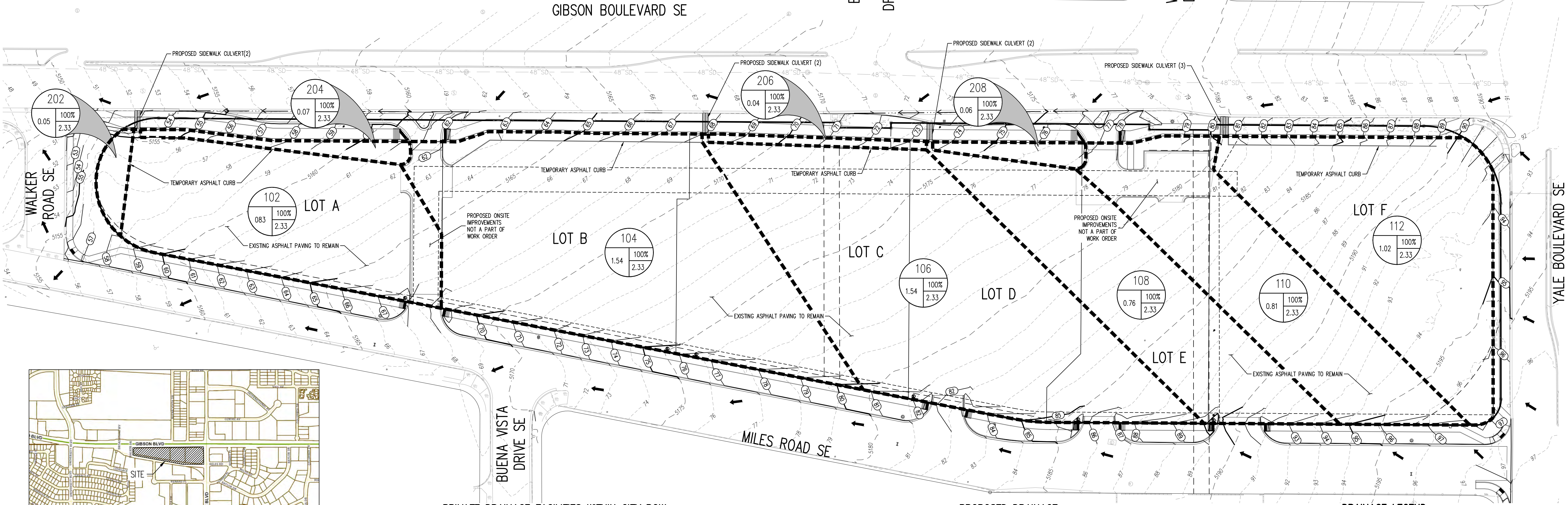
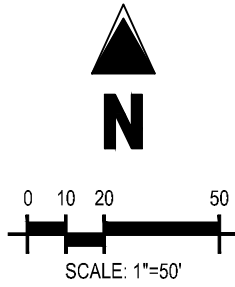
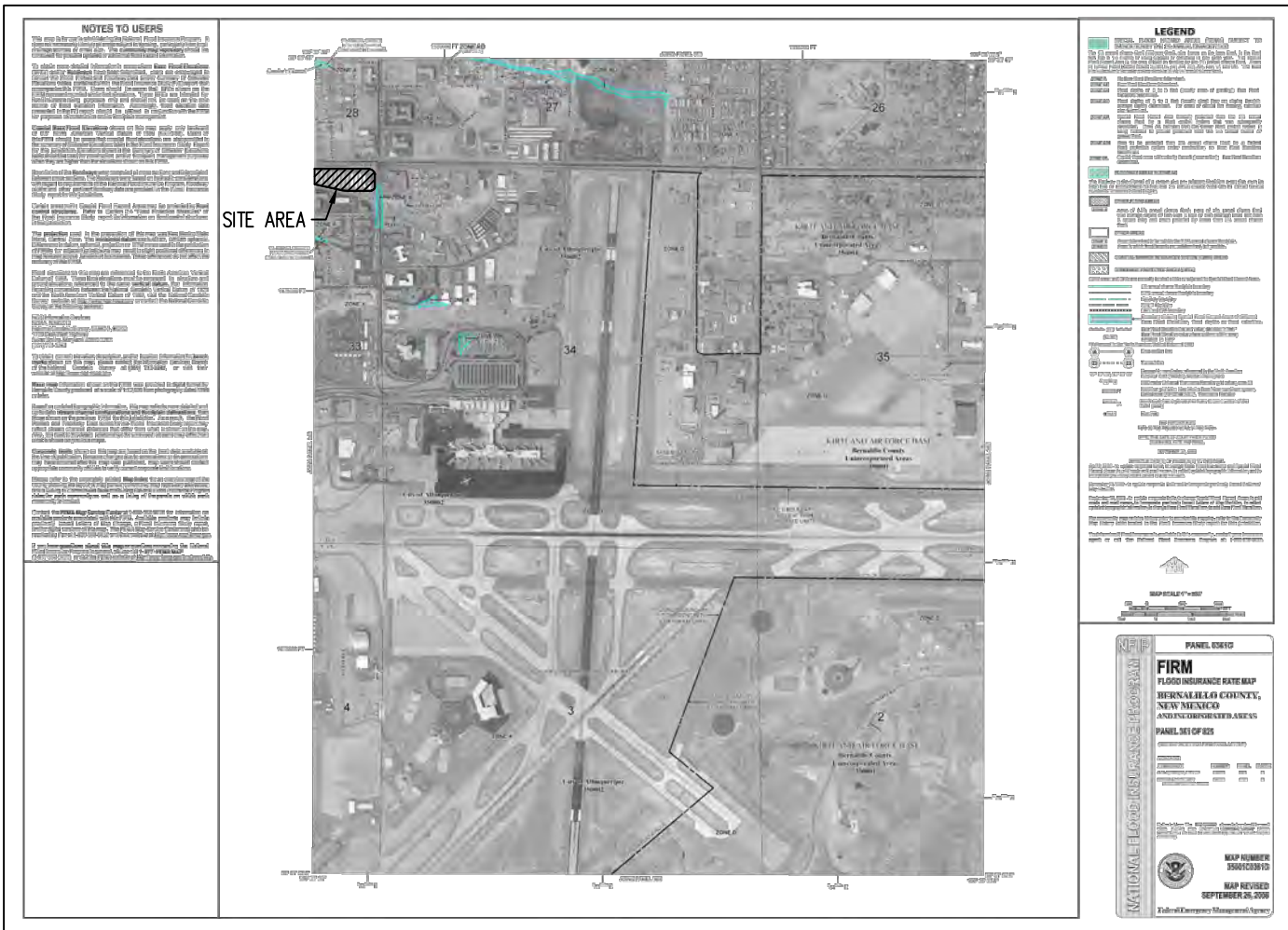


