# CITY OF ALBUQUERQUE

Planning Department Brennon Williams, Director



July 13, 2020

Verlyn Miller, P.E. Miller Engineering Consultants, Inc 3500 Comanche NE Bldg. F Albuquerque, NM 87107

RE: Hanover Warehouse 6500 Hanover Rd. NW Grading and Drainage Plan Engineer's Stamp Date: 07/01/20 Hydrology File: J10D040A

Dear Mr. Miller:

Based upon the information provided in your submittal received 07/09/2020, the Grading & Drainage Plan is approved for Building Permit.

PO Box 1293

Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter. Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required.

Albuquerque

NM 87103

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.

www.cabq.gov

The Payment in Lieu payment of \$ 8,392.00 must be paid prior to Permanent Release of Occupancy approval. Please use the attached City of Albuquerque Treasury Deposit form. The Owner needs to bring three copies of this form to the cashier on the Building Permits side of the ground floor and pay the fee. Once paid, please provide Hydrology with one of the copies showing the receipt.

If you have any questions, please contact me at 924-3995 or <a href="mailto:rbrissette@cabq.gov">rbrissette@cabq.gov</a>.

Sincerely,

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

Renée C. Brissette

Find Hydrology forms and information at: <a href="mailto:cabq.gov/planning/development-review-services/hydrology-section">cabq.gov/planning/development-review-services/hydrology-section</a>

