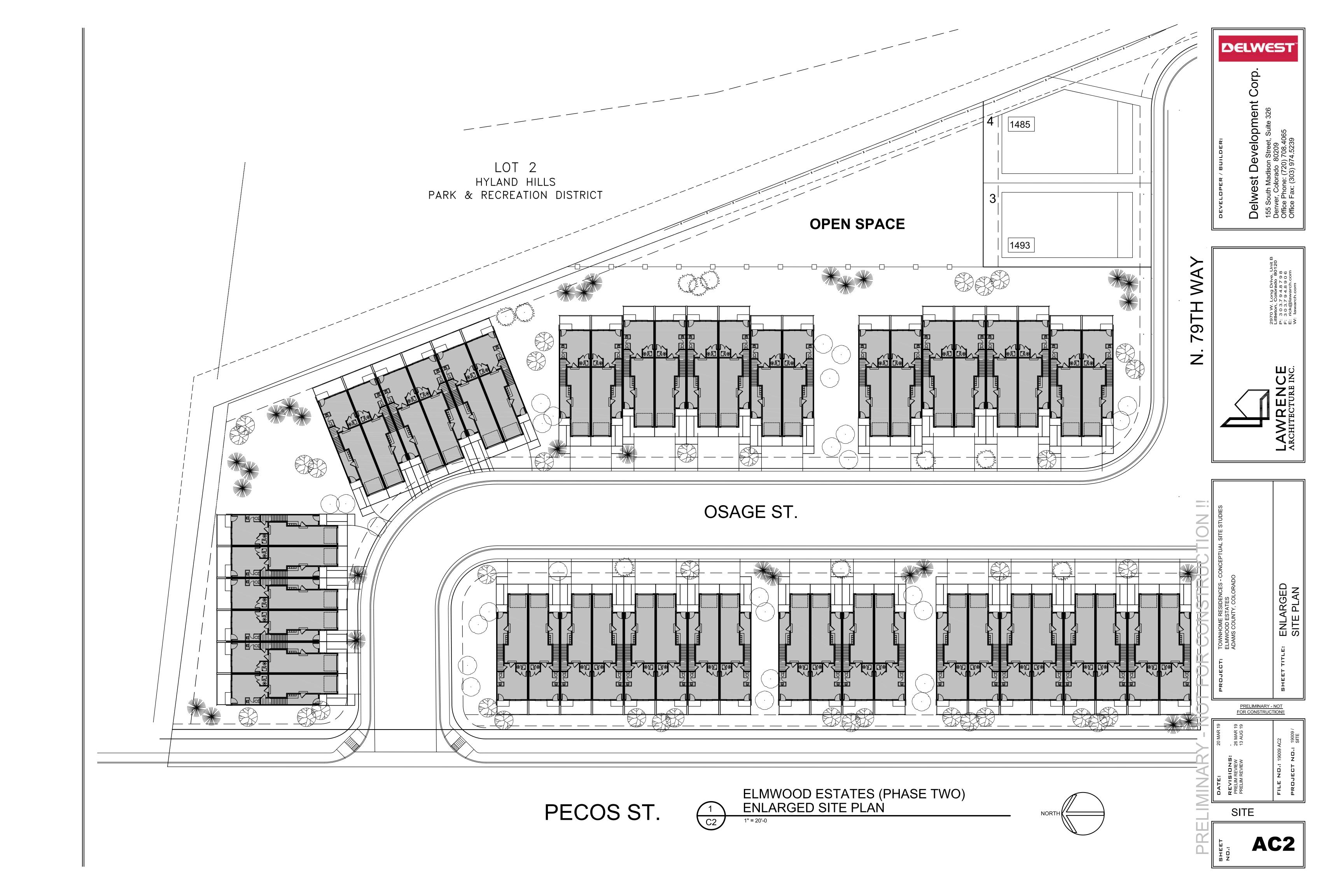
Coverage: Commercial General Liability

Coverage Amount: \$1,000,000 Coverage Dates: 10/2/18 – 10/2/19

In consideration of permission to use facilities belonging to Westminster Public Schools, the undersigned agree to the District's governing rules and regulations as stated in Board of Education Policy FEIH and all applicable fee structures and rates.

James Duffy, Ed.I Chief Operating Westminster Pul	O. Officer		Individual Authorized to Sign for Party Requesting Facility Use
8/6/19			
Date			Date
Internal Use Only: Date:			
Copy Distribution:	District Operations	Auxiliary Services	Custodial & School Requestor Event Personnel







PRELIMINARY - NOT FOR CONSTRUCTION!!

-26 MAR 19 13 AUG 19

SITE

LAWRENCE ARCHITECTURE INC.

DELWEST

Development Corp.









Neighborhood Cleanup









PRELIMINARY DRAINAGE REPORT

ELMWOOD ESTATES ADAMS COUNTY, COLORADO

Prepared for:

Delwest Development Corporation 155 South Madison Street Denver, CO 80209 Phone: 303.632.6755 Contact: Derrell Schreiner

Prepared by:

CORE Consultants, Inc.
1950 W. Littleton Blvd., Suite 109
Littleton, CO 80120
Phone: 303-703-4444
Contact: Justin Simpson
CORE Project Number: 19-165

December, 2019





CERTIFICATIONS

	I.	Engineer's Statement:
--	----	-----------------------

I hereby certify that this report and plan for the Preliminary Drainage Design of Elmwood Estates was
prepared by me or under my direct supervision in accordance with the provisions of Adams County
Storm Drainage Design and Technical Criteria for the owners thereof. I understand that Adams
County does not and will not assume liability for drainage facilities designed by others.

Justin R. Simpson, PE.
Colorado Professional Engineer No. 54251

II. Owner / Developer's Statement:

Delwest Development Corporation hereby certifies that the drainage facilities for Elmwood Estates shall be constructed according to the design presented in this report. I understand that Adams County does not and will not assume liability for the drainage facilities designed and/ or certified by my engineer. I understand that Adams County reviews drainage plans pursuant to Colorado Revised Statues Title 30, Article 28; but cannot, on behalf of Elmwood Estates, guarantee that final drainage design review will absolve Delwest Development Corporation and/ or their successors and/ or assigns the future liability for improper design. I further understand that approval of the Final Plat and/ or Final Development Plan does not imply approval of my engineer's drainage design.

Derrell Schreiner	Date
Owner Representative	



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Appendices

Appendix A - Hydrologic Calculations

- Vicinity Map
- Firm Map
- SCS Soils Map
- SF-2 and SF-3 Forms

Appendix B - Hydraulic Calculations

- Detention Storage Calculations
- Street Capacity

Appendix C – Reference Information

Excerpts from Previous Drainage Reports

Appendix D - Proposed Maps

Overall Drainage plan



I INTRODUCTION

I.I Purpose

This report was prepared as a preliminary analysis of Elmwood Estates (Elmwood) to meet the regulatory requirements as outlined in the Adams County Storm Drainage Design and Technical Criteria for Final Drainage analysis purposes and volumes I-3 of the Urban Drainage and Flood Control District Criteria Manuals. This report provides preliminary drainage analysis that encompasses both Elmwood Estates and an existing single-family development to the south called Sherrelwood Village.

1.2 General Location & Description of Property

Elmwood is located within the SE $\frac{1}{4}$, Section of 28 and NE $\frac{1}{4}$, Section 33, T2S, R68W of the 6th Principal meridian. The 10 +/- acre site is bordered on the north by Kalcevic Reservoir, on the east by Sherrelwood Park, on the south by Sherrelwood Village and the west by North Pecos Street.

Ultimately the property will follow natural drainage patterns to the southeast at an approximate 2.25% slope. An existing pond designed, approved and as-built with the Sherrelwood Village Final Plat will be utilized as the primary drainage infrastructure for Elmwood.

The site receives no offsite runoff.

Soils within the site are identified by the National Cooperative Soil Survey as Platner Loam (PIB), Samsil-Shingle complex (ShF) and Ulm Loam (UIC). These soil types are a part of Type C and D hydrologic soil group. A soils map has been provided and can be found in Appendix A.

2 MAJOR DRAINAGE BASINS

2.1 Drainage Basins

The existing drainage patters for the Elmwood site will remain historic with runoff from the northwest flowing to the southeast. An existing 100-yr detention pond in the southeast corner of the Sherrelwood Village site will be increased in size to accommodate the addition developed flow from the Elmwood site. Along with a volume increase of the existing pond the existing WQ Plate will be replaced to ensure the WQ and EURV events drain in the required time.

2.2 FIRM

The site falls within Zone X, as shown on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panel 08001C0584H. A copy of the FIRM map can be found in Appendix A.

3 DRAINAGE DESIGN CRITERIA

The subsurface storm infrastructure for the Sherrelwood Village project was designed to carry the 5-yr storm event (minor) within the pipe and to keep the 100-yr (major) hydraulic grade line below the finish grade surface. The existing storm sewer infrastructure is adequately designed to carry the maximum flow each inlet can capture at any given time and no modifications are needed. Additional flow from the minor



and major events from Elmwood will be captured by an existing 5' inlet at DP-2 and an existing 10' inlet at DP-5. By-pass flow during the minor event will not spread past the back of the sidewalk and during the major event the street crown will not have more than 6" of water. If any of the 3 existing inlets are clogged water will overflow through Tract C and reach the existing detention pond.

4 DRAINAGE FACILITY DESIGN

Elmwood will consist of 48 townhomes broken into pods of 5-9 units.

4.1 North Sub-Basins

There are 2 sub-basins that ultimately drain to the existing pond on the southwest corner of Sherrelwood Village. For this preliminary analysis a conservative imperviousness value of 70% was assumed.

4.2 Finish Floor Analysis

No structures will be inundated at the ground line during either the minor or major storm events. Further analysis will be conducted during the final drainage report phase of the Elmwood Estates project.

5 WATER QUALITY BEST MANAGEMENT PRACTICES

5.1 Non-Structural BMP's

Non-structural best management practices BMP's may include grass buffers and swales and permanent seeding. These will be designed as part of the final design of the site. The landscaping around the impervious areas will create buffers for water quality benefit.

5.2 Structural BMP's

The existing Sherrelwood Village detention pond will be expanded to capture the increased developed runoff from Elmwood. The as-built pond currently has 0.779 acre-ft of volume. During the Final Phase of the Elmwood project the pond will be expanded to a total volume of 0.958 per MHFD-Detention, Version 4.00 spreadsheet developed by UDFCD. Along with a volume increase the WQ plate will be replaced within the existing outlet structure.

5.3 Source Controls

Existing Sherrelwood Village pond requires regular maintenance and cleaning to function properly and provide adequate water quality.

6 CONCLUSION

6.1 Compliance with Standards

The design of drainage facilities for Elmwood Estates follows the Urban Drainage and Flood Control District's Drainage Criteria Manual and the Adams County Storm Drainage Design and Technical Criteria.



6.2 Variance

No variances will need to be granted.

6.3 Drainage Concept

The Rational Method was used to determine the developed runoff values for the minor drainage basins throughout the site. These basins were delineated based on the natural site topography and the developed site plan. Once the runoff values were identified, storm sewer pipes and other drainage conveyances were designed to capture and transport runoff towards the existing detention pond. The storm sewer system has been designed to capture the minor (5-year) storm event. The drainage design included herein will control damage to proposed structures. The proposed improvements do not negatively affect any upstream or downstream drainage facilities or other structures.



7 REFERENCES

- 1. Chapter 9 Storm Drainage Design and Stormwater Quality Regulations, Adams County Development Standards and Regulations, August 15, 2017.
- 2. Urban Storm Drainage Criteria Manuals, Urban Drainage and Flood Control District.
 - a. Volume I, Revised August 2018
 - b. Volume 2, Revised September 2017.
 - c. Volume 3 Revised April 2018



APPENDIX A HYDROLOGIC CALCULATIONS

VICINITY MAP 7840 PECOS STREET (NOT TO SCALE)



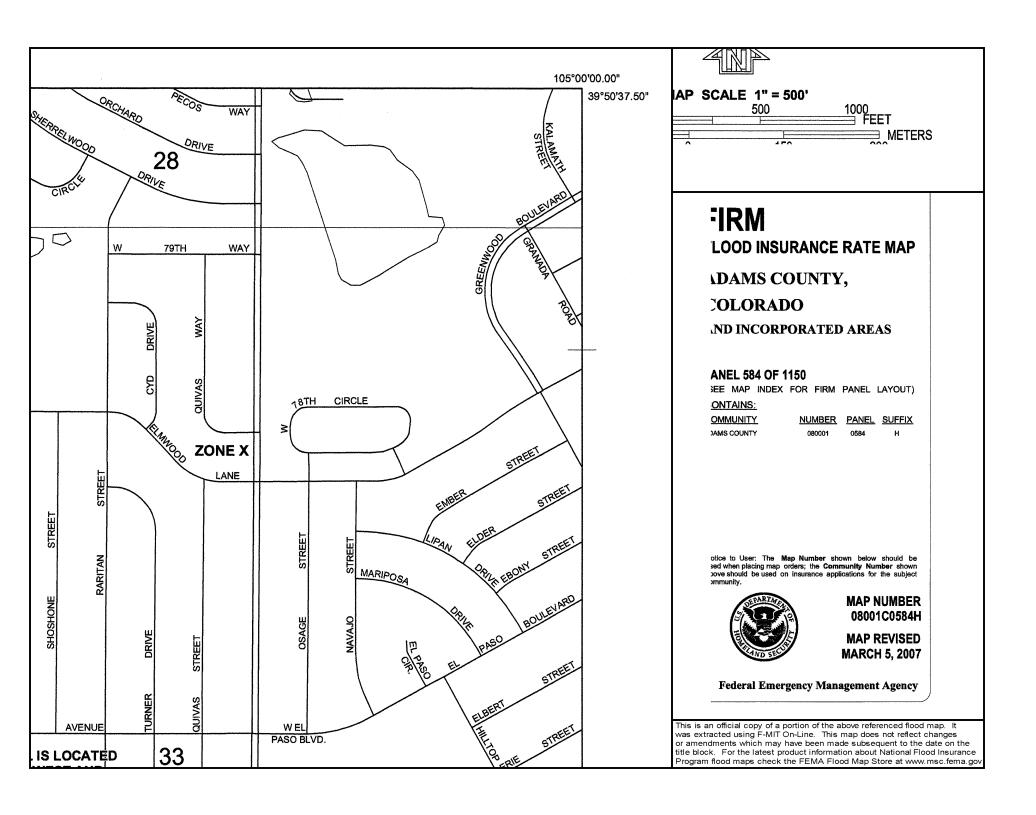
PROJECT: 7840 PECOS STREET

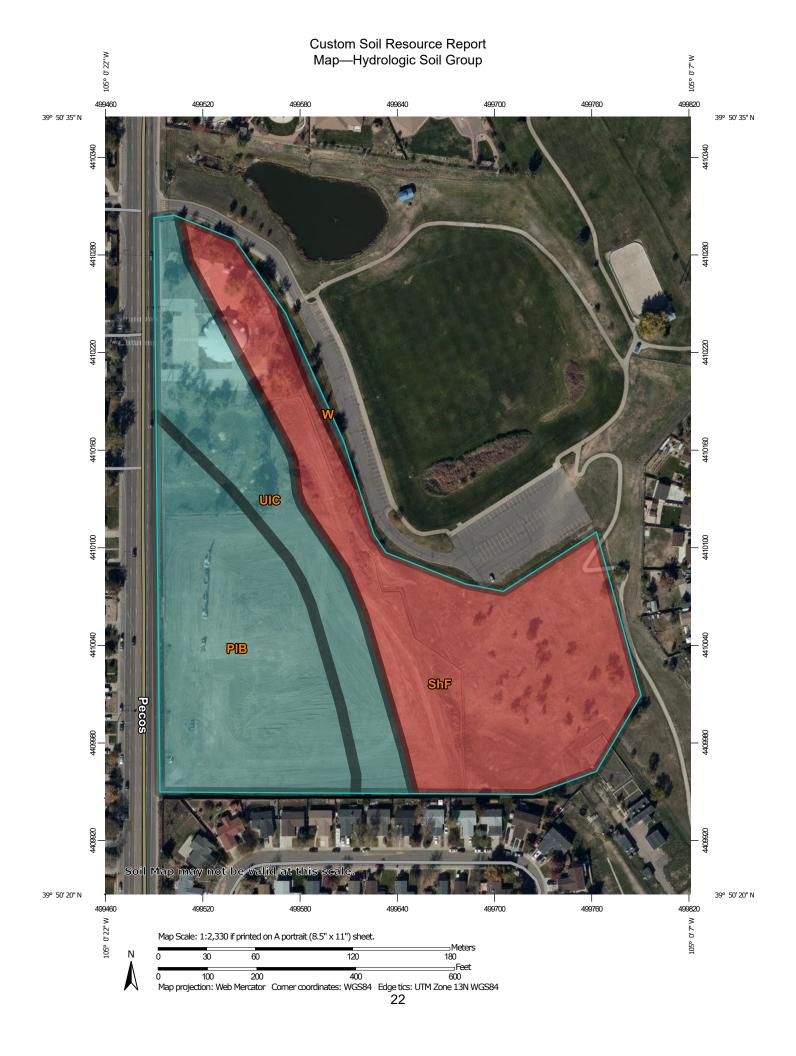
VICINITY MAP DATE: 12/13/2019



CIVIL ENGINEERING DEVELOPMENT CONSULTING

305.705.4444 1950 W. Littleton Bivd., Ste. 109 Littleton, CO 20120





MAP LEGEND Area of Interest (AOI) С Area of Interest (AOI) C/D Soils D Soil Rating Polygons Not rated or not available Α **Water Features** A/D Streams and Canals В Transportation B/D Rails ---Interstate Highways C/D **US Routes** Major Roads Not rated or not available Local Roads -Soil Rating Lines Background Aerial Photography Not rated or not available **Soil Rating Points** Α A/D

B/D

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20.000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Adams County Area, Parts of Adams and

Denver Counties, Colorado

Survey Area Data: Version 16, Sep 12, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 20, 2018—Oct 26, 2018

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

Table—Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
PIB	Platner loam, 0 to 3 percent slopes	С	4.7	31.5%
ShF	Samsil-Shingle complex, 3 to 35 percent slopes	D	6.8	45.7%
UIC	Ulm loam, 3 to 5 percent slopes	С	3.3	22.3%
W	Water		0.1	0.6%
Totals for Area of Intere	st		15.0	100.0%

Rating Options—Hydrologic Soil Group

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

CORE Project #: 19-165
Prepared By: JRS

COMPOSITE BASIN - WEIGHTED "C" CALCULATIONS

-REFERENCE UDFCD Vol.1 RUNOFF Table 6-3

			Resid	ential					Lav	vns			
			Single Family		Multi-Unit				Clay	Soil			
		0.25 acres	6 DU's/Ac	N/A	Townhomes	Roof	Streets: Paved	Gravel	2-7% Slope	>7% Slope	Historic		
% Imperv.		45.00%	48.00%	50.00%	70.00%	90.00%	100.00%	40.00%	2.00%	2.00%	2.00%		
	Design											Total	Percent
BASIN	Point	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Impervious
EA-1	EA	-	-	-	0.38	-	-	-	-	-	-	0.38	70.0%
EA-2	EB	-	-	-	3.02	-	-	-	-	-	1	3.02	70.0%
В	2	-	0.86	-	-	-	-	-	-	-	1	0.86	48.0%
С	3	-	1.43	-	-	-	-	-	-	-	-	1.43	48.0%
D	4	-	2.17	-	-	-	-	-	-	-	-	2.17	48.0%
Е	5	-	0.53	-	-	-	-	-	-	-	-	0.53	48.0%
Н	8	-	0.68	-	-	-	-	-	-	-	-	0.68	48.0%
		-	-	-	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	-	-	
TOTAL		0.00	5.68	0.00	3.40	0.00	0.00	0.00	0.00	0.00	0.00	9.08	56.2%

CORE Project #: 19-165
Prepared By: JRS

<u>COMPOSITE DEVELOPED BASIN -WEIGHTED "C" CALCULATIONS</u> <u>-REFERENCE UDFCD Vol.1 RUNOFF Table 6-4</u>

i = % imperviousness/100 expressed as a decimal

C_A = Runoff coefficient for NRCS HSG A soils

C_B = Runoff coefficient for NRCS HSG B soils

 C_{CD} = Runoff coefficient for NRCS HSG C and D soils.

Natural Resource Conservation Service (NRCS)

Table 6-4. Runoff coefficient equations based on NRCS soil group and storm return period

NRCS				Storm Ret	turn Period			
Soil Group	2-Year 5-Year		5-Year 10-Year		50-Year	100-Year	500-Year	
A	C _A =	C _A =	C _A =	C _A =	C _A =	C _A =	$C_A =$	
	$0.84i^{1.302}$	$0.86i^{1.276}$	$0.87i^{1.232}$	$0.84i^{1.124}$	0.85 <i>i</i> +0.025	0.78 <i>i</i> +0.110	0.65i+0.254	
В	C _B =	C _B =	C _B =	C _B =	C _B =	C _B =	C _B =	
	0.84i ^{1.169}	$0.86i^{1.088}$	0.81 <i>i</i> +0.057	0.63 <i>i</i> +0.249	0.56i+0.328	0.47i+0.426	0.37i+0.536	
C/D	C _{C/D} =	C _{C/D} =	C _{C/D} =	C _{C/D} =	C _{C/D} =	C _{C/D} =	C _{C/D} =	
	$0.83i^{1.122}$	0.82 <i>i</i> +0.035	0.74i+0.132	0.56i+0.319	0.49i+0.393	0.41 <i>i</i> +0.484	0.32i+0.588	

Basin ID	% Imperv.	i	Soil Type		Runoff Co	efficients,	С	Basin	Total	W	eighted Runo	ff Coefficients,	С
Busin iD			3011 Type	2-Year	5-Year	10-Year	100-Year	Area	Area	2-Year	5-Year	10-Year	100-Year
			Α	0.53	0.55	0.56	0.66						
EA-1	70.0%	0.70	В	0.55	0.58	0.62	0.76		0.38	0.56	0.61	0.65	0.77
			C or D	0.56	0.61	0.65	0.77	0.38					
			A	0.53	0.55	0.56	0.66						
EA-2	70.0%	0.70	В	0.55	0.58	0.62	0.76		3.02	0.56	0.61	0.65	0.77
			C or D	0.56	0.61	0.65	0.77	3.02					
			Α	0.32	0.34	0.35	0.48						
В	48.0%	0.48	В	0.36	0.39	0.45	0.65		0.86	0.36	0.43	0.49	0.68
			C or D	0.36	0.43	0.49	0.68	0.86					
			A	0.32	0.34	0.35	0.48						
С	48.0%	0.48	В	0.36	0.39	0.45	0.65		1.43	0.36	0.43	0.49	0.68
			C or D	0.36	0.43	0.49	0.68	1.43					
			Α	0.32	0.34	0.35	0.48						
D	48.0%	0.48	В	0.36	0.39	0.45	0.65		2.17	0.36	0.43	0.49	0.68
			C or D	0.36	0.43	0.49	0.68	2.17					
			Α	0.32	0.34	0.35	0.48						
Е	48.0%	0.48	В	0.36	0.39	0.45	0.65		0.53	0.36	0.43	0.49	0.68
			C or D	0.36	0.43	0.49	0.68	0.53					
			Α	0.32	0.34	0.35	0.48						
Н	48.0%	0.48	В	0.36	0.39	0.45	0.65		0.68	0.36	0.43	0.49	0.68
			C or D	0.36	0.43	0.49	0.68	0.68					
										_	-	_	-
										-	-	-	-

CORE Project #: 19-165
Prepared By: JRS

TIME OF CONCENTRATION CALCULATIONS

-REFERENCE UDFCD Vol.1 Section 2.4 NRCS Conveyance factors, K -REFERENCE UDFCD Vol.1 RUNOFF Table 6-2

SF-2 Heavy Meadow 2.50 Short Grass Pasture & Lawns 7.00 Grassed Waterway 15.00

10.00 Paved Area & Shallow Gutter 20.00 Tillage/field 5.00 Nearly Bare Ground INITIAL / OVERLAND CHANNEL / TRAVEL TIME T(c) CHECK FINAL SUB-BASIN DATA (URBANIZED BASINS) TIME T(c) T(†) DRAIN AREA C(5) Elev Slope T(i) Elev Slope Coeff. Velocity T(†) COMP. % IMPER-USDCM Length Length VIOUS BASIN ac. ft. Change % min ft. Change % fps min. T(c) Eq. 6-5 min. 132 495 2.9 EA-1 0.38 0.61 2.0 1.5 8.9 10.5 2.1 20.0 2.8 11.7 70.0% 17.1 11.7 115 3.2 70.0% EA-2 3.02 0.61 142 3.0 2.1 8.3 3.0 2.6 20.0 0.6 8.8 14.7 8.8 9.1 22.7 0.86 0.43 30 2.0 5.3 650 13.0 2.0 20.0 2.8 3.8 48.0% В 0.6 9.1 С 1.43 0.43 65 1.3 2.0 7.8 530 10.4 2.0 20.0 2.8 3.2 10.9 48.0% 21.9 10.9 D 3.9 2.17 0.43 110 2.2 2.0 10.1 660 13.0 2.0 20.0 2.8 14.0 48.0% 22.8 14.0 Е 0.53 0.43 50 1.0 2.0 6.8 410 12.4 3.0 20.0 3.5 2.0 8.8 48.0% 20.3 8.8 150 7.5 Н 0.68 0.43 100 2.0 2.0 9.6 5.0 20.0 4.5 0.6 10.2 48.0% 18.6 10.2

 CORE Project #:
 19-165

 Prepared By:
 JRS

RATIONAL METHOD PEAK RUNOFF

5-Year STORM Rainfall Depth-Duration-Frequency (1-hr) = 1.42

SF-3

-REFERENCE UDFCD Vol.1 EQ 5-1 & EQ 6-1

BASI	N INFORMA	TON	DIR	ECT RUN	OFF		
DESIGN	DRAIN	AREA	5yr Runoff	T(c)	СхА	I	Q
POINT	BASIN	ac.	COEFF	min		in/hr	cfs
EA	EA-1	0.38	0.61	11.7	0.23	3.60	0.8
EB	EA-2	3.02	0.61	8.8	1.84	4.03	7.4
2	В	0.86	0.43	9.1	0.37	3.98	1.5
3	С	1.43	0.43	10.9	0.61	3.71	2.3
4	D	2.17	0.43	14.0	0.93	3.33	3.1
5	Е	0.53	0.43	8.8	0.23	4.04	0.9
8	Н	0.68	0.43	10.2	0.29	3.81	1.1

