DRAINAGE AND TRANSPORTATION INFORMATION SHEET

DRB#:		LE # <u>L-18-Z</u>	ZONE MAP/DRG. FII WORK ORDER#:	RAINING STORAGE T	PROJECT TITLE: NEW REDREH: EI
ENGINEERING FIRM: MILLER ENGINEERING CONSULTANTS ADDRESS: 3500 COMMANCHE NE, BUILDING F CITY, STATE: ALBUQUEDQUE, NM OWNER: PLUMPER AND P. PEFITTER, LOCAL UNION 412 ADDRESS: 421 ARIZONA SE CITY, STATE: ALBUQUERQUE, N.M. ARCHITECT: ARAGON ASSOCIATES ADDRESS: 6913 SHOSHONE RD. NE CITY, STATE: ALBUQUERQUE, NM SURVEYOR: CONTACT: LOHN JACQUEZ PHONE: 505 - 888 - 7800 ZIP CODE: 87107 CONTACT: EDWARD ARAGOL PHONE: 505 - 843 - 6263 ZIP CODE: 87110	T. 10 A	ON SECTION 15, T. CTY. NEW MEXICO 87108	LE 1 MESA PARK ADDITION ALBUQUERQUE BERNALILLO ALBUQUERQUE , NM	TRACT A-1-B BLO R.3 E., N.M.P.M. ARIZONA SE	TRA LEGAL DESCRIPTION: R. 7 CITY ADDRESS: 421 A
ADDRESS: 421 ARIZONA SE CITY, STATE: ALBUQUERQUE, N.M. ARCHITECT: ARAGON ASSOCIATES ADDRESS: 6913 SHOSHONE RD. NE CITY, STATE: ALBUQUERQUE, NM. SURVEYOR: ADDRESS: 421 ARIZONA SE PHONE: ZIP CODE: 87108 CONTACT: EDWARD ARAGON PHONE: 505 - 843 - 6263 ZIP CODE: 87110	-	10HN JACQUEZ 5-888-7500	CONSULTANTS CONTACT:	COMMENTE NE P	ENGINEERING FIRM: MILL ADDRESS: 3500
ARCHITECT: ARAGON ASSOCIATES ADDRESS: 6913 SHOSHONE RD. NE CITY, STATE: ALBUQUERQUE, NM SURVEYOR: CONTACT: EDWARD ARAGOL PHONE: 505 - 843 - 6263 ZIP CODE: 87110	_	87108	UNION 412 CONTACT:	D PI PEFITTER, LOCA	OWNER: PLUMPER AND F
SURVEYOR:CONTACT:	J	MARD ARACAN	CONTACT: E	13 SHOSHOUS B	ARCHITECT: ARAGON ADDRESS: 691
ADDRESS: PHONE: ZIP CODE:			PHONE:		ADDRESS:
PROFESSIONAL LICENSED SURVEYOR SIGNATURE LICENSE NO. DATE		DATE	LICENSE NO.		
CONTRACTOR: ADDRESS: CITY, STATE: ZIP CODE:			PHONE:		ADDRESS:
TYPE OF SUBMITTAL: DRAINAGE REPORT DRAINAGE PLAN 1st SUBMITTAL DRAINAGE PLAN RESUBMITTAL DRAINAGE PLAN RESUBMITTAL CONCEPTUAL G & D PLAN GRADING PLAN EROSION CONTROL PLAN ENGINEER'S CERT (HYDROLOGY) CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT ENGINEER/ARCHITECT CERT (TCL) ENGINEER/ARCHITECT (DRB SITE PLAN) OTHER CHECK TYPE OF APPROVAL SOUGHT: SIA/FINANCIAL GUARANTEE RELEASE PRELIMINARY PLAT APPROVAL S. DEV. POR BLDG. PERMIT APPROVAL SECTOR PLAN APPROVAL FINAL PLAT APPROVAL FOUNDATION PERMIT APPROVAL CERTIFICATE OF OCCUPANCY (PERM) CERTIFICATE OF OCCUPANCY (TEMP) GRADING PERMIT APPROVAL WORK ORDER APPROVAL OTHER (SPECIFY)		SOUGHT: RANTEE RELEASE APPROVAL B'D APPROVAL ERMIT APPROVAL OVAL AL T APPROVAL PPROVAL CUPANCY (PERM) CUPANCY (TEMP) PROVAL ROVAL	CHECK TYPE OF APPROVAL S SIA/FINANCIAL GUAR PRELIMINARY PLAT A S. DEV. PLAN FOR SUI S. DEV. FOR BLDG. PE SECTOR PLAN APPROVA FOUNDATION PERMIT BUILDING PERMIT AP CERTIFICATE OF OCCU GRADING PERMIT APP PAVING PERMIT APPR WORK ORDER APPROV	N 1st SUBMITTAL N RESUBMITTAL & D PLAN OL PLAN T (HYDROLOGY) ATION LAYOUT ITECT CERT (TCL)	DRAINAGE REPORT DRAINAGE PLAN 1st DRAINAGE PLAN RE CONCEPTUAL G & D GRADING PLAN EROSION CONTROL ENGINEER'S CERT (F CLOMR/LOMR TRAFFIC CIRCULATI ENGINEER/ARCHITE ENGINEER/ARCHITE
WAS A PRE-DESIGN CONFERENCE ATTENDED: YES NO COPY PROVIDED UBMITTED BY: DATE: 7/9/15		7191,		ERENCE ATTENDED:	YES NO COPY PROVIDED

