

LOCATION MAP

SCALE: 1"=1000'±
ZONE ATLAS MAP G-14

I. EXECUTIVE SUMMARY

THIS PLAN SERVES TO SUPPORT THE DEVELOPMENT OF A NEW OFFICE AND STORAGE BUILDING FOR INSIGHT CONSTRUCTION. THE SITE IS LOCATED IN THE CITY OF ALBUQUERQUE AND IS KNOWN AS PARCEL 138-B OF THE VALLE ALTO ADDITION. THIS PARCEL IS LOCATED IN THE NORTH VALLEY ALONG 12TH STREET BETWEEN AZTEC AND HEADINGLEY. THE SITE ADDRESS IS 3909 12TH STREET. THE PROPOSED CONSTRUCTION CONSISTS OF NEW BUILDING, PARKING LOT, WALKWAYS, RETENTION BASINS, LANDSCAPE AND OTHER AMENITIES. OFF-SITE CONSTRUCTION WILL INCLUDE SIDEWALK, AND DRIVE PADS. THE SITE WILL BE DEVELOPED CONCURRENTLY AND NO PHASING IS PROPOSED. MOST LOTS WITHIN THIS SUBDIVISION ARE FULLY DEVELOPED. ALSO, RIGHT-OF-WAY STREET PAVEMENT, CURB AND GUTTER, PUBLIC UTILITIES AND DRAINAGE STRUCTURES FOR THE VALLE ALTO ADDITION ARE IN PLACE. DUE TO THESE DEVELOPMENTS, OFF-SITE STORMWATER SHOULD NOT IMPACT THIS SITE. IT IS PROPOSED THAT STORMWATER GENERATED ON-SITE WILL BE CONVEYED TO THE RIGHT-OF-WAYS AND WILL NOT EXCEED HISTORIC FLOWS. THE HISTORIC TOTAL RUN-OFF GENERATED ON-SITE DURING A 100 YEAR, 24-HOUR EVENT IS DETERMINED TO BE 1.61 CFS. RUN-OFF FROM THE PROPOSED DEVELOPMENT IS DETERMINED TO BE 1.22 CFS, WHICH DOES NOT EXCEED HISTORIC.

II. PROJECT DESCRIPTION

AS SHOWN ON THE LOCATION MAP THE SITE (17,203 SF = APPROXIMATELY 0.3949 ACRES) IS LOCATED IN THE CITY OF ALBUQUERQUE AT 3909 12TH STREET. CURRENTLY THE SITE IS DEVELOPED. THE SITE IS PLATTED AS PARCEL NUMBER 138-B OF SUMMARY PLAT SHOWING PARCELS 138-A AND 138-B, VALLE ALTO ADDITION, ALBUQUERQUE, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON THE SUMMARY PLAT THEREOF, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON SEPTEMBER 22, 1951, IN BOOK C18, PAGE 186. FURTHERMORE, THE SITE IS LOCATED IN FLOOD ZONE SHADED X AS INDICATED BY FIRM NUMBER 35001C01196, RECORDED ON SEPTEMBER 26, 2008 BY THE FEMA.

III. BACKGROUND DOCUMENTS

THERE IS NO KNOWN DRAINAGE REPORT FOR THIS SUBDIVISION. THE PLAT, THE FIRM, THE COA DEVELOPMENT PROCESS MANUAL, THE SITE SURVEY, AND THE PROPOSED GRADING AND DRAINAGE PLAN WERE UTILIZED FOR THE EXECUTION OF THIS HYDROLOGY AND HYDRAULIC ANALYSIS.

IV. EXISTING CONDITIONS

CURRENTLY THE SITE IS DEVELOPED AND CONTAINS AN EXISTING BUILDING, PAVEMENT, CONCRETE AND FENCES. THERE IS VERY LITTLE VEGETATION ON THE PROJECT SITE. THE SITE NATURALLY EXIST WITH A HIGH POINT IN THE MIDDLE, AND THEREFORE DRAINS TO THE ROW ALONG THE NORTH, EAST AND SOUTH.

V. DEVELOPED CONDITIONS

THE PROPOSED ON-SITE CONSTRUCTION CONSISTS OF NEW BUILDING, RETENTION BASINS, PARKING LOT, WALKWAYS, LANDSCAPE AND OTHER AMENITIES. OFF-SITE CONSTRUCTION WILL INCLUDE SIDEWALK AND DRIVE PADS. STORMWATER GENERATED ON-SITE WILL BE SURFACE ROUTED AND DIRECTED TOWARDS THE RIGHT-OF-WAYS OF AZTEC ROAD, 12TH STREET, AND HEADINGLEY AVENUE. RUN-OFF FLOWS AFTER DEVELOPMENT ARE DETERMINED TO BE 1.22 CFS. SINCE ALL LANDSCAPED AREAS WILL BE DEPRESSED 12-INCHES TO 6-INCHES, STORMWATER THAT FALLS IN THESE AREAS WILL BE RETAINED AND WILL SLOWLY PERCOLATE INTO THE GROUND AND SURROUNDING VEGETATION. ROOF RUN-OFF WILL BE CONVEYED UTILIZING ROOF SCUPPERS AND DOWNSPOUTS. DOWNSPOUTS WILL BE DIRECTED TOWARD LANDSCAPED AREAS. DRAINAGE STRUCTURES ARE SIZED TO ACCOMMODATE THE 100-YR 24-HOUR EVENT.

VI. EROSION CONTROL

CURRENTLY 60% OF THE PARCEL IS HARD SURFACES (PAVEMENT, ROOFTOPS AND CONCRETE). AFTER DEVELOPMENT APPROXIMATELY 62% OF THE SITE WILL BE MADE-UP OF CONCRETE, ASPHALT AND ROOFTOP. THE PROPOSED CONSTRUCTION WILL SLIGHTLY INCREASE THE AMOUNT OF IMPERVIOUS AREA BY 2%. PERMANENT EROSION CONTROL AT SURFACE FLOW CONCENTRATION POINTS WILL CONSIST OF PAVEMENT OR CONCRETE.

VII. WATER QUALITY ENHANCEMENTS

NO WATER QUALITY ENHANCEMENTS ARE PROPOSED.

VIII. GRADING PLAN

THE GRADING & DRAINAGE PLAN ON THIS SHEET SHOWS:
1. EX. SPOT ELEVATION AS TAKEN FROM RECENT TOPOGRAPHY
2. PROPOSED GRADES INDICATED BY SPOT ELEVATIONS
3. THE LIMITS AND CHARACTER OF THE EX. FEATURES TO REMAIN
4. THE LIMITS AND CHARACTER OF THE PROPOSED IMPROVEMENTS
5. CONTINUITY BETWEEN EXISTING AND PROPOSED GRADES

IX. CALCULATIONS

THE CALCULATIONS HEREON ANALYZE THE HYDROLOGY FOR BOTH THE EXISTING AND DEVELOPED CONDITIONS (PRE AND POST) UPON A 100 YEAR, 24-HOUR RAINFALL EVENT. THE PROCEDURE FOR 40 ACRES AND SMALLER BASINS, AS SET FORTH IN CHAPTER 22 OF THE DEVELOPMENT PROCESS MANUAL (DPM), VOLUME 1, 1997 REVISIONS IS USED TO QUANTIFY THE PEAK RATE OF DISCHARGE (Q) AND VOLUME (V) OF ON-SITE STORMWATER RUN-OFF. ALL DATA UTILIZED FOR ANALYSIS CAN BE FOUND BELOW UNDER SITE CHARACTERISTICS. RESULTS ARE PRESENTED BELOW.

HYDROLOGY ANALYSIS FOR PEAK RATE OF DISCHARGE (Q) AND PEAK VOLUME (V)

SITE CHARACTERISTICS:

DRAINAGE AREA = (SEE PRE AND POST-DEVELOPMENT MAP)
LAND TREATMENT (DPM CH. 22, TABLE A-4)
IMPERVIOUS = D
PERVIOUS = C
PRECIPITATION ZONE = 2 (DPM CH. 22, TABLE A-1)

PRE-DEVELOPMENT:

DRAINAGE AREA "A"
2,492 sf = 27% IMPERVIOUS
6,597 sf = 73% PERVIOUS
ANALYSIS RESULTS
Q = 0.744 cfs
V = 1,142 cf

DRAINAGE AREA "B"
4,286 sf = 100% IMPERVIOUS
0 sf = 0% PERVIOUS
ANALYSIS RESULTS
Q = 0.461 cfs
V = 397 cf

DRAINAGE AREA "C"
3,451 sf = 90% IMPERVIOUS
400 sf = 10% PERVIOUS
ANALYSIS RESULTS
Q = 0.400 cfs
V = 761 cf

POST-DEVELOPMENT:

DRAINAGE AREA "A"
2,288 sf = 37% IMPERVIOUS
3,902 sf = 63% PERVIOUS
ANALYSIS RESULTS
Q = 0.528 cfs
V = 848 cf

DRAINAGE AREA "B"
2,558 sf = 91% IMPERVIOUS
267 sf = 9% PERVIOUS
ANALYSIS RESULTS
Q = .296 cfs
V = 565 cf

DRAINAGE AREA "C"
3,706 sf = 100% IMPERVIOUS
0 sf = 0% PERVIOUS
ANALYSIS RESULTS
Q = 0.400 cfs
V = 778 cf

DRAINAGE AREA "C2" (RETAINED)
0 sf = 0% IMPERVIOUS
503 sf = 100% PERVIOUS
ANALYSIS RESULTS
Q = 0.038 cfs
V = 50 cf

DRAINAGE AREA "D" (RETAINED)
2,165 sf = 54% IMPERVIOUS
1,814 sf = 46% PERVIOUS
ANALYSIS RESULTS
Q = 0.362 cfs
V = 621 cf

DESCRIPTION OF SITE DRAINAGE AMENITIES AND ANALYSIS:
ROOF RUNOFF (0.19 CFS) IN AREA "D" WILL DRAIN TO THE ADJACENT RETENTION AREA VIA A 4" ROOF DRAIN AND PIPE. SIDEWALK RUNOFF (0.05 CFS) IN AREA "D" WILL DRAIN TO THE ADJACENT RETENTION AREA VIA A 3" SLOTTED DRAIN AND A 4" PIPE.

4" PIPE CAPACITY (Q):

PIPE ROUGHNESS (n) = 0.012
PIPE FLOW AREA (A) = 0.083 sf
HYDRAULIC RADIUS (R) = 0.096
PIPE SLOPE (S) = 0.0208%

3" SLOTTED DRAIN CAPACITY:

MANUFACTURER'S
SPEC'D FLOW = 0.06cfs / LIN. FT.
PROPOSED ON PLAN = 5 LIN. FT.
ASSUMPTION = 50% CLOG FACTOR

$$Q = (1.49/n)(A)(R^{0.667})(S^{0.5}) = 0.29 \text{ cfs} \quad Q = (0.06)(5)(0.50) = 0.15 \text{ cfs}$$

RETENTION BASIN DESCRIPTION AND VOLUME (V) CALCULATIONS:
THE PROPOSED RETENTION BASINS FOR AREAS "D" AND "C2" ARE RECTANGULAR AND WILL BE 12" AND 6" DEEP RESPECTIVELY. THE VOLUME IS CALCULATED AS FOLLOWS:

RETENTION BASIN "D"

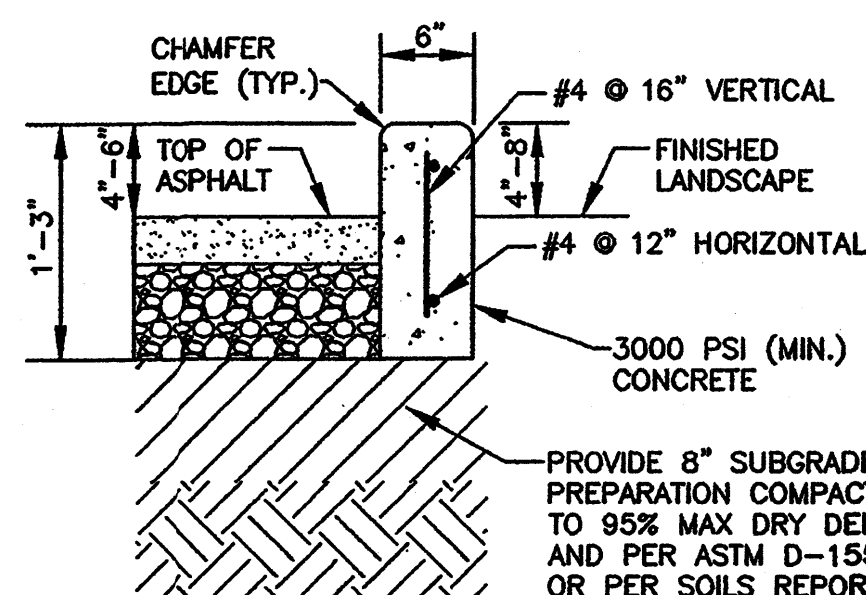
POLYGONAL CHARACTERISTICS:
TOP PERIMETER AREA = 1,053 SF
BOTTOM PERIMETER AREA = 518 SF
DEPTH = 1.00 FT
 $V = (1/2)[(1,053 \text{ SF} + 518 \text{ SF})(1.00 \text{ FT})] = 785 \text{ CF}$

