# CITY OF ALBUQUERQUE

Planning Department Brennon Williams, Director



November 21, 2019

Holden Rennaker Short Elliot Hendrickson Inc. 934 Main Avenue, Unit C Durango, CO 81301

**RE:** Monterey Place Apts

2306-2320 Central SW

Grading Plan Stamp Date: 11/13/19 Drainage Report Stamp Date: 11/13/19

Hydrology File: J12D030

Dear Mr. Rennaker,

PO Box 1293

Based on the submittal received on 11/20/19 the above-referenced Grading Plan and Drainage Report are approved for Work Order and Building Permit.

### Prior to Certificate of Occupancy (For Information):

Albuquerque

1. Engineer's Certification, per the DPM Chapter 22.7: *Engineer's Certification Checklist For Non-Subdivision* is required.

NM 87103

- www.cabq.gov
- 2. A Bernalillo County Recorded Private Facility Drainage Covenant is required for the storm water quality ponds. The original notarized form, exhibit A (legible on 8.5x11 paper), and recording fee (\$25, payable to Bernalillo County) must be turned into DRC (4th, Plaza del Sol) for routing. Please contact Charlotte LaBadie (clabadie@cabq.gov, 924-3996) regarding the routing and recording process for covenants. The routing and recording process for covenants can take a month or longer; Hydrology recommends beginning this process as soon as possible as to not delay approval for certificate of occupancy.
  - 3. City acceptance and close-out of the public Work Order will be required, unless a financial guarantee has been posted.

If you have any questions, please contact me at 924-3695 or dpeterson@cabq.gov.

Sincerely,

Dana M. Peterson

Senior Engineer, Planning Dept. Development Review Services



### TREASURY DIVISION DAILY DEPOSIT

# Transmittals for: PROJECTS Only

# Payment In-Lieu for Storm Water Quality Volume Requirement

CASH COUNT	AMOUNT	ACCOUNT NUMBER	FUND NUMBER	BUSINESS UNIT	PROJECT ID	ACTIVITY ID	AMOUNT
TOTAL CHECKS	\$ 5080.00	461615	305	PCDMD	24_MS4	7547210	\$ 5080.00
TOTAL AMOUNT						TOTAL DEPOSIT	\$5080.00

	0 nt In-Lieu For Storm Water Quality Requirement	Name:	Monterey Place Apts, 29310sf imp.
	ion: 2306-2320 Central SW Lots 2-6, Blk 6, Traction Park ar	nd City E	lectric Addn
DEPARTMENT NAME	: Planning Department/Development	ent Reviev	w Services, Hydrology
PREPARED BY Da	na Peterson P	PHONE	924-3695
BUSINESS DATE 10	)/1/19		
DUAL VERIFICATION	OF DEPOSIT RMPLOYEE SIGNATU	URE	
AND BY EMPLOYE	E SIGNATURE		
REMITTER:			
·			
BANK:	DATE ON CHECK:		and a share a

The Payment-in-Lieu can be paid at the Plaza del Sol Treasury, 600 2<sup>nd</sup> St. NW. **Bring three copies of this invoice to the Treasury** and provide a copy of the receipt to Hydrology, Suite 201, 600 2<sup>nd</sup> St. NW, or e-mail with the Hydrology submittal to PLNDRS@cabq.gov.



# City of Albuquerque

### Planning Department Development & Building Services Division

### DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

	FPC#·				
Legal Descriptions	Building Permit #: EPC#:		Work Order#:		
Legal Description:					
City Address:					
Applicant:			Contact:		
Address:					
			E-mail:		
Owner:			Contact:		
Address:					
			E-mail:		
TYPE OF SUBMITTAL:PLAT (_	# OF LOTS)	_ RESIDENCE	DRB SITE ADMIN SITE		
IS THIS A RESUBMITTAL?:	Yes	No			
DEPARTMENT: TRAFFIC/ TRA	NSPORTATION _	HYDROLO	GY/ DRAINAGE		
Check all that Apply:		түре оғ	APPROVAL/ACCEPTANCE SOUGHT:		
TYPE OF SUBMITTAL:		_	LDING PERMIT APPROVAL		
ENGINEER/ARCHITECT CERTIFI	CATION	CERTIFICATE OF OCCUPANCY			
PAD CERTIFICATION		PRE	LIMINARY PLAT APPROVAL		
CONCEPTUAL G & D PLAN		SITE PLAN FOR SUB'D APPROVAL			
GRADING PLAN		SITE	SITE PLAN FOR BLDG. PERMIT APPROVAL		
DRAINAGE MASTER PLAN		FINAL PLAT APPROVAL			
DRAINAGE REPORT		SIA/ RELEASE OF FINANCIAL GUARANTEE			
FLOODPLAIN DEVELOPMENT PE	ERMIT APPLIC	FOU	NDATION PERMIT APPROVAL		
ELEVATION CERTIFICATE		GRA	ADING PERMIT APPROVAL		
CLOMR/LOMR		SO-1	9 APPROVAL		
TRAFFIC CIRCULATION LAYOUT (TCL)		PAVING PERMIT APPROVAL			
TRAFFIC IMPACT STUDY (TIS)		GRA	ADING/ PAD CERTIFICATION		
OTHER (SPECIFY)		WOF	RK ORDER APPROVAL		
PRE-DESIGN MEETING?		CLO	MR/LOMR		
		FLO	ODPLAIN DEVELOPMENT PERMIT		
		OTH	IER (SPECIFY)		
DATE SUBMITTED:					
COA STAFF:		VIC SUBMITTAL REC			

COA STAFF:

FEE PAID:\_\_\_



November 14th, 2019

Dana Peterson, PE
Development Review Services – Hydrology Section
City of Albuquerque
PO Box 1293
Albuquerque, NM 87103

RE: Monterey Place Drainage Submittal for Building Permit (Hydrology File: J12D030)

Mr. Peterson,

Thank you for the comments you provided on the Grading and Drainage Plan for the Monterey Place Apartments project (PR-2019-002331 and CPN 631982) on October 01, 2019. Below in blue are SEH's responses to Comments 1-4 for "Prior to Building Permit and Work Order."

- 1. Remove all "Conceptual/Not for Construction" markings and stamp, sign and date the plan.
  - All markings were removed and the plan stamped and dated.
- 2. All drainage calculations and findings, to include those presented in the response letter, need to be provided in a bound report, stamped/signed by the engineer.
  - The calculations and findings have been included in a bound report that is stamped/signed.
- 3. As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior to any earth disturbance.
  - An Erosion and Sediment Plan and Notice of Intent will be submitted 14 days prior to earth disturbance.
- 4. Payment of the Fee in Lieu (Amount = 635CF x \$8/CF = \$5080, per sheet C-102) of onsite management of the SWQV must be made. Include a copy of the paid receipt when resubmitting.

The fee was paid and a copy of the paid receipt was included with the resubmittal.

Development Review Services – Hydrology Section Monterey Place September 25<sup>th</sup>, 2019

Additional comments 5-7 were provided "For Information" for Prior to Certificate of Occupancy. SEH appreciates these comments and will address when appropriate.

Please let me know if you have any questions or concerns.

Sincerely,

Holden Rennaker, PE (CO, NM, OR)

Short Elliot Hendrickson Inc. Email: <u>hrennaker@sehinc.com</u>

Phone: 970-459-9012

SEE SHEET C-201 FOR WEST GRADING DETAIL

1. NO WORK SHALL BE PERFORMED IN PUBLIC ROW WITHOUT AN APPROVED WORK ORDER OR EXCAVATION PERMIT

### **EXISTING CONDITIONS:**

THE PROPOSED DEVELOPMENT SITE IS PRESENTLY DIVIDED INTO TWO SEPARATE SITES. THE WEST SITE HAS TWO BUILDINGS AND A LARGE ASPHALT LOT. HALF OF THE LOT DRAINS NORTH TO CENTRAL WHILE THE SOUTHERN PORTION DRAINS SOUTH ONTO NEIGHBORING PROPERTY.

THE EAST SITE, MOSTLY A GRAVEL LOT, CONTAINS ONE SMALL BUILDING AND AN ASPHALT PARKING AREA. THIS LOT GENERALLY DRAINS TOWARDS CENTRAL.

