CITY OF ALBUQUERQUE

Planning Department Alan Varela, Interim Director



Mayor Timothy M. Keller

October 4, 2021

Ronald Bohannan, P.E. Tierra West, LLC 5571 Midway Park Place NE Albuquerque, NM 87109

RE: Transport Housing Apartments Conceptual Grading and Drainage Plans Engineer's Stamp Date: 08/25/21 Hydrology File: M15D023H

Dear Mr. Bohannan:

PO Box 1293 Based upon the information provided in your submittal received 08/23/2021, the Conceptual Grading & Drainage Plans are approved for action by the DRB for Site Plan for Building Permit and Platting.

Albuquerque 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 <u>rbrissette@cabq.gov</u>.

www.cabq.gov

Renée C. Brissette

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

Sincerely,



City of Albuquerque

Planning Department Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: Transport Housing Apartments	Building 1	Permit #:	Hydrology File #: <u>M15D023H</u>
DRB#:	EPC#:		Work Order#:
Legal Description: Lots 1-A & 2-A-1, Block 2			
City Address: 2900 Transport St. SE, Albuque	erque, NM	87106	
Applicant: Tierra West, LLC			Contact: Vinny Perea
Address: 5571 Midway Park Place NE Albuquerq	ue NM 8710	09	
Phone#: 505-858-3100	Fax#:	505-858-1118	E-mail: vperea@tierrawestllc.com
Other Contact:			Contact:
Address: Phone#:			E-mail:
TYPE OF DEVELOPMENT: PLAT (#			
IS THIS A RESUBMITTAL? X Yes	N	0	
DEPARTMENT TRANSPORTATION	<u>х</u> н	YDROLOGY/DRAIN	AGE
Check all that Apply: TYPE OF SUBMITTAL: ENGINEER/ARCHITECT CERTIFICATION PAD CERTIFICATION X CONCEPTUAL G & D PLAN GRADING PLAN DRAINAGE REPORT DRAINAGE MASTER PLAN FLOODPLAIN DEVELOPMENT PERMIT A ELEVATION CERTIFICATE CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL) TRAFFIC IMPACT STUDY (TIS) STREET LIGHT LAYOUT OTHER (SPECIFY) PRE-DESIGN MEETING?		BUILDIN CERTIFI X PRELIM SITE PL X SITE PL X FINAL P SIA/ REI GRADIN GRADIN	PERMIT APPROVAL IG/ PAD CERTIFICATION PRDER APPROVAL
DATE SUBMITTED: <u>8/23/2021</u>		nny Perea	
COA STAFF:	ELECTRO	NIC SUBMITTAL RECEIVI	ED:

TIERRA WEST, LLC

August 23, 2021

Ms. Renee Brissette, P.E. CFM Senior Engineer, Hydrology PO BOX 1293 Albuquerque, NM 87103

RE: RESPONSE TO HYDROLOGY COMMENTS TRANSPORT HOUSING APARTMENTS, 2900 TRANSPORT ST. SE CONCEPTUAL GRADING & DRAINAGE PLAN

Dear Ms. Brissette:

Per the correspondence dated June 6, 2021, please find the following responses addressing the comments listed below:

- Sheet 2.2. Please add the existing basins that correspond to Sunport Phase 1 Master Drainage Plan to both the existing and the proposed basins.
 Response: These basins are now shown on both basin maps on Sheet 2.2.
- 2. The existing Comfort Inn currently has a discharge of 6.1 cfs that needs to be added to the existing conditions and somehow needs to be allowed to pass through the site. This may be just picking up the drainage and piping it to Flightway or Transport. Response: Basin O1 for the hotel is now shown on both basin maps along with the outfall location and discharge rate. The Weighted E table also shows this basin note that 6.1 cfs comes from this basin. A 12" HDPE storm drain has been added to pick up this drainage and pass through the site and daylight through the western proposed retaining wall and ultimately discharge into Transport Street. Keyed Notes 7 and 8 call these out on Sheet 2.1.
- 3. Please note that the original drainage areas A-2, A-4, & A-5 have allowable discharge rate of 3.4 cfs/ac. Therefore, the detention pond at the northwest corner will have this discharge rate. The original drainage area A-9 has allowable discharge rate of 3.85 cfs/ac. Therefore, the detention pond at the southwest corner will have a discharge rate that reflects this. It does appear that there are portions of some of the proposed drainage areas that is split between different discharge rates. These areas are the only ones that will have a weighted discharge rate depending on the percentage in A-5 and A-9 respectfully. Please make these changes. Response: The contributing basins to the NW pond now follow the 3.4 cfs/ac rate and will have an allowable discharge of 16.13 cfs. For the SW pond, the allowable discharge from that pond has been revised to reflect which contributing basins need to follow 3.4 cfs/ac and which need to follow 3.85 cfs/ac. These calcs. are shown on Sheet 2.1 and the allowable discharge for the SW pond based on this is 16.13 cfs. The Existing and Proposed Conditions narrative on this same sheet has now been updated to reflect this as well.
- Sheet 2.2. Please add some drainage arrows on the proposed drainage basins showing how each area will drain to the respected detention pond.
 Response: Flow arrows have been added to the proposed drainage basin map.

- Sheet 2.1. Please show maintenance ramps for each detention ponds. Also show a driveway for each pond.
 Response: Maintenance ramps and drive pads are now shown on Sheet 2.1 with Keyed Note 9 calling these out.
- Please show a section for each detention pond showing the top of pond elevation, bottom of pond elevation, water surface elevation for the 100 year, water of the stormwater quality, and elevation of the raised outfall pipe.
 Response: Sheet 2.3 has been added to show cross sections A-A and B-B for the two ponds. These call out the elevations for the 100yr MWSE, the First Flush/Outfall Elevations, and the BOP/TOP elevations.
- As a reminder, if the project total area of disturbance (including the staging are 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 (Dough Hughes, PE, <u>ihughes@cabq.gov</u>, (924-3420) 14 days prior to any earth disturbance.
 Response: Noted. We will be preparing an ESC plan as we move closer towards a final grading plan. We don't anticipate starting any construction (i.e. rough grading) prior to the issuance of a building permit.
- 8. Standard Review fee of \$300 (for DRB Site) will be required at the time of resubmittal. **Response: This will be paid as soon as invoice is received.**

