CITY OF ALBUQUERQUE

September 14, 2012

Fred C. Arfman, P.E. freda@iacivil.com
Isaacson & Arfman, P.A.
128 Monroe Street N.E.
Albuquerque, NM 87108

Re: Lowe's Subdivision Phase I, 3400 NM 528,
Request for Permanent C.O. –Accepted
Engineer's Stamp dated: 02-08-12, (A14/D006B)
Certification dated: 09-13-12

Dear Mr. Arfman,

Based upon the information provided in the Certification received 09-13-12, the above referenced Certification is acceptable for a release of a Permanent Certificate of Occupancy by Hydrology.

Hydrology is asking for an electronic copy, in .pdf format, of this certification for our records. This certification can be e-mailed to me at: tsims@cabq.gov.

If you have any questions, you can contact me at 924-3982.

Sincerely,

Timothy E. Sims,
Plan Checker—Hydrology Section
Development and Building Services

C: CO Clerk—Katrina Sigala
File

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

DRAINAGE AND TRANSPORTATION INFORMATION SHEET
(Rev. 12/05)

PROJECT TITLE: Lowe's Subdivision, Lot 3 ZONE MAP/DRG. FILE #: A-14 / D006B
DRB#: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: Lowe's Subdivision, Lot 3, Albuquerque, New Mexico
CITY ADDRESS: 3400 NM 528

ENGINEERING FIRM: ISAACSON & ARFMAN, PA — CONTACT: Fred Arfman
ADDRESS: 128 MONROE NE — PHONE: 268-8828
CITY, STATE: ALBUQUERQUE, NM — ZIP CODE: 87108

OWNER: _____ — CONTACT: _____
ADDRESS: _____ — PHONE: _____
CITY, STATE: _____ — ZIP CODE: _____

ARCHITECT: Modulus Architects — CONTACT: Stephen Dunbar
ADDRESS: _____ — PHONE: 338-1499
CITY, STATE: _____ — ZIP CODE: _____

SURVEYOR: Surv-Tek, Inc. — CONTACT: _____
ADDRESS: 9384 Valley View Drive, NW — PHONE: _____
CITY, STATE: Albuquerque, NM — ZIP CODE: 87114

CONTRACTOR: _____ — CONTACT: _____
ADDRESS: _____ — PHONE: _____
CITY, STATE: _____ — ZIP CODE: _____

TYPE OF SUBMITTAL:
_____ DRAINAGE REPORT
_____ DRAINAGE PLAN 1st SUBMITTAL
_____ DRAINAGE PLAN RESUBMITTAL
_____ CONCEPTUAL G & D PLAN
_____ GRADING PLAN
_____ EROSION CONTROL PLAN
__X__ ENGINEER'S CERT (HYDROLOGY)
_____ CLOMR/LOMR
_____ TRAFFIC CIRCULATION LAYOUT
_____ ENGINEER/ARCHITECT CERT (TCL)
_____ ENGINEER/ARCHITECT CERT (DRB S.P.)
_____ ENGINEER/ARCHITECT CERT (AA)
_____ OTHER (SPECIFY)

CHECK TYPE OF APPROVAL SOUGHT:
_____ SIA/FINANCIAL GUARANTEE RELEASE
_____ PRELIMINARY PLAT APPROVAL
_____ S. DEV. PLAN FOR SUB'D APPROVAL
_____ S. DEV. FOR BLDG. PERMIT APPROVAL
_____ SECTOR PLAN APPROVAL
_____ FINAL PLAT APPROVAL
_____ FOUNDATION PERMIT APPROVAL
_____ BUILDING PERMIT APPROVAL
__X__ CERTIFICATE OF OCCUPANCY (PERM)
_____ CERTIFICATE OF OCCUPANCY (TEMP)
_____ GRADING PERMIT APPROVAL
_____ PAVING PERMIT APPROVAL
_____ WORK ORDER APPROVAL
_____ OTHER (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED:
_____ YES
_____ NO
_____ COPY PROVIDED

9-13-12

SUBMITTED BY: Fred Arfman — DATE: 9/13/2012
Isaacson & Arfman, P.A.

