

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

January 19, 2024

Brad Bingham, P.E.
Bingham Engineering
515 Montclair SE
Albuquerque, NM 87108

**RE: Hanover Studio
Grading Plan & Drainage Report
Engineer's Stamp Date: 01/15/24
Hydrology File: J10D040A**

Dear Mr. Arfman:

Based upon the information provided in your submittal received 12/09/2023, the Grading & Drainage Plan is approved for Building Permit, Grading Permit and Paving Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

PO Box 1293

PRIOR TO CERTIFICATE OF OCCUPANCY:

Albuquerque

NM 87103

www.cabq.gov

1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.
2. Please pay the Payment-in-Lieu of \$ **31,768.00** by emailing the attached approved Waiver Application from Stormwater Quality Volume Management On-site to PLNDRS@cabq.gov. Once this is received, a receipt will then be produced and email back. Follow the instructions on the bottom of the form and pay it at the Treasury in Plaza de Sol. Once paid, please provide me proof of payment.

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.

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

Renée C. Brissette

Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (DTIS)

Project Title: _____ Hydrology File # _____

Legal Description: _____

City Address, UPC, OR Parcel: _____

Applicant/Agent: _____ Contact: _____

Address: _____ Phone: _____

Email: _____

Applicant/Owner: _____ Contact: _____

Address: _____ Phone: _____

Email: _____

(Please note that a DFT SITE is one that needs Site Plan Approval & ADMIN SITE is one that does not need it.)

TYPE OF DEVELOPMENT: PLAT (#of lots) _____ RESIDENCE
DFT SITE ADMIN SITE

RE-SUBMITTAL: YES NO

DEPARTMENT: TRANSPORTATION HYDROLOGY/DRAINAGE

Check all that apply under Both the Type of Submittal and the Type of Approval Sought:

TYPE OF SUBMITTAL:

ENGINEER/ARCHITECT CERTIFICATION
PAD CERTIFICATION
CONCEPTUAL G&D PLAN
GRADING & DRAINAGE PLAN
DRAINAGE REPORT
DRAINAGE MASTER PLAN
CLOMR/LOMR
TRAFFIC CIRCULATION LAYOUT (TCL)
ADMINISTRATIVE
TRAFFIC CIRCULATION LAYOUT FOR DFT
APPROVAL
TRAFFIC IMPACT STUDY (TIS)
STREET LIGHT LAYOUT
OTHER (SPECIFY) _____

TYPE OF APPROVAL SOUGHT:

BUILDING PERMIT APPROVAL
CERTIFICATE OF OCCUPANCY
CONCEPTUAL TCL DFT APPROVAL
PRELIMINARY PLAT APPROVAL
FINAL PLAT APPROVAL
SITE PLAN FOR BLDG PERMIT DFT
APPROVAL
SIA/RELEASE OF FINANCIAL GUARANTEE
FOUNDATION PERMIT APPROVAL
GRADING PERMIT APPROVAL
SO-19 APPROVAL
PAVING PERMIT APPROVAL
GRADING PAD CERTIFICATION
WORK ORDER APPROVAL
CLOMR/LOMR
OTHER (SPECIFY) _____

DATE SUBMITTED: _____

CITY OF ALBUQUERQUE
PLANNING DEPARTMENT
HYDROLOGY DEVELOPMENT SECTION

**WAIVER APPLICATION FROM STORMWATER
QUALITY VOLUME MANAGEMENT ON-SITE**

GENERAL INFORMATION

APPLICANT: Avatar Recoveries LLC DATE: 1-6-2024

DEVELOPMENT: Hanover Studios

LOCATION: 6501 Hanover NW, Albuquerque

STORMWATER QUALITY POND VOLUME

Per the DPM Article 6-12 - Stormwater Quality and Low-Impact Development, the calculated sizing for required Stormwater Quality Pond volume is equal to the impervious area draining to the BMP multiplied by 0.42 inches for new development sites and by 0.26 inches for redevelopment sites.

The required volume is 3971 cubic feet

The provided volume is 0 cubic feet

The deficient volume is 3971 cubic feet

WAIVER JUSTIFICATION

Per the DPM Article 6-12(C), private off-site mitigation and payment-in-lieu may only be considered if management on-site is waived in accordance with the following criteria and procedures.

1. Management on-site shall be waived by the City Engineer if the following conditions are met:

- a. Stormwater quality can be effectively controlled through private off-site mitigation or through an arrangement (approved by the City) to use a cooperator's existing regional stormwater management infrastructure or facilities that are available to control stormwater quality.
 - b. Any of the following conditions apply:
 - i. The lot is too small to accommodate management on site while also accommodating the full plan of development.
 - ii. The soil is not stable as demonstrated by a geotechnical report certified by a professional engineer licensed in the State of New Mexico.
 - iii. The site use is inconsistent with the capture and reuse of stormwater.
 - iv. Other physical conditions exist where compliance with on-site stormwater quality control leaves insufficient area.
 - v. Public or private off-site facilities provide an opportunity to effectively accomplish the mitigation requirements of the Drainage Ordinance (Part 14-5-2 ROA 1994) as demonstrated on as-built construction drawings and an approved drainage report.
 - vi. The developer constructs a project to replenish regional groundwater supplies at an off-site location.
 - vii. A waiver to State water law or acquisition of water rights would be required in order to implement management on site.
2. The basis for requesting payment-in-lieu or private off-site mitigation is to be clearly demonstrated on the drainage plan.

This project's justification: This project is the second phase of a multi-phase project initiated 20 years ago, before SWQ mandates were enacted. The drainage solution provided the site drain to an internal inlet/stormdrain system. The inlet is in a drive aisle and modification to provide for the required SWQ volume is not feasible.

Bradley L Bingham, P.E.

Professional Engineer or Architect

PAYMENT-IN-LIEU

Per the DPM Article 6-12(C)(1), the amount of payment-in-lieu is deficient volume (cubic feet) times \$6 per cubic feet for detached single-family residential projects or \$8 per cubic feet for all other projects.

AMOUNT OF PAYMENT-IN-LIEU = \$ 31,768

THIS SECTION IS FOR CITY USE ONLY

☒ Waiver is approved. The amount of payment-in-lieu from above must be paid prior to Certificate of Occupancy.

☐ Waiver is DENIED.

Renée C. Brissette

01/19/24

City of Albuquerque
Hydrology Section

DRAINAGE REPORT

Hanover Studios
6501 Hanover NW
Albuquerque, New Mexico
January 13, 2024

Prepared by:

Bingham Engineering, LLC

515 Montclair Dr. SE

Albuquerque, New Mexico 87108

I certify that this report was prepared under my
supervision, and I am a registered professional
engineer in the State of New Mexico in good
standing.

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION

APPROVED

DATE: 01/19/24
BY: *Renée C. Brissette*
HydroTrans # J10D040A

THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE
CONSTRUED TO PERMIT VIOLATIONS OF ANY CITY
ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT
THE CITY OF ALBUQUERQUE FROM REQUIRING
CORRECTION, OR ERROR OR DIMENSIONS IN PLANS,
SPECIFICATIONS, OR CONSTRUCTIONS. SUCH APPROVED PLANS
SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT
AUTHORIZATION.



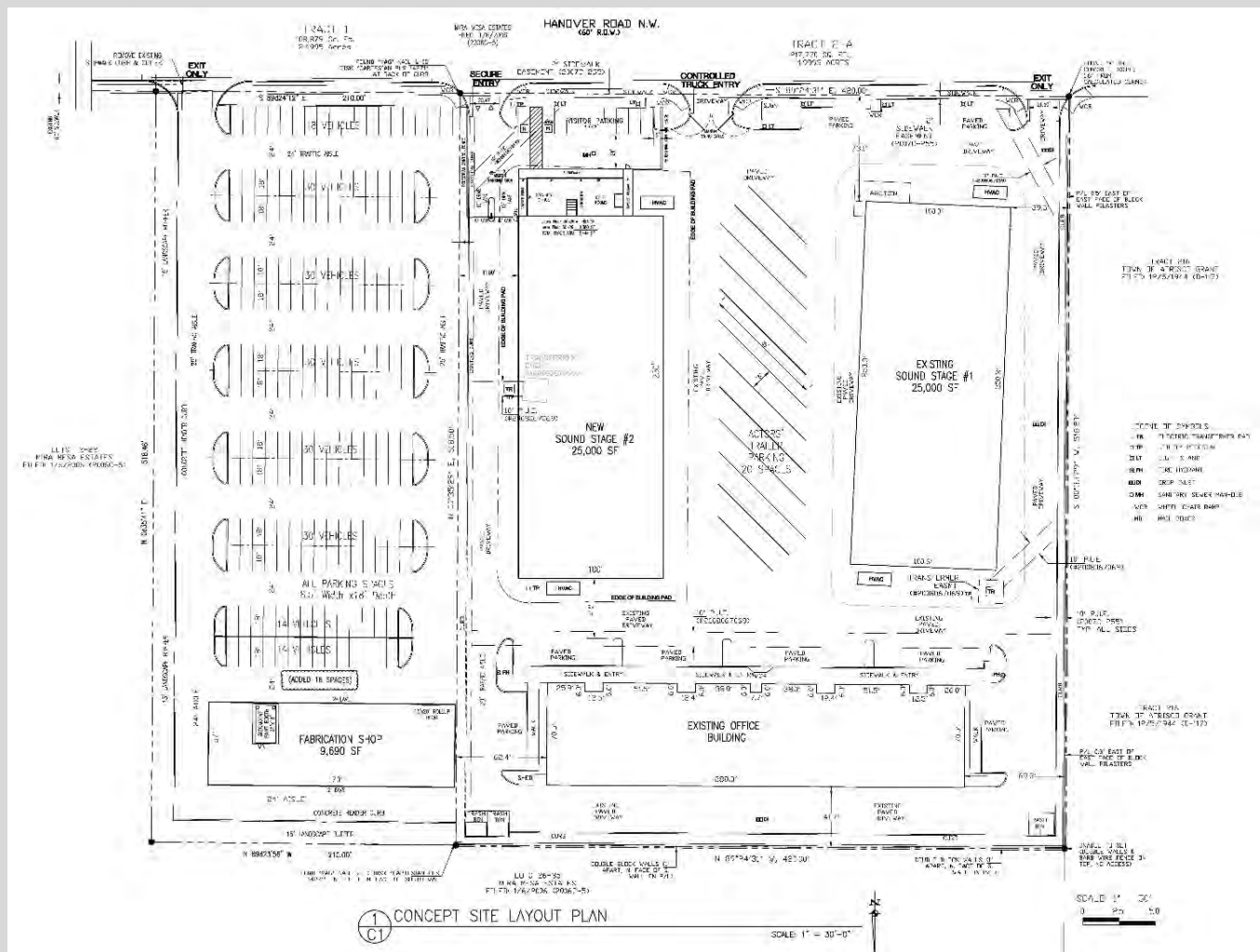
Bradley L. Bingham

PE NO. 12697

Introduction

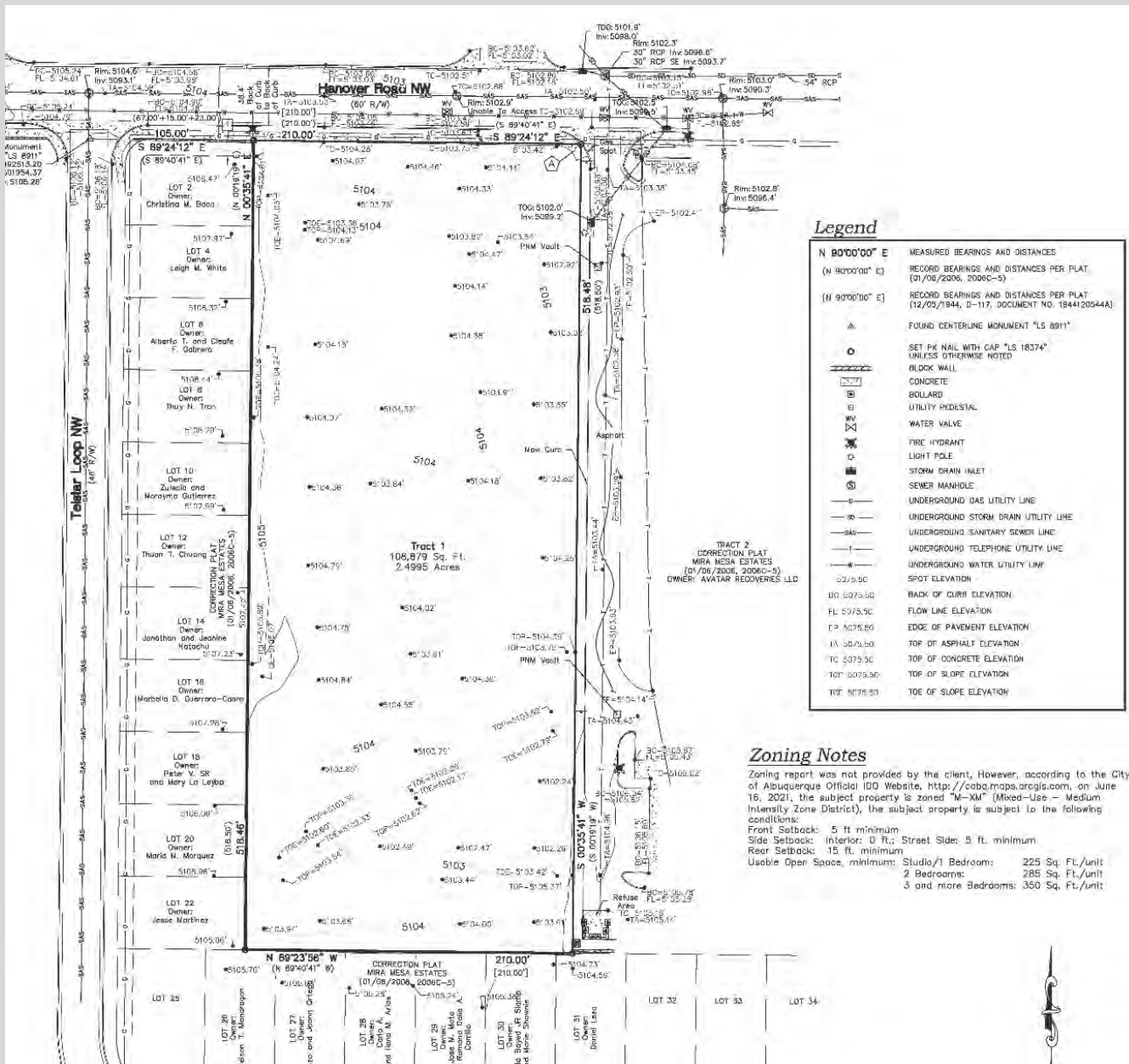
This report documents a proposed development on Tract 1 and Tract 2 of the Correction Plat of Mira Mesa Estates, filed 1-6-2006. It is bounded by Hanover Road to the north, and the Mira Mesa Estates Subdivision on the west and south. Phase I (J10-D040A) (see exhibit) constructed a 25,000 square foot studio, a 18,000 square foot support building and associated paved parking and drive aisles. A 25,000 square foot pad site was not paved to be used for future development.

Phase II of the Hanover Studio project will construct a 25,000 square foot pre-engineered metal building in Basin 205, a 9,690 square foot shop building on tract 1 and approximately 180 parking spaces. There will be a 15-landscape buffer on the west and south edge of the project. The conceptual site plan is shown below.



Existing Conditions

The following exhibit is the as-built certification for Phase I. It also demonstrates the sub-basin delineation of Tract 2. Basin 201, 202 and 203 drain to the northeast to an existing storm drain system connected to a storm drain in Hanover Rd. Basin 204 and 205 drain to a separate system, also connected to the Hanover system. Tract 1 (just to the west) is an undeveloped 2.5-acre parcel that currently drains into basin 205. See topographic exhibit and site pictures below.



PLAT OF TOPOGRAPHY
OF
TRACT A-2
MIRA MESA ESTATES
ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO
NOVEMBER 2023

GENERAL NOTES:

1. SPACING INTERVAL IS ONE (1) FOOT.
2. ELEVATION ARE BASED ON THE BOUNDARY SURVEY & ALTA/RETS LAST YEAR SURVEY OF TRACT 1 PREPARED BY CORTAVAL SURVEYING INC. SIGNED & STAMPED ON 0-22-21. NO CITY WADSWORTH INFORMATION WAS PROVIDED.
3. STUDIES SHOWN HEREIN ARE IN THEIR APPROPRIATE LOCATION BASED ONLY ON 2022. 2022 STUDIES WERE CONDUCTED IN THE FIELD AND AIRBORNE. INFORMATION PROVIDED BY THE CLIENT STUDIES SHOWN HEREIN, WHICH IS NOTED AS AIRBORNE OR SET, SHALL BE REVIEWED BY CHANGESTO FACT LOCATION, HUB, OR SOUTH POINT TO DETERMINE IF STUDY CAN BE SUBMITTED.
4. THIS IS A BOUNDARY SURVEY. AIRBORNE PROPERTY CORNERS AND PROPERTY LINES ARE SHOWN FOR INFORMATION ONLY. BOUNDARY DATA SHOWN IS FROM PREVIOUS SURVEY INTERESTS HEREIN.

subsequently to the inlet built with Phase I. The 15-foot landscape buffer will be graded so no runoff leaves it, therefore total impervious area from Tract 1 equals 2.25 acres (90%) draining to the inlet.

