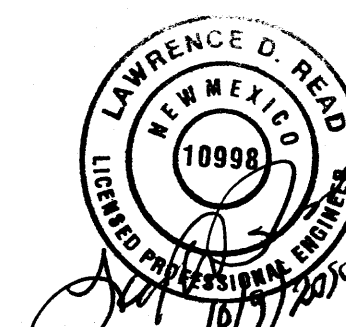
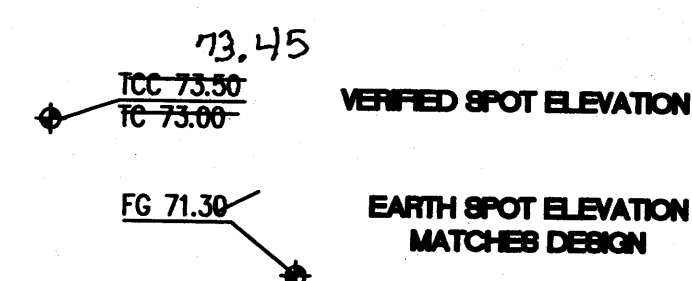


DRAINAGE CERTIFICATION

I, Larry D. Read, NMPE 10998, of the firm Larry Read & Associates, Inc., hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated Jan 9, 2014. The record information edited onto the original design document has been obtained by Brian Martinez, NMPS 18374, of the firm Cartesian Survey. I further certify that I have personally visited the project site on Oct 6, 2014 and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Certificate of Occupancy.

Exceptions: Note Exemptions Here.

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the Grading and Drainage aspects of this project. Those relying on this record document are advised to obtain independent verification of its accuracy before using it for any other purpose.



ISSUES & REVISIONS		DATE	PERMIT SET	CHECK
0				
REV. #	DATE	DESCRIPTION		

PROJECT
NEW WAREHOUSE FOR V.A. ELECTRIC, INCORPORATED
2211 CANDELARIA NE
ALBUQUERQUE, NM 87107

SCALE
1" = 20'

DATE
NOVEMBER 2013

PROJECT MANAGER
RFB

DRAWN BY
LFA

SHEET TITLE
GRADING PLAN

SHEET NUMBER
C-2

RECEIVED
OCT - 9 2014
LAND DEVELOPMENT SECTION

RMKM ARCHITECTURE, P.C.
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GENERAL CONSTRUCTION NOTES

GENERAL

CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS, INCLUDING A TOP SOIL DISTURBANCE PERMIT, PRIOR TO START OF CONSTRUCTION.

ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.

REFERENCES MADE TO STANDARD SPECIFICATIONS AND STANDARD DRAWINGS REFER TO THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION WITH ALL UPDATES.

THE CONTRACTOR SHALL NOT INSTALL ITEMS AS SHOWN ON THESE PLANS WHEN IT IS OBVIOUS THAT FIELD CONDITIONS ARE DIFFERENT THAN SHOWN IN THE PLANS. SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN A TIMELY MANNER. IN THE EVENT THE CONTRACTOR DOES NOT NOTIFY THE ENGINEER IN A TIMELY MANNER, THE CONTRACTOR ASSUMES FULL RESPONSIBILITY AND EXPENSE FOR ANY REVISIONS NECESSARY, INCLUDING ENGINEERING DESIGN FEES.

EXISTING SITE IMPROVEMENTS WHICH ARE DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. REPAIRS SHALL BE APPROVED BY THE OWNER PRIOR TO CONSTRUCTION OF THE REPAIRS. REPAIRS SHALL BE ACCEPTED BY THE OWNER PRIOR TO FINAL PAYMENT.

EXISTING FENCING THAT IS NOT DESIGNATED FOR REMOVAL SHALL NOT BE DISTURBED. ANY FENCING THAT IS DISTURBED OR ALTERED BY THE CONTRACTOR SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. IF THE CONTRACTOR DESIRES TO REMOVE FENCING TO ACCOMMODATE CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL OBTAIN THE OWNER'S WRITTEN PERMISSION BEFORE THE FENCE IS REMOVED. CONTRACTOR SHALL RESTORE THE FENCE TO ITS ORIGINAL CONDITION AT THE EARLIEST OPPORTUNITY. WHILE ANY FENCING IS REMOVED, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SECURITY OF THE SITE UNTIL THE FENCE IS RESTORED.

WORK WITHIN ADJACENT RIGHT-OF-WAY

PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES WITHIN ADJACENT RIGHT-OF-WAYS OR WITHIN PROPERTY NOT OWNED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE, THE CONTRACTOR SHALL ASSURE THAT ALL PERMITS AND PERMISSIONS REQUIRED HAVE BEEN OBTAINED IN WRITING.

SURVEY MONUMENTS, PROPERTY CORNERS, BENCHMARKS

THE CONTRACTOR SHALL NOTIFY THE OWNER AT LEAST SEVEN DAYS BEFORE BEGINNING ANY CONSTRUCTION ACTIVITY THAT COULD DAMAGE OR DISPLACE SURVEY MONUMENTS, PROPERTY CORNERS, OR PROJECT BENCHMARKS SO THESE ITEMS MAY BE RELOCATED.

ANY SURVEY MONUMENTS, PROPERTY CORNERS, OR BENCHMARKS THAT ARE NOT IDENTIFIED FOR RELOCATION ARE THE RESPONSIBILITY OF THE CONTRACTOR TO PRESERVE AND PROTECT. RELOCATION OR REPLACEMENT OF THESE ITEMS SHALL BE DONE BY THE OWNER'S SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.

DIMENSIONS

ALL DIMENSIONS TO CURBS ARE TO THE FLOWLINE UNLESS OTHERWISE NOTED.

ALL STATIONING IS TO THE CENTERLINE OF THE RIGHT-OF-WAY UNLESS OTHERWISE NOTED.

ALL SLOPES AND GRADES ARE IN PERCENT UNLESS OTHERWISE NOTED.

CURB ELEVATIONS ARE SHOWN AT THE FLOW LINE UNLESS OTHERWISE NOTED. SEE THE DETAIL SHEET TO DETERMINE THE CURB HEIGHT ABOVE FLOW LINE.

SOILS

UNLESS OTHERWISE SPECIFIED, SUBGRADE, ENGINEERED FILL, AND STRUCTURAL FILL SHALL BE COMPACTED TO THE FOLLOWING SPECIFICATIONS OF THE ASTM D-1557 MAXIMUM DRY DENSITY.

MATERIAL / LOCATION	PERCENT COMPACTION
STRUCTURAL FILL IN THE BUILDING AREA	95%
SUBBASE FOR SLAB SUPPORT	95%
MISCELLANEOUS BACKFILL BELOW STRUCTURAL FILL OR ROADWAY PAVEMENT	95%
MISCELLANEOUS BACKFILL BELOW UNPAVED, NON-BUILDING AREAS	90%
ROADWAY PAVEMENT SUBGRADE	95%
SIDEWALK SUBGRADE	90%
CURB AND GUTTER SUBGRADE	95%

PAVEMENT

WHEN ABUTTING NEW PAVEMENT TO EXISTING PAVEMENT, CUT EXISTING PAVEMENT EDGE TO A NEAT, STRAIGHT LINE AS NECESSARY TO REMOVE ANY BROKEN OR CRACKED PAVEMENT AND MATCH NEW PAVEMENT ELEVATION TO EXISTING.

ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED AND APPROVED PRIOR TO PAVING.

ALL WATER VALVE BOXES AND ELECTRICAL, TELEPHONE, TELEVISION, AND SEWER MANHOLES IN THE CONSTRUCTION AREA SHALL BE ADJUSTED TO FINISHED GRADE BEFORE PAVING.

WHEN SIDEWALK OR CURB AND GUTTER IS REMOVED, IT SHALL BE REMOVED TO EXISTING CONSTRUCTION JOINTS. CUTTING OR BREAKING SHALL NOT BE ALLOWED.

UTILITIES

IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE LOCATION ONLY BASED ON THE INFORMATION PROVIDED TO THE ENGINEER BY OTHERS. THIS INFORMATION MAY BE INACCURATE OR INCOMPLETE. ADDITIONALLY, UNDERGROUND LINES MAY EXIST THAT ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ACCORDANCE WITH CHAPTER 62, ARTICLE 14-1, THROUGH 14-8, NMSA 1978.

THE CONTRACTOR SHALL CONTACT THE STATEWIDE UTILITY LOCATOR SERVICE AT 1-800-321-2537 AT LEAST TWO WORKING DAYS BEFORE BEGINNING CONSTRUCTION. AFTER THE UTILITIES ARE SPOTTED, THE CONTRACTOR SHALL EXPOSE ALL PERTINENT UTILITIES TO VERIFY THEIR VERTICAL AND HORIZONTAL LOCATION. IF A CONFLICT EXISTS BETWEEN EXISTING UTILITIES AND PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMAL DELAY.

THE CONTRACTOR SHALL EXERCISE DUE CARE TO AVOID DISTURBING ANY EXISTING UTILITIES, ABOVE OR BELOW GROUND. UTILITIES THAT ARE DAMAGED BY CARELESS CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.

EXISTING VALVES SHALL ONLY BE OPERATED BY THE UTILITY COMPANY. CONTRACTOR SHALL NOTIFY THE UTILITY A MINIMUM OF TWO WORKING DAYS BEFORE ANY VALVE, NEW OR EXISTING, NEEDS TO BE OPERATED.

THE CONTRACTOR SHALL COORDINATE ANY REQUIRED UTILITY INTERRUPTIONS WITH THE OWNER AND AFFECTED UTILITY COMPANY A MINIMUM OF THREE WORKING DAYS BEFORE THE INTERRUPTION.

THE CONTRACTOR SHALL MAINTAIN A RECORD DRAWING SET OF PLANS AND PROMPTLY LOCATE ALL UTILITIES, EXISTING OR NEW, IN THEIR CORRECT LOCATION, HORIZONTAL AND VERTICAL. THIS RECORD SET OF DRAWINGS SHALL BE MAINTAINED ON THE PROJECT SITE AND SHALL BE AVAILABLE TO THE OWNER AND ENGINEER AT ANY TIME DURING CONSTRUCTION.

EROSION CONTROL, ENVIRONMENTAL PROTECTION, AND STORM WATER POLLUTION PREVENTION PLAN

THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE, AND FEDERAL DUST AND EROSION CONTROL REGULATIONS. THE CONTRACTOR SHALL OBTAIN AND PREPARE ANY DUST CONTROL OR EROSION CONTROL PERMITS REQUIRED FROM THE REGULATORY AGENCIES.

THE CONTRACTOR SHALL PROMPTLY REMOVE ANY MATERIAL EXCAVATED WITH THE PUBLIC RIGHT-OF-WAY OR ADJACENT PROPERTY TO KEEP IT FROM WASHING OFF THE PROJECT SITE.

THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY BY CONSTRUCTION OF TEMPORARY EROSION CONTROL BERMS OR INSTALLING SLT FENCES AT THE PROPERTY LINES AND WETTING THE SOIL TO PREVENT IT FROM BLOWING.

WATERING, AS REQUIRED FOR CONSTRUCTION DUST CONTROL, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO MEASUREMENT OR PAYMENT SHALL BE MADE. CONSTRUCTION AREAS SHALL BE WATERED FOR DUST CONTROL IN COMPLIANCE WITH GOVERNMENT ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SUPPLYING WATER AS REQUIRED.

ANY AREAS DISTURBED BY CONSTRUCTION AND NOT COVERED BY LANDSCAPING OR IMPERVIOUS SURFACES SHALL BE REVEGETATED WITH RECLAMATION SEEDING.

THE CONTRACTOR SHALL PROPERLY HANDLE AND DISPOSE OF ALL ASPHALT REMOVED ON THE PROJECT BY HAULING IT TO AN APPROVED DISPOSAL SITE IN ACCORDANCE WITH THE REQUIREMENTS OF THE NEW MEXICO SOLID WASTE ACT.

ALL WASTE PRODUCTS FROM THE CONSTRUCTION SITE, INCLUDING ITEMS DESIGNED FOR REMOVAL, CONSTRUCTION WASTE, CONSTRUCTION EQUIPMENT WASTE PRODUCTS (OIL, GAS, TIRES, ETC.), GARBAGE, GRUBBING, EXCESS CUT MATERIAL, VEGETATIVE DEBRIS, ETC., SHALL BE APPROPRIATELY DISPOSED OF OFFSET AT NO ADDITIONAL COST TO THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY PERMITS REQUIRED FOR HAUL OR DISPOSAL OF WASTE PRODUCTS, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE WASTE DISPOSAL SITE COMPLIES WITH GOVERNMENT REGULATIONS REGARDING THE ENVIRONMENT, ENDANGERED SPECIES, AND ARCHAEOLOGICAL RESOURCES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANUP AND REPORTING OF SPILLS OF HAZARDOUS MATERIALS ASSOCIATED WITH THE CONSTRUCTION SITE. HAZARDOUS MATERIALS INCLUDE GASOLINE, DIESEL FUEL, MOTOR OIL, SOLVENTS, CHEMICALS, PAINT, ETC. WHICH MAY BE A THREAT TO THE ENVIRONMENT. THE CONTRACTOR SHALL REPORT THE DISCOVERY OF PAST OR PRESENT SPILLS TO THE NEW MEXICO EMERGENCY RESPONSE AT 1-800-219-6157.

THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING SURFACE AND UNDERGROUND WATER. CONTACT WITH SURFACE WATER BY CONSTRUCTION EQUIPMENT AND PERSONNEL SHALL BE MINIMIZED. EQUIPMENT MAINTENANCE AND REFUELING OPERATIONS SHALL BE PERFORMED IN AN ENVIRONMENTALLY SAFE MANNER IN COMPLIANCE WITH GOVERNMENT REGULATIONS.

THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING CONSTRUCTION NOISE AND HOURS OF OPERATION.

ACCESSIBLE FACILITIES

ALL SURFACES ALONG ACCESSIBLE ROUTES AND FOR HANDICAP RAMPS SHALL BE STABLE FIRM, SLIDE RESISTANT AND SHALL COMPLY WITH UNIFORM FEDERAL ACCESSIBILITY STANDARDS, PARAGRAPH 4.5.

LONGITUDINAL SLOPES ALONG ACCESSIBLE ROUTE SIDEWALKS, EXCEPT AT HANDICAP RAMPS, SHALL NOT BE STEEPER THAN 1:20. CROSS SLOPES ALONG ACCESSIBLE ROUTE SIDEWALKS EXCEPT AT HANDICAP RAMPS, SHALL NOT BE STEEPER THAN 1:48. SLOPES IN ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND PASSENGER LOADING ZONES SHALL NOT BE STEEPER THAN 1:48 IN ALL DIRECTIONS.

THE SITE SHALL COMPLY WITH ANSI A117.1-1992, "ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES".

TRAFFIC CONTROL

THE CONTRACTOR SHALL PROVIDE ALL REQUIRED TRAFFIC CONTROL PLANS. ALL SIGNS, BARRICADES, CHANNELIZATION DEVICES, SIGN FRAMES AND ERECTION OF SUCH DEVICES SHALL CONFORM TO THE REQUIREMENTS OF "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" LATEST EDITION. PRIOR TO CONSTRUCTION, TRAFFIC CONTROL PLANS SHALL BE APPROVED BY THE GOVERNING AUTHORITY.

DRAINAGE REPORT

LOCATION & DESCRIPTION

THE EXISTING SITE HAS BEEN USED AS A CONSTRUCTION YARD FOR SOME TIME AND IS HEAVILY GRADED AND COMPACTED SOIL ALTHOUGH THE ONLY EXISTING DEVELOPMENT CONSISTS OF METAL SHIPPING CONTAINERS AND PORTABLE METAL STRUCTURES. THE PROPOSED DEVELOPMENT FOR THIS PROJECT INCLUDES A NEW, 4850 SQUARE FOOT PREFABRICATED METAL BUILDING WITH ASSOCIATED CONCRETE PAVEMENT. AN EXISTING 30' WIDE ACCESS AND UTILITY EASEMENT FROM THE SOUTH SIDE OF THE PARCEL SOUTH TO THE CANDELARIA RIGHT-OF-WAY HAS BEEN INCLUDED IN THE DRAINAGE CALCULATIONS AS PART OF THE SITE.

HYDROLOGY

THE HYDROLOGY FOR THIS PROJECT WAS ANALYZED USING THE QUICK CALCULATIONS OF THE JUNE 1997 RELEASE OF THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2.

PRECIPITATION

THE 100-YR, 6-HR AND 100-YR, 10-DAY DURATION STORM EVENTS WERE USED AS THE DESIGN STORM FOR THIS ANALYSIS. THE SITE LIES WITHIN THE ZONE 2 PRECIPITATION AREA FOR THE CITY OF ALBUQUERQUE, AS IDENTIFIED IN THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2. THEREFORE, TABLES WITHIN THIS SECTION WERE USED TO ESTABLISH THE EXCESS PRECIPITATION AND PEAK DISCHARGE. AND EXISTING

EXISTING DRAINAGE

MUCH OF THE EXISTING SITE DRAINS VIA UNCONCENTRATED SHEET FLOWS IN A EAST TO WEST DIRECTION DISCHARGING INTO THE PARCELS TO THE WEST. THE CENTRAL PORTION OF THE SITE DRAINS TO THE SOUTH, THROUGH THE EXISTING EASEMENT AND ADJACENT PARKING AREAS TO CANDELARIA.

THE SITE IS IMPACTED BY DRAINAGE FROM THE ROOF AREAS (BASIN A, TRACT 2, GROWNEY SUBDIVISION) OF EXISTING BUILDINGS TO THE EAST AS WELL AS DRAINAGE FROM THE ENTIRE PARCEL (BASIN C, TRACT C LANDS OF JOHN PIPER) THAT DRAINS INTO THIS SITE THEN SOUTH THROUGH THE EASEMENT ALONG WITH THE RUNOFF FROM BASIN D (EASTERN PORTION OF TRACT B LANDS OF JOHN PIPER).

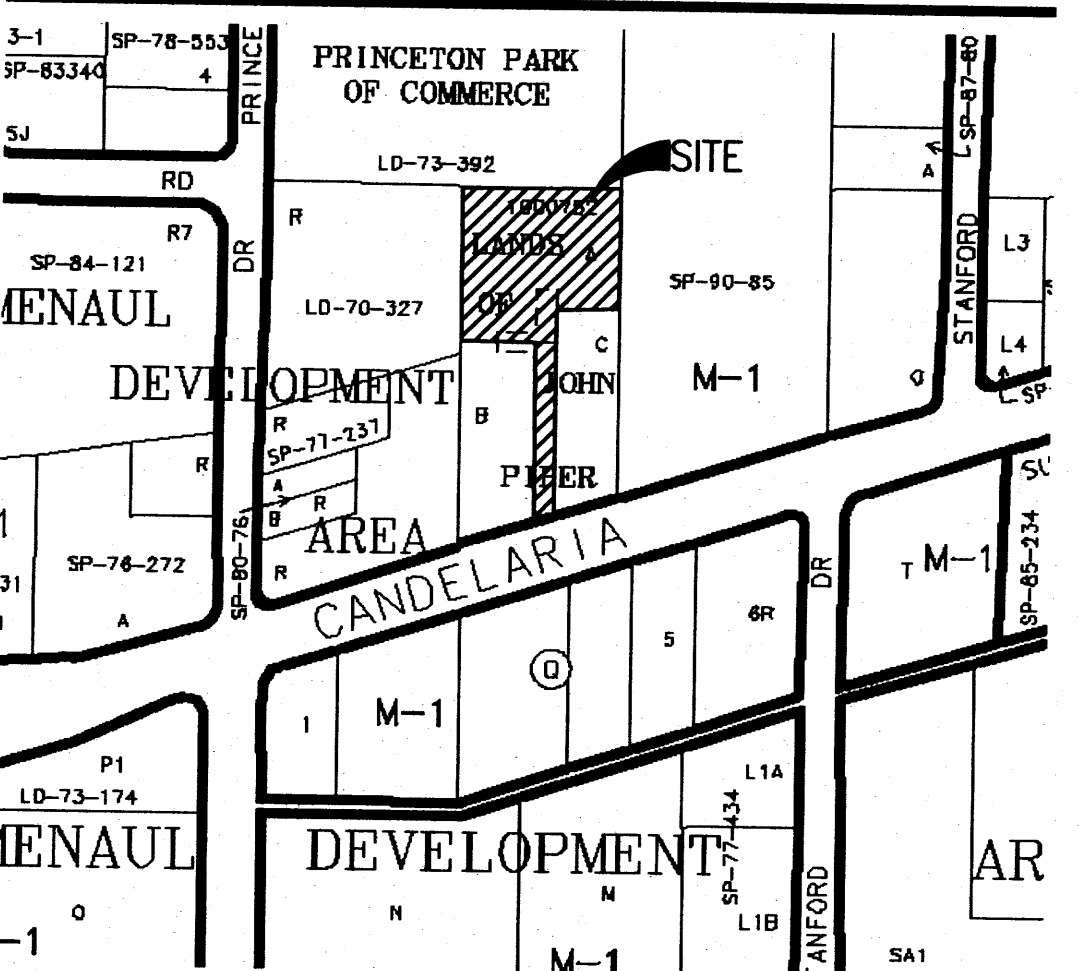
DEVELOPED CONDITION

THE PROPOSED SITE HAS BEEN DESIGNED TO DIRECT THE RUNOFF FROM THE SITE AS WELL AS OFFSITE BASINS A, C, AND D SOUTH TO THE CANDELARIA RIGHT OF WAY VIA THE EXISTING EASEMENT. A CONCRETE VALLEY GUTTER IS PROPOSED THROUGH THE SITE AS WELL AS THE EASEMENT TO HELP DRAIN MINOR FLOW SINCE THE SLOPES ARE VERY FLAT. THIS PROPOSED DRAINAGE SCHEME HELPS ELIMINATE IMPACTS TO THE PARCELS WEST OF THE SITE FROM RUNOFF FROM THIS SITE.