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope to the proposed development define the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

- Conceptual Grading and Drainage Plan: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
- Drainage Plans: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
 Drainage Report: Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more.



July 8, 2015

City of Albuquerque Planning Department Development and Building Services P.O. Box 1293 Albuquerque, NM 87103

Attn: Rita Harmon, P.E., Senior Engineer Hydrology

RE: New Training & Storage Facility
Engineers Stamp Date 06/12/15 (L18D074)

Dear Mrs. Harmon.

This letter is in response to your comments by letter dated June 29, 2015. All of your comments have been addressed as follows:

- 1. Provide how flows are leaving the FF pond. What is the pond bottom?

 The northwest corner of the first flush pond will act like a natural spillway. The pond bottom invert elevation is 97.0.
- 2. Provide the type of surface in the south area. A look at the aerial map shows pavement. How will the flows exit this area?

The area in question is actually dirt/base course as it stands today. The flows will exist through a swale which we have added on sheet C-102. The new swale will begin near the east edge to the south of the property and run west then head northeast around the paved drive area and northwest to the first flush pond on the west side.

- 3. Provide a FF pond for the downspouts on the east side of the building.

 A new first flush pond has been provided on the corner of the southeast side of the building. Provided the site constraints, we have made every feasible effort to accommodate a FF pond to accommodate the east side of the building.
- 4. Provide a letter of approval from the owner to the north of this site for grading and paving in their property. Also provide a FF pond for this area. What does the hatched area represent? The property to the north is owned by the same owner as this property. A letter from the property owner has been attached. Provided the site constraints, a FF pond in this area is not feasible. We have made every effort to capture as much runoff from paved areas as possibly feasible. The hatched area represents parking lot striping within the north parking lot area.

5. Sheet C-501 shows a typical pond section with a berm. Where is this berm located? If on the east side of the pond, how will the concrete channels enter the pond?

The berm has been removed from the detail on sheet C-501. The flows will be able to enter the pond through the concrete channels.

6. Provide a basin map of the entire area.

A basin map of the entire area has been provided on sheet C-100 as requested.

If you have any questions or need any additional information, please feel free to contact our office.

MILLER ENGINEERING CONSULTANTS, INC.

UAN

Verlyn A. Miller, P.E.