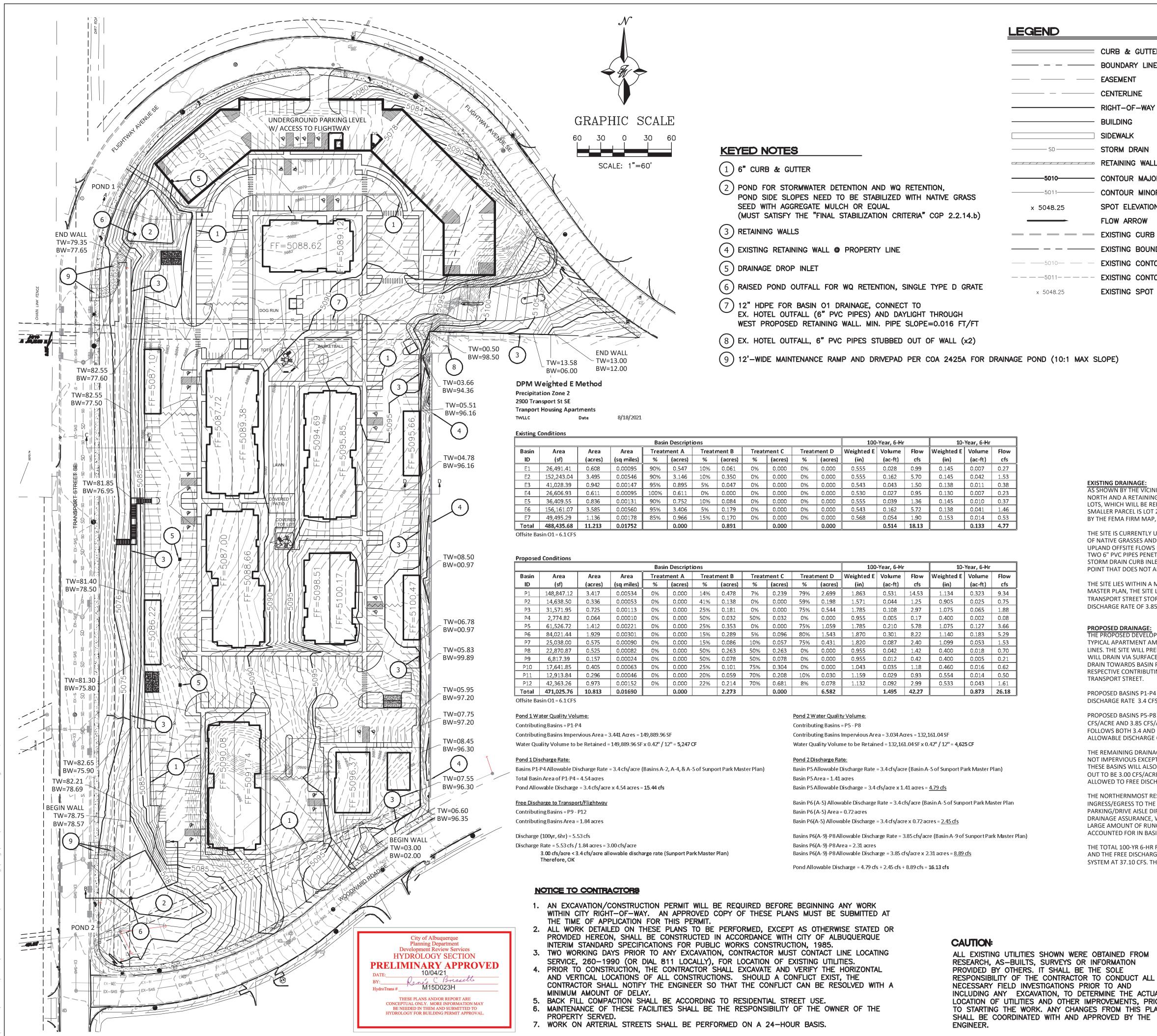
If you have any questions or need additional information regarding this matter, please do not hesitate to contact me.