LEGAL DESCRIPTION

TRACT A, LANDS OF JOHN PIPER

RMKM ARCHITECTURE, P.C.
400 GOLD AVE SW STUDIO 1100 ALBUQUERQUE, NM 87102 505.243.5454



VICINITY MAP H - 16 - Z



FIRM PANEL 351H 8/16/2012

ISSUES & REVISIONS			
0	DATE	PERMIT SET	
REV. #	DATE	DESCRIPTION	CHECK

PROJECT

SCALE
NONE

NEW WAREHOUSE
FOR V.A. ELECTRIC,
INCORPORATED

PERMIT SET

2211 CANDELARIA NE
ALBUQUERQUE, NM
87107

PROJECT MANAGER
RFB

SHEET TITLE
CIVIL COVER PAGE

SHEET NUMBER
C-1

DATE
NOVEMBER 2013

DRAWN BY
LUA

RMKM PROJECT NO.
1300

DRAWING FILE NO.
1

LAWRENCE D. READ
NEW MEXICO
10999

RMKM ARCHITECTURE, P.C.
HARRIS BORDO

ABBREVIATIONS

= AREA DRAIN	ELEC. = ELECTRIC	NG = NATURAL GROUND	SW = SIDEWALK
BLDG = BUILDING	ELEV = ELEVATION	OE = OVERHEAD ELECTRIC LINE	T = TELEPHONE
BM = BENCHMARK	EX = EXISTING	OT = OVERHEAD TELEPHONE LINE	TA = TOP OF ASPHALT PAVEMENT
CATV = CABLE TELEVISION LINE	FF = FINISHED FLOOR ELEVATION	PCC = PORTLAND CEMENT CONCRETE	TAC = TOP OF ASPHALT CURB
CI = CAST IRON PIPE	FG = FINISHED GRADE	PG = PLAYGROUND GRADE	TC = TOP OF CONCRETE SLAB (PAVEMENT)
CMP = CORRUGATED METAL PIPE	FH = FIRE HYDRANT	PP = POWER POLE	TCC = TOP OF CONCRETE CURB
CMPA = CORRUGATED METAL PIPE ARCH	FL = FLOW LINE	PROP = PROPOSED	TG = TOP OF GRATE
CO = CLEANOUT	G = GAS PIPE	PVC = POLYVINYL CHLORIDE PIPE	TS = TOP OF SIDEWALK
COA = CITY OF ALBUQUERQUE	GM = GAS METER	RCP = REINFORCED CONCRETE PIPE	TW = TOP OF WALL
CONC = CONCRETE	GV = GATE VALVE	RD = ROOF DRAIN	TYP = TYPICAL
CL = CENTERLINE	HI PT = HIGH POINT	R/W = RIGHT-OF-WAY	TB = TELEPHONE BOX
DIA = DIAMETER	INV = INVERT ELEVATION	S = SLOPE	UE = UNDERGROUND ELECTRIC
DI = DUCTILE IRON PIPE	LF = LINEAL FEET	SAS = SANITARY SEWER	UT = UNDERGROUND TELEPHONE
DTL = DETAIL	LP = LIGHT POLE	SD = STORM DRAIN	W = WATER
DWG = DRAWING	L/S = LANDSCAPING	STA = STATION	WM = WATER METER
E = ELECTRIC LINE	MH = MANHOLE	STD = STANDARD	WV = WATER VALVE

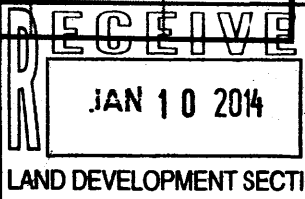
100-YEAR HYDROLOGIC CALCULATIONS

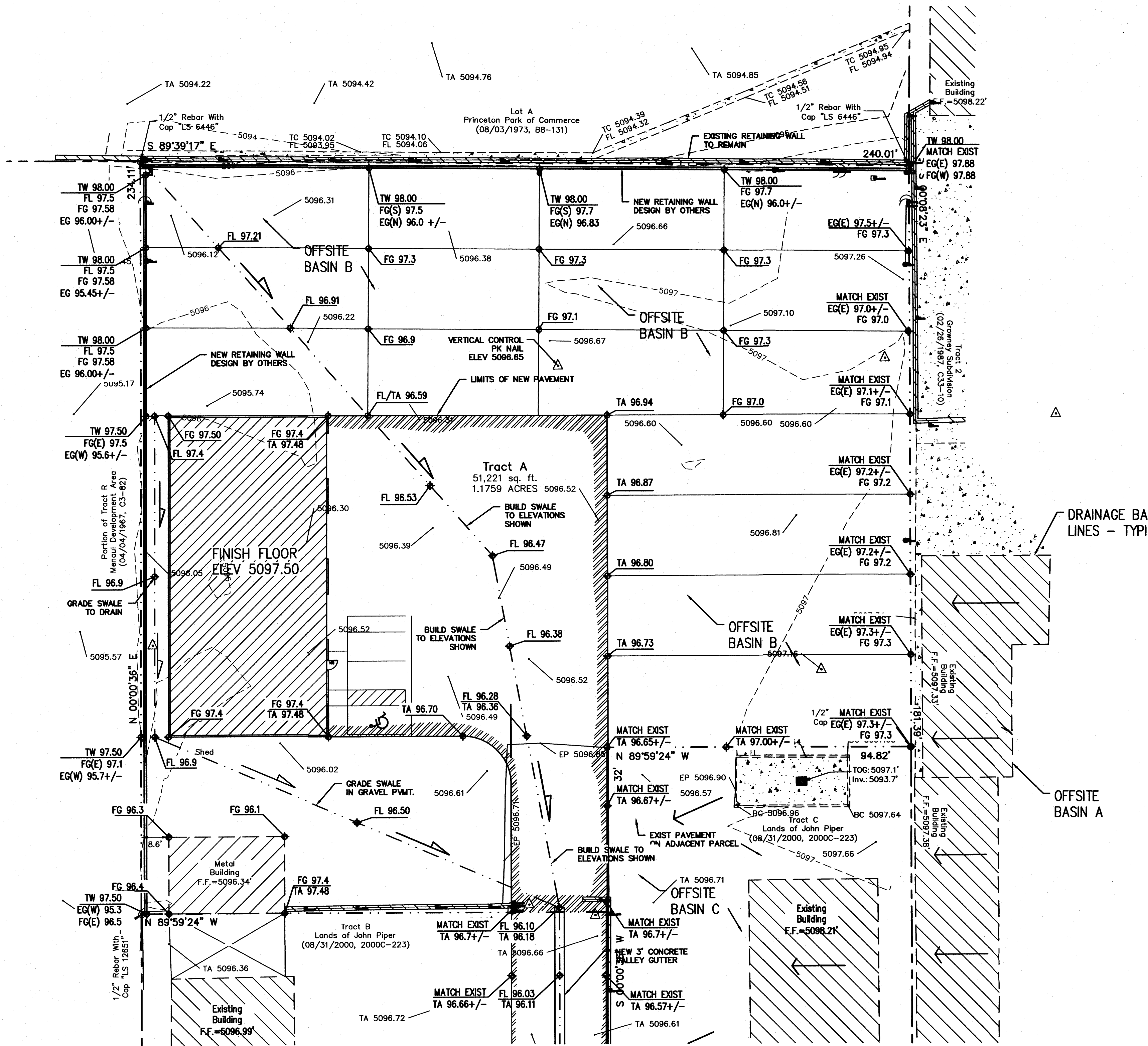
100-YEAR HYDROLOGIC CALCULATIONS												
BASIN #	AREA (acre)	LAND TREATMENT				WEIGHTED E (in)	100-YEAR PRECIPITATION					
		A (%)	B (%)	C (%)	D (%)		V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V(10 day) (acre-ft)	V(10 day) (cu-ft)	Q (cfs)	
		EXISTING CONDITIONS										
OFFSITE BASIN A	0.0876	0.00	0.00	0.00	100.00	2.12	0.02	751	0.03	1,318	0.46	
SITE BASIN B	1.1758	0.00	0.00	100.00	0.00	1.13	0.11	4,823	0.11	4,823	3.69	
OFFSITE BASIN C	0.4124	0.00	0.00	0.00	100.00	2.12	0.07	3,174	0.13	5,569	1.94	
OFFSITE BASIN D	0.5285	0.00	0.00	0.00	100.00	2.12	0.09	4,067	0.16	7,137	2.48	
TOTAL RUNOFF	2.21						0.29	12,815	0.43	18,847	8.57	
PROPOSED CONDITIONS												
OFFSITE BASIN A	0.0876	0.00	0.00	0.00	100.00	2.12	0.02	751	0.03	1,318	0.46	
SITE BASIN B	1.1758	0.00	0.00	70.10	29.90	1.43	0.14	6,996	0.19	8,128	4.24	
OFFSITE BASIN C	0.4124	0.00	0.00	0.00	100.00	2.12	0.07	3,174	0.13	5,569	1.94	
OFFSITE BASIN D	0.5285	0.00	0.00	0.00	100.00	2.12	0.09	4,067	0.16	7,137	2.48	
TOTAL RUNOFF	2.21						0.32	14,078	0.51	22,152	9.12	
EXCESS PRECIP.		0.53	0.78	1.13	2.12	E (in)						
PEAK DISCHARGE		1.56	2.28	3.14	4.7	Q _p (cfs)						
WEIGHTED E̅ (in) = (E _A)(%A) + (E _B)(%B) + (E _C)(%C) + (E _D)(%D)												
V _{6-hr} (acre-ft) = (WEIGHTED E̅)(AREA)/12												
V _{10day} (acre-ft) = V _{6-hr} + (A _D)(P _{DDAY} - P _{6-hr})/12												
Q (cfs) = (Q _{max})(A _A) + (Q _{max})(A _B) + (Q _{max})(A _C) + (Q _{max})(A _D)												
ZONE = 2												
P _{6-hr} (in) = 2.35												
P _{24-hr} (in) = 2.75												
P _{DDAY} (in) = 3.95												