 CORE Project #:
 19-165

 Prepared By:
 JRS

RATIONAL METHOD PEAK RUNOFF

100-YR STORM

SF-3 Rainfall Depth-Duration-Frequency (1-hr) = 2.71

-REFERENCE UDFCD Vol.1 EQ 5-1 & EQ 6-1

ВА	SIN INFORMAT	DIRECT RUNOFF					
DESIGN POINT	DRAIN BASIN	AREA ac.	100yr RUNOFF COEFF C	T(c) min	CxA	l in/hr	Q cfs
EA	EA-1	0.38	0.77	11.71	0.29	6.87	2.01
EB	EA-2	3.02	0.77	8.85	2.33	7.68	17.89
2	В	0.86	0.68	9.11	0.59	7.60	4.45
3	С	1.43	0.68	10.93	0.98	7.07	6.90
4	D	2.17	0.68	14.03	1.48	6.35	9.38
5	E	0.53	0.68	8.78	0.36	7.70	2.79
8	Н	0.68	0.68	10.20	0.46	7.27	3.37
L	<u> </u>		<u> </u>				

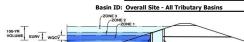


APPENDIX B HYDRAULIC CALCULATIONS

DETENTION BASIN STAGE-STORAGE TABLE BUILDER

MHFD-Detention, Version 4.00 (December 2019)

Project: Sherrelwood Village + Elmwood Estates



ZONE 1 AND 2 ORIFICE
ORIFICES
Example Zone Configuration (Retention Pond)

Watershed Information

Selected BMP Type =	EDB	
Watershed Area =	9.08	acres
Watershed Length =	1,500	ft
Watershed Length to Centroid =	750	ft
Watershed Slope =	0.020	ft/ft
Watershed Imperviousness =	56.20%	percent
Percentage Hydrologic Soil Group A =	0.0%	percent
Percentage Hydrologic Soil Group B =	0.0%	percent
Percentage Hydrologic Soil Groups C/D =	100.0%	percent
Target WQCV Drain Time =	40.0	hours
Location for 1-hr Rainfall Depths =	Denver - Capit	ol Building

After providing required inputs above including 1-hour rainfall depths, click 'Run CUHP' to generate runoff hydrographs using the embedded Colorado Urban Hydrograph Procedure.

the embedded Colorado Urban Hydrograph Procedure.					
Water Quality Capture Volume (WQCV) =	0.170	acre-feet			
Excess Urban Runoff Volume (EURV) =	0.487	acre-feet			
2-yr Runoff Volume (P1 = 1 in.) =	0.418	acre-feet			
5-yr Runoff Volume (P1 = 1.42 in.) =	0.713	acre-feet			
10-yr Runoff Volume (P1 = 1.68 in.) =	0.909	acre-feet			
25-yr Runoff Volume (P1 = 2.35 in.) =	1.459	acre-feet			
50-yr Runoff Volume (P1 = 2.5 in.) =	1.579	acre-feet			
100-yr Runoff Volume (P1 = 2.71 in.) =	1.769	acre-feet			
500-yr Runoff Volume (P1 = 3.14 in.) =	2.114	acre-feet			
Approximate 2-yr Detention Volume =	0.364	acre-feet			
Approximate 5-yr Detention Volume =	0.596	acre-feet			
Approximate 10-yr Detention Volume =	0.690	acre-feet			
Approximate 25-yr Detention Volume =	0.907	acre-feet			
Approximate 50-yr Detention Volume =	0.886	acre-feet			
Approximate 100-yr Detention Volume =	0.958	acre-feet			

Define Zones and Basin Geometry

CHIEC ZONCS and Dasin Ocomica y		
Zone 1 Volume (WQCV) =	0.170	acre-feet
Zone 2 Volume (EURV - Zone 1) =	0.318	acre-feet
Zone 3 Volume (100-year - Zones 1 & 2) =	0.471	acre-feet
Total Detention Basin Volume =	0.958	acre-feet
Initial Surcharge Volume (ISV) =	22	ft ³
Initial Surcharge Depth (ISD) =	0.33	ft
Total Available Detention Depth (H _{total}) =	5.50	ft
Depth of Trickle Channel (H_{TC}) =	0.50	ft
Slope of Trickle Channel $(S_{TC}) =$	0.005	ft/ft
Slopes of Main Basin Sides (S _{main}) =	4	H:V
Basin Length-to-Width Ratio (R _{L/W}) =	2	

Initial Surcharge Area (A _{ISV}) =	67	ft 2
Surcharge Volume Length $(L_{ISV}) =$	8.2	ft
Surcharge Volume Width $(W_{ISV}) =$	8.2	ft
Depth of Basin Floor (H _{FLOOR}) =	0.51	ft
Length of Basin Floor (L_{FLOOR}) =	112.2	ft
Width of Basin Floor $(W_{FLOOR}) =$	59.2	ft
Area of Basin Floor (A_{FLOOR}) =		ft ²
Volume of Basin Floor $(V_{FLOOR}) =$	1,253	ft ³
Depth of Main Basin (H _{MAIN}) =	4.16	ft
Length of Main Basin $(L_{MAIN}) =$	145.5	ft
Width of Main Basin (W _{MAIN}) =	92.4	ft
Area of Main Basin (A _{MAIN}) =	13,442	ft 2
Volume of Main Basin (V _{MAIN}) =	40,910	ft ³
Calculated Total Basin Volume (V_{total}) =	0.969	acre-

Depth Increment =	0.25	ft
C1 C1	Character	Optio
Stage - Storage Description	Stage (ft)	Overr Stage
Top of Micropool	0.00	- Lage
	0.33	
	0.58	
	0.83	
	1.08	
	1.33	
Floor	1.34	
11001	1.50	
	1.75	
	2.00	
Zone 1 (WQCV)	2.19	
- (() - ()	2.25	
	2.50	
	2.75	
	3.00	
	3.25	
	3.50	
Zone 2 (EURV)	3.72	
	3.75	
	4.00	
	4.25	
	4.50	
	4.75	
	5.00	
	5.25	
Zone 3 (100-year)	5.47	
	5.50	
	5.75	
	6.00	
	6.25	
	6.50	
	6.75	
	7.00	
	7.25	
	7.50	
	7.75	
	8.00	
	8.25	

acre-feet acre-feet

inches

inches

inches

inches

inches

1.00

1.42

1.68

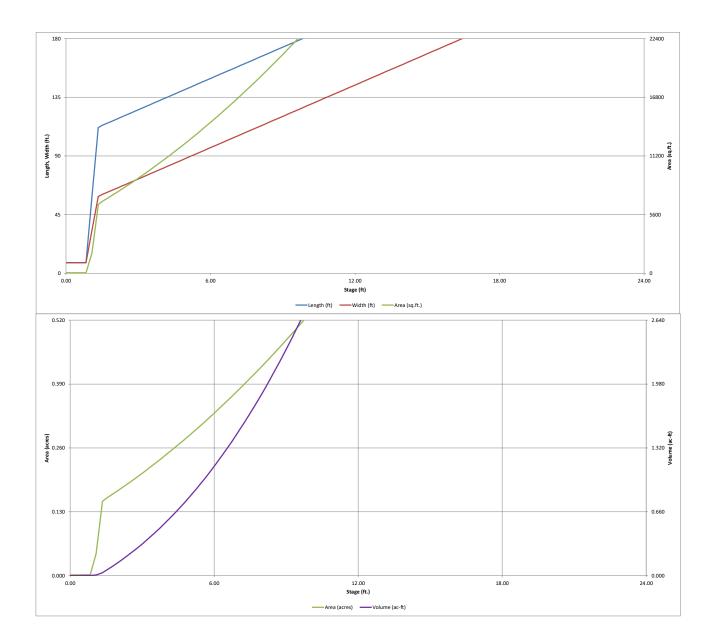
2.35

2.50 inches

2.71

Depth Increment =	0.25	ft			1	Optional			
Stage - Storage	Stage	Optional Override	Length	Width	Area	Override	Area	Volume	Volume
Description	(ft)	Stage (ft)	(ft)	(ft)	(ft 2)	Area (ft ²)	(acre)	(ft 3)	(ac-ft)
Top of Micropool	0.00		8.2	8.2	67		0.002		0.004
	0.33		8.2	8.2	67		0.002	22	0.001
	0.58		8.2	8.2	67		0.002	39	0.001
	1.08		8.2 58.5	8.2 32.9	67 1,924		0.002	55 250	0.001
	1.33		109.5	57.9	6,338		0.145	1,230	0.008
Floor	1.34		111.6	58.9	6,567		0.151	1,294	0.020
11001	1.50		113.5	60.4	6,854		0.157	2,373	0.054
	1.75		115.5	62.4	7,206		0.165	4,130	0.095
	2.00		117.5	64.4	7,565		0.174	5,976	0.137
Zone 1 (WQCV)	2.19		119.0	65.9	7,844		0.180	7,440	0.171
	2.25		119.5	66.4	7,933		0.182	7,913	0.182
	2.50		121.5	68.4	8,309		0.191	9,943	0.228
	2.75		123.5	70.4	8,693		0.200	12,068	0.277
	3.00		125.5	72.4	9,084		0.209	14,290	0.328
	3.25		127.5 129.5	74.4 76.4	9,484 9,892		0.218	16,611	0.381
Zone 2 (EURV)	3.72		131.2	78.2	10,257		0.235	21,249	0.488
	3.75		131.5	78.4	10,307		0.237	21,558	0.495
	4.00		133.5	80.4	10,731		0.246	24,187	0.555
	4.25		135.5	82.4	11,163		0.256	26,924	0.618
	4.50		137.5	84.4	11,603		0.266	29,769	0.683
	4.75		139.5	86.4	12,050		0.277	32,726	0.751
	5.00		141.5	88.4	12,506		0.287	35,795	0.822
	5.25		143.5	90.4	12,970		0.298	38,980	0.895
Zone 3 (100-year)	5.47		145.2	92.2	13,385		0.307	41,879	0.961
	5.50		145.5 147.5	92.4 94.4	13,442		0.309	42,281	0.971 1.049
	5.75 6.00		147.5	94.4	13,921 14,409		0.320	45,701 49,242	1.130
	6.25		151.5	98.4	14,905		0.342	52,906	1.215
	6.50		153.5	100.4	15,408		0.354	56,695	1.302
	6.75		155.5	102.4	15,920		0.365	60,611	1.391
	7.00		157.5	104.4	16,440		0.377	64,656	1.484
	7.25		159.5	106.4	16,968		0.390	68,832	1.580
	7.50		161.5	108.4	17,503		0.402	73,141	1.679
	7.75		163.5	110.4	18,047		0.414	77,584	1.781
	8.00 8.25		165.5 167.5	112.4 114.4	18,599		0.427	82,165 86,884	1.886
	8.50		167.5	116.4	19,159 19,726		0.440	91,745	2.106
	8.75		171.5	118.4	20,302		0.466	96,748	2.221
	9.00		173.5	120.4	20,886		0.479	101,896	2.339
	9.25		175.5	122.4	21,478		0.493	107,192	2.461
	9.50		177.5	124.4	22,077		0.507	112,636	2.586
	9.75		179.5	126.4	22,685		0.521	118,231	2.714
	10.00		181.5	128.4	23,301		0.535	123,979	2.846
	10.25		183.5	130.4	23,924		0.549	129,882	2.982
	10.50		185.5	132.4	24,556		0.564	135,942	3.121
	10.75		187.5 189.5	134.4 136.4	25,196 25,844		0.578	142,161 148,541	3.264 3.410
	11.25		191.5	138.4	26,499		0.608	155,083	3.560
	11.50		193.5	140.4	27,163		0.624	161,791	3.714
	11.75		195.5	142.4	27,835		0.639	168,665	3.872
	12.00		197.5	144.4	28,515		0.655	175,709	4.034
	12.25		199.5	146.4	29,202		0.670	182,923	4.199
	12.50		201.5	148.4	29,898		0.686	190,311	4.369
	12.75		203.5	150.4	30,602		0.703	197,873	4.543
	13.00		205.5	152.4	31,313 32,033		0.719	205,612	4.720 4.902
	13.25		207.5	154.4 156.4	32,033		0.752	213,530 221,630	5.088
	13.75 14.00		211.5 213.5	158.4 160.4	33,497 34,240		0.769	229,912 238,379	5.278 5.472
	14.25		215.5	162.4	34,992		0.803	247,032	5.671
	14.50 14.75		217.5 219.5	164.4 166.4	35,752 36,520		0.821 0.838	255,875 264,909	5.874 6.081
	15.00		221.5	168.4	37,295		0.856	274,136	6.293
	15.25 15.50		223.5 225.5	170.4 172.4	38,079 38,871		0.874	283,557 293,176	6.510 6.730
	15.75		227.5	174.4 176.4	39,670		0.911	302,993	6.956
	16.00 16.25		229.5	176.4	40,478 41,294		0.929 0.948	313,012 323,233	7.186 7.420
	16.50		233.5	180.4	42,118		0.967	333,659	7.660
	16.75 17.00		235.5 237.5	182.4 184.4	42,949 43,789		0.986 1.005	344,293 355,135	7.904 8.153
	17.25 17.50		239.5 241.5	186.4	44,637		1.025	366,188	8.407
	17.75		243.5	188.4 190.4	45,493 46,356		1.064	377,454 388,935	8.665 8.929
	18.00 18.25		245.5 247.5	192.4 194.4	47,228 48,108		1.084 1.104	400,633 412,549	9.197 9.471
	18.50		249.5	196.4	48,995		1.125	424,687	9.749
	18.75 19.00		251.5 253.5	198.4 200.4	49,891 50,795		1.145 1.166	437,048 449,634	10.033 10.322
	19.25		255.5	202.4	51,707		1.187	462,446	10.616
	19.50 19.75		257.5 259.5	204.4 206.4	52,626 53,554		1.208 1.229	475,488 488,760	10.916 11.220
	20.00		261.5	208.4	54,490		1.251	502,265	11.530
	20.25 20.50		263.5 265.5	210.4 212.4	55,434 56,385		1.273 1.294	516,006 529,983	11.846 12.167
	20.75		267.5	214.4	57,345		1.316	544,199	12.493
	21.00 21.25		269.5 271.5	216.4 218.4	58,313 59,289		1.339 1.361	558,656 573,356	12.825 13.162
	21.50		273.5	220.4	60,272		1.384	588,301	13.506
	21.75 22.00		275.5 277.5	222.4 224.4	61,264 62,264		1.406 1.429	603,493 618,933	13.854 14.209
	22.25		279.5	226.4	63,271		1.453	634,625	14.569
	22.50 22.75		281.5 283.5	228.4 230.4	64,287 65,311		1.476 1.499	650,570 666,769	14.935 15.307
	23.00		285.5	232.4	66,343		1.523	683,226	15.685
	23.25		287.5 289.5	234.4 236.4	67,382 68,430		1.547	699,941 716,918	16.068 16.458
					,			/	

12/13/2019, 1:19 PM MHFD-Detention_v4 00.xlsm, Basin



MHFD-Detention_v4 00.xlsm, Basin 12/13/2019, 1:19 PM

POND CALCULATIONS

Tributary Area, A (acres) = 9.08

Water Quality Capture Volume (acre-ft) = 0.170

Excess Urban Runoff Volume (acre-ft) = 0.488

100 year Volume plus WQCV (acre-ft) = 0.958

Prismoidal Method						
Elevation	Area	Volume	Volume _{sum}	Volume _{sum}		
	(ft²)	(ft³)	(ft³)	(Ac-ff)		
5318.0	50	0	0	0.000		
5319.0	1,275	526	526	0.012		
5320.0	12,077	5,759	6,284	0.144		
5321.0	14,256	13,151	19,436	0.446		
5322.0	16,615	15,420	34,856	0.800		
5323.0	19,181	17,882	52,739	1.211		
5324.0	21,951	20,550	73,289	1.682		
5325.0		7,317	80,606	1.850		
Water Oual	ity Capture Volun	5320.19				
Waler Quar	ily Capiole Voloii W	2.19				
Fycess III	ban Runoff Volun	5321.12				
LACE33 O	Excess Urban R	3.12				
	100 ye	5322.38				
	100 ye	4.38				
Top F	nergency Overflo	5323.38				

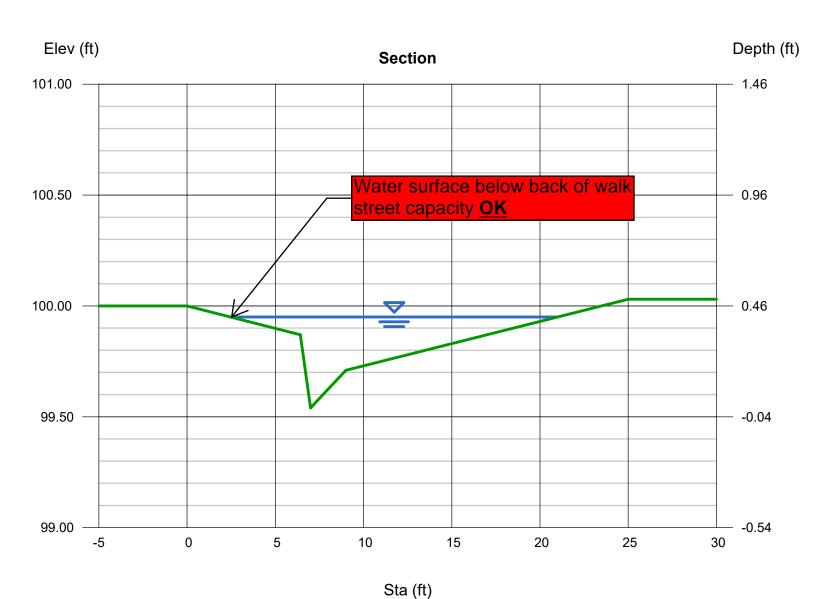
Channel Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Friday, Dec 13 2019

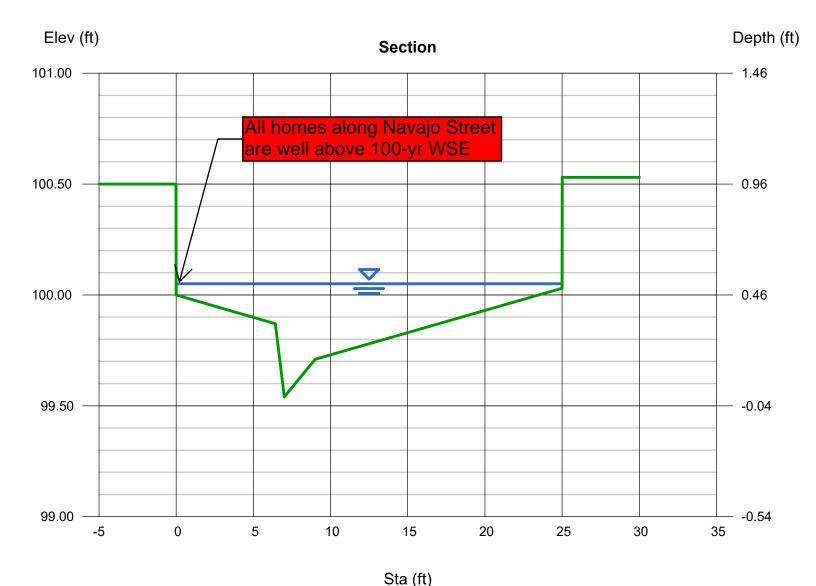
Navajo Street Capacity

User-defined		Highlighted				
Invert Elev (ft)	= 99.54	Depth (ft)	= 0.41			
Slope (%)	= 2.00	Q (cfs)	= 9.700			
N-Value	= 0.013	Area (sqft)	= 2.39			
		Velocity (ft/s)	= 4.06			
Calculations		Wetted Perim (ft)	= 18.63			
Compute by:	Known Q	Crit Depth, Yc (ft)	= 0.49			
Known Q (cfs)	= 9.70	Top Width (ft)	= 18.53			
	κ	EGL (ft)	= 0.67			
(Sta, El, n)-(Sta, El, n) (0.00, 100.00)-(6.42, 99.87, 0.013)-(7.00, 99.54,0.013)-(9.00, 99.71, 0.013)-(25.00, 100.03, 0.013)						
Sub-Basins:						
	EA-1 + EA-2 + I	B = 9.7 cfs (5-yr)				



Channel Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc. Monday, Dec 16 2019 0.51' - 0.33' = 0.18' above back **Navajo Street Capacity - 100-YR** of walk **User-defined** Highlighted Invert Elev (ft) = 99.54Depth (ft) = 0.51Q (cfs) Slope (%) = 2.00= 24.35N-Value = 0.013Area (sqft) = 4.67Velocity (ft/s) = 5.22 **Calculations** Wetted Perim (ft) = 25.17Compute by: Known Q Crit Depth, Yc (ft) = 0.64= 24.35Top Width (ft) Known Q (cfs) = 25.00EGL (ft) = 0.93(Sta, El, n)-(Sta, El, n)... (-0.01, 100.50)-(6.42, 99.87, 0.013)-(7.00, 99.54, 0.013)-(9.00, 99.71, 0.013)-(25.00, 100.03, 0.013)-(25.01, 100.53, 0.013) Sub-Basins: EA-1 + EA-2 + B = 24.35 cfs(100-vr)





APPENDIX C REFERENCE INFORMATION

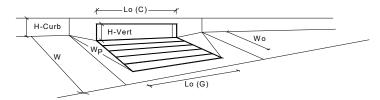
Version 4.04 Released November 2016

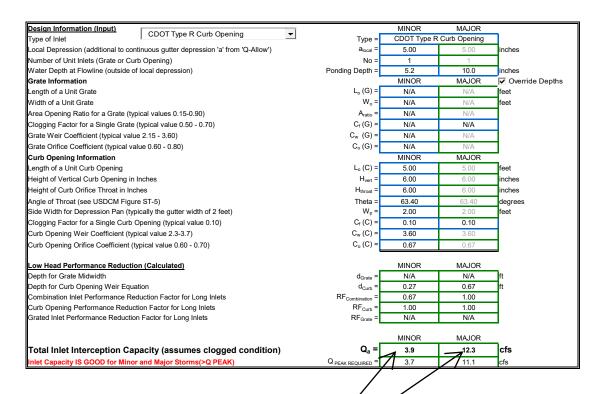
ALLOWABLE CAPACITY FOR ONE-HALF OF STREET (Minor & Major Storm) (Based on Regulated Criteria for Maximum Allowable Flow Depth and Spread) Project: 78TH & PECOS Inlet ID: BASIN A&B Existing DP-2 STREET Gutter Geometry (Enter data in the blue cells) T_{BACK} Maximum Allowable Width for Spread Behind Curb 6.0 Side Slope Behind Curb (leave blank for no conveyance credit behind curb) $\mathsf{S}_{\mathsf{BACK}}$ 0.020 ft/ft Manning's Roughness Behind Curb (typically between 0.012 and 0.020) 0.012 Height of Curb at Gutter Flow Line $\mathsf{H}_{\mathsf{CURB}}$ 4.00 Distance from Curb Face to Street Crown T_{CROWN} 18.0 Gutter Width w: 2.00 Street Transverse Slope S_X 0.020 ft/ft Gutter Cross Slope (typically 2 inches over 24 inches or 0.083 ft/ft) S_w 0.083 ft/ft S_o Street Longitudinal Slope - Enter 0 for sump condition 0.000 Manning's Roughness for Street Section (typically between 0.012 and 0.020) 0.012 n_{STREET} Minor Storm Major Storm Max. Allowable Spread for Minor & Major Storm 18.0 18.0 Max. Allowable Depth at Gutter Flowline for Minor & Major Storm 4.0 12.0 Allow Flow Depth at Street Crown (leave blank for no) check = yes MINOR STORM Allowable Capacity is based on Depth Criterion Minor Storm Major Storm MAJOR STORM Allowable Capacity is based on Depth Criterion SUMP SUMP