AN EXISTING CITY ALLEY BORDERS THE SITE ON THE WEST AND SOUTH PROPERTY LINES. THIS ALLEY IS CURRENTLY GRAVEL AND DRAINS TO NEIGHBORING PROPERTY TO THE SOUTH.

TOTAL RUNOFF FROM THE EXISTING SITE IS CALCULATED IN TABLE 1 OF THIS EXHIBIT.

ADJACENT PROPERTIES WERE NOT FOUND TO DISCHARGE ONTO THE PROJECT SITE. THE SITE IS DIRECTLY BORDERED BY TWO BUILDINGS - THE MONTEREY MOTEL TO THE WEST AND EL DON MOTEL TO THE EAST. THE EL DON MOTEL HAS A FLAT ROOF WHERE FLOWS ARE CONVEYED VIA A ROOF DRAIN SYSTEM. THE MONTEREY MOTEL ROOF FLOWS SHEET OFF THE ROOF BEHIND A CMU WALL WHICH KEEPS FLOWS ON THE MONTEREY MOTEL PROPERTY. SOME FLOWS FROM THE EXISTING SITE RUN ONTO NEIGHBORING PROPERTY TO THE SOUTH WHILE FLOWS FROM THE ALLEY EAST OF THE PROPERTY TRAVEL SOUTH AND DO NOT RUN ON TO THE PROJECT SITE.

### PROPOSED CONDITIONS:

THE PROJECT WILL CONSIST OF A NEW 4-STORY, MIXED USE, MULTI-FAMILY BUILDING WITH A FOOTPRINT OF APPROXIMATELY 16,600-SF. THE EXISTING CITY ALLEY WILL ALSO BE WIDENED AND IMPROVED. THE PROPOSED GRADE WILL MATCH GRADE AT ADJACENT PROPERTY LINES AND SLOPE TOWARDS CATCH CURB ADJACENT TO THE BUILDING. PRESENT DRAINAGE ISSUES ON THE EXISTING SITE WILL BE MITIGATED WITH THE PROPOSED DESIGN AS FLOWS WILL NO LONGER BE CONVEYED TO SOUTHERN NEIGHBORING PROPERTIES.

THE EXISTING ALLEY EAST OF THE SITE WILL BE IMPROVED TO CLAYTON STREET. A SMALL PORTION OF THIS ALLEY WAS DESIGNED TO DRAIN TOWARDS POND B AND WAS INCLUDED IN THE BASIN B FLOW CALCULATIONS. THE PORTION EAST OF THE GRADE BREAK WAS DESIGNED TO SURFACE FLOW TO CLAYTON STREET.

THE SITE WILL BE DIVIDED INTO 4 SEPARATE BASINS, A-D. BASINS A-B WILL DRAIN TOWARDS WATER QUALITY FEATURES IN PARKING END ISLANDS - PONDS A AND B. FLOWS WERE THEN DESIGNED TO BE CONVEYED, VIA STORM DRAIN, TO TIE INTO THE BACK OF EXISTING INLETS IN CENTRAL AVENUE.

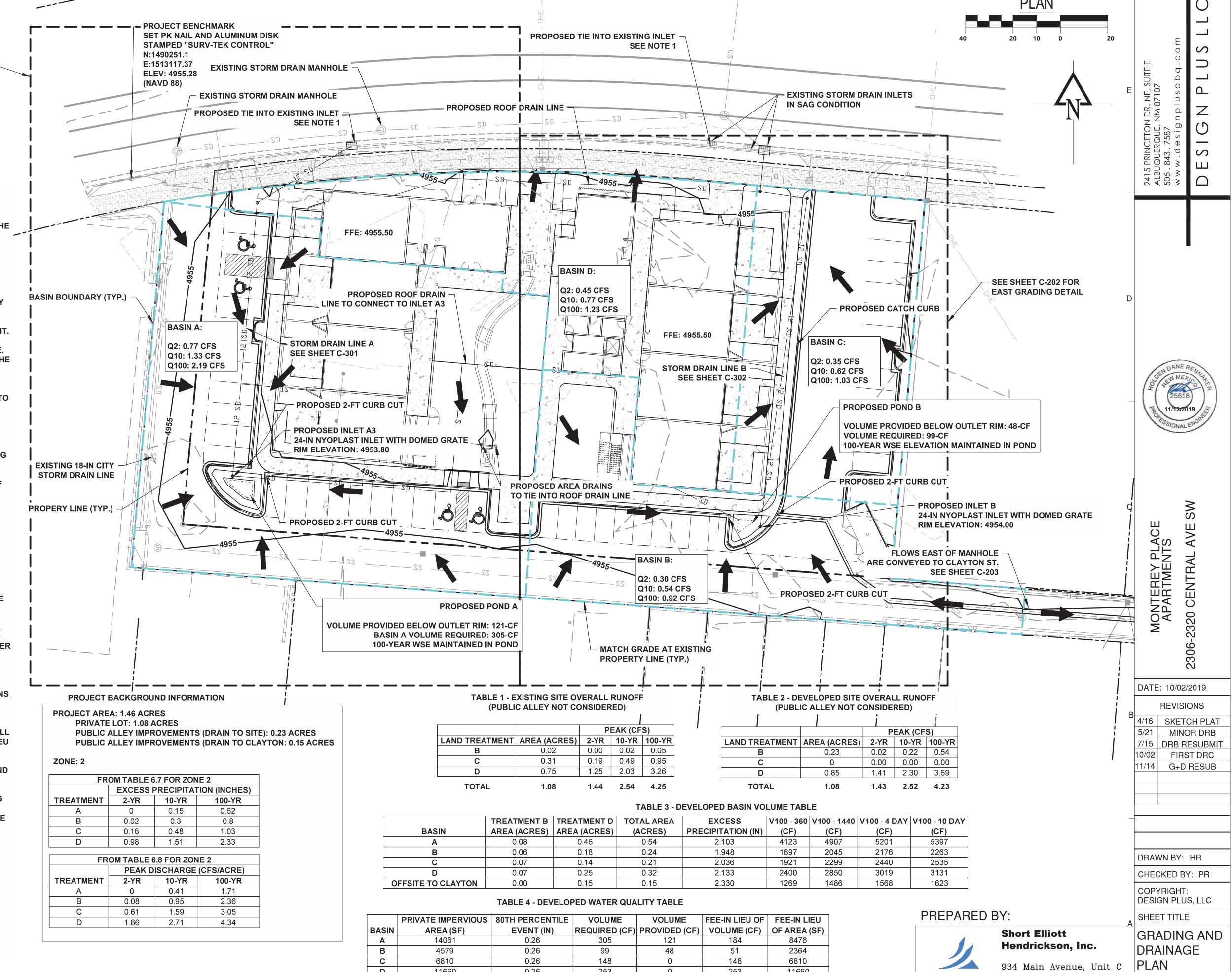
BASIN C WILL DRAIN TO THE ALLEY APRON ONTO CENTRAL AVENUE WHERE IT WILL BE CAPTURED BY THE EXISTING SAG INLETS. WATER QUALITY FOR THE IMPERVIOUS AREA OF THIS BASIN WAS NOT ABLE TO FEASIBLY BE PROVIDED AND THE DEVELOPER IS REQUESTING TO PAY A FEE IN-LIEU OF MANAGING ON-SITE.

BASIN D INCLUDES FLOWS FROM THE THE PROPOSED BUILDING ROOF DRAINS AND THE FRONT OF THE BUILDING. WATER QUALITY FOR THE FLOWS FROM THIS BASIN WAS NOT ABLE TO FEASIBLY BE PROVIDED DUE TO GEOTECHNICAL CONSIDERATIONS AND THE DEVELOPER IS REQUESTING TO PAY A FEE IN-LIEU OF MANAGING ON-SITE.

OVERALL, PONDING FEATURES ON THE SITE WILL PROVIDE WATER QUALITY TREATMENT FOR 7,800-SF OF IMPERVIOUS AREA. 29,310-SF OF IMPERVIOUS AREA WILL NOT BE TREATED ON-SITE AND THE DEVELOPER IS REQUESTING TO PAY A FEE IN-LIEU OF MANAGING ON SITE PER TABLE 6.17 OF THE DRAFT DPM.