The owner has elected to pay Payment in Lieu, as calculated below.

Methodology and Calculations

Per the City of Albuquerque DPM regulations (Chapter 6), the runoff from the Phase II project can be calculated using Table 6.3.8. The site is in Zone 1. SWQV is determined by

| | Area | Ex runoff | Dev runoff | SWQ Vol |
|------------------|----------|-----------|------------|----------|
| New studio bldg. | 25000 sf | 2.34 cfs | 2.34 cfs | 541 cf |
| Tract 1 | 98010 sf | 3.85 cfs | 9.27 cfs | 3,430 cf |

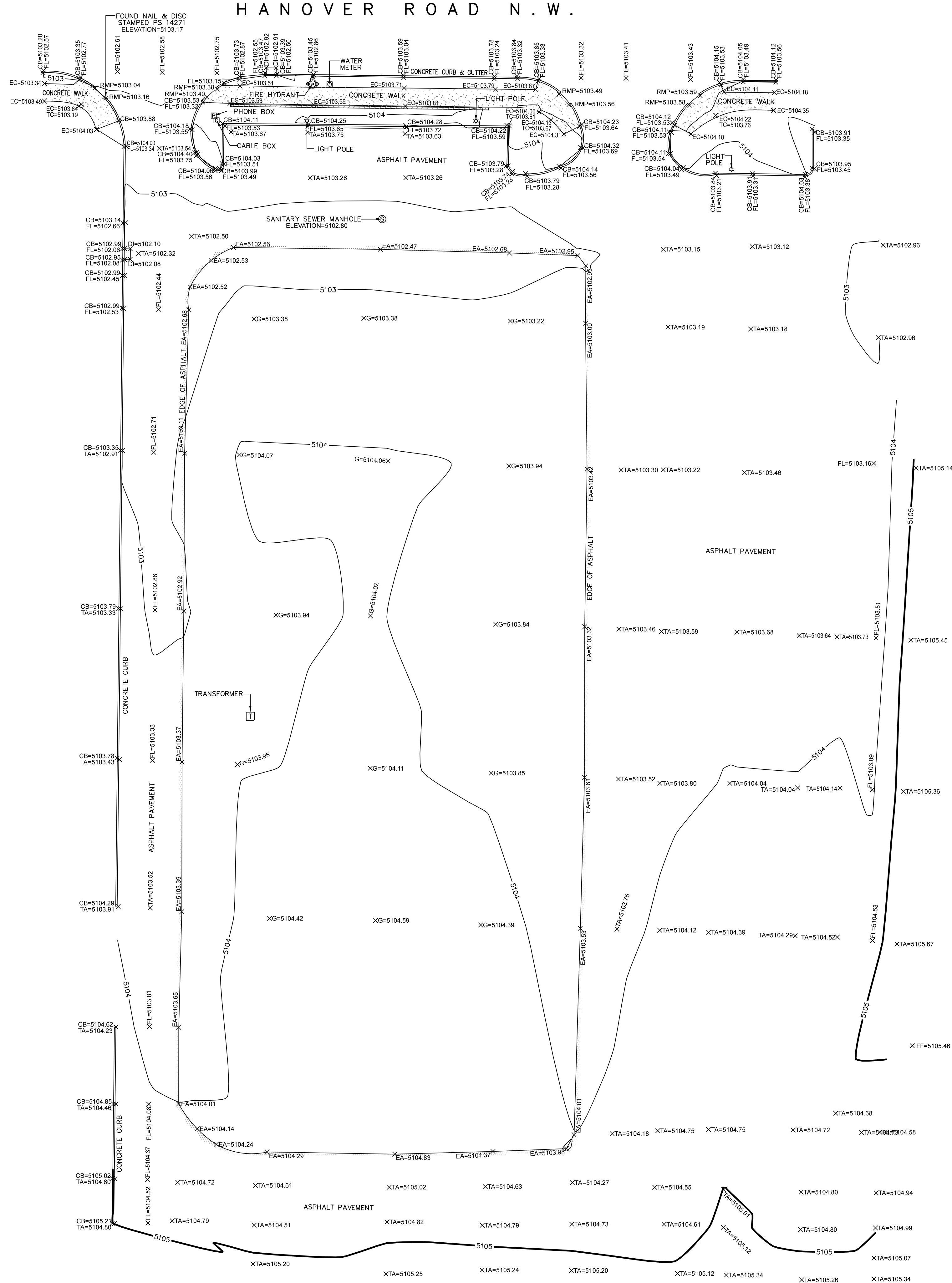
Summary

The construction of this project will produce a slight increase of 5.4 cfs entering the existing inlet. The inlet is a COA Type C (single grate, double throat) in a sump condition, which will be modified to be fitted with a COA Type D grate. The connector to the Hanover Rd system is an 18" ADS SD at 5%, which can easily handle the small increase.

PLAT OF TOPOGRAPHY
OF
TRACT A-2
MIRA MESA ESTATES
ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO
NOVEMBER 2023

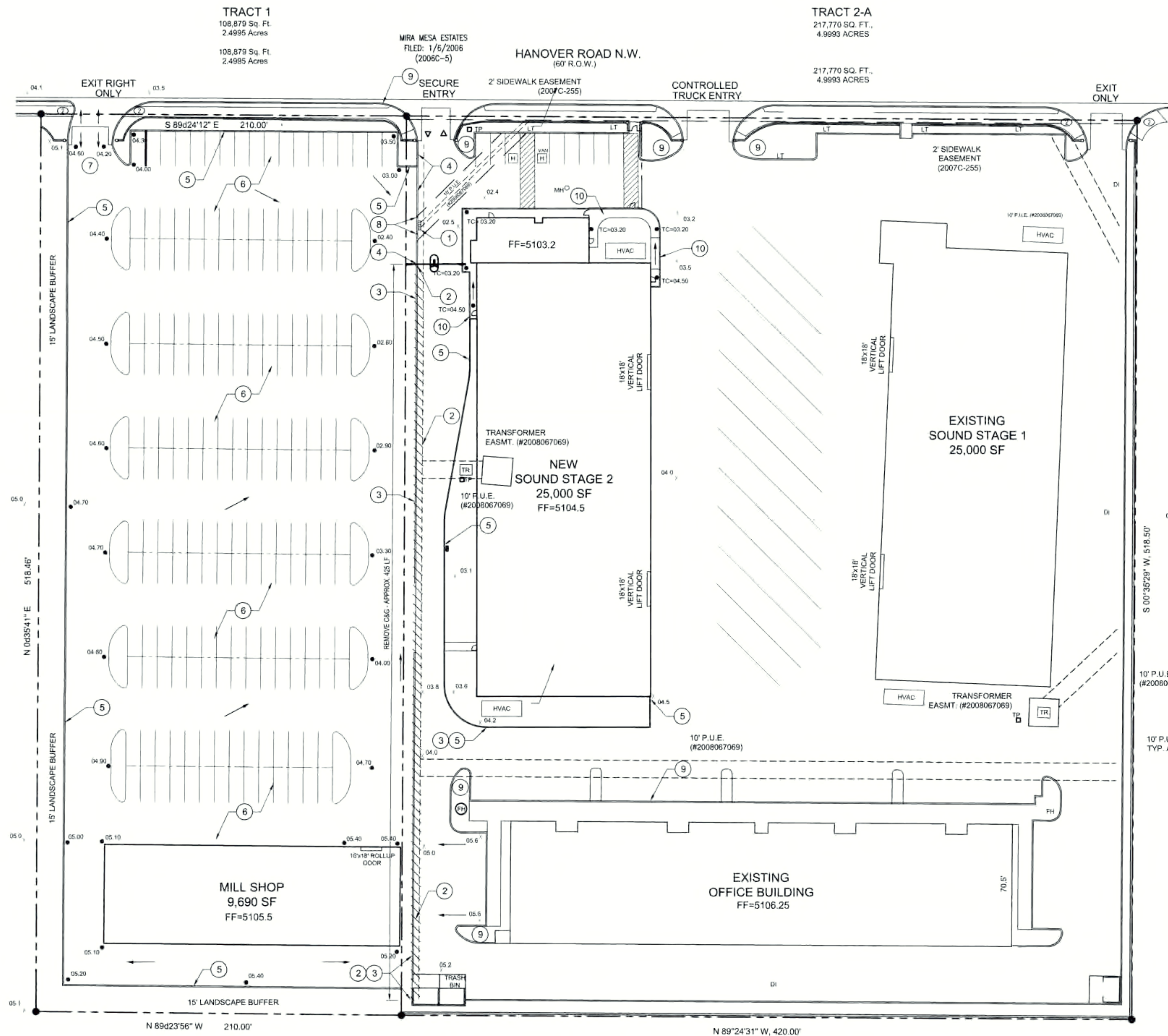
GENERAL NOTES:

- 1: CONTOUR INTERVAL IS ONE (1) FOOT.
- 2: ELEVATIONS ARE BASED ON THE BOUNDARY SURVEY & ALTA/NSPS LAND TITLE SURVEY OF TRACT 1 PREPARED BY CARTESIAN SURVEYS INC. SIGNED & STAMPED ON 6-22-21. NO CITY BENCHMARK INFORMATION WAS PROVIDED.
- 3: UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT INFORMATION PROVIDED BY THE CLIENT. UTILITIES SHOWN HEREON, WHETHER INDICATED AS ABANDONED OR NOT, SHALL BE VERIFIED BY OTHERS FOR EXACT LOCATION AND/ OR DEPTH PRIOR TO EXCAVATION OR DESIGN CON-SIDERATIONS.
- 4: THIS IS **NOT** A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS AND PROPERTY LINES ARE SHOWN FOR INFORMATION ONLY. BOUNDARY DATA SHOWN IS FROM PREVIOUS SURVEY REFERENCE HEREON



C SITE GRADING PLAN

1

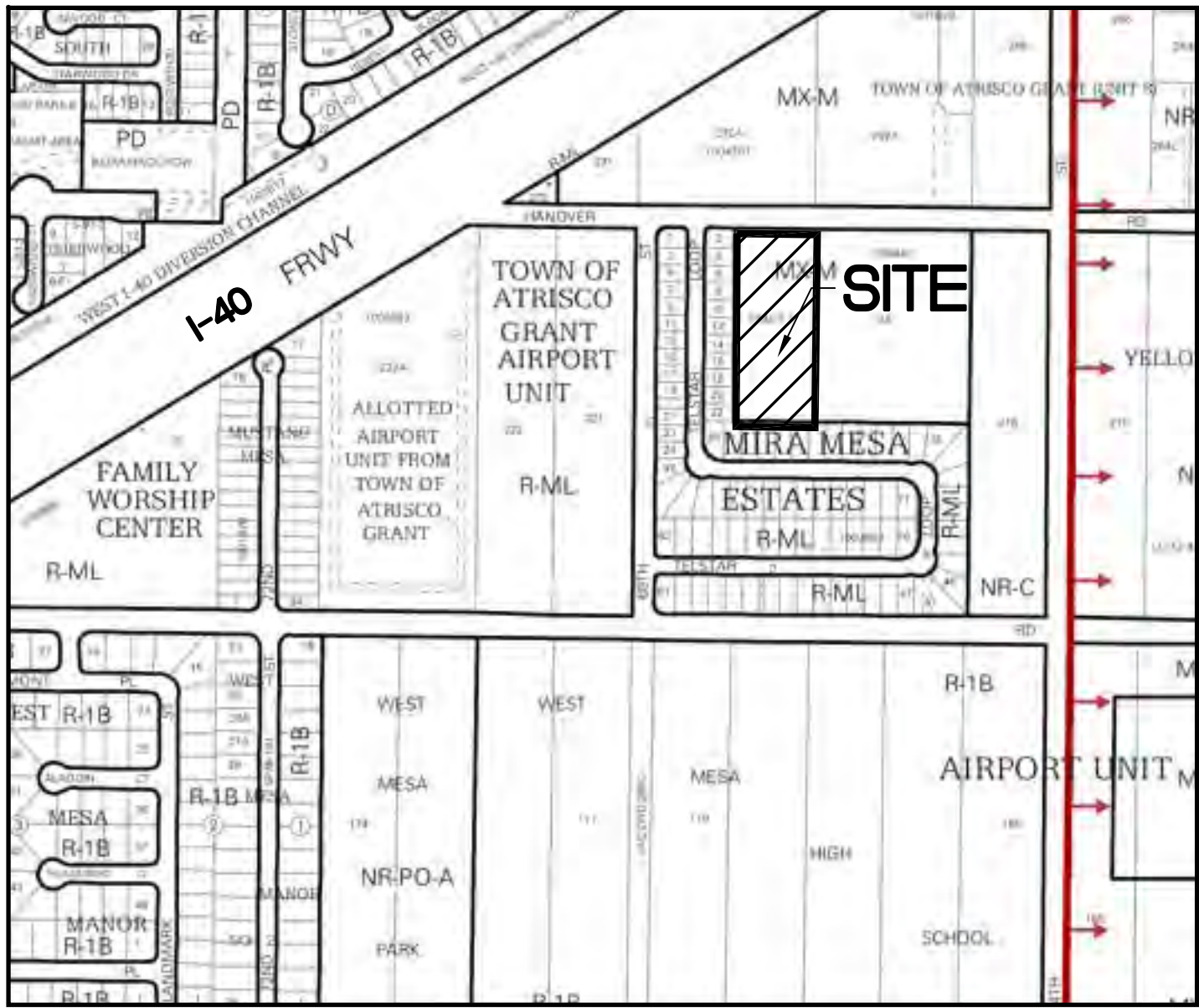


- SHEET NOTES:**
1. NEW SPOT ELEVATIONS ARE TO FLOW LINE OF CURB & GUTTER, TYP.
 2. EXISTING STORM DRAIN IN HANOVER NOT SHOWN FOR CLARITY.

- KEYED NOTES:**
1. EXISTING DRAINAGE INLET TO REMAIN. INV = 99.67 TOG=02.00
 2. REMOVE EXISTING CURB & GUTTER AND PREPARE FOR NEW PAVEMENT.
 3. MATCH EXISTING EDGE OF PAVEMENT.
 4. EXISTING CURB & GUTTER AND STORM INLET TO REMAIN.
 5. NEW 6" CURB & GUTTER.
 6. NEW 3" AC PAVEMENT.
 7. NEW WATER BLOCK AT NEW DRIVEWAY.
 8. NEW 6" CURB CUT ON EACH SIDE OF EXISTING INLET.
 9. EXISTING CURB TO REMAIN UNDISTURBED.
 10. NEW CONCRETE SIDEWALK & RAMP.