RETENTION BASIN "C2"

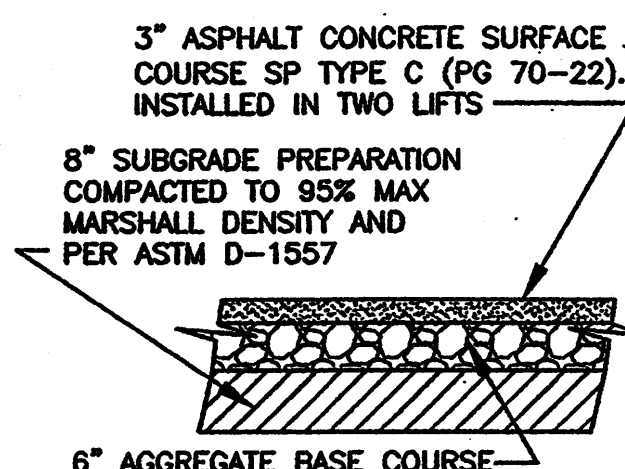
POLYGONAL CHARACTERISTICS:
TOP PERIMETER AREA = 268 SF
BOTTOM PERIMETER AREA = 78 SF
DEPTH = 0.5 FT
 $V = (1/2)[(268 \text{ SF} + 78 \text{ SF})(0.5 \text{ FT})] = 86 \text{ CF}$

X. CONCLUSION

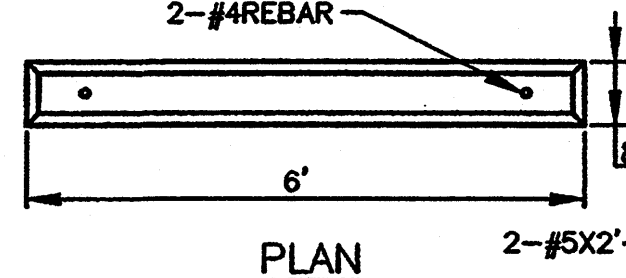
THE PROPOSED STORM DRAINAGE FACILITIES WILL ADEQUATELY CONVEY STORMWATER GENERATED ON-SITE BY A 100 YEAR, 24-HOUR STORM EVENT. ALSO, IF CONSTRUCTED IN ACCORDANCE WITH THE ASSOCIATED GRADING AND DRAINAGE PLAN, THE SITE HYDRAULICS WILL ALLOW 1.22 CFS OF STORMWATER TO RUN OFF INTO THE RIGHT-OF-WAY, AND WILL PROVIDE 828 CF OF STORMWATER RETENTION ON-SITE. MORE SPECIFICALLY, RUN-OFF FROM: DRAINAGE AREA "A" WILL SHEET FLOW TO AZTEC ROAD, DRAINAGE AREA "B" WILL SHEET FLOW TO 12TH STREET, AND DRAINAGE AREA "C" WILL SHEET FLOW TO HEADINGLEY AVENUE. STORMWATER THAT FALLS WITHIN DRAINAGE AREAS "C2" AND "D" WILL BE RETAINED. FURTHERMORE, THE RUN-OFF DIRECTED TO THE RIGHT-OF-WAYS (1.22 CFS) DOES NOT EXCEED THE TOTAL HISTORIC FLOW OF 1.61 CFS. ALL ON-SITE STORM DRAINAGE FACILITIES WILL BE PRIVATELY OWNED, OPERATED AND MAINTAINED.



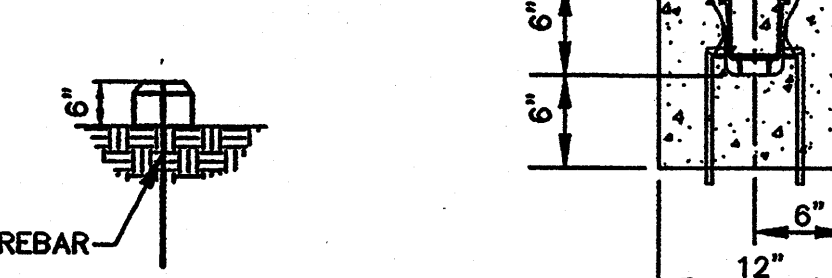
① HEADER CURB
SCALE: 1"=1'-0"



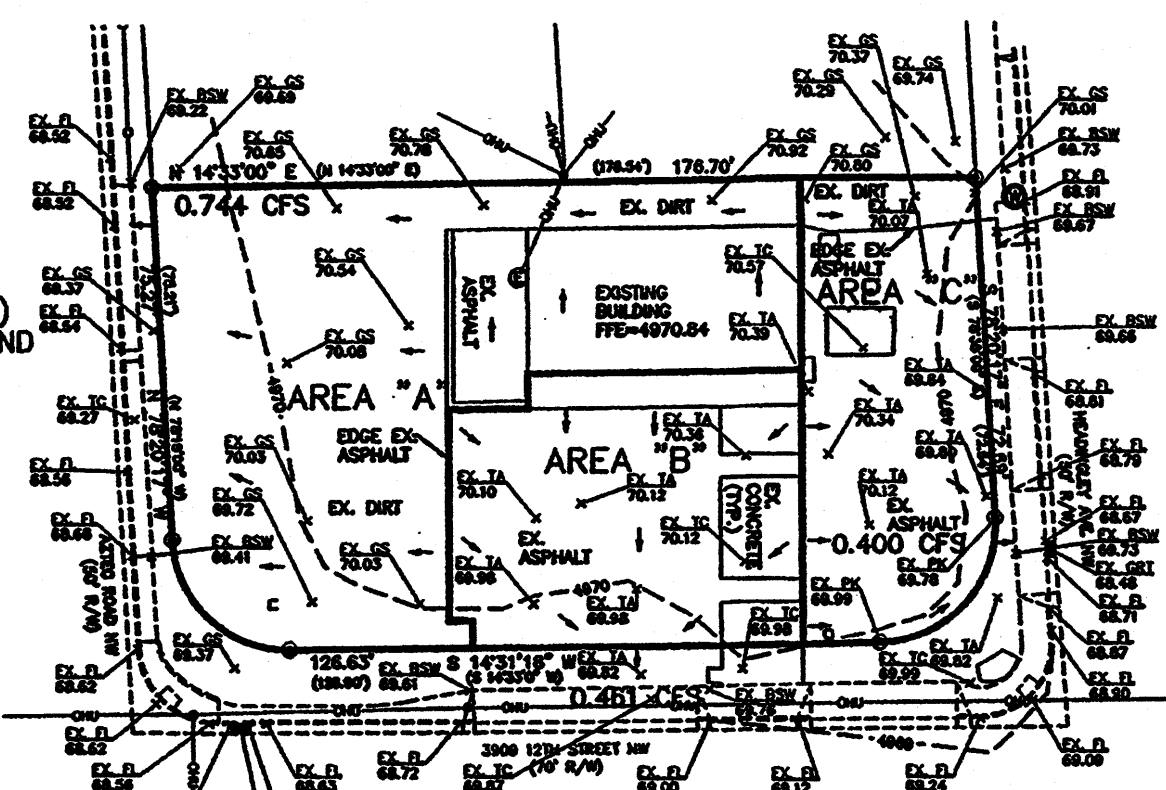
② PAVEMENT SECTION
SCALE: 1/2"=1'



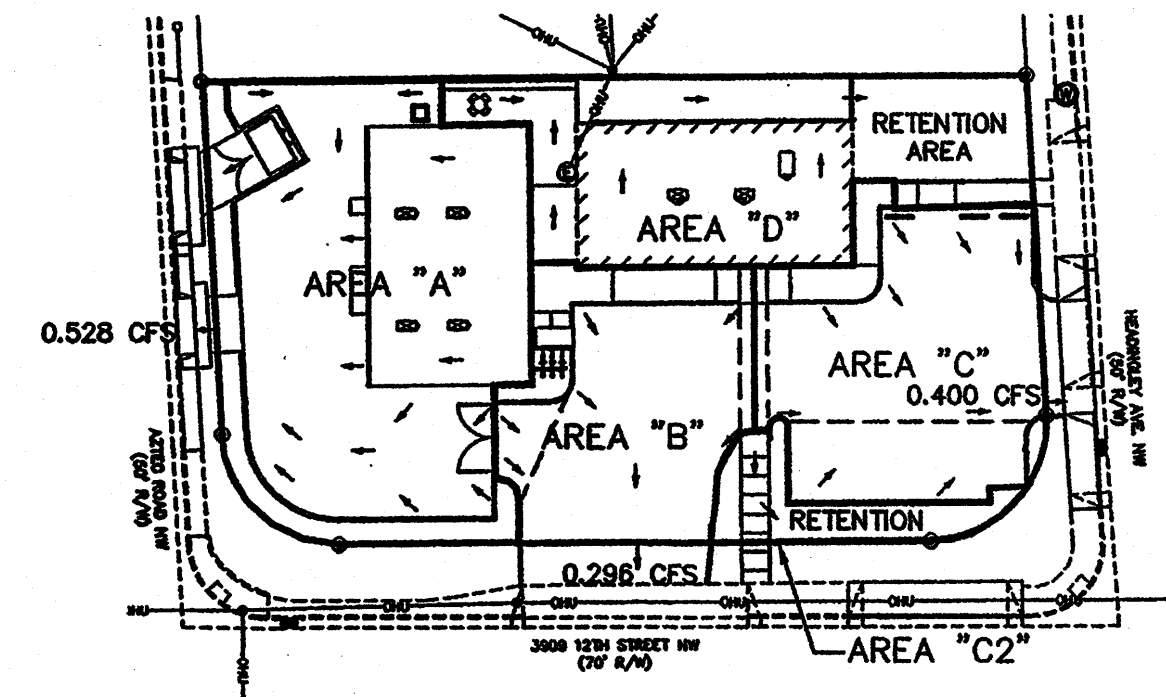
③ PARKING BUMPER
SCALE: 1/2"=1'



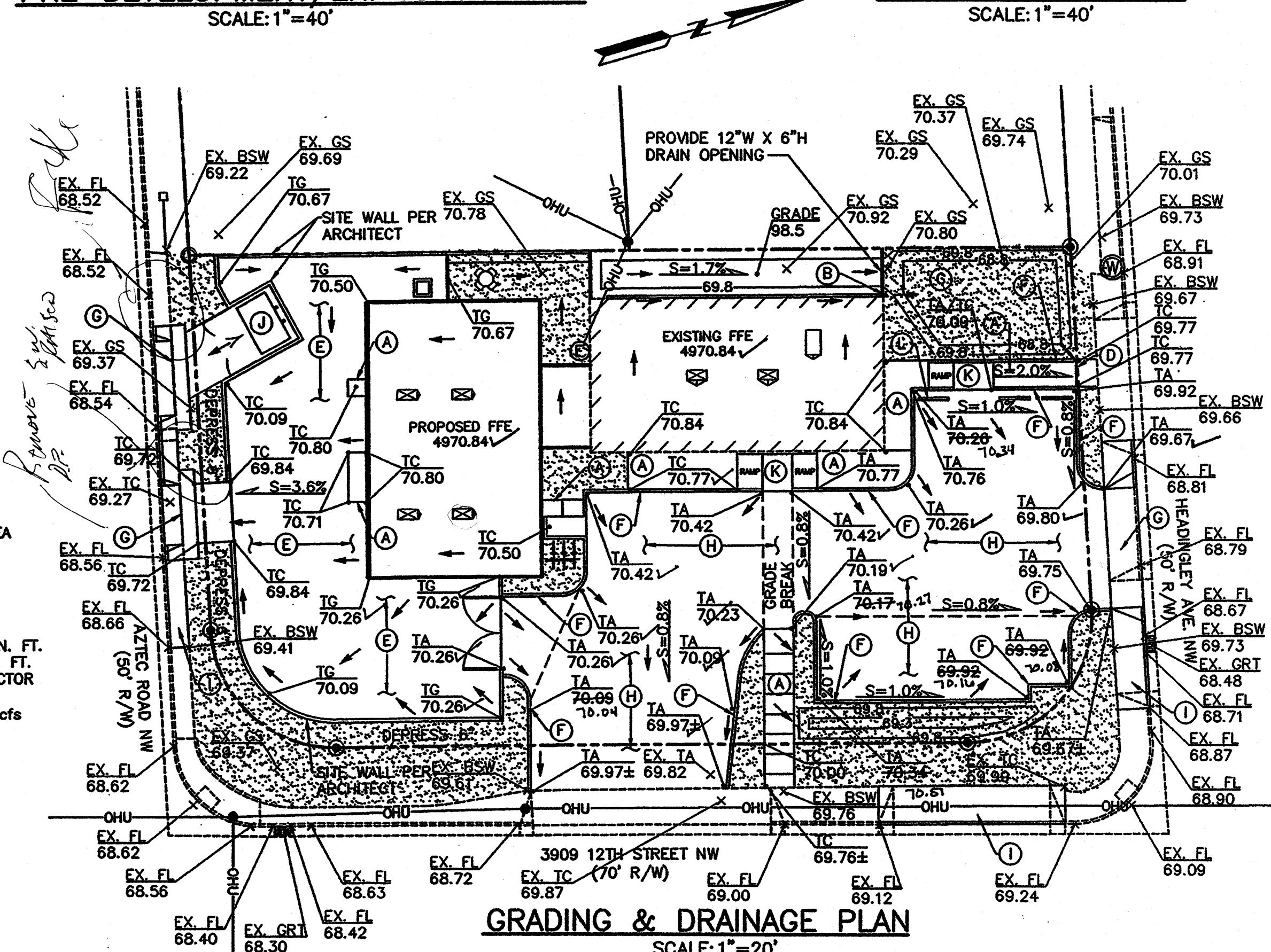
④ SLOTTED DRAIN
SCALE: 1"=1'-0"



