

CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

May 16, 2017

Fred Arfman, P.E.
Isaacson & Arfman, P.A.
128 Monroe St. N.E
Albuquerque, NM, 87108

RE: **Galles Chevrolet Grading and Drainage Plan**
University and Candelaria
Engineer's Stamp Date 5/15/2017
Hydrology File: H15D065

Dear Mr. Arfman:

PO Box 1293

Based upon the information provided in the submittal received on 5/15/2017 the above-referenced Grading and Drainage Plan is approved for Grading, Paving, and Building Permit.

Albuquerque

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required. If you have any questions, please contact me at 924-3695 or dpeterson@cabq.gov.

New Mexico 87103

Sincerely,

www.cabq.gov

Dana Peterson, P.E.
Senior Engineer, Planning Dept.
Development Review Services



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: _____ **Building Permit #:** _____ **City Drainage #:** _____
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: _____
City Address: _____

Engineering Firm: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____
bryanb@iacivil.com

Owner: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Architect: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Other Contact: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Check all that Apply:

DEPARTMENT:

☒ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION
☐ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

☒ ENGINEER ARCHITECT CERTIFICATION
☐ CONCEPTUAL G & D PLAN
☒ GRADING PLAN
☐ DRAINAGE MASTER PLAN
☐ DRAINAGE REPORT
☐ CLOMR/LOMR
☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ TRAFFIC IMPACT STUDY (TIS)
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
☐ OTHER (SPECIFY) _____

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

☒ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY
☐ PRELIMINARY PLAT APPROVAL
☐ SITE PLAN FOR SUB'D APPROVAL
☐ SITE PLAN FOR BLDG. PERMIT APPROVAL
☐ FINAL PLAT APPROVAL
☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
☐ FOUNDATION PERMIT APPROVAL
☒ GRADING PERMIT APPROVAL
☐ SO-19 APPROVAL
☒ PAVING PERMIT APPROVAL
☐ GRADING/ PAD CERTIFICATION
☐ WORK ORDER APPROVAL
☐ CLOMR/LOMR
☐ PRE-DESIGN MEETING
☐ OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: ☒ Yes ☐ No