Page 1 of 1



# City of Albuquerque

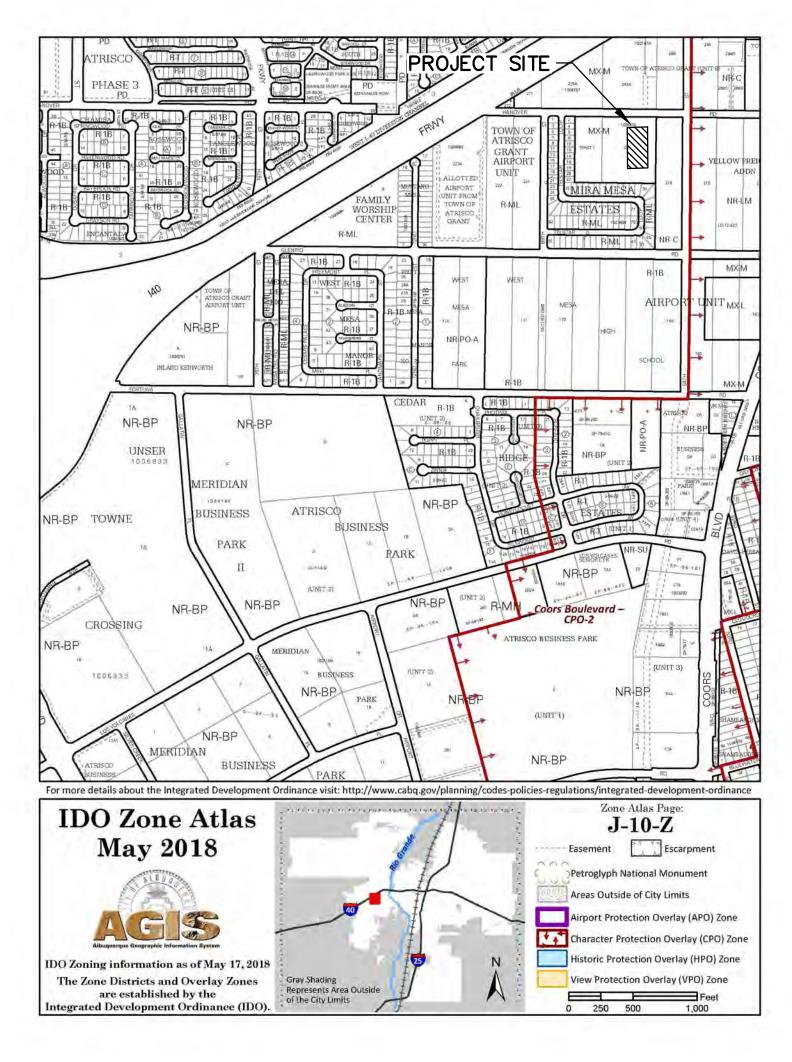
### Planning Department

### Development & Building Services Division

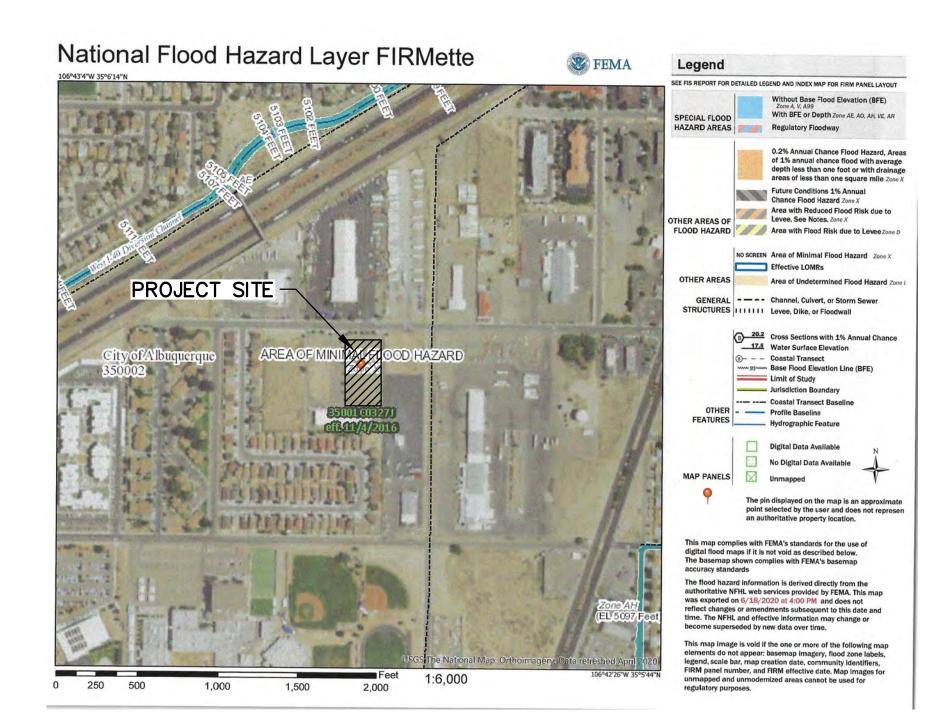
### DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

-	~	#: Hydrology File #:
DRB#:	EPC#:	Work Order#:
· ·		TATES (BEING A REPLAT OF TRACTS 2 & 3) CONT 4.9993 AC
City Address: 1720 Louisiana Blvd. 1	NE, Ste. 100, Albuquero	jue, NM 87110
Applicant: Avatar Recoveries LLC Address: 1720 Louisiana Blvd. NE, Sto	e 100 Albuquerque NI	Contact:
<del>-</del>		
Phone#:	Fax#:	E-mail:
		Contact: Verlyn Miller
Address: <u>3500 Comanche NE, Bldg. F,</u> Phone#: <u>505-888-7500</u>		
TYPE OF DEVELOPMENT: P	LAT (# of lots)R	ESIDENCE DRB SITE _XADMIN SITE
IS THIS A RESUBMITTAL?	Yes X No	
DEPARTMENT TRANSPORTATION	ON <u>X</u> HYDROL	OGY/DRAINAGE
Check all that Apply:  TYPE OF SUBMITTAL:  ENGINEER/ARCHITECT CERTIFICATION  CONCEPTUAL G & D PLAN  X GRADING PLAN  DRAINAGE REPORT  DRAINAGE MASTER PLAN  FLOODPLAIN DEVELOPMENT PERIODE ELEVATION CERTIFICATE  CLOMR/LOMR  TRAFFIC CIRCULATION LAYOUT  TRAFFIC IMPACT STUDY (TIS)  STREET LIGHT LAYOUT  OTHER (SPECIFY)  PRE-DESIGN MEETING?	ATION  - MIT APPLIC  - (TCL)	TYPE OF APPROVAL/ACCEPTANCE SOUGHT:  X BUILDING PERMIT APPROVAL CERTIFICATE OF OCCUPANCY  PRELIMINARY PLAT APPROVAL SITE PLAN FOR SUB'D APPROVAL SITE PLAN FOR BLDG. PERMIT APPROVAL FINAL PLAT 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 FLOODPLAIN DEVELOPMENT PERMIT OTHER (SPECIFY)
DATE SUBMITTED: 7/9/2020	By: Verly	n A. Miller, P.E.
COA STAFF:	ELECTRONIC SUBM	MITTAL RECEIVED:

FEE PAID:







# FLOOD ZONE MAP

### SITE LOCATION

The proposed site is an approximate 0.95-acre site located on Hanover Road NW. The site is bound on the south by Telstar Loop NW., on the west side by Telstar Loop NW., and the east side by an 64<sup>th</sup>

### **EXISTING CONDITIONS**

The existing site is estimated at 0.95 acres and is currently partially developed with a pad ready site and surrounding asphalt-paved parking lots. The site does not lie within a 100-year FEMA floodplain and is not impacted by offsite flows.