UD-Inlet_v4.04.xlsm, BASIN A&B 3/6/2017, 4:52 PM

INLET IN A SUMP OR SAG LOCATION

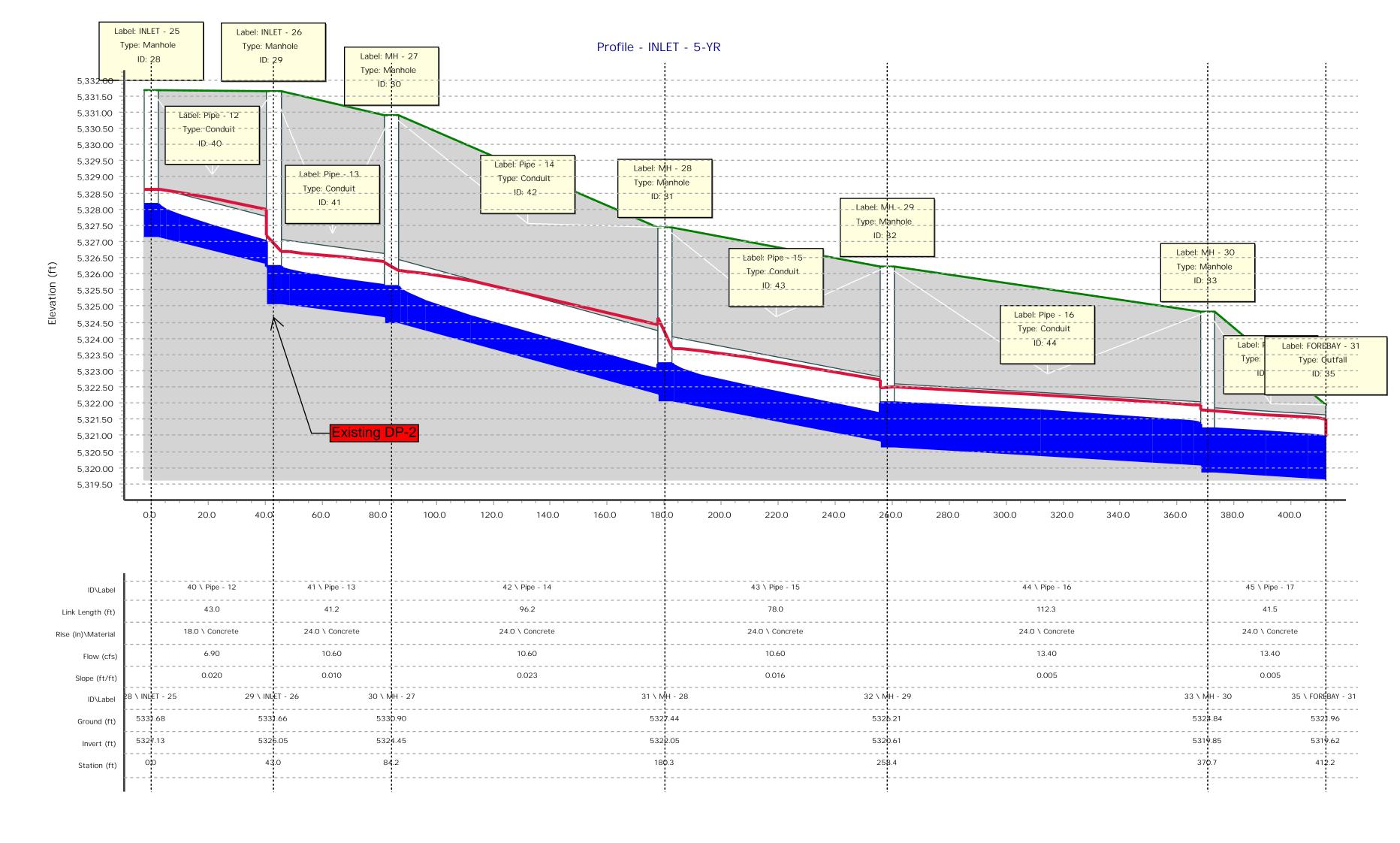
Version 4.04 Released November 2016

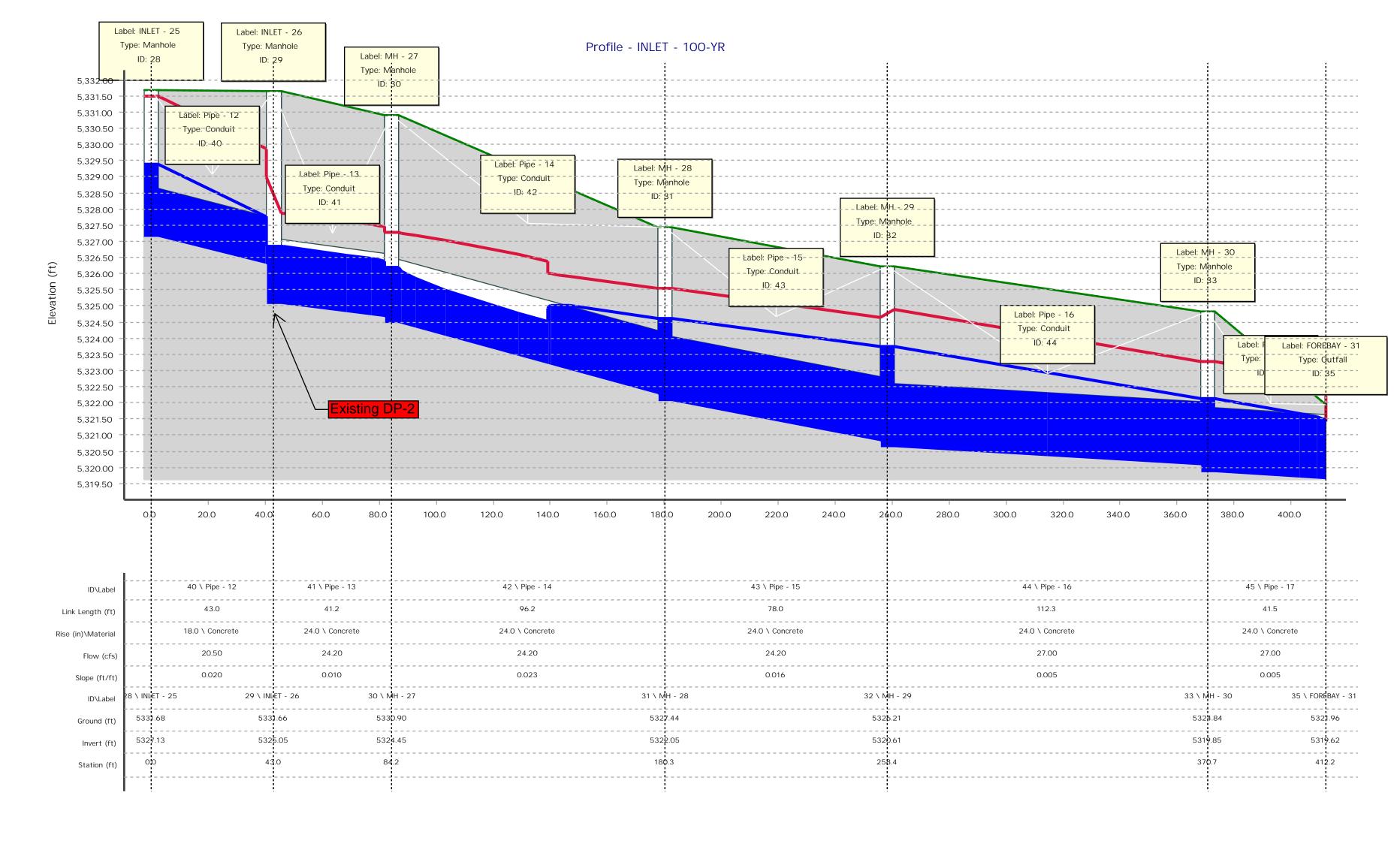


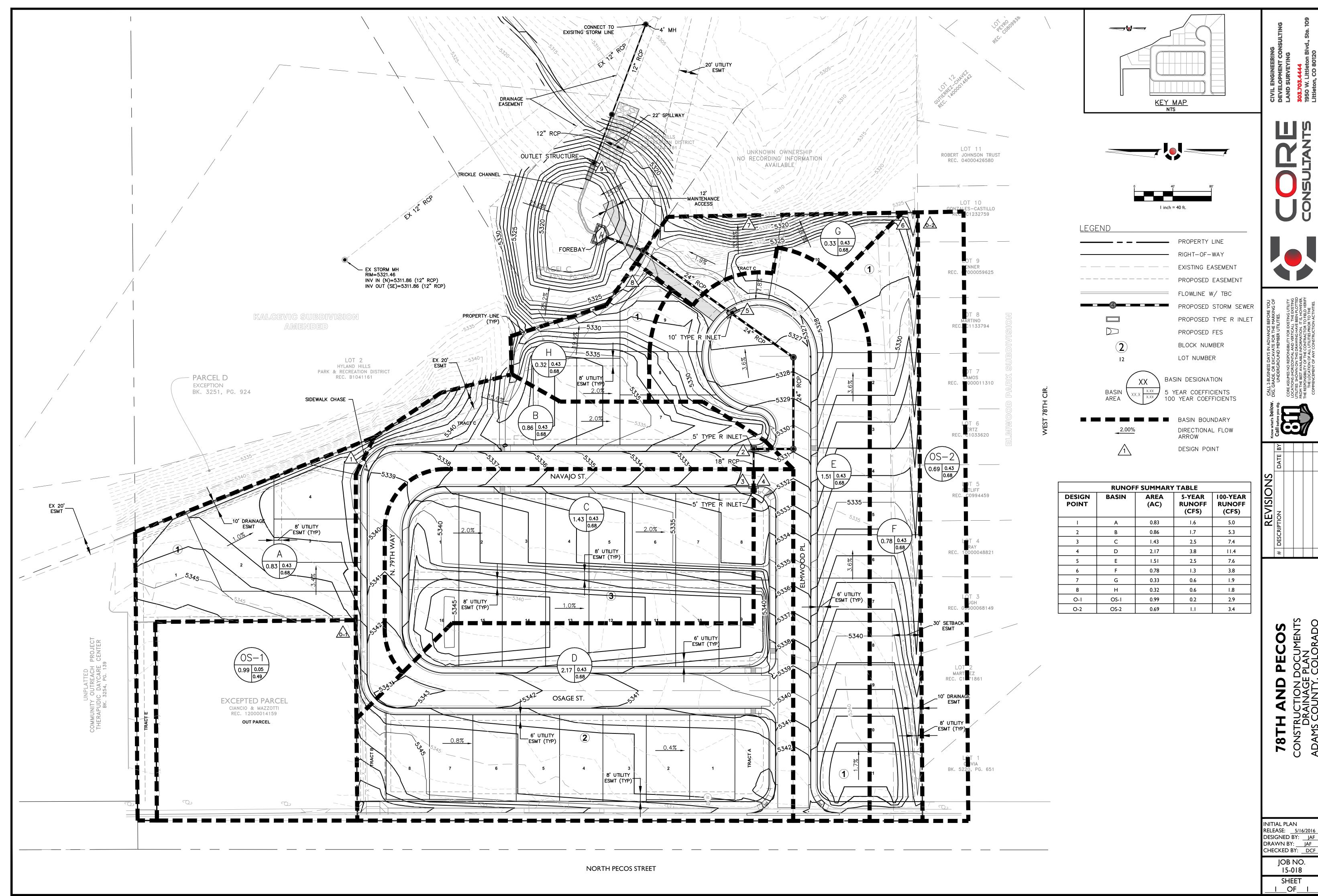


Existing storm pipes were designed for maximum interception

UD-Inlet_v4.04.xlsm, BASIN A&B 3/6/2017, 4:52 PM



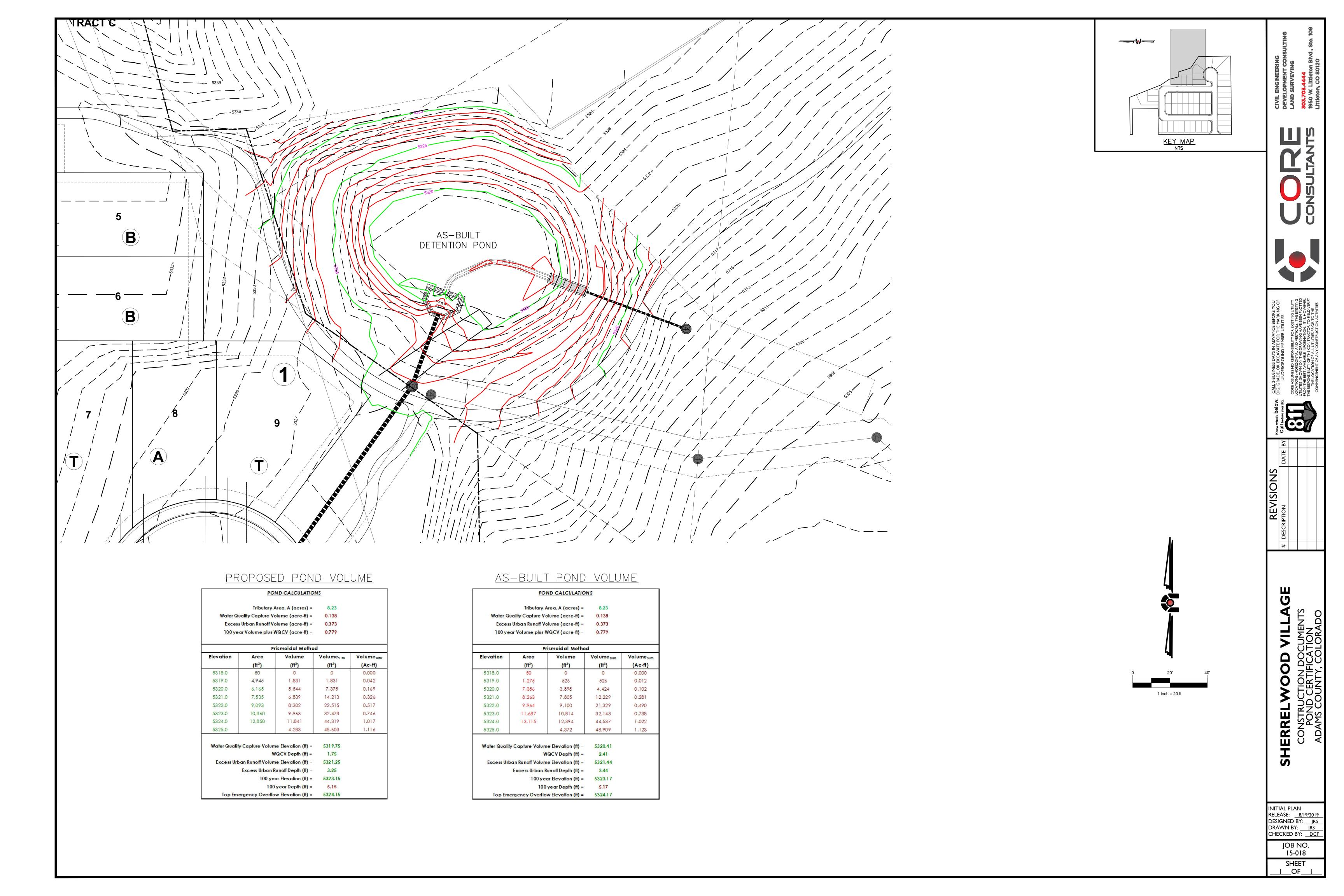


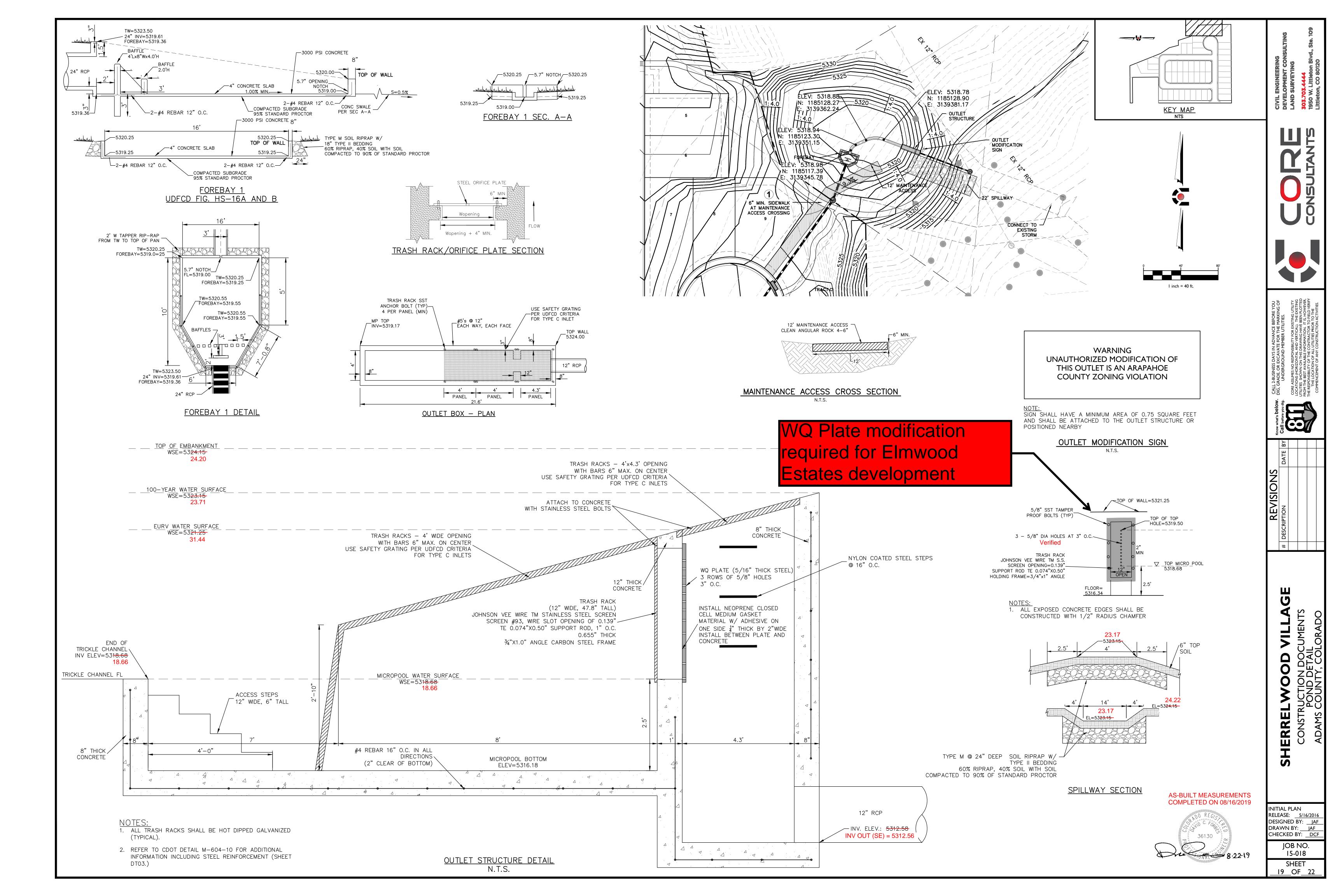




DOCUMENTS
PLAN
COLORADO 78TH AND I
CONSTRUCTION D
DRAINAGE F
ADAMS COUNTY, C

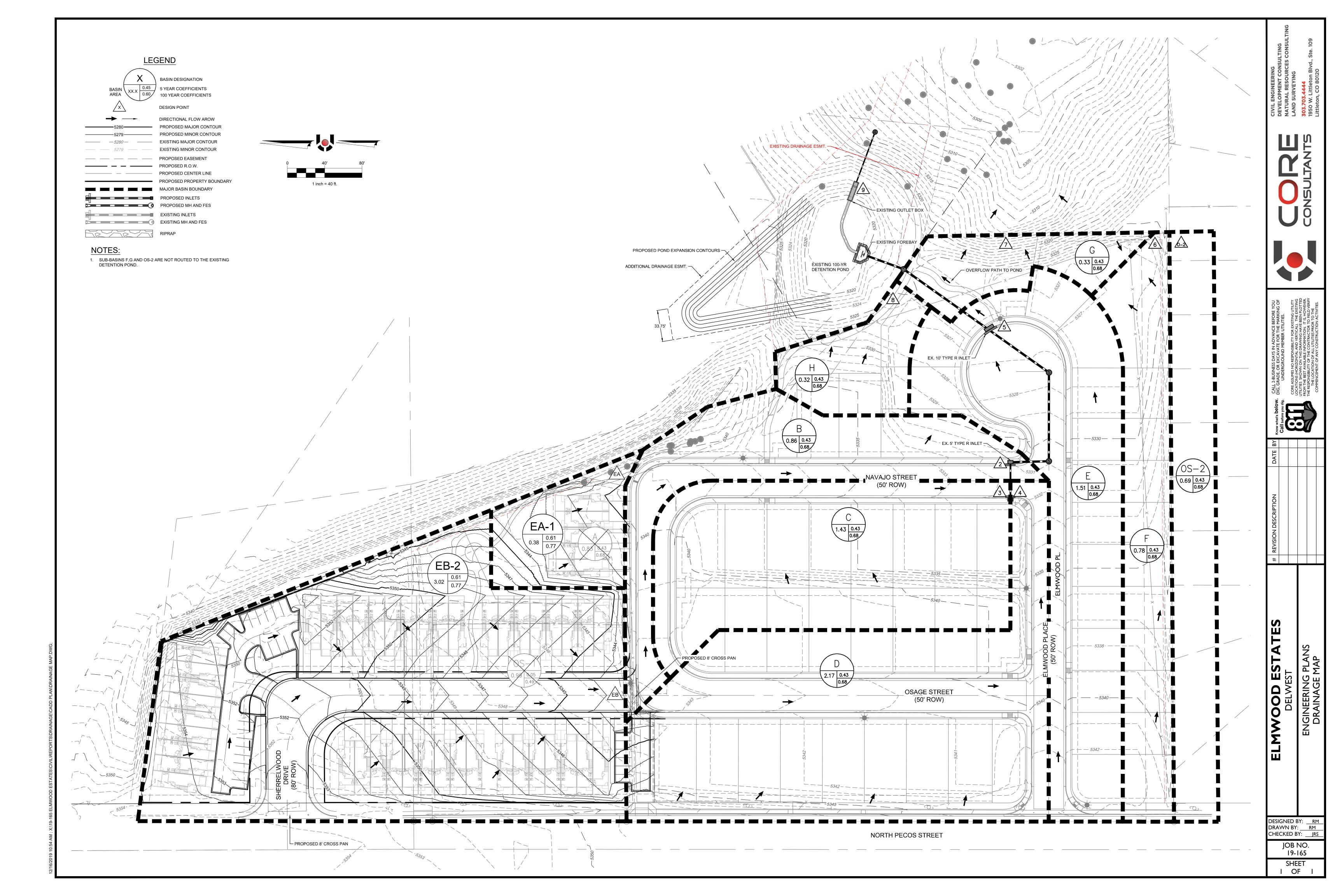
JOB NO. 15-018 SHEET







APPENDIX D PROPOSED MAPS





April 9, 2020

Ms. Melissa Hale Delwest Development Corp. 155 South Madison Street Suite 326 Denver. CO 80209

Re: Elmwood North Traffic Study

Adams County, Colorado

Dear Ms. Hale:

This letter documents a traffic study prepared for a proposed Elmwood North residential neighborhood project to be located at the Pecos Street and 79th Way intersection in Adams County, Colorado. The development is located along the east side of Pecos Street, approximately halfway between US-36 and 84th Avenue. The residential neighborhood development currently proposes 41 single family detached homes and 48 multi-family townhome units. A vicinity map illustrating the location of the project site is attached in **Figure 1**.

The surrounding area primarily consists of single-family residences with a multifamily building located on the northwest corner of the 79th Way and Pecos Street intersection. Sherrelwood Park and Sherrelwood Elementary School are located to the northeast of the project. The proposed development is located approximately 0.7 miles north of US Highway 36 and 1.8 miles west of Interstate 25. The site area within the project study area is shown in the aerial of attached **Figure 2**. A site plan for the proposed development is also attached.

The purpose of this letter is to identify the amount of traffic associated with this proposed development based on the expected trip generation, trip distribution, and traffic assignment. An operational analysis and vehicle queue calculations for the proposed Elmwood North project were performed. Project traffic was assigned to the key intersections and project driveways within the study limits. It is expected that project construction will be completed within the next year; therefore, analysis was performed for the 2022 short term build out horizon as well as the 2040 long-term twenty-year horizon.

Existing Roadway Network and Traffic Counts

Regional access to the Elmwood North project is provided by Interstate 25 and US Highway 36. Primary access will be provided by Pecos Street. Direct access to the site will be provided by two full movements accesses on the east side of Pecos Street, one to align with existing Sherrelwood Drive, and the other is already constructed approximately halfway between 79th Way and Elmwood Lane. The following intersections were analyzed in this traffic study letter in accordance with Adams County standards and requirements:

- Sherrelwood Drive and Pecos Street (Northern Access)
- 79th Way and Pecos Street
- Elmwood Place and Pecos Street (Southern Access)



Pecos Street extends north-south with a two-way left turn lane and two through lanes in each direction with a speed limit of 35 miles per hour adjacent to the site. Sherrelwood Drive extends east-west with one through lane in each direction and has a posted speed limit of 25 miles per hour in the vicinity of the site. 79th Way extends east-west with one through lane in each direction and a posted speed limit of 25 miles per hour in the vicinity of the site. The intersection of Sherrelwood Drive and Pecos Street is signalized, which operates with permitted only left turn phasing in the northbound approach. The intersection of 79th Way and Pecos Street operates with stop control on the eastbound approach. The existing lane configuration and control of the key intersections is shown in attached **Figure**

Morning and afternoon peak hour turning movement counts were performed at the key intersections on Tuesday, March 10, 2020. The weekday counts were conducted in 15-minute intervals during the morning and afternoon peak hours of adjacent street traffic from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM. The existing peak hour counts of the key intersections are shown in attached **Figure 4**, with count sheets attached as well.

Trip Generation

Site-generated traffic estimates are determined through a process known as trip generation. Rates and equations are applied to the proposed land use to estimate traffic generated by the development during a specific time interval. The acknowledged source for trip generation rates is the *Trip Generation Manual* published by the Institute of Transportation Engineers (ITE). ITE has established trip rates in nationwide studies of similar land uses. Trip generation is based on the ITE Trip Generation, 10th Edition (most current edition) fitted curve equations for Single-Family Detached Housing (ITE Code 210), and Multifamily Housing (Low-Rise) (ITE 220).

The following summarizes the anticipated trip generation for the proposed development (trip generation calculations are attached). Project generated traffic volumes are identified on a weekday daily as well as on a morning peak hour and afternoon peak hour basis. The morning peak hour is the highest one-hour time period of adjacent street traffic during four consecutive 15-minute intervals during the morning rush hour, between 7:00 am and 9:00 am. The afternoon peak hour is the highest one-hour time period of four consecutive 15-minute intervals between the hours of 4:00 pm and 6:00 pm representing the afternoon rush hour. As summarized in **Table 1**, the proposed Elmwood North project is anticipated to generate 780 weekday daily trips with 58 trips (13 in and 45 out) occurring during the morning peak hour, and 74 trips (47 in and 27 out) occurring during the afternoon peak hour.

Table 1 – Elmwood North Trip Generation

	Daily	Weekday Vehicle Trips					
	Vehicle	AM Peak Hour			PM Peak Hour		
Land Use and Size	Trips	In	Out	Total	In	Out	Total
Single-Family Detached Housing (210) – 41 Dwelling Units	458	7	27	34	27	16	43
Multifamily Housing (Low-Rise) (220) – 48 Dwelling Units	322	6	18	24	20	11	31
Total Trips	780	13	45	58	47	27	74



Project Access

Primary access will be provided by two full movements accesses, both along the east side of Pecos Street. The proposed northern access will align with the existing Sherrelwood Drive and Pecos Street signalized intersection. The proposed southern driveway along Pecos Street is already constructed, named Elmwood Place, and is approximately 550 feet south of 79th Way.

Distribution, Assignment, and Total Traffic

Trip distribution of the anticipated project traffic was identified based on the area street system characteristics, surrounding demographic information, and the access system for the project. Traffic assignment was obtained by applying the project trip distribution to the estimated full project traffic generation of the proposed development. Attached **Figure 5** illustrates the expected trip distribution, while **Figure 6** illustrates the traffic assignment for the proposed Elmwood North project on the surrounding street network and key intersections. Site traffic volumes were added to the 2022 and 2040 background volumes to represent estimated build-out year and long-term traffic conditions. These total traffic volumes for 2022 and 2040 are illustrated in **Figure 7** and **Figure 8**.

Traffic Operations Analysis

Kimley-Horn's analysis of traffic operations in the site vicinity was conducted to determine potential capacity deficiencies at the project key intersections for the 2022 build-out and 2040 long term horizons. The acknowledged source for determining overall capacity is the *Highway Capacity Manual*¹. Capacity analysis results are listed in terms of Level of Service (LOS). LOS is a qualitative term describing operating conditions a driver will experience while traveling on a particular street or highway during a specific time interval. It ranges from A (very little delay) to F (long delays and congestion). For intersections and roadways in this study area, typical traffic study practice identifies overall intersection LOS D and movement or approach LOS E as the minimum thresholds for acceptable operations. The following **Table 2** shows the definition of level of service for signalized and unsignalized intersections.

Level of Service	Signalized Intersection Average Total Delay (sec/veh)	Unsignalized Intersection Average Total Delay (sec/veh)
Α	≤ 10	≤ 10
В	> 10 and ≤ 20	> 10 and ≤ 15
С	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

Table 2 - Level of Service Definitions

Definitions provided from the Highway Capacity Manual, Sixth Edition, Transportation Research Board, 2016.

¹ Transportation Research Board, *Highway Capacity Manual*, Sixth Edition, Washington DC, 2016.



Project Intersections Operational Analysis

With the configuration of the project intersection in the opening year of 2022, the signalized intersection of Sherrelwood Drive and Pecos Street operates at LOS A, and all movements at the stop-controlled intersections are anticipated to operate acceptably with LOS C or better during the weekday peak hours with the addition of Elmwood North project traffic. By 2040, the signalized intersection of Sherrelwood Drive and Pecos Street is anticipated to continue operating at LOS A, and all movements at the stop-controlled intersections are expected to continue to operate acceptably with LOS D or better during the peak hours. The operational analysis is shown in **Table 3**.

Single shared movement lanes are expected to be sufficient for traffic exiting both project driveways. The northern access at the intersection of Sherrelwood Drive and Pecos Street will be incorporated into the existing signal. The exiting approach at the intersection of Elmwood Place and Pecos Street should provide a R1-1 "STOP" sign. Also, although the current eastbound approach at the intersection of Sherrelwood Drive and Pecos Street operates acceptably as a shared left/right turn lane, the eastbound approach could be striped to include a shared left turn/through lane and an exclusive right turn lane if desired. This is how the eastbound approach is operating in the field and it would keep the possibility of a left turning vehicle from a blocking a driver wishing to turn right.