DATE SUBMITTED: May 15, 2017 By: Fred C. Arfman

COA STAFF: _____ ELECTRONIC SUBMITTAL RECEIVED: _____

CIVIL GENERAL NOTES

- A. THE CONTRACTOR SHALL ABIDE BY ALL STATE, LOCAL, AND FEDERAL LAWS, CODES, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA AND ADA REQUIREMENTS.
- B. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL EXCEPT AS OTHERWISE STATED ON OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT EDITION OF THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS (COA SPEC.) / NMDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION (NMDOT SPEC.) / MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- C. NO WORK SHALL BE PERFORMED WITHOUT THE APPROPRIATE PERMITS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION, OR PRIOR TO OCCUPANCY, AS APPROPRIATE. IF PERMITS ARE DELAYED OR ISSUED WITH CONDITIONS, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ARCHITECT IMMEDIATELY.
- D. COORDINATE WORK WITH SITE PLAN, UTILITY PLAN, DEMOLITION PLAN, AND LANDSCAPE PLAN.
- E. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING OBSTRUCTIONS, AND CONDITION OF ALL EXISTING INFRASTRUCTURE PRIOR TO CONSTRUCTION. REPORT ALL DISCREPANCIES TO THE ARCHITECT / ENGINEER AND VERIFY THE ARCHITECT / ENGINEER'S INTENT BEFORE PROCEEDING.
- F. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE SAFETY.
- G. THE CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS ON SITE AT ALL TIMES. THE CONTRACTOR SHALL NOT SCALE DRAWINGS. ONLY WRITTEN DIMENSIONS OR KEYED NOTES SHALL BE USED.
- H. CONTRACTOR SHALL OBTAIN ALL REQUIRED INSPECTIONS OF THE WORK. CONTRACTOR SHALL REGULARLY UPDATE OWNER AND ARCHITECT REGARDING THE STATUS OF THE INSPECTIONS.
- I. CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT STRUCTURES RESULTING FROM THE CONSTRUCTION PROCESS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
- J. CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS. EQUIPMENT SHALL ONLY OBSTRUCT DESIGNATED TRAFFIC LANES IF APPROPRIATE BARRICADING PERMITS HAVE BEEN OBTAINED. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL IN THE RIGHT-OF-WAY.
- K. THE CONTRACTOR SHALL PROVIDE A CONSTRUCTION TRAFFIC CONTROL AND SIGNING PLAN THAT CONFORMS TO THE LATEST EDITION OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND LOCAL REQUIREMENTS. THE CONTRACTOR SHALL OBTAIN BARRICADING PERMITS FROM THE APPROPRIATE AUTHORITIES PRIOR TO ANY CONSTRUCTION WORK ON OR ADJACENT TO EXISTING STREETS.
- L. THE CONTRACTOR SHALL MAINTAIN ALL BARRICADING AND CONSTRUCTION SIGNING AT ALL TIMES. THE CONTRACTOR SHALL VERIFY THE PROPER LOCATION OF ALL BARRICADING AT THE END AND BEGINNING OF EACH DAY.
- M. 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. CONTRACTOR SHALL CONTACT NM-811 FOR UTILITY LINE SPOTS FIVE WORKING DAYS PRIOR TO CONDUCTING SITE FIELD WORK. CONTRACTOR SHALL FIELD VERIFY AND LOCATE ALL UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. 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. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF NECESSARY DRY UTILITY ADJUSTMENTS.
- N. FIVE WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NM811 (811) FOR LOCATION OF EXISTING UTILITIES.
- O. ALL SITE PREPARATION, GRADING OPERATIONS, FOUNDATION CONSTRUCTION, AND PAVEMENT INSTALLATION WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT, WHICH WILL BE PROVIDED BY THE OWNER OR ARCHITECT. ALL OTHER WORK SHALL, UNLESS OTHERWISE NOTED IN THE PLANS, BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATION (FIRST PRIORITY), AND/OR NMDOT STANDARD SPECIFICATIONS FOR PUBLIC WORK (SECOND PRIORITY.)
- P. ALL TRASH, DEBRIS, & SURFACE VEGETATION SHALL BE CLEARED AND LEGALLY DISPOSED OFFSITE.
- Q. VIBRATORY COMPACTION SHALL NOT BE USED OVER IN-PLACE UTILITIES.
- R. SOIL TESTING AND INSPECTION SERVICES DURING SITE OPERATIONS ARE REQUIRED. CONTRACTOR SHALL ALLOW TESTING LABS TO INSPECT AND APPROVE COMPACTED SUBGRADES, BACKFILL, AND FILL LAYERS BEFORE FURTHER CONSTRUCTION WORK IS DONE. SHOULD COMPACTION TESTS INDICATE INADEQUATE DENSITY, CONTRACTOR SHALL PROVIDE ADDITIONAL COMPACTION AND TESTING AT THE CONTRACTOR'S SOLE EXPENSE.
- S. CONTRACTOR SHALL PROVIDE CONSTRUCTION STAKING. CONTRACTOR SHALL LOCATE AND PRESERVE ALL BOUNDARY CORNERS AND REPLACE ANY LOST OR DISTURBED CORNERS AT CONTRACTOR'S SOLE EXPENSE. PROPERTY CORNERS SHALL ONLY BE RESET BY A REGISTERED LAND SURVEYOR. CONTRACTOR SHALL PROVIDE CONSTRUCTION STAKING TO FACILITATE ACCURACY IN CONSTRUCTION STAKING, UPON WRITTEN REQUEST FROM THE CONTRACTOR, A FILE CONTAINING THE ELECTRONIC DATA COMPRISING THE SITE CIVIL DRAWINGS WILL BE FORWARDED TO THE LICENSED LAND SURVEYOR TO PERFORM CONSTRUCTION STAKING. ALL SITE CONSTRUCTION LAYOUT MUST BE PERFORMED BY A LICENSED SURVEYOR USING ELECTRONIC DATA PROVIDED IN AUTOCAD *.DWG (CURRENT VERSION) BY ISAACSON & ARFMAN, P.A. CONTACT PROJECT CIVIL ENGINEER, FRED. C. ARFMAN, PE AT (505)-268-8842. IN ORDER TO MAINTAIN THE INTEGRITY OF HORIZONTAL AND VERTICAL CONTROL FOR THE SITE, THE SURVEYOR EMPLOYED BY THE CONTRACTOR TO PERFORM CONSTRUCTION LAYOUT STAKING SHALL SET AND PROTECT ADDITIONAL TRAVERSE POINTS OUTSIDE THE AREAS OF CONSTRUCTION ACTIVITY.