STORM VOLUMES AND WATER QUALITY CALCULATIONS ARE SHOWN IN TABLES 3 AND 4. CALCULATED FLOWS ARE SHOWN IN THE EXHIBIT FOR EACH BASIN.

THE DEVELOPED OVERALL FLOWS WILL BE SLIGHTLY REDUCED FROM THE EXISTING CONDITIONS. AS SHOWN IN TABLE 2. THE RUNOFF PATTERN WAS ALTERED TO CONVEY FLOW TO CENTRAL AVENUE INSTEAD OF NEIGHBORING PROPERTIES TO THE SOUTH BASED ON DISCUSSIONS WITH THE CITY.



11660

37110

D

TOTAL

0.26

0.26

253

804

253

635

169

11660

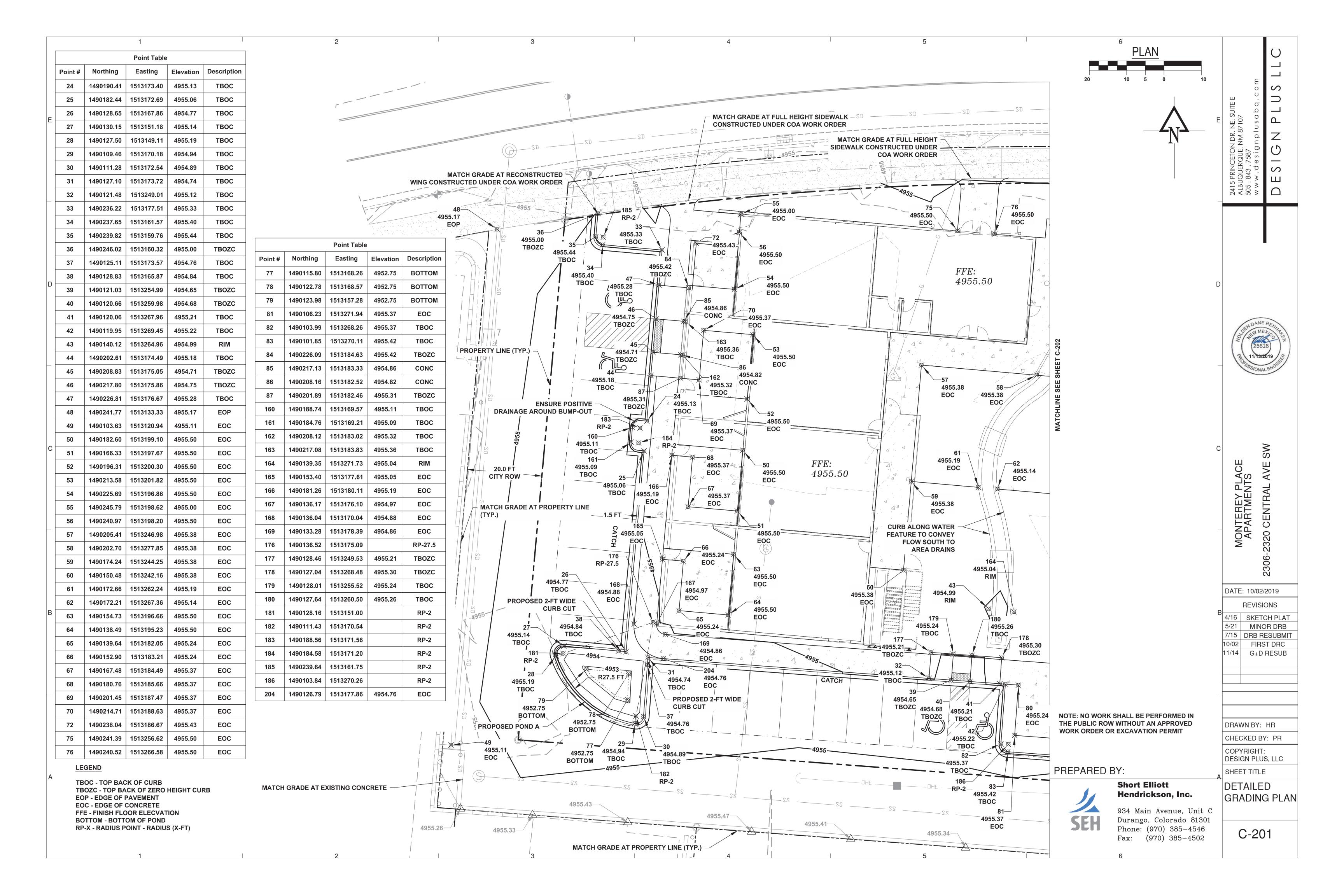
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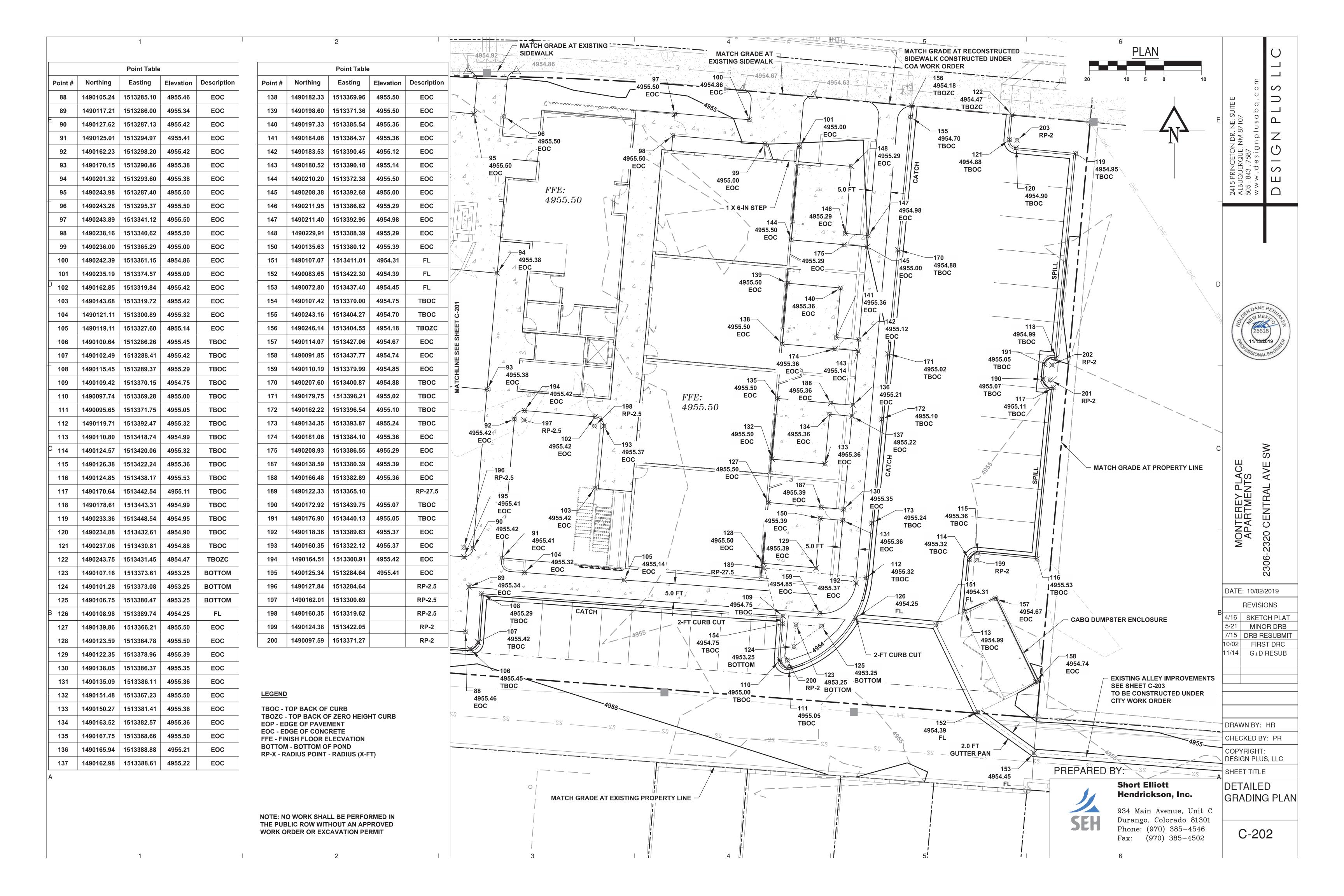
Durango, Colorado 81301