RECEIVED

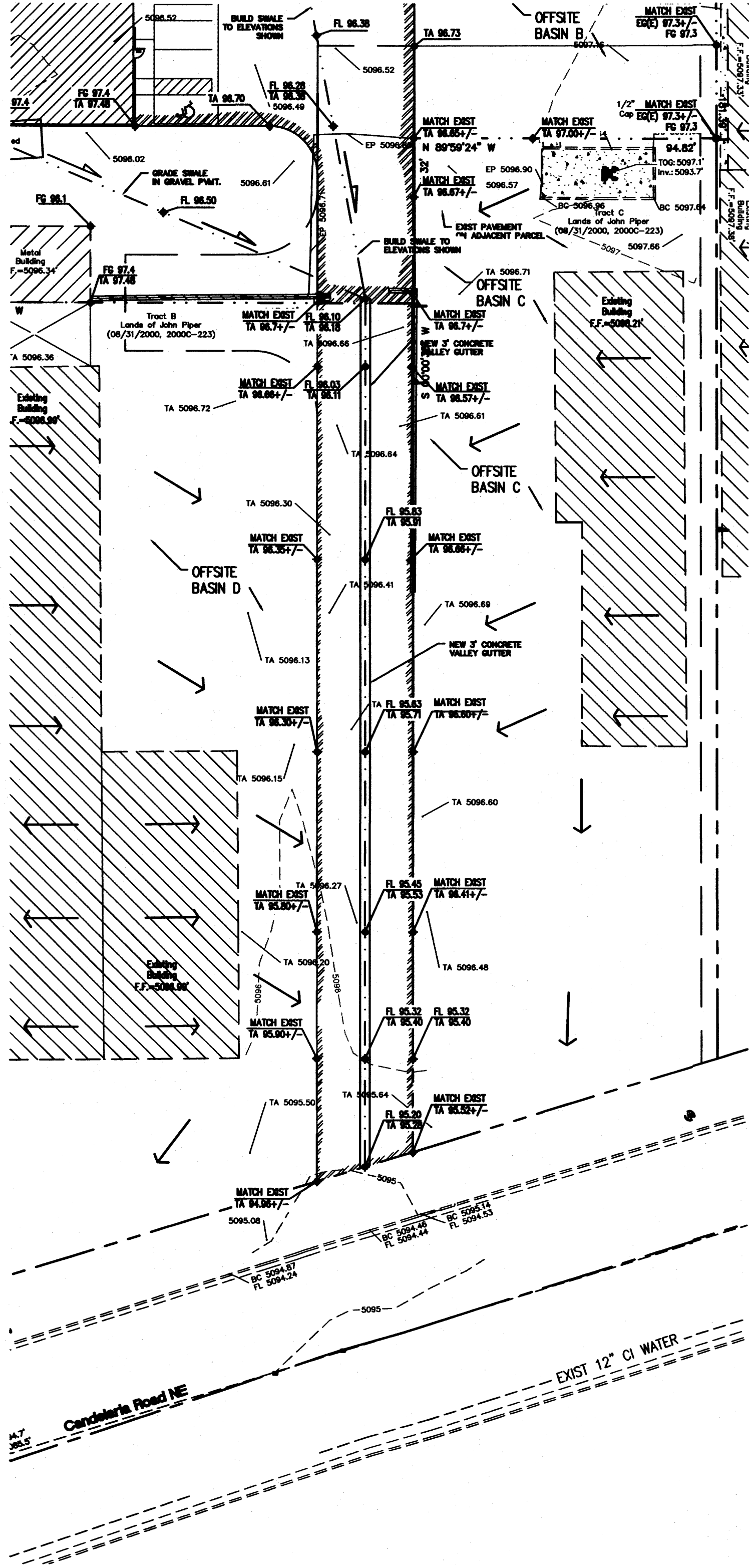
JAN 10 2004

LAND DEVELOPMENT SECT





1 SITE GRADING PLAN
Scale: 1" = 20'



2 EASEMENT GRADING PLAN
Scale: 1" = 30'

ISSUES & REVISIONS			
Q	DATE	PERMIT SET	
REV. #	DATE	DESCRIPTION	CHECK

PROJECT

SCALE
1" = 20'

RMKM PROJECT NO.
1300

DRAWING FILE NO.

DATE
NOVEMBER 2013

PROJECT MANAGER
RFB

DRAWN BY
LRA

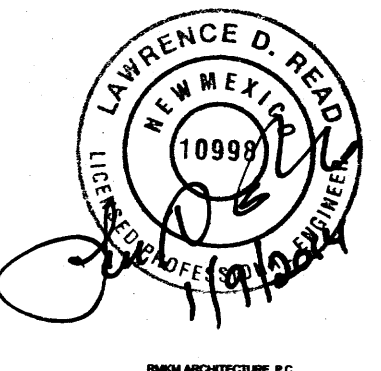
NEW WAREHOUSE
FOR V.A. ELECTRIC,
INCORPORATED

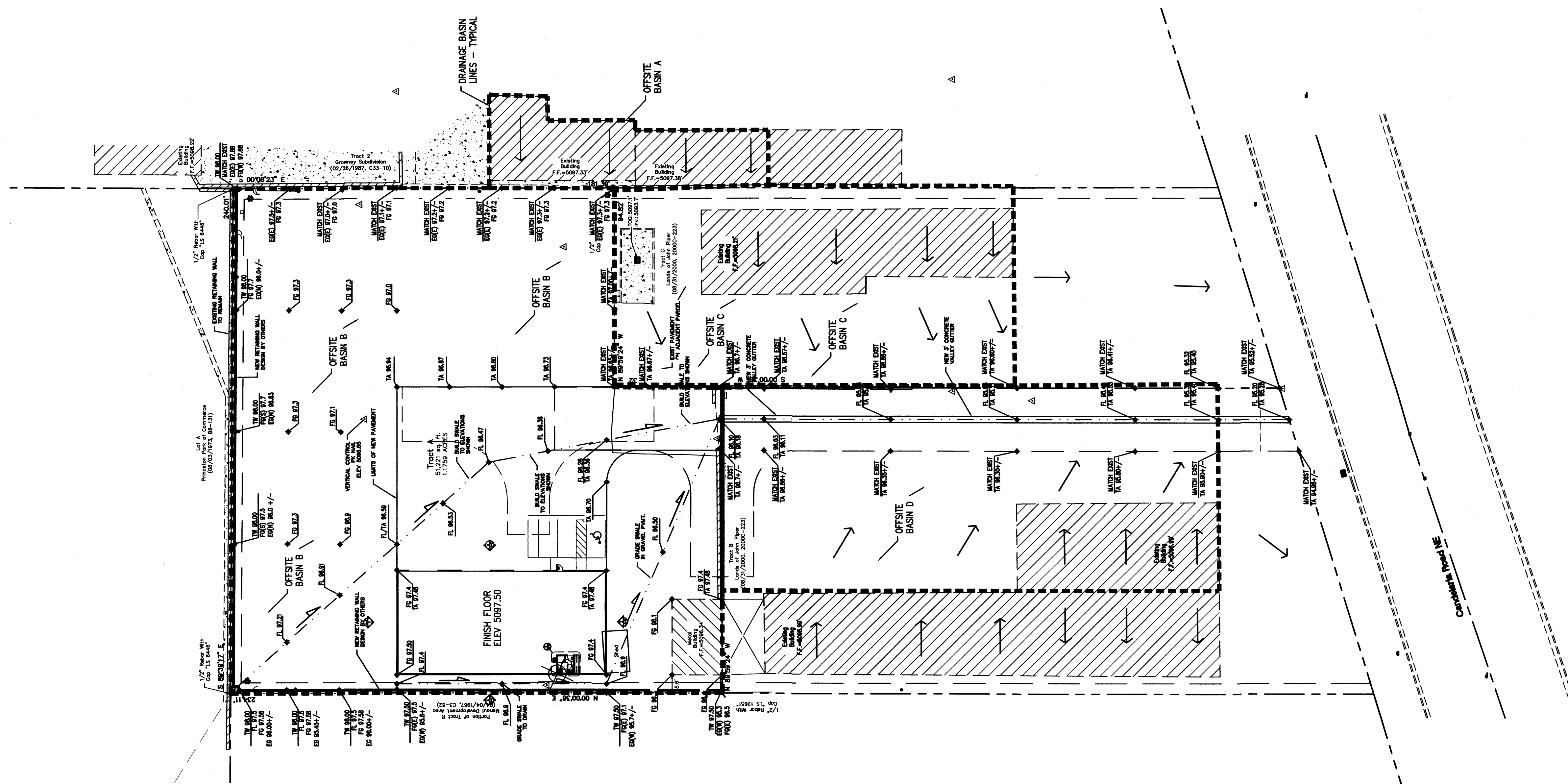
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2211 CANDELARIA NE
ALBUQUERQUE, NM
87107

SHEET TITLE
GRADING PLAN

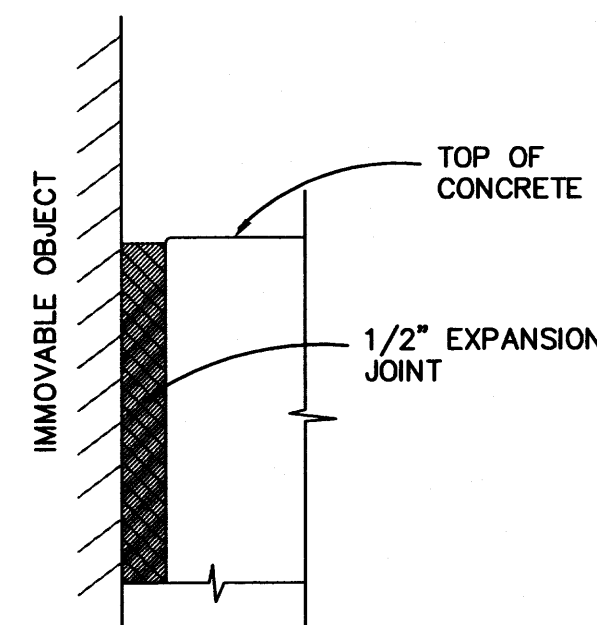
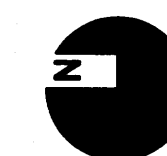
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C-2