- T. ADJUST ANY RIMS OF EXISTING UTILITY FEATURES AS NECESSARY TO MATCH NEW GRADES. UTILITIES IN PAVED AREAS SHALL BE HS-25 TRAFFIC RATED.
- U. CONTRACTOR SHALL COMPLY WITH LOCAL REGULATIONS FOR RESEEDING OF DISTURBED AREAS.

GRADING GENERAL NOTES

- A. GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN.
- B. PROPOSED SPOT AND CONTOUR ELEVATIONS 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.
- C. IF FIELD GRADE ADJUSTMENTS ARE REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT / ENGINEER.
- D. THE ENVIRONMENTAL PROTECTION AGENCY (EPA) AND THE CITY OF ALBUQUERQUE REQUIRE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP), AN NPDES PERMIT, AND AN EROSION AND SEDIMENT CONTROL (ESC) PERMIT FOR PROJECTS WHERE CONSTRUCTION ACTIVITIES MEET THE EPA THRESHOLD. (SWPPP, NPDES PERMIT, AND ESC PLAN BY OTHERS.) A CURRENT CITY-APPROVED ESC PERMIT MUST BE INCLUDED WITH THE CONTRACTOR'S SUBMITTAL FOR A ROUGH GRADING, GRADING, PAVING, BUILDING, OR WORK ORDER PERMIT. CONTRACTOR SHALL COORDINATE WITH OWNER TO DETERMINE WHO WILL PREPARE SWPPP AND INSPECT REQUIRED ELEMENTS.
- E. IF THE SITE IS SMALL ENOUGH NOT TO REQUIRE A SWPPP/NPDES PERMIT (LESS THAN ONE ACRE), THE CONTRACTOR SHALL STILL BE RESPONSIBLE FOR USING EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP'S) TO ENSURE THAT NO SOIL ERODES FROM THE SITE ON ADJACENT PUBLIC RIGHT-OF-WAY.
- F. MEASURES REQUIRED FOR EROSION AND SEDIMENT CONTROL SHALL BE INCIDENTAL TO THE PROJECT COST.
- G. ALL NEW PAVEMENT SURFACES SHALL BE CONSTRUCTED WITH POSITIVE SLOPE AWAY FROM BUILDINGS AND POSITIVE SLOPE TOWARD EXISTING AND/OR PROPOSED DRAINAGE PATHS. PAVING AND ROADWAY GRADES SHALL BE ±0.1' FROM PLAN ELEVATIONS. BUILDING PAD ELEVATION SHALL BE ±0.05' FROM PLAN ELEVATION.
- H. WHERE GRADES BETWEEN NEW AND EXISTING ARE SHOWN AS 'MATCH' OR '+', TRANSITIONS SHALL BE SMOOTH.
- I. PAVEMENT GRADES IN MARKED HANDICAPPED PARKING AREAS SHALL NOT EXCEED 2.0% IN ANY DIRECTION. FOR ALL ACCESSIBLE AREAS, MAXIMUM ALLOWABLE CROSS SLOPE IS 2.0% AND MAXIMUM LONGITUDINAL SLOPE WITHOUT RAMP IS 5.0%. FOLLOW ALL ADA ACCESSIBILITY GUIDELINES OR CITY CODES, WHICHEVER IS MORE STRINGENT.
- J. ALL EROSION PROTECTION TO BE INSTALLED AS 6" AVG. DIA. ANGULAR FACED ROCK (F.F. ROCK) PLACED OVER GEOTEX 501 NON-WOVEN GEOTEXTILE (O.E.). NOTE: PERMANENT TURF REINFORCEMENT MATERIAL (LANDLOK TRM 450 O.E.) MAY BE SUBSTITUTED AT ALL AREAS REFERENCING F.F. ROCK EROSION PROTECTION.
- K. SIDESLOPES STEEPER THAN 3:1 BUT LESS THAN 2:1 MUST HAVE PERMANENT EROSION PROTECTION INSTALLED, TYPICAL. NO SLOPE SHALL BE STEEPER THAN 2:1.
- L. POND DESIGN PARAMETERS AND STORMWATER CONTROL MEASURES SHOWN ON THIS PLAN (TOP OF POND, BOTTOM OF POND, SIZE OF ORIFICE, AREA OF POND, ETC.) TO BE STRICTLY ADHERED TO FOR CERTIFICATION PURPOSES. SEE DETAIL SHEET FOR ADDITIONAL INFORMATION.
- M. POST-CONSTRUCTION MAINTENANCE FOR PRIVATE STORMWATER FACILITIES WILL BE THE RESPONSIBILITY OF THE FACILITIES OWNER. PERIODIC INSPECTION AND CERTIFICATIONS OF THE FACILITIES MAY BE REQUIRED BY THE CITY ENGINEER. ENGINEER RECOMMENDS THAT OWNER INSPECT SITE YEARLY AND AFTER EACH RAINFALL TO IDENTIFY NEW AREAS OF EROSION AND INSTALL ADDITIONAL EROSION PROTECTION AS NEEDED BASED ON ACTUAL OCCURRENCES.
- N. FOR ENGINEER'S CERTIFICATION OF SUBSTANTIAL COMPLIANCE (FOR CERTIFICATE OF OCCUPANCY) CONTRACTOR SHALL PROVIDE AN AUTOCAD FORMAT AS-BUILT SURVEY PREPARED BY A LICENSED SURVEYOR WHICH INCLUDES:
- AS-BUILT SPOT ELEVATIONS AT EACH DESIGN SPOT ELEVATION SHOWN ON THE APPROVED PLAN;
 - TOP AND BOTTOM ELEVATIONS AS REQUIRED TO DEFINE THE PERIMETER OF PONDS (TO BE USED BY ENGINEER TO CALCULATE AS-BUILT VOLUME PROVIDED);
 - POND OVERFLOW ELEVATIONS
 - ALL CONSTRUCTION, INCLUDING DRAIN INLETS, PIPES AND PONDS SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN IN ORDER TO RECEIVE ENGINEER'S CERTIFICATION.
- P. GRADING OF FIRST FLUSH BASINS WILL BE INSPECTED AS PART OF ENGINEER'S CERTIFICATION FOR CERTIFICATE OF OCCUPANCY. DURING LANDSCAPING, FIRST FLUSH BASINS WILL BE SMOOTHLY INTEGRATED INTO LANDSCAPING WHILE MAINTAINING REQUIRED TOP AND BOTTOM ELEVATION, VOLUME AND INLET / OVERFLOW ELEVATIONS.