LOVELACE HEIGHTS ADDITION  
CONCEPTUAL GRADING & DRAINAGE PLAN

2121 YALE BOULEVARD  
CITY OF ALBUQUERQUE, COUNTY OF BERNALILLO,  
STATE OF NEW MEXICO



VICINITY MAP  
SCALE: 1"=1000'



FIRM MAP 35001CQ361G  
NOT TO SCALE

Curb Chase Capacity

Weir Equation:

$Q = CLH^{3/2}$

Q = Flow  
C = 2.95  
L = Length of weir  
H = Height of weir

2" Curb Chase Capacity (8" Curb)

$Q = 2.95 \times 2 \times 0.583^{3/2}$   
Q = 2.63 cfs

Required Equivalent Curb Opening				
Basin	10-Year Flow (cfs)	Number of 2" Curb Openings	Equivalent Open Length (ft)	Actual Flow Capacity (cfs)
102	2.25	2	4	5.26
106	4.17	2	2	5.26
108	4.19	2	4	5.26
112	2.07	3	4	7.89

Note: Due to the temporary conditions shown in this plan, sidewalk culverts were sized using 10-year flows.

PRIVATE DRAINAGE FACILITIES WITHIN CITY ROW:

NOTICE TO CONTRACTOR (SPECIAL ORDER 19 "SO-10")

- BUILD SIDEWALK CULVERT PER COA STD DWG 2236.
- CONTACT STORM DRAIN MAINTENANCE AT (505) 857-8033 TO SCHEDULE A MEETING PRIOR TO FORMING.
- AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
- ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL, DIAL "811" [OR (505) 260-1990] FOR THE LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD SO THE CONFLICT CAN BE RESOLVED WITH MINIMAL DELAY.
- BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
- MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED.
- WORK ON ARTERIAL STREETS MAY BE REQUIRED ON A 24-HOUR BASIS.
- CONTRACTOR MUST CONTACT STORM DRAIN MAINTENANCE AT (505) 857-8033 TO SCHEDULE A CONSTRUCTION INSPECTION. FOR EXCAVATING AND BARRICADING INSPECTIONS, CONTACT CONSTRUCTION COORDINATION AT (505) 924-3416.