President

VAM:vam Enclosures

cc: File

JOINT APPRENTICESHIP TRAINING COMMITTEE FOR THE PLUMBING AND PIPEFITTING INDUSTRY IN NEW MEXICO (STATE WIDE)

IN COOPERATION WITH THE BUREAU OF APPRENTICESHIP, UNITED STATES DEPARTMENT OF LABOR AND NEW MEXICO APPRENTICESHIP COUNCIL

PLUMBERS AND PIPEFITTERS TRAINING CENTER

411 Arizona SE Phone: 505-256-9257

Albuquerque, NM 87108 Fax: 505-255-9688

Email: JATC412@AOL.com

July 9, 2015

Rita Harmon, PE Senior Engineer, Hydrology Planning Department City of Albuquerque

Re: New Training and Storage Facility
421 Arizona St. SE
Grading and Drainage Plan
Engineer's Stamped dated 6-12-2015 (L18D074)

Dear Ms. Harmon,

This letter shall serve as my approval to make changes to the north property to join the two properties together for the grading and drainage necessary for the new building.

If you should have any questions please contact me at (505) 256-9257.

Sincerely,

Courtenay Eichhorst Training Coordinator

clal

SITE LOCATION

PLUMBERS AND PIPEFITTERS TRAINING CENTER IS LOCATED IS LOCATED AT 421 ARIZONA, N.E.. IN ALBUQUERQUE, NM. THE BOUNDARY IS RECTANGULAR AND BOUNDED BY SAN PEDRO DRIVE S.E. TO THE WEST, JACK AND JILL PARK TO THE SOUTH, PLUMBERS AND PIPEFITTERS PARKING AREA FOR EXISTING OFFICES TO THE NORTH, AND ARIZONA STREET S.E. AVENUE TO THE EAST.

EXISTING ON SITE CONDITIONS

THE SITE IS THE WEST HALF TRACT A-1-B, BLOCK 1 OF MESA PARK ADDITION. THE EAST HALF OF THE TRACT HAS TWO EXISTING BUILDINGS AND AN EXISTING PARKING AREA. THE GRADING AND DRAINAGE PLAN FOR THE EXISTING EAST HALF WAS APPROVED BY CITY HYDROLOGY ON FEBRUATRY 10, 2010 UNDER ENGINEER STAMPED DATED 6-24-09 HYDROLOGY PROJECT NUMBER L-18/D074. THE WEST HALF OF THE SITE IS VACANT WITH A BASE COURSE SURFACING. THERE IS AN EXISTING ASPHALT DITCH THAT WAS CONSTRUCTED ALONG THE EAST AND THE NORTH PROPERTY LINE. THERE IS AN EXISTING OVERHEAD ELECTRICAL POWER LINES. THAT ARE CROSSING THE SITE. THE SITE IS ACCESSED FROM THE EAST OFF OF ARIZONA STREET. GRADING AND DRAINAGE PLAN (L-18/D074) FOR PLUMBERS AND STEAM FITTERS UNION BY BRASHER AND LORENZ DATED 6-24-2009 WAS APPROVED IN 2010. THE PROPERTY HAS THREE DRAINAGE BASINS, WHICH IS IDENTIFIED AS BASINS 1, 2, AND 3 TO MATCH THE PREVIOUSLY APPROVED GRADING PLAN. THIS REPORT FOCUSES ON THE PRE AND POST HYDROLOGY. BASIN 3 DRAINS TO THE NORTHWEST CORNER OF THE PROPERTY BY SURFACE FLOW. THE DRAINAGE DATA ON THIS PAGE SUMMARIZES THE EXISTING PEAK DISCHARGE AND RUNOFF VOLUME FOR BASIN 3.