- LEGEND:**
- EX SPOT EL
 - NEW SPOT EL
 - C&G TO BE REMOVED

| | |
|---|----|
| REVISION | BY |
| | |
| | |
| | |
| | |
| PINCAM ENGINEERING, LLC 515 Monticello Drive SE Albuquerque, New Mexico 87108 (505) 258-1277 | |
| | |
| SOUND STAGE BUILDING HANOVER STUDIOS ALBUQUERQUE, NEW MEXICO 87121 6500 HANOVER RD. NW NEW | |
| SITE GRADING & DRAINAGE PLAN | |
| st price design studio KSH BLB 12/03/2023 1"=30' 23-14 2023 | |
| C-1 | |



Vicinity Map - Zone Atlas J-10-Z

Exceptions 9-13

- 9 RESERVATIONS CONTAINED IN PATENT FROM UNITED STATES OF AMERICA RECORDED IN BOOK 35, PAGE 91, RECORDS OF BERNALILLO COUNTY, NEW MEXICO. AFFECTS SUBJECT PROPERTY-BLANKET IN NATURE
- 10 EASEMENT(S) RESERVED ACROSS THE LAND, COVENANTS AND CONDITIONS AS SHOWN AND NOTED ON THE RECORDED PLAT, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO, ON JANUARY 6, 2006, IN PLAT BOOK 2006C, PAGE 5. AFFECTS SUBJECT PROPERTY-SHOWN HEREON AS 1
- 11 {a} RIGHT-OF-WAY EASEMENT TO AMERICAN TELEPHONE AND TELEGRAPH COMPANY OF WYOMING, DATED DECEMBER 13, 1929, RECORDED MAY 17, 1930, IN BOOK 112, PAGE 290, RECORDS OF BERNALILLO COUNTY, NEW MEXICO. SAID EASEMENT AMENDED BY A {b} MODIFICATION EASEMENT DATED JANUARY 31, 1973, RECORDED FEBRUARY 13, 1973, IN BOOK MISC. 298, PAGE 635, AS DOCUMENT NO. 35087, RECORDS OF BERNALILLO COUNTY, NEW MEXICO. {c} SAID EASEMENT HAVING BEEN ASSIGNED TO THE MOUNTAIN STATES TELEPHONE AND TELEGRAPH COMPANY, A COLORADO CORPORATION, BY ASSIGNMENT DATED DECEMBER 26, 1977, RECORDED DECEMBER 13, 1977, IN BOOK MISC. 575, PAGE 928, AS DOCUMENT NO. 77-77282, {d} AMENDED BY QUITCLAIM DEED FROM THE MOUNTAIN STATES TELEGRAPH AND TELEGRAPH COMPANY FILED JULY 8, 1988, RECORDED IN BOOK D337A, PAGE 559, AS DOCUMENT NO. 8861648; {e} AMENDED BY QUITCLAIM DEED FROM US WEST COMMUNICATIONS, INC. FILED DECEMBER 14, 1993 AS DOCUMENT NO. 93141149, RECORDS OF BERNALILLO COUNTY, NEW MEXICO.
- {a} DOES NOT AFFECT SUBJECT PROPERTY
{b} AFFECTS SUBJECT PROPERTY-BLANKET IN NATURE
{c} NOT SURVEY RELATED
{d} DOES NOT AFFECT SUBJECT PROPERTY
{e} DOES NOT AFFECT SUBJECT PROPERTY
- 12 TERMS AND CONDITIONS OF THAT CERTAIN REAL ESTATE CONTRACT OR MEMORANDUM THEREOF, EXECUTED BY AND BETWEEN JOHN LORENTZEN AND LOIS A. LORENTZEN, HUSBAND AND WIFE; PARK & SHUTTLE, INC., A NEW MEXICO CORPORATION; AND INFORMATICA, LLC, A NEW MEXICO LIMITED LIABILITY COMPANY, AS OWNER(S), AND MAIDA VALE INTERESTS, LLC, A NEW MEXICO LIMITED LIABILITY COMPANY, AS PURCHASER(S), DATED _____, FILED _____ AS DOCUMENT NO. _____, RECORDS OF BERNALILLO COUNTY, NEW MEXICO. NOT SURVEY RELATED
- 13 ANY MATTER ARISING AFTER THE DATE HEREOF WHICH COULD ADVERSELY AFFECT THE TITLE OF THE INSURED HEREUNDER BY REASON OF NON-DELIVERY OF PROPER DEED OR DEEDS CONVEYING TITLE TO SUBJECT PROPERTY TO THE ASSURED HEREUNDER AND THE EFFECT OF NON-DELIVERY OF SUBJECT DEED OR DEEDS; AND ANY CONDITION CONTAINED IN ANY REAL ESTATE CONTRACT AND/OR ASSIGNMENT OF ANY REAL ESTATE CONTRACT AFFECTING THE SUBJECT PROPERTY. NOT SURVEY RELATED

Flood Notes

BASED UPON SCALING, THIS PROPERTY LIES WITHIN FLOOD ZONE X WHICH IS DEFINED AS AN AREA OF MINIMAL FLOOD HAZARD AS DETERMINED BY F.E.M.A. AND SHOWN ON THE FLOOD INSURANCE RATE MAP NO. 35001C0327J, DATED NOVEMBER 4, 2016.

Documents

1. TITLE COMMITMENT PROVIDED BY FIRST AMERICAN TITLE, HAVING FILE NO. 2634346-AL04 AND AN EFFECTIVE DATE OF MAY 25, 2021.
2. CORRECTION PLAT OF MIRA MESA ESTATES FILED IN THE BERNALILLO COUNTY CLERK'S OFFICE ON JANUARY 6, 2006, IN BOOK 2006C, PAGE 5.
3. PLAT OF TOWN OF ATRISCO GRANT FILED IN THE BERNALILLO COUNTY CLERK'S OFFICE ON DECEMBER 05, 1944, IN BOOK D, PAGE 117, AS DOCUMENT NO. 1944120544A.
4. SPECIAL WARRANTY DEED FOR A 25% UNDIVIDED IN INTEREST OF THE SUBJECT PROPERTY TO PARK AND SHUTTLE, INC., FILED IN THE BERNALILLO COUNTY CLERK'S OFFICE ON MAY 23, 2014, AS DOCUMENT NO. 2014041129.
5. WARRANTY DEED FOR A 25% INTEREST OF THE SUBJECT PROPERTY TO PARK AND SHUTTLE, INC. FILED IN THE BERNALILLO COUNTY CLERK'S OFFICE ON NOVEMBER 17, 2014, AS DOCUMENT NO. 2014083633.
6. TRUSTEE'S DEED FOR A PORTION OF INTEREST IN THE SUBJECT PROPERTY TO JOHN AND LOIS LORENTZEN, FILED IN THE BERNALILLO COUNTY CLERK'S OFFICE ON APRIL 07, 2008, AS DOCUMENT NO. 2008039132.

Indexing Information

Section 15, Township 10 North, Range 2 East, N.M.P.M. as Projected into the Town of Aristo Grant
Subdivision: Mira Mesa Estates
Owner: Park & Shuttle Inc. Etal.
UPC #: 101005841545710502

Easement Notes

- 10 1 EXISTING 10' PNM EASEMENT (4/24/86, C3-78)

Surveyor's Observations


- A PUBLIC SIDEWALK INTO SUBJECT PROPERTY BY AS MUCH AS 7.9 FEET.

Record and Measured Legal Description

TRACT ONE (1) OF THE CORRECTION PLAT OF MIRA MESA ESTATES, TOWN OF ATRISCO GRANT, ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNED ON THE PLAT THEREOF, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO, ON JANUARY 6, 2006, IN PLAT BOOK 2006C, PAGE 5.

Boundary Survey and ALTA/NSPS Land Title Survey for Tract 1, Mira Mesa Estates City of Albuquerque Bernalillo County, New Mexico June 2021

Notes

- FIELD SURVEY PERFORMED IN JUNE 2021.
- ALL DISTANCES ARE GROUND DISTANCES: U.S. SURVEY FOOT.
- THE BASIS OF BEARINGS REFERENCES NEW MEXICO STATE PLANE COORDINATES (NAD 83-CENTRAL ZONE).
- NO BUILDINGS EXISTING ON THE SURVEYED PROPERTY.
- NO EVIDENCE OBSERVED INDICATING RECENT EARTHWORK, BUILDING CONSTRUCTION OR ADDITIONS.
- WITH REGARD TO UNDERGROUND UTILITY LOCATIONS, SOURCE INFORMATION FROM PLANS AND MARKINGS WERE COMBINED WITH OBSERVED EVIDENCE OF UTILITIES PURSUANT TO SECTION 5.E.iv. TO DEVELOP A VIEW OF THE UNDERGROUND UTILITIES. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY AND RELIABLY DEPICTED. IN ADDITION, IN SOME JURISDICTIONS, 811 OR OTHER SIMILAR UTILITY LOCATE REQUESTS FROM SURVEYORS MAY BE IGNORED OR RESULT IN AN INCOMPLETE RESPONSE, WHICH MAY AFFECT THIS SURVEYOR'S ASSESSMENT OF THE LOCATION OF THE UTILITIES. WHERE ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED, THE CLIENT IS ADVISED THAT THAT EXCAVATION AND/OR A PRIVATE UTILITY LOCATE REQUEST MAY BE NECESSARY. (NM811 TICKET NO. 21MY270366)
- PARTY WALL IS DEFINED AS A WALL ERECTED ON A PROPERTY BOUNDARY AS A COMMON SUPPORT TO STRUCTURES ON BOTH SIDES, WHICH HAVE DIFFERENT OWNERSHIPS. THERE ARE NO PARTY WALLS ON THE SUBJECT PROPERTY OTHER THAN SHOWN HEREON AS 
- WHILE NO SPECIFIC INFORMATION IS AVAILABLE BY THE CONTROLLING JURISDICTION CONCERNING PLANNED STREET WIDENING, THE SURVEYOR REFERS TO THE FOLLOWING WEBSITE FOR LONG RANGE STREET CLASSIFICATION, THE STREET WIDTH AND RETURN REQUIREMENTS FOR THE DIFFERENT CLASSIFICATIONS AND EVEN SPECIAL PLANNED CORRIDOR AND MASTER PLANS: [HTTP://WWW.CABQ.GOV/GIS](http://www.cabq.gov/gis)
- NO WETLAND DELINEATION MARKERS WERE OBSERVED IN THE FIELD DURING THIS SURVEY.
- THE COORDINATES SHOWN HEREON REFERENCE MODIFIED NEW MEXICO STATE PLANE COORDINATES (NAD 83-GROUND-CENTRAL ZONE), USING GROUND TO GRID FACTOR OF 0.999679308, WITH AN ORIGIN OF (0,0).

Surveyor's Certificate

To: First American Title Insurance Company, Maida Vale Interests, LLC, a New Mexico limited liability company, Park & Shuttle Inc. Etal:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes items 1-5, 6(a), 6(b), 7(a), 7(b), 7(c), 8, 9, 10, 11(a), 11(b), 13, 14 and 16-21 of Table A thereof. The Field Work was completed on June 14, 2021.

Will Plotner Jr. 6/22/2021
N.M.R.P.S. No. 14271 Date

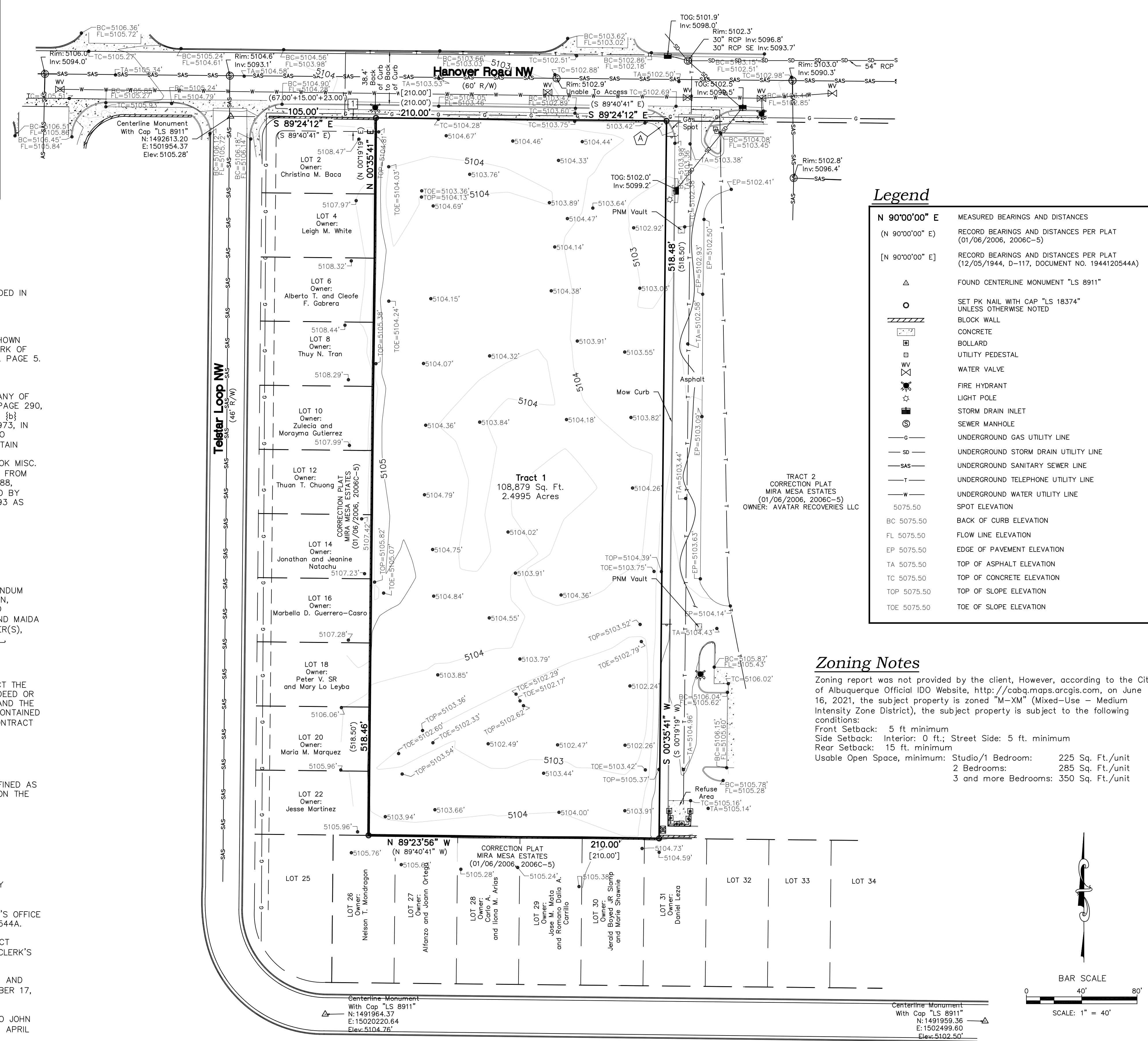
Revisions: 06/16/21 - Original
06/21/21 - Revised to include topographic data.
06/22/21 - Revised to clarify exceptions 11's multiple documents

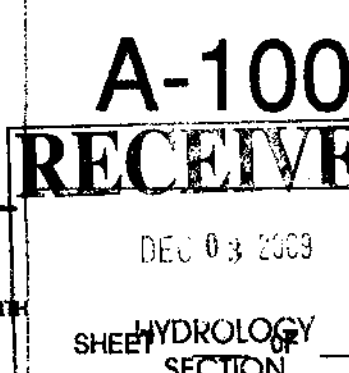
I, Will Plotner Jr., New Mexico Professional Surveyor No. 14271, do hereby certify that this boundary survey plat and the actual survey on the ground upon which it is based were performed by me or under my direct supervision; that I am responsible for this survey; that this survey meets the minimum standards for surveying in New Mexico; and that it is true and correct to the best of my knowledge and belief. I further certify that this survey is not a land division or subdivision as defined in the New Mexico subdivision act and that this instrument is a boundary survey plat of an existing tract or tracts.

Will Plotner Jr. 6/22/2021
N.M.R.P.S. No. 14271 Date

CSI-CARTESIAN SURVEYS INC.

P.O. BOX 44414 RIO RANCHO, N.M. 87174
Phone (505) 896-3050 Fax (505) 891-0244
wplotnerjr@gmail.com

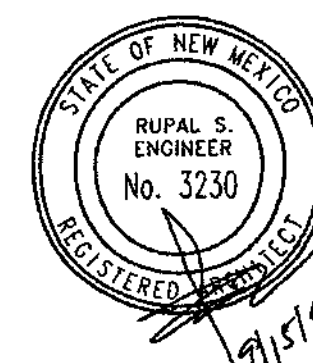




Proposed Site Plan

DESIGN PLUS LLC

2415 PRINCETON DR. NE, SUITE G-2
ALBUQUERQUE, NM 87107
505.843.7587 505.843.6773 (F)
www.designplusllc.com



HANOVER
BUSINESS PARK

GENERAL NOTES

- PARKING CALCULATIONS CAN BE FOUND ON SHEET A100.1.
- ALL COMPACT PARKING SPACES WILL BE MARKED AND SIGNED.

KEY NOTES

- SITE WALL - 6'-0" HIGH CMU WALL. UTILITY BLOCK 'GREY'.
- EXISTING 6'-0" HIGH CHAIN LINK FENCE.
- DEMOLISH EXISTING 6'-0" CMU WALL. INSTALL NEW RETAINING WALL PER C100 AND NEW PARTY WALL OR FENCE AS DIRECTED BY OWNER.
- EXISTING 4'-0" CONCRETE SIDEWALK, PLANTER, AND 6" CURB.
- LANDSCAPE AREA.
- EXISTING RESIDENCES.
- NEW SITE LIGHTING - BEGA DOMED REFLECTOR OR EQUAL - 18'-0" HIGH POLE.
- NEW SITE LIGHTING - BEGA OVAL REFLECTOR OR EQUAL - 20'-0" HIGH POLE.
- 11 UNIT BIKE RACK - 2 1/2" STEEL PIPE, FACTORY FINISH, COLOR BY ARCHITECT.
- MONUMENT SIGN - 12'-0" WIDE X 4'-0" HIGH.
- ALTERNATE SPLIT UNIT CONFIGURATION.
- FIRE HYDRANT LOCATION.
- ENTRANCE/EXIT SIGN FOR SERVICE LN.
- STOP SIGN.
- SITE-MOUNTED WASTE RECEPTACLE.
- 5'-0" LONG BENCH.
- MECHANICAL EQUIPMENT TO BE SCREENED BY PARAPET.
- NEW ACCESSIBLE CONCRETE RAMP, 1:50 MAXIMUM SLOPE. REFER TO CIVIL.