Sincerely,

inR

Vinny Perea, P.E

JN: 2020072 RRB/vp/ye

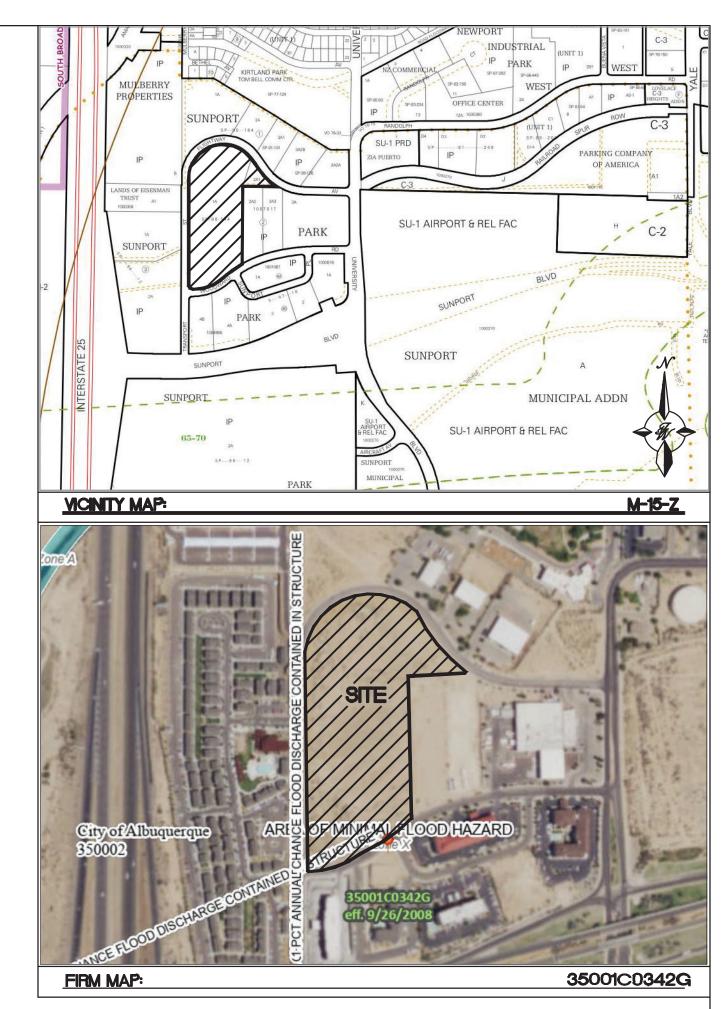




Basin Descriptions										100-Year, 6-Hr			10-Year, 6-Hr				
Basin	Area	Area	Area	Treatr	nent A	Treatr	nent B	Treatr	nent C	Treatr	nent D	Weighted E	Volume	Flow	Weighted E	Volume	Flow
ID	(sf)	(acres)	(sq miles)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	(in)	(ac-ft)	cfs	(in)	(ac-ft)	cfs
E1	26,491.41	0.608	0.00095	90%	0.547	10%	0.061	0%	0.000	0%	0.000	0.555	0.028	0.99	0.145	0.007	0.27
E2	152,243.04	3.495	0.00546	90%	3.146	10%	0.350	0%	0.000	0%	0.000	0.555	0.162	5.70	0.145	0.042	1.53
E3	41,028.39	0.942	0.00147	95%	0.895	5%	0.047	0%	0.000	0%	0.000	0.543	0.043	1.50	0.138	0.011	0.38
E4	26,606.93	0.611	0.00095	100%	0.611	0%	0.000	0%	0.000	0%	0.000	0.530	0.027	0.95	0.130	0.007	0.23
E5	36,409.55	0.836	0.00131	90%	0.752	10%	0.084	0%	0.000	0%	0.000	0.555	0.039	1.36	0.145	0.010	0.37
E6	156,161.07	3.585	0.00560	95%	3.406	5%	0.179	0%	0.000	0%	0.000	0.543	0.162	5.72	0.138	0.041	1.46
E7	49,495.29	1.136	0.00178	85%	0.966	15%	0.170	0%	0.000	0%	0.000	0.568	0.054	1.90	0.153	0.014	0.53
Total	488,435.68	11.213	0.01752		0.000		0.891		0.000		0.000		0.514	18.13		0.133	4.77
Off.: 1. D.	ain 01 C1CEC																