Weighted E Method (Developed)																
										100-Year			10-Year			
Basin	Area (sf)	Area (ac)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (in)	Volume (ac-ft)	Flow (cfs)	Weighted E (in)	Volume (ac-ft)	Flow (cfs)
			%	acres	%	acres	%	acres	%	acres						
102	36,184	0.83	0.00%	0	0.00%	0	0.00%	0	100.00%	0.83	2.330	1.935	3.61	1.510	1.254	2.25
104	67,078	1.54	0.00%	0	0.00%	0	0.00%	0	100.00%	1.54	2.330	3.588	6.68	1.510	2.325	4.17
106	67,285	1.54	0.00%	0	0.00%	0	0.00%	0	100.00%	1.54	2.330	3.599	6.70	1.510	2.332	4.19
108	33,211	0.76	0.00%	0	0.00%	0	0.00%	0	100.00%	0.76	2.330	1.776	3.31	1.510	1.151	2.07
110	35,154	0.81	0.00%	0	0.00%	0	0.00%	0	100.00%	0.81	2.330	1.880	3.50	1.510	1.219	2.19
112	44,256	1.02	0.00%	0	0.00%	0	0.00%	0	100.00%	1.02	2.330	2.367	4.41	1.510	1.534	2.75
202	2,359	0.05	0.00%	0	0.00%	0	0.00%	0	100.00%	0.05	2.330	0.126	0.24	1.510	0.082	0.15
204	3,111	0.07	0.00%	0	0.00%	0	0.00%	0	100.00%	0.07	2.330	0.166	0.31	1.510	0.108	0.19
206	1,727	0.04	0.00%	0	0.00%	0	0.00%	0	100.00%	0.04	2.330	0.092	0.17	1.510	0.060	0.11
208	2,518	0.06	0.00%	0	0.00%	0	0.00%	0	100.00%	0.06	2.330	0.135	0.25	1.510	0.087	0.16
Total	292,881	6.72														

Equations:

Weighted E = Ea\*Aa + Eb\*Ab + Ec\*Ac + Ed\*Ad / Total Area

Volume = Weighted E \* Total Area

Flow = Qa\*Aa + Qb\*Ab + Qc\*Ac + Qd\*Ad

Excess Precipitation, E (in)		
Zone 2	100-Year	10-Year
Ea	0.62	0.15
Eb	0.80	0.30
Ec	1.03	0.48
Ed	2.33	1.51

Peak Discharge (cfs/acre)		
Zone 2	100-Year	10-Year
Qa	1.71	0.41
Qb	2.36	0.95
Qc	3.05	1.59
Qd	4.34	2.71

PROPOSED DRAINAGE:

AFTER RIGHT-OF-WAY DEDICATION ALONG GIBSON BLVD AND YALE BLVD, THE PROPOSED SITE IS APPROXIMATELY 6.72 ACRES. AT THIS TIME, ONLY RIGHT-OF-WAY IMPROVEMENTS AND OVERALL INFRASTRUCTURE IS PROPOSED WITH THIS PROJECT. RIGHT-OF-WAY IMPROVEMENTS WILL NOT AFFECT THE OVERALL DRAINAGE PATTERN OF THE SITE OR THE SURROUNDING AREAS.

THE INTENT OF THIS PLAN IS SHOW INTERIM DRAINAGE PATTERNS PRIOR TO INDIVIDUAL LOT DEVELOPMENT. TO THE EXTENT POSSIBLE, ALL EXISTING ONSITE PAVEMENT IS TO REMAIN. FLOWS SHALL BE DIRECTED TO PROPOSED SIDEWALK CULVERTS VIA TEMPORARY ASPHALT CURB IN THE INTERIM PRIOR TO INDIVIDUAL LOT DEVELOPMENT. FOR THE PURPOSES OF THIS PLAN, IT IS ASSUMED THAT THE ENTIRETY OF THE SITE IS TO BE TREATMENT D PRIOR TO INDIVIDUAL LOT DEVELOPMENT. ALL LOTS WILL BE INDIVIDUALLY RESPONSIBLE FOR INDIVIDUAL STORM WATER QUALITY TREATMENT OR CASH-IN-LINE.