COLOR OF BUILDING ELEMENTS

- | | |
|---|---|
| A | STEEL BEAM / POST TRELLIS AND OVERHANG, PAINTED: ASH GREY |
| B | VERTICAL TILE: BLACK |
| C | STOREFRONT WINDOW AND FRONT DOOR SYSTEM: ASH GREY |
| D | HOLLOW METAL DOOR & FRAME: ASH GREY |
| E | STUCCO: WARM GRAY, MUSTARD, REDISH BROWN |
| F | BUILDING-MOUNTED LIGHT: BLACK |
| G | COPING: ASH GREY |
| H | OVERHEAD DOOR: COLOR WILL MATCH ADJACENT STUCCO |

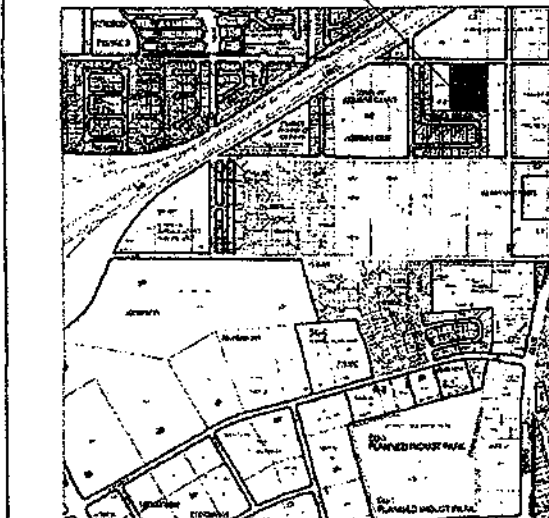
PROJECT NUMBER: 090822
Application Number: L200-0188

This plan is submitted with the express understanding that the applicant is responsible for obtaining all necessary permits and approvals from the appropriate authorities. The applicant warrants that the information provided is true and correct to the best of their knowledge and belief.

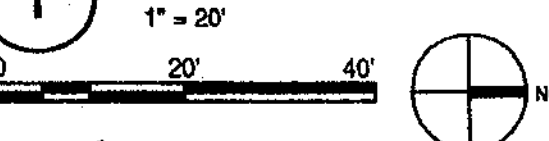
DATE: JUN. 20, 2007

| REVISIONS | DATE |
|-----------|----------------|
| R1 | 04.16.07 |
| R2 | 05.30.07 |
| R3 | SEPT. 15, 2009 |

PROJECT SITE

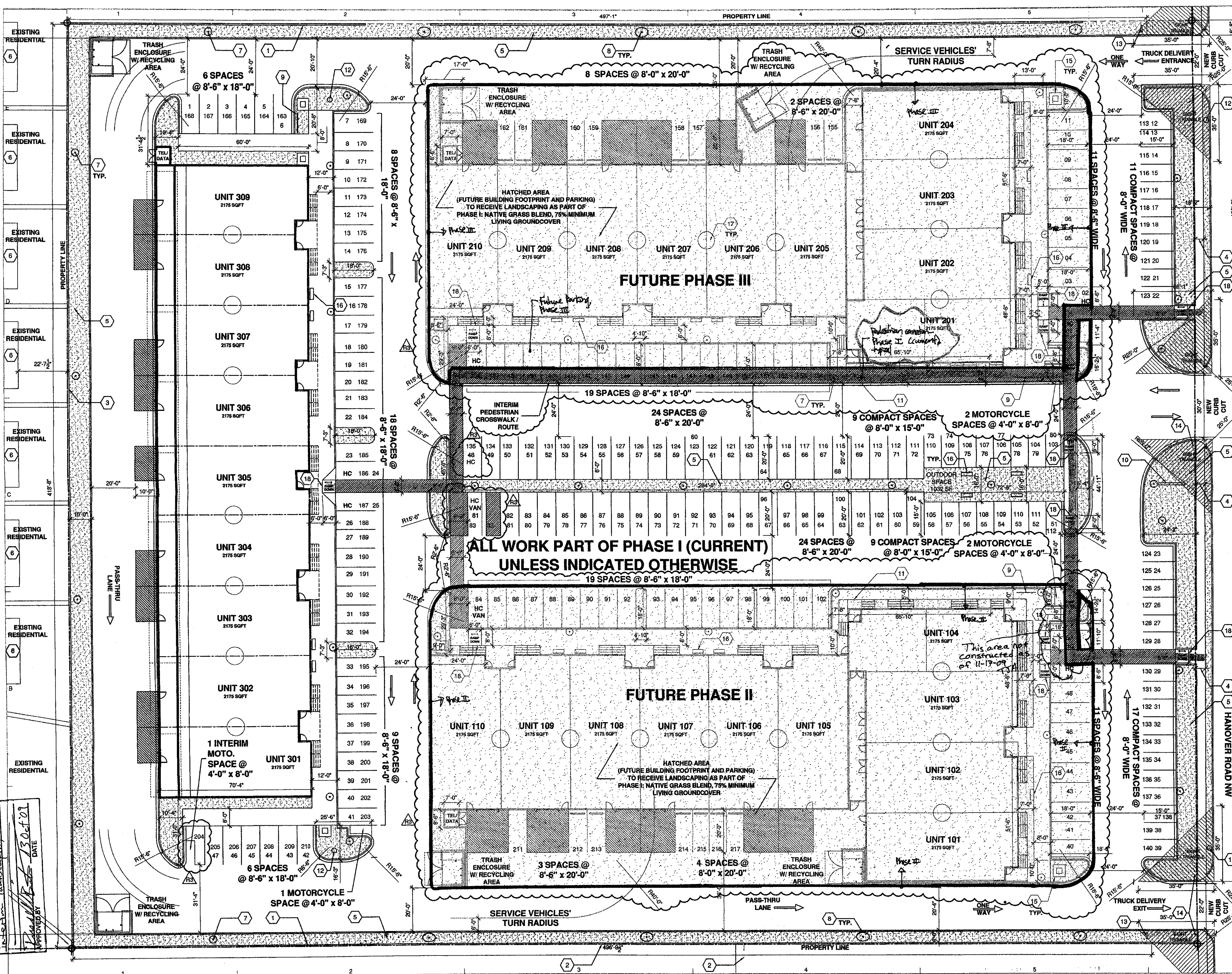


SITE PLAN FOR BUILDING PERMIT
1" = 20'



A-100
RECEIVED

DEC 03 2009
HYDROLOGY
SHEET SECTION



ADMINISTRATIVE AMENDMENT
File # 09A-00155 Project # 1005782
Placed construction with
interior landscaping.
Approved by: [Signature]
DATE: 12-03-09

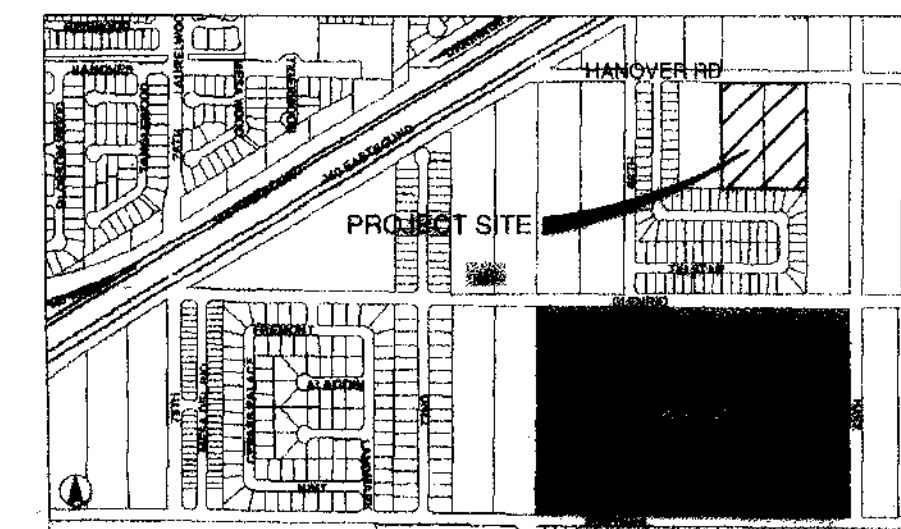
1. STA 10+00.00, @
INSTALL 1-TYPE "D" INLET
SEE DETAIL SHEET C501
TOG ELEV.=5105.00
INV. ELEV.=5103.00
2. STA 11+92.47, @
INSTALL 1-18" 90° ADS BEND
INV. ELEV.=5101.65
3. STA 14+64.38, @
INSTALL 1-TYPE "D"
SEE DETAIL SHEET C501
TOG ELEV.=5103.15
INV ELEV.=5099.75
4. STA 16+57.70, @
INSTALL 1-TYPE "D" INLET
SEE DETAIL SHEET C501
TOG ELEV.=5102.50
INV. ELEV.=5098.33
5. STA 17+19.43, @
INSTALL 1-TYPE "A" INLET
TC=5103.86
TOG=5103.76
INV(OUT)=5098.03
6. STA 17+31.54, 6.50'RT
TIE TO EXISTING SDMH
EX RIM=5102.97
EX INV=5091.87
- 6A. STA 11+23.33, 6.50'RT
TIE TO EXISTING SDMH
EX RIM=5099.67
EX INV=5094.75
7. N 4479.1833
E 5389.5030
REMOVE & DISPOSE EXISTING CMU WALL
INSTALL NEW PARTY WALL
SEE DETAIL SHEET C503
TW EL=5105.00
BW EL=5100.70
8. N 4476.7923
E 5646.1982
END REMOVE & DISPOSE EXISTING CMU WALL
END NEW PARTY WALL
SEE DETAIL SHEET C503
TW EL=5106.00
BW EL=5100.50
9. STA 10+00.00, @
INSTALL 1-TYPE A INLET
SEE DETAIL SHEET C501
TC=5103.10
TOG=5102.26
INV(OUT)=5098.77
10. STA 10+71.07, @
INSTALL 1-TYPE A INLET
SEE DETAIL SHEET C501
TC=5103.86
TOG=5103.76
INV(IN)=5098.10
INV(OUT)=5098.00
11. SAWCUT EXISTING ASPHALT AROUND INLET TO FULL
DEPTH. REMOVE & DISPOSE EXISTING ASPHALT & INLET
GROUT FILL EXISTING STORM DRAIN LATERAL TO
MANHOLE. PATCH EXISTING SAWCUT AREA TO FULL
DEPTH
12. INSTALL ADA WHEELCHAIR RAMP
SEE DETAIL SHEET C501
13. SAW CUT 20"-0" WIDE TRENCH REMOVE
AND DISPOSE TO FULL DEPTH. REPLACE
ASPHALT PER COA PAVEMENT SECTION
TO FULL DEPTH
14. WHEELCHAIR RAMP SEE DETAIL SHEET C505
15. SEE CURB & GUTTER DETAILS SHEET C505
16. CONCRETE VALLEY GUTTER SEE SHEET C505

| | TC | FL |
|---|------|------|
| 1 | 4.32 | 3.82 |
| 2 | — | 3.69 |
| 3 | 4.06 | 3.56 |

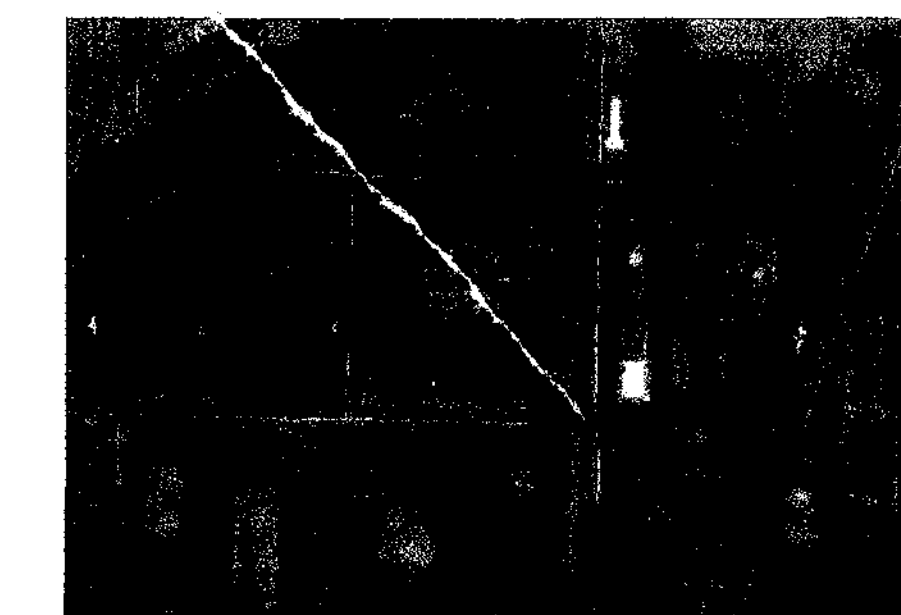
$\Delta = 90^\circ 48' 42''$
 $R = 25.00'$
 $L = 39.62'$



EXISTING INTERMEDIATE
CONTOUR
EXISTING INDEX CONTOUR
EXISTING PROPERTY LINE
BASIN BOUNDARIES
TOP OF CURB
TOP OF WALL
BOTTOM OF WALL
FINISHED FLOOR ELEVATION
HIGH POINT
GRADE BREAK
SWALE
DIRECTION OF FLOW
PROPOSED ASPHALT
PROPOSED LANDSCAPE
PROPOSED PCC
PROPOSED RETAINING WALL

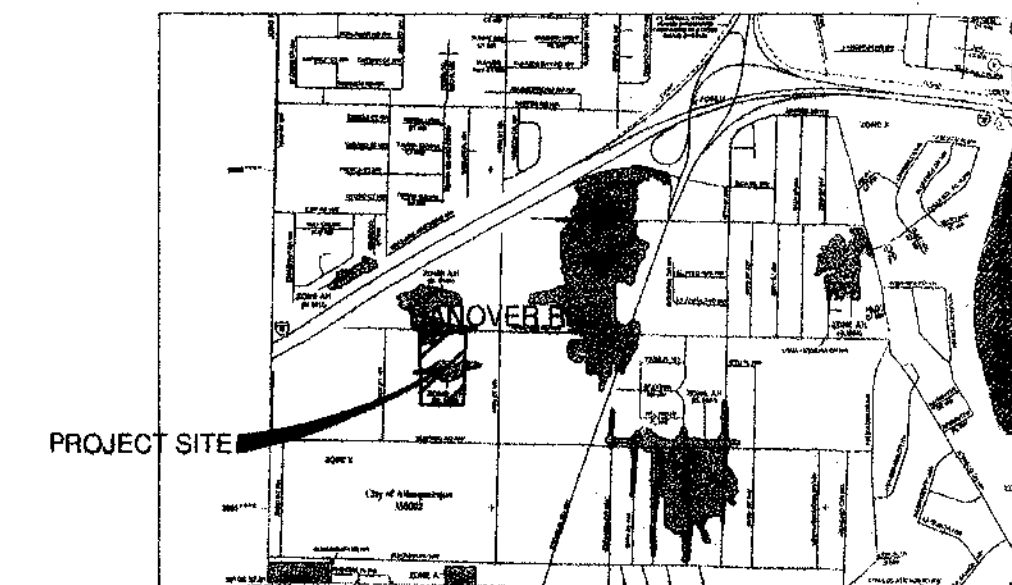


LOCATION MAP
ZONE ATLAS MAP NO. J-10



SOILS MAP

REFERENCE: SCS BERNALILLO COUNTY SOIL SURVEY
SHEET NO. 30



FLOOD INSURANCE MAP

REFERENCE: FLOOD INSURANCE STUDY
PANEL 35001C0327E

LEGAL DESCRIPTION

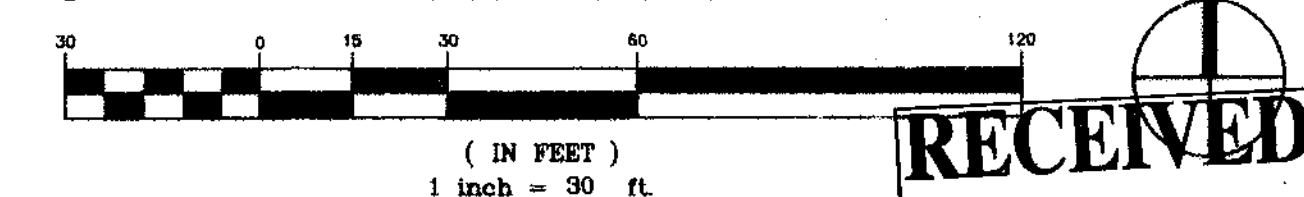
TRACT 2 OF THE CORRECTION PLAT OF MIRA MESA ESTATES,
TRACTS 217, 218, 219 AND 220,
TOWN OF ATRISCO GRANT, ALBUQUERQUE NEW MEXICO

BENCH MARK

A STANDARD STATE HIGHWAY COMMISSION DISK
STAMPED STA 1-40-18, AND IS FLUSH WITH THE GROUND
DATUM ELEVATION
NAVD 88 ELEV=5106.68