PRE-DEVELOPMENT/EX. TOPOGRAPHY
SCALE: 1"=40'



POST-DEVELOPMENT
SCALE: 1"=40'



Grading & Drainage Plan
SCALE: 1"=20'

LEGEND

--- 4969 --- EXISTING CONTOUR
--- OHU --- DRAINAGE FLOW DIRECTION
--- OHU --- OVERHEAD UTILITY
--- OHU --- POWER POLE
--- OHU --- PROPERTY CORNER
--- OHU --- ELECTRIC METER
--- OHU --- WATER METER

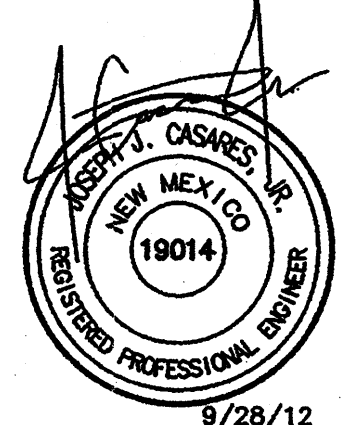
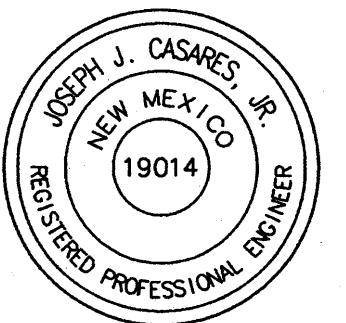
FL = FLOWLINE
BSW = BACK OF SIDEWALK
CS = GRADE SHOT
TC = TOP OF CONCRETE
TA = TOP OF ASPHALT
GRT = TOP OF DRAIN GRATE
PK = PK NAIL AT PROPERTY
FFE = FINISHED FLOOR ELEVATION

✓ = design elevation =
as built elevation

DRAINAGE CERTIFICATION
I, JOSEPH J. CASARES, NMPE 19014, OF THE FIRM LARKIN GROUP NM, 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 9-28-12. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY TIMOTHY MARTINEZ, NMPS 13982, OF THE FIRM TM SURVEYING, INC. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 1-25-13 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.

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.

JOSEPH J. CASARES, NMPE 19014
1/25/13
DATE



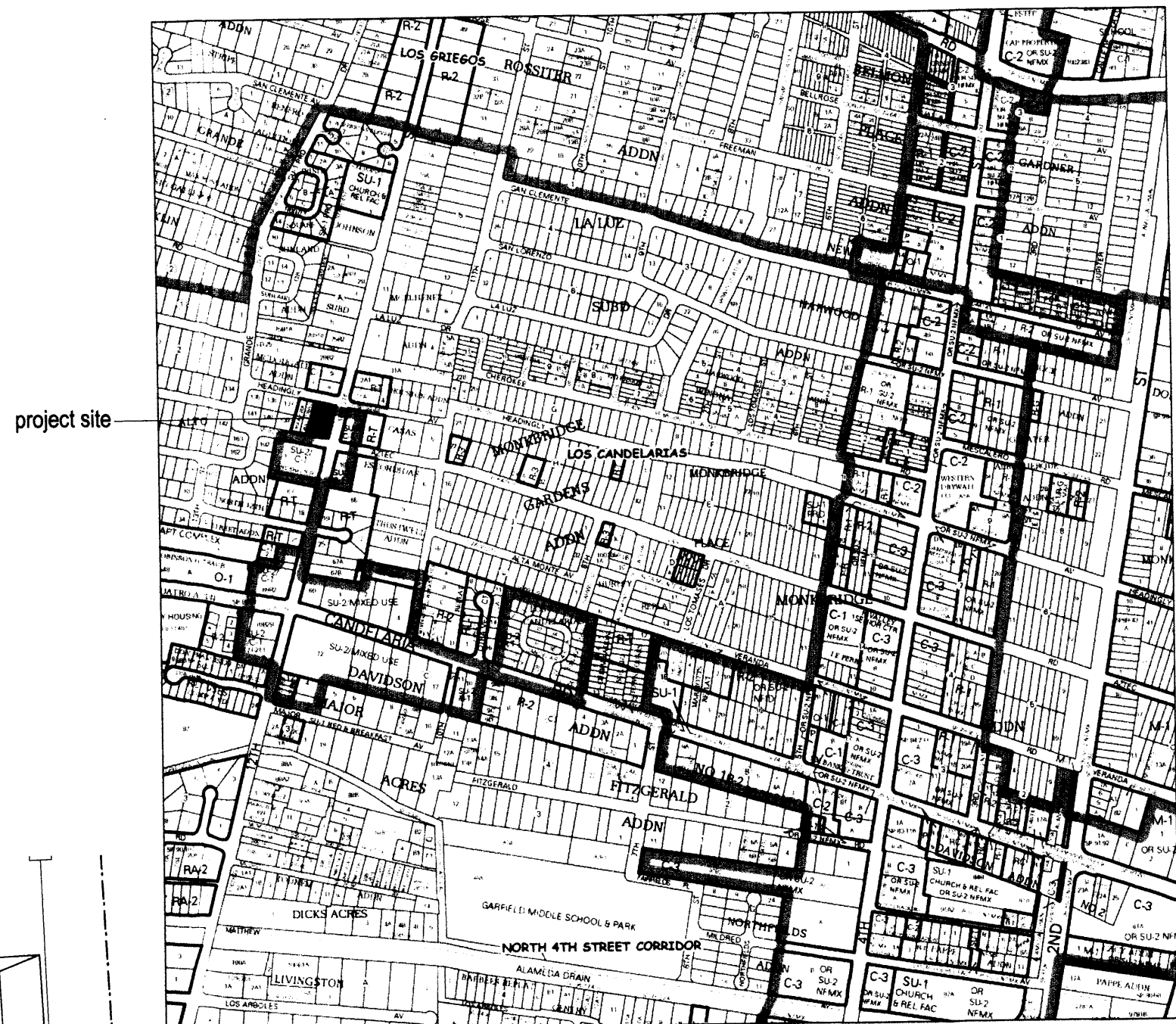
GENERAL NOTES

- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER THIS CONTRACT. EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. ROW WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH COA SPECIFICATION AND DETAILS.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (280-1990), FOR LOCATION OF EXISTING UTILITIES. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES AND OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR WILL NOTIFY THE ARCHITECT IMMEDIATELY SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- ALL EXCAVATION, TRENCHING, AND SHORING ACTIVITIES MUST BE CARRIED OUT IN ACCORDANCE WITH OSHA 29 CFR 1926.650 SUBPART P, AND LOCAL ORDINANCES.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO KNOW AND COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970".
- CONTRACTOR SHALL SCARIFY TO A DEPTH OF 8" AND RECOMPACT SUBGRADE TO 95% MAX. DENSITY AS DETERMINED BY ASTM D-1557 UNLESS NOTED OTHERWISE.
- CONTRACTOR WILL BE RESPONSIBLE FOR FURNISHING BORROW MATERIAL OR HAULING OFF EXCESS MATERIAL.
- WHEN ABUTTING NEW CONCRETE TO EXISTING, CUT BACK EXISTING TO A NEAT STRAIGHT LINE AS REQUIRED TO REMOVE ANY BROKEN OR CRACKED CONCRETE, AND MATCH NEW TO EXISTING.
- EXERCISE CARE TO AVOID DISTURBING EXISTING UTILITIES, AND COORDINATE WITH THE UTILITY COMPANIES IN ORDER TO PREVENT ANY SERVICE DISRUPTION.
- CONSTRUCTION AREAS SHALL BE WATERED OR OTHERWISE KEPT DUST FREE. THE CONTRACTOR SHALL USE WATERING EQUIPMENT FOR DUST POLLUTION ABATEMENT AS DIRECTED BY THE ARCHITECT.
- THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL DEMOLITION DEBRIS. WORK MATERIALS SHALL BE DISPOSED OF IN A CITY APPROVED WASTE AREA, IN ACCORDANCE WITH ALBUQUERQUE SPECIFICATIONS.
- THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED UTILITY LINES THAT ARE EXPOSED AS A RESULT OF CONSTRUCTION UNLESS OTHERWISE DIRECTED BY THE ARCHITECT.
- THE CONTRACTOR SHALL PROVIDE THE ARCHITECT WITH "AS-BUILT" PLANS.
- THE CONTRACTOR AGREES TO TAKE NECESSARY SAFETY PRECAUTIONS AS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES TO PROTECT PEDESTRIAN AND VEHICULAR TRAFFIC IN THE CONSTRUCTION AREA, WHICH INCLUDE BUT ARE NOT LIMITED TO: MAINTAINING ADEQUATE WARNING SIGNS, BARRICADES, LIGHTS, GUARD FENCES, WALKS AND BRIDGES.
- CONTRACTOR SHALL ADJUST CLEANOUT RIMS, VALVE CANS, MONITORING WELL COVERS, AND OTHER SURFACE UTILITIES AS NEEDED TO MATCH FINISHED ELEVATIONS.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND ADHERING TO A STORMWATER POLLUTION PREVENTION PLAN.
- ALL LANDSCAPED AREAS SHALL BE DEPRESSED APPROXIMATELY 6" BELOW ADJACENT CONCRETE, UNLESS NOTED OTHERWISE ON PLAN.
- COORDINATE WITH SITE PLAN FOR ADDITIONAL DETAILS.
- BOUNDARY INFORMATION IS TAKEN FROM A PLAT ENTITLED "PARCEL NUMBER 138-B OF SUMMARY PLAT SHOWING PARCELS 138-A AND 138-B, VALLE ALTO ADDITION, ALBUQUERQUE, NEW MEXICO," AS THE SAME IS SHOWN AND DESIGNATED ON THE SUMMARY PLAT THEREOF, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON SEPTEMBER 22, 1951, IN BOOK C18, PAGE 86.
- ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES, U.S. SURVEY FEET.
- COORDINATES SHOWN ARE MODIFIED (SURFACE) NEW MEXICO STATE PLANE COORDINATES-CENTRAL ZONE, NAD 83.
- TO OBTAIN TRUE STATE PLANE GRID COORDINATES, MULTIPLY THE COORDINATES BY THE PROJECT COMBINED FACTOR (CF) 0.999868179.
- ELEVATIONS ARE REFERRED TO SEA LEVEL, NAVD 88.