2022 Total Traffic **2020 Existing Traffic** 2040 Total Traffic **PM Peak** AM Peak **PM Peak** AM Peak **PM Peak** AM Peak Hour Hour Hour Hour Hour Hour Delay Delay Delay **Delay** Delay Delay (sec/ LOS (sec/ LOS (sec/ LOS (sec/ LOS (sec/ LOS (sec/ LOS **Access and Movement** veh) veh) veh) veh) veh) veh) Sherrelwood Dr & Pecos 5.5 Α 4.2 Α 4.8# A# 3.1# A# 4.7# A# 3.2# A# 79th Way & Pecos St Eastbound Approach 10.8 В 11.8 В 10.9 В 11.9 В 11.0 В 12.5 В Northbound Left 8.4 7.9 8.4 7.9 8.6 Α 8.0 Α Α Α Α Α **Elmwood Place & Pecos** St С Westbound Approach 9.8 Α 22.7 9.9 Α 25.8 D Southbound Left 8.2 Α 12.2 8.4 13.0 В

Table 3 – Project Intersections LOS Results

Vehicle Queuing Analysis

Queuing analysis was conducted for the study area intersections per Adams County standards and requirements. Results were obtained from the 95th percentile queue lengths obtained from the Synchro analysis. Queue length calculations are provided within the level of service operational sheets attached for the unsignalized intersections and in separate reports for the signalized intersection. Results of the queuing analysis and recommendations at the study area intersections are provided in **Table 4**.

[#] Proposed full movement westbound leg included



Table 4 – Turn Lane Queuing Analysis Results

	Existing Turn Lane Length	2022 Calculated Queue	2022 Recommended	2040 Calculated Queue	2040 Recommended
Intersection Turn Lane	(feet)	(feet)	Length (feet)	(feet)	Length (feet)
Sherrelwood Dr & Pecos St		•	<u> </u>	Ì	<u> </u>
Eastbound Approach	С	31'	С	18'	С
Westbound Approach	DNE	0'	С	0'	С
Northbound Left	TWLTL	31'	TWLTL	37'	TWLTL
Southbound Left	TWLTL	9'	TWLTL	9'	TWLTL
79th Way & Pecos St					
Eastbound Approach	С	25'	С	25'	С
Northbound Left	TWLTL	25'	TWLTL	25'	TWLTL
Elmwood Place & Pecos St					
Westbound Approach	DNE	25'	С	25'	С
Southbound Left	TWLTL	25'	TWLTL	25'	TWLTL

C = Continuous Lane, DNE = Does Not Exist, TWLTL = Two-Way Left Turn Lane

As shown in **Table 4** representing the queuing results, all anticipated queues are accommodated or managed within existing turn bay lengths with project traffic in the 2040 project build out year and long-term horizon.

Conclusion and Recommendations

The two project driveways, with the northern access being the east leg of the Sherrelwood Drive/Pecos Street intersection and southern access being Elmwood Place/Pecos Street are expected to operate acceptably during the peak hours in 2022 and 2040. Single shared movement lanes are expected to be sufficient for exiting both project driveways. The exiting approach at the intersection of Sherrelwood Drive and Pecos Street should be incorporated in the existing signal, which may require a new signal pole on the northwest corner of the intersection with a mast arm across the east leg. The exiting approach at Elmwood Place and Pecos Street should provide a R1-1 "STOP" sign. The recommended intersection lane configurations and control for the project buildout and long-term horizon are illustrated in **Figure 9**.

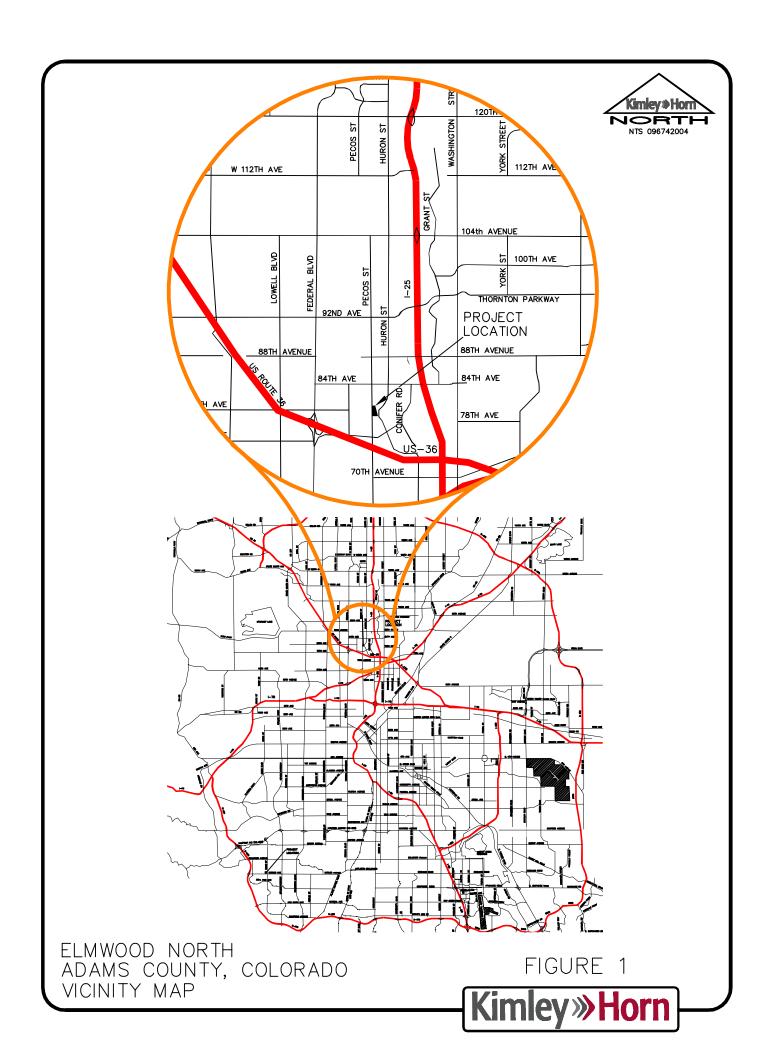
In summary, this traffic study letter provides project traffic generation estimates, trip distribution, traffic assignment, and future traffic volume projections operational analysis to identify potential Elmwood North project traffic related impacts on the local street system. Based on the analysis presented in this study, Kimley-Horn believes the proposed Elmwood North project will be incorporated acceptably in the existing and proposed surrounding street network. If you have any questions or require anything further, please feel free to call.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

Curtis D. Rowe, P.E., PTOE

Vice President



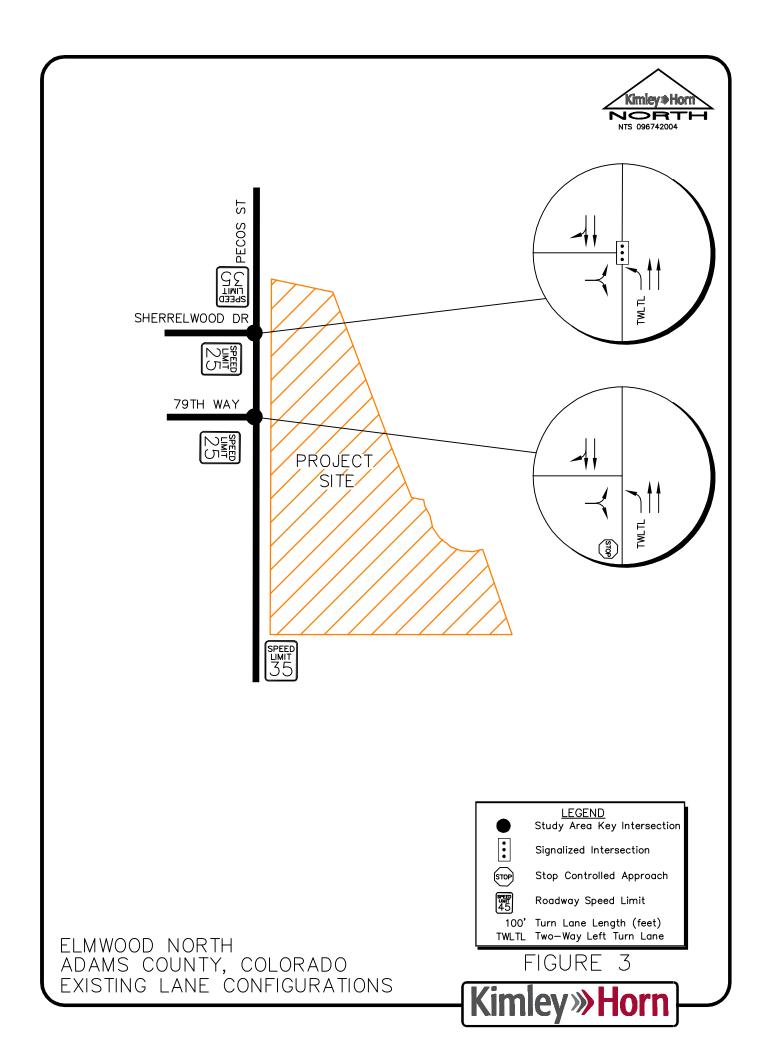


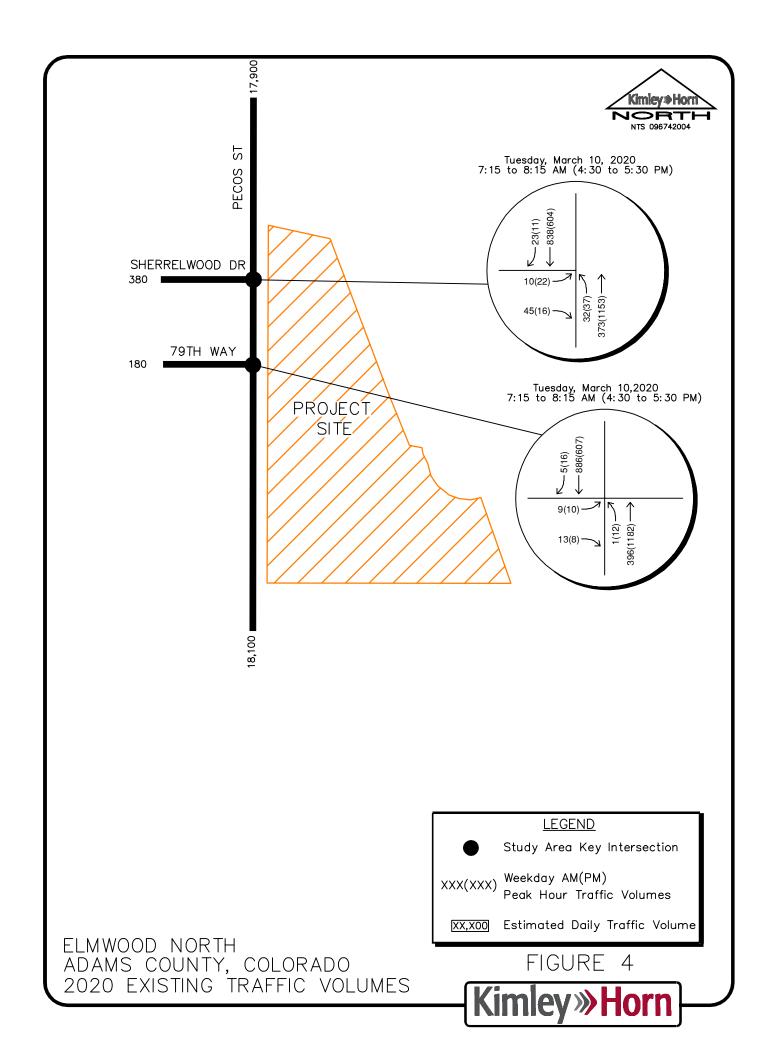


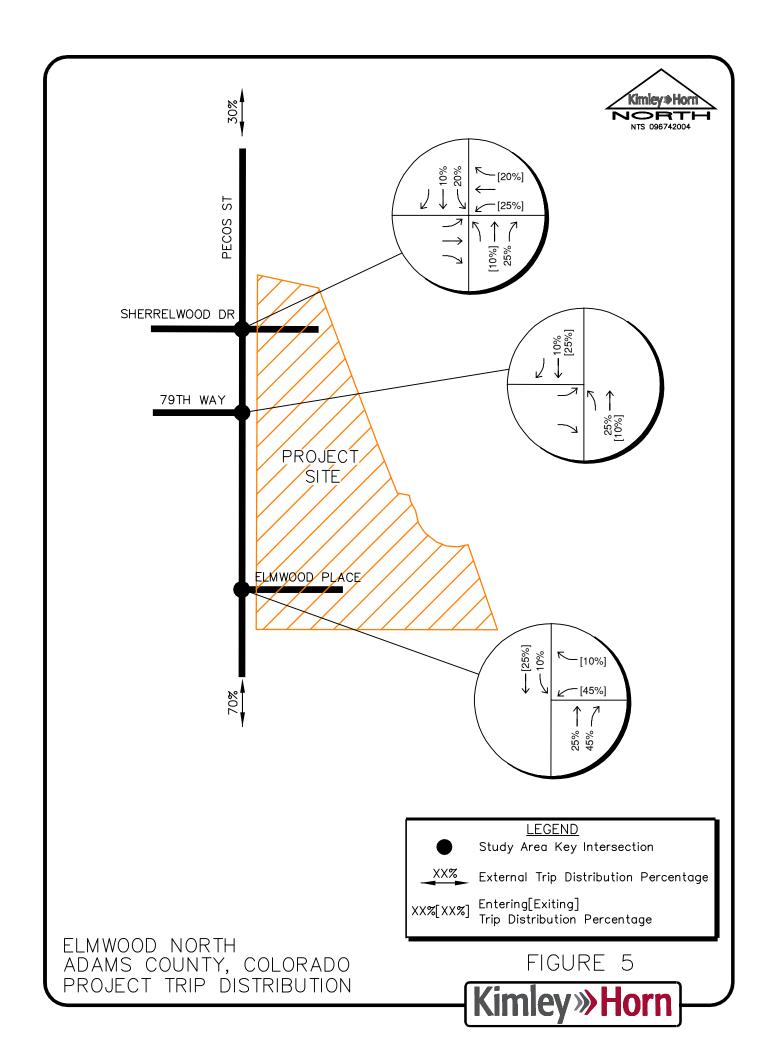
ELMWOOD NORTH ADAMS COUNTY, COLORADO SITE AREA

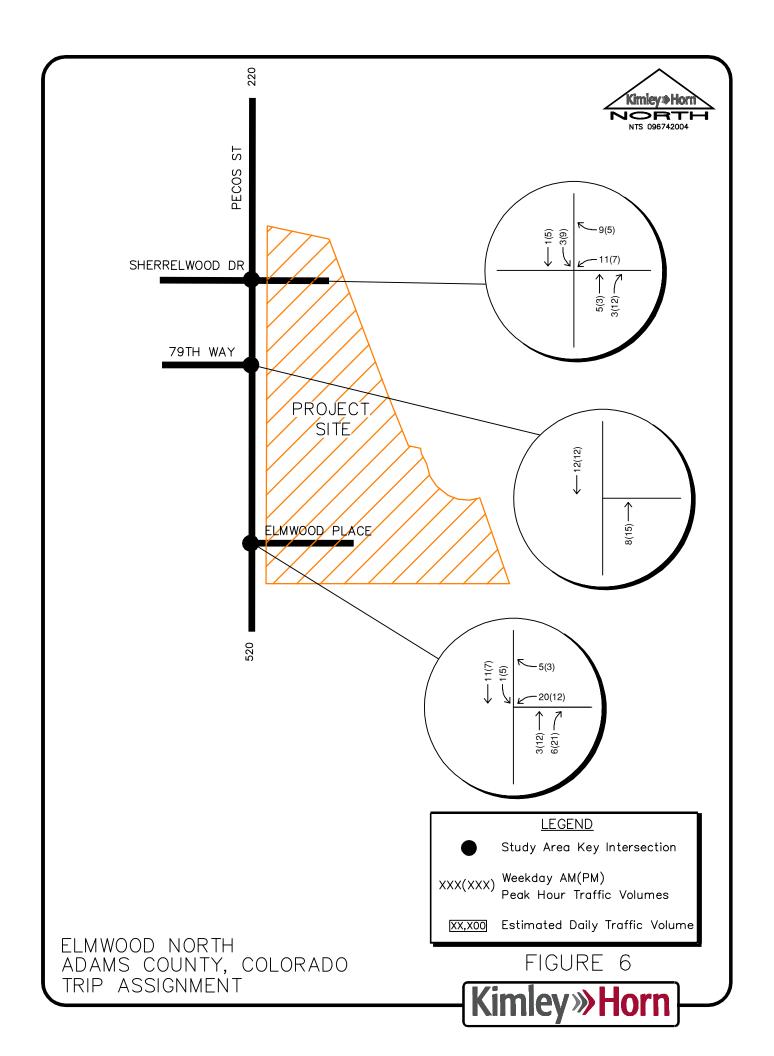
FIGURE 2

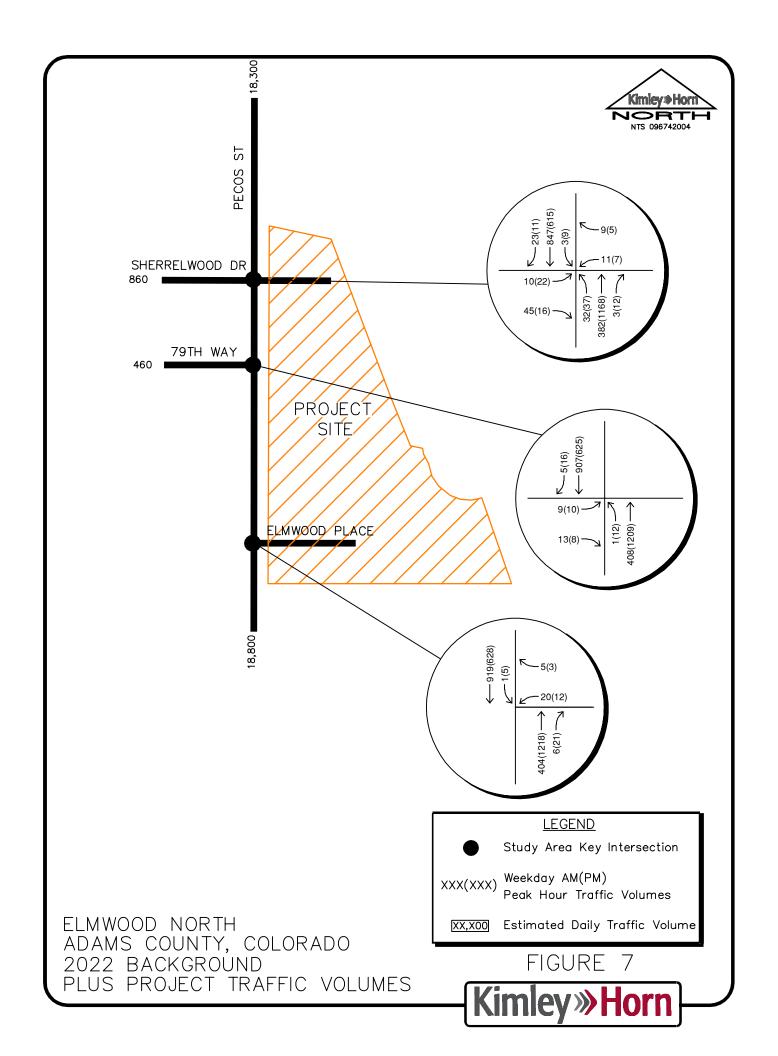


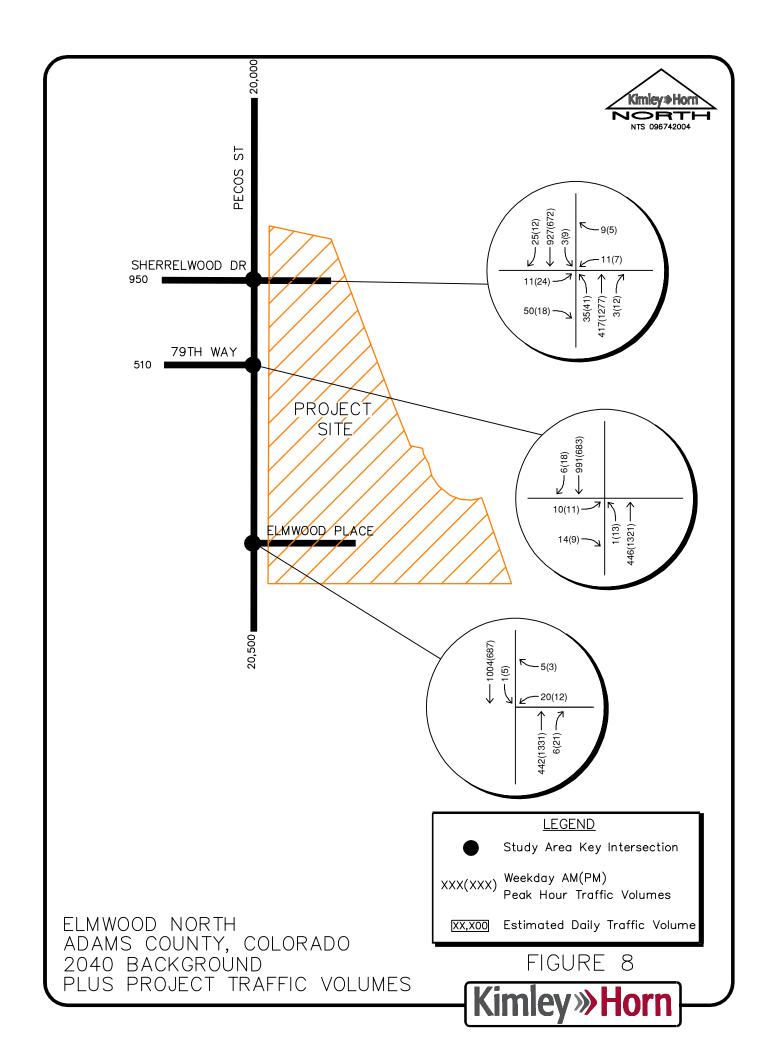


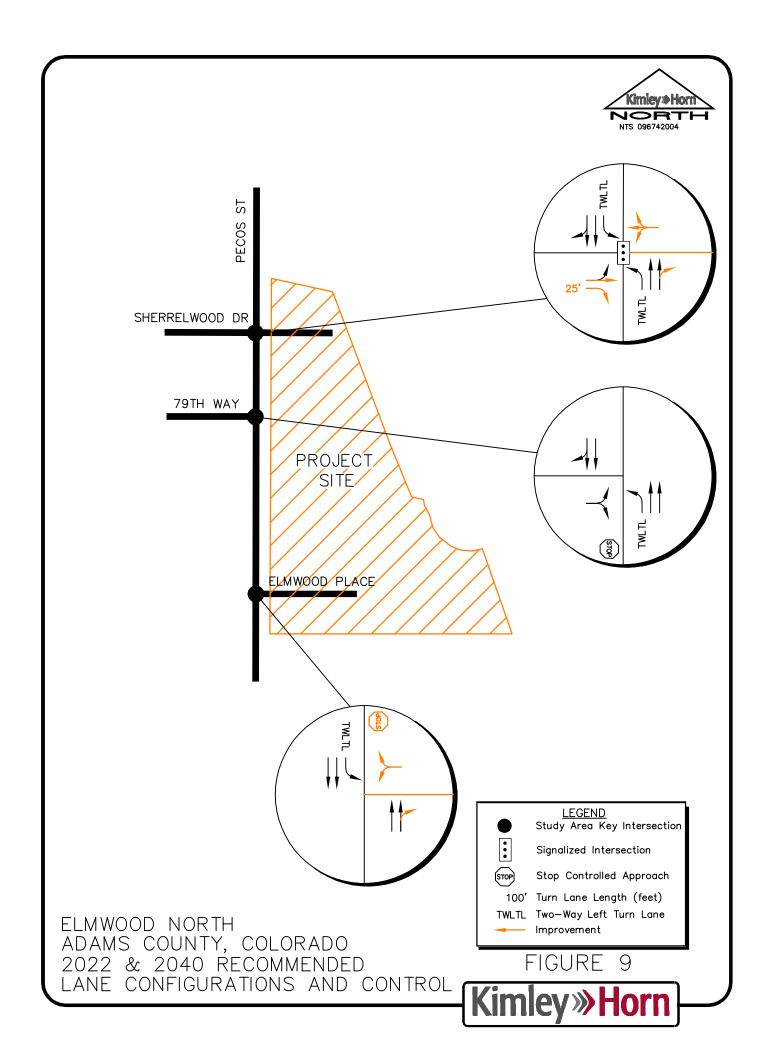














Adams, CO Elmwood North AM Peak 79th Way and Pecos St File Name: 79th and Pecos AM

Site Code : IPO 494 Start Date : 3/10/2020

Page No : 1

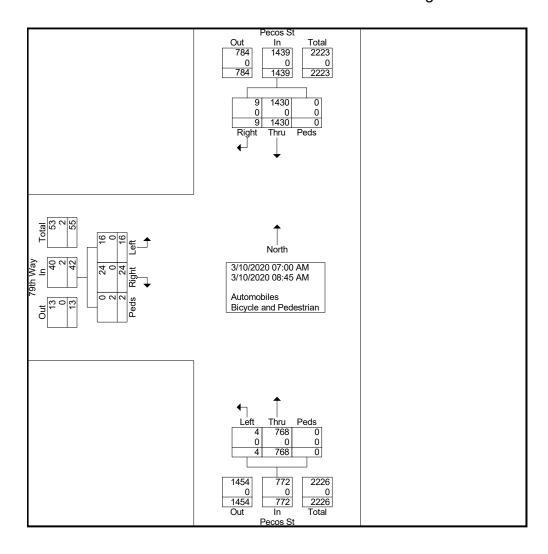
Groups Printed- Automobiles - Bicycle and Pedestrian

				Groups Pr	<u>inted- A</u> uto	omobiles	 Bicycle 	and Pedes	trian				
			Way			Pec	os St			Pec	os St		
			bound				bound				bound		
Start Time	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	2	4	0	6	0	59	0	59	185	3	0	188	253
07:15 AM	1	3	0	4	0	78	0	78	216	1	0	217	299
07:30 AM	4	4	0	8	1	97	0	98	225	0	0	225	331
07:45 AM	2	2	2	6	0	111	0	111	233	1	0	234	351
Total	9	13	2	24	1	345	0	346	859	5	0	864	1234
08:00 AM	2	4	0	6	0	110	0	110	212	3	0	215	331
00.00 AIVI	2	4	U	O	U	110	U	110	212	3	U	213	331
08:15 AM	2	4	0	6	2	113	0	115	134	1	0	135	256
08:30 AM	1	2	0	3	1	109	0	110	134	0	0	134	247
08:45 AM	2	1	0	3	0	91	0	91	91	0	0	91	185
Total	7	11	0	18	3	423	0	426	571	4	0	575	1019
Grand Total	16	24	2	42	4	768	0	772	1430	9	0	1439	2253
Apprch %	38.1	57.1	4.8		0.5	99.5	0		99.4	0.6	0		
Total %	0.7	1.1	0.1	1.9	0.2	34.1	0	34.3	63.5	0.4	0	63.9	
Automobiles	16	24	0	40	4	768	0	772	1430	9	0	1439	2251
% Automobiles	100	100	0	95.2	100	100	0	100	100	100	0	100	99.9
Bicycle and Pedestrian	0	0	2	2	0	0	0	0	0	0	0	0	2
% Bicycle and Pedestrian	0	0	100	4.8	0	0	0	0	0	0	0	0	0.1