④ GRADING & DRAINAGE PLAN

GRAPHIC SCALE



RECEIVED

HYDROLOGY
SECTION

GRADING
& DRAINAGE
PLAN

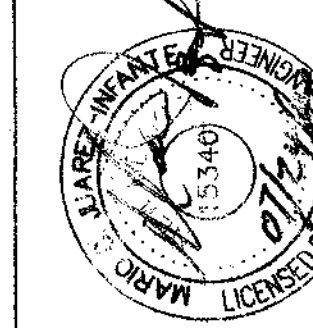
C101

SPEC 01

Plan approved by
City Engineer is
on following sheet

2415 PRINCETON DR. NE, SUITE G-2
ALBUQUERQUE, NM 87102
505.843.7587 505.843.6773(F)
www.designplusbb.com

**WILSON
& COMPANY**
900 LANG AVENUE N.E.
BUQUEROQUE, NM 87109
(505) 348-4000
FAX (505) 348-4072
WWW.WILSONCO.COM



HANOVER
BUSINESS PARK

DATE: JUL 24, 2007

REVISIONS

PROJECT NO:

CAD DWG FILE:

DRAWN BY:

CHECKED BY:

CONFIDENTIAL

DESIGN PLUS, L

SHEET THREE

GRADIN

& DRAINAGE

PLAN

C101

SPEC 04

- KEY NOTES**
- STA 10+00.00, C
INSTALL 1-TYPE "D" INLET
SEE DETAIL SHEET C501
TOG ELEV.=5105.00
INV. ELEV.=5103.00
 - STA 11+92.47, C
INSTALL 1-18" 90° ADS BEND
INV. ELEV.=5101.65
 - STA 14+64.38, C
INSTALL 1-TYPE "D" INLET
SEE DETAIL SHEET C501
TOG ELEV.=5103.15
INV. ELEV.=5099.75
 - STA 16+57.70, C
INSTALL 1-TYPE "D" INLET
SEE DETAIL SHEET C501
TOG ELEV.=5102.50
INV. ELEV.=5098.33
 - STA 17+19.43, C
INSTALL 1-TYPE "A" INLET
TOG=5103.86
TOG=5103.76
INV(OUT)=5098.03
 - STA 17+31.54, 6.50' RT
TIE TO EXISTING SDMH
EX RIM=5102.97
EX INV=5091.87
 - N 4479.1833
E 5389.5030
REMOVE & DISPOSE EXISTING CMU WALL
INSTALL NEW PARTY WALL
SEE DETAIL SHEET C503
TW EL=5105.00
BW EL=5100.70
 - N 4476.7923
E 5846.1982
END REMOVE & DISPOSE EXISTING CMU WALL
END NEW PARTY WALL
SEE DETAIL SHEET C503
TW EL=5106.00
BW EL=5100.50
 - STA 10+00.00, C
INSTALL 1-TYPE A INLET
SEE DETAIL SHEET C501
TOG=5103.10
TOG=5102.26
INV(OUT)=5098.77
 - STA 10+71.07, C
INSTALL 1-TYPE A INLET
SEE DETAIL SHEET C501
TOG=5103.86
TOG=5103.76
INV(IN)=5098.10
INV(OUT)=5098.00
 - SAWCUT EXISTING ASPHALT AROUND INLET TO FULL DEPTH. REMOVE & DISPOSE EXISTING ASPHALT & INLET GROUT FILL EXISTING STORM DRAIN LATERAL TO MANHOLE. PATCH EXISTING SAWCUT AREA TO FULL DEPTH
 - INSTALL ADA WHEELCHAIR RAMP
SEE DETAIL SHEET C501
 - SAW CUT 20'-0" WIDE TRENCH REMOVE AND DISPOSE TO FULL DEPTH. REPLACE ASPHALT PER COA PAVEMENT SECTION TO FULL DEPTH
 - WHEELCHAIR RAMP SEE DETAIL SHEET C505
 - SEE CURB & GUTTER DETAILS SHEET C505
 - CONCRETE VALLEY GUTTER SEE SHEET C505

CURVE DATA DESCRIBES FACE OF CURB

| A | TC FL | |
|---|-------------|------|
| | 1 | 2 |
| | 3.57 | 3.07 |
| | 2 | 3.44 |
| | 3 | 4.31 |
| | 4 | 3.81 |
| | Δ=87°57'07" | |
| | R=25.00' | |
| | L=38.38' | |

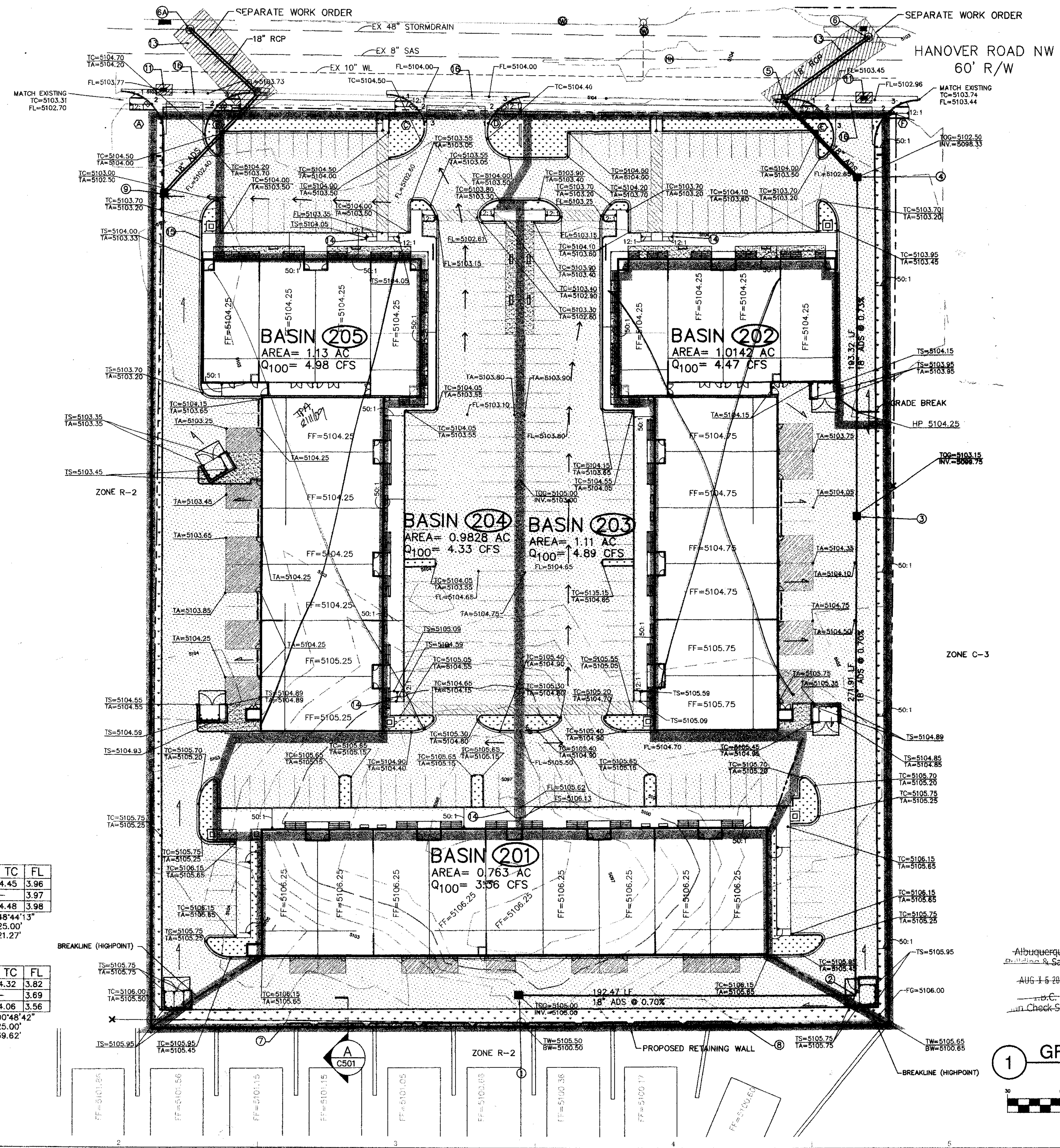
| B | TC FL | |
|---|-------------|------|
| | 1 | 2 |
| | 4.85 | 4.35 |
| | 2 | 4.50 |
| | 3 | 5.15 |
| | 4 | 4.65 |
| | Δ=80°40'03" | |
| | R=25.00' | |
| | L=35.20' | |

| C | TC FL | |
|---|-------------|------|
| | 1 | 2 |
| | 4.45 | 3.96 |
| | 2 | 3.97 |
| | 3 | 4.48 |
| | 4 | 3.98 |
| | Δ=48°44'13" | |
| | R=25.00' | |
| | L=21.27' | |

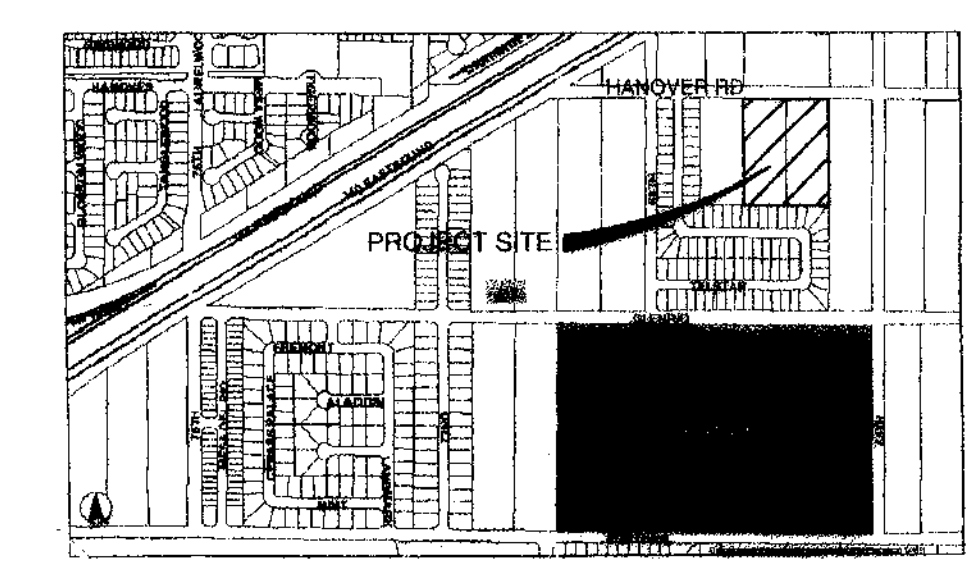
| D | TC FL | |
|---|-------------|------|
| | 1 | 2 |
| | 4.20 | 3.70 |
| | 2 | 3.70 |
| | 3 | 4.20 |
| | 4 | 3.70 |
| | Δ=61°12'03" | |
| | R=25.00' | |
| | L=26.70' | |

| E | TC FL | |
|---|-------------|------|
| | 1 | 2 |
| | 4.13 | 3.63 |
| | 2 | 3.74 |
| | 3 | 4.35 |
| | 4 | 3.85 |
| | Δ=65°37'15" | |
| | R=25.00' | |
| | L=28.63' | |

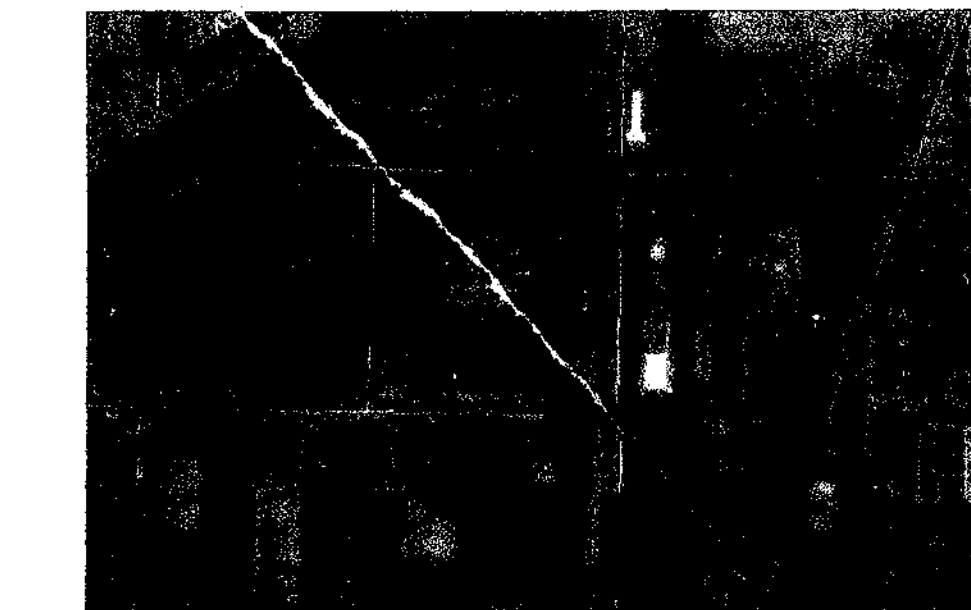
| F | TC FL | |
|---|-------------|------|
| | 1 | 2 |
| | 4.32 | 3.82 |
| | 2 | 3.69 |
| | 3 | 4.06 |
| | 4 | 3.56 |
| | Δ=90°48'42" | |
| | R=25.00' | |
| | L=39.62' | |



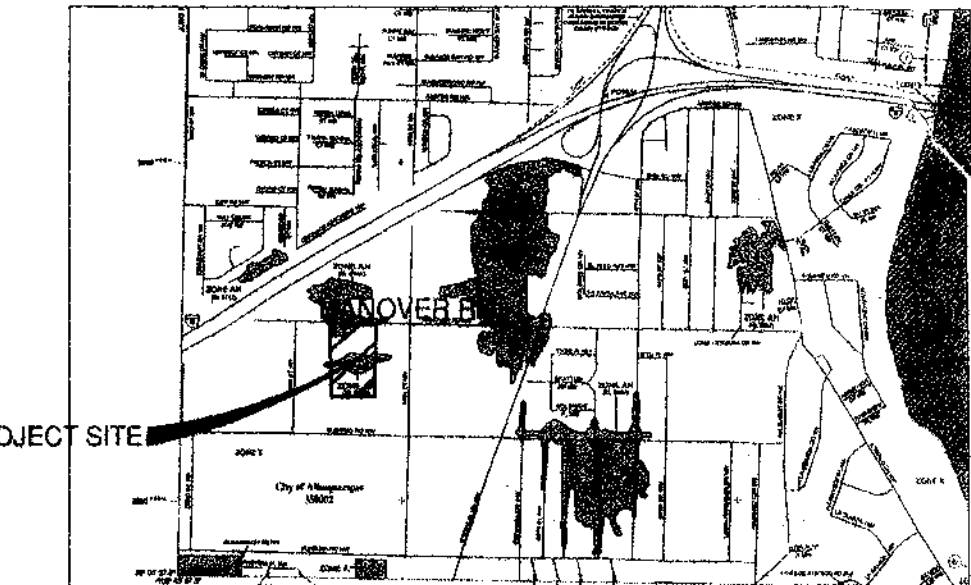
- LEGEND**
- EXISTING INTERMEDIATE CONTOUR
 - EXISTING INDEX CONTOUR
 - EXISTING PROPERTY LINE
 - BASIN BOUNDARIES
 - TOP OF CURB
 - TOP OF WALL
 - BOTTOM OF WALL
 - FINISHED FLOOR ELEVATION
 - HIGH POINT
 - GRADE BREAK
 - SWALE
 - DIRECTION OF FLOW
 - PROPOSED ASPHALT
 - PROPOSED LANDSCAPE
 - PROPOSED PCC
 - PROPOSED RETAINING WALL



LOCATION MAP
ZONE ATLAS MAP NO. J-10



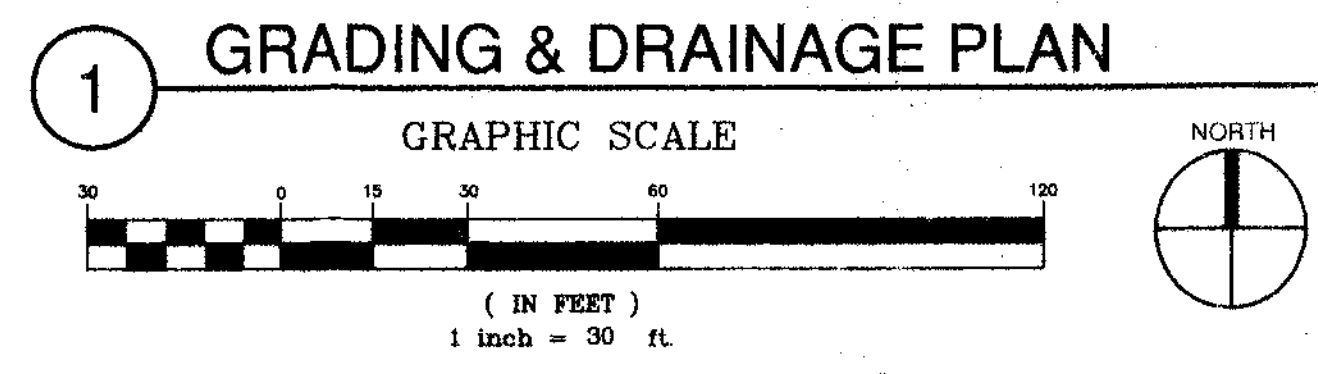
SOILS MAP
REFERENCE: SCS BERNALILLO COUNTY SOIL SURVEY SHEET NO. 30



FLOOD INSURANCE MAP
REFERENCE: FLOOD INSURANCE STUDY PANEL 35001C0327E

LEGAL DESCRIPTION
TRACT 2 OF THE CORRECTION PLAT OF MIRA MESA ESTATES, TRACTS 217, 218, 219 AND 220, TOWN OF ATRISCO GRANT, ALBUQUERQUE NEW MEXICO