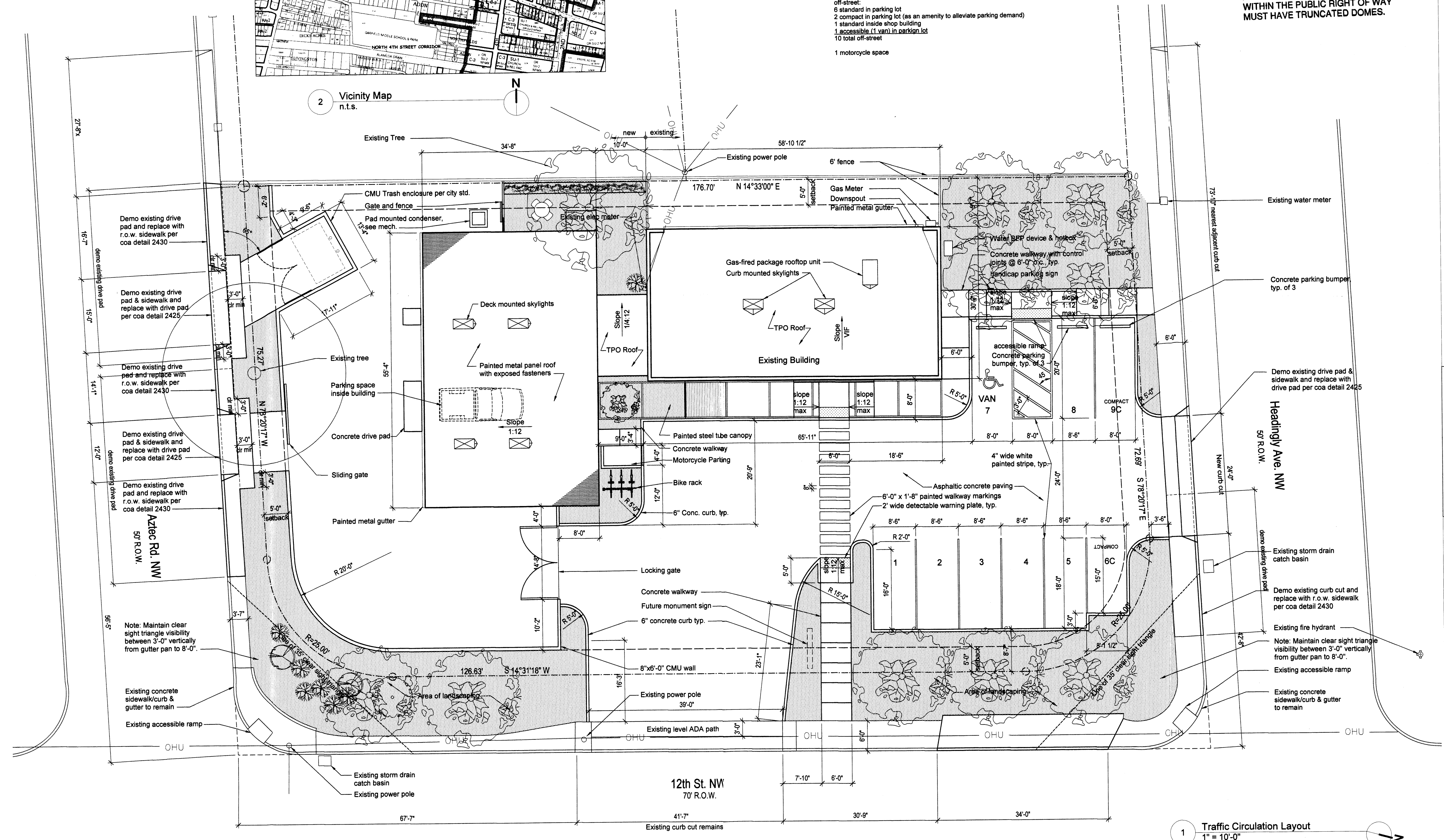
CONSTRUCTION NOTES

- CONSTRUCT 4" THICK CONCRETE (2500 PSI) WALKWAY WITH 6"x6"x#10. WIRE MESH. PROVIDE (MAX. SPACING) SCORE JOINTS. ALSO PROVIDE 2" (MAX. SPACING) EXPANSION JOINTS. PROVIDE 1/8" PER 1' CROSS SLOPE (MIN.). FINISH PER OWNER.
- INSTALL ROOF DRAIN DOWN SPOUT 4" (MIN) AND DIRECT FLOW TOWARDS ADJACENT LANDSCAPE AREA.
- DEPRESS AREA 12", TOP OF CRUSHER FINES TO BE AT ELEVATION AS SHOWN ON PLAN.
- INSTALL 3" SLOT DRAIN PER DETAIL 4, THIS SHEET. CONNECT TO 4" PVC DRAIN PIPE SLOPED AT 1/8" PER 1' AND DIRECT FLOW TO ADJACENT RETENTION BASIN.
- INSTALL 4" BASE COURSE OVER 8" COMPACTED SUBGRADE PER COA SECTIONS 301 AND 302 RESPECTIVELY.
- CONSTRUCT HEADER CURB PER DETAIL-1, THIS SHEET.
- CONSTRUCT CONCRETE DRIVE PAD PER COA DETAIL 2425. MAINTAIN EXISTING GUTTER FLOWLINE. COORDINATE WITH SITE PLAN FOR SIZE.
- CONSTRUCT NEW ASPHALT SECTION PER DETAIL 2, THIS SHEET, COORDINATE WITH SOILS REPORT RECOMMENDATIONS.
- CONSTRUCT RIGHT-OF-WAY SIDEWALK PER COA DETAIL 2430.
- CONSTRUCT REFUSE ENCLOSURE. SEE SITE PLAN FOR DETAILS.
- CONSTRUCT CONCRETE ADA COMPLIANT RAMP AT MAX. SLOPE OF 6":12" (8.33%). PROVIDE DETECTABLE WARNING PLATES (TYP.).
- INSTALL PARKING BUMPERS PER DETAIL 3, THIS SHEET, AT LOCATIONS AS SHOWN ON PLAN.

SURVEY BENCHMARK				
ALBUQUERQUE CITY SURVEY MONUMENT "NM-47-10"				
ELEV.=4970.252 (NAVD 1988)				
N=1500810.208, E=1523633.488				
NEW MEXICO STATE PLANE COORDINATE SYSTEM, (NAD83) CENTRAL ZONE, GRID BEARINGS.				
OWNER				
DAMIAN CHIMENTI INSIGHT CONSTRUCTION 1720 CENTRAL SW, SUITE B ALBUQUERQUE, NEW MEXICO 87104				
PROJECT				
3909 12TH ST. OFFICE IMPROVEMENTS Grading and Drainage Plan & Hydrologic Analysis				
PROJECT NO.	DRAWN	CHECKED	DATE	SHEET
2012.103	KC	JC	09-26-12	C1



2 Vicinity Map
n.t.s.



1 Traffic Circulation Layout
1" = 10'-0"

general notes

- A. COMPACT parking space shall be marked with 12" high lettering, entire word shall be 6'-0" wide with 3" spacing between letters.
- B. All pavement striping to be pavo paint, 100% acrylic polymer emulsion (or equal).
- C. All signs and markings are per 2003 MUCTD unless otherwise noted.

project description

This project is a remodel & addition to create a General Contractor's Office & Shop.

legal description

Lot 1368 Valle Alto Subdivision

lot size

0.3949 acres

building size

3,870 sf

building & traffic circulation concept

There are 6 existing driveways on this site, which was originally a gas station. We are proposing that two be abandoned, three be reduced and relocated away from the street intersections, and one remain as-is (the primary entrance off of 12th street). The project is designed to accommodate two-way traffic flow from 12th Street to Headingly Avenue. There is a gate allowing access to the screened contractor's yard from the main parking area and a gate from the yard to Aztec Road.

The existing uses nearby are townhomes to the west, a church to the north, businesses and residences to the east, and a retail store to the south.

There have been no traffic impact studies.

Parking

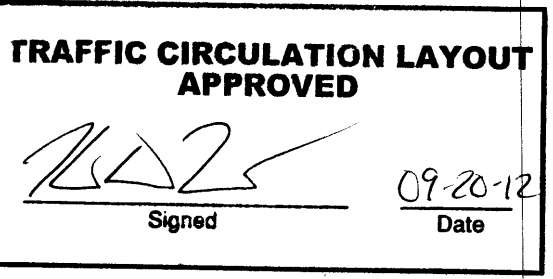
base required parking:
existing building & site constructed prior to 1965 (1961) so no parking requirement.

provided parking:

- off-street:
- 6 standard in parking lot
- 2 compact in parking lot (as an amenity to alleviate parking demand)
- 1 standard inside shop building
- 1 accessible (1 van) in parking lot
- 10 total off-street
- 1 motorcycle space

Public Infrastructure shown on these plans for information only and not part of approval. Separate DRC/Permit approval and Work Order required.

ALL WHEELCHAIR RAMPS LOCATED WITHIN THE PUBLIC RIGHT OF WAY MUST HAVE TRUNCATED DOMES.



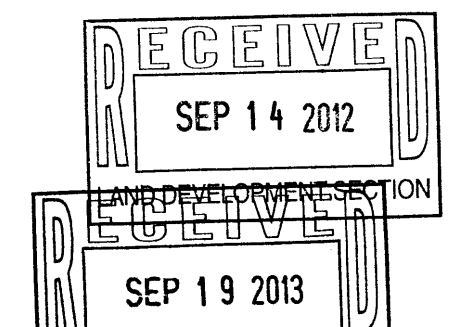
Revisions:

Insight Construction
3909 12th St NW
Albuquerque, NM 87113

TCL

traffic circulation layout

DATE: September 13, 2012



LAND DEVELOPMENT SECTION
SAMUEL M. STERLING ARCHITECTURE, LLC
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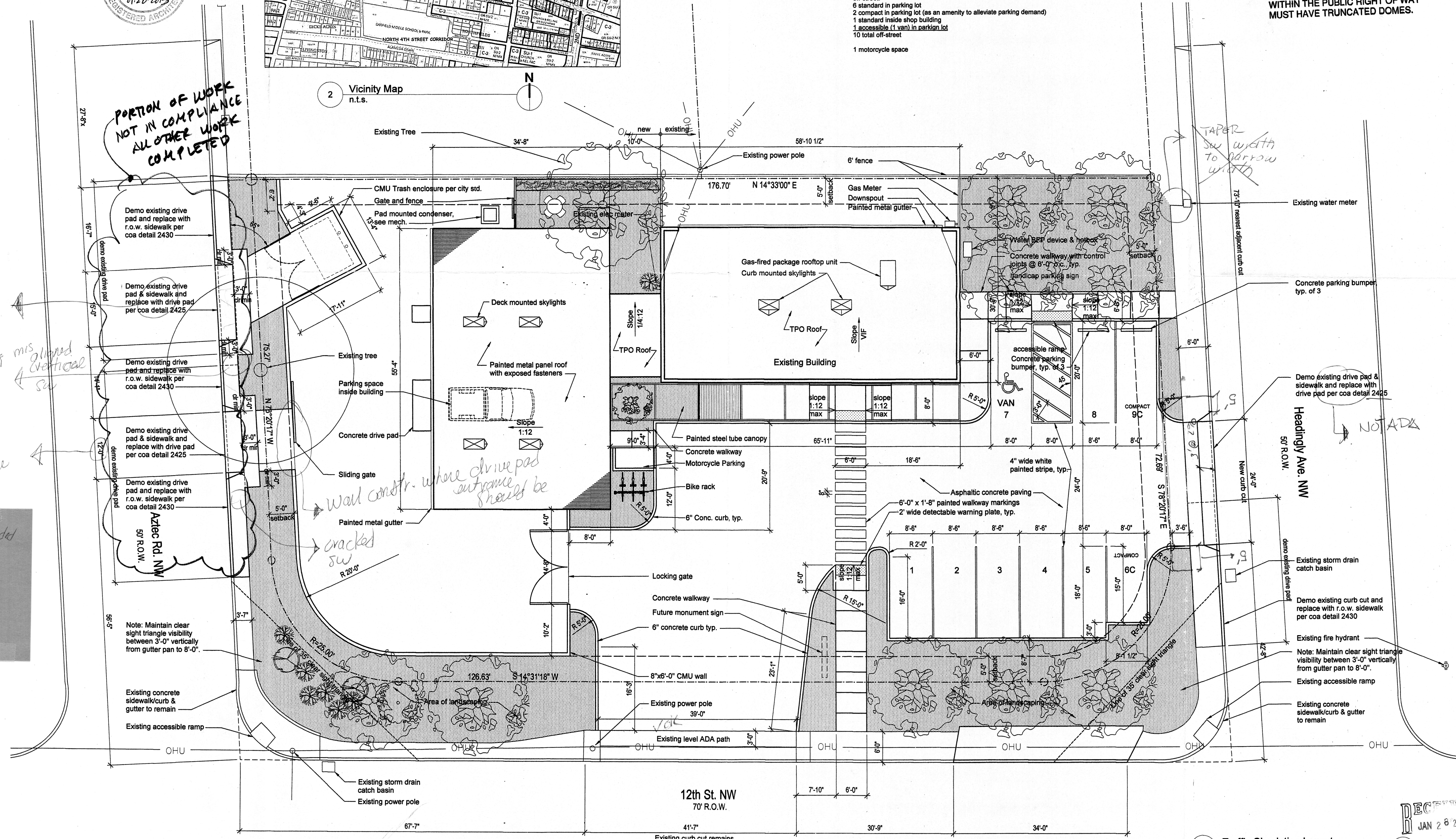
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TRAFFIC CIRCULATION LAYOUT APPROVED