Adams, CO Elmwood North AM Peak 79th Way and Pecos St File Name: 79th and Pecos AM

Site Code : IPO 494 Start Date : 3/10/2020



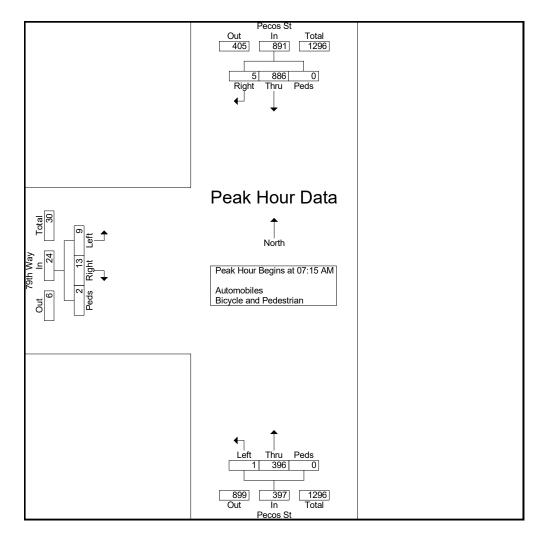


Adams, CO Elmwood North AM Peak 79th Way and Pecos St

File Name: 79th and Pecos AM

Site Code : IPO 494 Start Date : 3/10/2020

		79th	Way			Pec	os St			Pec	os St		
		Eastl	oound			North	bound			South	bound		
Start Time	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysi	s From 07	7:00 AM to	o 08:45 <i>A</i>	M - Peak 1	of 1								
Peak Hour for Enti	re Interse	ction Beg	ins at 07	:15 AM									
07:15 AM	1	3	0	4	0	78	0	78	216	1	0	217	299
07:30 AM	4	4	0	8	1	97	0	98	225	0	0	225	331
07:45 AM	2	2	2	6	0	111	0	111	233	1	0	234	351
MA 00:80	2	4	0	6	0	110	0	110	212	3	0	215	331
Total Volume	9	13	2	24	1	396	0	397	886	5	0	891	1312
% App. Total	37.5	54.2	8.3		0.3	99.7	0		99.4	0.6	0		
PHF	.563	.813	.250	.750	.250	.892	.000	.894	.951	.417	.000	.952	.934





Adams, CO Elmwood North PM Peak 79th Way and Pecos St File Name: 79th and Pecos PM

Site Code : IPO 494 Start Date : 3/10/2020

Page No : 1

Groups Printed- Automobiles - Bicycle and Pedestrian

		704-	14/	Croupori	intoa 7tat			and redes	tiidii	Do -	01		1
			Way				os St				os St		
O(1.T)			ound				bound				bound		
Start Time	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
04:00 PM	3	1	0	4	4	290	0	294	175	1	0	176	474
04:15 PM	1	1	2	4	1	307	0	308	136	3	0	139	451
04:30 PM	0	5	3	8	4	282	0	286	153	6	0	159	453
04:45 PM	3	3	1	7	4	274	0	278	141	3	0	144	429
Total	7	10	6	23	13	1153	0	1166	605	13	0	618	1807
05:00 PM	3	0	0	3	2	288	0	290	156	3	0	159	452
05:15 PM	4	0	0	4	2	338	0	340	157	4	0	161	505
05:30 PM	5	2	0	7	5	252	0	257	137	5	0	142	406
05:45 PM	0	4	0	4	3	258	0	261	141	2	0	143	408
Total	12	6	0	18	12	1136	0	1148	591	14	0	605	1771
Grand Total	19	16	6	41	25	2289	0	2314	1196	27	0	1223	3578
Apprch %	46.3	39	14.6		1.1	98.9	0		97.8	2.2	0		
Total %	0.5	0.4	0.2	1.1	0.7	64	0	64.7	33.4	8.0	0	34.2	
Automobiles	19	16	0	35	25	2289	0	2314	1196	27	0	1223	3572
% Automobiles	100	100	0	85.4	100	100	0	100	100	100	0	100	99.8
Bicycle and Pedestrian	0	0	6	6	0	0	0	0	0	0	0	0	6
% Bicycle and Pedestrian	0	0	100	14.6	0	0	0	0	0	0	0	0	0.2

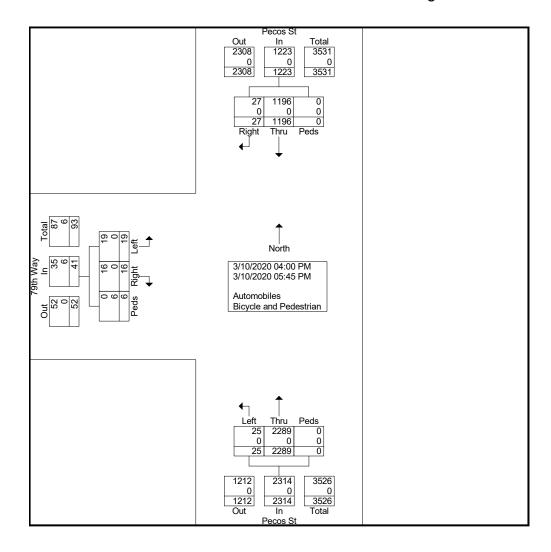


Adams, CO Elmwood North PM Peak

79th Way and Pecos St

File Name: 79th and Pecos PM

Site Code : IPO 494 Start Date : 3/10/2020



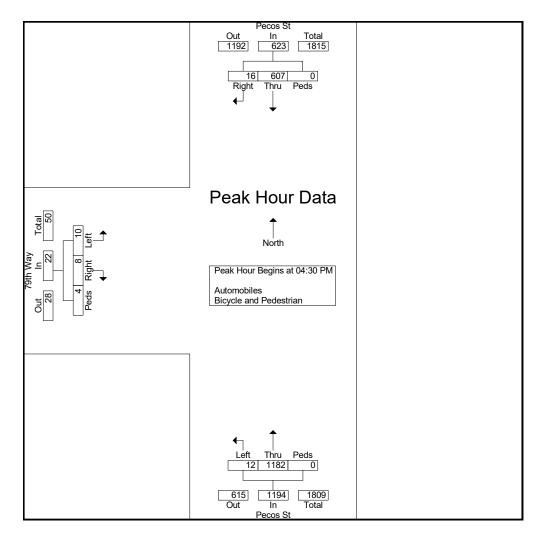


Adams, CO Elmwood North PM Peak 79th Way and Pecos St

File Name: 79th and Pecos PM

Site Code : IPO 494 Start Date : 3/10/2020

		79th	Way			Pec	os St			Pec	os St		
		Eastl	oound			North	bound			South	bound		
Start Time	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysi	s From 04	1:00 PM to	o 05:45 F	PM - Peak 1	of 1								
Peak Hour for Enti	re Interse	ction Beg	ins at 04	:30 PM									
04:30 PM	0	5	3	8	4	282	0	286	153	6	0	159	453
04:45 PM	3	3	1	7	4	274	0	278	141	3	0	144	429
05:00 PM	3	0	0	3	2	288	0	290	156	3	0	159	452
05:15 PM	4	0	0	4	2	338	0	340	157	4	0	161	505
Total Volume	10	8	4	22	12	1182	0	1194	607	16	0	623	1839
% App. Total	45.5	36.4	18.2		1	99	0		97.4	2.6	0		
PHF	.625	.400	.333	.688	.750	.874	.000	.878	.967	.667	.000	.967	.910





Adams, CO Elmwood North AM Peak Sherrelwood Dr and Pecos St File Name: Sherrelwood and Pecos AM

Site Code : IPO 494 Start Date : 3/10/2020

Page No : 1

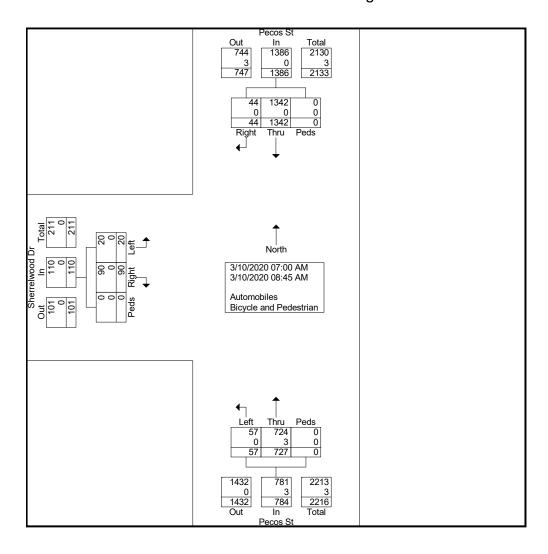
Groups Printed- Automobiles - Bicycle and Pedestrian

		Shorrol	wood Dr		intod 7tate		os St	and redes	tilaii	Poc	os St		
			oound				bound				bound		
Start Time	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	11	0	11	0	59	0	59	178	6	0	184	254
07:15 AM	2	14	0	16	4	77	0	81	201	4	0	205	302
07:30 AM	2	8	0	10	5	96	0	101	218	4	0	222	333
07:45 AM	2	10	0	12	11	101	0	112	214	6	0	220	344
Total	6	43	0	49	20	333	0	353	811	20	0	831	1233
,								·				,	
08:00 AM	4	13	0	17	12	99	0	111	205	9	0	214	342
08:15 AM	2	10	0	12	5	113	0	118	123	6	0	129	259
08:30 AM	7	14	0	21	16	93	0	109	123	8	0	131	261
08:45 AM	1	10	0	11	4	89	0	93	80	1	0	81	185
Total	14	47	0	61	37	394	0	431	531	24	0	555	1047
·													
Grand Total	20	90	0	110	57	727	0	784	1342	44	0	1386	2280
Apprch %	18.2	81.8	0		7.3	92.7	0		96.8	3.2	0		
Total %	0.9	3.9	0	4.8	2.5	31.9	0	34.4	58.9	1.9	0	60.8	
Automobiles	20	90	0	110	57	724	0	781	1342	44	0	1386	2277
% Automobiles	100	100	0	100	100	99.6	0	99.6	100	100	0	100	99.9
Bicycle and Pedestrian	0	0	0	0	0	3	0	3	0	0	0	0	3
% Bicycle and Pedestrian	0	0	0	0	0	0.4	0	0.4	0	0	0	0	0.1



Adams, CO Elmwood North AM Peak Sherrelwood Dr and Pecos St File Name: Sherrelwood and Pecos AM

Site Code : IPO 494 Start Date : 3/10/2020





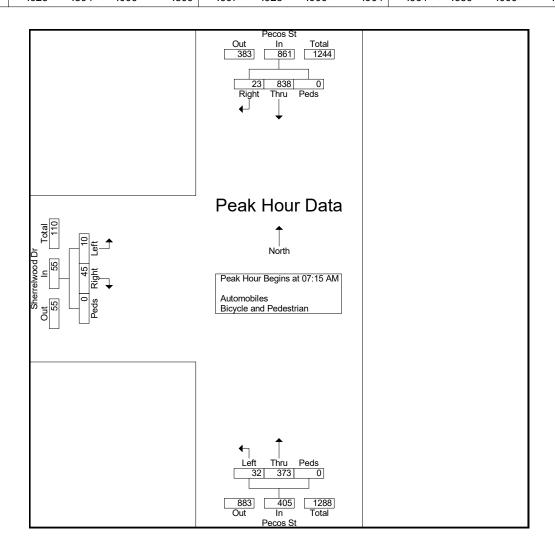
Adams, CO Elmwood North AM Peak Sherrelwood Dr and Pecos St

Pherrelwood Dr and Pecos St Page No : 3

File Name: Sherrelwood and Pecos AM

Site Code : IPO 494 Start Date : 3/10/2020

		Sherrel	wood Dr			Pec	os St			Pec	os St		
		East	bound			North	bound			South	nbound		
Start Time	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysi	s From 07	:00 AM t	o 08:45 A	AM - Peak 1	of 1				•				
Peak Hour for Enti	re Intersed	ction Beg	ins at 07	:15 AM									
07:15 AM	2	14	0	16	4	77	0	81	201	4	0	205	302
07:30 AM	2	8	0	10	5	96	0	101	218	4	0	222	333
07:45 AM	2	10	0	12	11	101	0	112	214	6	0	220	344
MA 00:80	4	13	0	17	12	99	0	111	205	9	0	214	342
Total Volume	10	45	0	55	32	373	0	405	838	23	0	861	1321
% App. Total	18.2	81.8	0		7.9	92.1	0		97.3	2.7	0		
PHF	.625	.804	.000	.809	.667	.923	.000	.904	.961	.639	.000	.970	.960





Adams, CO Elmwood North PM Peak Sherrelwood Dr and Pecos St File Name: Sherrelwood and Pecos PM

Site Code : IPO 494 Start Date : 3/10/2020

Page No : 1

Groups Printed- Automobiles - Bicycle and Pedestrian

		Sherrel	wood Dr		inted- Auto		os St	and Fedes	шап	Pec	os St		
		East	oound			North	bound			South	bound		
Start Time	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
04:00 PM	12	13	0	25	13	279	0	292	160	11	0	171	488
04:15 PM	11	5	0	16	9	300	0	309	127	3	0	130	455
04:30 PM	5	4	0	9	9	274	0	283	158	6	0	164	456
04:45 PM	5	5	0	10	8	268	0	276	135	1	0	136	422
Total	33	27	0	60	39	1121	0	1160	580	21	0	601	1821
05:00 PM	5	6	0	11	11	280	0	291	153	2	0	155	457
05:15 PM	7	1	0	8	9	331	0	340	158	2	0	160	508
05:30 PM	1	3	0	4	11	242	0	253	142	3	0	145	402
05:45 PM	3	5	0	8	7	258	0	265	135	5	0	140	413
Total	16	15	0	31	38	1111	0	1149	588	12	0	600	1780
Grand Total	49	42	0	91	77	2232	0	2309	1168	33	0	1201	3601
Apprch %	53.8	46.2	0		3.3	96.7	0		97.3	2.7	0		
Total %	1.4	1.2	0	2.5	2.1	62	0	64.1	32.4	0.9	0	33.4	
Automobiles	49	42	0	91	77	2229	0	2306	1167	33	0	1200	3597
% Automobiles	100	100	0	100	100	99.9	0	99.9	99.9	100	0	99.9	99.9
Bicycle and Pedestrian	0	0	0	0	0	3	0	3	1	0	0	1	4
% Bicycle and Pedestrian	0	0	0	0	0	0.1	0	0.1	0.1	0	0	0.1	0.1

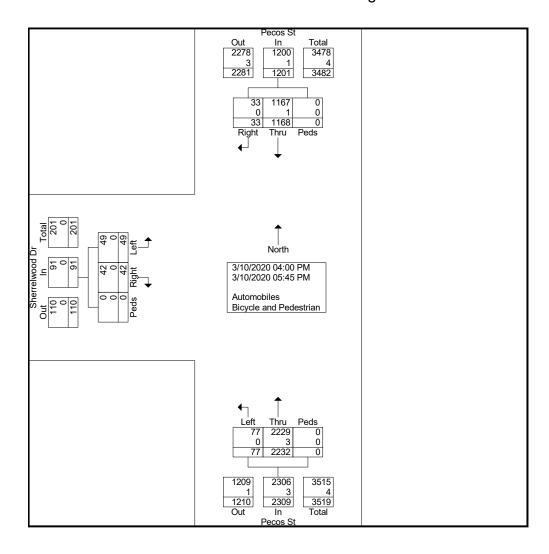


Adams, CO Elmwood North PM Peak

Sherrelwood Dr and Pecos St

File Name: Sherrelwood and Pecos PM

Site Code : IPO 494 Start Date : 3/10/2020





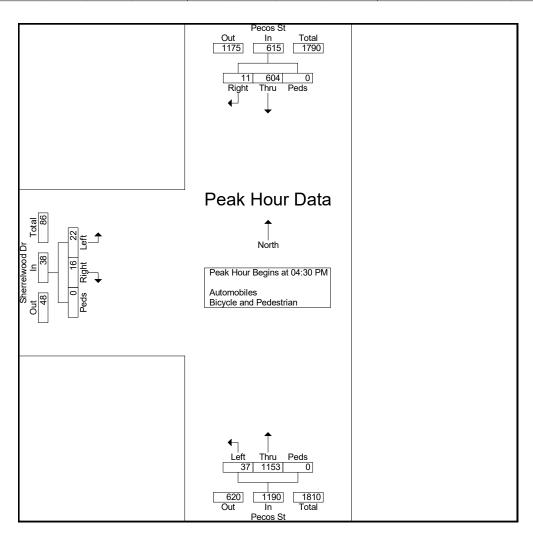
Adams, CO **Elmwood North** PM Peak

Sherrelwood Dr and Pecos St

File Name: Sherrelwood and Pecos PM

Site Code: IPO 494 Start Date : 3/10/2020

		Sherrel	wood Dr			Pec	os St			Pec	os St		
		East	bound			North	bound			South	bound		
Start Time	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysi	s From 0	4:00 PM t	o 05:45 F	PM - Peak 1	of 1	'			•				
Peak Hour for Enti	re Interse	ction Beg	ins at 04	:30 PM									
04:30 PM	5	4	0	9	9	274	0	283	158	6	0	164	456
04:45 PM	5	5	0	10	8	268	0	276	135	1	0	136	422
05:00 PM	5	6	0	11	11	280	0	291	153	2	0	155	457
05:15 PM	7	1	0	8	9	331	0	340	158	2	0	160	508
Total Volume	22	16	0	38	37	1153	0	1190	604	11	0	615	1843
% App. Total	57.9	42.1	0		3.1	96.9	0		98.2	1.8	0		
PHF	.786	.667	.000	.864	.841	.871	.000	.875	.956	.458	.000	.938	.907





Project	Elmwood North				
Subject	Trip Generation for	Single-Family De	tached Housing		
Designed by	TES	Date	April 01, 2020	Job No.	96742004.000
Checked by		Date		Sheet No.	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 10th Edition, Fitted Curve Equations

Land Use Code - Single-Family Detached Housing (210)

Independant Variable - Dwelling Units (X)

$$X = 41$$

T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (200 Series Page 3)

Average Weekday Directional Distribution: 25% ent. 75% exit. T = 34 Average Vehicle Trip Ends (T) = 0.71 * (41) + 4.80 7 entering 26 exiting

7 + 27 = 34

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (200 Series Page 4)

Average Weekday Directional Distribution: 63% ent. 37% exit. $Ln(T) = 0.96 \ Ln(X) \ + 0.20$ T = 43 Average Vehicle Trip Ends $Ln(T) = 0.96 \ ^*$ $Ln(41) \ + 0.20$ 27 entering 16 exiting 16

27 + 16 = 43

Peak Hour of Generator, Saturday (200 Series Page 8)

Average Saturday Directional Distribution: 54% ent. 46% exit. (T) = 0.84 (X) + 17.99 T = 52 Average Vehicle Trip Ends T = 52 entering 24 exiting

28 + 24 = 52

Weekday (200 Series Page 2)

Average Weekday Directional Distribution: 50% entering, 50% exiting Ln(T) = 0.92 Ln(X) + 2.71 T = 458 Average Vehicle Trip Ends Ln(T) = 0.92 * Ln(41) + 2.71 229 entering 229 exiting

229 + 229 = 458

Kimley » Horn

Project	Elmwood North						
Subject	Trip Generation fo	r Multifamily Housi	ing (Low-Rise)				
Designed by	TES	Date	April 01, 2020	Job No.	96	742004	.000
Checked by		Date		Sheet No.	1	of	1

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 10th Edition, Fitted Curve Equations

Land Use Code - Multifamily Housing (Low-Rise) (220)

Independent Variable - Dwelling Units (X)

X = 48

T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (Series 200 Page 32)

 $Ln(T) = 0.95 \ Ln(X) - 0.51 \\ Ln(T) = 0.95 \ * \ Ln(48.0) - 0.51$ $Directional Distribution: 23\% ent. 77\% exit. \\ T = 24 Average Vehicle Trip Ends \\ 6 entering 18 exiting$

6 + 18 = 24

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (Series 200 Page 33)

 $Ln(T) = 0.89 \ Ln(X) \ -0.02$ $Ln(T) = 0.89 \ * \ Ln(48.0) \ -0.02$ $Directional Distribution: 63\% \ ent. 37\% \ exit.$ $T = 31 \ Average Vehicle Trip Ends$ $20 \ entering \ 11 \ exiting$

20 + 11 = 31

Weekday (Series 200 Page 31)

 $(T) = 7.56^*(X) - 40.86 \\ (T) = 7.56 * 48 - 40.86$ Directional Distribution: 50% ent. 50% exit. $T = 322 \quad \text{Average Vehicle Trip Ends}$ $161 \quad \text{entering} \quad 161 \quad \text{exiting}$

161 + 161 = 322

Peak Hour of Generator, Saturday (Series 200 Page 37)

 $(T) = 1.08*(X) - 33.24 \\ (T) = 1.08* \\ (T)$

8 + 10 = not ok

Timings 1: Pecos St & Sherrelwood Dr

	۶	4	†	↓		
Lane Group	EBL	NBL	NBT	SBT		
Lane Configurations	¥	ሻ	^	† %		
Traffic Volume (vph)	10	32	373	838		
Future Volume (vph)	10	32	373	838		
Turn Type	Prot	Perm	NA	NA		
Protected Phases	4		2	6		
Permitted Phases		2				
Detector Phase	4	2	2	6		
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0		
Minimum Split (s)	24.5	24.5	24.5	24.5		
Total Split (s)	30.0	60.0	60.0	60.0		
Total Split (%)	33.3%	66.7%	66.7%	66.7%		
Yellow Time (s)	4.5	4.5	4.5	4.5		
All-Red Time (s)	2.0	2.0	2.0	2.0		
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.5	6.5	6.5	6.5		
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	C-Max	C-Max	C-Max		
Act Effct Green (s)	7.1	73.6	73.6	73.6		
Actuated g/C Ratio	0.08	0.82	0.82	0.82		
v/c Ratio	0.40	0.10	0.14	0.32		
Control Delay	21.8	3.4	2.6	3.1		
Queue Delay	0.0	0.0	0.0	0.0		
Total Delay	21.8	3.4	2.6	3.1		
LOS	С	Α	Α	Α		
Approach Delay	21.8		2.6	3.1		
Approach LOS	С		A	А		
Intersection Summary						
Cycle Length: 90						
Actuated Cycle Length: 90						
Offset: 0 (0%), Referenced		·NRTL ar	nd 6·SBT	Start of	Green	
Natural Cycle: 50	i to pridac z	IVDTE ai	IG 0.551	Start or	Orcon	
Control Type: Actuated-Co	ordinated					
Maximum v/c Ratio: 0.40	orumateu					
Intersection Signal Delay: 3	2 0			h	ntersection LOS: A	
Intersection Capacity Utiliz		4			CU Level of Service A	
Analysis Period (min) 15	alion 41.07	O		''	SO LEVELOI SELVICE A	
Analysis Penou (min) 15						
Splits and Phases: 1: Pe	ecos St & S	herrelwo	od Dr			
≪ †>						≯
Ø2 (R)						Ø4 30 s
00 S						30 S
▼ Ø6 (R)]

	۶	•	4	†	ļ	4
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		ሻ	^	†	
Traffic Volume (veh/h)	10	45	32	373	838	23
Future Volume (veh/h)	10	45	32	373	838	23
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	· ·	0	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	1.00	1.00	No	No	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	56	48	405	873	36
Peak Hour Factor	0.63	0.80	0.67	0.92	0.96	0.64
Percent Heavy Veh, %	0.03		2	0.92	0.90	2
	20	0 71	528	2837	2777	115
Cap, veh/h						
Arrive On Green	0.06	0.06	0.80	0.80	0.80	0.80
Sat Flow, veh/h	357	1249	614	3647	3571	143
Grp Volume(v), veh/h	73	0	48	405	446	463
Grp Sat Flow(s), veh/h/ln	1628	0	614	1777	1777	1845
Q Serve(g_s), s	4.0	0.0	2.1	2.3	6.1	6.1
Cycle Q Clear(g_c), s	4.0	0.0	8.1	2.3	6.1	6.1
Prop In Lane	0.22	0.77	1.00			0.08
Lane Grp Cap(c), veh/h	93	0	528	2837	1419	1473
V/C Ratio(X)	0.78	0.00	0.09	0.14	0.31	0.31
Avail Cap(c_a), veh/h	425	0	528	2837	1419	1473
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.9	0.0	3.5	2.1	2.4	2.4
Incr Delay (d2), s/veh	13.4	0.0	0.3	0.1	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.2	0.5	1.4	1.4
Unsig. Movement Delay, s/vel		0.0	0.2	0.0	1.7	1.7
LnGrp Delay(d),s/veh	55.2	0.0	3.9	2.2	3.0	3.0
LnGrp LOS	55.2 E	Α	3.9 A	2.2 A	3.0 A	3.0 A
		<u> </u>	<u> </u>			<u> </u>
Approach Vol, veh/h	73			453	909	
Approach LOS	55.2			2.4	3.0	
Approach LOS	E			А	Α	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		78.4		11.6		78.4
Change Period (Y+Rc), s		6.5		6.5		6.5
Max Green Setting (Gmax), s		53.5		23.5		53.5
Max Q Clear Time (q_c+l1), s		10.1		6.0		8.1
Green Ext Time (p_c), s		3.4		0.2		6.7
		5.4		0.2		0.7
Intersection Summary						
HCM 6th Ctrl Delay			5.5			
HCM 6th LOS			Α			
Notes						

User approved volume balancing among the lanes for turning movement.