BENCH MARK
A STANDARD STATE HIGHWAY COMMISSION DISK STAMPED STA 1-40-18, AND IS FLUSH WITH THE GROUND DATUM ELEVATION NAVD 88 ELEV=5106.68



2415 PRINCETON DR. NE SUITE G-2
ALBUQUERQUE, NM 87110
505.843.7587 505.843.6773 (F)
WWW.DESIGNPLUSLLC.COM

DESIGN PLUS LLC

4900 LANG AVENUE N.E.
ALBUQUERQUE, NM 87109
(505) 348-4000
FAX (505) 348-4072
WWW.WILSONCO.COM

WILSON & COMPANY

HANOVER BUSINESS PARK

DATE: JUL 24, 2007

REVISIONS

PROJECT NO:

CAD DWG FILE:

DRAWN BY:

CHECKED BY:

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DESIGN PLUS, LLC

SHEET TITLE

GRADING & DRAINAGE PLAN

C101

Plan approved by
City Engineer is
on following sheet

KEY NOTES

- STA 10+00.00, @
INSTALL 1-TYPE "D" INLET
SEE DETAIL SHEET C501
TOG ELEV.=5105.00
INV. ELEV.=5103.00
- STA 11+92.47, @
INSTALL 1-18" 90° ADS BEND
INV. ELEV.=5101.65
- STA 14+64.38, @
INSTALL 1-TYPE "D" INLET
SEE DETAIL SHEET C501
TOG ELEV.=5103.15
INV. ELEV.=5099.75
- STA 16+57.70, @
INSTALL 1-TYPE "D" INLET
SEE DETAIL SHEET C501
TOG ELEV.=5102.50
INV. ELEV.=5098.33
- STA 17+19.43, @
INSTALL 1-TYPE "A" INLET
TC=5103.86
TOG=5103.76
INV(OUT)=5098.03
- STA 17+31.54, 6.50' RT
TIE TO EXISTING SDMH
EX RIM=5102.97
EX INV=5091.87
- N 4479.1833
E 5389.5030
REMOVE & DISPOSE EXISTING CMU WALL
INSTALL NEW PARTY WALL
SEE DETAIL SHEET C503
TW EL=5105.00
BW EL=5100.70
- N 4476.7923
E 5646.1982
END REMOVE & DISPOSE EXISTING CMU WALL
END NEW PARTY WALL
SEE DETAIL SHEET C503
TW EL=5106.00
BW EL=5100.50
- STA 10+00.00, @
INSTALL 1-TYPE "A" INLET
SEE DETAIL SHEET C501
TC=5103.10
TOG=5102.26
INV(OUT)=5098.77
- STA 10+71.07, @
INSTALL 1-TYPE "A" INLET
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INV(IN)=5098.10
INV(OUT)=5098.00
- SAWCUT EXISTING ASPHALT AROUND INLET TO FULL DEPTH. REMOVE & DISPOSE EXISTING ASPHALT & INLET GROUT FILL EXISTING STORM DRAIN LATERAL TO MANHOLE. PATCH EXISTING SAWCUT AREA TO FULL DEPTH
- INSTALL ADA WHEELCHAIR RAMP
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- SAW CUT 20'-0" WIDE TRENCH REMOVE AND DISPOSE TO FULL DEPTH. REPLACE ASPHALT PER COA PAVEMENT SECTION TO FULL DEPTH
- WHEELCHAIR RAMP SEE DETAIL SHEET C505
- SEE CURB & GUTTER DETAILS SHEET C505
- CONCRETE VALLEY GUTTER SEE SHEET C505

CURVE DATA DESCRIBES FACE OF CURB

| A | TC FL | |
|---|------------------------|------|
| | 1 | 2 |
| | 3.57 | 3.07 |
| | 2 | 3.44 |
| | 3 | 4.31 |
| | 3.81 | |
| | $\Delta=87^{\circ}07'$ | |
| | R=25.00' | |
| | L=38.38' | |

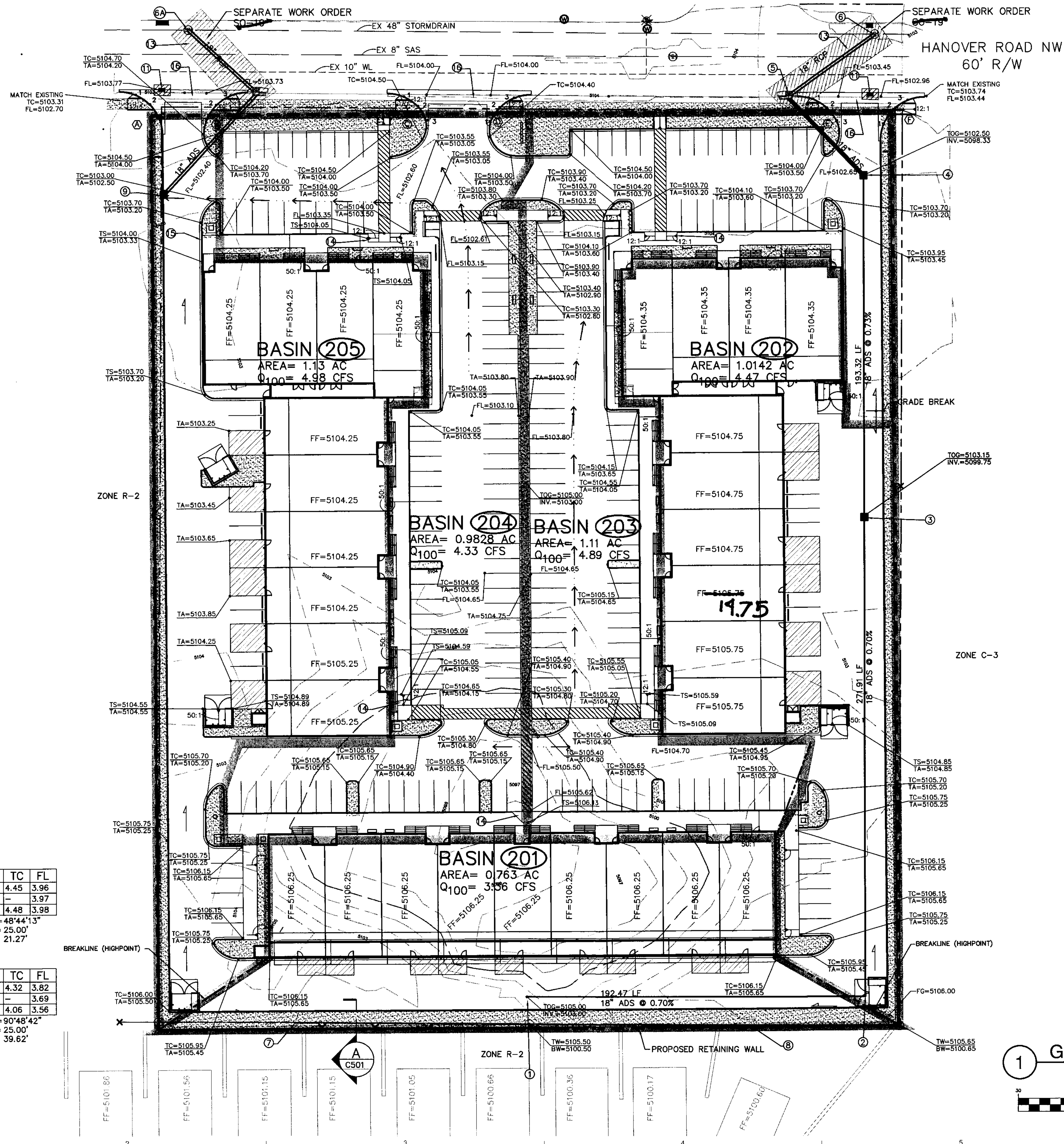
| B | TC FL | |
|---|----------------------------|------|
| | 1 | 2 |
| | 4.85 | 4.35 |
| | 2 | 4.50 |
| | 3 | 5.15 |
| | 4.65 | |
| | $\Delta=80^{\circ}40'03''$ | |
| | R=25.00' | |
| | L=35.20' | |

| C | TC FL | |
|---|----------------------------|------|
| | 1 | 2 |
| | 4.45 | 3.96 |
| | 2 | 3.97 |
| | 3 | 4.48 |
| | 3.98 | |
| | $\Delta=48^{\circ}44'13''$ | |
| | R=25.00' | |
| | L=21.27' | |

| D | TC FL | |
|---|----------------------------|------|
| | 1 | 2 |
| | 4.20 | 3.70 |
| | 2 | 3.70 |
| | 3 | 4.20 |
| | 3.70 | |
| | $\Delta=61^{\circ}12'03''$ | |
| | R=25.00' | |
| | L=26.70' | |

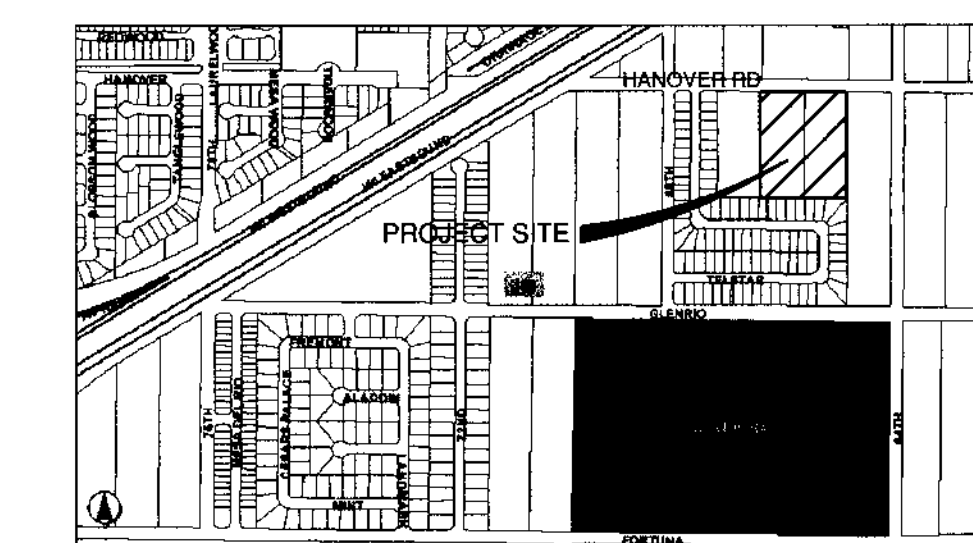
| E | TC FL | |
|---|----------------------------|------|
| | 1 | 2 |
| | 4.13 | 3.63 |
| | 2 | 3.74 |
| | 3 | 4.35 |
| | 3.85 | |
| | $\Delta=65^{\circ}37'15''$ | |
| | R=25.00' | |
| | L=28.63' | |

| F | TC FL | |
|---|----------------------------|------|
| | 1 | 2 |
| | 4.32 | 3.82 |
| | 2 | 3.69 |
| | 3 | 4.06 |
| | 3.56 | |
| | $\Delta=90^{\circ}48'42''$ | |
| | R=25.00' | |
| | L=39.62' | |



LEGEND

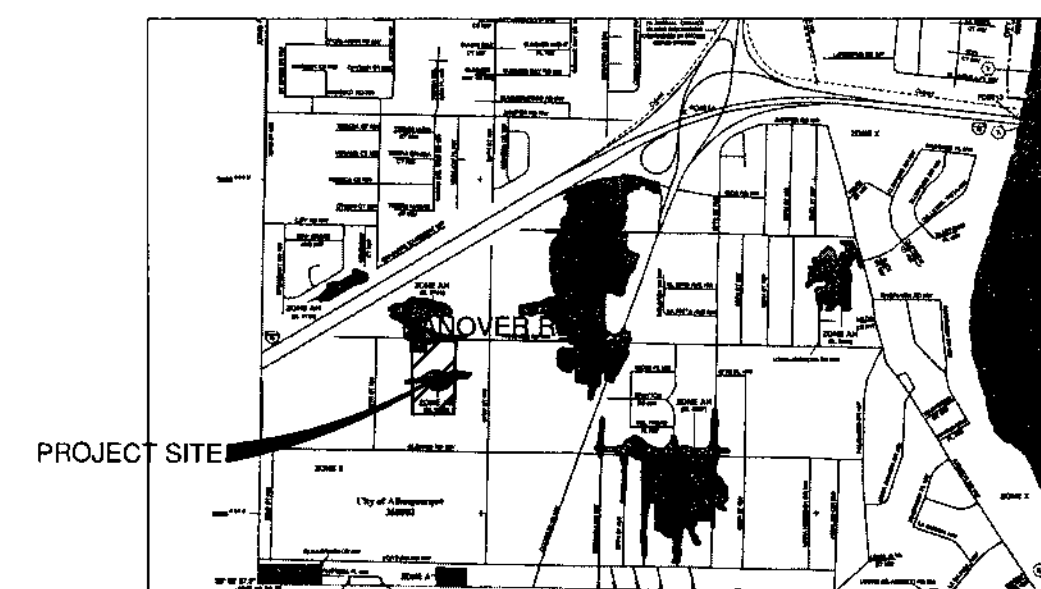
- EXISTING INTERMEDIATE CONTOUR
- EXISTING INDEX CONTOUR
- EXISTING PROPERTY LINE
- BASIN BOUNDARIES
- TC= TOP OF CURB
- TW= TOP OF WALL
- BW= BOTTOM OF WALL
- FF= FINISHED FLOOR ELEVATION
- GRADE BREAK
- SWALE
- DIRECTION OF FLOW
- PROPOSED ASPHALT



LOCATION MAP
ZONE ATLAS MAP NO. J-10



SOILS MAP
REFERENCE: SCS BERNALILLO COUNTY SOIL SURVEY
SHEET NO. 30

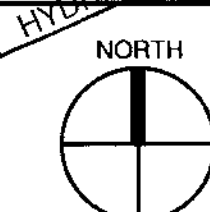
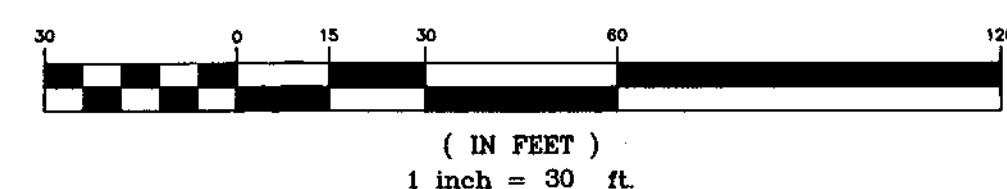


FLOOD INSURANCE MAP
REFERENCE: FLOOD INSURANCE STUDY
PANEL 35001C0327E
LEGAL DESCRIPTION
TRACT 2 OF THE CORRECTION PLAT OF MIRA MESA ESTATES,
TRACTS 217, 218, 219 AND 220,
TOWN OF ATRISCO GRANT, ALBUQUERQUE NEW MEXICO

BENCH MARK
A STANDARD STATE HIGHWAY COMMISSION DISK
STAMPED STA 1-40-18, AND IS FLUSH WITH THE GROUND
DATUM ELEVATION
NAVD 88 ELEV=5106.68

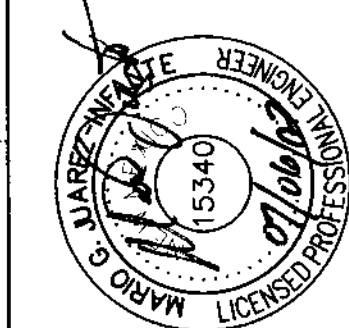
GRADING & DRAINAGE PLAN

GRAPHIC SCALE



DESIGN PLUS LLC
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ALBUQUERQUE, NM 87107
505.843.7587 505.843.6773 (F)
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WILSON & COMPANY
4900 LANG AVENUE N.E.
ALBUQUERQUE, NM 87109
(505) 348-4000
FAX (505) 348-4072
WWW.WILSONCO.COM



HANOVER
BUSINESS PARK

DATE: JUN. 12, 2007

REVISIONS

PROJECT NO:

CAD DWG FILE:

DRAWN BY:

CHECKED BY:

COPYRIGHT:
DESIGN PLUS, LLC

SHEET TITLE

GRADING
& DRAINAGE
PLAN

C101

SHEET ____ OF ____

Introduction

A commercial site will be developed at Hannover Road. This commercial site will have an underground drainage system and will be graded to eliminate possible flooding. The site is currently located in a floodplain area according to FEMA; in order to remove the floodplain a LOMR will be required. A both hydrology and hydrologic analysis is needed to analyze how the runoff is going to affect the site as well as the surrounding areas.