PROPOSED CONDITIONS

THE PROPOSED DEVELOPMENT OF THE SITE WILL CONSIST OF ONE BUILDING, ASSOCIATED CONCRETE FLATWORK, SIDEWALKS, SIDEWALK CULVER, AND LANDSCAPING. THE IMPROVEMENTS ARE ALL LOCATED IN EXISTING DRAINAGE BASIN 7. 3. THE MAJORITY OF THE STORM WATER FLOW GENERATED FROM THE DEVELOPMENT OF THIS SITE WILL BE COLLECTED VIA SURFACE FLOW AND FREE DISCHARGE THRU AN EXISTING ASPHALT DITCH TO SAN PEDRO DRIVE. THE DRAINAGE DATA ON THIS PAGE SUMMARIZES THE EXISTING PEAK DISCHARGE AND RUNOFF VOLUME FOR BASIN 3.

OFFSITE FLOWS

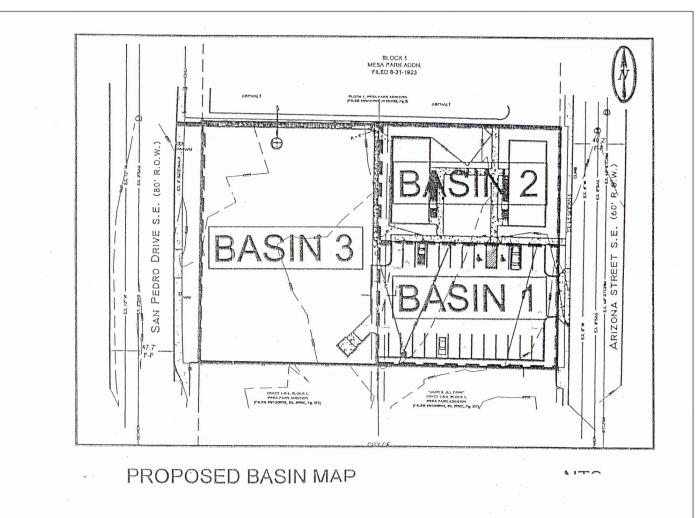
BASINS ONE AND TWO FROM THE PREVIOUS DEVELOPMENT ON THE EAST HALF OF THE SITE DRAIN VIA SURFACE FLOW THROUGH AN EXISTING ASPHALT DITCH ACROSS BASIN 3 THUS DISCHARGING TO THE NORTHWEST CORNER OF THE SITE INTO SAN PEDRO DRIVE VIA AN EXISTING SIDEWALK CULVERT.

CONCLUSION

RUNOFF VOLUME AND FLOW RATE INCREASED AS A RESULT OF CHANGES IN LAND TREATMENTS FOR BASIN 3 BY 0.042 ACRE FEET AND THE PEAK FLOW RATE HAS INCREASED BY 0.51 CFS.

AS PER APPROVED GRADING AND DRAINAGE PLAN (L-18/D074) FOR PLUMBERS AND STEAM FITTERS UNION BY BRASHER AND LORENZ DATED 6-24-2009 WAS APPROVED IN 2010 BASIN 1, 2, AND 3 (THIS SITE), HARE ALLOWED TO FREE DISCHARGE INTO SAN PEDRO DRIVE. WITH THE PROPOSED IMPROVEMENTS AS OUTLINED IN THE PLAN, A PEAK DISCHARGE OF 2.49 cfs WILL BE GENERATED FOR THE 100 YEAR, 24 HOUR EVENT.

THE PROPOSED GRADING IMPROVEMENTS WILL INCLUDE STANDARD CONCRETE FLATWORK, SIDEWALK CULVERT, CONCRETE DRAINAGE CHANNEL AND A FIRST FLUSH WATER HARVEST AREA. THIS WATER HARVESTING AREA WILL BE USED TO MANAGE THE FIRST FLUSH AS REQUIRED BY THE RECENT CITY OF ALBUQUERQUE DRAINAGE ORDINANCE CHANGES. THE VOLUME OF THE FIRST FLUSH (0.44-0.1 INCHES * IMPERVIOUS AREA)= 395 cf. THE WATER HARVEST AREA VOLUME = 880 cf > 395 cf. THEREFOR MANAGES THE FIRST FLUSH.