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:

1. **Conceptual Grading and Drainage Plan**: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.

2. **Drainage Plans**: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.

3. **Drainage Report**: Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more.

DRAINAGE CERTIFICATION

I, Fred C. Arfman, NMPE 7322, of the firm Isaacson & Arfman, P.A. 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. The record information edited onto the original design document has been obtained by Surv-Tek, Inc., NMPS 9750. I further certify that I have personally visited the project site on September 7, 2012 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 Permanent Certification of Occupancy.

The shown wall along the westerly property line was not constructed. The Owner negotiated a "Temporary License Agreement" with the adjacent property owner to make the grade transition happen by regarding along the common property line. Therefore, this certification / plan represents the as-built condition.

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.

FRED C. ARFMAN NEW MEXICO 7322 REGISTERED PROFESSIONAL ENGINEER

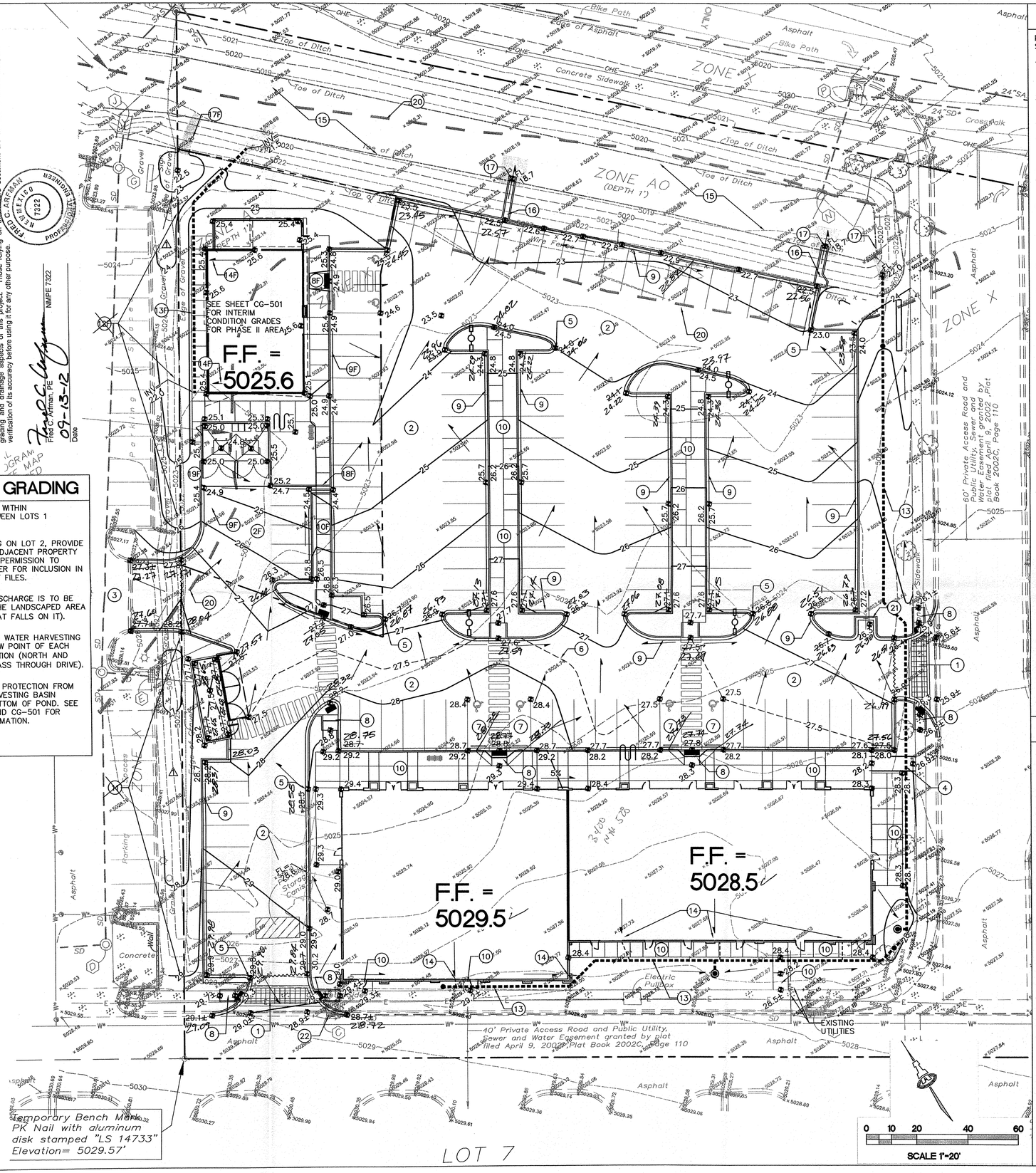
Fred C. Arfman, PE NMPE 7322

09-13-12
Date

⚠OFF-SITE GRADING

TRANSITION GRADE WITHIN LANDSCAPING BETWEEN LOTS 1 AND 2:

- PRIOR TO GRADING ON LOT 2, PROVIDE A LETTER FROM ADJACENT PROPERTY OWNER GRANTING PERMISSION TO GRADE TO ENGINEER FOR INCLUSION IN C.O.A. HYDROLOGY FILES.
- NO DEVELOPED DISCHARGE IS TO BE RELEASED INTO THE LANDSCAPED AREA (OTHER THAN WHAT FALLS ON IT).
- PROVIDE SHALLOW WATER HARVESTING BASIN AT THE LOW POINT OF EACH LANDSCAPED SECTION (NORTH AND SOUTH OF THE PASS THROUGH DRIVE).
- PROVIDE EROSION PROTECTION FROM EAST WATER HARVESTING BASIN OVERFLOW TO BOTTOM OF POND. SEE SHEET CG-101 AND CG-501 FOR ADDITIONAL INFORMATION.



ⓧ KEYED NOTES

KEYED NOTES '#' REPRESENT FUTURE PHASE II CONSTRUCTION. SEE SHEET CG-501 FOR INTERIM GRADING.