### PROPOSED CONDITIONS

The proposed project would consist of a new commercial building to be placed within the pad ready envelope on the site. The finish floor of the new building will be set so that the existing overhead doors on the south side of the building can be accommodated with a 1% minimum grade. The site will also have new concrete sidewalks around the building for connectivity to the parking lot areas. Other areas around the building will be having with new asphalt paving as indicated on the G &D

The site will experience additional runoff as outlined in the hydrology table on this sheet. The client has chosen to pay a fee in lieu of first flush ponding since there are no areas available on the existing site for a first flush pond.

### CONCLUSIONS

When developed as indicated on the grading and drainage plan, the increased runoff from the site is estimated at 1.27 cfs, and 4,443 cf during the 100-year event. The first flush pond volume required for the project estimated at 1049 cf. The owner has chosen to pay a fee in lieu of first flush ponding.

### HYDROLOGY

Precipitat	ion Zone 1 -	100-year \$	Storm	P(360) =	2.20	in	P(1440) =	2.66	in
	Basin	Land Treatment Factors							
Basin	Area	Α	В	С	D	Ew	V(100-6)	V(100-24)	Q(100)
	(Ac)		(Acre	s)		(in)	(af)	(af)	(cfs)
Existing C	Conditions								
Α	0.95	0.00	0.00	0.95	0.00	0.99	0.078	0.078	2.73
Total	0.95								2.73
Proposed	Conditions					6			
A	0.95	0.00	0.00	0.10	0.85	1.87	0.148	0.180	4.00
Total	0.95	1							4.00

SHEET No.	SHEET TITLE
C-100	HYDROLOGY PLAN AND DRAWING INDEX
C-101	GRADING AND DRAINAGE PLAN
C-501	MISCELLANEOUS DETAILS

### GENERAL NOTES:

- . EXISTING TOPOGRAPHIC DATA SHOWN ON THESE PLANS WAS PROVIDED BY SANDIA LAND SURVEYING LLC. MILLER ENGINEERING CONSULTANTS HAS UNDERTAKEN NO FIELD VERIFICATION OF THIS INFORMATION.
- ACS STA 6-G15 THE STATION IS LOCATED 2.2 MILES NORTH OF DOWNTOWN ALBUQUERQUE AT THE INTERSECTION OF CANDELARIA ROAD AND THE BNSF RAILROAD TRACKS. TO REACH THE STATION FROM THE INTERSECTION OF CANDELARIA ROAD AND I-25 NE TRAVEL WEST ON CANDELARIA ROAD 0.8 MILES TO THE EAST SIDE OF THE BNSF RAILROAD TRACKS AND THE STATION ON THE RIGHT. THE STATION MARK IS A CITY OF ALBUQUERQUE SURVEY CONTROL 3" BRASS DISC STAMPED "6-G15 1979" SET IN A TRAFFIC SIGNAL BOX 0.6 FEET BELOW THE SURFACE OF THE GROUND ELEV. 4975.35 (NAVD 1988)
- 3. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES DURING THE CONSTRUCTION PHASE.
- 4. CONTRACTOR SHALL OBTAIN A GRADING PERMIT FROM THE CITY OF ALBUQUERQUE, PRIOR TO ANY GRADING OR CONSTRUCTION.
- 5. TWO WORKING DAYS PRIOR TO ANY EXCAVATION CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 260-1990 FOR LOCATION OF EXISTING UTILITIES.
- 6. ALL EMBANKMENTS SHALL BE PLACED AND COMPACTED IN LIFTS OF MAXIMUM OF 8". THE EMBANKMENTS SHALL BE WETTED AND COMPACTED TO 95% OPTIMUM DENSITY PER ASTM D1557 AND 95% UNDER ALL STRUCTURES INCLUDING DRIVEWAYS AND PARKING LOTS.
- 7. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER(S) OF THE PROPERTY SERVED.
- 8. THE CONTRACTOR SHALL FIELD VERIFY LOCATION AND SIZE OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- 9. THE SUBJECT PROPERTY IS LOCATED WITHIN ZONE X (500 YEAR) DESIGNATING AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR FLOOD PLANE ACCORDING TO THE FLOOD INSURANCE RATE MAP, ALBUQUERQUE, NEW MEXICO AND UNINCORPORATED AREAS PER MAP NO 35001C 0332G.