Project Description

Hannover Business Center is located at Hannover Road, track #2 , located in Zone Atlas Map J-10-Z. The legal description is Tract #2 of the Correction Plat of MIRA MESA ESTATES, Tracts 217, 218, 219, and 220, Town of Atrisco Grant, Albuquerque, New Mexico. The purpose of this drainage report is to provide infrastructure and development improvements for the proposed site.

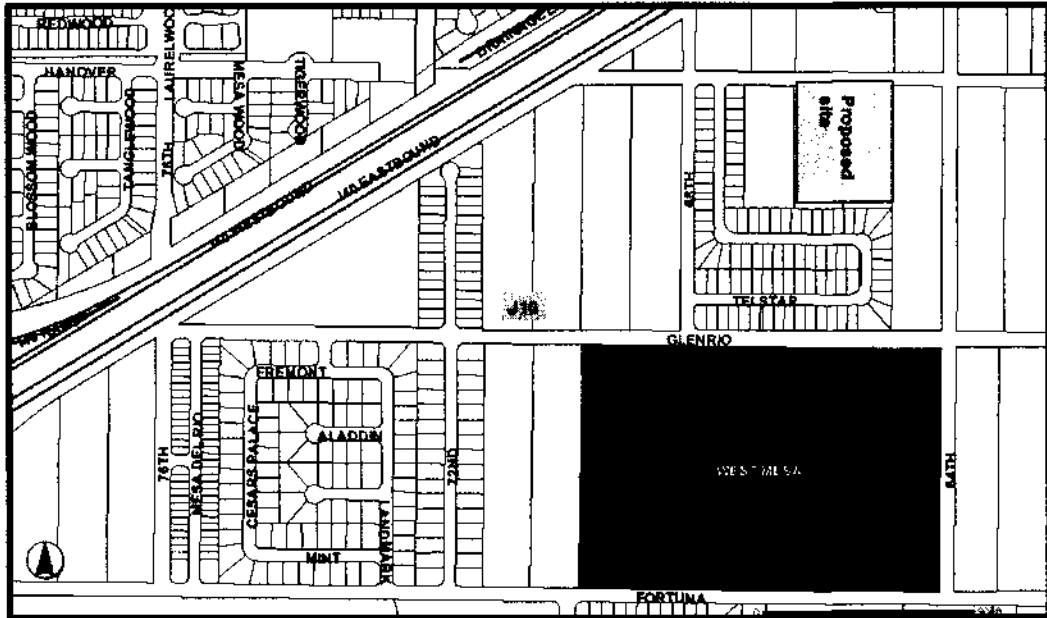


Figure 1.- Hannover business center, Zone Atlas Map J-10-Z

Hydrology Analysis

Existing Conditions

The existing site is located on a floodplain and naturally drains to the center of the site. The site currently has only one type of soil, Madurez-wink associatin, gently sloping. Soil information was taken from the NRCS website (<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>). The hydrology for the site will be obtained using the 100 year 24 hour event, according to the DPM (Development Process Manual, Vol. 2 for the City of Albuquerque, New Mexico); the site is located in precipitation Zone 1 (West of the Rio Grande). Due to its topography the site was divided in three sub-basins as shown on Figure 2.

The site currently has one type of land treatment (Treatment C according to the DPM manual) which has a total area of 4.88 acres (Same as the Total Site area).

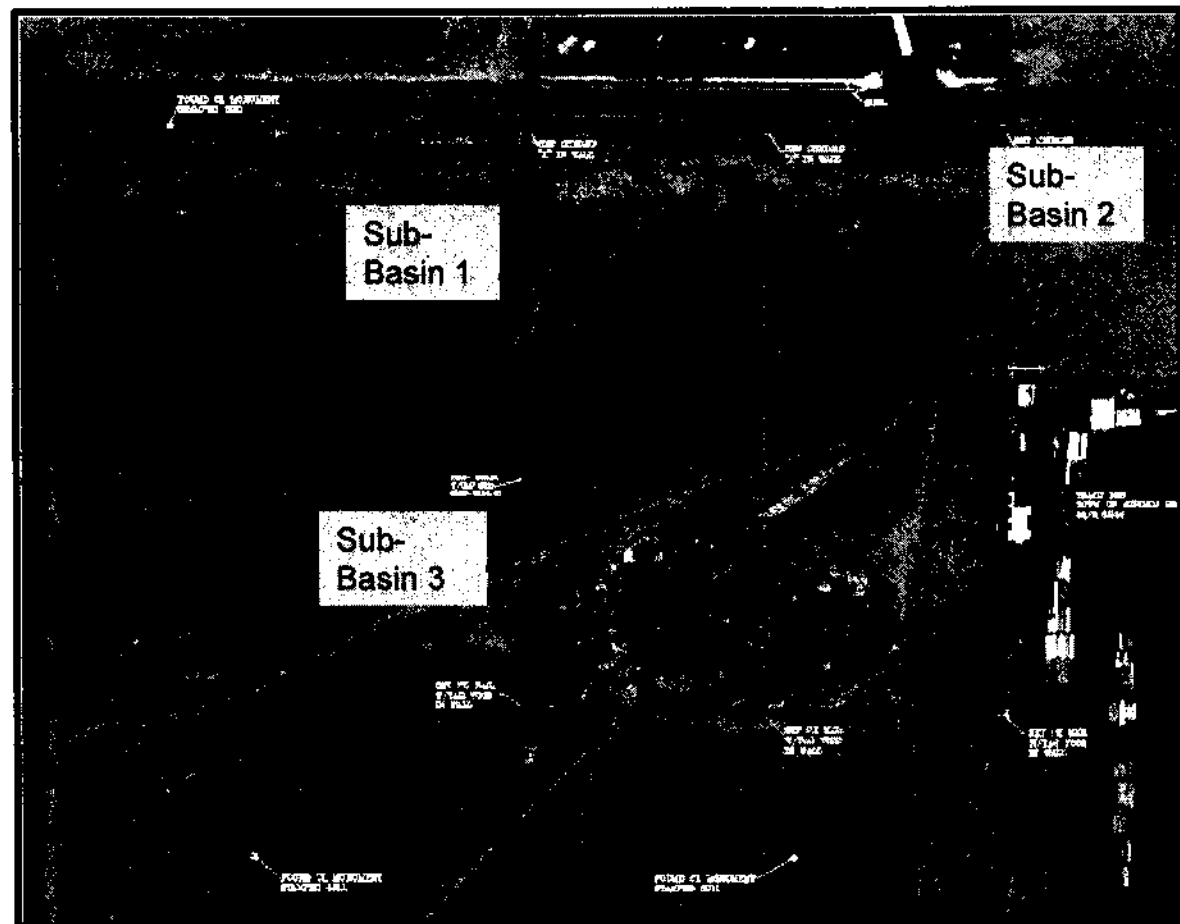


Figure 2.-Hannover business center existing sub-basin division.

The following table is the existing hydrology (Table 1) for Hanover Business Center which includes peak discharge and runoff volume for all the subdivided basins within a 100 year 24 hr event (All calculations were based on the DPM of Albuquerque assuming "Zone 1 and a land treatment C").

| Table 1.- Existing hydrology for Hanover Business Center | | | |
|--|------------------|----------------------|------------------|
| | TOTAL AREA (ft²) | Peak Discharge (cfs) | Volume (acre-ft) |
| Sub-Basin 101 | 38453.5 | 2.55 | 0.07 |
| Sub-Basin 102 | 49514.099 | 3.29 | 0.14 |
| Sub-Basin 103 | 124393.9 | 8.28 | 0.36 |
| TOTAL AREA | 2123712 | 14.1 | 0.56 |
| TOTAL AREA | 4.88 Acres | | |

Proposed Conditions

The site at Hannover Road will be developed into a business complex center. The Business center will be graded to discharge all the runoff into Hannover Road. The total increase of runoff will be 52% of the original runoff.

Hydrology Analysis

Proposed Conditions

Post development flows are determined based on the proposed watershed boundaries and modified treatments. The site will have 5 different basins; the basins were delineated depending on the discharge location. The basins will have a type D treatment consequently there will be an increase of 52% of discharge runoff and a 32 % of total volumetric runoff. The site will be graded and will have a total 6 inlets;

| Proposed Basin | Total Area (acres) | Peak Discharge (cfs) | Volume (acre-ft) |
|----------------|--------------------|----------------------|------------------|
| Basin 102 | 1.0142 | 4.47 | 0.22 |
| Basin 103 | 1.14 | 4.89 | 0.24 |
| Basin 104 | 0.9828 | 4.33 | 0.22 |
| Basin 105 | 1.73 | 4.98 | 0.25 |
| TOTAL | 5.0 | 22.03 | 1.06 |

Table 2 represents the proposed conditions for Hanover Business center. The site will have an increase of 7.9 cfs for total runoff and an increase volumetric flow of 0.5 acre-ft for 6 hrs (V₃₆₀).

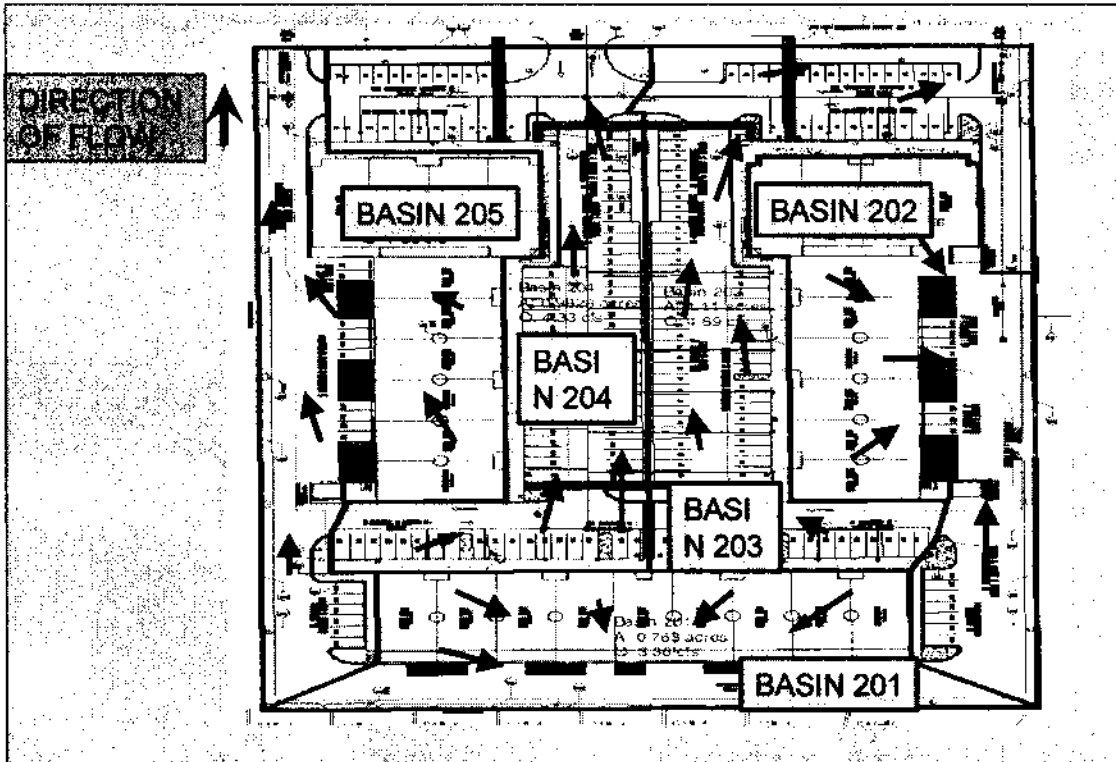


Figure 3.-Hannover business center proposed sub-basin division

Hydraulics

Based on proposed hydrology the hydraulics of the site will be performed. Basins 204 and 205 will be discharging into Hanover Road this will be accomplish by grading the site to the west, basin 201-203 will be draining into an inside site inlet that will be connected to the main storm system on Hanover Road (Figure 3). The catch basin will be a (24" Nyloplast catch basin) and the pipe will be an 18" pipe diameter that will connect to an existing pipe line on Hanover Road. To determine the pipe size diameter Manning's equation was used. A roughness coefficient of 0.013 was assumed (plastic pipe) and a constant (k) of 1.46(for USCS). The peak discharge of the Basins 201-203 was used to calculate the pipe size diameter.

Conclusion

Hannover Business Center will be constructed at Hannover Road Zone Atlas Map J-10-Z. The site has approximately 5 acres of land treatment type C (soil compacted by human activity). This site naturally slopes to the center of the site. The total existing runoff is 14.1 cfs and will increase by 52% due to the proposed land treatment change (Type D). The proposed business center will be discharging to 2 out of it's 5 basins into Hanover street (basin 204 and 205) while basin 201-03 will have au underground storm system.

| SO 19 | | | | |
|---|--------------|------|------|---|
| NOTICE TO CONTRACTOR | | | | |
| 1. AN EXCAVATION/ CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. | | | | |
| 2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985. | | | | |
| 3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES. | | | | |
| 4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY. | | | | |
| 5. BACKFILL COMPACTION SHALL BE ACCORDING TO _____ RESIDENTIAL _____ STREET USE. | | | | |
| 6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED. | | | | |
| 7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS. | | | | |
| WILSON & COMPANY WCEA # 7601700 | APPROVALS | NAME | DATE | PERMANENT HOUSING FOR PERSONS WITH DISABILITIES |
| | HYDROLOGY | | | |
| | INSPECTOR | | | MAP NO. |
| | A.C.E./FIELD | | | J-10-Z |

2415 PRINCETON DR. NE, SUITE G-2
ALBUQUERQUE, NM 87107
505-843-7587 505-843-6773 (F)
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DESIGN PLUS LLC

WILSON & COMPANY
4900 LANG AVENUE N.E.
ALBUQUERQUE, NM 87109
(505) 348-4000
FAX (505) 348-4072
WWW.WILSONCO.COM



HANOVER
BUSINESS PARK

DATE: JUN. 12, 2007

REVISIONS

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| | |

PROJECT NO:

CAD DWG FILE:

DRAWN BY:

CHECKED BY:

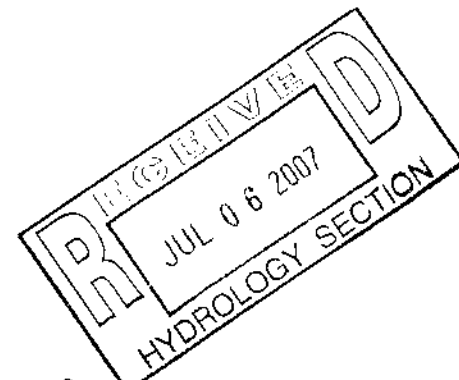
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SHEET TITLE