Timings 1: Pecos St & Sherrelwood Dr

	•	•	†	ļ		
Lane Group	EBL	NBL	NBT	SBT		
Lane Configurations	W	ሻ	^	∱ }		
Traffic Volume (vph)	22	37	1153	604		
Future Volume (vph)	22	37	1153	604		
Turn Type	Prot	Perm	NA	NA		
Protected Phases	4		2	6		
Permitted Phases		2				
Detector Phase	4	2	2	6		
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0		
Minimum Split (s)	24.5	24.5	24.5	24.5		
Total Split (s)	28.0	92.0	92.0	92.0		
Total Split (%)	23.3%	76.7%	76.7%	76.7%		
Yellow Time (s)	4.5	4.5	4.5	4.5		
All-Red Time (s)	2.0	2.0	2.0	2.0		
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.5	6.5	6.5	6.5		
Lead/Lag	0.5	0.5	0.5	0.5		
Lead-Lag Optimize?						
Recall Mode	None	C-Max	C-Max	C-Max		
Act Effct Green (s)	7.7	103.0	103.0	103.0		
Actuated g/C Ratio	0.06	0.86	0.86	0.86		
v/c Ratio	0.39	0.00	0.44	0.00		
Control Delay	41.7	2.5	3.2	2.2		
Queue Delay	0.0	0.0	0.0	0.0		
J	41.7	2.5	3.2	2.2		
Total Delay LOS	41.7 D	2.5 A	3.2 A	2.2 A		
	41.7	А	3.2	2.2		
Approach LOS						
Approach LOS	D		А	А		
Intersection Summary						
Cycle Length: 120						
Actuated Cycle Length: 120						
Offset: 0 (0%), Referenced	to phase 2	2:NBTL ar	nd 6:SBT	, Start of	Green	
Natural Cycle: 60						
Control Type: Actuated-Coo	ordinated					
Maximum v/c Ratio: 0.44						
Intersection Signal Delay: 3					tersection LOS: A	
Intersection Capacity Utiliza	ation 46.9%	6		[(CU Level of Service A	
Analysis Period (min) 15						
Splits and Phases: 1: Ped	cos St & S	herrelwo	od Dr			
						≯ _{Ø4}
02 (R)						28 s
1						20 3

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Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥		ሻ	^	†	
Traffic Volume (veh/h)	22	16	37	1153	604	11
Future Volume (veh/h)	22	16	37	1153	604	11
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	· ·		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	1.00	1.00	No	No	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	24	44	1325	629	24
Peak Hour Factor	0.79	0.67	0.84	0.87	0.96	0.46
Percent Heavy Veh, %	0	0	2	2024	2072	112
Cap, veh/h	36	31	698	3026	2972	113
Arrive On Green	0.04	0.04	0.85	0.85	0.85	0.85
Sat Flow, veh/h	892	764	779	3647	3584	133
Grp Volume(v), veh/h	53	0	44	1325	320	333
Grp Sat Flow(s), veh/h/ln	1688	0	779	1777	1777	1846
Q Serve(g_s), s	3.7	0.0	1.3	10.6	3.9	3.9
Cycle Q Clear(g_c), s	3.7	0.0	5.2	10.6	3.9	3.9
Prop In Lane	0.53	0.45	1.00			0.07
Lane Grp Cap(c), veh/h	68	0	698	3026	1513	1572
V/C Ratio(X)	0.78	0.00	0.06	0.44	0.21	0.21
Avail Cap(c_a), veh/h	302	0	698	3026	1513	1572
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.1	0.00	2.1	2.1	1.6	1.6
Incr Delay (d2), s/veh	17.4	0.0	0.2	0.5	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.2	2.1	0.9	0.9
Unsig. Movement Delay, s/vel		0.0	0.0	6 /	4.0	4.0
LnGrp Delay(d),s/veh	74.4	0.0	2.3	2.6	1.9	1.9
LnGrp LOS	E	A	A	A	A	A
Approach Vol, veh/h	53			1369	653	
Approach Delay, s/veh	74.4			2.6	1.9	
Approach LOS	Е			Α	Α	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		108.7		11.3		108.7
Change Period (Y+Rc), s		6.5		6.5		6.5
Max Green Setting (Gmax), s		85.5		21.5		85.5
Max Q Clear Time (q_c+l1), s						5.9
		12.6		5.7		
Green Ext Time (p_c), s		15.2		0.1		4.4
Intersection Summary						
HCM 6th Ctrl Delay			4.2			
HCM 6th LOS			Α			
Notes						

User approved volume balancing among the lanes for turning movement.

Timings 1: Pecos St & Sherrelwood Dr

	٠	1	†	↓	
Lane Group	EBL	NBL	NBT	SBT	
Lane Configurations	N/	ሻ	^	∱ }	
Traffic Volume (vph)	10	32	377	846	
Future Volume (vph)	10	32	377	846	
Turn Type	Prot	Perm	NA	NA	
Protected Phases	4		2	6	
Permitted Phases		2			
Detector Phase	4	2	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	
Minimum Split (s)	24.5	24.5	24.5	24.5	
Total Split (s)	30.0	60.0	60.0	60.0	
Total Split (%)	33.3%	66.7%	66.7%	66.7%	
Yellow Time (s)	4.5	4.5	4.5	4.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.5	6.5	6.5	6.5	
Lead/Lag	0.5	0.5	0.5	0.5	
Lead-Lag Optimize?					
Recall Mode	None	C-Max	C-Max	C-Max	
	None				
Act Effet Green (s)	7.1	73.6	73.6	73.6	
Actuated g/C Ratio	0.08	0.82	0.82	0.82	
v/c Ratio	0.40	0.10	0.14	0.32	
Control Delay	21.8	3.4	2.6	3.1	
Queue Delay	0.0	0.0	0.0	0.0	
Total Delay	21.8	3.4	2.6	3.1	
LOS	С	Α	Α	Α	
Approach Delay	21.8		2.6	3.1	
Approach LOS	С		А	А	
Intersection Summary					
Cycle Length: 90					
Actuated Cycle Length: 90)				
Offset: 0 (0%), Referenced	d to phase 2	2:NBTL ar	nd 6:SBT	Start of	Green
Natural Cycle: 50					
Control Type: Actuated-Co	ordinated				
Maximum v/c Ratio: 0.40					
Intersection Signal Delay:	3.9			lı	ntersection LOS: A
Intersection Capacity Utiliz		6			CU Level of Service A
Analysis Period (min) 15		-			
Splits and Phases: 1: P	ecos St & S	herrelwo	nd Dr		
	5503 J. R. J	TICH CIWU	54 DI)
Ø2 (R)					Ø4
60 S					30 s
▼ Ø6 (R)					
60 s					

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Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥		ሻ	† †	†	
Traffic Volume (veh/h)	10	45	32	377	846	23
Future Volume (veh/h)	10	45	32	377	846	23
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00		· ·	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	1.00	1.00	No	No	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	56	48	410	881	36
Peak Hour Factor	0.63	0.80	0.67	0.92	0.96	0.64
Percent Heavy Veh, %	0.03	0.00	2	2	2	2
Cap, veh/h	20	71	525	2837	2778	114
Arrive On Green	0.06	0.06	0.80	0.80	0.80	0.80
	357	1249	609	3647	3573	142
Sat Flow, veh/h						
Grp Volume(v), veh/h	73	0	48	410	450	467
Grp Sat Flow(s), veh/h/ln	1628	0	609	1777	1777	1845
Q Serve(g_s), s	4.0	0.0	2.1	2.4	6.2	6.2
Cycle Q Clear(g_c), s	4.0	0.0	8.2	2.4	6.2	6.2
Prop In Lane	0.22	0.77	1.00			0.08
Lane Grp Cap(c), veh/h	93	0	525	2837	1419	1473
V/C Ratio(X)	0.78	0.00	0.09	0.14	0.32	0.32
Avail Cap(c_a), veh/h	425	0	525	2837	1419	1473
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.9	0.0	3.6	2.1	2.4	2.4
Incr Delay (d2), s/veh	13.4	0.0	0.3	0.1	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.2	0.5	1.4	1.4
Unsig. Movement Delay, s/vel						
LnGrp Delay(d),s/veh	55.2	0.0	3.9	2.2	3.0	3.0
LnGrp LOS	E	A	A	A	A	A
Approach Vol, veh/h	73	, , , , , , , , , , , , , , , , , , ,		458	917	
Approach Delay, s/veh	55.2			2.4	3.0	
Approach LOS	55.Z F			Z.4 A	3.0 A	
				Α	A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		78.4		11.6		78.4
Change Period (Y+Rc), s		6.5		6.5		6.5
Max Green Setting (Gmax), s		53.5		23.5		53.5
Max Q Clear Time (q_c+l1), s		10.2		6.0		8.2
Green Ext Time (p_c), s		3.5		0.2		6.8
Intersection Summary						
HCM 6th Ctrl Delay			5.4			
HCM 6th LOS						
			Α			
Notes						

User approved volume balancing among the lanes for turning movement.

Timings 1: Pecos St & Sherrelwood Dr

	•	4	†	ļ	
Lane Group	EBL	NBL	NBT	SBT	
Lane Configurations	¥	ሻ	^	∱ }	
Traffic Volume (vph)	22	37	1165	610	
Future Volume (vph)	22	37	1165	610	
Turn Type	Prot	Perm	NA	NA	
Protected Phases	4		2	6	
Permitted Phases		2			
Detector Phase	4	2	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	
Minimum Split (s)	24.5	24.5	24.5	24.5	
Total Split (s)	28.0	92.0	92.0	92.0	
Total Split (%)	23.3%	76.7%	76.7%	76.7%	
Yellow Time (s)	4.5	4.5	4.5	4.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.5	6.5	6.5	6.5	
	0.3	0.0	0.3	0.3	
Lead/Lag					
Lead-Lag Optimize?	None	C May	C May	C May	
Recall Mode	None	C-Max	C-Max	C-Max	
Act Effct Green (s)	7.7	103.0	103.0	103.0	
Actuated g/C Ratio	0.06	0.86	0.86	0.86	
v/c Ratio	0.39	0.07	0.44	0.22	
Control Delay	41.7	2.5	3.2	2.2	
Queue Delay	0.0	0.0	0.0	0.0	
Total Delay	41.7	2.5	3.2	2.2	
LOS	D	Α	Α	Α	
Approach Delay	41.7		3.2	2.2	
Approach LOS	D		Α	Α	
Intersection Summary					
Cycle Length: 120					
Actuated Cycle Length: 120)				
Offset: 0 (0%), Referenced		:NBTL ar	nd 6:SBT	Start of	Green
Natural Cycle: 60					
Control Type: Actuated-Coo	ordinated				
Maximum v/c Ratio: 0.44					
Intersection Signal Delay: 3	8 8			lr	ntersection LOS: A
Intersection Capacity Utiliza		<u></u>			CU Level of Service A
Analysis Period (min) 15	alion 47.27	U		11	50 Level of Scivice A
Analysis renou (min) 13					
Splits and Phases: 1: Pe	cos St & S	herrelwo	od Dr		
1 Ø2 (R)					→ _{Ø4}
92 s					28 s
∮ ∮ Ø6 (R)					

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Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥		*	^	†	
Traffic Volume (veh/h)	22	16	37	1165	610	11
Future Volume (veh/h)	22	16	37	1165	610	11
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	1.00	1.00	No	No	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	24	44	1339	635	24
Peak Hour Factor	0.79	0.67	0.84	0.87	0.96	0.46
Percent Heavy Veh, %		0.07	2	2	0.90	0.40
	0					
Cap, veh/h Arrive On Green	36	31	694	3026	2973	112
	0.04	0.04	0.85	0.85	0.85	0.85
Sat Flow, veh/h	892	764	775	3647	3585	132
Grp Volume(v), veh/h	53	0	44	1339	323	336
Grp Sat Flow(s), veh/h/ln	1688	0	775	1777	1777	1847
Q Serve(g_s), s	3.7	0.0	1.3	10.8	4.0	4.0
Cycle Q Clear(g_c), s	3.7	0.0	5.3	10.8	4.0	4.0
Prop In Lane	0.53	0.45	1.00			0.07
Lane Grp Cap(c), veh/h	68	0	694	3026	1513	1572
V/C Ratio(X)	0.78	0.00	0.06	0.44	0.21	0.21
Avail Cap(c_a), veh/h	302	0	694	3026	1513	1572
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.1	0.0	2.1	2.1	1.6	1.6
Incr Delay (d2), s/veh	17.4	0.0	0.2	0.5	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.2	2.2	0.9	0.0
Unsig. Movement Delay, s/vel		0.0	0.2	۷.۷	0.7	0.7
LnGrp Delay(d),s/veh	74.4	0.0	2.3	2.6	1.9	1.9
LnGrp LOS	74.4 E					
		A	A	1202	/F0	A
Approach Vol, veh/h	53			1383	659	
Approach Delay, s/veh	74.4			2.6	1.9	
Approach LOS	E			Α	А	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		108.7		11.3		108.7
Change Period (Y+Rc), s		6.5		6.5		6.5
Max Green Setting (Gmax), s		85.5		21.5		85.5
Max Q Clear Time (g_c+l1), s		12.8		5.7		6.0
Green Ext Time (p_c), s		15.5		0.1		4.4
		10.0		0.1		4.4
Intersection Summary						
HCM 6th Ctrl Delay			4.2			
HCM 6th LOS			Α			
Natas						
Notes						

User approved volume balancing among the lanes for turning movement.

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Lane Group	EBT	WBT	NBL	NBT	SBL	SBT	Ø3	Ø7	
Lane Configurations	4	4	*	ħβ	7	∱ ∱			
Traffic Volume (vph)	0	0	32	382	3	847			
Future Volume (vph)	0	0	32	382	3	847			
Turn Type	NA	NA	Perm	NA	Perm	NA			
Protected Phases	4	8		2		6	3	7	
Permitted Phases			2		6				
Detector Phase	4	8	2	2	6	6			
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	24.5	22.5	24.5	24.5	24.5	24.5	9.5	24.5	
Total Split (s)	37.5	22.5	43.0	43.0	43.0	43.0	9.5	24.5	
Total Split (%)	41.7%	25.0%	47.8%	47.8%	47.8%	47.8%	11%	27%	
Yellow Time (s)	4.5	3.5	4.5	4.5	4.5	4.5	3.5	4.5	
All-Red Time (s)	2.0	1.0	2.0	2.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	6.5	4.5	6.5	6.5	6.5	6.5			
Lead/Lag	Lag	Lag					Lead	Lead	
Lead-Lag Optimize?	Yes	Yes					Yes	Yes	
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	None	None	
Act Effct Green (s)	0.0	0.0	68.2	68.2	68.2	68.2			
Actuated g/C Ratio	0.00	0.00	0.76	0.76	0.76	0.76			
v/c Ratio	0.60	0.11	0.11	0.16	0.00	0.34			
Control Delay	23.1	1.1	10.0	6.7	10.3	7.9			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	23.1	1.1	10.0	6.7	10.3	7.9			
LOS	С	Α	Α	Α	В	Α			
Approach Delay	23.1	1.1		7.1		7.9			
Approach LOS	С	Α		Α		Α			
Intersection Summary									

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

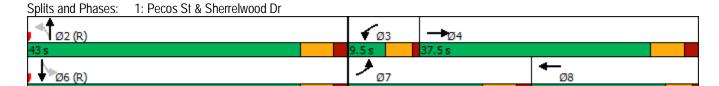
Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 8.3 Intersection LOS: A Intersection Capacity Utilization 41.6% ICU Level of Service A

Analysis Period (min) 15



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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			44		Ţ	∱ }		*	∱ ∱	
Traffic Volume (veh/h)	10	0	45	11	0	9	32	382	3	3	847	23
Future Volume (veh/h)	10	0	45	11	0	9	32	382	3	3	847	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	0	56	12	0	10	48	415	3	3	882	36
Peak Hour Factor	0.63	0.92	0.80	0.92	0.92	0.92	0.67	0.92	0.92	0.92	0.96	0.64
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	0	83	0	0	83	528	2905	21	833	2795	114
Arrive On Green	0.00	0.00	0.05	0.00	0.00	0.05	0.80	0.80	0.80	0.80	0.80	0.80
Sat Flow, veh/h	0	0	1585	0	0	1585	609	3616	26	969	3480	142
Grp Volume(v), veh/h	0	0	56	0	0	10	48	204	214	3	450	468
Grp Sat Flow(s), veh/h/ln	0	0	1585	0	0	1585	609	1777	1866	969	1777	1845
Q Serve(g_s), s	0.0	0.0	3.1	0.0	0.0	0.5	2.0	2.3	2.3	0.1	6.0	6.0
Cycle Q Clear(g_c), s	0.0	0.0	3.1	0.0	0.0	0.5	8.0	2.3	2.3	2.4	6.0	6.0
Prop In Lane	0.00	0.0	1.00	0.00	0.0	1.00	1.00	2.0	0.01	1.00	0.0	0.08
Lane Grp Cap(c), veh/h	0	0	83	0	0	83	528	1427	1499	833	1427	1482
V/C Ratio(X)	0.00	0.00	0.68	0.00	0.00	0.12	0.09	0.14	0.14	0.00	0.32	0.32
Avail Cap(c_a), veh/h	0	0	546	0	0	317	528	1427	1499	833	1427	1482
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	41.9	0.0	0.0	40.7	3.4	2.0	2.0	2.2	2.3	2.3
Incr Delay (d2), s/veh	0.0	0.0	9.3	0.0	0.0	0.6	0.3	0.2	0.2	0.0	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.4	0.0	0.0	0.2	0.2	0.5	0.5	0.0	1.3	1.4
Unsig. Movement Delay, s/vel		0.0		0.0	0.0	0.2	0.2	0.0	0.0	0.0		
LnGrp Delay(d),s/veh	0.0	0.0	51.2	0.0	0.0	41.3	3.7	2.2	2.2	2.2	2.9	2.9
LnGrp LOS	A	A	D	A	A	D	A	A	A	A	A	A
Approach Vol, veh/h		56			10			466		, , , , , , , , , , , , , , , , , , ,	921	
Approach Vol, ven/ii Approach Delay, s/veh		51.2			41.3			2.3			2.9	
Approach LOS		D D			41.3 D			Α.3			Α.7	
					D						Л	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		78.8	0.0	11.2		78.8	0.0	11.2				
Change Period (Y+Rc), s		6.5	4.5	6.5		6.5	6.5	* 6.5				
Max Green Setting (Gmax), s		36.5	5.0	31.0		36.5	18.0	* 18				
Max Q Clear Time (g_c+l1), s		10.0	0.0	5.1		8.0	0.0	2.5				
Green Ext Time (p_c), s		2.9	0.0	0.3		6.4	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			4.8									
HCM 6th LOS			Α									
Notes												

^{*} HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

	-	←	4	†	>	ļ			
Lane Group	EBT	WBT	NBL	NBT	SBL	SBT	Ø3	Ø7	
Lane Configurations	4	4	Ţ	∱ }	Ĭ	∱ }			
Traffic Volume (vph)	0	0	37	1168	9	615			
Future Volume (vph)	0	0	37	1168	9	615			
Turn Type	NA	NA	Perm	NA	Perm	NA			
Protected Phases	4	8		2		6	3	7	
Permitted Phases			2		6				
Detector Phase	4	8	2	2	6	6			
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	24.5	22.5	24.5	24.5	24.5	24.5	9.5	9.5	
Total Split (s)	24.5	24.5	86.0	86.0	86.0	86.0	9.5	9.5	
Total Split (%)	20.4%	20.4%	71.7%	71.7%	71.7%	71.7%	8%	8%	
Yellow Time (s)	4.5	3.5	4.5	4.5	4.5	4.5	3.5	3.5	
All-Red Time (s)	2.0	1.0	2.0	2.0	2.0	2.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	6.5	4.5	6.5	6.5	6.5	6.5			
Lead/Lag	Lag	Lag					Lead	Lead	
Lead-Lag Optimize?	Yes	Yes					Yes	Yes	
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	None	None	
Act Effct Green (s)	0.0	0.0	100.8	100.8	100.8	100.8			
Actuated g/C Ratio	0.00	0.00	0.84	0.84	0.84	0.84			
v/c Ratio	0.60	0.14	0.09	0.43	0.03	0.22			
Control Delay	29.8	3.2	4.3	4.7	4.8	3.5			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	29.8	3.2	4.3	4.7	4.8	3.5			
LOS	С	Α	Α	Α	Α	Α			
Approach Delay	29.8	3.3		4.7		3.5			
Approach LOS	С	Α		Α		А			
Intersection Summary									
Cyclo Longth: 120									

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 65

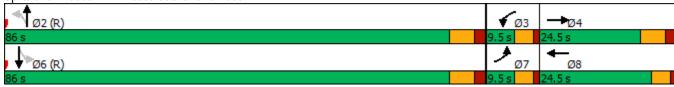
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 5.0 Intersection LOS: A Intersection Capacity Utilization 47.7% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: Pecos St & Sherrelwood Dr



	۶	→	•	•	•	•	4	†	/	/	ļ	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		7	ተ ኈ		7	∱ ∱	
Traffic Volume (veh/h)	22	0	16	7	0	5	37	1168	12	9	615	11
Future Volume (veh/h)	22	0	16	7	0	5	37	1168	12	9	615	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	0	20	8	0	5	55	1270	13	10	641	17
Peak Hour Factor	0.63	0.92	0.80	0.92	0.92	0.92	0.67	0.92	0.92	0.92	0.96	0.64
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	0	57	0	0	57	699	3083	32	395	3026	80
Arrive On Green	0.00	0.00	0.04	0.00	0.00	0.04	0.86	0.86	0.86	0.86	0.86	0.86
Sat Flow, veh/h	0	0	1585	0	0	1585	776	3604	37	431	3537	94
Grp Volume(v), veh/h	0	0	20	0	0	5	55	626	657	10	322	336
Grp Sat Flow(s), veh/h/ln	0	0	1585	0	0	1585	776	1777	1864	431	1777	1853
Q Serve(g_s), s	0.0	0.0	1.5	0.0	0.0	0.4	1.6	9.4	9.4	0.6	3.8	3.8
Cycle Q Clear(q_c), s	0.0	0.0	1.5	0.0	0.0	0.4	5.5	9.4	9.4	10.1	3.8	3.8
Prop In Lane	0.00		1.00	0.00		1.00	1.00		0.02	1.00		0.05
Lane Grp Cap(c), veh/h	0	0	57	0	0	57	699	1520	1595	395	1520	1586
V/C Ratio(X)	0.00	0.00	0.35	0.00	0.00	0.09	0.08	0.41	0.41	0.03	0.21	0.21
Avail Cap(c_a), veh/h	0	0	238	0	0	264	699	1520	1595	395	1520	1586
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	56.5	0.0	0.0	55.9	2.0	1.9	1.9	3.1	1.5	1.5
Incr Delay (d2), s/veh	0.0	0.0	3.6	0.0	0.0	0.7	0.2	0.8	0.8	0.1	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.7	0.0	0.0	0.2	0.2	2.0	2.1	0.1	0.8	0.8
Unsig. Movement Delay, s/veh		0.0	0	0.0	0.0	0.2	0.2	2.0		0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	60.1	0.0	0.0	56.6	2.2	2.8	2.7	3.2	1.8	1.8
LnGrp LOS	A	A	E	A	A	E	A	A	Α	A	A	A
Approach Vol, veh/h		20			5			1338			668	
Approach Delay, s/veh		60.1			56.6			2.7			1.9	
Approach LOS		E			50.0 E			Α			Α	
			_		L		_				Λ	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		109.2	0.0	10.8		109.2	0.0	10.8				
Change Period (Y+Rc), s		6.5	4.5	6.5		6.5	4.5	* 6.5				
Max Green Setting (Gmax), s		79.5	5.0	18.0		79.5	5.0	* 20				
Max Q Clear Time (g_c+I1), s		11.4	0.0	3.5		12.1	0.0	2.4				
Green Ext Time (p_c), s		12.8	0.0	0.0		4.6	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			3.1									
HCM 6th LOS			Α									
Notes												

^{*} HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings 1: Pecos St & Sherrelwood Dr

	٠	4	†	ļ			
Lane Group	EBL	NBL	NBT	SBT			
Lane Configurations	W	ሻ	^	∱ 1≽			
Traffic Volume (vph)	11	35	412	926			
Future Volume (vph)	11	35	412	926			
Turn Type	Prot	Perm	NA	NA			
Protected Phases	4	1 01111	2	6			
Permitted Phases	•	2	_				
Detector Phase	4	2	2	6			
Switch Phase	•	_	_				
Minimum Initial (s)	5.0	5.0	5.0	5.0			
Viinimum Split (s)	24.5	24.5	24.5	24.5			
Fotal Split (s)	29.0	61.0	61.0	61.0			
Fotal Split (%)	32.2%	67.8%	67.8%	67.8%			
Yellow Time (s)	32.2% 4.5	4.5	4.5	4.5			
All-Red Time (s)	2.0	2.0	2.0	2.0			
			0.0				
Lost Time Adjust (s)	0.0	0.0		0.0			
Total Lost Time (s)	6.5	6.5	6.5	6.5			
Lead/Lag							
Lead-Lag Optimize?	N.I.	0.14	0.14	0.14			
Recall Mode	None	C-Max	C-Max	C-Max			
Act Effct Green (s)	6.9	73.8	73.8	73.8			
Actuated g/C Ratio	0.08	0.82	0.82	0.82			
//c Ratio	0.38	0.09	0.15	0.34			
Control Delay	20.9	3.3	2.5	3.2			
Queue Delay	0.0	0.0	0.0	0.0			
Total Delay	20.9	3.3	2.5	3.2			
_OS	С	Α	Α	Α			
Approach Delay	20.9		2.6	3.2			
Approach LOS	С		А	Α			
ntersection Summary							
Cycle Length: 90							
Actuated Cycle Length: 90							
Offset: 0 (0%), Reference	d to phase 2	2:NBTL ar	nd 6:SBT,	Start of	Green		
Natural Cycle: 50							
Control Type: Actuated-Co	oordinated						
Maximum v/c Ratio: 0.38							
ntersection Signal Delay:	3.8			lı	ntersection LOS: A		
ntersection Capacity Utiliz	zation 44.1%	6		[(CU Level of Service A		
Analysis Period (min) 15							
Splits and Phases: 1: P	ecos St & S	herrelwo	od Dr				
-4						*	
Ø2 (R)						Ø4	
61s						29 s	
(% (n)						1	
▼ Ø6 (R)						-	

	•	•	4	†	ļ	4
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		ሻ	^	†	
Traffic Volume (veh/h)	11	50	35	412	926	25
Future Volume (veh/h)	11	50	35	412	926	25
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	- U	•	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	1.00	1.00	No	No	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	54	38	448	965	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.96	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	15	69	494	2854	2835	79
Arrive On Green	0.05	0.05	0.80	0.80	0.80	0.80
Sat Flow, veh/h	290	1306	568	3647	3624	99
Grp Volume(v), veh/h	67	0	38	448	486	506
Grp Sat Flow(s), veh/h/ln	1621	0	568	1777	1777	1853
Q Serve(g_s), s	3.7	0.0	1.7	2.6	6.7	6.7
Cycle Q Clear(g_c), s	3.7	0.0	8.4	2.6	6.7	6.7
Prop In Lane	0.18	0.81	1.00			0.05
Lane Grp Cap(c), veh/h	85	0	494	2854	1427	1488
V/C Ratio(X)	0.79	0.00	0.08	0.16	0.34	0.34
Avail Cap(c_a), veh/h	405	0.00	494	2854	1427	1488
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
	42.1	0.00	3.5	2.0	2.4	2.4
Uniform Delay (d), s/veh						
Incr Delay (d2), s/veh	14.7	0.0	0.3	0.1	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.2	0.5	1.5	1.5
Unsig. Movement Delay, s/vel						
LnGrp Delay(d),s/veh	56.9	0.0	3.8	2.1	3.0	3.0
LnGrp LOS	E	Α	A	A	Α	A
Approach Vol, veh/h	67			486	992	
Approach Delay, s/veh	56.9			2.2	3.0	
Approach LOS	Е			А	Α	
		2				4
Timer - Assigned Phs		2 70.0		4		70.0
Phs Duration (G+Y+Rc), s		78.8		11.2		78.8
Change Period (Y+Rc), s		6.5		6.5		6.5
Max Green Setting (Gmax), s		54.5		22.5		54.5
Max Q Clear Time (g_c+l1), s		10.4		5.7		8.7
Green Ext Time (p_c), s		3.7		0.1		7.6
Intersection Summary						
HCM 6th Ctrl Delay			5.1			
HCM 6th LOS			J. 1			
			Α.			
Notes						

User approved volume balancing among the lanes for turning movement.