Signed: *[Signature]* Date: 09-20-12

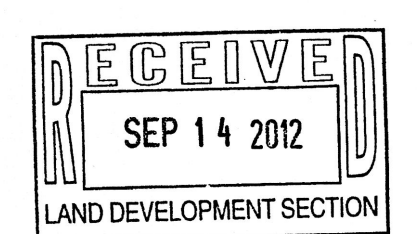


Revisions:

Insight Construction
3909 12th St NW
Albuquerque, NM 87113

TCL

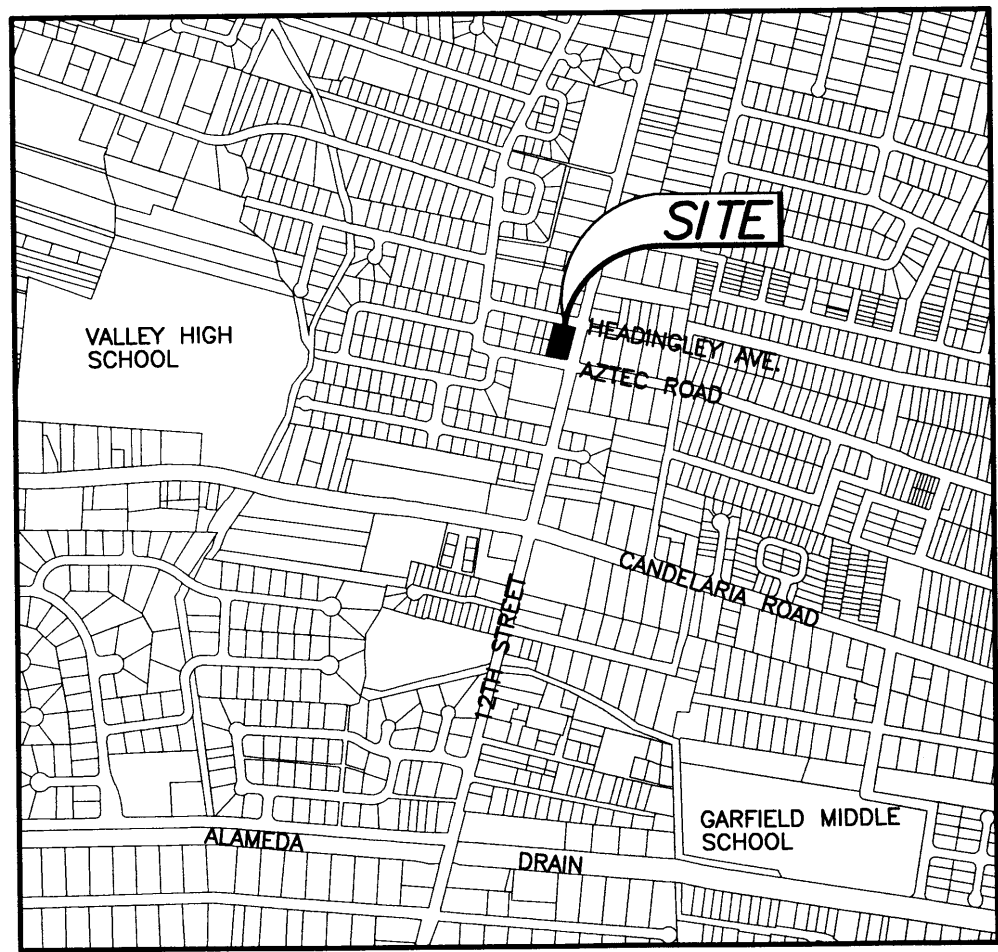
traffic circulation layout
DATE: September 13, 2012



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1 Traffic Circulation Layout
1" = 10'-0"



LOCATION MAP

SCALE: 1"=1000'±
ZONE ATLAS MAP G-14

I. EXECUTIVE SUMMARY

THIS PLAN SERVES TO SUPPORT THE DEVELOPMENT OF A NEW OFFICE AND STORAGE BUILDING FOR INSIGHT CONSTRUCTION. THE SITE IS LOCATED IN THE CITY OF ALBUQUERQUE AND IS KNOWN AS PARCEL 138-B OF THE VALLE ALTO ADDITION. THIS PARCEL IS LOCATED IN THE NORTH VALLEY ALONG 12TH STREET BETWEEN AZTEC AND HEADINGLEY. THE SITE ADDRESS IS 3909 12TH STREET. THE PROPOSED CONSTRUCTION CONSISTS OF NEW BUILDING, PARKING LOT, WALKWAYS, RETENTION BASINS, LANDSCAPE AND OTHER AMENITIES. OFF-SITE CONSTRUCTION WILL INCLUDE SIDEWALK, AND DRIVE PADS. THE SITE WILL BE DEVELOPED CONCURRENTLY AND NO PHASING IS PROPOSED. MOST LOTS WITHIN THIS SUBDIVISION ARE FULLY DEVELOPED. ALSO, RIGHT-OF-WAY STREET PAVEMENT, CURB AND GUTTER, PUBLIC UTILITIES AND DRAINAGE STRUCTURES FOR THE VALLE ALTO ADDITION ARE IN PLACE. DUE TO THESE DEVELOPMENTS, OFF-SITE STORMWATER SHOULD NOT IMPACT THIS SITE. IT IS PROPOSED THAT STORMWATER GENERATED ON-SITE WILL BE CONVEYED TO THE RIGHT-OF-WAYS AND WILL NOT EXCEED HISTORIC FLOWS. THE HISTORIC TOTAL RUN-OFF GENERATED ON-SITE DURING A 100 YEAR, 24-HOUR EVENT IS DETERMINED TO BE 1.61 CFS. RUN-OFF FROM THE PROPOSED DEVELOPMENT IS DETERMINE TO BE 1.22 CFS, WHICH DOES NOT EXCEED HISTORIC.

II. PROJECT DESCRIPTION

AS SHOWN ON THE LOCATION MAP THE SITE (17,203 SF = APPROXIMATELY 0.3949 ACRES) IS LOCATED IN THE CITY OF ALBUQUERQUE, AT 3909 12TH STREET. CURRENTLY THE SITE IS DEVELOPED. THE SITE IS PLATTED "PARCEL NUMBER 138-B OF SUMMARY PLAT SHOWING PARCELS 138-A AND 138-B, VALLE ALTO ADDITION, ALBUQUERQUE, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON THE SUMMARY PLAT THEREOF, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON SEPTEMBER 22, 1951, IN BOOK C18, PAGE 186. FURTHERMORE, THE SITE IS LOCATED IN FLOOD ZONE SHADED X AS INDICATED BY FIRM NUMBER 35001C0119G, RECORDED ON SEPTEMBER 26, 2008 BY THE FEMA.

III. BACKGROUND DOCUMENTS

THERE IS NO KNOWN DRAINAGE REPORT FOR THIS SUBDIVISION. THE PLAT, THE FIRM, THE COA DEVELOPMENT PROCESS MANUAL, THE SITE SURVEY, AND THE PROPOSED GRADING AND DRAINAGE PLAN, UTILIZED FOR THE EXECUTION OF THIS HYDROLOGY AND HYDRAULIC ANALYSIS.

IV. EXISTING CONDITIONS

CURRENTLY THE SITE IS DEVELOPED AND CONTAINS AN EXISTING BUILDING, PAVEMENT, CONCRETE AND FENCES. THERE IS VERY LITTLE VEGETATION ON THE PROJECT SITE. THE SITE NATURALLY EXIST WITH A HIGH POINT IN THE MIDDLE, AND THEREFORE DRAINS TO THE ROW ALONG THE NORTH, EAST AND SOUTH.

V. DEVELOPED CONDITIONS

THE PROPOSED ON-SITE CONSTRUCTION CONSISTS OF NEW BUILDING, RETENTION BASINS, PARKING LOT, WALKWAYS, LANDSCAPE AND OTHER AMENITIES. OFF-SITE CONSTRUCTION WILL INCLUDE SIDEWALK AND DRIVE PADS. STORMWATER GENERATED ON-SITE WILL BE SURFACE ROUTED AND DIRECTED TOWARDS THE RIGHT-OF-WAYS OF AZTEC ROAD, 12TH STREET, AND HEADINGLEY AVENUE. RUN-OFF FLOWS AFTER DEVELOPMENT ARE DETERMINED TO BE 1.22 CFS. SINCE ALL LANDSCAPED AREAS WILL BE DEPRESSED 12-INCHES TO 1-INCHES, STORMWATER THAT FALLS IN THESE AREAS WILL BE RETAINED AND WILL SLOWLY PERCOLATE INTO THE GROUND AND SURROUNDING VEGETATION. ROOF RUN-OFF WILL BE CONVEYED UTILIZING ROOF SCUPPERS AND DOWNSPOUTS. DOWNSPOUTS WILL BE DIRECTED TOWARD LANDSCAPED AREAS. DRAINAGE STRUCTURES ARE SIZED TO ACCOMMODATE THE 100-YR 24-HOUR EVENT.

VI. EROSION CONTROL

CURRENTLY 60% OF THE PARCEL IS HARD SURFACES (PAVEMENT, ROOFTOPS AND CONCRETE). AFTER DEVELOPMENT APPROXIMATELY 62% OF THE SITE WILL BE MADE-UP OF CONCRETE, ASPHALT AND ROOFTOP. THE PROPOSED CONSTRUCTION WILL SLIGHTLY INCREASE THE AMOUNT OF IMPERVIOUS AREA BY 2%. PERMANENT EROSION CONTROL AT SURFACE FLOW CONCENTRATION POINTS WILL CONSIST OF PAVEMENT OR CONCRETE.

VII. WATER QUALITY ENHANCEMENTS

NO WATER QUALITY ENHANCEMENTS ARE PROPOSED.

VIII. GRADING PLAN

THE GRADING & DRAINAGE PLAN ON THIS SHEET SHOWS:
1. EX. SPOT ELEVATION AS TAKEN FROM RECENT TOPOGRAPHY
2. PROPOSED GRADES INDICATED BY SPOT ELEVATIONS
3. THE LIMITS AND CHARACTER OF THE EX. FEATURES TO REMAIN
4. THE LIMITS AND CHARACTER OF THE PROPOSED IMPROVEMENTS
5. CONTINUITY BETWEEN EXISTING AND PROPOSED GRADES

IX. CALCULATIONS

THE CALCULATIONS HEREON ANALYZE THE HYDROLOGY FOR BOTH THE EXISTING AND DEVELOPED CONDITIONS (PRE AND POST) UPON A 100 YEAR, 24-HOUR RAINFALL EVENT. THE PROCEDURE FOR 40 ACRES AND SMALLER BASINS, AS SET FORTH IN CHAPTER 22 OF THE DEVELOPMENT PROCESS MANUAL (DPM), VOLUME 1, 1997 REVISIONS IS USED TO QUANTIFY THE PEAK RATE OF DISCHARGE (Q) AND VOLUME (V) OF ON-SITE STORMWATER RUN-OFF. ALL DATA UTILIZED FOR ANALYSIS CAN BE FOUND BELOW UNDER SITE CHARACTERISTICS. RESULTS ARE PRESENTED BELOW.

HYDROLOGY ANALYSIS FOR PEAK RATE OF DISCHARGE (Q) AND PEAK VOLUME (V)

SITE CHARACTERISTICS:

DRAINAGE AREA = (SEE PRE AND POST-DEVELOPMENT MAP)
LAND TREATMENT (DPM CH. 22, TABLE A-4)
IMPERVIOUS = D
PERVIOUS = C
PRECIPITATION ZONE = 2 (DPM CH. 22, TABLE A-1)

PRE-DEVELOPMENT:

DRAINAGE AREA "A"
2,492 sf = 27% IMPERVIOUS
6,597 sf = 73% PERVIOUS
ANALYSIS RESULTS
Q = 0.744 cfs
V = 1,142 cf

DRAINAGE AREA "B"
4,286 sf = 100% IMPERVIOUS
0 sf = 0% PERVIOUS
ANALYSIS RESULTS
Q = 0.461 cfs
V = 897 cf

DRAINAGE AREA "C"
3,431 sf = 90% IMPERVIOUS
400 sf = 10% PERVIOUS
ANALYSIS RESULTS
Q = 0.400 cfs
V = 761 cf

POST-DEVELOPMENT:

DRAINAGE AREA "A"
2,288 sf = 37% IMPERVIOUS
3,902 sf = 63% PERVIOUS
ANALYSIS RESULTS
Q = 0.528 cfs
V = 848 cf

DRAINAGE AREA "B"
2,558 sf = 91% IMPERVIOUS
267 sf = 9% PERVIOUS
ANALYSIS RESULTS
Q = 0.295 cfs
V = 565 cf

DRAINAGE AREA "C"
3,706 sf = 100% IMPERVIOUS
0 sf = 0% PERVIOUS
ANALYSIS RESULTS
Q = 0.400 cfs
V = 778 cf

DRAINAGE AREA "C2" (RETAINED)
503 sf = 100% IMPERVIOUS
0 sf = 0% PERVIOUS
ANALYSIS RESULTS
Q = 0.038 cfs
V = 50 cf

DRAINAGE AREA "D" (RETAINED)
2,165 sf = 54% IMPERVIOUS
1,814 sf = 46% PERVIOUS
ANALYSIS RESULTS
Q = 0.362 cfs
V = 621 cf

DESCRIPTION OF SITE DRAINAGE AMENITIES AND ANALYSIS:

ROOF RUNOFF (0.19 CFS) IN AREA "D" WILL DRAIN TO THE ADJACENT RETENTION AREA VIA A 4" ROOF DRAIN AND PIPE. SIDEWALK RUNOFF (0.05 CFS) IN AREA "D" WILL DRAIN TO THE ADJACENT RETENTION AREA VIA A 3" SLOTTED DRAIN AND A 4" PIPE.