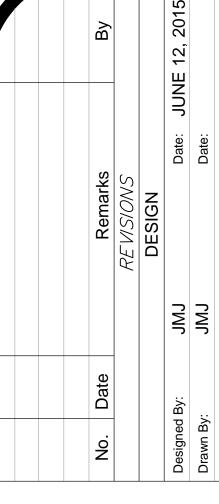
BASIN MAP

NOT TO SCALE

GENERAL NOTES:

- EXISTING TOPOGRAPHIC DATA SHOWN ON THESE PLANS WAS PROVIDED BY HARRIS SURVEYING. MILLER ENGINEERING CONSULTANTS HAS UNDERTAKEN NO FIELD VERIFICATION OF THIS INFORMATION.
- 2. PROJECT BENCHMARK IS ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE STATION "5-K18B"HAVING AN ELEVATION OF 5292.987, NAVD 1988.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES DURING THE CONSTRUCTION PHASE.
- 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.
- 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.
- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER(S) OF THE PROPERTY SERVED.
- THE CONTRACTOR SHALL FIELD VERIFY LOCATION AND SIZE OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- 9. THE SUBJECT PROPERTY IS LOCATED WITHIN ZONE X. 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 0354H.
- 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. AS OF MARCH 10, 2003, THE USEPA REQUIRES NPDES PERMIT COVERAGE FOR STORM WATER DISCHARGES FROM CONSTRUCTION PROJECTS (COMMON PLANS OF DEVELOPMENT) THAT WILL RESULT IN THE DISTURBANCE (OR RE-DISTURBANCE) OF ONE OR MORE ACRES, INCLUDING EXPANSIONS OF TOTAL LAND AREA. THE DEVELOPER SHOULD BE MADE AWARE THAT THE USEPA REQUIRES THAT ALL "OPERATORS" (SEE FEDERAL REGISTER/VOL. 63, NO. 128 MONDAY, JULY 6, 1999 PG 36509) OBTAIN NPDES PERMIT COVERAGE FOR CONSTRUCTION PROJECTS. GENERALLY THIS MEANS THAT AT LEAST TWO PARTIES WILL REQUIRE PERMIT COVERAGE. THE OWNER/DEVELOPER OF THIS CONSTRUCTION PROJECT WHO HAS OPERATIONAL CONTROL OVER THE PROJECT SPECIFICATIONS, THE GENERAL CONTRACTOR WHO HAS DAY-TO-DAY OPERATIONAL CONTROL OF THOSE ACTIVITIES AT THE SITE, WHICH ARE NECESSARY TO ENSURE COMPLIANCE WITH THE STORM WATER POLLUTION PLAN AND OTHER CONDITIONS, AND POSSIBLY OTHER "OPERATORS" THAT WILL REQUIRE APPROPRIATE NPDES PERMIT COVERAGE FOR THIS PROJECT.
- 16. THE CONTRACTOR SHALL SUBMIT A SEED MIX DESIGN TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO STARTING THE SEEDING ON THE PROJECT. THE SEED MIX DESIGN SHALL BE A SEED MIX RECOMMENDED BY THE NRCS FIELD OFFICE REPRESENTATIVE THAT IS APPROPRIATE FOR THE PROJECT LOCATION. ALL DISTURBED AREAS WITH SLOPES LESS THAN 3:1 SHALL RECEIVE CLASS "A" SEEDING. ALL DISTURBED AREAS WITH SLOPES EQUAL TO OR GREATER THAN 3:1 SHALL RECEIVE STEEP SLOPE SEEDING. THE STEEP SLOPE SEEDING SHALL CONSIST OF SEEDING IN CONJUNCTION WITH A 100% COCONUT FIBER BLEND EROSION BLANKET (NORTH AMERICAN GREEN C125) OR APPROVED EQUAL. ALL MATERIALS, EQUIPMENT AND LABOR ASSOCIATED WITH THE PROPER CONSTRUCTION OF THE STEEP SLOPE SEEDING WILL BE CONSIDERED INCIDENTAL AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE FOR THIS MATERIAL OR WORK. THE COCONUT FIBER EROSION BLANKET AND ASSOCIATED SEEDING SHALL BE CONSTRUCTED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND APPROVED BY THE PROJECT ENGINEER PRIOR TO CONSTRUCTION.
- 17. 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.
- 18. 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.
- 19. 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.
- 20. THE CONTRACTOR SHALL SUBMIT MATERIAL SUBMITTALS, CUT SHEETS AND SHOP DRAWINGS FOR ALL CIVIL RELATED ITEMS FOR REVIEW PRIOR TO CONSTRUCTION.
- 21. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS AND ABCWUA FOR ALL UTILITIES. (UPDATE 8, AMENDMENT 1)
- 22. THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR CLARIFICATION IF THERE ARE ANY CONFLICTS BETWEEN EXISTING OR PROPOSED UTILITIES ON THIS PROJECT PRIOR TO CONSTRUCTION.
- 23. ALL EXISTING MANHOLES, VALVES AND METERS SHALL BE ADJUSTED TO NEW FINISH GRADE.