Timings 1: Pecos St & Sherrelwood Dr

	•	4	†	ļ	
Lane Group	EBL	NBL	NBT	SBT	
Lane Configurations	¥	ሻ	^	∱ }	
Traffic Volume (vph)	24	41	1274	667	
Future Volume (vph)	24	41	1274	667	
Turn Type	Prot	Perm	NA	NA	
Protected Phases	4		2	6	
Permitted Phases		2			
Detector Phase	4	2	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	
Minimum Split (s)	24.5	24.5	24.5	24.5	
Total Split (s)	27.0	93.0	93.0	93.0	
Total Split (%)	22.5%	77.5%	77.5%	77.5%	
Yellow Time (s)	4.5	4.5	4.5	4.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.5	6.5	6.5	6.5	
Lead/Lag	0.5	0.5	0.5	0.5	
Lead-Lag Optimize?					
Recall Mode	None	C-Max	C-Max	C-Max	
Act Effct Green (s)	7.6	103.1	103.1	103.1	
Actuated g/C Ratio	0.06	0.86	0.86	0.86	
v/c Ratio	0.00	0.00	0.46	0.00	
Control Delay	42.5	2.5	3.2	2.3	
Queue Delay	0.0	0.0	0.0	0.0	
•	42.5	2.5	3.2	2.3	
Total Delay LOS	42.5 D	2.5 A	3.2 A	2.3 A	
	42.5	А	3.2		
Approach LOS				2.3	
Approach LOS	D		А	А	
Intersection Summary					
Cycle Length: 120					
Actuated Cycle Length: 120					
Offset: 0 (0%), Referenced	to phase 2	2:NBTL ar	nd 6:SBT	Start of	Green
Natural Cycle: 60					
Control Type: Actuated-Coo	ordinated				
Maximum v/c Ratio: 0.46					
Intersection Signal Delay: 3					ntersection LOS: A
Intersection Capacity Utiliza	ation 50.29	6		Į(CU Level of Service A
Analysis Period (min) 15					
Splits and Phases: 1: Pe	ecos St & S	herrelwo	od Dr		
+					≯ _{Ø4}
Ø2 (R)					27 s
					273
▼ Ø6 (R)					

	۶	•	4	†	ļ	4
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥		ሻ	^	†	
Traffic Volume (veh/h)	24	18	41	1274	667	12
Future Volume (veh/h)	24	18	41	1274	667	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	U	· ·	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	1.00	1.00	No	No	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	20	45	1385	695	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.96	0.92
Percent Heavy Veh, %	0.92	0.92	0.92	0.92	0.90	0.92
	33	26	668			57
Cap, veh/h Arrive On Green			0.86	3043 0.86	3055	0.86
	0.04	0.04			0.86	
Sat Flow, veh/h	937	721	741	3647	3662	67
Grp Volume(v), veh/h	47	0	45	1385	346	362
Grp Sat Flow(s), veh/h/ln	1694	0	741	1777	1777	1858
Q Serve(g_s), s	3.3	0.0	1.4	11.0	4.2	4.2
Cycle Q Clear(g_c), s	3.3	0.0	5.6	11.0	4.2	4.2
Prop In Lane	0.55	0.43	1.00			0.04
Lane Grp Cap(c), veh/h	60	0	668	3043	1521	1591
V/C Ratio(X)	0.78	0.00	0.07	0.46	0.23	0.23
Avail Cap(c_a), veh/h	289	0	668	3043	1521	1591
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.4	0.0	2.0	2.0	1.5	1.5
Incr Delay (d2), s/veh	19.5	0.0	0.2	0.5	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.2	2.1	0.9	0.9
Unsig. Movement Delay, s/veh		0.0	0.2	۷.1	0.7	0.7
LnGrp Delay(d),s/veh	76.9	0.0	2.2	2.5	1.9	1.9
LnGrp LOS	70.9 E	Α	2.2 A	2.5 A	1.9 A	1.9 A
Approach Vol, veh/h	47			1430	708	
Approach Delay, s/veh	76.9 F			2.5	1.9	
Approach LOS	E			А	Α	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		109.2		10.8		109.2
Change Period (Y+Rc), s		6.5		6.5		6.5
Max Green Setting (Gmax), s		86.5		20.5		86.5
Max Q Clear Time (g_c+l1), s		13.0		5.3		6.2
Green Ext Time (p_c), s		16.6		0.1		4.9
		10.0		0.1		7.7
Intersection Summary						
HCM 6th Ctrl Delay			3.9			
HCM 6th LOS			Α			
Notes						

User approved volume balancing among the lanes for turning movement.

	→	•	4	†	>	ļ			
Lane Group	EBT	WBT	NBL	NBT	SBL	SBT	Ø3	Ø7	
Lane Configurations	4	4	ነ ነ	ተኈ	ሻ	∱ ⊅			
Traffic Volume (vph)	0	0	35	417	3	927			
Future Volume (vph)	0	0	35	417	3	927			
Turn Type	NA	NA	Perm	NA	Perm	NA			
Protected Phases	4	8		2		6	3	7	
Permitted Phases			2		6				
Detector Phase	4	8	2	2	6	6			
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	24.5	22.5	24.5	24.5	24.5	24.5	9.5	24.5	
Total Split (s)	37.5	22.5	43.0	43.0	43.0	43.0	9.5	24.5	
Total Split (%)	41.7%	25.0%	47.8%	47.8%	47.8%	47.8%	11%	27%	
Yellow Time (s)	4.5	3.5	4.5	4.5	4.5	4.5	3.5	4.5	
All-Red Time (s)	2.0	1.0	2.0	2.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	6.5	4.5	6.5	6.5	6.5	6.5			
Lead/Lag	Lag	Lag					Lead	Lead	
Lead-Lag Optimize?	Yes	Yes					Yes	Yes	
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	None	None	
Act Effct Green (s)	0.0	0.0	68.2	68.2	68.2	68.2			
Actuated g/C Ratio	0.00	0.00	0.76	0.76	0.76	0.76			
v/c Ratio	0.55	0.11	0.10	0.17	0.00	0.37			
Control Delay	18.5	1.1	10.1	6.8	10.3	8.1			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	18.5	1.1	10.1	6.8	10.3	8.1			
LOS	В	Α	В	Α	В	Α			
Approach Delay	18.5	1.1		7.0		8.2			
Approach LOS	В	А		Α		Α			
Intersection Summary									

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

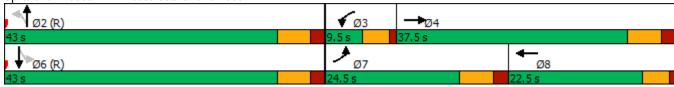
Maximum v/c Ratio: 0.55

Intersection Signal Delay: 8.1 Intersection Capacity Utilization 44.1%

Intersection LOS: A ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: Pecos St & Sherrelwood Dr



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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		7	ተ ኈ		ሻ	∱ ∱	
Traffic Volume (veh/h)	11	0	50	11	0	9	35	417	3	3	927	25
Future Volume (veh/h)	11	0	50	11	0	9	35	417	3	3	927	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	0	54	12	0	10	38	453	3	3	966	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.96	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	0	79	0	0	79	495	2916	19	808	2845	80
Arrive On Green	0.00	0.00	0.05	0.00	0.00	0.05	0.81	0.81	0.81	0.81	0.81	0.81
Sat Flow, veh/h	0	0	1585	0	0	1585	567	3619	24	935	3531	99
Grp Volume(v), veh/h	0	0	54	0	0	10	38	222	234	3	486	507
Grp Sat Flow(s), veh/h/ln	0	0	1585	0	0	1585	567	1777	1866	935	1777	1853
Q Serve(g_s), s	0.0	0.0	3.0	0.0	0.0	0.5	1.7	2.5	2.5	0.1	6.6	6.6
Cycle Q Clear(g_c), s	0.0	0.0	3.0	0.0	0.0	0.5	8.3	2.5	2.5	2.6	6.6	6.6
Prop In Lane	0.00		1.00	0.00		1.00	1.00		0.01	1.00		0.05
Lane Grp Cap(c), veh/h	0	0	79	0	0	79	495	1432	1504	808	1432	1493
V/C Ratio(X)	0.00	0.00	0.68	0.00	0.00	0.13	0.08	0.16	0.16	0.00	0.34	0.34
Avail Cap(c_a), veh/h	0	0	546	0	0	317	495	1432	1504	808	1432	1493
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	42.1	0.0	0.0	40.9	3.4	1.9	1.9	2.2	2.3	2.3
Incr Delay (d2), s/veh	0.0	0.0	10.0	0.0	0.0	0.7	0.3	0.2	0.2	0.0	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.4	0.0	0.0	0.2	0.2	0.5	0.6	0.0	1.4	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	52.0	0.0	0.0	41.6	3.8	2.2	2.2	2.2	3.0	3.0
LnGrp LOS	Α	Α	D	Α	Α	D	Α	Α	Α	Α	Α	Α
Approach Vol, veh/h		54			10			494			996	
Approach Delay, s/veh		52.0			41.6			2.3			3.0	
Approach LOS		D			D			A			A	
			2	4		,	7				, ,	
Timer - Assigned Phs Phys Duretien (C - V - Pa) - s		70.0	3	11.0		6 79.0	7	11.0				
Phs Duration (G+Y+Rc), s		79.0	0.0				0.0					
Change Period (Y+Rc), s Max Green Setting (Gmax), s		6.5	4.5	6.5		6.5	6.5	* 6.5 * 10				
Max Q Clear Time (g_c+l1), s		36.5	5.0 0.0	31.0		36.5	18.0 0.0	* 18 2.5				
		10.3		5.0		8.6						
Green Ext Time (p_c), s		3.1	0.0	0.3		7.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			4.7									
HCM 6th LOS			Α									
Notes												

^{*} HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

	-	←	4	†	>	↓			
Lane Group	EBT	WBT	NBL	NBT	SBL	SBT	Ø3	Ø7	
Lane Configurations	4	4	*	∱ î≽	7	∱ ∱			
Traffic Volume (vph)	0	0	41	1277	9	672			
Future Volume (vph)	0	0	41	1277	9	672			
Turn Type	NA	NA	Perm	NA	Perm	NA			
Protected Phases	4	8		2		6	3	7	
Permitted Phases			2		6				
Detector Phase	4	8	2	2	6	6			
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	24.5	22.5	24.5	24.5	24.5	24.5	9.5	9.5	
Total Split (s)	24.5	24.5	86.0	86.0	86.0	86.0	9.5	9.5	
Total Split (%)	20.4%	20.4%	71.7%	71.7%	71.7%	71.7%	8%	8%	
Yellow Time (s)	4.5	3.5	4.5	4.5	4.5	4.5	3.5	3.5	
All-Red Time (s)	2.0	1.0	2.0	2.0	2.0	2.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	6.5	4.5	6.5	6.5	6.5	6.5			
Lead/Lag	Lag	Lag					Lead	Lead	
Lead-Lag Optimize?	Yes	Yes					Yes	Yes	
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	None	None	
Act Effct Green (s)	0.0	0.0	100.8	100.8	100.8	100.8			
Actuated g/C Ratio	0.00	0.00	0.84	0.84	0.84	0.84			
v/c Ratio	0.51	0.14	0.08	0.47	0.04	0.24			
Control Delay	19.4	3.2	4.3	5.0	4.9	3.6			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	19.4	3.2	4.3	5.0	4.9	3.6			
LOS	В	Α	Α	Α	Α	Α			
Approach Delay	19.4	3.3		5.0		3.6			
Approach LOS	В	Α		Α		Α			
Intersection Summary									

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 70

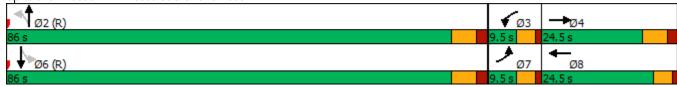
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.51

Intersection Signal Delay: 4.8 Intersection LOS: A Intersection Capacity Utilization 50.7% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: Pecos St & Sherrelwood Dr



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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			44		Ţ	∱ }		7	∱ β	
Traffic Volume (veh/h)	24	0	18	7	0	5	41	1277	12	9	672	12
Future Volume (veh/h)	24	0	18	7	0	5	41	1277	12	9	672	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	0	20	8	0	5	45	1388	13	10	700	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.96	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	0	54	0	0	54	667	3094	29	356	3061	57
Arrive On Green	0.00	0.00	0.03	0.00	0.00	0.03	0.86	0.86	0.86	0.86	0.86	0.86
Sat Flow, veh/h	0	0	1585	0	0	1585	737	3607	34	385	3569	66
Grp Volume(v), veh/h	0	0	20	0	0	5	45	683	718	10	348	365
Grp Sat Flow(s), veh/h/ln	0	0	1585	0	0	1585	737	1777	1864	385	1777	1858
Q Serve(g_s), s	0.0	0.0	1.5	0.0	0.0	0.4	1.4	10.7	10.7	0.7	4.2	4.2
Cycle Q Clear(g_c), s	0.0	0.0	1.5	0.0	0.0	0.4	5.6	10.7	10.7	11.4	4.2	4.2
Prop In Lane	0.00	0.0	1.00	0.00	0.0	1.00	1.00	10.7	0.02	1.00	1.2	0.04
Lane Grp Cap(c), veh/h	0	0	54	0	0	54	667	1524	1599	356	1524	1594
V/C Ratio(X)	0.00	0.00	0.37	0.00	0.00	0.09	0.07	0.45	0.45	0.03	0.23	0.23
Avail Cap(c_a), veh/h	0	0	238	0	0	264	667	1524	1599	356	1524	1594
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	56.7	0.0	0.0	56.2	2.0	2.0	2.0	3.3	1.5	1.5
Incr Delay (d2), s/veh	0.0	0.0	4.2	0.0	0.0	0.7	0.2	1.0	0.9	0.1	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.7	0.0	0.0	0.2	0.2	2.2	2.3	0.1	0.9	0.9
Unsig. Movement Delay, s/vel		0.0	01.7	0.0	0.0	0.2	0.2		2.0	0	0.7	0.7
LnGrp Delay(d),s/veh	0.0	0.0	60.9	0.0	0.0	56.9	2.2	2.9	2.9	3.4	1.9	1.8
LnGrp LOS	A	A	E	A	A	E	A	A	A	A	A	A
Approach Vol, veh/h		20			5			1446			723	
Approach Vol, ven/ii Approach Delay, s/veh		60.9			56.9			2.9			1.9	
Approach LOS		E			50.7 E			Α.7			Α	
											Л	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		109.4	0.0	10.6		109.4	0.0	10.6				
Change Period (Y+Rc), s		6.5	4.5	6.5		6.5	4.5	* 6.5				
Max Green Setting (Gmax), s		79.5	5.0	18.0		79.5	5.0	* 20				
Max Q Clear Time (g_c+l1), s		12.7	0.0	3.5		13.4	0.0	2.4				
Green Ext Time (p_c), s		15.0	0.0	0.0		5.1	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			3.2									
HCM 6th LOS			Α									
Notes												

^{*} HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection								
Int Delay, s/veh	0.3							
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	¥		ሻ	^	∱ }			
Traffic Vol, veh/h	9	13	1	396	886	5		
Future Vol, veh/h	9	13	1	396	886	5		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Stop	Stop	Free	Free	Free	Free		
RT Channelized	-	None	-	None	-	None		
Storage Length	0	-	0	-	_	-		
Veh in Median Storage		-	-	0	0	_		
Grade, %	0	_	_	0	0	_		
Peak Hour Factor	56	81	25	89	95	42		
Heavy Vehicles, %	2	2	2	2	2	2		
Mvmt Flow	16	16	4	445	933	12		
IVIVIIIL I IOW	10	10	4	443	733	12		
Major/Minor	Minora		Malar1		/olor)			
	Minor2		Major1		/lajor2	^		
Conflicting Flow All	1170	473	945	0	-	0		
Stage 1	939	-	-	-	-	-		
Stage 2	231	-	-	-	-	-		
Critical Hdwy	6.84	6.94	4.14	-	-	-		
Critical Hdwy Stg 1	5.84	-	-	-	-	-		
Critical Hdwy Stg 2	5.84	-	-	-	-	-		
Follow-up Hdwy	3.52	3.32	2.22	-	-	-		
Pot Cap-1 Maneuver	*479	*720	*1077	-	-	-		
Stage 1	*679	-	-	-	-	-		
Stage 2	*785	-	-	-	-	-		
Platoon blocked, %	1	1	1	-	-	-		
Mov Cap-1 Maneuver	*477	*720	*1077	-	-	-		
Mov Cap-2 Maneuver	*603	-	-	-	-	-		
Stage 1	*676	-	-	-	-	-		
Stage 2	*785	-	-	-	-	-		
Approach	EB		NB		SB			
HCM Control Delay, s	10.8		0.1		0			
•			0.1		U			
HCM LOS	В							
Minor Lane/Major Mvm	nt	NBL	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)		* 1077	-	656	-	-		
HCM Lane V/C Ratio		0.004	-	0.049	-	-		
HCM Control Delay (s)		8.4	-	10.8	-	-		
HCM Lane LOS		Α	-	В	-	-		
HCM 95th %tile Q(veh)	0	-	0.2	-	-		
Notes								
~: Volume exceeds cap	pacity	\$: D	elav ex	ceeds 3	00s	+: Com	nputation Not Defined	*: All major volume in platoon
. Volume execus ca	pacity	ψ. υ	ciay ch	occus J	003	1. 0011	ipatation Not Defined	. 7 iii major volame in platoon

ntersection								
Int Delay, s/veh	0.3							
Movement	EBL	EBR	NBL	NBT	SBT	SBR	ĺ	
Lane Configurations	¥	LDIN	NDL	^	↑	OBIN		
Traffic Vol, veh/h	10	8	12	1182	607	16		
Future Vol, veh/h	10	8	12	1182	607	16		
Conflicting Peds, #/hr	0	0	0	0	007	0		
Sign Control	Stop	Stop	Free	Free	Free	Free		
RT Channelized	310p -	None	-	None	-	None		
Storage Length	0	-	0	-	-	-		
Veh in Median Storage		-	-	0	0	-		
Grade, %	0	-	-	0	0	-		
Peak Hour Factor	63	40	75	87	97	67		
Heavy Vehicles, %	2	2	2	2	2	2		
Mvmt Flow	16	20	16	1359	626	24		
Major/Minor N	Minor2	N	Major1	N	/lajor2		ĺ	
Conflicting Flow All	1350	325	650	0	- najoiz	0		
		323	- 050	-				
Stage 1	638				-	-		
Stage 2	712	-	-	-	-	-		
Critical Hdwy	6.84	6.94	4.14	-	-	-		
Critical Hdwy Stg 1	5.84	-	-	-	-	-		
Critical Hdwy Stg 2	5.84	-	-	-	-	-		
Follow-up Hdwy	3.52	3.32	2.22	-	-	-		
Pot Cap-1 Maneuver	*221	*846	*1265	-	-	-		
Stage 1	*798	-	-	-	-	-		
Stage 2	*447	-	-	-	-	-		
Platoon blocked, %	1	1	1	-	-	-		
Mov Cap-1 Maneuver	*218		*1265	-	-	-		
Mov Cap-2 Maneuver	*402	-	-	_	_	_		
Stage 1	*788	_	_	_	_	_		
<u> </u>	*447			-	_	-		
Stage 2	447	-	-	-	-	-		
Approach	EB		NB		SB			
HCM Control Delay, s	11.8		0.1		0			
HCM LOS	В		0.1		U			
HOW EOS								
Minor Lane/Major Mvm	nt	NBL	NBT I	EBLn1	SBT	SBR		
Capacity (veh/h)		* 1265	-	568	-	-		
HCM Lane V/C Ratio		0.013	-	0.063	-	-		
HCM Control Delay (s))	7.9	_	11.8	-	_		
HCM Lane LOS		A	_	В	_	_		
HCM 95th %tile Q(veh))	0	_	0.2				
	'/	U		0.2				
Notes								
~: Volume exceeds cap	pacity	\$: D	elay ex	ceeds 3	00s	+: Com		putation Not Defined
	. ,		_					•

Intersection								
Int Delay, s/veh	0.3							
Movement	EBL	EBR	NBL	NBT	SBT	SBR		ļ
Lane Configurations	EBL W	LDK	NDL		↑	אמכ		
Traffic Vol, veh/h	T '	13	<u>។</u> 1	↑↑ 400	T № 895	5		
Future Vol, veh/h	9	13	1	400	895	5		
Conflicting Peds, #/hr	0	0	0	400	095	0		
Sign Control	Stop	Stop	Free	Free	Free	Free		
RT Channelized	Siup -	None	-	None	-	None		
Storage Length	0	None -	0	None -	-	None		
Veh in Median Storage			-	0	0			
Grade, %	0	-		0	0	-		
	56		- 2E	89		42		
Peak Hour Factor		81	25		95			
Heavy Vehicles, %	2	2	2	2	2	2		
Mvmt Flow	16	16	4	449	942	12		
Major/Minor	Minor2	N	/lajor1	Λ	/lajor2			J
Conflicting Flow All	1181	477	954	0	-	0		
Stage 1	948	-	-	-	-	-		
Stage 2	233	_	_	_	_	_		
Critical Hdwy	6.84	6.94	4.14	_	_	_		
Critical Hdwy Stg 1	5.84	0.74	7.17		_			
Critical Hdwy Stg 2	5.84	-	_		-			
Follow-up Hdwy	3.52	3.32	2.22			_		
Pot Cap-1 Maneuver	*468		*1077	-	-	-		
•	*679	720	1077	•	-	•		
Stage 1			-	-	-	-		
Stage 2	*784	- 1	1	-	-	-		
Platoon blocked, %	*4//	*720	*1077	-	-	-		
Mov Cap-1 Maneuver	*466		*1077	-	-	-		
Mov Cap-2 Maneuver	*600	-	-	-	-	-		
Stage 1	*676	-	-	-	-	-		
Stage 2	*784	-	-	-	-	-		
Approach	EB		NB		SB			
HCM Control Delay, s			0.1		0			
HCM LOS	В		0.1		U			
HOW LOS	ь							
Minor Lane/Major Mvn	nt	NBL	NBT I	EBLn1	SBT	SBR		
Capacity (veh/h)		* 1077		655				
HCM Lane V/C Ratio		0.004	_	0.049	-	-		
HCM Control Delay (s)	8.4	-	10.8	-			
HCM Lane LOS		A	_	В	_	_		
HCM 95th %tile Q(veh	1)	0	_	0.2	_	_		
	7	U		0.2				
Notes								
~: Volume exceeds ca	pacity	\$: De	elay ex	ceeds 3	00s	+: Com	putation Not Defined	*

ntersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	**	LDIX	ሻ	^	†	ODIT
Traffic Vol, veh/h	10	8	12	1194	613	16
Future Vol, veh/h	10	8	12	1194	613	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage,		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	63	40	75	87	97	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	20	16	1372	632	24
NA - ! /NA!	/!· ·· O		1-!1		4-!	
	/linor2		Major1		/lajor2	
Conflicting Flow All	1362	328	656	0	-	0
Stage 1	644	-	-	-	-	-
Stage 2	718	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	*216		*1265	-	-	-
Stage 1	*798	-	-	-	-	-
Stage 2	*444	-	-	-	-	-
Platoon blocked, %	1	1	1	-	-	-
Mov Cap-1 Maneuver	*214		*1265	-	-	-
Mov Cap-2 Maneuver	*399	-	-	-	-	-
Stage 1	*788	-	-	-	-	-
Stage 2	*444	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	11.8		0.1		0	
HCM LOS	В		0			
		NDI	NDT	EDL 4	ODT	000
Minor Lane/Major Mvmt		NBL	NRII	EBLn1	SBT	SBR
Capacity (veh/h)		* 1265	-	566	-	-
HCM Lane V/C Ratio		0.013	-	0.063	-	-
HCM Control Delay (s)		7.9	-	11.8	-	-
HCM Lane LOS		A	-	В	-	-
HCM 95th %tile Q(veh)		0	-	0.2	-	-
Notes						
~: Volume exceeds cap	acity	\$: D	elay ex	ceeds 3	00s	+: Com
		,, ,	, 0.11		-	

Intersection								
Int Delay, s/veh	0.3						•	
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	W			^	† \$			
Traffic Vol, veh/h	9	13	1	408	907	5		
Future Vol, veh/h	9	13	1	408	907	5		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Stop		Free	Free	Free	Free		
RT Channelized	-		-	None	-	None		
Storage Length	0	-	540	-	-	-		
Veh in Median Storage		-	-	0	0	-		
Grade, %	0	-	-	0	0	-		
Peak Hour Factor	56	81	25	89	95	42		
Heavy Vehicles, %	2	2	2	2	2	2		
Mvmt Flow	16	16	4	458	955	12		
Major/Minor	Minora		Molor1	N.	//olor)			
	Minor2		Major1		Major2			
Conflicting Flow All	1198	484	967	0	-	0		
Stage 1	961	-	-	-	-	-		
Stage 2	237	-	-	-	-	-		
Critical Hdwy	6.84	6.94	4.14	-	-	-		
Critical Hdwy Stg 1	5.84	-	-	-	-	-		
Critical Hdwy Stg 2	5.84	-	-	-	-	-		
Follow-up Hdwy	3.52	3.32	2.22	-	-	-		
Pot Cap-1 Maneuver	*484	*703	*1051	-	-	-		
Stage 1	*663	-	-	-	-	-		
Stage 2	*780	-	-	-	-	-		
Platoon blocked, %	1	1	1	-	-	-		
Mov Cap-1 Maneuver	*482	*703	*1051	-	-	-		
Mov Cap-2 Maneuver	*596	-	-	-	-	-		
Stage 1	*660	-	-	-	-	-		
Stage 2	*780	-	-	-	-	-		
Approach	EB		NB		SB			
HCM Control Delay, s	10.9		0.1		0			
HCM LOS			0.1		U			
HCIVI LU3	В							
Minor Lane/Major Mvm		NBL	NBT E	EBLn1	SBT	SBR		
Capacity (veh/h)		* 1051	-	645	-	-		
HCM Lane V/C Ratio		0.004	-	0.05	-	-		
HCM Control Delay (s)		8.4	-	10.9	-	-		
HCM Lane LOS		Α	-	В	-	-		
HCM 95th %tile Q(veh))	0	-	0.2	-	-		
Notes							j	
INDICO								
~: Volume exceeds cap	nacity	¢. D	elay exc	soods 2	$\Omega\Omega_{C}$	Cam	ì	putation Not Defined