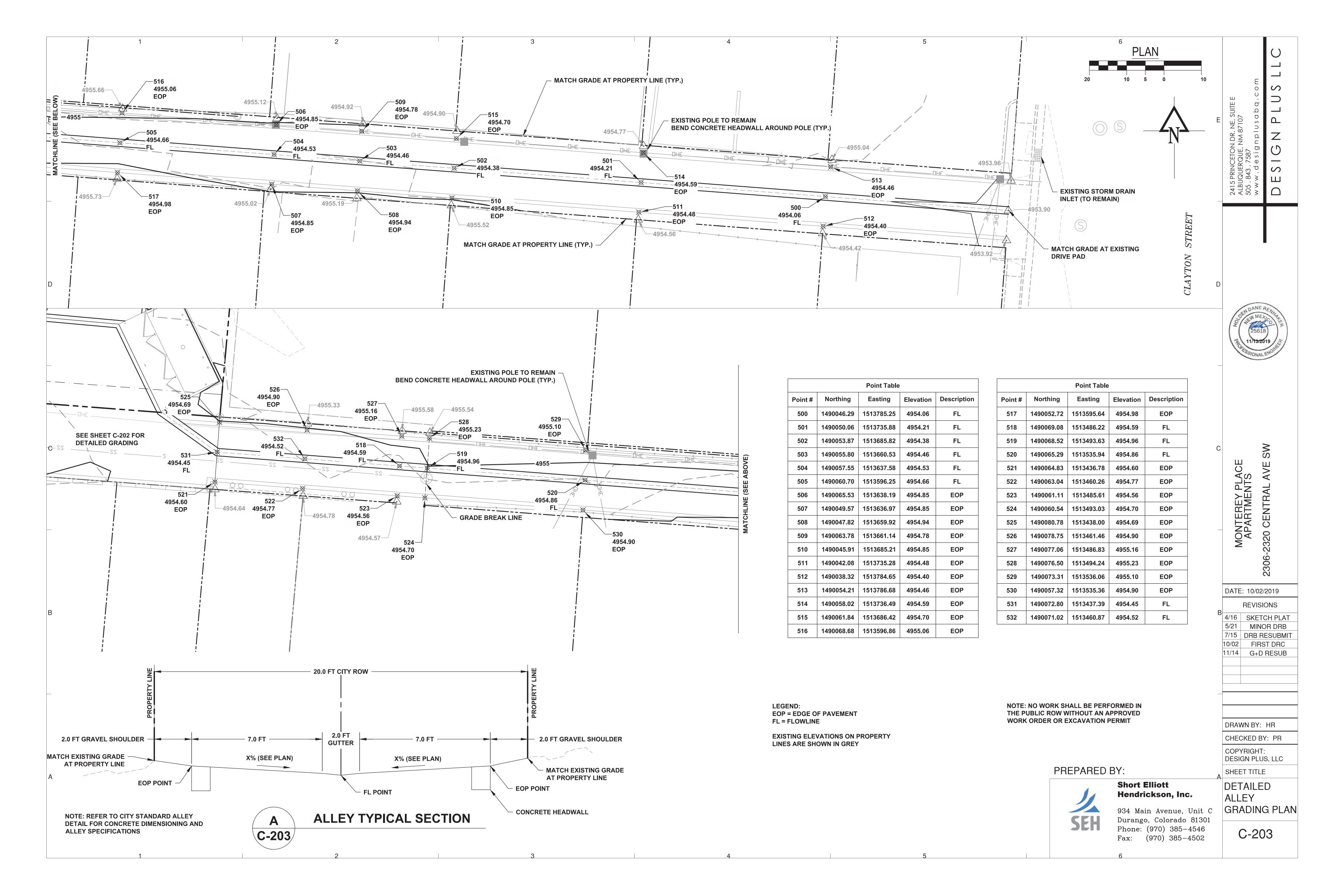
C-102

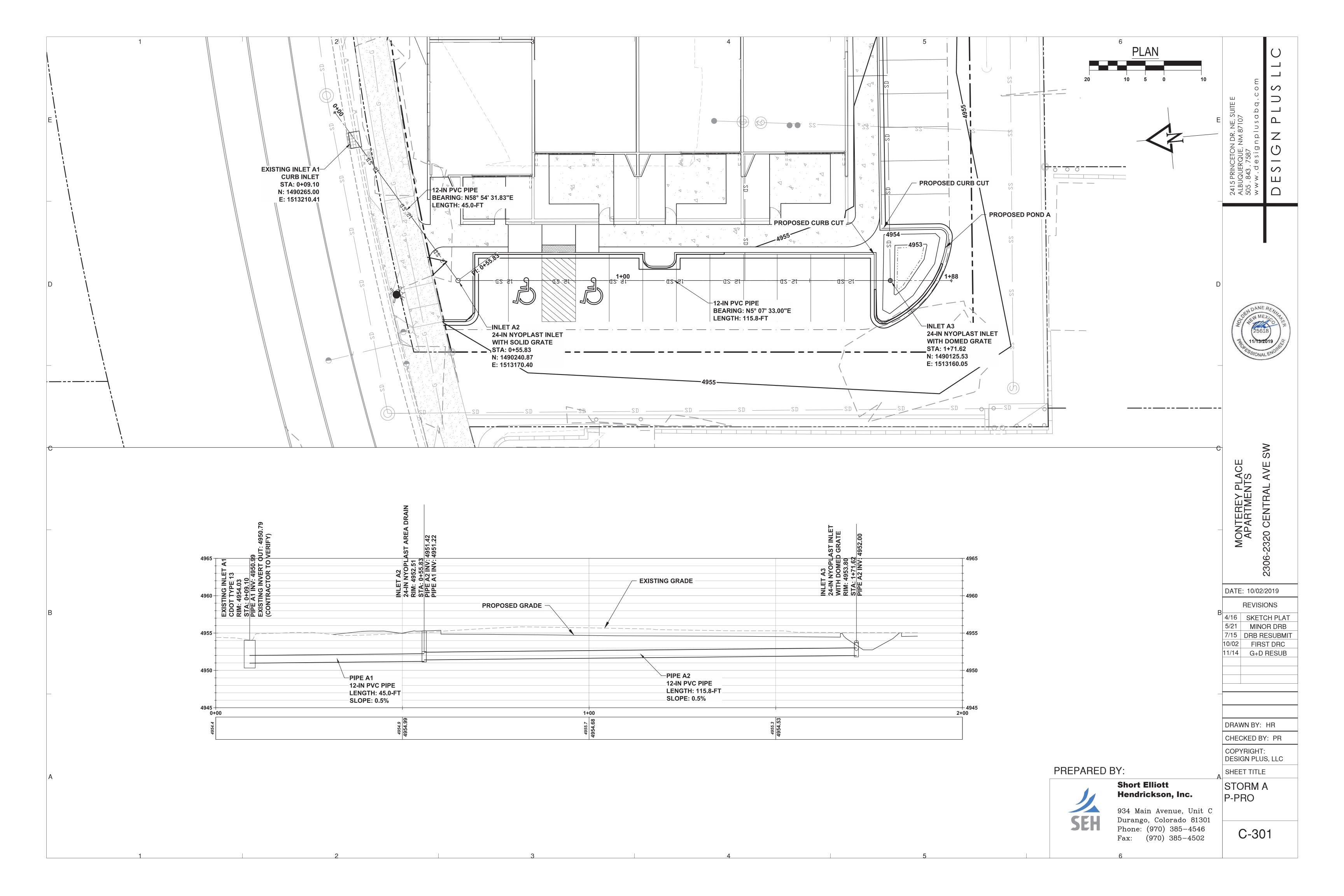
Phone: (970) 385-4546

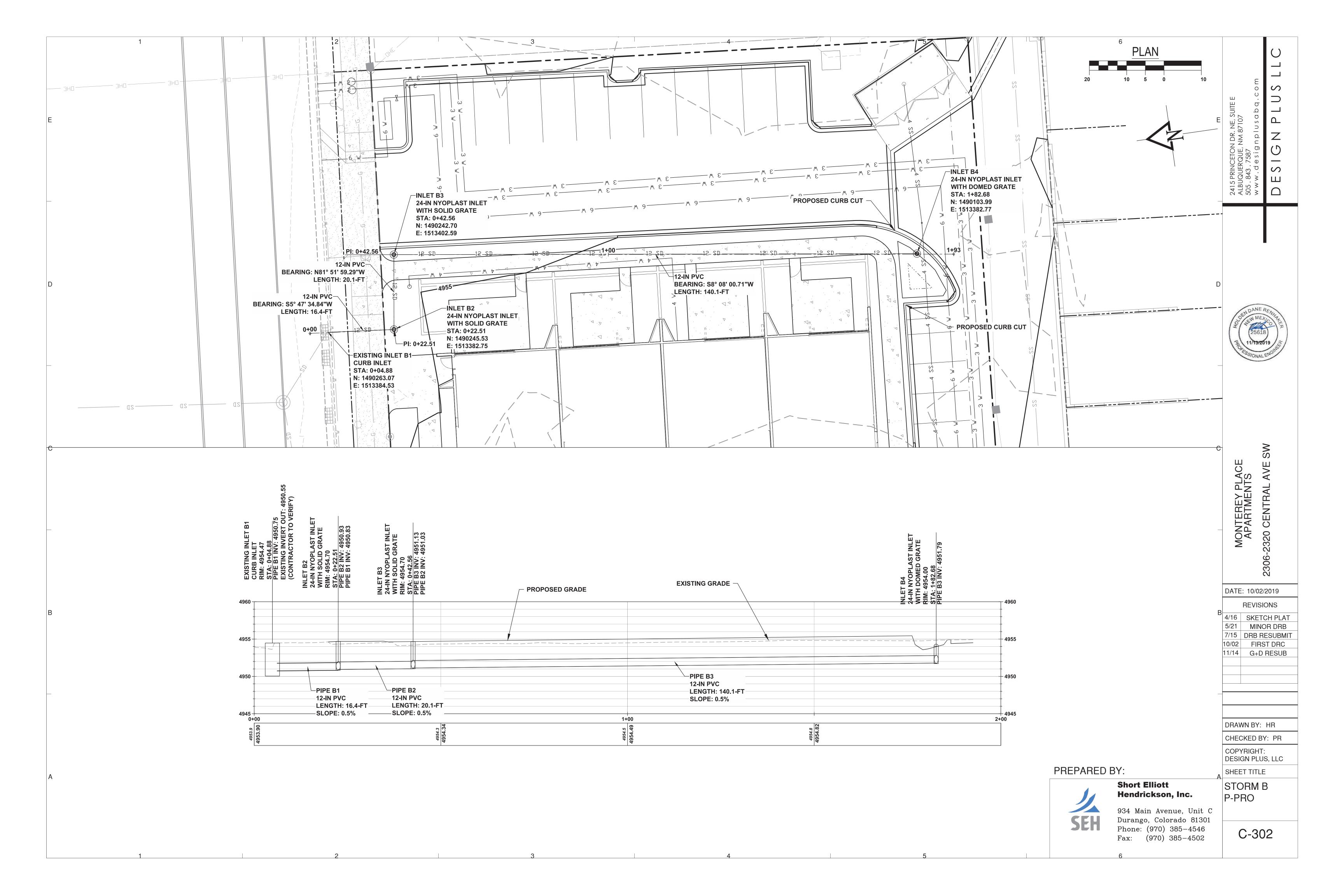
Fax: (970) 385-4502











### MONTEREY PLACE APARTMENTS

## GRADING AND DRAINAGE PLAN SUPPLEMENTAL CALCULATIONS AND FINDINGS

ALBUQUERQUE, NM



November 13, 2019

### Prepared by:

Short, Elliott, Hendrickson, Inc. 934 Main Ave., Unit C Durango, CO 81301



### INTRODUCTION

The Monterey Place Apartments project (Hydrology File J12D030) is a proposed mixed use apartment building located at 2306-2320 Central Avenue SW, Albuquerque, NM 87104. The project includes a 4-story building with a footprint of approximately 16,600-sf. The project also includes improvements in the City Right-of-Way. A Conceptual Grading and Drainage Plan was approved on May 22, 2019 by the Hydrology Section of the Planning Department.

The following report summarizes calculations and findings supplemental to the submitted Grading and Drainage Plan. The Grading and Drainage Plan highlights both the existing and proposed conditions and flow calculations for each basin. The following sections provide more detail into certain design elements of the drainage scheme.

### WATER QUALITY

Water Quality was designed to be provided on-site to the maximum extent possible but was constrained by the density of the development as well as geotechnical considerations. The geotechnical report prohibits ponding adjacent to the building and the bioswale shown on the Conceptual Grading and Drainage Plan as providing 233-cf of water quality volume had to be removed from the plan.

As the design advanced on Ponds A and B, the amount of water quality provided by each was reduced from what was shown on the Conceptual Plan in order to provide adequate conveyance.

The developer paid a fee in lieu of providing water quality as calculated by the Hydrology Section.

The following tables for Ponds A and B describe the volume calculations between the pond bottom and outlet structure rim elevation – representing the water quality volume provided by each pond. Volumes were calculated using the conical method for contour areas.

### Pond A:

Stage (ft)	Contour Area (sq. ft)	Incremental Volume (cf)	Cumulative Volume (cf)
0.00	50	0	0
0.25	77	16	16
0.75	145	54	70
1.05	196	51	121

### Pond B:

Stage (ft)	Contour Area (sq. ft)	Incremental Volume (cf)	Cumulative Volume (cf)
0.00	20	0	0
0.25	46	8	8
0.75	119	40	48