1. CONSTRUCT NEW SITE ACCESS WITH WATERBLOCK TO ELEVATIONS SHOWN. PROVIDE SMOOTH RIDING TRANSITION TO EXISTING. SEE ARCHITECTURAL FOR DETAILS.
2. CONSTRUCT NEW PAVING AT ELEVATIONS SHOWN. SEE ARCHITECTURAL FOR EXTENTS AND PAVING DETAILS.
3. EXISTING PAVING TO REMAIN.
4. CONSTRUCT RAMP WITH GUARDRAILS TO TRANSITION TO EXISTING CONCRETE WALK AT 1:12 MAX. SLOPE. SEE ARCHITECTURAL FOR DETAILS.
5. SPOT ELEVATIONS WITHIN FLOWLINE REPRESENT FLOWLINE UNLESS NOTED. ADD 0.5' TYPICAL FOR TOP OF ADJACENT CURB OR WALK ELEVATIONS.
6. ONE-HALF FOOT DESIGN CONTOURS (0.5') SHOWN DASHED THIS AREA TO CLARIFY GRADING CONCEPT.
7. CONSTRUCT HANDICAP PARKING AREA AT ELEVATIONS SHOWN. SLOPE WITHIN HANDICAP PARKING AREA TO MEET ADA REQUIREMENTS. MAX. SLOPE = 2% IN ANY DIRECTION.
8. CONSTRUCT 1:12 (MAX.) RAMP TO ADA STANDARDS. SEE ARCHITECTURAL FOR DETAILS.
9. CONSTRUCT CONCRETE MEDIAN CURB AND GUTTER. SEE SHEET CG-501 FOR DETAIL.
10. CONSTRUCT CONCRETE PEDESTRIAN WALKS AND PATIOS AT ELEVATIONS SHOWN.
11. ~~CONSTRUCT GARDEN WALL (MAXIMUM RETAINING = 30") WITHIN PROPERTY TO ACHIEVE GRADES SHOWN.~~ TOP OF WALL VARIES ⚠ SEE PLAN. ~~(DESIGN BY OTHERS).~~
12. ~~CONSTRUCT GARDEN WALL (MAXIMUM RETAINING = 30") WITHIN PROPERTY TO ACHIEVE GRADES SHOWN.~~ TOP OF WALL ⚠ELEVATION = 5024.9 TYPICAL. ~~(DESIGN BY OTHERS).~~
13. CONSTRUCT NEW STORM DRAIN SYSTEM. SEE CG-501 DETAILS.
14. ALL ROOF DISCHARGE TO BE PIPED DIRECTLY TO STORM DRAIN SYSTEM. SEE ARCHITECTURAL AND PLUMBING PLAN(S) FOR ROOF DRAIN LOCATIONS AND SIZES. EXTEND ROOF DRAINS TO STORM DRAIN USING WATERTIGHT FITTINGS.
15. EXISTING DETENTION POND WITH CONTROLLED DISCHARGE TO ALAMEDA PUBLIC STORM DRAIN SYSTEM. TOP OF LANDSCAPE MATERIAL TO BE AT 5018.7 PER ORIGINAL DESIGN. REESTABLISH ALL SLOPES AND RESEED ALL DISTURBED AREAS.
16. CONSTRUCT 2' WIDE (BOTTOM WIDTH) CONCRETE RUNDOWN. SEE CG-501 FOR DETAIL.
17. CONSTRUCT 4.0' WIDE F.F. ROCK SWALE AT PIPE OUTLET (2 LOCATIONS) AND 10' WIDE X 10' LONG X 12" DEEP F.F. ROCK PAD AT BOTTOM OF CONCRETE RUNDOWN (2 LOCATIONS). SEE GENERAL NOTE '1' AND SHEET CG-501.
18. INSTALL THREE (3) 4" DIA. PIPES THROUGH WALK TO PASS FLOW. SLOPE @ 2%. SEE CG-501 FOR DETAIL.
19. PROVIDE SHALLOW WATER HARVESTING AREA (12" MAX.) TO COLLECT MINOR FLOW, UTILIZE FOR LANDSCAPING AND RELEASE EXCESS TO PAVEMENT.
20. EXISTING FLOODPLAIN LIMIT (ZONE AO 1' DEPTH). ELEVATION CERTIFICATE REQUIRED FOR PHASE II BUILDING.
21. PROVIDE 12" WIDE OPENING IN CURB TO PASS MINOR FLOW TO LANDSCAPE.
22. MODIFY EXISTING STORM DRAIN INLET TO C.O.A. TYPE 'D' PER C.O.A. STD. DWG. 2206. MATCH RIM ELEVATION.

GENERAL NOTES

A. COORDINATE WORK WITH SITE PLAN AND UTILITY PLAN.

B. ALL TRASH, DEBRIS, & SURFACE VEGETATION SHALL BE CLEARED AND LEGALLY DISPOSED OF OFFSITE.

C. FINAL GRADES SHOWN REPRESENT TOP OF FINISH MATERIAL (I.E. TOP OF CONCRETE, TOP OF CONCRETE BUILDING PAD, TOP OF PAVEMENT MATERIAL, TOP OF LANDSCAPING MATERIAL, ETC.). CONTRACTOR SHALL GRADE, COMPACT SUBGRADE AND DETERMINE EARTHWORK ESTIMATES BASED ON ELEVATIONS SHOWN MINUS FINISH MATERIAL THICKNESSES.

D. MINIMUM SLOPES SHALL BE 1% UNLESS OTHERWISE NOTED.

E. EXISTING UTILITY LINES ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND MAY BE INCOMPLETE OR OBSOLETE. SUCH LINES MAY OR MAY NOT EXIST WHERE SHOWN OR NOT SHOWN. ALL UTILITIES SHOULD BE FIELD VERIFIED AND LOCATED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES.