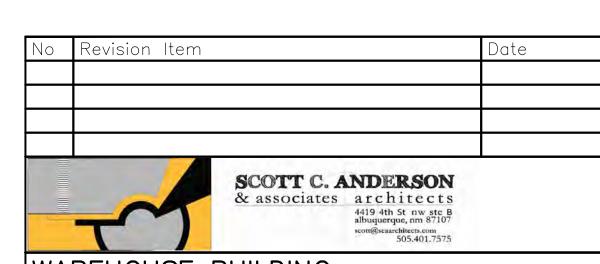
- 10. ALL WORK PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE STORM DRAINAGE REGULATIONS. ALL WORK PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE "GRADING AND DRAINAGE DESIGN REQUIREMENTS AND POLICIES FOR LAND DEVELOPMENT."
- 11. THE OWNER, CONTRACTOR AND/OR BUILDER SHALL COMPLY WITH ALL APPROPRIATE LOCAL, STATE AND FEDERAL REGULATIONS AND REQUIREMENTS.
- 12. THE CONTRACTOR SHALL TAKE ALL APPROPRIATE AND REASONABLE MEASURES TO PREVENT SEDIMENT OR POLLUTANT LADEN STORM WATER FROM EXITING THE SITE DURING CONSTRUCTION. STORMWATER MAY BE DISCHARGED IN A MANNER, WHICH COMPLIES WITH THE APPROVED GRADING AND DRAINAGE PLAN.
- 13. THE CONTRACTOR SHALL TAKE ALL APPROPRIATE MEASURES TO PREVENT THE MOVEMENT OF CONSTRUCTION RELATED SEDIMENT, DUST, MUD, POLLUTANTS, DEBRIS, WASTE, ETC FROM THE SITE BY WIND, STORM FLOW OR ANY OTHER METHOD EXCLUDING THE INTENTIONAL, LEGAL TRANSPORTATION OF SAME IN A MANNER ACCEPTABLE BY THE CITY.
- 14. THE CONTRACTOR SHALL NOT DISTURB AREAS OUTSIDE THE AREAS SHOWN AS "SLOPE LIMITS" ON THE GRADING AND DRAINAGE PLAN.
- 15. SEE ARCHITECTURAL DRAWINGS FOR SIDEWALK AND HANDICAPPED RAMPS, DETAILS AROUND THE BUILDING.
- 16. THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR CLARIFICATION IF THERE ARE ANY SPOT ELEVATIONS ON THE GRADING AND DRAINAGE PLAN WHICH APPEAR TO BE AMBIGUOUS OR DO NOT MEET THE INTENT OF THE GRADING AND DRAINAGE PLAN.
- 17. THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR CLARIFICATION IF THERE ARE SIDEWALKS OR CONCRETE FLATWORK WHICH DOES NOT MEET ADA ACCESSIBILITY REQUIREMENTS. ALL SIDEWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.0%, ALL SIDEWALKS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 5.0%, AND ALL RAMPS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 15:1.
- 18. ALL SIDEWALKS AND CONCRETE FLATWORK SHALL HAVE A MINIMUM OF 0.5% SLOPE. CONTRACTOR SHALL CONTACT PROJECT ENGINEER IF THERE ARE SIDEWALKS OR CONCRETE FLATWORK WHICH DO NOT MEET THIS REQUIREMENT.
- 19. THE CONTRACTOR SHALL SUBMIT MATERIAL SUBMITTALS, CUT SHEETS AND SHOP DRAWINGS FOR ALL CIVIL RELATED ITEMS FOR REVIEW PRIOR TO CONSTRUCTION.
- 20. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS (UPDATE 8, AMENDMENT 1)
- 21. ALL EXISTING MANHOLES, VALVES AND METERS SHALL BE ADJUSTED TO NEW FINISH GRADE.

# FIRST FLUSH CALCULATIONS

MILLER ENGINEERING CONSULTANTS

Engineers • Planners

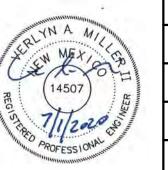
FIRST FLUSH = (0.34" \* 34,0265 SF)/12 = 1049 CF