	Basin Descriptions								100-Year, 6-Hr			10-Year, 6-Hr					
Basin	Area	Area	Area	Treatr	nent A	Treatr	ment B	Treatment C Treatment D		Weighted E	Volume	Flow	Weighted E	Volume	Flow		
ID	(sf)	(acres)	(sq miles)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	(in)	(ac-ft)	cfs	(in)	(ac-ft)	cfs
P1	148,847.12	3.417	0.00534	0%	0.000	14%	0.478	7%	0.239	79 %	2.699	1.863	0.531	14.53	1.134	0.323	9.34
P2	14,638.50	0.336	0.00053	0%	0.000	41%	0.138	0%	0.000	59%	0.198	1.571	0.044	1.25	0.905	0.025	0.75
P3	31,571.95	0.725	0.00113	0%	0.000	25%	0.181	0%	0.000	75%	0.544	1.785	0.108	2.97	1.075	0.065	1.88
P4	2,774.82	0.064	0.00010	0%	0.000	50%	0.032	50%	0.032	0%	0.000	0.955	0.005	0.17	0.400	0.002	0.08
P5	61,526.72	1.412	0.00221	0%	0.000	25%	0.353	0%	0.000	75%	1.059	1.785	0.210	5.78	1.075	0.127	3.66
P6	84,021.44	1.929	0.00301	0%	0.000	15%	0.289	5%	0.096	80%	1.543	1.870	0.301	8.22	1.140	0.183	5.29
P7	25,038.00	0.575	0.00090	0%	0.000	15%	0.086	10%	0.057	75%	0.431	1.820	0.087	2.40	1.099	0.053	1.53
P8	22,870.87	0.525	0.00082	0%	0.000	50%	0.263	50%	0.263	0%	0.000	0.955	0.042	1.42	0.400	0.018	0.70
P9	6,817.39	0.157	0.00024	0%	0.000	50%	0.078	50%	0.078	0%	0.000	0.955	0.012	0.42	0.400	0.005	0.21
P10	17,641.85	0.405	0.00063	0%	0.000	25%	0.101	75%	0.304	0%	0.000	1.043	0.035	1.18	0.460	0.016	0.62
P11	12,913.84	0.296	0.00046	0%	0.000	20%	0.059	70%	0.208	10%	0.030	1.159	0.029	0.93	0.554	0.014	0.50
P12	42,363.26	0.973	0.00152	0%	0.000	22%	0.214	70%	0.681	8%	0.078	1.132	0.092	2.99	0.533	0.043	1.61
Total	471,025.76	10.813	0.01690		0.000		2.273		0.000		6.582		1.495	42.27		0.873	26.18

- CURB & GUTTER BOUNDARY LINE EASEMENT CENTERLINE RIGHT-OF-WAY BUILDING SIDEWALK STORM DRAIN - CONTOUR MAJOR CONTOUR MINOR SPOT ELEVATION FLOW ARROW
- EXISTING CURB & GUTTER - EXISTING BOUNDARY LINE
- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR EXISTING SPOT ELEVATION



EXISTING DRAINAGE

AS SHOWN BY THE VICINITY MAP, THIS SITE IS BOUNDED BY WOODWARD ROAD TO THE SOUTH, TRANSPORT STREET TO THE WEST, FLIGHTWAY AVENUE TO THE NORTH AND A RETAINING WALL TO THE EAST THAT HOLDS THE ADJACENT COMFORT SUITES HOTEL SITE ABOVE THIS PROPERTY. THE SITE CONSISTS OF TWO LOTS, WHICH WILL BE REPLATTED TO BE COMBINED INTO ONE LOT. LOT 1-A, BLOCK 2, SUNPORT PARK IS THE LARGER PARCEL CONSISTING OF 10.1 ACRES. THE SMALLER PARCEL IS LOT 2-A-1, BLOCK 2, SUNPORT PARK AND CONSISTS OF 0.69 ACRES. THE TOTAL OF THE TWO LOTS TO BE COMBINED IS 10.69 ACRES. SHOWN BY THE FEMA FIRM MAP, THE SITE DOES NOT LIE WITHIN ANY FLOODPLAIN.

THE SITE IS CURRENTLY UNDEVELOPED AND CONSISTS OF DRAINAGE FLOW FROM EAST TO WEST TOWARDS TRANSPORT STREET. THE GROUND COVER CONSISTS OF NATIVE GRASSES AND WEEDS AND IS RELATIVELY STEEP, WITH SLOPES RANGING BETWEEN 10% TO 20% AND WITH SOME AREAS EXCEEDING 20%. THERE ARE UPLAND OFFSITE FLOWS FROM BASIN O1 THAT PASS THROUGH THE SITE FROM THE HOTEL DIRECTLY TO THE EAST. BASIN O1 OUTFALLS ONTO THE SITE VIA TWO 6" PVC PIPES PENETRATED THROUGH AN EXISTING RETAINING WALL SEPARATING BOTH SITES. BASINS E1 THROUGH E6 CONVEY RUNOFF TO THE EXISTING STORM DRAIN CURB INLETS ALONG THE EAST SIDE OF TRANSPORT STREET. BASIN E7 CAPTURES AND RETAINS FLOWS ONSITE, AS THIS BASIN CONTAINS A LOW POINT THAT DOES NOT ALLOW FLOWS TO MAKE ITS WAY TO THE TRANSPORT STREET STORM DRAIN SYSTEM.