4" PIPE CAPACITY (Q):

PIPE ROUGHNESS (n) = 0.012
PIPE FLOW AREA (A) = 0.083 sf
HYDRAULIC RADIUS (R) = 0.096
PIPE SLOPE (S) = 0.0208%

$$Q = (1.49/n)(A)(R^{0.667})(S^{0.5}) = 0.29 \text{ cfs}$$

3" SLOTTED DRAIN CAPACITY:

MANUFACTURER'S
SPEC'D FLOW = 0.06cfs / LIN. FT.
PROPOSED ON PLAN = 5 LIN. FT.
ASSUMPTION = 50% CLOG FACTOR

$$Q = (0.06)(5)(0.50) = 0.15 \text{ cfs}$$

RETENTION BASIN DESCRIPTION AND VOLUME (V) CALCULATIONS:

THE PROPOSED RETENTION BASINS FOR AREAS "D" AND "C2" ARE RECTANGULAR AND WILL BE 12" AND 6" DEEP RESPECTIVELY. THE VOLUME IS CALCULATED AS FOLLOWS:

RETENTION BASIN "D"

POLYGONAL CHARACTERISTICS:
TOP PERIMETER AREA = 1,053 SF
BOTTOM PERIMETER AREA = 518 SF
DEPTH = 1.00 FT

$$V = (1/2)*[(1,053 \text{ SF} + 518 \text{ SF})*(1.00 \text{ FT})] = 785 \text{ CF}$$

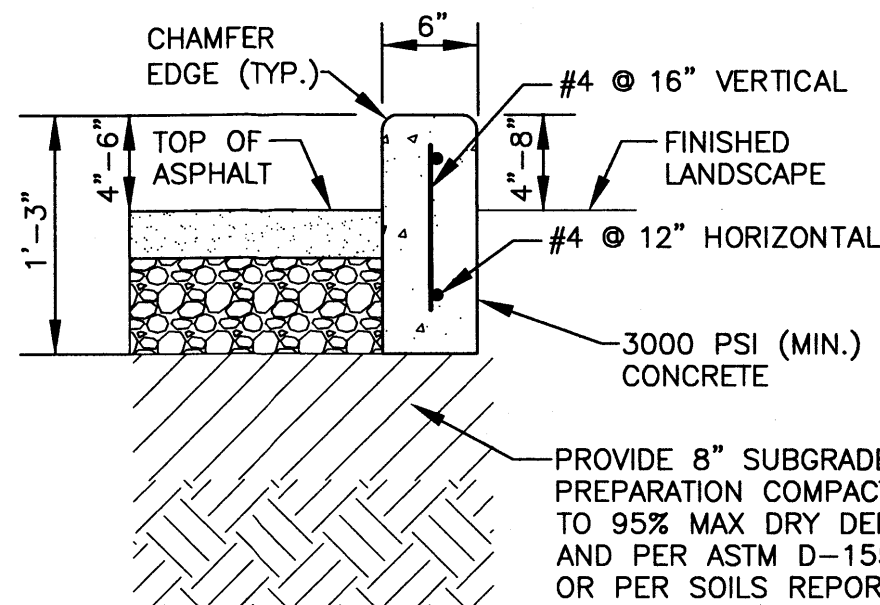
RETENTION BASIN "C2"

POLYGONAL CHARACTERISTICS:
TOP PERIMETER AREA = 268 SF
BOTTOM PERIMETER AREA = 78 SF
DEPTH = 0.5 FT

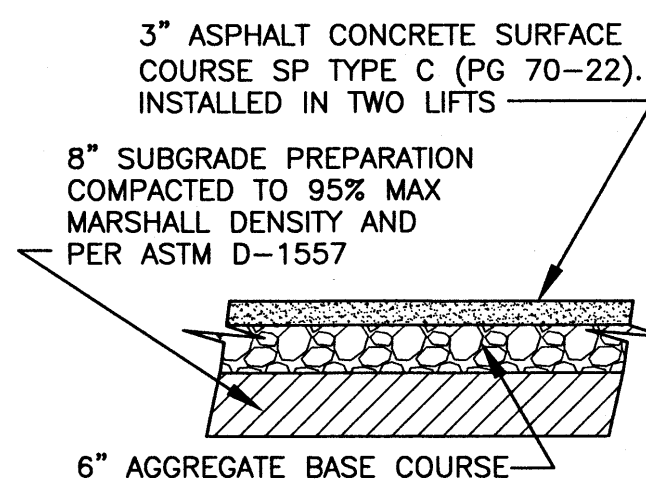
$$V = (1/2)*[(268 \text{ SF} + 78 \text{ SF})*(0.5 \text{ FT})] = 86 \text{ CF}$$

X. CONCLUSION

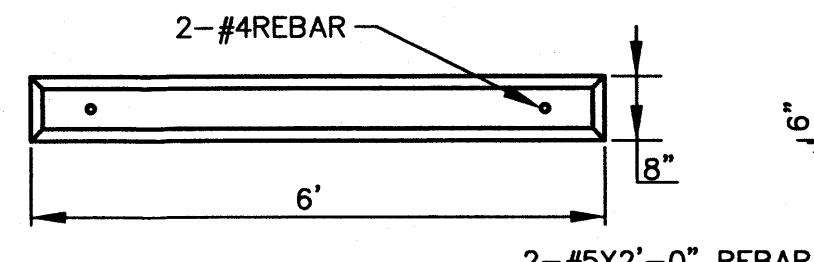
THE PROPOSED STORM DRAINAGE FACILITIES WILL ADEQUATELY CONVEY STORMWATER GENERATED ON-SITE BY A 100 YEAR, 24-HOUR STORM EVENT. ALSO, IF CONSTRUCTED IN ACCORDANCE WITH THE ASSOCIATED GRADING AND DRAINAGE PLAN, THE SITE HYDRAULICS WILL ALLOW 1.22 CFS OF STORMWATER TO RUN OFF INTO THE RIGHT-OF-WAY, AND WILL PROVIDE 828 CF OF STORMWATER RETENTION ON-SITE. MORE SPECIFICALLY, RUN-OFF FROM; DRAINAGE AREA "A" WILL SHEET FLOW TO AZTEC ROAD, DRAINAGE AREA "B" WILL SHEET FLOW TO 12TH STREET, AND DRAINAGE AREA "C" WILL SHEET FLOW TO HEADINGLEY AVENUE. STORMWATER THAT FALLS WITHIN DRAINAGE AREAS "C2" AND "D" WILL BE RETAINED. FURTHERMORE, THE RUN-OFF DIRECTED TO THE RIGHT-OF-WAYS (1.22 CFS) DOES NOT EXCEED THE TOTAL HISTORIC FLOW OF 1.61 CFS. ALL ON-SITE STORM DRAINAGE FACILITIES WILL BE PRIVATELY OWNED, OPERATED AND MAINTAINED.



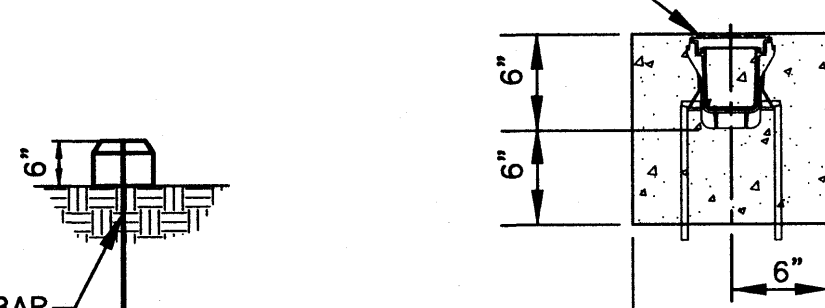
① HEADER CURB
SCALE: 1"=1'-0"



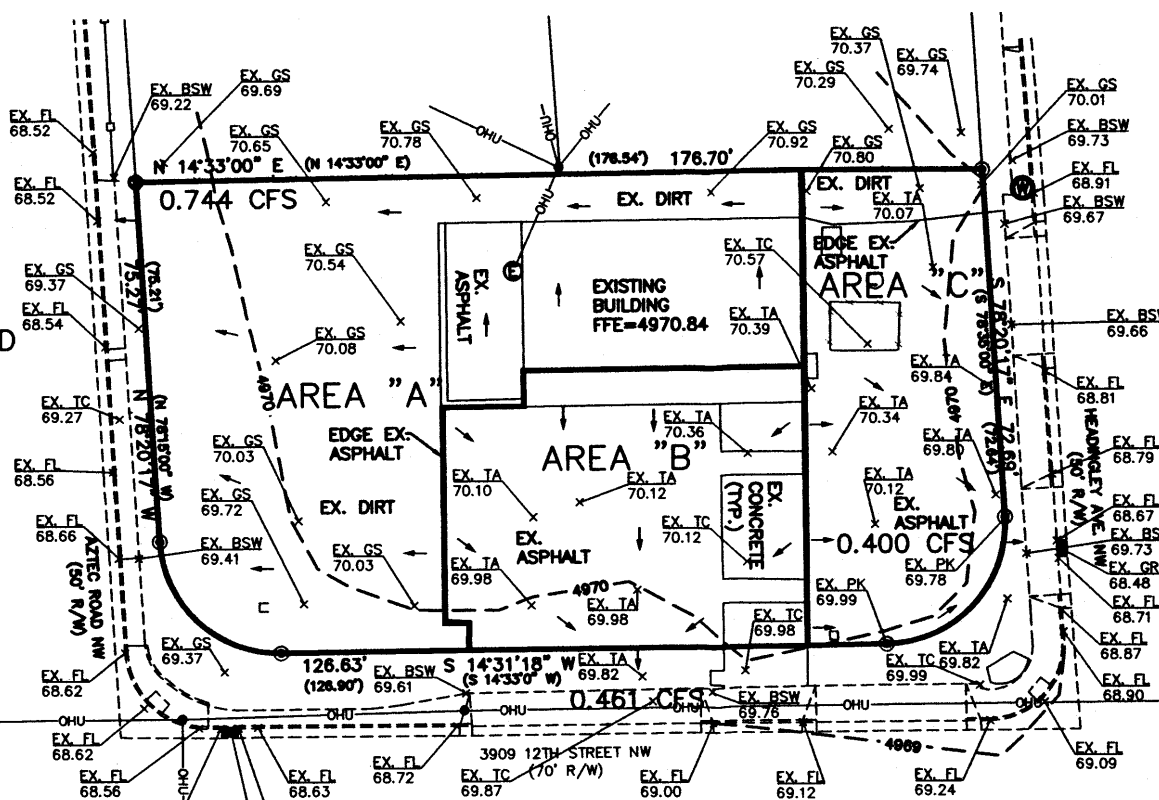
② PAVEMENT SECTION
SCALE: 1/2"=1'



③ PARKING BUMPER
SCALE: 1/2"=1'