WAREHOUSE BUILDING 6500 HANOVER RD NW ALBUQUERQUE, NM 87121

DRAWING TITLE

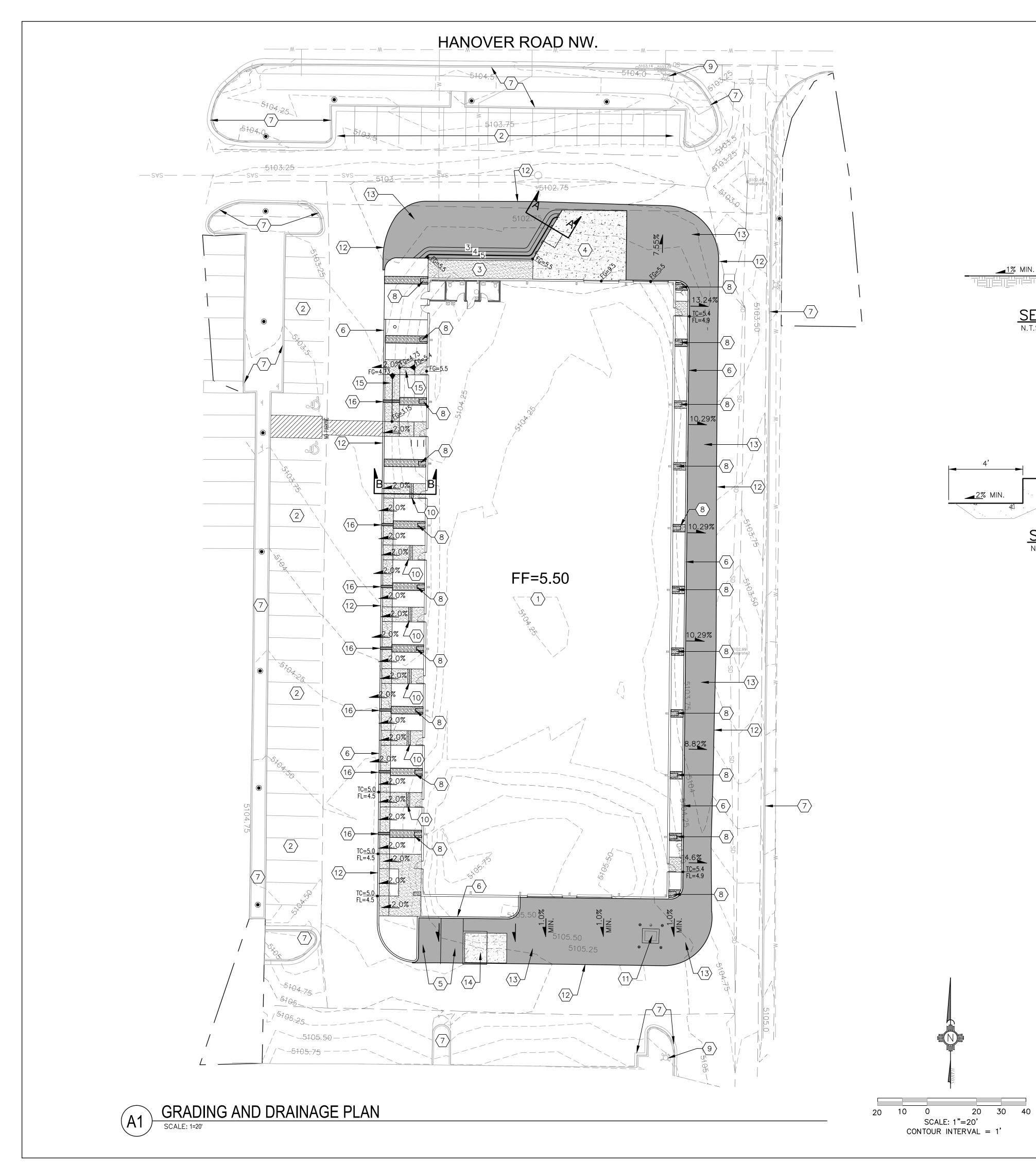
### **HDROLOGY PLAN**

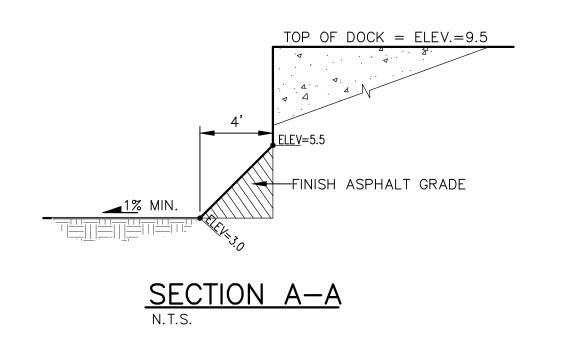


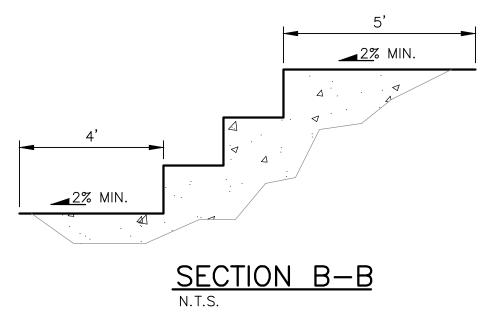
SIGNED MEC REVIEWED

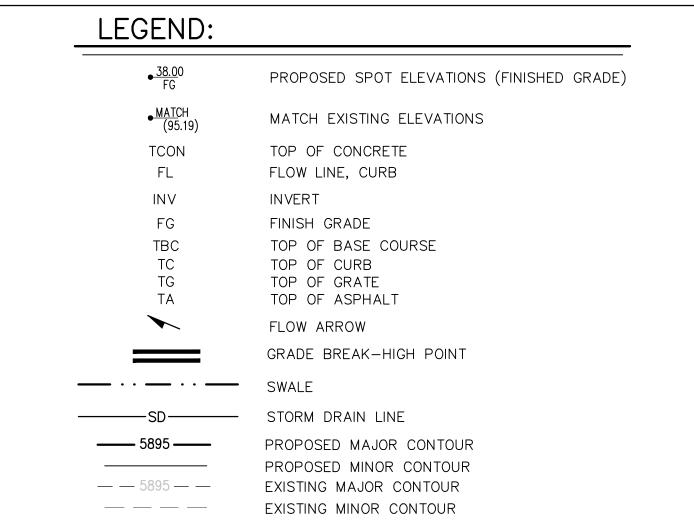
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CIVIL DRAWING INDEX









# **KEYED NOTES:**

- 1. NEW BUILDING SEE ARCHITECTURAL DRAWINGS.
- 2. EXISTING PARKING SPACES AND ASPHALT TO REMAIN.
- 3. NEW DOCK RAMP SEE ARCHITECTURAL DRAWINGS.
- 4. NEW LOADING DOCK SEE ARCHITECTURAL DRAWINGS.
- 5. NEW 4" REFLECTIVE STRIPING IN ACCORDANCE WITH THE LATEST MUTCD SEE ARCHITECTURAL DRAWINGS.
- 6. NEW CURB AND GUTTER SEE DETAIL SHEET C-501.
- 7. EXISTING CURB AND GUTTER TO REMAIN.
- 8. NEW SPLASH BLOCKS WITH COBLE SWALE FOR DOWNSPOUTS SEE DETAIL SHEET C-501.
- 9. EXISTING FIRE HYDRANTS TO REMAIN.
- 10. NEW 3-6" RISERS AND 2-8" THREAD ON CONCRETE WALKWAY SEE ARCHITECTURAL DRAWINGS FOR DETAILS.
- 11. EXISTING TRANSFORMER AND BOLLARDS TO REMAIN.
- 12. SAWCUT EXISTING ASPHALT AND MATCH EXISTING GRADE.
- 13. NEW HEAVY DUTY ASPHALT HMA PAVING SEE DETAIL SHEET C-501.
- 14. NEW REFUSE ENCLOSURE LOCATION, SEE ARCHITECTURAL DRAWINGS.
- 15. ADA ACCESSIBLE RAMP SEE ARCHITECTURAL DRAWINGS.
- 16. 12" WIDE SIDEWALK CULVERT SEE DETAIL SHEET C-501.