THE SITE LIES WITHIN A MASTER DRAINAGE PLAN KNOWN AS SUNPORT PARK - PHASE 1 DATED 12/6/1996 (HYDROLOGY FILE M15-D023). PER THIS DRAINAGE MASTER PLAN, THE SITE LIES WITHIN BASINS A-4, A-5, A-9, AND A SMALL PORTION OF A-2 WITH ALL OF THESE BASINS INTENDED TO DISCHARGE INTO THE TRANSPORT STREET STORM DRAIN. DRAINAGE BASINS A-2, A-4, AND A-5 ALLOW A 100-YR, 6-HR DISCHARGE RATE OF 3.4 CFS/ACRE WHILE BASIN A-9 ALLOWS A DISCHARGE RATE OF 3.85 CFS/ACRE.

PROPOSED DRAINAGE

THE PROPOSED DEVELOPMENT WILL BE AN APARTMENT COMPLEX WITH 7 3-STORY RESIDENT BUILDINGS, 4 GARAGE BUILDINGS, A CLUBHOUSE AND VARIOUS TYPICAL APARTMENT AMENITIES. DUE TO STEEP EXISTING GRADES OF THE SITE, THERE WILL BE NEW RETAINING WALLS ALONG THE EAST AND WEST PROPERTY LINES. THE SITE WILL PREDOMINANTLY DRAIN TOWARDS POND 1 (NW QUADRANT OF PROPERTY) AND POND 2 (SW QUADRANT OF PROPERTY). BASINS P1-P3 WILL DRAIN VIA SURFACE FLOW TOWARDS BASIN P4, WHICH IS POND 1. BASINS P5-P7 WILL DRAIN BY A COMBINATION OF SURFACE FLOW AND ONSITE STORM DRAIN TOWARDS BASIN P8, WHICH IS POND 2. EACH POND WILL HAVE RAISED OUTFALLS FOR RETAINING THE REQUIRED WATER QUALITY VOLUME FROM THEIR RESPECTIVE CONTRIBUTING BASINS. THESE OUTFALLS IN THESE PONDS WILL CONNECT TO THE BACK OF THE EXISTING CURB INLETS ALONG THE EAST SIDE OF TRANSPORT STREET.

PROPOSED BASINS P1-P4 FALL WITHIN THE MASTER PLAN DRAINAGE BASINS OF A-2, A-4, & A-5. THESE MASTER PLAN BASINS ALL HAVE AN ALLOWABLE DISCHARGE RATE 3.4 CFS/ACRE, SO POND 1 WILL BE LIMITED TO DISCHARGE AT THIS RATE WITH AN ALLOWABLE TOTAL DISCHARGE OF 15.44 CFS.

PROPOSED BASINS P5-P8 FALL WITHIN THE MASTER PLAN DRAINAGE BASINS OF A-5 & A-9, WHICH EACH HAVE AN ALLOWABLE DISCHARGE RATE OF 3.4 CFS/ACRE AND 3.85 CFS/ACRE, RESPECTIVELY. PROPOSED BASIN P5 FOLLOWS 3.4 CFS/ACRE, BASINS P7 AND P8 FOLLOWS 3.85 CFS/ACRE, AND BASIN P6 FOLLOWS BOTH 3.4 AND 3.85 CFS/ACRE SINCE THIS AREA IS SPLIT BETWEEN THE MASTER PLAN BASINS MENTIONED. POND 2 THEREFORE, WILL HAVE ALLOWABLE DISCHARGE OF 16.13 CFS. HDYROLOGY CALCS FOR THESE DETERMINED DISCHARGES CAN BE FOUND ON THIS SHEET.