F. THE ENVIRONMENTAL PROTECTION AGENCY REQUIRES A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR PROJECTS WHERE CONSTRUCTION ACTIVITIES (INCLUDING OTHER LAND-DISTURBING ACTIVITIES) DISTURB ONE ACRE OR MORE (BY OTHERS).

G. ADJUST RIMS OF EXISTING UTILITY FEATURES AS NECESSARY TO MATCH NEW GRADES, TYPICAL.

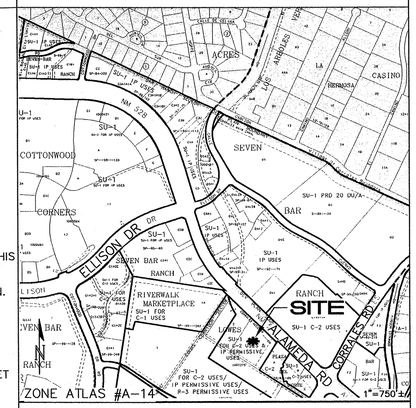
H. WHERE NEW GRADES ARE SHOWN AS 'MATCH' OR '±', TRANSITIONS TO EXISTING INFRASTRUCTURE SHALL BE SMOOTH, SHALL ALLOW FOR POSITIVE DRAINAGE AS INTENDED ON PLAN AND SHALL MEET ADA REQUIREMENTS.

I. ALL PERMANENT EROSION PROTECTION TO BE 12" DEPTH OF 6" AVG. DIA. FRACTURED FACED ROCK (F.F. ROCK) OVER GEOTEX 50 NON-WOVEN GEOTEXTILE.

J. OWNER SHALL MAINTAIN EROSION PROTECTION ELEMENTS. ENGINEER RECOMMENDS THAT OWNER INSPECT SITE YEARLY AND AFTER EACH RAINFALL TO MAINTAIN GRADES, IDENTIFY NEW AREAS OF EROSION AND INSTALL ADDITIONAL EROSION PROTECTION AS NEEDED BASED ON ACTUAL OCCURRENCES.

K. LANDSCAPED AREAS SHALL BE DEPRESSED TO RETAIN MOISTURE THAT FALLS ON THEM FOR INFILTRATION. DO NOT DEPRESS LANDSCAPING WITHIN 10' OF BUILDING.

GENERAL NOTES



PROJECT INFORMATION

PROPERTY: THE SITE IS AN UNDEVELOPED PROPERTY ZONED 'SU-1 FOR C-2 USES & IP PERMISSIVE USES' LOCATED WITHIN C.O.A. VICINITY MAP A-14. THE SITE IS BOUND TO THE NORTH BY N.M. STATE HIGHWAY 528, AND TO THE WEST, SOUTH AND EAST BY DEVELOPED COMMERCIAL PROPERTY.

PROPOSED IMPROVEMENTS: THE PROPOSED IMPROVEMENTS INCLUDE A 14,000 SF(±) MULTI TENANT BUILDING AND A 2200 SF(±) RESTAURANT WITH ASSOCIATED ASPHALT PAVED ACCESS, PARKING AND LANDSCAPING.

LEGAL: LOT 3, LOWES SUBDIVISION, ALBUQUERQUE, NM

BENCHMARK: VERTICAL DATUM IS BASED UPON THE ALBUQUERQUE CONTROL STATION MONUMENT "NM-448-N12", ELEVATION = 5,026.132 FEET (NAVD 1988) AS PUBLISHED.

OFF-SITE: NO OFF-SITE DRAINAGE AFFECTS THIS PROPERTY.