### STORMWATER CONVEYANCE

The development was designed to utilize a series of curb cuts, inlets and storm drain to convey flow from the site to existing inlets in Central Ave. The following sub-sections detail the sizing calculations of each component.

### Curb Cuts

The *Hydraflow Express Extension for AutoCad Civil3D* 2018 was used to model the proposed curb cuts to determine their capacity. The curbs were modelled as a 2-ft wide rectangular channel with a 0.5% slope, the minimum slope into the ponds. *Express* output is attached and shows that the capacity of these curb cuts is 3.9 cfs – larger than the 100-year of any single basin on the project.

### Nyoplast Inlets

Each pond will have a 24-in diameter Nyoplast inlet with a Dome Grate. The Nyoplast 24" Dome Grate Inlet Capacity Chart was used to determine the head on the 100-year storm. To model 50% clogging, the Capacity modelled was twice the flow from the 100-year storm as calculated on the Drainage Plan.

The rims of each inlet were set to contain the 100-year water surface elevation to not extend outside of the proposed limits of Ponds A and B.

### Storm Drain Lines A and B

Two separate 12-in PVC storm drain lines were designed to convey flow from Ponds A and B to the existing inlets in Central Avenue. The *Hydraflow Storm Sewer Extension for AutoCad Civil3D 2018* was used to model each of the proposed storm drain lines and calculate the Hydraulic Grade Line of each system during the 100-year storm.

Storm Sewer output is attached and demonstrates the HGL remains in the pipe during the 100-year storm.

### PROPOSED ALLEY EXTENSION IMPROVEMENTS

A condition of project approval in DRB was the requirement to pave the existing dirt alley from the project's eastern boundary to Clayton St. Several residents in the area have expressed drainage concerns in this alley as the alley is very flat and generally flows towards the property owners to the south.

Based on discussions with the City Hydrology Department the alley was graded to hold grade at all property lines and drain to a gutter pan at the center of the alley. The majority of the alley will slope east towards Clayton St. while a western portion will be conveyed to Pond B.

It should be noted that although this alley was designed to help alleviate several drainage problems in this area, there will be no grading on the lots of adjacent homeowners. If low points exist on neighboring properties, they will continue to exist. Flows from the alley will be conveyed to a center gutter pan instead of to the properties on the south which is largely the case presently.