BASIN "102" WILL GENERATE A 100-YR, 6-HOUR FLOW OF 2.25 CFS, WHICH SHALL BE DIRECTED NORTHWEST VIA OVERLAND FLOW, WHERE IT SHALL BE DIRECTED VIA TEMPORARY CURB THROUGH THE PROPOSED SIDEWALK CULVERT INTO THE GIBSON RIGHT-OF-WAY.

BASIN "104" WILL GENERATE A 100-YR, 6-HOUR FLOW OF 4.17 CFS, WHICH SHALL BE DIRECTED NORTHWEST VIA OVERLAND FLOW, WHERE IT SHALL BE DIRECTED VIA TEMPORARY CURB THROUGH TO PROPOSED TURN LANE AND INTO THE GIBSON RIGHT-OF-WAY.

BASIN "106" WILL GENERATE A 100-YR, 6-HOUR FLOW OF 4.19 CFS, WHICH SHALL BE DIRECTED NORTHWEST VIA OVERLAND FLOW, WHERE IT SHALL BE DIRECTED VIA TEMPORARY CURB THROUGH THE PROPOSED SIDEWALK CULVERT INTO THE GIBSON RIGHT-OF-WAY.

BASIN "108" WILL GENERATE A 100-YR, 6-HOUR FLOW OF 2.07 CFS, WHICH SHALL BE DIRECTED NORTHWEST VIA OVERLAND FLOW, WHERE IT SHALL BE DIRECTED VIA TEMPORARY CURB THROUGH THE PROPOSED SIDEWALK CULVERT INTO THE GIBSON RIGHT-OF-WAY.

BASIN "110" WILL GENERATE A 100-YR, 6-HOUR FLOW OF 2.19 CFS, WHICH SHALL BE DIRECTED NORTHWEST VIA OVERLAND FLOW, WHERE IT SHALL BE DIRECTED VIA TEMPORARY CURB THROUGH TO PROPOSED TURN LANE AND INTO THE GIBSON RIGHT-OF-WAY.

BASIN "112" WILL GENERATE A 100-YR, 6-HOUR FLOW OF 2.75 CFS, WHICH SHALL BE DIRECTED NORTHWEST VIA OVERLAND FLOW, WHERE IT SHALL BE DIRECTED VIA TEMPORARY CURB THROUGH THE PROPOSED SIDEWALK CULVERT INTO THE GIBSON RIGHT-OF-WAY.

BASIN "202" WILL GENERATE A 100-YR, 6-HOUR FLOW OF 0.15 CFS, WHICH IS ASSUMED TO BE DIRECTED WEST, WHERE IT SHALL BE DIRECTED INTO THE WALKER RIGHT-OF-WAY. THIS BASIN REPRESENTS TEMPORARY LANDSCAPED AREA IN THE WESTERN PORTION OF LOT A BEHIND THE TEMPORARY CURB.

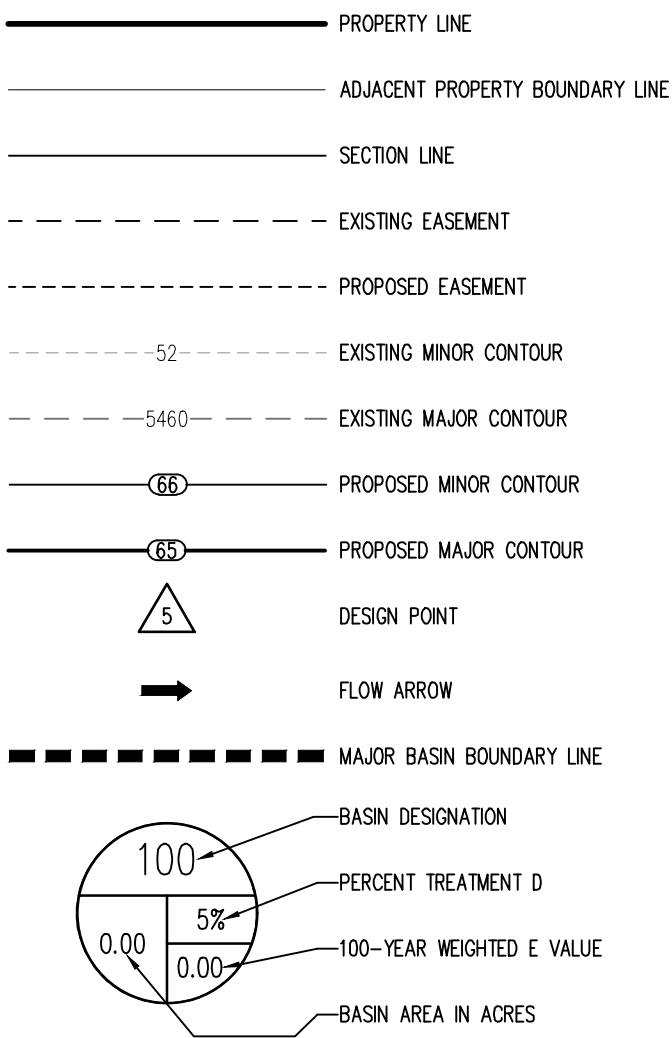
BASIN "204" WILL GENERATE A 100-YR, 6-HOUR FLOW OF 0.19 CFS, WHICH IS ASSUMED TO BE DIRECTED NORTHWEST, WHERE IT SHALL BE DIRECTED INTO THE GIBSON RIGHT-OF-WAY. THIS BASIN REPRESENTS TEMPORARY LANDSCAPED AREA IN THE NORTHERN PORTION OF LOT A BEHIND THE TEMPORARY CURB.