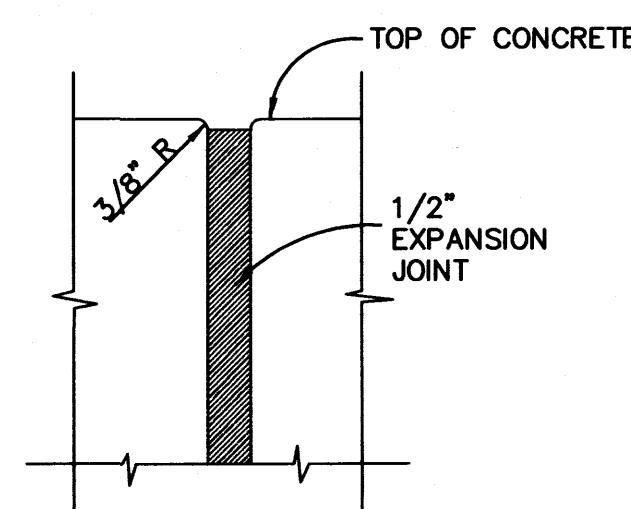


5 DRAINAGE BASIN MAP

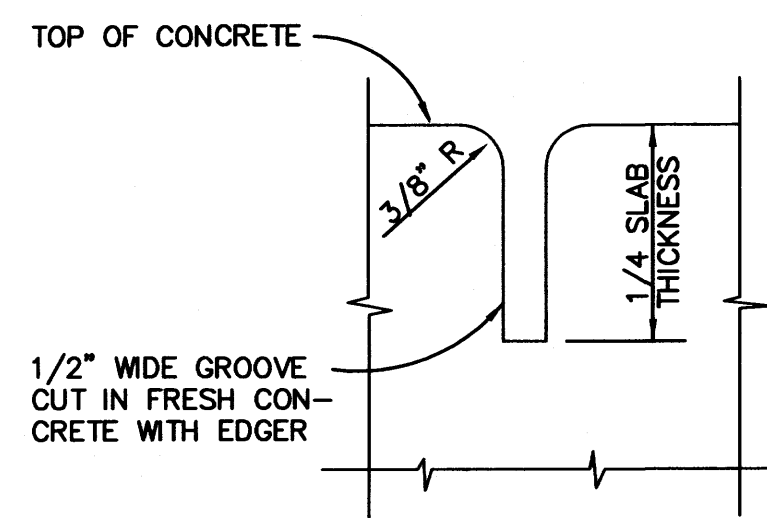
Scale: 1" = 30'



1 EXPANSION JOINT AT IMMOVABLE OBJECT
C2 N. T. S.

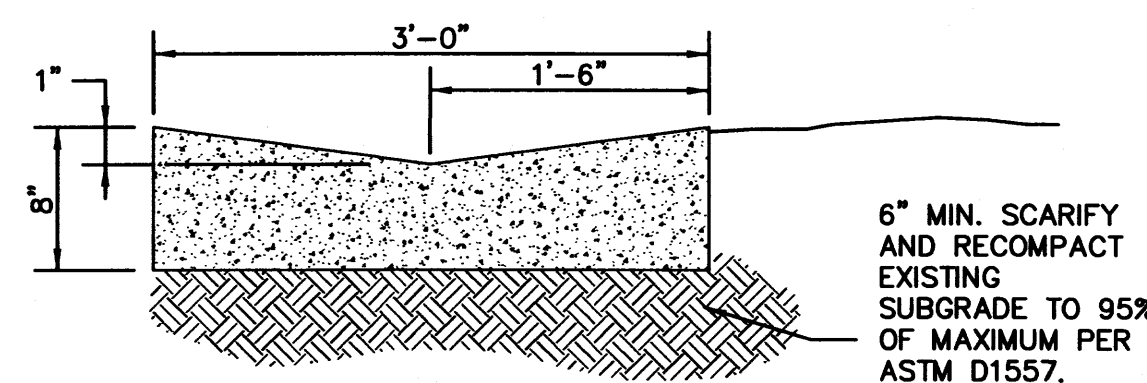


2 EXPANSION JOINT DETAIL
C2 N. T. S.



3 CONTRACTION JOINT DETAIL
C2 N. T. S.

- CONSTRUCTION NOTES:
1. PROVIDE 1/2" EXPANSION JOINTS AT 36' O.C., AT IMMOVABLE OBJECTS AND AT PERPENDICULAR CURBS PER DETAIL THIS SHEET
 2. PROVIDE CONTRACTION JOINTS @ 6' O.C. PER DETAIL THIS SHEET



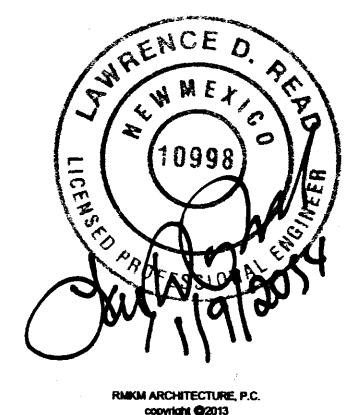
4 CONCRETE VALLEY GUTTER
C2 N. T. S.

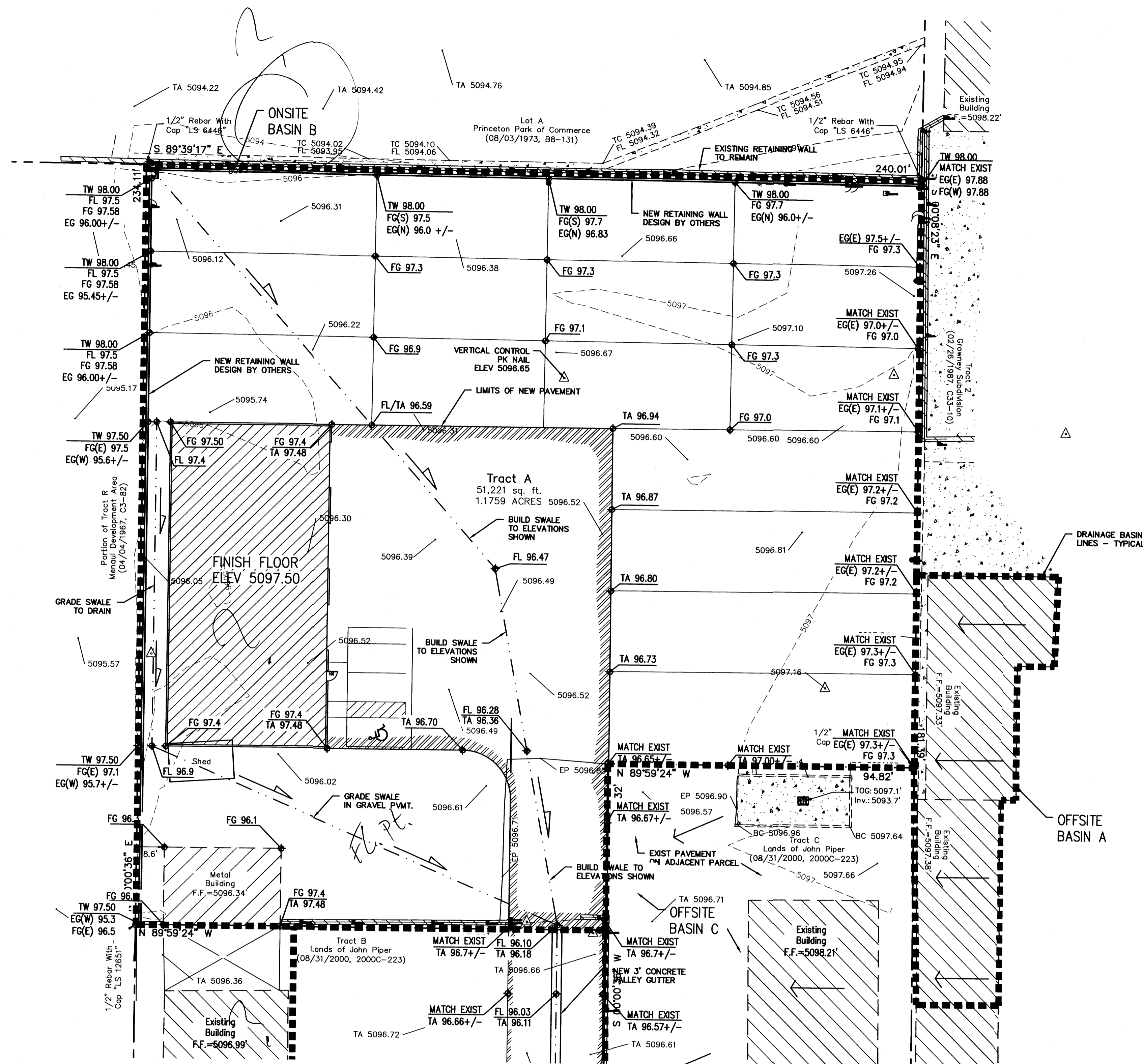
ISSUES & REVISIONS			
REV. #	DATE	DESCRIPTION	CHECK
0		PERMIT SET	

PROJECT
NEW WAREHOUSE FOR V.A. ELECTRIC, INCORPORATED
2211 CANDELARIA NE
ALBUQUERQUE, NM 87107
PERMIT SET
DATE: NOVEMBER 2013
PROJECT MANAGER: RJS
DRAWN BY: LRA

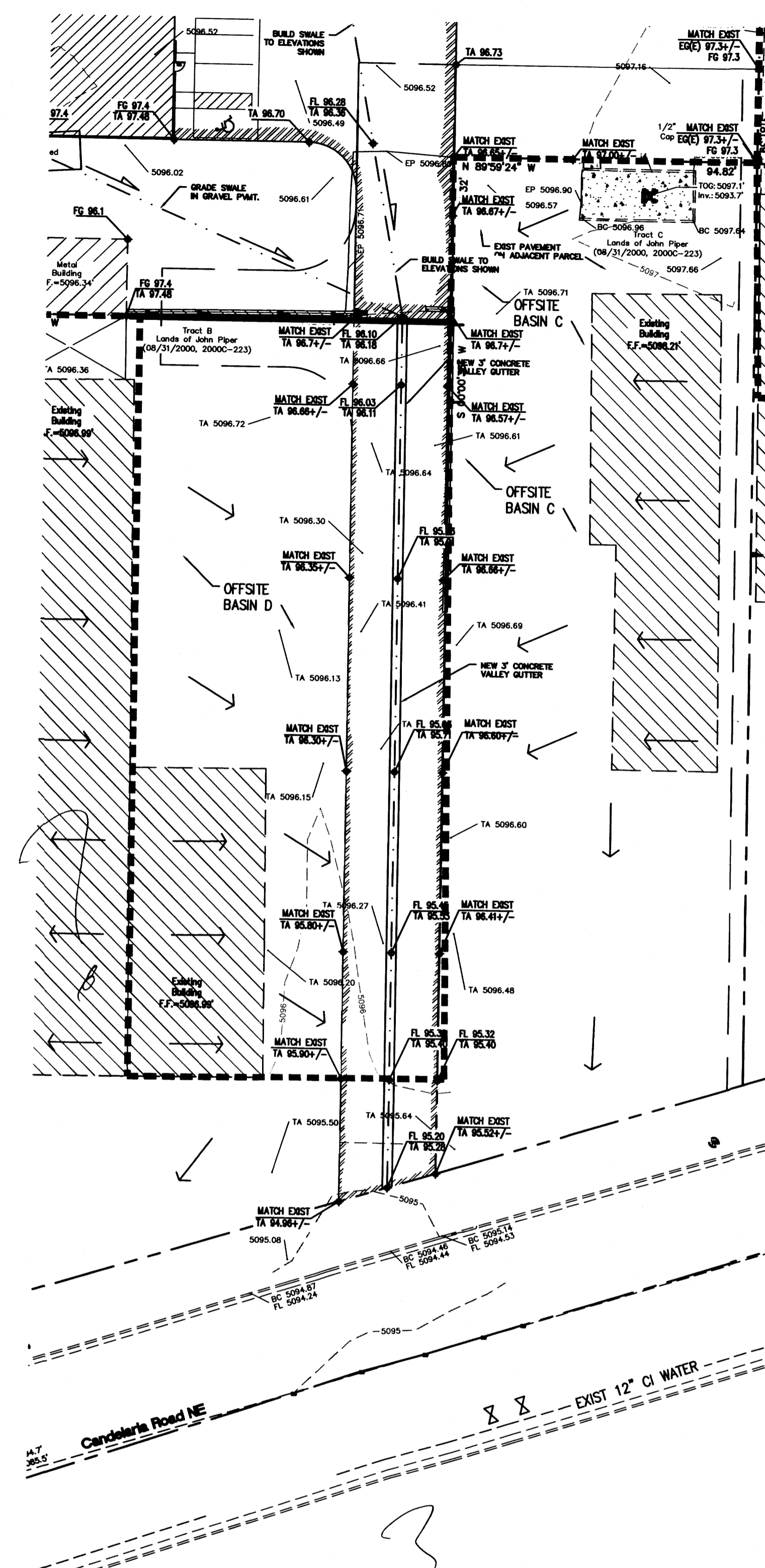
SHEET TITLE
DRAINAGE BASIN MAP and DETAILS