				_		
0.3	.3					
EBL	3L	EBR	NBL	NBT	SBT	SBR
						0511
		8				16
						16
0		0	0	0	0	0
				Free	Free	Free
-			-	None	-	None
0		-	540	-	-	-
		-	-	0	0	-
		-	-			-
		40	75			67
						2
						24
				.070	011	
	_					
					/lajor2	
		334	668	0	-	0
		-	-	-	-	-
		-	-	-	-	-
		6.94	4.14	-	-	-
		-	-	-	-	-
		-	-	-	-	-
				-	-	-
*208	18	*846	1252	-	-	-
		-	-	-	-	-
*439	19	-	-	-	-	-
1	1	1	1	-	-	-
		*846	1252	-	-	-
*394	14	-	-	-	-	-
*788	38	-	-	-	-	-
*439	39	-	-	-	-	-
					SB	
ΓD	D		NID			
EB			NB			
11.9	.9		0.1		0	
	.9					
11.9	.9					
11.9 B	.9 B	NBL	0.1	EBLn1		SBR
11.9	.9 B		0.1 NBT E	EBLn1 561	0	SBR -
11.9 B	.9 B	1252	0.1 NBT E	561	0	
11.9 B	.9 B	1252 0.013	0.1 NBT E	561 0.064	SBT	-
11.9 B	.9 B	1252 0.013 7.9	0.1 NBT E	561 0.064 11.9	0 SBT - -	- - -
11.9 B	.9 B	1252 0.013 7.9 A	0.1 NBT E	561 0.064 11.9 B	SBT	-
11.9 B	.9 B	1252 0.013 7.9	0.1 NBT E	561 0.064 11.9	0 SBT - -	- - -
11.9 B	.9 B	1252 0.013 7.9 A 0	0.1 NBT E	561 0.064 11.9 B	SBT	- - -
	EB 11 11 Sto	EBL 10 10 0 Stop 0 8, # 2 0 63 2 16 Minor2 1383 656 727 6.84 5.84 5.84 5.84 5.84 5.84 5.84 798 *439 1 *205 *394 *788	EBL EBR 10 8 10 8 0 0 Stop Stop - None 0 63 40 2 2 16 20 Minor2 N 1383 334 656 727 6.84 6.94 5.84 5.84 5.84 3.52 3.32 *208 *846 *798 *439 1 1 *205 *846 *394 *788	EBL EBR NBL 10 8 12 10 8 12 0 0 0 0 Stop Stop Free - None - 0 - 540 2, # 2 63 40 75 2 2 2 2 16 20 16 Minor2 Major1 1383 334 668 656 727 6.84 6.94 4.14 5.84 5.84 5.84 5.84 5.84 5.84 5.84 4.352 3.32 2.22 *208 *846 1252 *798 *439 1 1 1 1 *205 *846 1252 *394 *788	EBL EBR NBL NBT Y Y Y 10 8 12 1209 0 0 0 0 0 Stop Stop Free Free Free - None - None - None 0 - 540 - - - - - - - - - - - -	EBL EBR NBL NBT SBT Y <th< td=""></th<>

ntersection						
Int Delay, s/veh	0.2		<u> </u>		·	
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		*	^	↑ ⊅	
Traffic Vol, veh/h	10	14	1	438	979	6
Future Vol, veh/h	10	14	1	438	979	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage,		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	95	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	15	1	476	1031	7
WWW. Tiow	•	10	•	170	1001	•
		-		-		
	/linor2		Major1		/lajor2	
Conflicting Flow All	1275		1038	0	-	0
Stage 1	1035	-	-	-	-	-
Stage 2	240	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	*472	*668	*1000	-	-	-
Stage 1	*631	-	-	-	-	-
Stage 2	*777	-	-	-	-	-
Platoon blocked, %	1	1	1	-	-	-
Mov Cap-1 Maneuver	*471	*668	*1000	-	-	-
Mov Cap-2 Maneuver	*575	-	-	-	-	-
Stage 1	*630	-	-	-	-	-
Stage 2	*777	-	-	-	-	-
J						
Δ	- FD		ND		CD.	
Approach	EB		NB		SB	
HCM Control Delay, s	11		0		0	
HCM LOS	В					
Minor Lane/Major Mvmi	t	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)		* 1000	- 14011	626		JDIT
HCM Lane V/C Ratio		0.001	-	0.042	-	-
		8.6	-	11	-	-
HCM Long LOS			-		-	-
HCM DEth % tile O(vob)		A	-	B	-	-
HCM 95th %tile Q(veh)		0	-	0.1	-	-
Notes						
~: Volume exceeds cap	acity	\$: D	elay ex	ceeds 3	00s	+: Com
			,			

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		ሻ	^	†	02.1
Traffic Vol, veh/h	11	9	13	1306	671	18
Future Vol, veh/h	11	9	13	1306	671	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage		-	_	0	0	-
Grade, %	0		-	0	0	_
Peak Hour Factor	92	92	92	92	97	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	10	14	1420	692	20
IVIVIIII I IOW	12	10	17	1420	072	20
Major/Minor N	/linor2		Major1	N	Najor2	
Conflicting Flow All	1440	356	712	0	-	0
Stage 1	702	-	-	-	-	-
Stage 2	738	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	*198	*820	*1227	-	-	-
Stage 1	*774	-	-	-	-	-
Stage 2	*434	-	-	-	-	-
Platoon blocked, %	1	1	1	-	-	-
Mov Cap-1 Maneuver	*196	*820	*1227	-	-	-
Mov Cap-2 Maneuver	*387	-	-	-	-	-
Stage 1	*765	-	-	-	-	-
Stage 2	*434	-	-	-	-	-
J						
			ND		C.D.	
Approach	EB		NB		SB	
HCM Control Delay, s	12.4		0.1		0	
HCM LOS	В					
Minor Lane/Major Mvm	t	NBL	NRT I	EBLn1	SBT	SBR
Capacity (veh/h)		* 1227	-	508	-	-
HCM Lane V/C Ratio		0.012		0.043	-	-
HCM Control Delay (s)		8		12.4		-
HCM Lane LOS					-	
HCM 95th %tile Q(veh)		A 0	-	0.1	-	-
now your %lile Q(ven)		U	-	U. I	-	-
Notes						
~: Volume exceeds cap	oacity	\$: D	elay ex	ceeds 3	00s	+: Com
	,					

Intersection								
Int Delay, s/veh	0.2							
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	¥	LDIT	ሻ	^	†	USIN		
Traffic Vol, veh/h	10	14	1	446	991	6		
Future Vol, veh/h	10	14	1	446	991	6		
Conflicting Peds, #/hr		0	0	0	0	0		
Sign Control	Stop	Stop	Free	Free	Free	Free		
RT Channelized	310p			None	-	None		
			540			None		
Storage Length	0	-		-	-	-		
Veh in Median Storage		-	-	0	0	-		
Grade, %	0	-	-	0	0	-		
Peak Hour Factor	92	92	92	92	95	92		
Heavy Vehicles, %	2	2	2	2	2	2		
Mvmt Flow	11	15	1	485	1043	7		
Major/Minor	Minor	N	Major1	N	Majora		l	
	Minor2		Major1		Major2			
Conflicting Flow All	1292	525	1050	0	-	0		
Stage 1	1047	-	-	-	-	-		
Stage 2	245	-	-	-	-	-		
Critical Hdwy	6.84	6.94	4.14	-	-	-		
Critical Hdwy Stg 1	5.84	-	-	-	-	-		
Critical Hdwy Stg 2	5.84	-	-	-	-	-		
Follow-up Hdwy	3.52	3.32	2.22	-	-	-		
Pot Cap-1 Maneuver	*454	*668	*1000	-	-	-		
Stage 1	*631	-	-	_	_	_		
Stage 2	*773	_	_	_	_	_		
Platoon blocked, %	1	1	1	_	_	_		
Mov Cap-1 Maneuver			*1000	-	-	-		
Mov Cap-2 Maneuver	*570	-	-	-	-	-		
Stage 1	*630	-	-	-	-	-		
Stage 2	*773	-	-	-	-	-		
Approach	EB		NB		SB		j	
HCM Control Delay, s			0		0			
HCM LOS	В							
Minor Lane/Major Mvr	nt	NBL	NBT I	EBLn1	SBT	SBR		
Capacity (veh/h)		* 1000	_	623		_	ĺ	
HCM Lane V/C Ratio		0.001		0.042				
	١				-	-		
HCM Long LOS)	8.6	-	11	-	-		
HCM Lane LOS		A	-	В	-	-		
HCM 95th %tile Q(veh	1)	0	-	0.1	-	-		
Notes								
Notes ~: Volume exceeds ca	nacity	\$. D.	elav ev	ceeds 3	inns	T. Com		putation Not Defined

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W	LDIX	NDL	↑ ↑	↑	JUIC
Traffic Vol, veh/h	11	9	13	1321	683	18
Future Vol, veh/h	11	9	13	1321	683	18
Conflicting Peds, #/hr	0	0	0	0	003	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	310p	None	-	None	-	None
Storage Length	0	-	540	-	_	-
Veh in Median Storage			-	0	0	_
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	97	92
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	12	10	14	1436	704	20
IVIVIIIL I IOW	12	10	14	1430	704	20
	Minor2		Major1		/lajor2	
Conflicting Flow All	1460	362	724	0	-	0
Stage 1	714	-	-	-	-	-
Stage 2	746	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	*191	*820	*1227	-	-	-
Stage 1	*774	-	-	-	-	-
Stage 2	*430	-	-	-	-	-
Platoon blocked, %	1	1	1	-	-	-
Mov Cap-1 Maneuver	*189	*820	*1227	-	-	-
Mov Cap-2 Maneuver	*383	-	-	-	-	-
Stage 1	*765	-	-	-	-	-
Stage 2	*430	-	-	-	-	-
J						
A	ΓD		ND		CD	
Approach	EB		NB		SB	
HCM Control Delay, s	12.5		0.1		0	
HCM LOS	В					
Minor Lane/Major Mvm	nt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)		* 1227	_	504		
HCM Lane V/C Ratio		0.012	_	0.043	_	_
HCM Control Delay (s)		8	_	12.5	_	_
HCM Lane LOS		A	_	12.3 B	_	_
HCM 95th %tile Q(veh)	0	_	0.1	-	-
	7	U		0.1		
Notes						
~: Volume exceeds ca	pacity	\$: D	elay ex	ceeds 3	00s	+: Com

Intersection								
Int Delay, s/veh	0.2							
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations	¥		ħβ		ሻ	^		
Traffic Vol, veh/h	20	5	404	6	1	919		
Future Vol, veh/h	20	5	404	6	1	919		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Stop	Stop	Free	Free	Free	Free		
RT Channelized	-	None	-	None	-	None		
Storage Length	0	-	-	-	540	-		
Veh in Median Storage	e, # 2	-	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	22	5	439	7	1	999		
Major/Minor I	Minor1		Major1	<u> </u>	Major2			
Conflicting Flow All	945	223	0	0	446	0		
Stage 1	443	-	-	-	-	-		
Stage 2	502	-	-	-	-	-		
Critical Hdwy	6.84	6.94	-	-	4.14	-		
Critical Hdwy Stg 1	5.84	-	-	-	-	-		
Critical Hdwy Stg 2	5.84	-	-	-	-	-		
Follow-up Hdwy	3.52	3.32	-	-	2.22	-		
Pot Cap-1 Maneuver	*662	780	-	-	1111	-		
Stage 1	*614	-	-	-	-	_		
Stage 2	*663	_	_	_	-	_		
Platoon blocked, %	1		_	_		_		
Mov Cap-1 Maneuver	*662	780	_	_	1111	_		
Mov Cap-2 Maneuver	-	-	_	_		_		
Stage 1	*614	_	_	_	_	_		
Stage 2	*662	_	_	_	_	_		
Oluge 2	002							
Annraach	MD		ND		CD			
Approach	WB		NB		SB			
HCM Control Delay, s	9.8		0		0			
HCM LOS	А							
Minor Lane/Major Mvm	nt	NBT	NBRV	VBLn1	SBL	SBT		
Capacity (veh/h)		-	-	780	1111	-		
HCM Lane V/C Ratio		-	-	0.035	0.001	-		
HCM Control Delay (s)		-	-	9.8	8.2	-		
HCM Lane LOS		-	-	Α	Α	-		
HCM 95th %tile Q(veh)	-	-	0.1	0	-		
Notes								
~: Volume exceeds ca	nacity	\$· D	elav ev	ceeds 3	2005	+. Con	putation Not Defined	*
. Volume exceeds ca	pacity	- ψ. D	ciay chi	occus J	1003	1. 0011	ipatation Not Defined	*.

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	¥#		↑ ↑		ሻ	^
Traffic Vol, veh/h	12	3	1218	21	5	628
Future Vol, veh/h	12	3	1218	21	5	628
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	_	None	-	None	-	None
Storage Length	0	-	-	-	540	-
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	13	3	1324	23	5	683
WWW. Flow	10		1021	20		000
		-		-		
	Minor1		Major1		Major2	
Conflicting Flow All	1688	674	0	0	1347	0
Stage 1	1336	-	-	-	-	-
Stage 2	352	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	*116	397	-	-	507	-
Stage 1	*210	-	-	-	-	-
Stage 2	*798	-	-	-	-	-
Platoon blocked, %	1		-	-		-
Mov Cap-1 Maneuver	*114	397	-	-	507	-
Mov Cap-2 Maneuver	*198	-	-	-	-	-
Stage 1	*210	-	-	-	-	-
Stage 2	*790	-	-	-	-	-
3						
A	WD		ND		CD	
Approach	WB		NB		SB	
HCM Control Delay, s			0		0.1	
HCM LOS	С					
Minor Lane/Major Mvn	nt	NBT	NRRV	VBLn1	SBL	SBT
Capacity (veh/h)		- 1401	- NDIW	220	507	
HCM Lane V/C Ratio		-	-	0.074		-
	١	-	-	22.7	12.2	
HCM Long LOS)	-	-			-
HCM Lane LOS	,)	-	-	C	В	-
HCM 95th %tile Q(veh	IJ	-	-	0.2	0	-
Notes						
~: Volume exceeds ca	pacity	\$: D	elay ex	ceeds 3	800s	+: Con
	, ,		,			

ntersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y	אפא	↑ ↑	אפא	JDL	^
Traffic Vol, veh/h	20	5	442	6	1 1	1004
Future Vol, veh/h	20	5	442	6	1	1004
Conflicting Peds, #/hr		0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	Stop -	None	-	None	-	None
Storage Length	0	None -	-	None -	540	None -
Veh in Median Storage		-	0	-	340	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
	22	5	480	7	1	1091
Mvmt Flow	22	5	480	1		1091
Major/Minor	Minor1	Ν	Major1	N	Major2	
Conflicting Flow All	1032	244	0	0	487	0
Stage 1	484	-	_	-	-	-
Stage 2	548	_	-	_		_
Critical Hdwy	6.84	6.94	-	_	4.14	_
Critical Hdwy Stg 1	5.84	-	_	_		_
Critical Hdwy Stg 2	5.84	_	_	_	_	_
Follow-up Hdwy	3.52	3.32	_	_	2.22	_
Pot Cap-1 Maneuver	*630	757	_		1072	
	*585	- 131		-	1072	
Stage 1	*631	-	-	_	-	- -
Stage 2 Platoon blocked, %		-		-	-	
	*420	757	-	<u>-</u>	1072	-
Mov Cap-1 Maneuver	*630	757	-	-	1072	-
Mov Cap-2 Maneuver	* = 0 =	-	-	-	-	-
Stage 1	*585	-	-	-	-	-
Stage 2	*630	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s			0		0	
HCM LOS	Α		U		U	
TICIVI LOS						
Minor Lane/Major Mvr	nt	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)		-	-	757	1072	-
HCM Lane V/C Ratio		-	-	0.036	0.001	-
HCM Control Delay (s)	-	-	9.9	8.4	-
	,	_	-			_
	1)	_	-			_
	,					
~: Volume exceeds ca	pacity	\$: De	elay ex	ceeds 3	00s	+: Con
HCM Lane LOS HCM 95th %tile Q(ve Notes ~: Volume exceeds ca			-h) -	h)	h) 0.1	-h) 0.1 0

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	₩.	VVDIX	↑ ↑	NUN	<u> </u>	^
Traffic Vol, veh/h	12	3	1331	21	5	687
Future Vol, veh/h	12		1331	21	5	687
	0	3				
Conflicting Peds, #/hr			O Eroo	0 Fron	0 Fron	0 Eroo
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-		-	None
Storage Length	0	-	-	-	540	-
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	13	3	1447	23	5	747
N.A. ' /N.A'	N 01 - 4				4 1 0	
	Minor1		Major1		/lajor2	
Conflicting Flow All	1843	735	0	0	1470	0
Stage 1	1459	-	-	-	-	-
Stage 2	384	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	*89	362	-	-	455	-
Stage 1	*180	-	_	_	-	_
Stage 2	*774	_	_	_	_	_
Platoon blocked, %	1			_		_
Mov Cap-1 Maneuver	*88	362	_		455	_
•	*169			-		
Mov Cap-2 Maneuver	*180	-	-	-	-	-
Stage 1		-	-	-	-	-
Stage 2	*765	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s			0		0.1	
HCM LOS	D		U		0.1	
TIGINI EOS	U					
Minor Lane/Major Mvm	nt	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)		-	-	189	455	-
HCM Lane V/C Ratio		-	-	0.086		-
HCM Control Delay (s))	_	_	25.8	13	_
HCM Lane LOS		_	_	D	В	_
HCM 95th %tile Q(veh)	_	-	0.3	0	_
· ·	,			3.0	- 0	
Notes						
~: Volume exceeds ca	pacity	\$: De	elay ex	ceeds 3	00s	+: Com

	•	4	†	↓
Lane Group	EBL	NBL	NBT	SBT
Lane Group Flow (vph)	72	48	405	909
v/c Ratio	0.40	0.10	0.14	0.32
Control Delay	21.8	3.4	2.6	3.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	21.8	3.4	2.6	3.1
Queue Length 50th (ft)	9	5	22	58
Queue Length 95th (ft)	24	11	41	99
Internal Link Dist (ft)	198		190	486
Turn Bay Length (ft)				
Base Capacity (vph)	471	475	2895	2880
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.15	0.10	0.14	0.32
Intersection Summary				

	•	•	†	↓
Lane Group	EBL	NBL	NBT	SBT
Lane Group Flow (vph)	52	44	1325	653
v/c Ratio	0.39	0.07	0.44	0.22
Control Delay	41.7	2.5	3.2	2.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	41.7	2.5	3.2	2.2
Queue Length 50th (ft)	21	5	111	41
Queue Length 95th (ft)	51	12	159	66
Internal Link Dist (ft)	198		190	486
Turn Bay Length (ft)				
Base Capacity (vph)	324	646	3036	3019
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.16	0.07	0.44	0.22
Intersection Summary				

	•	•	†	↓
Lane Group	EBL	NBL	NBT	SBT
Lane Group Flow (vph)	72	48	410	917
v/c Ratio	0.40	0.10	0.14	0.32
Control Delay	21.8	3.4	2.6	3.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	21.8	3.4	2.6	3.1
Queue Length 50th (ft)	9	5	22	59
Queue Length 95th (ft)	24	11	41	100
Internal Link Dist (ft)	198		190	486
Turn Bay Length (ft)				
Base Capacity (vph)	471	471	2895	2880
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.15	0.10	0.14	0.32
Intersection Summary				

	•	•	†	↓
Lane Group	EBL	NBL	NBT	SBT
Lane Group Flow (vph)	52	44	1339	659
v/c Ratio	0.39	0.07	0.44	0.22
Control Delay	41.7	2.5	3.2	2.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	41.7	2.5	3.2	2.2
Queue Length 50th (ft)	21	5	113	42
Queue Length 95th (ft)	51	12	162	67
Internal Link Dist (ft)	198		190	486
Turn Bay Length (ft)				
Base Capacity (vph)	324	641	3036	3023
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.16	0.07	0.44	0.22
Intersection Summary				

	→	•	1	†	-	ļ
Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	72	22	48	418	3	918
v/c Ratio	0.60	0.11	0.11	0.16	0.00	0.34
Control Delay	23.1	1.1	10.0	6.7	10.3	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.1	1.1	10.0	6.7	10.3	7.9
Queue Length 50th (ft)	0	0	5	21	0	56
Queue Length 95th (ft)	#28	0	31	117	6	280
Internal Link Dist (ft)	198	98		190		486
Turn Bay Length (ft)						
Base Capacity (vph)	121	200	422	2679	715	2666
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.11	0.11	0.16	0.00	0.34
Intersection Summary						

⁹⁵th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

	-	←	1	†	/	↓
Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	55	13	55	1283	10	658
v/c Ratio	0.60	0.14	0.09	0.43	0.03	0.22
Control Delay	29.8	3.2	4.3	4.7	4.8	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.8	3.2	4.3	4.7	4.8	3.5
Queue Length 50th (ft)	0	0	5	92	1	36
Queue Length 95th (ft)	#31	0	22	308	9	129
Internal Link Dist (ft)	198	98		190		486
Turn Bay Length (ft)						
Base Capacity (vph)	91	91	629	2967	314	2962
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.14	0.09	0.43	0.03	0.22
Intersection Summary						

⁹⁵th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

	•	•	†	ļ
Lane Group	EBL	NBL	NBT	SBT
Lane Group Flow (vph)	66	38	448	992
v/c Ratio	0.38	0.09	0.15	0.34
Control Delay	20.9	3.3	2.5	3.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	20.9	3.3	2.5	3.2
Queue Length 50th (ft)	7	4	24	65
Queue Length 95th (ft)	44	13	44	109
Internal Link Dist (ft)	198		190	486
Turn Bay Length (ft)				
Base Capacity (vph)	451	433	2901	2891
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.15	0.09	0.15	0.34
Intersection Summary				

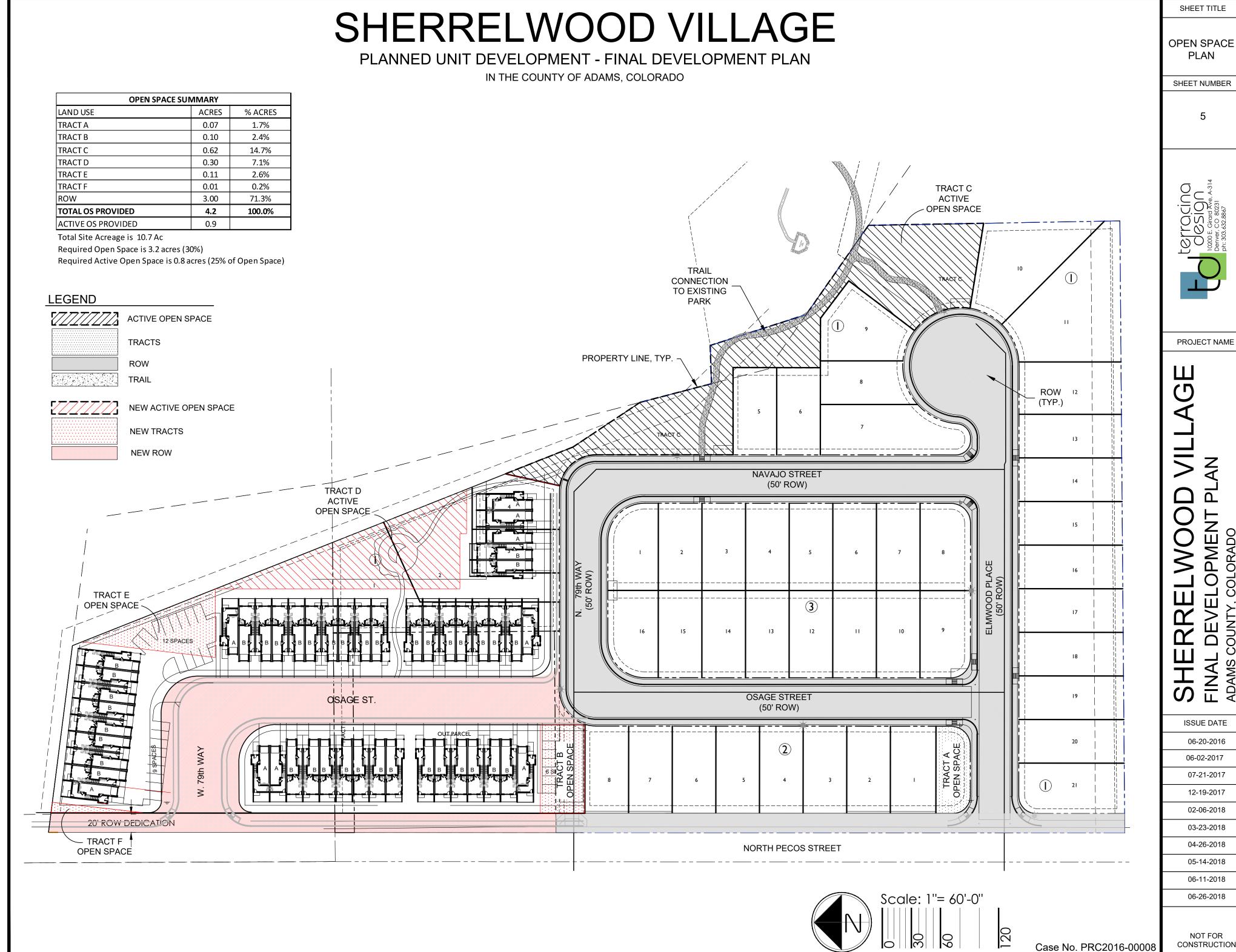
	•	•	†	↓
Lane Group	EBL	NBL	NBT	SBT
Lane Group Flow (vph)	46	45	1385	708
v/c Ratio	0.37	0.07	0.46	0.23
Control Delay	42.5	2.5	3.2	2.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	42.5	2.5	3.2	2.3
Queue Length 50th (ft)	20	5	119	45
Queue Length 95th (ft)	57	13	177	72
Internal Link Dist (ft)	198		190	486
Turn Bay Length (ft)				
Base Capacity (vph)	308	611	3040	3032
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.15	0.07	0.46	0.23
Intersection Summary				

	→	←	1	†	-	↓
Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	66	22	38	456	3	993
v/c Ratio	0.55	0.11	0.10	0.17	0.00	0.37
Control Delay	18.5	1.1	10.1	6.8	10.3	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.5	1.1	10.1	6.8	10.3	8.1
Queue Length 50th (ft)	0	0	4	23	0	63
Queue Length 95th (ft)	#18	0	37	127	6	310
Internal Link Dist (ft)	198	98		190		486
Turn Bay Length (ft)						
Base Capacity (vph)	121	200	385	2679	690	2672
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.11	0.10	0.17	0.00	0.37
Intersection Summary						

⁹⁵th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

	-	←	1	†	-	↓
Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	46	13	45	1401	10	713
v/c Ratio	0.51	0.14	0.08	0.47	0.04	0.24
Control Delay	19.4	3.2	4.3	5.0	4.9	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.4	3.2	4.3	5.0	4.9	3.6
Queue Length 50th (ft)	0	0	4	106	1	40
Queue Length 95th (ft)	#8	0	26	353	9	142
Internal Link Dist (ft)	198	98		190		486
Turn Bay Length (ft)						
Base Capacity (vph)	91	91	596	2970	273	2964
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.14	0.08	0.47	0.04	0.24
Intersection Summary						

⁹⁵th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.



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