BASIN "206" WILL GENERATE A 100-YR, 6-HOUR FLOW OF 0.11 CFS, WHICH IS ASSUMED TO BE DIRECTED NORTHWEST, WHERE IT SHALL BE DIRECTED INTO THE GIBSON RIGHT-OF-WAY. THIS BASIN REPRESENTS TEMPORARY LANDSCAPED AREA IN THE NORTHERN PORTION OF LOT C BEHIND THE TEMPORARY CURB.

BASIN "208" WILL GENERATE A 100-YR, 6-HOUR FLOW OF 0.16 CFS, WHICH IS ASSUMED TO BE DIRECTED NORTHWEST, WHERE IT SHALL BE DIRECTED INTO THE GIBSON RIGHT-OF-WAY. THIS BASIN REPRESENTS TEMPORARY LANDSCAPED AREA IN THE NORTHERN PORTION OF LOT D BEHIND THE TEMPORARY CURB.

THE TOTAL DISCHARGE INTO THE GIBSON RIGHT-OF-WAY SHALL BE LESS THAN THE DISCHARGE IN THE EXISTING CONDITIONS DUE TO THE INCREASE IN LANDSCAPED AREA ONSITE.

DRAINAGE LEGEND



EXISTING DRAINAGE:

THIS SITE IS CURRENTLY DEVELOPED AND USED AS AIRPORT PARKING, CONSISTING OF SEVERAL BUILDINGS, CARPORTS, AND ASPHALT DRIVES. ALMOST THE ENTIRETY OF THE LOT IS IMPERVIOUS AREA. THE SITE IS BOUNDED BY GIBSON BLVD TO THE NORTH, YALE BLVD TO THE EAST, MILES RD TO THE SOUTH, AND WALKER DR TO THE WEST. THE SITE IS APPROXIMATELY 7.18 ACRES AND DRAINS FROM SOUTHEAST TO NORTHWEST, FREE-RELEASING INTO GIBSON BLVD THROUGH SEVERAL SIDEWALK CULVERTS. THE SITE IS NOT LOCATED IN A FLOODPLAIN AS SHOWN ON THE FIRM MAP (SEE THIS SHEET). THE PROJECT DOES NOT RECEIVE OFFSITE FLOWS.

NOTE:

INDIVIDUAL LOTS ARE NOT BEING DEVELOPED AT THIS TIME. LOTS SHALL BE INDIVIDUALLY RESPONSIBLE FOR STORM WATER QUALITY TREATMENT OR CASH-IN-LINE. INDIVIDUAL LOTS SHALL NEED TO CONFORM TO RELEASE RATES SPECIFIED IN THE CONCEPTUAL MASTER GRADING & DRAINAGE PLAN FOR THIS SITE.

Galloway

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gallowayus.com



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CONCEPTUAL GRADING & DRAINAGE PLAN  
LOVELACE HEIGHTS ADDITION

125 & GIBSON, LLC.

2121 YALE BOULEVARD  
ALBUQUERQUE, NM

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Project No:	PRP000008
Drawn By:	DDJ
Checked By:	TDK
Date:	04/28/2022

GRADING & DRAINAGE PLAN