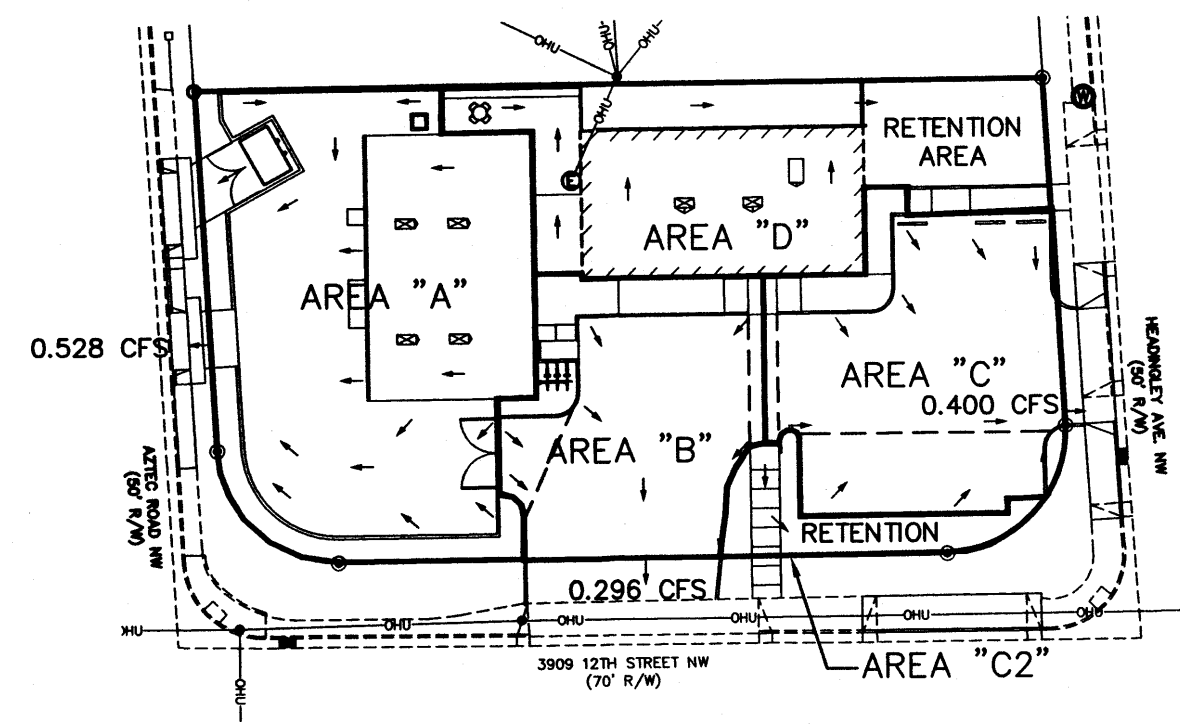


④ SLOTTED DRAIN
SCALE: 1"=1'-0"



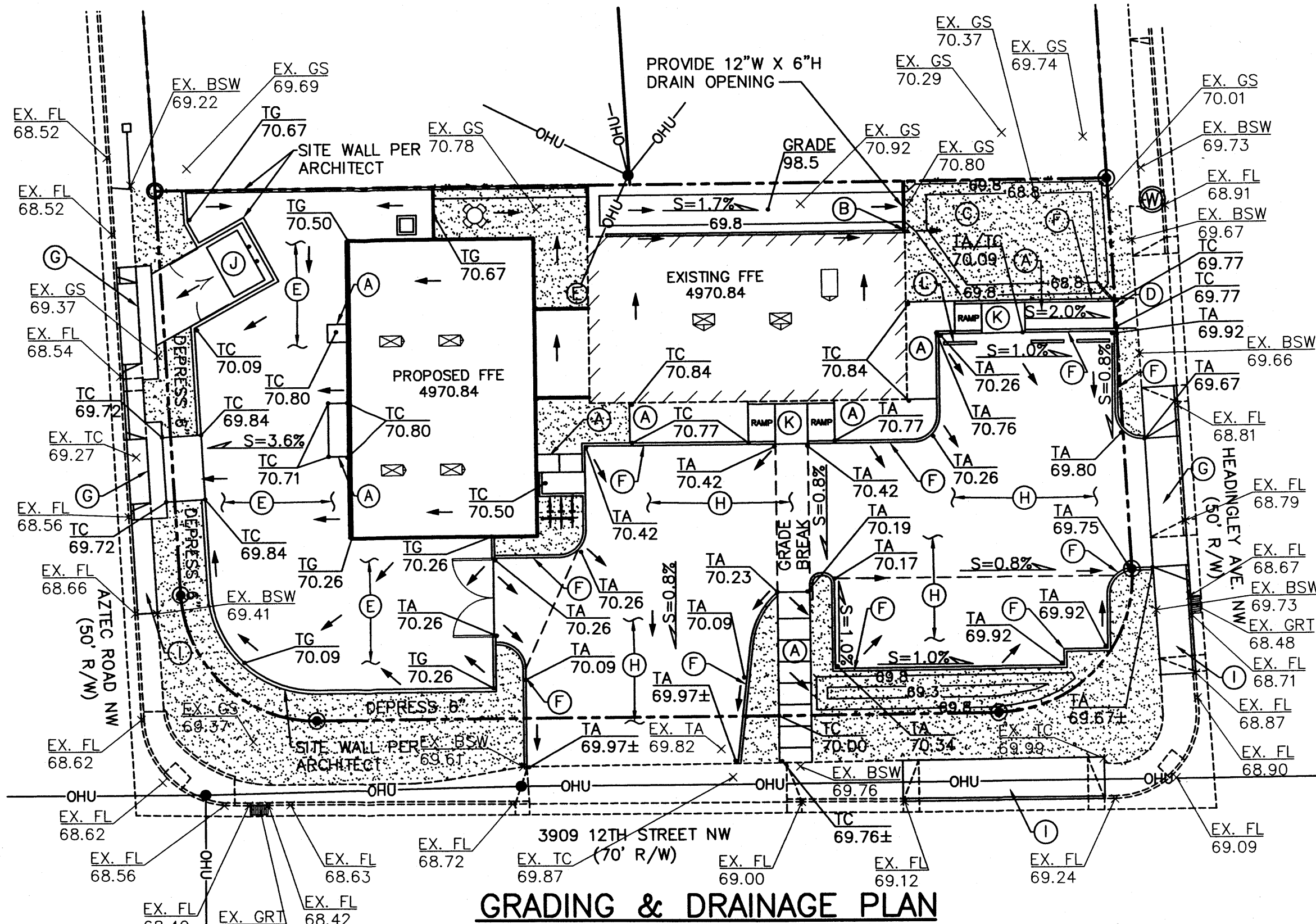
PRE-DEVELOPMENT/EX. TOPOGRAPHY

SCALE: 1"=40'



POST-DEVELOPMENT

SCALE: 1"=40'



Grading & Drainage Plan

SCALE: 1"=20'

LEGEND

---4969--- EXISTING CONTOUR
OHU DRAINAGE FLOW DIRECTION
OVERHEAD UTILITY
POWER POLE
PROPERTY CORNER
ELECTRIC METER
WATER METER
EX. FL 68.63
TA 70.09
FL = FLOWLINE
BSW = BACK OF SIDEWALK
GS = GRADE SHOT
TC = TOP OF CONCRETE
TA = TOP OF ASPHALT
GR = TOP OF DRAIN GRATE
PK = PK NAIL AT PROPERTY
FFE = FINISHED FLOOR ELEVATION

3" SLOTTED DRAIN (NDS PRO SERIES CHANNEL OR EQUAL) CONNECT TO 4" PVC DRAIN PIPE AND DAYLIGHT TO ADJACENT RETENTION BASIN

GENERAL NOTES

- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER THIS CONTRACT, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. ROW WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH COA SPECIFICATION AND DETAILS.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990), FOR LOCATION OF EXISTING UTILITIES. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES AND OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR WILL NOTIFY THE ARCHITECT IMMEDIATELY SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- ALL EXCAVATION, TRENCHING, AND SHORING ACTIVITIES MUST BE CARRIED OUT IN ACCORDANCE WITH OSHA 29 CFR 1926.650 SUBPART P, AND LOCAL ORDINANCES.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO KNOW AND COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970".
- CONTRACTOR SHALL SCARIFY TO A DEPTH OF 8" AND RECOMPACT SUBGRADE TO 95% MAX. DENSITY AS DETERMINED BY ASTM D-1557 UNLESS NOTED OTHERWISE.
- CONTRACTOR WILL BE RESPONSIBLE FOR FURNISHING BORROW MATERIAL OR HAULING OFF EXCESS MATERIAL.
- WHEN ABUTTING NEW CONCRETE TO EXISTING, CUT BACK EXISTING TO A NEAT STRAIGHT LINE AS REQUIRED TO REMOVE ANY BROKEN OR CRACKED CONCRETE, AND MATCH NEW TO EXISTING.
- EXERCISE CARE TO AVOID DISTURBING EXISTING UTILITIES, AND COORDINATE WITH THE UTILITY COMPANIES IN ORDER TO PREVENT ANY SERVICE DISRUPTION.
- CONSTRUCTION AREAS SHALL BE WATERED OR OTHERWISE KEPT DUST FREE. THE CONTRACTOR SHALL USE WATERING EQUIPMENT FOR DUST POLLUTION ABATEMENT AS DIRECTED BY THE ARCHITECT.
- THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL DEMOLITION DEBRIS. WORK MATERIALS SHALL BE DISPOSED OF IN A CITY APPROVED WASTE AREA, IN ACCORDANCE WITH ALBUQUERQUE SPECIFICATIONS.
- THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED UTILITY LINES THAT ARE EXPOSED AS A RESULT OF CONSTRUCTION UNLESS OTHERWISE DIRECTED BY THE ARCHITECT.
- THE CONTRACTOR SHALL PROVIDE THE ARCHITECT WITH "AS-BUILT" PLANS.
- THE CONTRACTOR AGREES TO TAKE NECESSARY SAFETY PRECAUTIONS AS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES TO PROTECT PEDESTRIAN AND VEHICULAR TRAFFIC IN THE CONSTRUCTION AREA, WHICH INCLUDE BUT ARE NOT LIMITED TO: MAINTAINING ADEQUATE WARNING SIGNS, BARRICADES, LIGHTS, GUARD FENCES, WALKS AND BRIDGES.
- CONTRACTOR SHALL ADJUST CLEANOUT RIMS, VALVE CANS, MONITORING WELL COVERS, AND OTHER SURFACE UTILITIES AS NEEDED TO MATCH FINISHED ELEVATIONS.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND ADHERING TO A STORMWATER POLLUTION PREVENTION PLAN.
- ALL LANDSCAPED AREAS SHALL BE DEPRESSED APPROXIMATELY 6" BELOW ADJACENT CONCRETE, UNLESS NOTED OTHERWISE ON PLAN.
- COORDINATE WITH SITE PLAN FOR ADDITIONAL DETAILS.
- BOUNDARY INFORMATION IS TAKEN FROM A PLAT ENTITLED "PARCEL NUMBER 138-B OF SUMMARY PLAT SHOWING PARCELS 138-A AND 138-B, VALLE ALTO ADDITION, ALBUQUERQUE, NEW MEXICO," AS THE SAME IS SHOWN AND DESIGNATED ON THE SUMMARY PLAT THEREOF, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON SEPTEMBER 22, 1951, IN BOOK C18, PAGE 186.
- ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES, U.S. SURVEY FEET.
- COORDINATES SHOWN ARE MODIFIED (SURFACE) NEW MEXICO STATE PLANE COORDINATES-CENTRAL ZONE, NAD 83.
- TO OBTAIN TRUE STATE PLANE GRID COORDINATES, MULTIPLY THE COORDINATES BY THE PROJECT COMBINED FACTOR (CF)=0.999668179.
- ELEVATIONS ARE REFERRED TO SEA LEVEL, NAVD 88.

CONSTRUCTION NOTES

- CONSTRUCT 4" THICK CONCRETE (2500 PSI) WALKWAY WITH 6"x6"x#10. WIRE MESH. PROVIDE 6" (MAX. SPACING) SCORE JOINTS. ALSO PROVIDE 20" (MAX SPACING) EXPANSION JOINTS. PROVIDE 1/8" PER 1" CROSS SLOPE (MIN.). FINISH PER OWNER.
- INSTALL ROOF DRAIN DOWN SPOUT 4" (MIN) AND DIRECT FLOW TOWARDS ADJACENT LANDSCAPE AREA.
- DEPRESS AREA 12", TOP OF CRUSHER FINES TO BE AT ELEVATION AS SHOWN ON PLAN.
- INSTALL 3" SLOT DRAIN PER DETAIL 4, THIS SHEET. CONNECT TO 4" PVC DRAIN PIPE SLOPED AT 1/8" PER 1" AND DIRECT FLOW TO ADJACENT RETENTION BASIN.
- INSTALL 4" BASE COURSE OVER 8" COMPACTED SUBGRADE PER COA SECTIONS 301 AND 302 RESPECTIVELY.
- CONSTRUCT HEADER CURB PER DETAIL-1, THIS SHEET.
- CONSTRUCT CONCRETE DRIVE PAD PER COA DETAIL 2425. MAINTAIN EXISTING GUTTER FLOWLINE. COORDINATE WITH SITE PLAN FOR SIZE.
- CONSTRUCT NEW ASPHALT SECTION PER DETAIL 2, THIS SHEET, COORDINATE WITH SOILS REPORT RECOMMENDATIONS.
- CONSTRUCT RIGHT-OF-WAY SIDEWALK PER COA DETAIL 2430.
- CONSTRUCT REFUSE ENCLOSURE. SEE SITE PLAN FOR DETAILS.
- CONSTRUCT CONCRETE ADA COMPLIANT RAMP AT MAX. SLOPE OF 6":12"V (8.33%). PROVIDE DETECTABLE WARNING PLATES (TYP.).
- INSTALL PARKING BUMPERS PER DETAIL 3, THIS SHEET, AT LOCATIONS AS SHOWN ON PLAN.