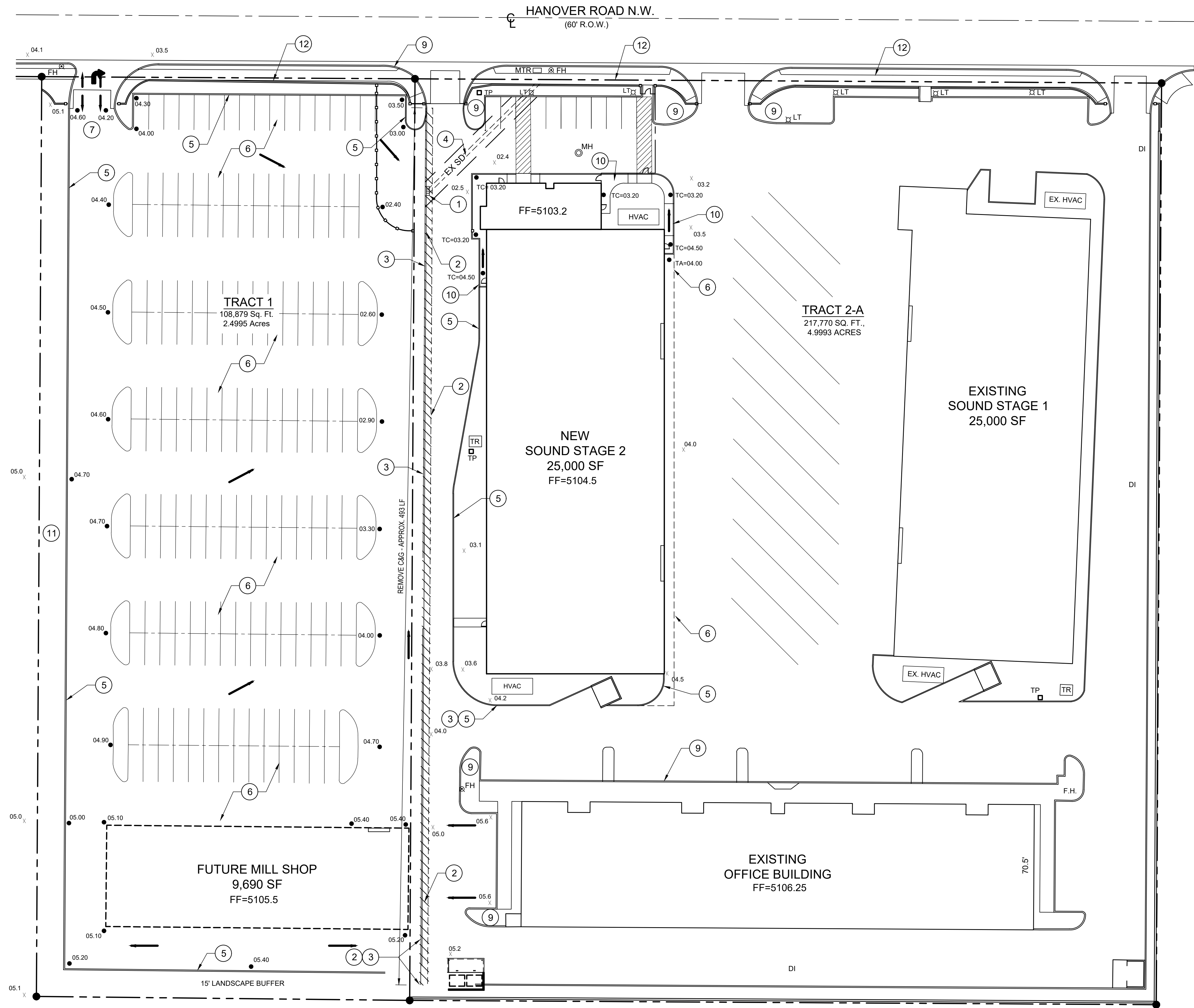
GRADING
& DRAINAGE
REPORT

C101A

SHEET ____ OF ____



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CC SITE GRADING PLAN
1

SCALE: 1" = 30'-0"

SHEET NOTES:

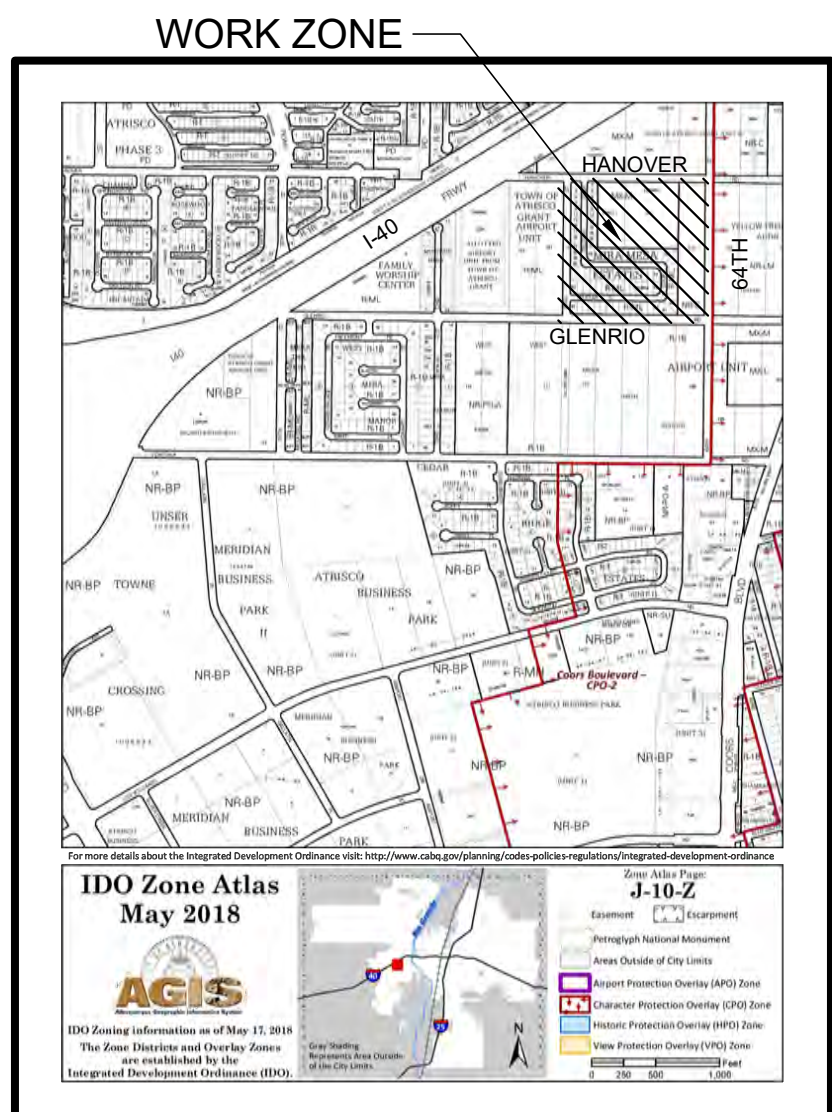
- OWNER HAS ELECTED TO PAY THE PAYMENT IN LIEU FOR THE REQUIRED STORMWATER QUALITY VOLUME. PAYMENT IN LIEU AMOUNT = 3971 CF X \$8/CF = 31,768.00
- NEW SPOT ELEVATIONS ARE TO FLOW LINE OF CURB & GUTTER, TYP.
- CONTRACTOR TO NEATLY SAWCUT EXISTING ASPHALT, NECESSARY FOR CONSTRUCTION. COMPLETELY REMOVE AND REPLACE TO MATCHING ASPHALT CONDITIONS.
- LEGAL DESCRIPTION: TRACT 1 AND TRACT 2A OF CORRECTION PLAT OF MIRA MESA ESTATES, FILED 1-6-2006
- FLOOD HAZARD STATEMENT: PROPERTY IS A ZONE X SFHA PER FEMA MAP 35001C0327H, EFF. 11/04/2016
- BENCHMARK: CENTERLINE MONUMENT AT INTERSECTION OF HANOVER / TELSTAR LOOP WITH CAP "LS 8911" N:1492613.20 E:1501954.37 ELEV = 5105.28

KEYED NOTES:

- EXISTING STORM INLET TO BE REMOVED AND REPLACED WITH NEW TYPE D INLET. EX INV = 5099.2 GRATE=5102.1
- REMOVE EXISTING STD CURB & GUTTER AND PREPARE FOR NEW PAVEMENT/ GRADING.
- MATCH EXISTING EDGE OF PAVEMENT.
- EXISTING STORM LINE TO REMAIN.
- NEW 6" CURB & GUTTER.
- NEW 3" AC PAVEMENT.
- NEW WATER BLOCK AT NEW DRIVEWAY.
- EXISTING CURB TO REMAIN UNDISTURBED.
- NEW CONCRETE SIDEWALK & RAMP.
- GRADED LANDSCAPE BUFFER TO REMAIN.
- EXISTING ACCESS WALL TO REMAIN.

LEGEND:

- X EX SPOT EL
- NEW SPOT EL
- FLOW DIRECTION
- - - EX EDGE OF PAVEMENT
- /// C&G TO BE REMOVED



VICINITY MAP (COA - J-10)

NTS

HANOVER STUDIO

ADDRESS 1
6300 HANOVER RD. NW
ALBUQUERQUE, NEW MEXICO 87121

ADDRESS 2
99999 HANOVER RD. NW
ALBUQUERQUE, NEW MEXICO 87121

SITE GRADING PLAN

st price design studio
2325 Cullen Ave.
Albuquerque, New Mexico 87106 505.345.3350

DRAWN
KSH

CHECKED
BLB

DATE
01/12/2024

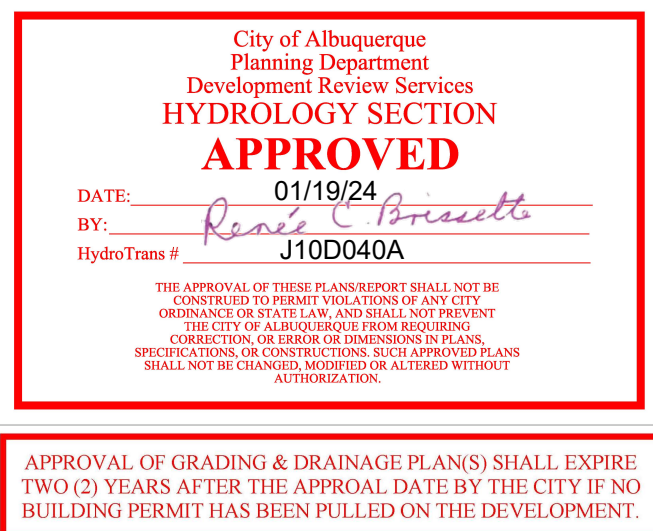
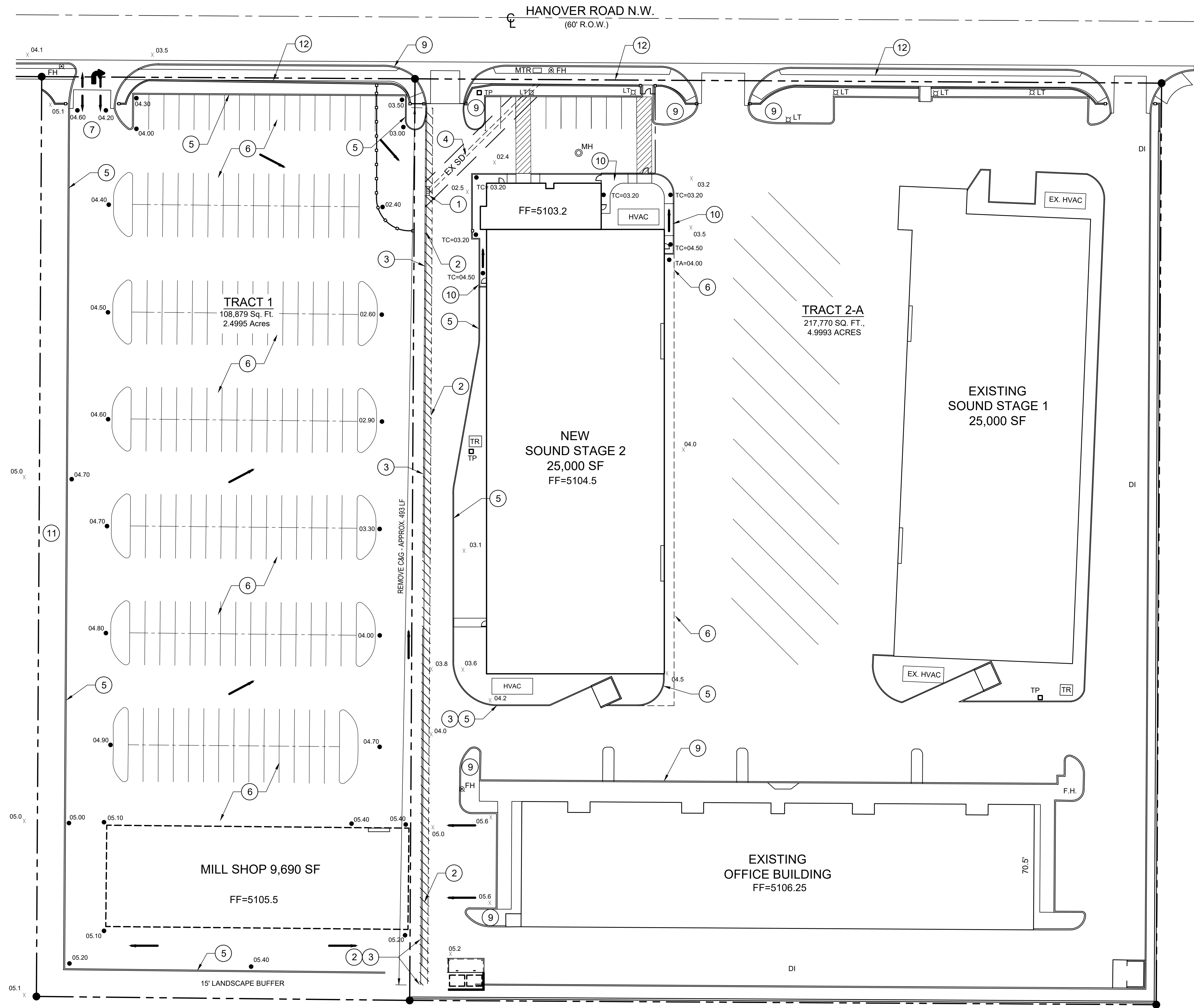
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JOB NO.
23-14

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SHEET NOTES:

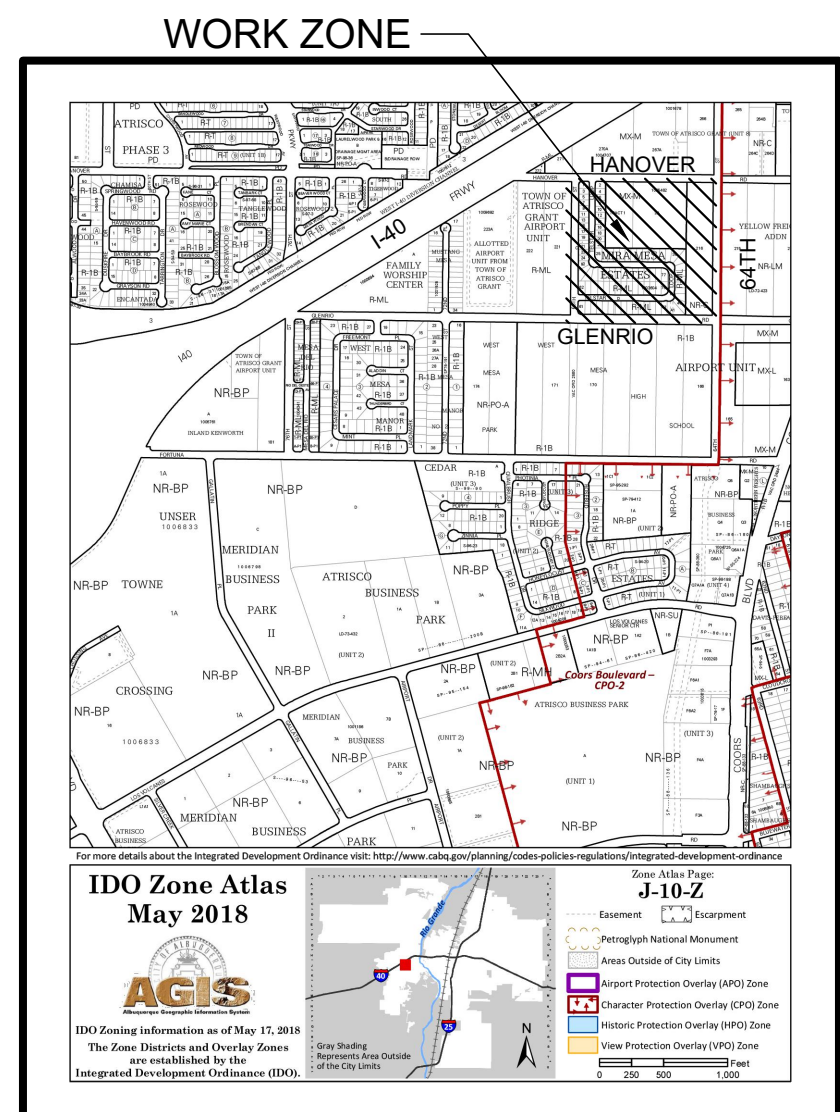
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- NEW SPOT EL
- FLOW DIRECTION
- - - EX EDGE OF PAVEMENT
- /// C&G TO BE REMOVED



VICINITY MAP (COA - J-10)

CC SITE GRADING PLAN

1

SCALE: 1" = 30'-0"

NTS

| REVISIONS | |
|-----------|----|
| DATE | BY |
| | |
| | |
| | |
| | |

PINGHAM ENGINEERING, LLC
515 Montclare Drive, SE
Albuquerque, New Mexico, 87108
(505) 256-1277

BRADLEY L. BINGHAM
12697
Professional Engineer
1-15-2024

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ALBUQUERQUE, NEW MEXICO 87121

SITE GRADING PLAN

St Line
st price design studio
2325 Cullen Ave.
Albuquerque, New Mexico 87106 505.345.3350

DRAWN: KSH
CHECKED: BLB
DATE: 01/12/2024
SCALE: 1"=30'
JOB NO: 23-14
SHEET

C-1