STORM DRAIN GENERAL NOTES

- A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE INSTALLATION OF ALL WORK RELATED TO PROPOSED STORM DRAINS SHOWN ON THIS PLAN INCLUDING: TRENCHING, BACKFILL, SUPPORTS, INLET AND MANHOLE COLLARS, MANHOLES, WATER QUALITY FEATURES, EROSION CONTROL FEATURES, TESTING, CLEANING, AND STERILIZING. ANY WORK NOT ACCEPTED BY THE ARCHITECT OR ENGINEER DUE TO IMPROPER WORKMANSHIP OR LACK OF PROPER COORDINATION SHALL BE REMOVED AND CORRECTLY INSTALLED AT THE CONTRACTOR'S EXPENSE, AS DIRECTED.
- B. MINIMUM COVER FOR STORM DRAIN PIPES SHALL BE 12", UNLESS OTHERWISE NOTED.
- C. STORM DRAINS SHALL BE INSTALLED AFTER COMPLETION OF THE SITE ROUGH GRADING.
- D. STORM DRAINS SHALL BE INSTALLED PRIOR TO SURFACE IMPROVEMENTS SUCH AS PAVEMENT, SIDEWALKS, AND LANDSCAPING.
- E. CONTRACTOR SHALL BE RESPONSIBLE FOR CONNECTIONS TO ROOF DOWNSPOUTS AND ALL NECESSARY FITTINGS. FITTING COSTS SHALL BE INCIDENTAL.
- F. TRENCHING, BORING, AND JACKING SHALL BE CONSTRUCTED IN ACCORDANCE WITH COA SPEC. SECT. 700. ALL BACKFILL SHALL BE COMPACTED TO A MINIMUM 95% DENSITY PER ASTM D-1557.
- G. ALL INLET AND AREA DRAIN RINGS & GRATES, MANHOLE RINGS & COVERS, AND OTHER SURFACE ITEMS FOR THE STORM DRAINS SHALL BE ADJUSTED TO FINISHED GRADE, UNLESS OTHERWISE NOTED ON THE PLANS.
- H. ALL STORM DRAIN CROSSINGS OF WATER AND SEWER LINES SHALL HAVE 18" MIN. CLEARANCE. IF 18" CLEARANCE IS NOT POSSIBLE, CONTACT THE ENGINEER IMMEDIATELY.
- I. RCP PIPES, PP PIPES, CONCRETE INLETS, MANHOLES, AND CLEANOUTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH COA SPEC. SECT. 900.
- J. HDPE PIPE SHALL BE ADS N-12 (WATERTIGHT) OR ENGINEER APPROVED EQUIVALENT. HDPE PIPE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
- K. PVC PIPES SHALL BE PVC SDR-35, INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
- L. STORM DRAINS SHALL BE INSTALLED AT INVERTS AND SLOPES SPECIFIED ON THE PLANS. THE PIPE SHALL DRAIN AT A CONSTANT SLOPE BETWEEN FITTINGS AND MANHOLES. THE PIPE SHALL DRAIN TOWARD THE OUTLET AT ALL LOCATIONS.