WAREHOUSE BUILDING 6500 HANOVER RD NW ALBUQUERQUE, NM 87121

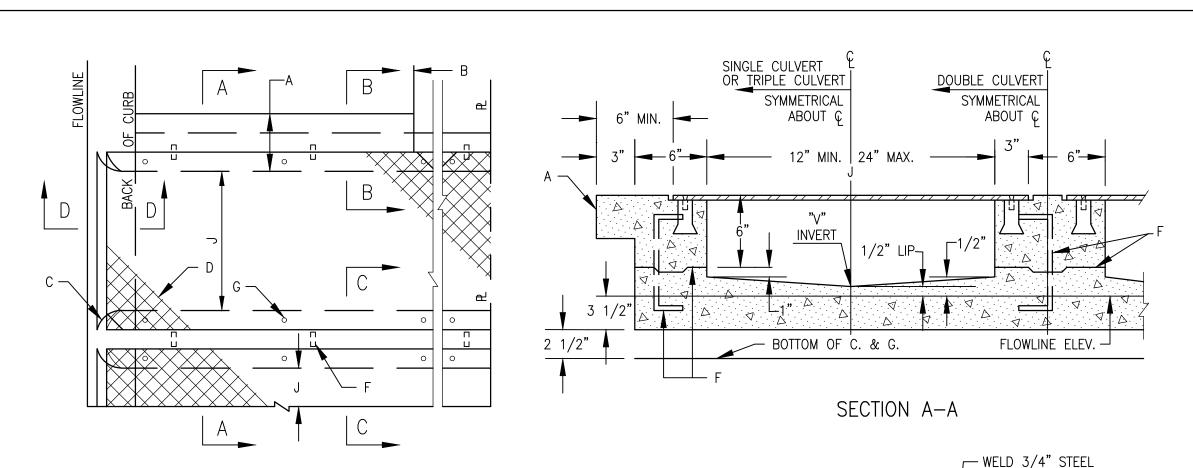
## **GRADING AND DRAINAGE PLAN**



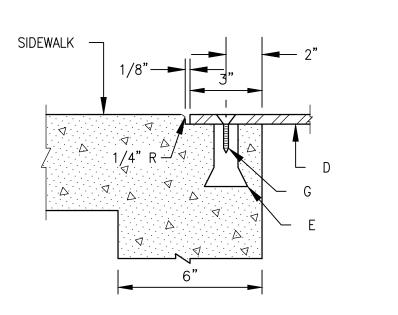
annum management of the second	DESIGNED MEC	PROJECT NO
MEX / COMM	DRAWN MEC	scale NO
14507	CHECKED VAM	DRAWING NO
11/2020	REVIEWED	

MILLER ENGINEERING CONSULTANTS Engineers • Planners





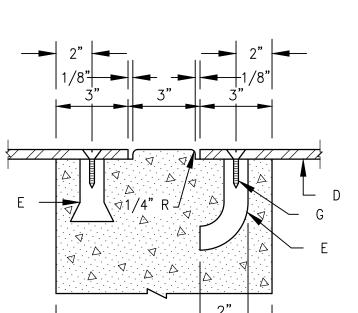
SINGLE AND OR MULTIPLE CULVERT



SECTION B-B

### **GENERAL NOTES:**

- 1. PLACING OF DRAIN THRU EXIST. SIDEWALK AND CURB & GUTTER REQUIRES THAT ENTIRE SIDEWALK AND C & G STONES BE REMOVED AND REPLACED AS DETAILED HEREIN.
- 2. BOTTOM SLAB OF CULVERT SHALL BE POURED MONOLITHICALLY WITH NEW GUTTER.
- 3. THE INVERT SHALL BE TROWELED TO PRODUCE A HARD POLISHED SURFACE OF MAX. DENSITY AND SMOOTHNESS. INVERT SHALL BE V-SHAPED TO WITHIN 3" OF OUTLET, THEN WARPED TO PARALLEL FLOWLINE AT OUTLET, UNLESS OTHERWISE SHOWN.
- 4. ALL EXPOSED CONC. SURFACE SHALL MATCH GRADE, COLOR, FINISH AND SCORING OF ADJACENT CURB AND SIDEWALK.



SECTION C-C

5. SIDEWALK REPLACED DURING CONSTRUCTION SHALL

BE POURED MONOLITHICALLY WITH CULVERT WALLS.

MACHINE SCREW. ATTACH ANCHORS TO PLATE AND

WEIGHT WILL NOT EXCEED 300 LBS. AND SHALL BE

SHOP COAT RED OXIDE AND TWO FINISH COATS

SECURE PLATE IN PLACE PRIOR TO POURING OF WALLS.

STRESS RELIEVED AFTER FABRICATION. CLEAN SURFACE

OF PLATE AND FRAMING MEMBERS AND PAINT W/ ONE

6. IF ROD ANCHORS ARE USED, DRILL & TAP FOR F.H.

7. LENGTH OF EACH PLATE SHALL BE SUCH THAT THE

ALUMINUM PAINT (AASHTO M 69).

8. THE CITY WILL NOT ASSUME RESPONSIBILITY FOR

TYP.

### SIDEWALK CULVERT CONSTRUCTION NOTES:

A. MATCH NEAREST CONTROL JOINT, INSTALL ½" EXPANSION

ROD TO PLATE FULL LENGTH OF OPENING

- B. EDGE OF SIDEWALK OR SETBACK (VARIABLE).
- C. 3" RADIUS (TYPICAL).

DOWEL DETAIL

- D. %" CHECKERED STEELE PLATE (PRINT PER NOTE 7, ABOVE. FOR SECURING PLATE USE 1" x 5" S.S. ROD ANCHOR, "RED HEAD MULTI-SEE II SRM-38 ANCHOR" OR APPROVED EQUAL. INSTALL PER MANUFACTURER'S INSTRUCTIONS AT MAX. 24" O.C., A MINIMUM OF 2 PER SIDE AND ONE WITH 6" OF OF
- EACH END. F. CONSTRUCTION JOINT IS OPTIONAL. IF USED, SPACE DOWELS
- AT 18" O.C. MAX., 11/2" MINIMUM FROM FACE OF CONCRETE G.  $\frac{3}{8}$  - 16 X 1  $\frac{1}{4}$ " COUNTERSUNK, F.H., STAINLESS STEEL
- MACHINE SCREW. H. SLOPE ¼" PER FT. MIN
- MAINTENANCE OF ANY SIDEWALK CULVERT INSTALLED BY OR FOR PRIVATE PROPERTY OWNERS. DRAIN WIDTH PER PLAN (12"., MIN., 24" MAX.).