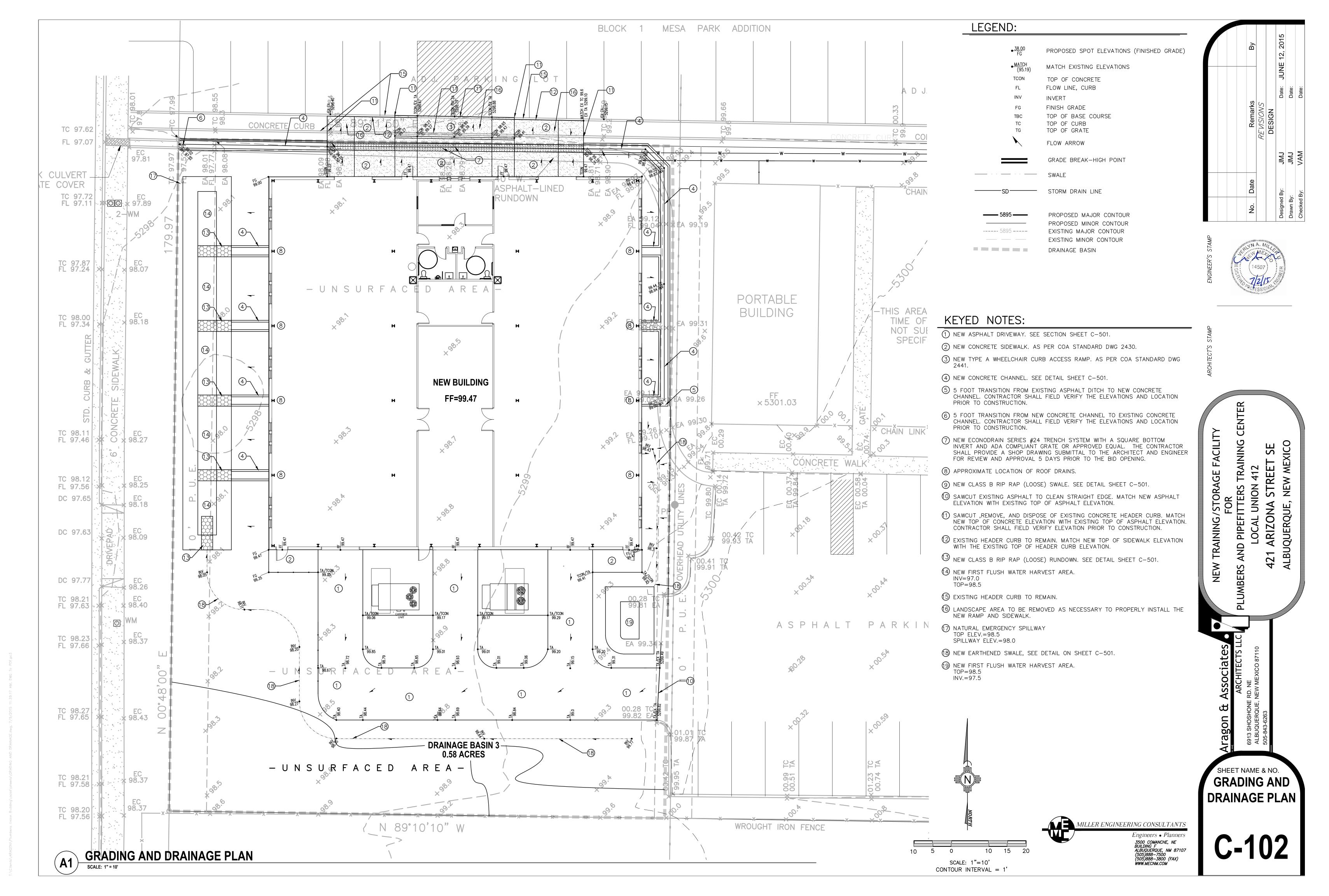
S NEW

SHEET NAME & NO. **GRADING AND DRAINAGE REPORT**

DRAINAGE DATA

									<i>/</i>
Percipita	ation Zone 3	- 100-year	Storm	P(360) =	2.6	in	P(1440) =	3.1	in
	Basin	L	and Treatr	nent Factor	s				
Basin	Area	Α	В	С	D	Ew	V(100-6)	V(100-24)	Q(100)
	(Ac)		(Acres	5)		(in)	(af)	(af)	(cfs)
Existing	Conditions								
3	0.58	0.00	0.00	0.58	0.00	1.29	0.062	0.062	1.98
Total	0.58								1.98
Proposed Conditions									
3	0.58	0.00	0.00	0.25	0.33	1.89	0.091	0.104	2.49
Total	0.58								2 49

Percipita	ation Zone 3	- 10-year S	torm	P(360) =	1.73	in	P(1440) =	2.07	in	
	Basin	L	Land Treatment Factors							
Basin	Area	Α	В	С	D	Ew	V(10-6)	V(10-24)	Q(10)	
	(Ac)		(Acres)		(in)	(af)	(af)	(cfs)	
Existing	Existing Conditions								2	
3	0.58	0.00	0.00	0.58	0.00	0.62	0.030	0.030	1.15	
Total	0.58								1.15	
Propose	Proposed Conditions									
3	0.58	0.00	0.00	0.25	0.33	1.12	0.054	0.063	1.60	
Total	0.58								1.60	



TYPICAL ASPHALT SECTION

REFERENCE GEOTECHNICAL REPORT PREPARED BY:
EARTHWORKS ENGINEERING GROUP
PROJECT NO.: A15-304
DATED: MAY 26, 2015

BOTTOM OF POND VARIES
SEE SHEET C-101
FOR ELEVATIONS

COMPACT BERM/POND
AREAS TO 95% MAX. DRY
DENSITY

EXISTING GROUND

TYPICAL POND SECTION DETAIL

SCALE: NOT TO SCALE

EARTHEN SWALE DETAIL

SCALE: NOT TO SCALE



ARCHITECT'S STAMF

NEW TRAINING/STORAGE FACILITY
FOR
ABERS AND PIPEFITTERS TRAINING CENTER
LOCAL UNION 412
421 ARIZONA STREET SE
ALBUQUERQUE, NEW MEXICO