UTILITY GENERAL NOTES

- A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE INSTALLATION OF ALL WORK RELATED TO PROPOSED UTILITIES SHOWN ON THIS PLAN INCLUDING: TRENCHING, BACKFILL, SUPPORTS, CLEANOUT PADS, SERVICE STOPS AND BOXES, SERVICE LINES, TESTING, CLEANING, AND STERILIZING. ANY WORK NOT ACCEPTED BY THE ARCHITECT OR ENGINEER DUE TO IMPROPER WORKMANSHIP OR LACK OF PROPER COORDINATION SHALL BE REMOVED AND CORRECTLY INSTALLED AT THE CONTRACTOR'S EXPENSE, AS DIRECTED.
- B. MINIMUM COVER SHALL BE 36" FOR WATERLINES AND 48" FOR SANITARY SEWER, EXCEPT AT BUILDING CONNECTIONS.
- C. UTILITY LINES SHALL BE INSTALLED AFTER COMPLETION OF THE SITE ROUGH GRADING.
- D. UTILITY LINES SHALL BE INSTALLED PRIOR TO SURFACE IMPROVEMENTS SUCH AS PAVEMENT, SIDEWALKS, AND LANDSCAPING.
- E. CONTRACTOR SHALL BE RESPONSIBLE FOR CONNECTIONS TO BUILDING PLUMBING AND ALL NECESSARY FITTINGS. FITTING COSTS SHALL BE INCIDENTAL. REFER TO THE MECHANICAL AND/OR PLUMBING PLANS FOR SERVICE CONNECTIONS.
- F. DRY UTILITY LOCATIONS AND DESIGN ARE NOT A PART OF THIS PLAN. CONTRACTOR SHALL COORDINATE WITH THE LOCAL DRY UTILITY COMPANIES TO DETERMINE THE SIZE, DEPTH, LOCATION, FITTINGS AND REQUIRED APPURTENANCES FOR THE DRY UTILITY SERVICE LINES ON THE SITE. REFER TO MECHANICAL AND ELECTRICAL PLANS FOR SERVICE CONNECTIONS.
- G. TRENCHING, BORING, AND JACKING SHALL BE CONSTRUCTED IN ACCORDANCE WITH COA SPEC. SECT. 700. ALL BACKFILL SHALL BE COMPACTED TO A MINIMUM 95% DENSITY PER ASTM D-1557.
- H. ALL WATER VALVE BOXES, MANHOLE RINGS & COVERS, AND OTHER SURFACE ITEMS FOR THE UTILITIES SHALL BE ADJUSTED TO FINISHED GRADE.
- I. ALL CROSSINGS OF WATER AND SEWER LINES SHALL HAVE 18" MIN. CLEARANCE. IF 18" CLEARANCE IS NOT POSSIBLE, BOTH SHALL PIPES BE ENCASED IN CONCRETE.
- J. VALVES, METERS, SERVICE LINES, METER AND VALVE BOXES, TAPPING SLEEVES, HYDRANTS, AND OTHER WATER APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH COA SPEC. SECT. 800.
- K. WATERLINES LESS THAN 4" DIAMETER SHALL BE COPPER TYPE K MEETING ASTM B 88 REQUIREMENTS. WATERLINES 4" IN DIAMETER OR LARGER SHALL BE PVC PIPE MEETING AWWA C900 DR-18 REQUIREMENTS.
- L. ALL FITTINGS AND COUPLINGS FOR WATERLINES LESS THAN 4" IN DIAMETER ARE TO BE COPPER, SOLDER JOINT FITTINGS IN ACCORDANCE WITH ASME 16.18 OR ASME B16.22.
- M. ALL FITTINGS AND COUPLINGS FOR WATERLINES 4" IN DIAMETER OR LARGER ARE TO BE MEGA LUG MECHANICAL JOINTS OR ENGINEER APPROVED EQUIVALENT.
- N. JOINTS SHALL BE RESTRAINED BY MEGA LUG HARNESSSES, OR ENGINEER APPROVED EQUIVALENT. JOINT RESTRAINTS SHALL BE INSTALLED AT DISTANCES FROM THE FITTINGS AS SHOWN ON THE JOINT RESTRAINT TABLE IN THESE PLANS.
- O. BACKFLOW PREVENTERS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- P. FIRE LINES SHALL USE PIPE MATERIALS LISTED AND APPROVED FOR FIRE SERVICE BY UNDERWRITERS LABORATORIES.
- Q. FIRE DEPARTMENT CONNECTIONS SHALL MEET UL 405, NFPA 1963, AND LOCAL FIRE DEPARTMENT REQUIREMENTS.
- R. ADJUST WATER AND FIRE LINES TO AVOID FOOTINGS, SEWER LINES, AND OTHER CONDUITS. INSTALL FITTINGS AS NEEDED.
- S. SEWER MANHOLES, CLEANOUTS, SEWER SERVICE TAPS, AND OTHER SEWER APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH COA SPEC. SECT. 900.
- T. SEWER SERVICE LINES SHALL BE INSTALLED AT A 2% MINIMUM SLOPE, UNLESS OTHERWISE SPECIFIED ON THE PLANS. THE PIPE SHALL DRAIN AT A CONSTANT SLOPE BETWEEN FITTINGS. THE PIPE SHALL DRAIN TOWARD THE SEWER MAIN AT ALL LOCATIONS.
- U. ALL SANITARY SEWER LINE MATERIALS SHALL BE PVC SDR-35 PIPE.