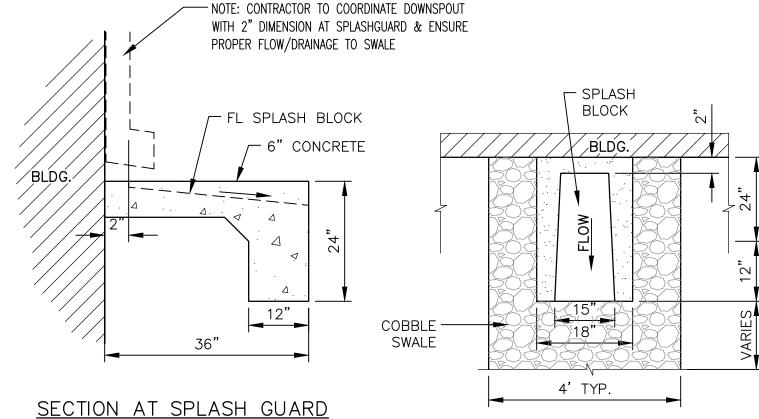
FLOWLINE

Δ · · · · Δ · · · · Δ · · · · Δ

SECTION D-D

NO. 3 DEFORMED BAR

# SIDEWALK CULVERT DETAIL SCALE: NOT TO SCALE





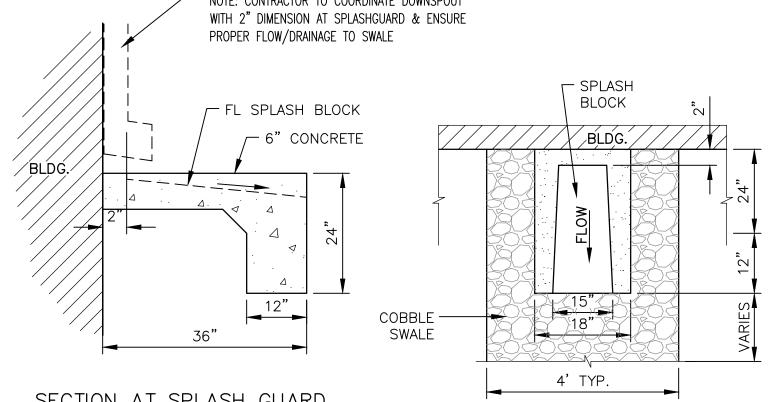
VARIES

6" AGREGATE BASE COURSE

——12" SUBGRADE PREP.

4" HMA PAVING, SP IV ( 2-2" LIFTS)





2. CONSTRUCT 1/2" EXPANSION JOINTS WITH SEALANT @40'-0" O.C. MAX. 3. CONSTRUCT 1 1/2" DEEP TOOLED CONTROL JOINTS @5'-0" O.C. MAX. 4. MATCH TOP OF EXISTING SIDEWALK AND MAINTAIN EXISTING FLOW LINE.

FACE OF CURB (FLOWLINE)

-4000 PSI CONCRETE OVER 95% COMPACTED SUBGRADE



L 6" SUBGRADE PREP.\*

2'-0"

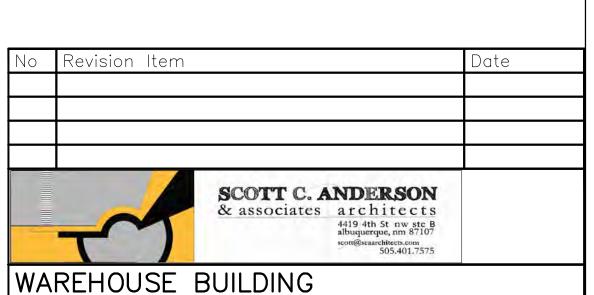
1. SEE PLAN FOR SIDEWALK JOINT PATTERN.

1/2" EXPANSION JOINT WITH

SEALANT\_

CONCRETE SIDEWALK





6500 HANOVER RD NW ALBUQUERQUE, NM 87121

### DRAWING TITLE MISCELLANEOUS DETAILS

DATE 7/09/20



r II Bores	DESIGNED MEC	PROJECT NO
	DRAWN MEC	SCALE NOTED
	CHECKED VAM	DRAWING NO

C-501