SURVEY BENCHMARK				
ALBUQUERQUE CITY SURVEY MONUMENT "NM-47-10" ELEV.=4970.252 (NAVD 1988) N=1500810.208, E=1523633.488 NEW MEXICO STATE PLANE COORDINATE SYSTEM, (NAD83) CENTRAL ZONE, GRID BEARINGS.				
OWNER DAMIEN CHIMENTI INSIGHT CONSTRUCTION 1720 CENTRAL SW. SUITE B ALBUQUERQUE, NEW MEXICO 87104				
PROJECT 3909 12TH ST. OFFICE IMPROVEMENTS GRADING AND DRAINAGE PLAN & HYDROLOGIC ANALYSIS				
PROJECT NO. 2012.103	DRAWN KC	CHECKED JC	DATE 09-26-12	SHEET C1



2 Vicinity Map
n.t.s.

general notes

- COMPACT parking space shall be marked with 12" high lettering, entire word shall be 6'-0" wide with 3" spacing between letters.
- All pavement striping to be pavo paint, 100% acrylic polymer emulsion (or equal).
- All signs and markings are per 2003 MUCTD unless otherwise noted.

project description

This project is a remodel & addition to create a General Contractor's Office & Shop.

legal description

Lot 138B Valle Alto Subdivision

lot size

0.3949 acres

building size

3,870 sf

building & traffic circulation concept

There are 6 existing driveways on this site, which was originally a gas station. We are proposing that two be abandoned, three be reduced and relocated away from the street intersections, and one remain as-is (the primary entrance off of 12th street). The project is designed to accommodate two-way traffic flow from 12th Street to Headingly Avenue. There is a gate allowing access to the screened contractor's yard from the main parking area and a gate from the yard to Aztec Road.

The existing uses nearby are townhomes to the west, a church to the north, businesses and residences to the east, and a retail store to the south.

There have been no traffic impact studies.

Parking

base required parking:

existing building & site constructed prior to 1965 (1961) so no parking requirement.

provided parking:

- off-street:
 - 6 standard in parking lot
 - 2 compact in parking lot (as an amenity to alleviate parking demand)
 - 1 standard inside shop building
 - 1 accessible (1 van) in parking lot
 - 10 total off-street
- 1 motorcycle space

Public Infrastructure shown on these plans for information only and not part of approval. Separate DRC/Permit approval and Work Order required.

ALL WHEELCHAIR RAMPS LOCATED WITHIN THE PUBLIC RIGHT OF WAY MUST HAVE TRUNCATED DOMES.

TRAFFIC CIRCULATION LAYOUT APPROVED

Signed Samuel M. Sterling Date 09-10-12

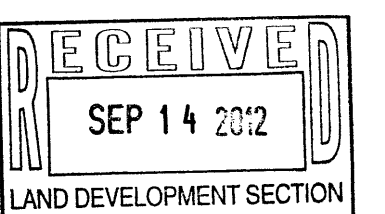
Revisions:

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3909 12th St NW
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TCL

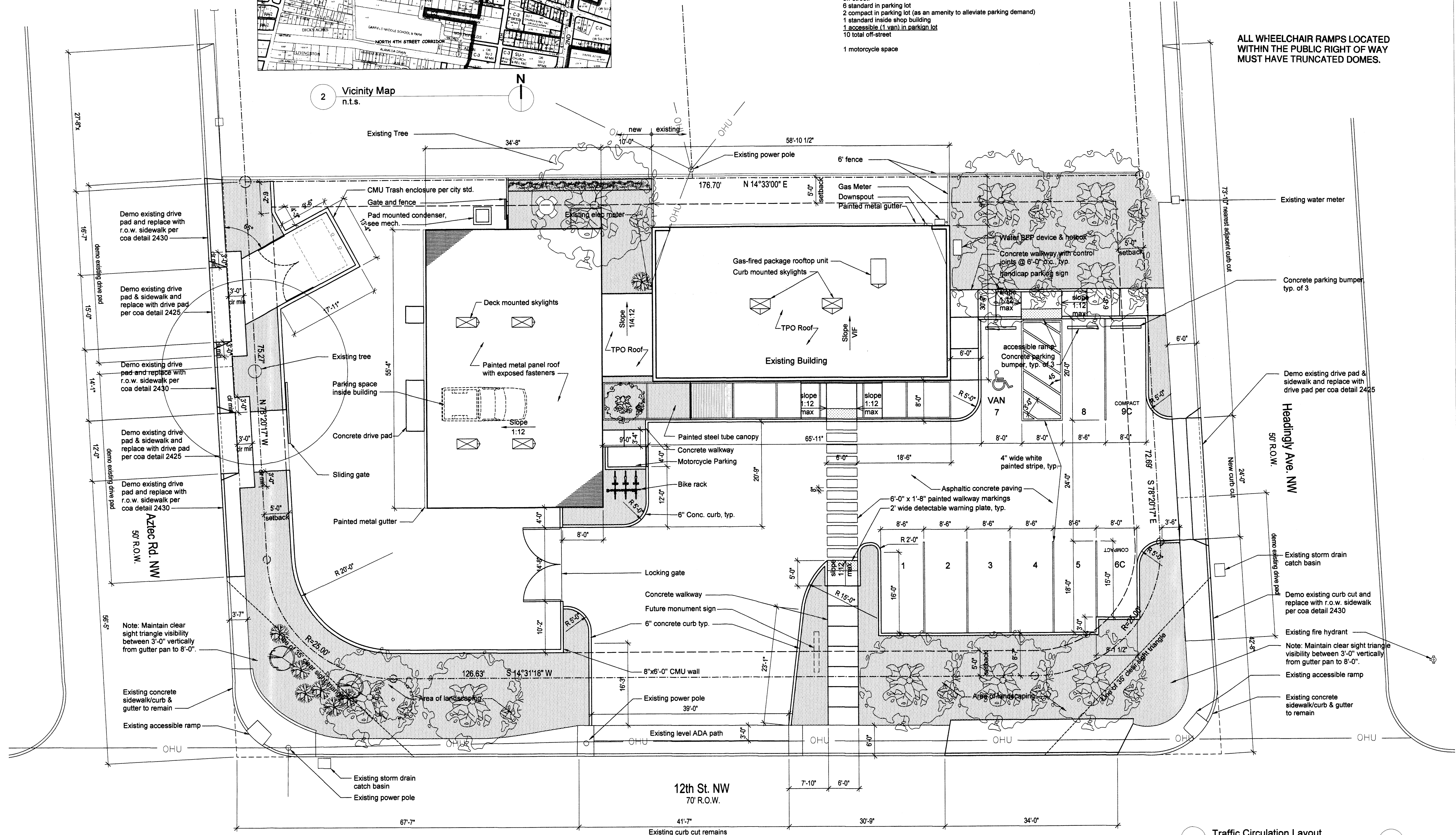
traffic circulation layout

DATE: September 13, 2012



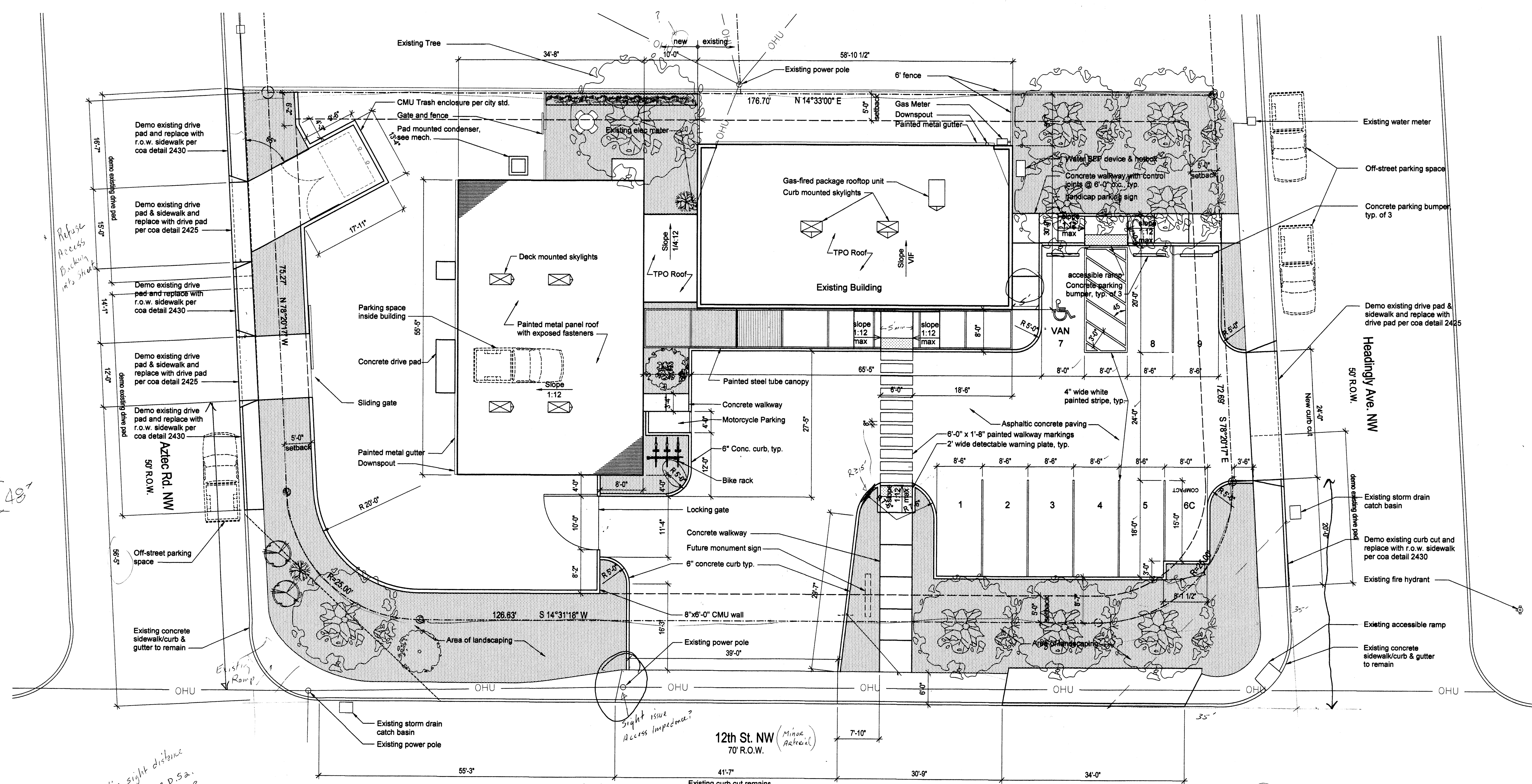
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1 Traffic Circulation Layout
1" = 10'-0"

Date: 7/30/12



Intersection sight distance
35' - Sec. 3 D.S.A.
35' - P. 23-28
Landscaping no obstructions
between 3' - 9' above 2/4.

* Corner Cuts: Traffic Engineer



2 Vicinity Map
n.t.s.

project description

- This project is a remodel & addition to create a General Contractor's Office & Shop.
- legal description
Lot 138B Valle Alto Subdivision
- lot size
0.3949 acres
- building size
3,870 sf
- building & traffic circulation concept
There are 6 existing driveways on this site, which was originally a gas station. We are proposing that two be abandoned, three be reduced and retrofitted away from the street intersections, and one remain as-is (the primary entrance off of 12th street which was recently rebuilt to comply with minor arterial requirements). The project is designed to accommodate two-way traffic flow from 12th Street to Heading Avenue. There is a gate allowing access to the screened contractor's yard from the main parking area and a gate from the yard to Aztec Road.
- The existing uses nearby are townhomes to the west, a church to the north, businesses and residences to the east, and a retail store to the south.
- There have been no traffic impact studies.
- Parking
base required parking:
office @ 1:200, 1,935 sf / 200 = 10
shop @ 1:200, 1,915 sf / 2,000 = 1
required parking = 11 spaces, includes 1 accessible.
- provided parking:
off-street:
7 standard in parking lot
1 compact in parking lot
1 standard inside shop building
1 accessible (1 van) in parking lot
10 total off-street
- on-street:
3 standard (counts as one)
- 11 total provided parking spaces
- 1 motorcycle space

Need 20 spaces for compact

general notes

- COMPACT parking space shall be marked with 12" high lettering, entire word shall be 6'-0" wide with 3' spacing between letters.
- All pavement striping to be per 2003 MUCTO unless otherwise noted.
- All signs and markings are per 2003 MUCTO unless otherwise noted.

1 Traffic Circulation Layout
1" = 10'-0"
scale bar 0 5 10

Insight Construction
3909 12th St NW
Albuquerque, NM 87113

TCL

traffic circulation layout
DATE: July 30, 2012