FLOOD HAZARD: PER BERNALILLO COUNTY FIRM MAP #35001C0109G DATED SEPTEMBER 26, 2008, THE MAJORITY OF THE SITE IS LOCATED WITHIN FLOODZONE 'X' DESIGNATED AS AREAS DETERMINED TO BE OUTSIDE THE 0.2-PERCENT-ANNUAL-CHANCE FLOODPLAIN. A PORTION OF THE NORTH AND WEST ENDS OF THE PROPERTY FALLS WITHIN FLOODZONE AO (DEPTH 1') DESIGNATED AS AREAS OF SHEET-FLOW SHALLOW FLOODING TO A DEPTH OF 1'.

DRAINAGE PLAN CONCEPT:

A PRIVATE STORM DRAIN SYSTEM WILL BE INSTALLED TO COLLECT ROOF DISCHARGE AND ROUTE TO THE EXISTING MASTER PLANNED DETENTION POND. THE REMAINDER OF THE SITE WILL SURFACE FLOW TO THE MASTER PLANNED DETENTION POND. CONTROLLED RUNOFF FROM THE POND IS PASSED TO THE EXISTING ALAMEDA STORM SEWER AT THE ALLOWABLE RATE.

LEGEND

27	PROPOSED CONTOUR – 1' INCREMENT
27.5	PROPOSED CONTOUR – 0.5' INCREMENT
78.3	PROPOSED SPOT ELEVATION
	FLOW ARROW
F.F.=XXXX.XX	FINISH FLOOR ELEVATION
78.3±	EXISTING ELEVATION (±) TO MATCH. PROVIDE SMOOTH TRANSITION.
	PROPOSED RETAINING WALL
	GRADE BREAK

FRED C. ARFMAN NEW MEXICO 7322 LICENSED PROFESSIONAL ENGINEER 09.13.12

ISAACSON & ARFMAN, P.A.
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1899 CG-101.dwg Apr 24,2012

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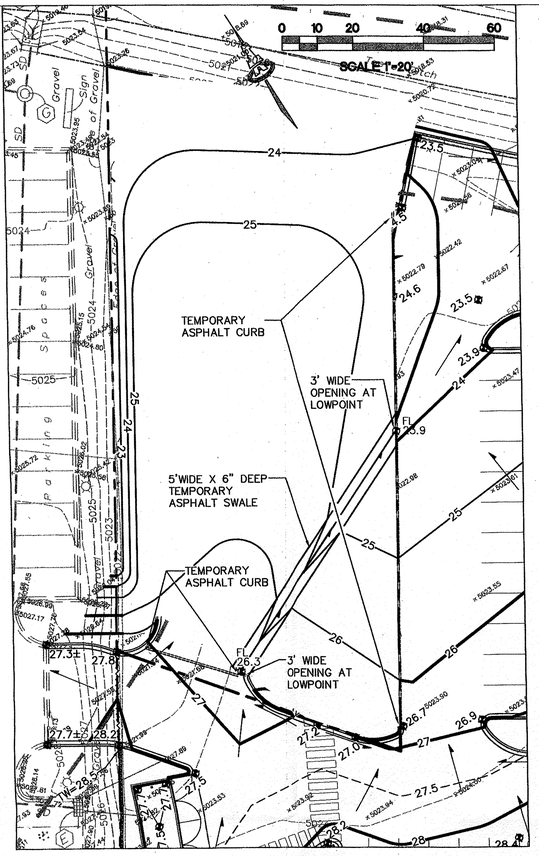
LOWE'S SUBDIVISION, LOT 3