SHEET NUMBER
C-3





1 SITE GRADING PLAN
Scale: 1" = 20'



2 EASEMENT GRADING PLAN
Scale: 1" = 20'

KEYED NOTES

- 1.
- 2.
- 3.
- 4.
- 5.

ISSUES & REVISIONS			
REV. #	DATE	DESCRIPTION	CHECK
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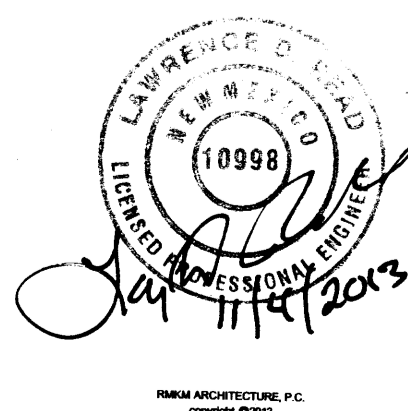
PROJECT
NEW WAREHOUSE FOR V.A. ELECTRIC, INCORPORATED

PERMIT SET

2211 CANDELARIA NE
ALBUQUERQUE, NM
87107

SHEET TITLE
GRADING PLAN

SHEET NUMBER
C-2



GENERAL CONSTRUCTION NOTES

GENERAL

CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS, INCLUDING A TOP SOIL DISTURBANCE PERMIT, PRIOR TO START OF CONSTRUCTION.

ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.

REFERENCES MADE TO STANDARD SPECIFICATIONS AND STANDARD DRAWINGS REFER TO THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION WITH ALL UPDATES.

THE CONTRACTOR SHALL NOT INSTALL ITEMS AS SHOWN ON THESE PLANS WHEN IT IS OBVIOUS THAT FIELD CONDITIONS ARE DIFFERENT THAN SHOWN IN THE PLANS. SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN A TIMELY MANNER. IN THE EVENT THE CONTRACTOR DOES NOT NOTIFY THE ENGINEER IN A TIMELY MANNER, THE CONTRACTOR ASSUMES FULL RESPONSIBILITY AND EXPENSE FOR ANY REVISIONS NECESSARY, INCLUDING ENGINEERING DESIGN FEES.

EXISTING SITE IMPROVEMENTS WHICH ARE DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. REPAIRS SHALL BE APPROVED BY THE OWNER PRIOR TO CONSTRUCTION OF THE REPAIRS. REPAIRS SHALL BE ACCEPTED BY THE OWNER PRIOR TO FINAL PAYMENT.

EXISTING FENCING THAT IS NOT DESIGNATED FOR REMOVAL SHALL NOT BE DISTURBED. ANY FENCING THAT IS DISTURBED OR ALTERED BY THE CONTRACTOR SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTORS EXPENSE. IF THE CONTRACTOR DESIRES TO REMOVE FENCING TO ACCOMMODATE CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL OBTAIN THE OWNER'S WRITTEN PERMISSION BEFORE THE FENCE IS REMOVED. CONTRACTOR SHALL RESTORE THE FENCE TO ITS ORIGINAL CONDITION AT THE EARLIEST OPPORTUNITY. WHILE ANY FENCING IS REMOVED, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SECURITY OF THE SITE UNTIL THE FENCE IS RESTORED.

WORK WITHIN ADJACENT RIGHT-OF-WAY

PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES WITHIN ADJACENT RIGHT-OF-WAYS OR WITHIN PROPERTY NOT OWNED BY THE OWNER OF THE PROJECT SITE, THE CONTRACTOR SHALL ASSURE THAT ALL PERMITS AND PERMISSIONS REQUIRED HAVE BEEN OBTAINED IN WRITING.

SURVEY MONUMENTS, PROPERTY CORNERS, BENCHMARKS

THE CONTRACTOR SHALL NOTIFY THE OWNER AT LEAST SEVEN DAYS BEFORE BEGINNING ANY CONSTRUCTION ACTIVITY THAT COULD DAMAGE OR DISPLACE SURVEY MONUMENTS, PROPERTY CORNERS, OR PROJECT BENCHMARKS SO THESE ITEMS MAY BE RELOCATED.

ANY SURVEY MONUMENTS, PROPERTY CORNERS, OR BENCHMARKS THAT ARE NOT IDENTIFIED FOR RELOCATION ARE THE RESPONSIBILITY OF THE CONTRACTOR TO PRESERVE AND PROTECT. RELOCATION OR REPLACEMENT OF THESE ITEMS SHALL BE DONE BY THE OWNER'S SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.

DIMENSIONS

ALL DIMENSIONS TO CURBS ARE TO THE FLOWLINE UNLESS OTHERWISE NOTED.

ALL STATIONING IS TO THE CENTERLINE OF THE RIGHT-OF-WAY UNLESS OTHERWISE NOTED.

ALL SLOPES AND GRADES ARE IN PERCENT UNLESS OTHERWISE NOTED.

CURB ELEVATIONS ARE SHOWN AT THE FLOW LINE UNLESS OTHERWISE NOTED. SEE THE DETAIL SHEET TO DETERMINE THE CURB HEIGHT ABOVE FLOW LINE.

SOILS

UNLESS OTHERWISE SPECIFIED, SUBGRADE, ENGINEERED FILL, AND STRUCTURAL FILL SHALL BE COMPACTED TO THE FOLLOWING SPECIFICATIONS OF THE ASTM D-1557 MAXIMUM DRY DENSITY.

MATERIAL/LOCATION	PERCENT COMPACTION
STRUCTURAL FILL IN THE BUILDING AREA	95%
SUBBASE FOR SLAB SUPPORT	95%
MISCELLANEOUS BACKFILL BELOW STRUCTURAL FILL OR ROADWAY PAVEMENT	95%
MISCELLANEOUS BACKFILL BELOW UNPAVED, NON-BUILDING AREAS	90%
ROADWAY PAVEMENT SUBGRADE	95%
SIDEWALK SUBGRADE	90%
CURB AND GUTTER SUBGRADE	95%

PAVEMENT

WHEN ABUTTING NEW PAVEMENT TO EXISTING PAVEMENT, CUT EXISTING PAVEMENT EDGE TO A NEAT, STRAIGHT LINE AS NECESSARY TO REMOVE ANY BROKEN OR CRACKED PAVEMENT AND MATCH NEW PAVEMENT ELEVATION TO EXISTING.

ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED AND APPROVED PRIOR TO PAVING.

ALL WATER VALVE BOXES AND ELECTRICAL, TELEPHONE, TELEVISION, AND SEWER MANHOLES IN THE CONSTRUCTION AREA SHALL BE ADJUSTED TO FINISHED GRADE BEFORE PAVING.

WHEN SIDEWALK OR CURB AND GUTTER IS REMOVED, IT SHALL BE REMOVED TO EXISTING CONSTRUCTION JOINTS. CUTTING OR BREAKING SHALL NOT BE ALLOWED.

UTILITIES

IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE LOCATION ONLY BASED ON THE INFORMATION PROVIDED TO THE ENGINEER BY OTHERS. THIS INFORMATION MAY BE INACCURATE OR INCOMPLETE. ADDITIONALLY, UNDERGROUND LINES MAY EXIST THAT ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ACCORDANCE WITH CHAPTER 62, ARTICLE 14-1, THROUGH 14-8, NMSA 1978.

THE CONTRACTOR SHALL CONTACT THE STATEWIDE UTILITY LOCATOR SERVICE AT 1-800-321-2537 AT LEAST TWO WORKING DAYS BEFORE BEGINNING CONSTRUCTION. AFTER THE UTILITIES ARE SPOTTED, THE CONTRACTOR SHALL EXPOSE ALL PERTINENT UTILITIES TO VERIFY THEIR VERTICAL AND HORIZONTAL LOCATION. IF A CONFLICT EXISTS BETWEEN EXISTING UTILITIES AND PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMAL DELAY.

THE CONTRACTOR SHALL EXERCISE DUE CARE TO AVOID DISTURBING ANY EXISTING UTILITIES, ABOVE OR BELOW GROUND. UTILITIES THAT ARE DAMAGED BY CARELESS CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.

EXISTING VALVES SHALL ONLY BE OPERATED BY THE UTILITY COMPANY. CONTRACTOR SHALL NOTIFY THE UTILITY A MINIMUM OF TWO WORKING DAYS BEFORE ANY VALVE, NEW OR EXISTING, NEEDS TO BE OPERATED.

THE CONTRACTOR SHALL COORDINATE ANY REQUIRED UTILITY INTERRUPTIONS WITH THE OWNER AND AFFECTED UTILITY COMPANY A MINIMUM OF THREE WORKING DAYS BEFORE THE INTERRUPTION.

THE CONTRACTOR SHALL MAINTAIN A RECORD DRAWING SET OF PLANS AND PROMPTLY LOCATE ALL UTILITIES, EXISTING OR NEW, IN THEIR CORRECT LOCATION, HORIZONTAL AND VERTICAL. THIS RECORD SET OF DRAWINGS SHALL BE MAINTAINED ON THE PROJECT SITE AND SHALL BE AVAILABLE TO THE OWNER AND ENGINEER AT ANY TIME DURING CONSTRUCTION.