THE REMAINING DRAINAGE BASINS P9-P12 CONSIST OF THE SLOPE TIE AREAS ALONG THE STREET-FRONTED PERIMETER OF THE PROPERTY. THESE BASINS ARE NOT IMPERVIOUS EXCEPT FOR THE DRIVEWAYS, WHICH ARE SLOPED TO CREATE WATER BLOCKS BETWEEN THE STREET DRAINAGE AND PRIVATE DRAINAGE. THESE BASINS WILL ALSO CONVEY FLOW TO THE EXISTING CURB INLETS IN TRANSPORT STREET VIA FREE DISCHARGE. THIS FREE DISCHARGE AMOUNT WORKS OUT TO BE 3.00 CFS/ACRE, WHICH IS LESS THAN THE ALLOWABLE 3.4 AND 3.85 CFS/ACRE RATES IN THE MASTER PLAN, THEREFORE THESE BASINS WILL BE ALLOWED TO FREE DISCHARGE TO TRANSPORT STREET AND FLIGHTWAY AVENUE.

THE NORTHERNMOST RESIDENT BUILDING ALONG FLIGHTWAY AVENUE WILL INCLUDE AN UNDERGROUND PARKING STRUCTURE, WITH VEHICLE INGRESS/EGRESS TO THE STRUCTURE COMING FROM FLIGHTWAY AVENUE. THE FIRST FLOOR ABOVE THIS STRUCTURE WILL BE AT GRADE WITH THE ONSITE PARKING/DRIVE AISLE DIRECTLY SOUTH OF THE BUILDING. THE PARKING STRUCTURE WILL HAVE SOME SLIGHT GRADE FROM EAST TO WEST FOR POSITIVE DRAINAGE ASSURANCE, WITH A DRAINAGE INLET PLACED AT THE WESTERN EDGE OF THE PARKING STRUCTURE, HOWEVER THERE IS NOT AN ANTICIPATED LARGE AMOUNT OF RUNOFF WITHIN THE STRUCTURE DUE TO A RAINFALL FROM A STORM EVENT BEING CAPTURE ON THE ROOF ABOVE AND ALREADY BEING ACCOUNTED FOR IN BASIN P1.

THE TOTAL 100-YR 6-HR FLOW FOR THE ENTIRE SITE IS 42.27 CFS OVER 10.813 ACRES. FOLLOWING THE ALLOWABLE DISCHARGE RATES BETWEEN BOTH PONDS AND THE FREE DISCHARGE AREAS ALONG FLIGHTWAY AND TRANSPORT, THE FULLY DEVELOPED SITE WILL DISCHARGE TO THE TRANSPORT STORM DRAIN SYSTEM AT 37.10 CFS. THIS AVERAGES OUT TO 3.43 CFS/ACRE FOR THE TOTAL DEVELOPED SITE.

	PRELIMI	NARY - NOT FOR CONSTRUCT	ION		
	ENGINEER'S SEAL	TRANSPORT HOUSING TRANSPORT ST & FLIGHTWAY AVE	DRAWN BY BF <i>DATE</i>		
OBTAINED FROM INFORMATION	ONALD R. BOAR				
THE SOLE TO CONDUCT ALL NOR TO AND TERMINE THE ACTUAL MPROVEMENTS, PRIOR SES FROM THIS PLAN	PROFILESSIONAL ENGINE	5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NM 87109	SHEET # C2.1		
PPROVED BY THE	RONALD R. BOHANNAN P.E. #7868	(505) 858-3100 www.tierrawestllc.com	JOB # 2020072		