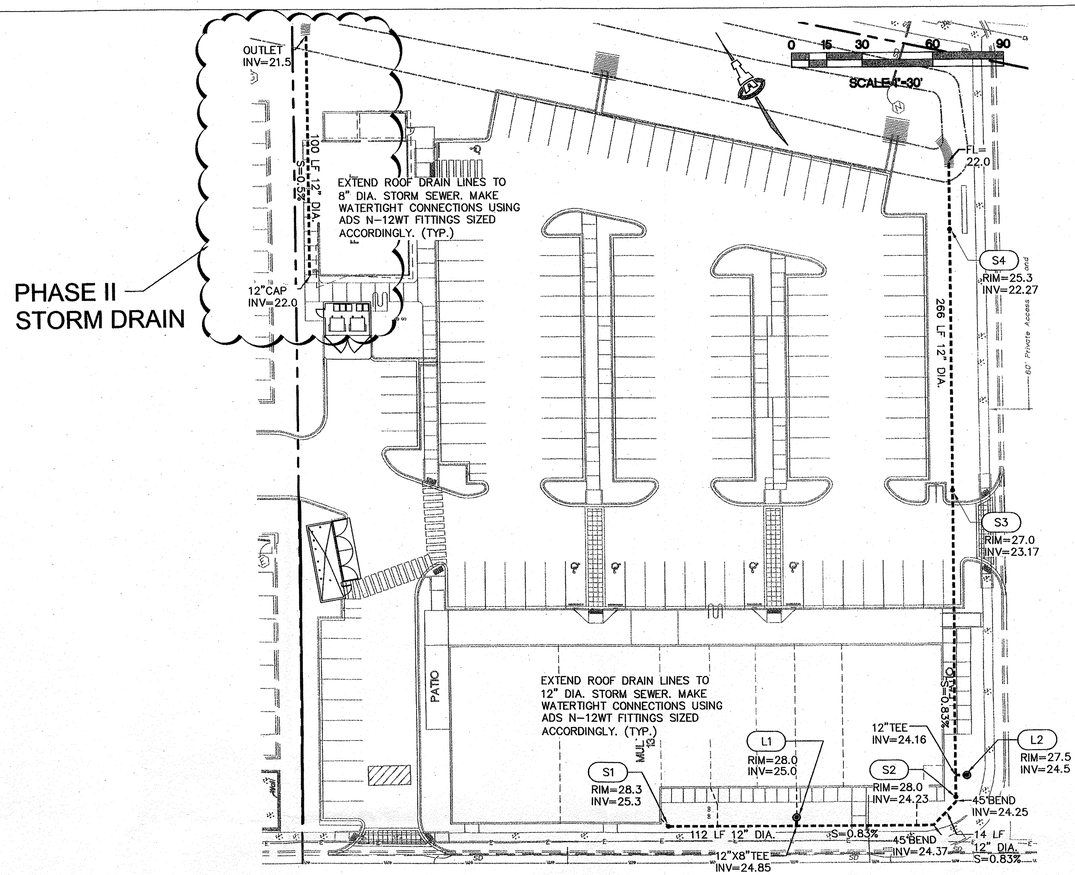
GRADING AND DRAINAGE PLAN

Date:	No.	Revision	Date	Job No.
01.24.12	⚠	STORM DRAIN REVISED	4/23/12	1899
Drawn By: BJB				CG-101
Ckd By: FCA				SH. OF



1 PHASE II AREA: INTERIM GRADES

Scale: 1"=20'



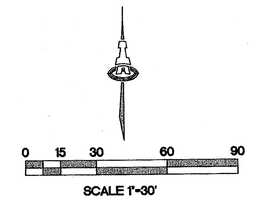
2 STORM DRAIN EXHIBIT

Scale: 1"=30'

LEGEND

(L#) IN-LINE DRAIN: DOMED GRATE. SEE DETAIL THIS SHEET.

(S#) IN-LINE DRAIN CLEANOUT: SOLID LID. SEE DETAIL THIS SHEET.

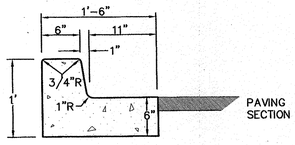


STORM DRAIN NOTES

A. INSTALL ALL STORM DRAIN INLETS AND PIPE PER MANUFACTURER'S SPECIFICATIONS.

B. ALL STORM DRAIN LINES AND FITTINGS TO BE ADS N-12WT WATERTIGHT O.A.E. UNLESS OTHERWISE NOTED.

C. STORM DRAIN SYSTEM WILL REQUIRE REGULAR MAINTENANCE TO ENSURE PROPER FUNCTIONING DURING STORM EVENTS. ENGINEER RECOMMENDS THAT PROPERTY OWNER PUT IN PLACE INSPECTION AND MAINTENANCE CRITERIA SCHEDULED TO OCCUR MONTHLY AND AFTER EACH STORM EVENT.