EROSION CONTROL, ENVIRONMENTAL PROTECTION, AND STORM WATER POLLUTION PREVENTION PLAN

THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE, AND FEDERAL DUST AND EROSION CONTROL REGULATIONS. THE CONTRACTOR SHALL OBTAIN AND PREPARE ANY DUST CONTROL OR EROSION CONTROL PERMITS REQUIRED FROM THE REGULATORY AGENCIES.

THE CONTRACTOR SHALL PROMPTLY REMOVE ANY MATERIAL EXCAVATED WITH THE PUBLIC RIGHT-OF-WAY OR ADJACENT PROPERTY TO KEEP IT FROM WASHING OFF THE PROJECT SITE.

THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY BY CONSTRUCTION OF TEMPORARY EROSION CONTROL BERMS OR INSTALLING SILT FENCES AT THE PROPERTY LINES AND WETTING THE SOIL TO PREVENT IT FROM BLOWING.

WATERING, AS REQUIRED FOR CONSTRUCTION DUST CONTROL, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO MEASUREMENT OR PAYMENT SHALL BE MADE. CONSTRUCTION AREAS SHALL BE WATERED FOR DUST CONTROL IN COMPLIANCE WITH GOVERNMENT ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SUPPLYING WATER AS REQUIRED.

ANY AREAS DISTURBED BY CONSTRUCTION AND NOT COVERED BY LANDSCAPING OR IMPERVIOUS SURFACES SHALL BE REVEGETATED WITH RECLAMATION SEEDING.

THE CONTRACTOR SHALL PROPERLY HANDLE AND DISPOSE OF ALL ASPHALT REMOVED ON THE PROJECT BY HAULING IT TO AN APPROVED DISPOSAL SITE IN ACCORDANCE WITH THE REQUIREMENTS OF THE NEW MEXICO SOLID WASTE ACT.

ALL WASTE PRODUCTS FROM THE CONSTRUCTION SITE, INCLUDING ITEMS DESIGNED FOR REMOVAL, CONSTRUCTION WASTE, CONSTRUCTION EQUIPMENT WASTE PRODUCTS (OIL, GAS, TIRES, ETC.), GARBAGE, GRUBBING, EXCESS CUT MATERIAL, VEGETATIVE DEBRIS, ETC., SHALL BE APPROPRIATELY DISPOSED OF OFFSET AT NO ADDITIONAL COST TO THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY PERMITS REQUIRED FOR HAUL OR DISPOSAL OF WASTE PRODUCTS, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE WASTE DISPOSAL SITE COMPLIES WITH GOVERNMENT REGULATIONS REGARDING THE ENVIRONMENT, ENDANGERED SPECIES, AND ARCHAEOLOGICAL RESOURCES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANUP AND REPORTING OF SPILLS OF HAZARDOUS MATERIALS ASSOCIATED WITH THE CONSTRUCTION SITE. HAZARDOUS MATERIALS INCLUDE GASOLINE, DIESEL FUEL, MOTOR OIL, SOLVENTS, CHEMICALS, PAINT, ETC. WHICH MAY BE A THREAT TO THE ENVIRONMENT. THE CONTRACTOR SHALL REPORT THE DISCOVERY OF PAST OR PRESENT SPILLS TO THE NEW MEXICO EMERGENCY RESPONSE AT 1-800-219-6157.

THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING SURFACE AND UNDERGROUND WATER. CONTACT WITH SURFACE WATER BY CONSTRUCTION EQUIPMENT AND PERSONNEL SHALL BE MINIMIZED. EQUIPMENT MAINTENANCE AND REFUELING OPERATIONS SHALL BE PERFORMED IN AN ENVIRONMENTALLY SAFE MANNER IN COMPLIANCE WITH GOVERNMENT REGULATIONS.

THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING CONSTRUCTION NOISE AND HOURS OF OPERATION.

ACCESSIBLE FACILITIES

ALL SURFACES ALONG ACCESSIBLE ROUTES AND FOR HANDICAP RAMPS SHALL BE STABLE FIRM, SLIDE RESISTANT AND SHALL COMPLY WITH UNIFORM FEDERAL ACCESSIBILITY STANDARDS, PARAGRAPH 4.5.

LONGITUDINAL SLOPES ALONG ACCESSIBLE ROUTE SIDEWALKS, EXCEPT AT HANDICAP RAMPS, SHALL NOT BE STEEPER THAN 1:20. CROSS SLOPES ALONG ACCESSIBLE ROUTE SIDEWALKS EXCEPT AT HANDICAP RAMPS, SHALL NOT BE STEEPER THAN 1:48. SLOPES IN ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND PASSENGER LOADING ZONES SHALL NOT BE STEEPER THAN 1:48 IN ALL DIRECTIONS.

THE SITE SHALL COMPLY WITH ANSI A117.1-1992, "ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES".

TRAFFIC CONTROL

THE CONTRACTOR SHALL PROVIDE ALL REQUIRED TRAFFIC CONTROL PLANS. ALL SIGNS, BARRICADES, CHANNELIZATION DEVICES, SIGN FRAMES AND ERECTION OF SUCH DEVICES SHALL CONFORM TO THE REQUIREMENTS OF "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" LATEST EDITION. PRIOR TO CONSTRUCTION, TRAFFIC CONTROL PLANS SHALL BE APPROVED BY THE GOVERNING AUTHORITY.

DRAINAGE REPORT

LOCATION & DESCRIPTION

THE EXISTING SITE HAS BEEN USED AS A CONSTRUCTION YARD FOR SOME TIME AND IS HEAVILY GRADED AND COMPACTED SOIL. ALTHOUGH THE ONLY EXISTING DEVELOPMENT CONSISTS OF METAL SHIPPING CONTAINERS AND PORTABLE METAL STRUCTURES, THE PROPOSED DEVELOPMENT FOR THIS PROJECT INCLUDES A NEW, 4850 SQUARE FOOT PREFABRICATED METAL BUILDING WITH ASSOCIATED CONCRETE PAVEMENT. AN EXISTING 30' WIDE ACCESS AND UTILITY EASEMENT FROM THE SOUTH SIDE OF THE PARCEL SOUTH TO THE CANDELARIA RIGHT-OF-WAY HAS BEEN INCLUDED IN THE DRAINAGE CALCULATIONS AS PART OF THE SITE.

HYDROLOGY

THE HYDROLOGY FOR THIS PROJECT WAS ANALYZED USING THE QUICK CALCULATIONS OF THE JUNE 1987 RELEASE OF THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2.

PRECIPITATION

THE 100-YR, 6-HR AND 100-YR, 10-DAY DURATION STORM EVENTS WERE USED AS THE DESIGN STORM FOR THIS ANALYSIS. THE SITE LIES WITHIN THE ZONE 2 PRECIPITATION AREA FOR THE CITY OF ALBUQUERQUE, AS IDENTIFIED IN THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2. THEREFORE, TABLES WITHIN THIS SECTION WERE USED TO ESTABLISH THE EXCESS PRECIPITATION AND PEAK DISCHARGE. AND EXISTING

EXISTING DRAINAGE

MUCH OF THE EXISTING SITE DRAINS VIA UNCONCENTRATED SHEET FLOWS IN A EAST TO WEST DIRECTION DISCHARGING INTO THE PARCELS TO THE WEST, THE CENTRAL PORTION OF THE SITE DRAINS TO THE SOUTH, THROUGH THE EXISTING EASEMENT AND ADJACENT PARKING AREAS TO CANDELARIA.

THE SITE IS IMPACTED BY DRAINAGE FROM THE ROOF AREAS (BASIN A, TRACT 2, GROWNEY SUBDIVISION) OF EXISTING BUILDINGS TO THE EAST AS WELL AS DRAINAGE FROM THE ENTIRE PARCEL (BASIN C, TRACT C LANDS OF JOHN PIPER) THAT DRAINS INTO THIS SITE THEN SOUTH THROUGH THE EASEMENT ALONG WITH THE RUNOFF FROM BASIN D (EASTERN PORTION OF TRACT B LANDS OF JOHN PIPER).