Agon & Associates ARCHITECTS LLC
ARCHITECTS LLC

BUQUERQUE, NEW MEXICO 87110

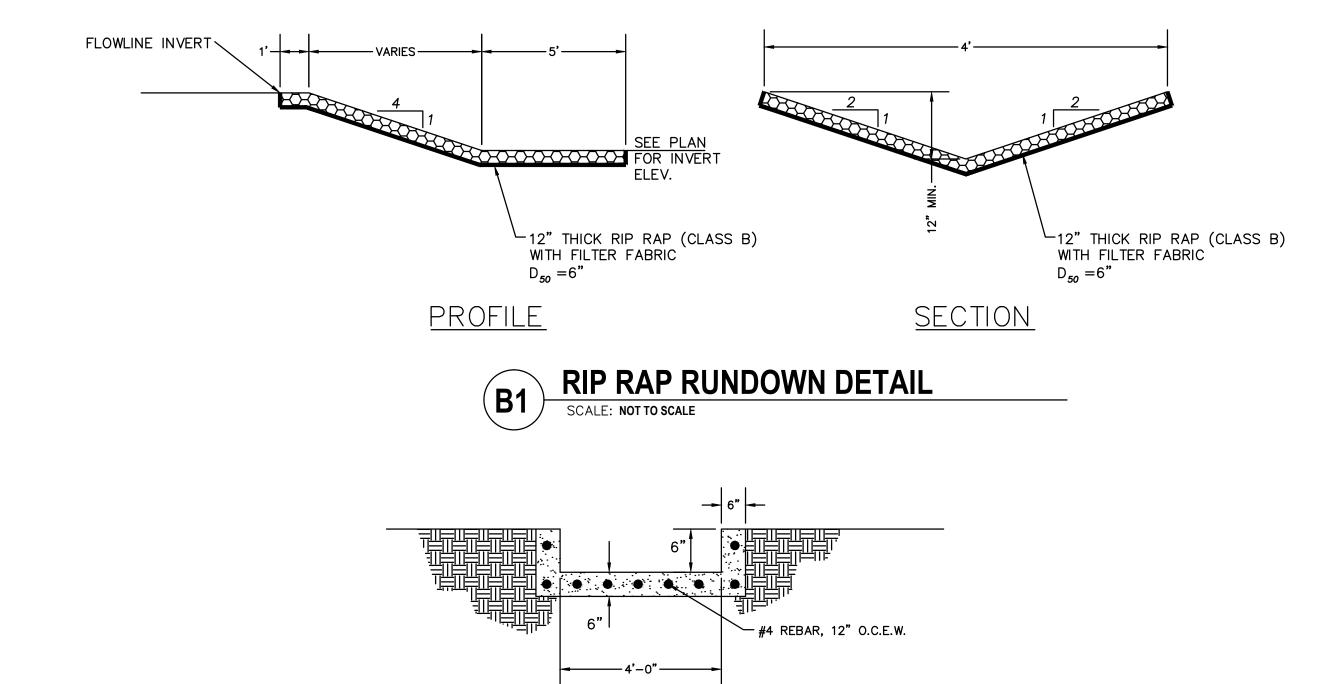
SHEET NAME & NO.
MISCELLANEOUS
DETAIL

C-501

MILLER ENGINEERING CONSULTANTS

Engineers • Planners

Engineers • Planners 3500 COMANCHE, NE BUILDING F ALBUQUERQUE, NM 87107 (505)888-7500 (505)888-3800 (FAX) WWW.MECNM.COM



CONCRETE CHANNEL DETAIL

SCALE: NOT TO SCALE

CITY OF ALBUQUERQUE

July 28, 2015



Verlyn Miller, PE Miller Engineering Consultants 3500 Comanche NE Bldg. F Albuquerque, NM 87110

Re: New Training & Storage Facility

421 Arizona St SE

Grading and Drainage Plan

Engineer's Stamp dated: 7-2-15 (L18D074)

Dear Mr. Miller,

Based upon the information provided in your submittal received 7/10/2015, the above referenced Grading and Drainage Plan is approved for Grading Permit and Building Permit.

Please attach a copy of this approved plan to the construction sets in the permitting process prior to sign-off by Hydrology.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

PO Box 1293

If you have any questions, you can contact me at 924-3999 or Rudy Rael at 924-3977.

Albuquerque

New Mexico 87103

www.cabq.gov

Sincerely

Shahab Biazar, P.E.

City Engineer, Albuquerque

Planning Department

RR/SB

C: email