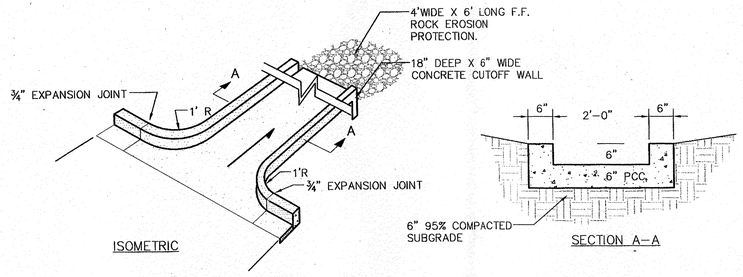


GENERAL NOTES

1. PROVIDE CONST. CONTROL JOINTS @ 6' O.C. MAX. AND 1/2" EXPANSION JOINTS @ 48' O.C. MAX
2. EDGES SHOULD BE REMOVED WITH 3/8" EDGING TOOL
3. MEDIAN C & G REQUIRE FULL FORM ON ALL FACES

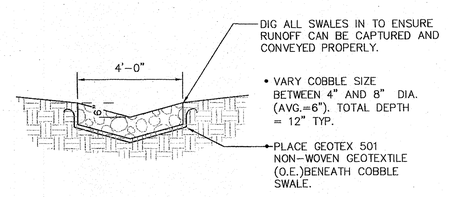
3 MEDIAN CURB AND GUTTER

Scale: N.T.S.



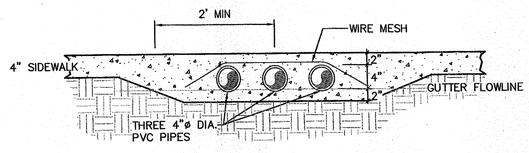
4 CONCRETE RUNDOWN

Scale: N.T.S.



5 FRACTURED FACE ROCK SWALE

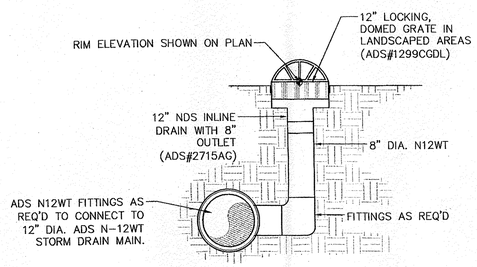
Scale: N.T.S.



6 UNDERWALK PIPE DRAINS

N.T.S.

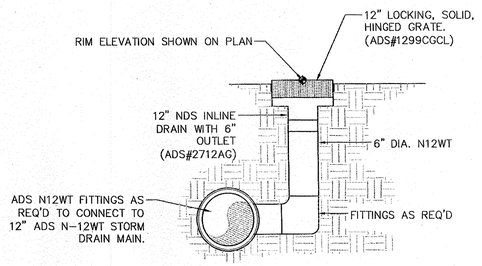
Scale: N.T.S.



7 IN-LINE DRAIN: DOMED GRATE

Scale: N.T.S.

SEE STORM DRAIN EXHIBIT (L#)



8 IN-LINE DRAIN CLEANOUT: SOLID LID

Scale: N.T.S.

SEE STORM DRAIN EXHIBIT (S#)

FRED C. ARFMAN NEW MEXICO 7322 LICENSED PROFESSIONAL ENGINEER 2-06-12

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1899 CG-101.dwg Feb 08,2012

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LOWE'S SUBDIVISION, LOT 3

PAVING AND DRAINAGE DETAILS

Date:	No.	Revision	Date	Job No.
01.24.12				1899
Drawn By: BJB				CG-501
Ckd By: FCA				SH. OF