A detailed alley grading plan is included in this submittal.

### **ATTACHMENTS**

- Output from Hydraflow Express Extension for Civil 3D (Curb Cut Capacity)
- Nyoplast 24" Dome Grate Inlet Capacity Charts
- Output from Hydraflow Storm Sewer Extension for Civil 3D (Storm Drain Lines A-B)

### **Channel Report**

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

Tuesday, Sep 24 2019

### **Monterey Place Curb Cut**

Rectangular Bottom Width (ft) = 2.00Total Depth (ft) = 0.50Invert Elev (ft) = 1.00

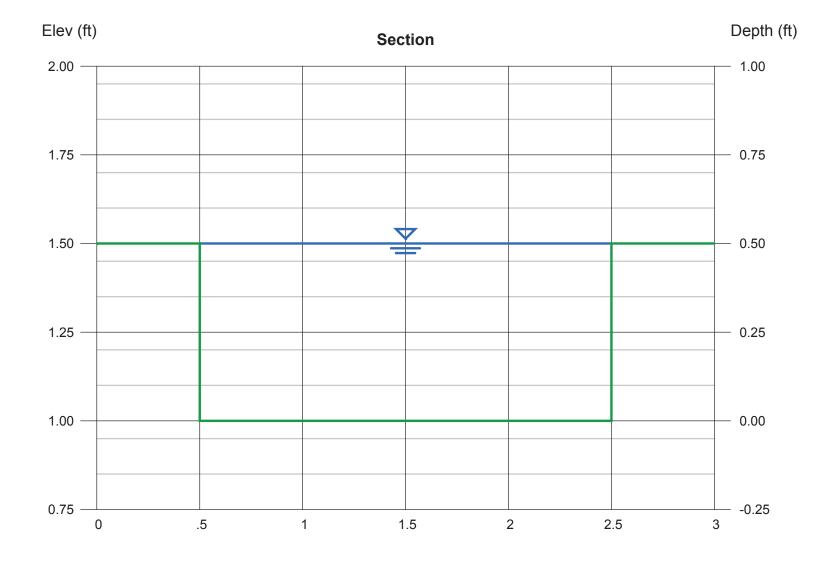
Slope (%) = 0.50N-Value = 0.013

Compute by:

Calculations

**Known Depth** Known Depth (ft) = 0.50

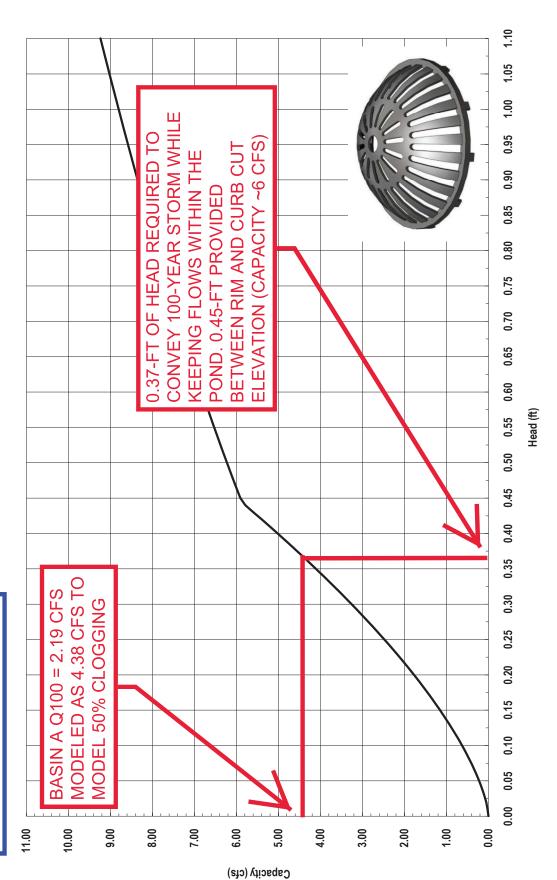
Highlighted Depth (ft) = 0.50= 3.884Q (cfs) Area (sqft) = 1.00= 3.88Velocity (ft/s) Wetted Perim (ft) = 3.00Crit Depth, Yc (ft) = 0.49Top Width (ft) = 2.00EGL (ft) = 0.73



Reach (ft)

# MONTEREY PLACE INLET A3

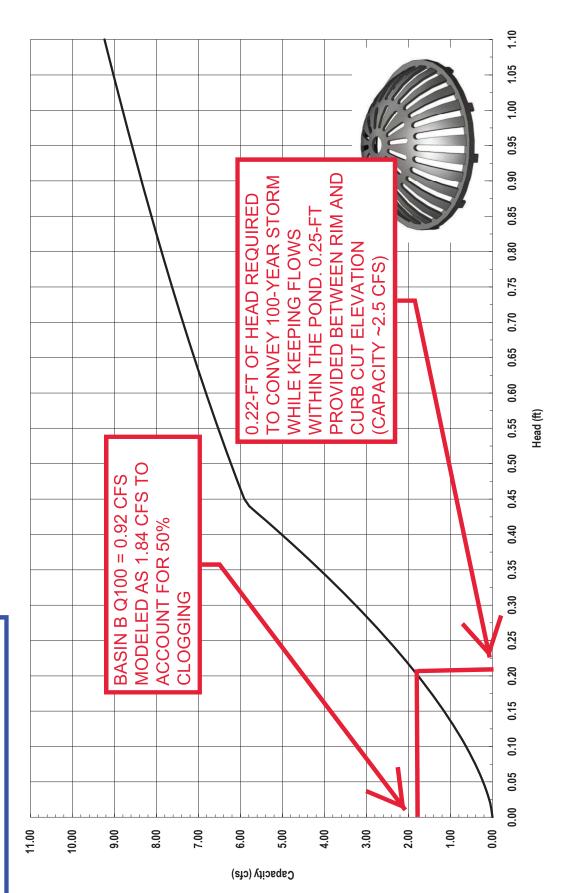
Nyloplast 24" Dome Grate Inlet Capacity Chart