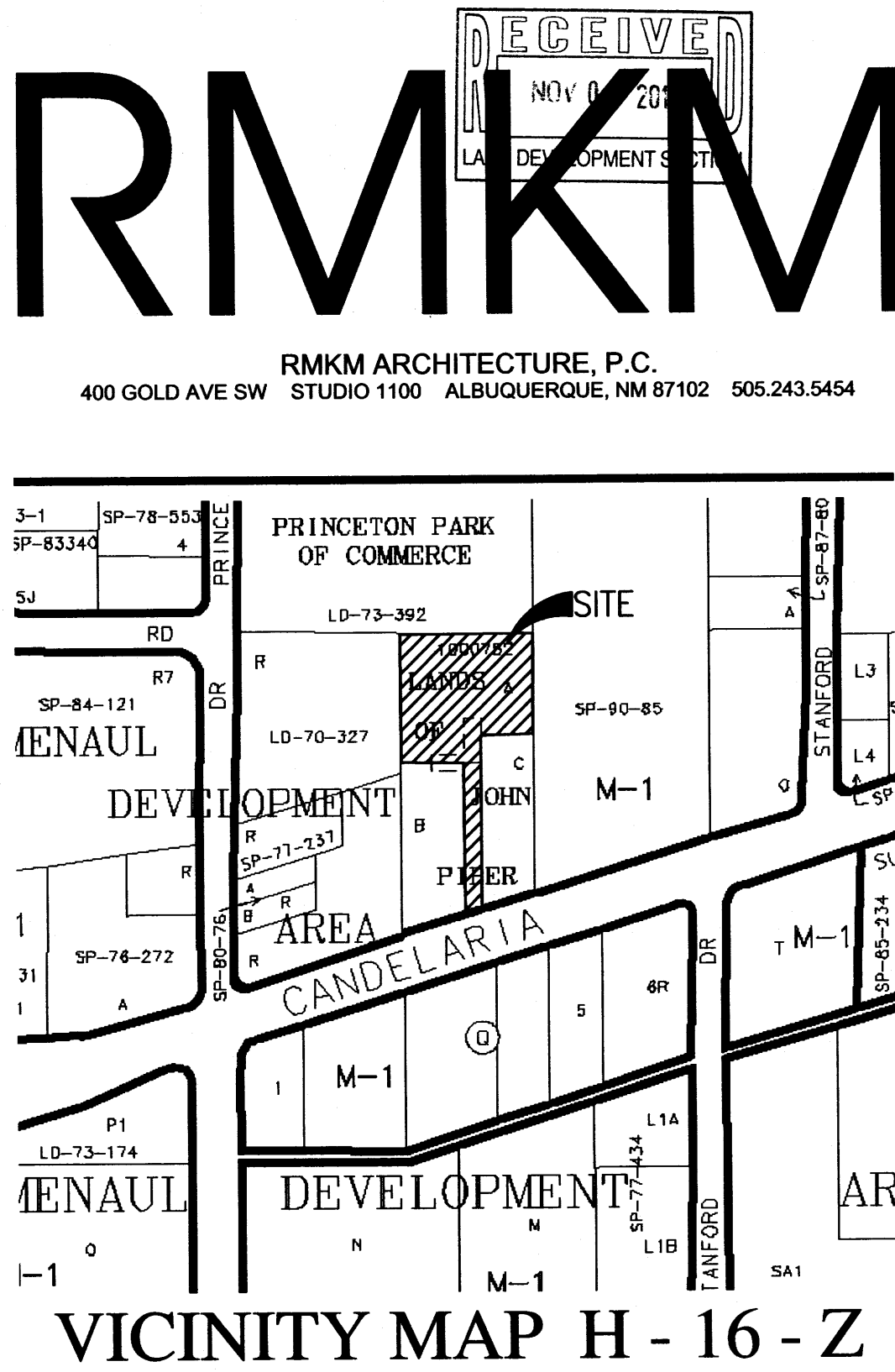
DEVELOPED CONDITION

THE PROPOSED SITE HAS BEEN DESIGNED TO DIRECT THE RUNOFF FROM THE SITE AS WELL AS OFFSITE BASINS A, C, AND D SOUTH TO THE CANDELARIA RIGHT OF WAY VIA THE EXISTING EASEMENT. A CONCRETE VALLEY GUTTER IS PROPOSED THROUGH THE SITE AS WELL AS THE EASEMENT TO HELP DRAIN MINOR FLOW SINCE THE SLOPES ARE VERY FLAT. THIS PROPOSED DRAINAGE SCHEME HELPS ELIMINATE IMPACTS TO THE PARCELS WEST OF THE SITE FROM RUNOFF FROM THIS SITE.

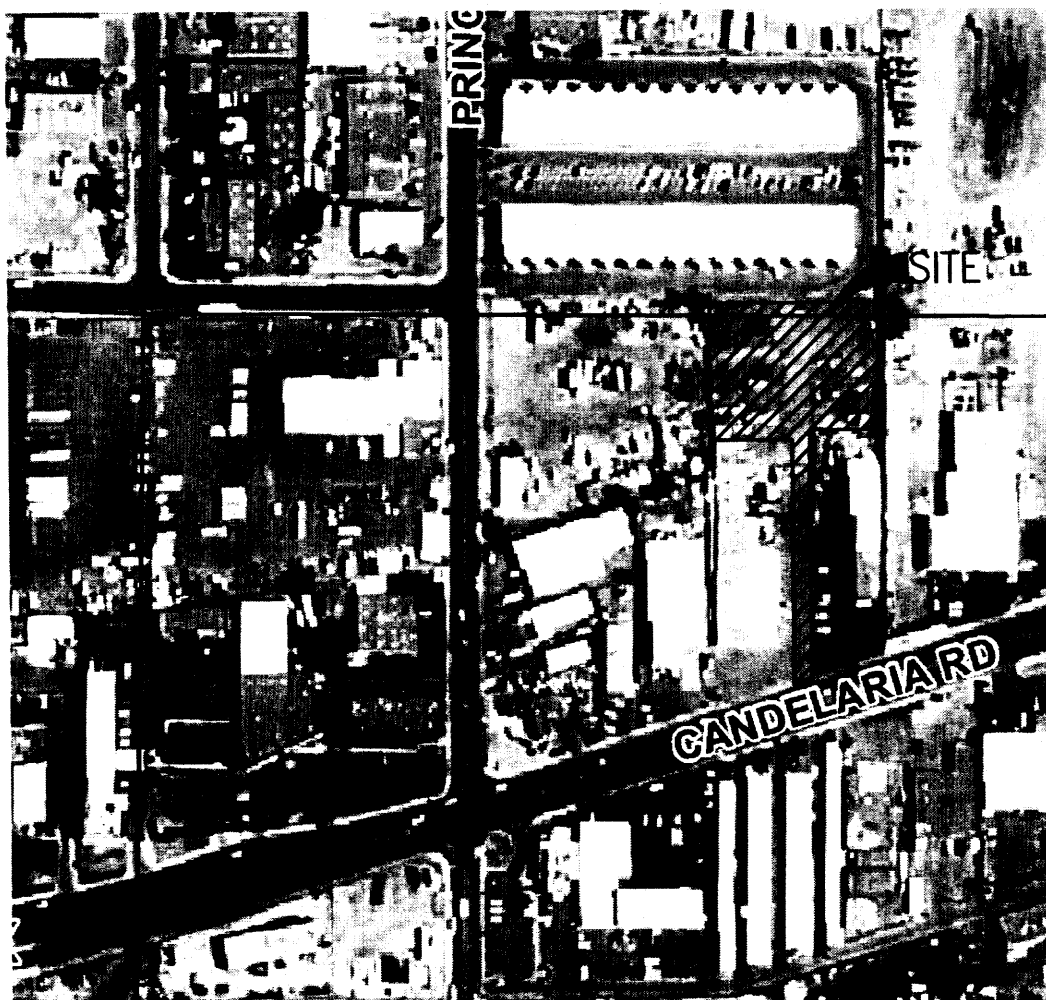
LEGAL DESCRIPTION

TRACT A, LANDS OF JOHN PIPER

Drainage
Environment



VICINITY MAP H - 16 - Z



FIRM PANEL 351H 8/16/2012

ABBREVIATIONS

= AREA DRAIN	ELEC. = ELECTRIC	NG = NATURAL GROUND	SW = SIDEWALK
BLDG = BUILDING	ELEV = ELEVATION	OE = OVERHEAD ELECTRIC LINE	T = TELEPHONE
BM = BENCHMARK	EX = EXISTING	OT = OVERHEAD TELEPHONE LINE	TA = TOP OF ASPHALT PAVEMENT
CATV = CABLE TELEVISION LINE	FF = FINISHED FLOOR ELEVATION	PCC = PORTLAND CEMENT CONCRETE	TAC = TOP OF ASPHALT CURB
CI = CAST IRON PIPE	FG = FINISHED GRADE	PG = PLAYGROUND GRADE	TC = TOP OF CONCRETE SLAB (PAVEMENT)
CMP = CORRUGATED METAL PIPE	FH = FIRE HYDRANT	PP = POWER POLE	TCC = TOP OF CONCRETE CURB
CMPA = CORRUGATED METAL PIPE ARCH	FL = FLOW LINE	PROP = PROPOSED	TG = TOP OF GRATE
CO = CLEANOUT	G = GAS PIPE	PVC = POLYVINYL CHLORIDE PIPE	TS = TOP OF SIDEWALK
COA = CITY OF ALBUQUERQUE	GM = GAS METER	RCP = REINFORCED CONCRETE PIPE	TW = TOP OF WALL
CONC = CONCRETE	GV = GATE VALVE	RD = ROOF DRAIN	TYP = TYPICAL
CL = CENTERLINE	HI PT = HIGH POINT	R/W = RIGHT-OF-WAY	TB = TELEPHONE BOX
DIA = DIAMETER	INV = INVERT ELEVATION	S = SLOPE	UE = UNDERGROUND ELECTRIC
DI = DUCTILE IRON PIPE	LF = LINEAL FEET	SAS = SANITARY SEWER	UT = UNDERGROUND TELEPHONE
DTL = DETAIL	LP = LIGHT POLE	SD = STORM DRAIN	W = WATER
DWG = DRAWING	L/S = LANDSCAPING	STA = STATION	WM = WATER METER
E = ELECTRIC LINE	MH = MANHOLE	STD = STANDARD	WV = WATER VALVE

100-YEAR HYDROLOGIC CALCULATIONS

100-YEAR HYDROLOGIC CALCULATIONS											
BASIN #	AREA (acre)	LAND TREATMENT				WEIGHTED E (in)	100-YEAR PRECIPITATION				Q (cfs)
		A (%)	B (%)	C (%)	D (%)		V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V (10 day) (acre-ft)	V (10 day) (cu-ft)	
EXISTING CONDITIONS											
OFFSITE BASIN A	0.0976	0.00	0.00	0.00	100.00	2.12	0.02	751	0.03	1,318	0.46
SITE BASIN B	1.1758	0.00	0.00	100.00	0.00	1.13	0.11	4,823	0.11	4,823	3.69
OFFSITE BASIN C	0.4124	0.00	0.00	0.00	100.00	2.12	0.07	3,174	0.13	5,569	1.94
OFFSITE BASIN D	0.5285	0.00	0.00	0.00	100.00	2.12	0.09	4,067	0.16	7,137	2.48
TOTAL RUNOFF	2.21						0.29	12,815	0.43	18,847	8.57
PROPOSED CONDITIONS											
OFFSITE BASIN A	0.0976	0.00	0.00	0.00	100.00	2.12	0.02	751	0.03	1,318	0.46
SITE BASIN B	1.1758	0.00	0.00	70.10	29.90	1.43	0.14	6,086	0.19	8,128	4.24
OFFSITE BASIN C	0.4124	0.00	0.00	0.00	100.00	2.12	0.07	3,174	0.13	5,569	1.94
OFFSITE BASIN D	0.5285	0.00	0.00	0.00	100.00	2.12	0.09	4,067	0.16	7,137	2.48
TOTAL RUNOFF	2.21						0.32	14,078	0.51	22,152	9.12
EXCESS PRECIP		0.53	0.78	1.13	2.12	E _i (in)					
PEAK DISCHARGE		1.56	2.28	3.14	4.7	Q _h (cfs)					
WEIGHTED E (in) = (E _A)(%A) + (E _B)(%B) + (E _C)(%C) + (E _D)(%D)											
V _{6-HR} (acre-ft) = (WEIGHTED E)(AREA)/12											
V _{10-DAY} (acre-ft) = V _{6-HR} + (A ₀)(P _{10-DAY} - P _{6-HR})/12											
Q (cfs) = (Q _{hA})(A _A) + (Q _{hB})(A _B) + (Q _{hC})(A _C) + (Q _{hD})(A _D)											
ZONE = 2											
P _{6-HR} (in.) = 2.35											
P _{24-HR} (in.) = 2.75											
P _{30-DAY} (in.) = 3.95											

NEW WAREHOUSE FOR V.A. ELECTRIC, INCORPORATED

PERMIT SET

2211 CANDELARIA NE
ALBUQUERQUE, NM
87107

CIVIL COVER PAGE

SHEET NUMBER

C-1