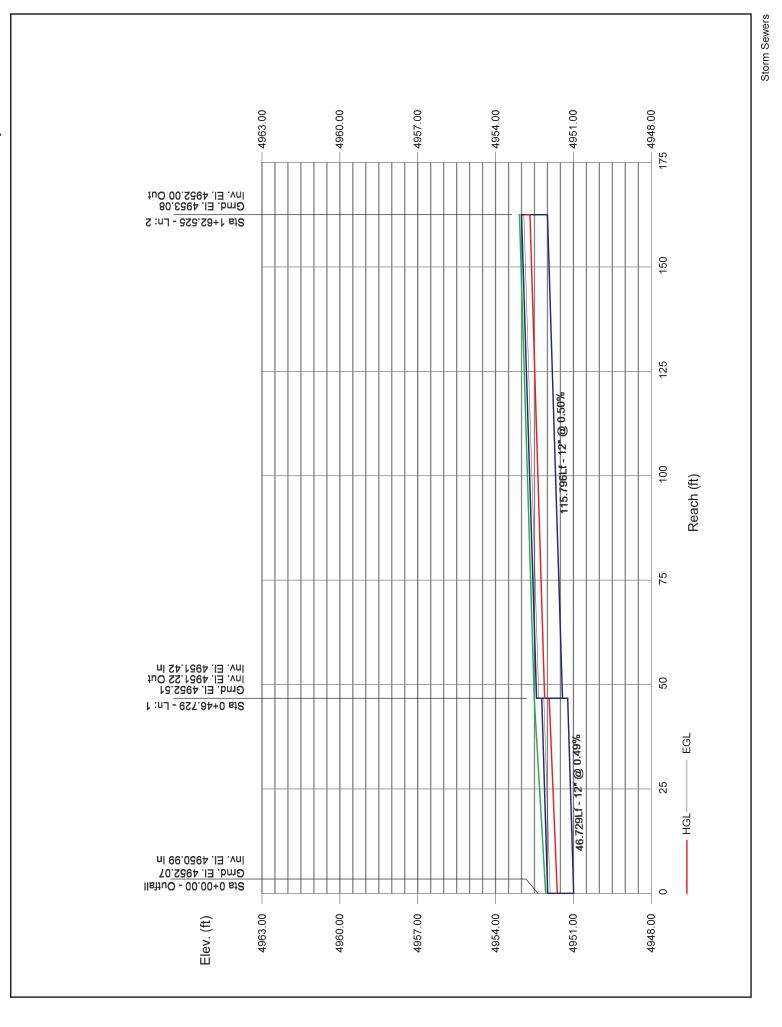


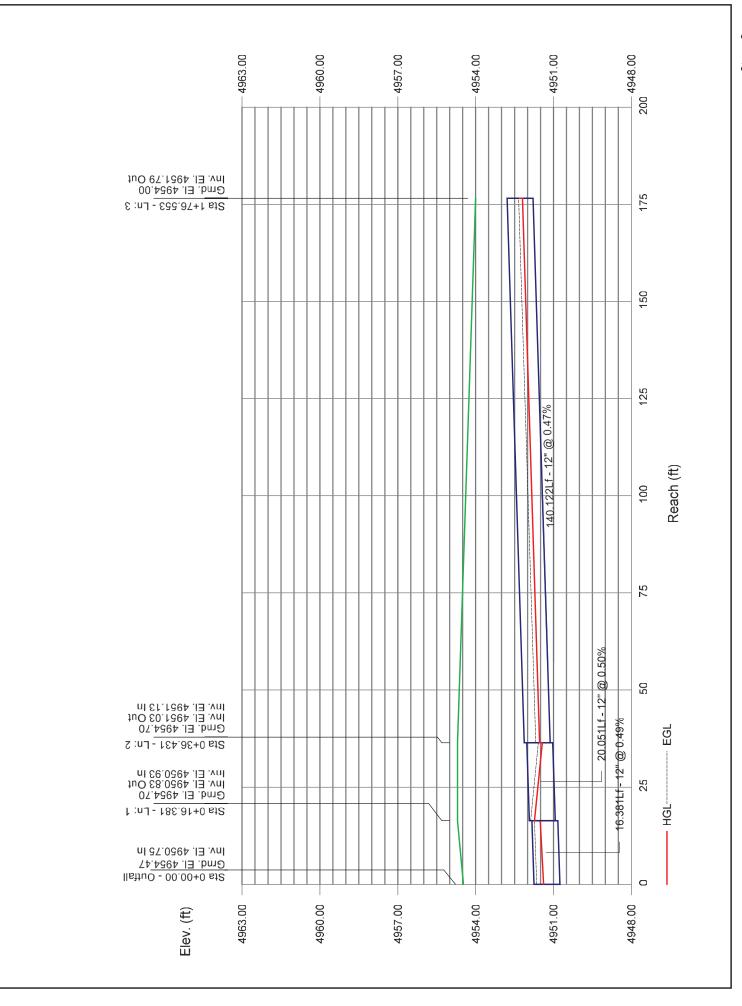
# MONTEREY PLACE INLET B3

# Nyloplast 24" Dome Grate Inlet Capacity Chart











February 3, 2021

Development Review Services – Hydrology City of Albuquerque PO Box 1293 Albuquerque, NM 87103

RE: Monterey Place Apartments (Hydrology File J12D030) Revised Grading and Drainage Plan

To Whom it May Concern,

Recent field discoveries have prompted the need for a minor revision to the Grading and Drainage Plan, approved November 21, 2019, for the Monterey Place Apartments. In short, an existing storm drain manhole was discovered in the SW corner of the alley that was previously unknown. This manhole is downstream of the inlets in Central Avenue, proposed to be tied into per the approved plan.

The revised plan calls for a tie-in to this storm drain manhole for some of reasons mentioned below:

- Overall improved internal storm drain system (outlet is now at the low point of the site, there is less opportunity for clogging and the tie-in is 6-in above City storm main invert for less opportunity for back up)
- Reduced impact to Central Avenue Right-of-Way
- Reduced chance of utility conflicts with existing utilities in Central Avenue ROW

Overall, the hydrology of the site, basin delineation, and land cover remain unchanged from the approved plan, as there were no surface flow changes. The "Storm Drain Lines A and B" section of the approved Supplemental Calculations and Findings Package should be revised to read as follows:

"Two separate 12-in PVC storm drain lines were designed to convey flow from the site to the existing City storm drain system. Storm Line A was designed to collect flows from Basins A and B and convey them to an existing storm drain manhole at the southwest corner of the site. Storm Line B was designed to collect flows from Basin D and convey them to an inlet in Central Ave. The *Hydraflow Storm Sewer Extension for AutoCad Civil3D 2018* was used to model each of the proposed storm drain lines and calculate the Hydraulic Grade Line of each system during the 100-

Monterey Place Apartments February 3, 2021

year storm. *Storm Sewer* output is attached and demonstrates the HGL remains in the pipe during the 100-year storm."

Please let me know if you have any questions or concerns.

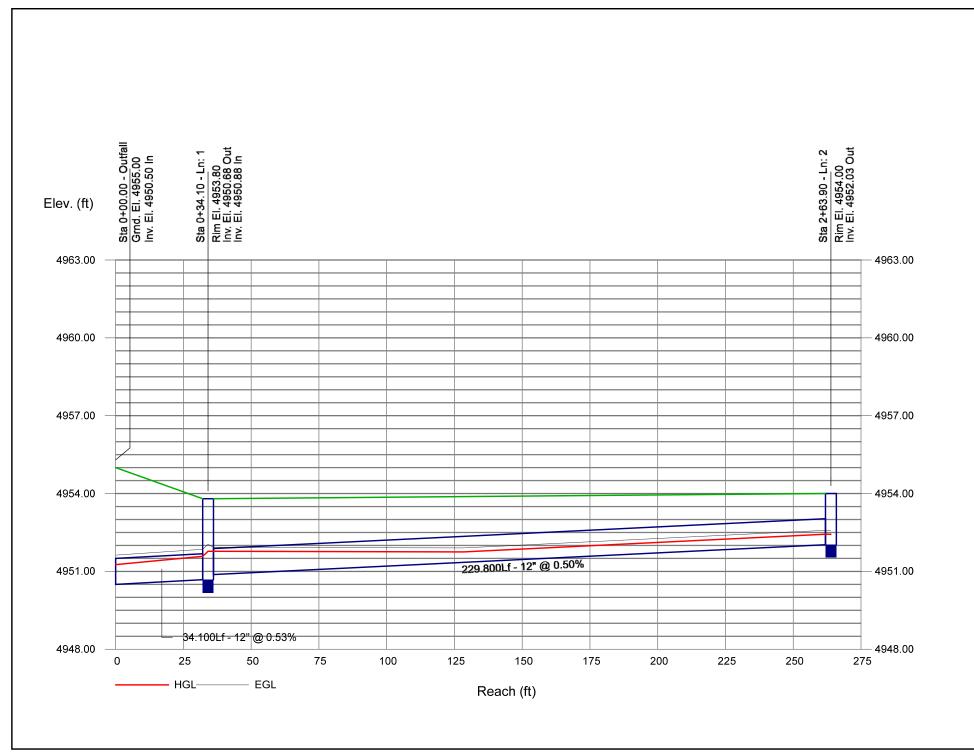
Sincerely,

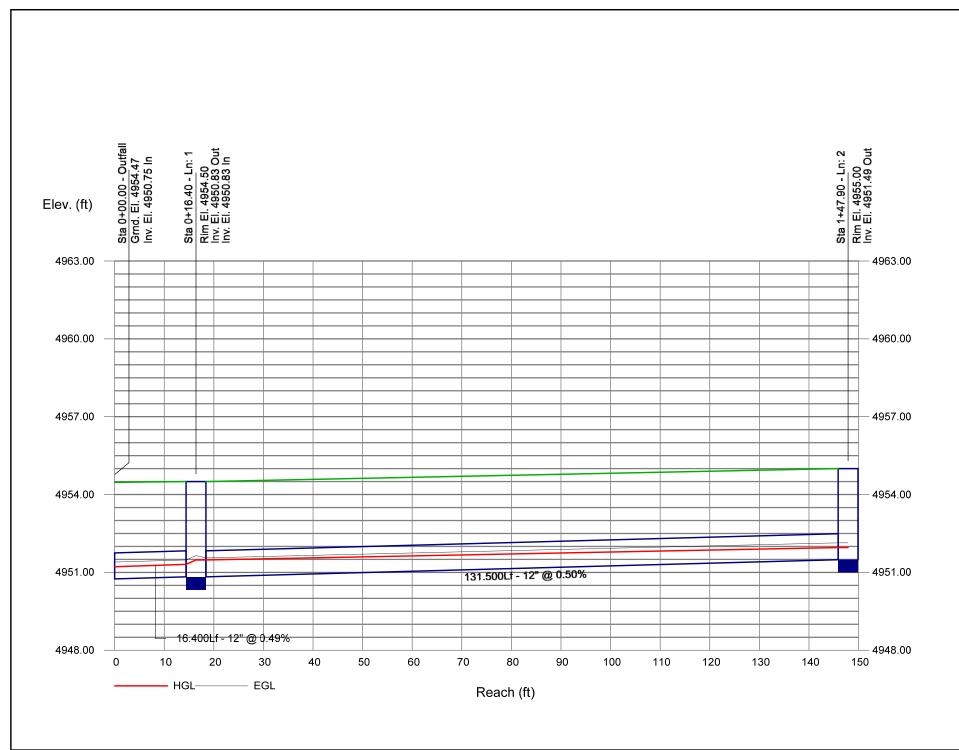
Holden Rennaker, PE (NM, CO, OR) Short Elliott Hendrickson Inc.



### Included:

- Revised Storm Sewer output
- Revised Stamped Grading and Drainage Plan





SEE SHEET C-201 FOR WEST GRADING DETAIL

### **NOTES:**

1. NO WORK SHALL BE PERFORMED IN PUBLIC ROW WITHOUT AN APPROVED WORK ORDER OR EXCAVATION PERMIT

### **EXISTING CONDITIONS:**

THE PROPOSED DEVELOPMENT SITE IS PRESENTLY DIVIDED INTO TWO SEPARATE SITES. THE WEST SITE HAS TWO BUILDINGS AND A LARGE ASPHALT LOT. HALF OF THE LOT DRAINS NORTH TO CENTRAL WHILE THE SOUTHERN PORTION DRAINS SOUTH ONTO NEIGHBORING PROPERTY.

THE EAST SITE, MOSTLY A GRAVEL LOT, CONTAINS ONE SMALL BUILDING AND AN ASPHALT PARKING AREA. THIS LOT GENERALLY DRAINS TOWARDS CENTRAL.

AN EXISTING CITY ALLEY BORDERS THE SITE ON THE WEST AND SOUTH PROPERTY LINES. THIS ALLEY IS CURRENTLY GRAVEL AND DRAINS TO NEIGHBORING PROPERTY TO THE SOUTH.

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ADJACENT PROPERTIES WERE NOT FOUND TO DISCHARGE ONTO THE PROJECT SITE. THE SITE IS DIRECTLY BORDERED BY TWO BUILDINGS - THE MONTEREY MOTEL TO THE WEST AND EL DON MOTEL TO THE EAST. THE EL DON MOTEL HAS A FLAT ROOF WHERE FLOWS ARE CONVEYED VIA A ROOF DRAIN SYSTEM. THE MONTEREY MOTEL ROOF FLOWS SHEET OFF THE ROOF BEHIND A CMU WALL WHICH KEEPS FLOWS ON THE MONTEREY MOTEL PROPERTY. SOME FLOWS FROM THE EXISTING SITE RUN ONTO NEIGHBORING PROPERTY TO THE SOUTH WHILE FLOWS FROM THE ALLEY EAST OF THE PROPERTY TRAVEL SOUTH AND DO NOT RUN ON TO THE PROJECT SITE.

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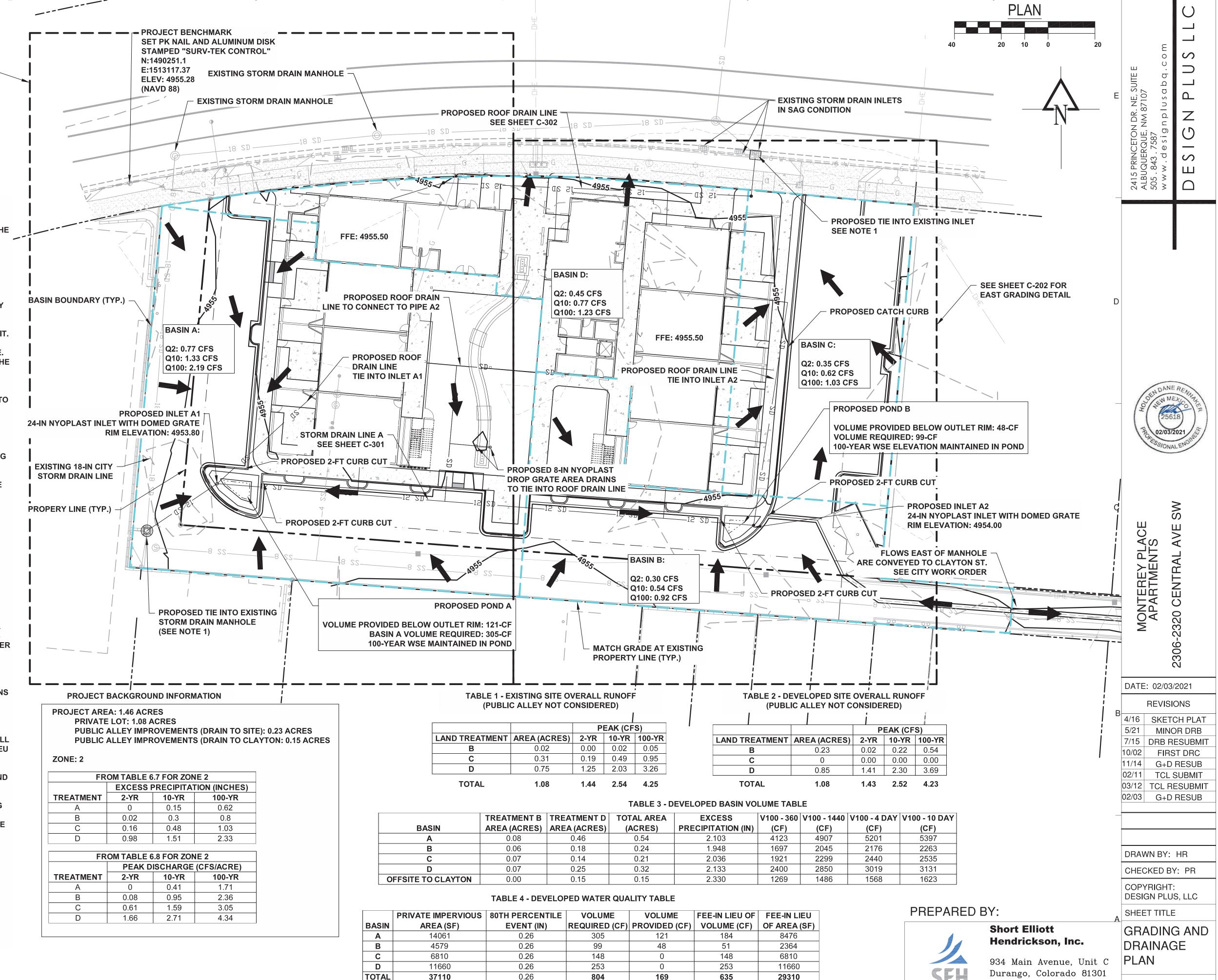
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OVERALL, PONDING FEATURES ON THE SITE WILL PROVIDE WATER QUALITY TREATMENT FOR 7,800-SF OF IMPERVIOUS AREA. 29,310-SF OF IMPERVIOUS AREA WILL NOT BE TREATED ON-SITE AND THE DEVELOPER IS REQUESTING TO PAY A FEE IN-LIEU OF MANAGING ON SITE PER TABLE 6.17 OF THE DRAFT DPM.

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Phone: (970) 385-4546

Fax: (970) 385-4502

C-102