PAVING GENERAL NOTES

- A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE INSTALLATION OF ALL WORK RELATED TO PROPOSED PAVING SHOWN ON THIS PLAN INCLUDING: ASPHALT AND OR CONCRETE PAVING, CURBS, GUTTERS, SIDEWALKS, RAMPS, PAVEMENT MARKINGS AND SIGNAGE. ANY WORK NOT ACCEPTED BY THE ARCHITECT OR ENGINEER DUE TO IMPROPER WORKMANSHIP OR LACK OF PROPER COORDINATION SHALL BE REMOVED AND CORRECTLY INSTALLED AT THE CONTRACTOR'S EXPENSE, AS DIRECTED.
- B. ALL PAVING, INCLUDING ASPHALT PAVEMENT, CONCRETE PAVEMENT, CURBS, GUTTERS, SIDEWALKS, AND RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH COA SPEC. SECTION 300 / NMDOT SPEC SECTIONS 300 AND 400.
- C. ALL PAVEMENT MARKINGS AND SIGNAGE SHALL BE INSTALLED IN ACCORDANCE WITH COA SPEC. SECTION 400 / NMDOT SPEC. SECTION 700. / MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- D. ALL PAVEMENT INSTALLATION WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT, WHICH WILL BE PROVIDED BY THE OWNER OR ARCHITECT. ALL OTHER WORK SHALL, UNLESS OTHERWISE NOTED IN THE PLANS, BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT EDITION OF THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS (COA SPEC.) / NMDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION (NMDOT SPEC.) / MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)
- E. ADJUST ANY RIMS OR COVERS OF EXISTING UTILITY FEATURES AS NECESSARY TO MATCH NEW GRADES. RIMS AND COVERS IN PAVED AREAS SHALL BE HS-25 TRAFFIC RATED.
- F. ALL NEW PAVEMENT SURFACES SHALL BE CONSTRUCTED WITH POSITIVE SLOPE AWAY FROM BUILDINGS AND POSITIVE SLOPE TOWARD EXISTING AND/OR PROPOSED DRAINAGE PATHS. PAVING AND ROADWAY GRADES SHALL BE ±0.1' FROM PLAN ELEVATIONS. FINISHED FLOOR ELEVATION SHALL BE ±0.05' FROM PLAN ELEVATION.
- G. NEW PAVEMENT SLOPE SHALL BE A MINIMUM OF 1.0% FOR CONCRETE AND 1.5% FOR ASPHALT UNLESS NOTED OTHERWISE.

GALLES CHEVROLET
ALBUQUERQUE, NEW MEXICO
JAYNES CORPORATION

date: AUGUST, 2016
drawn by: V&A
checked by:RRV
revisions:

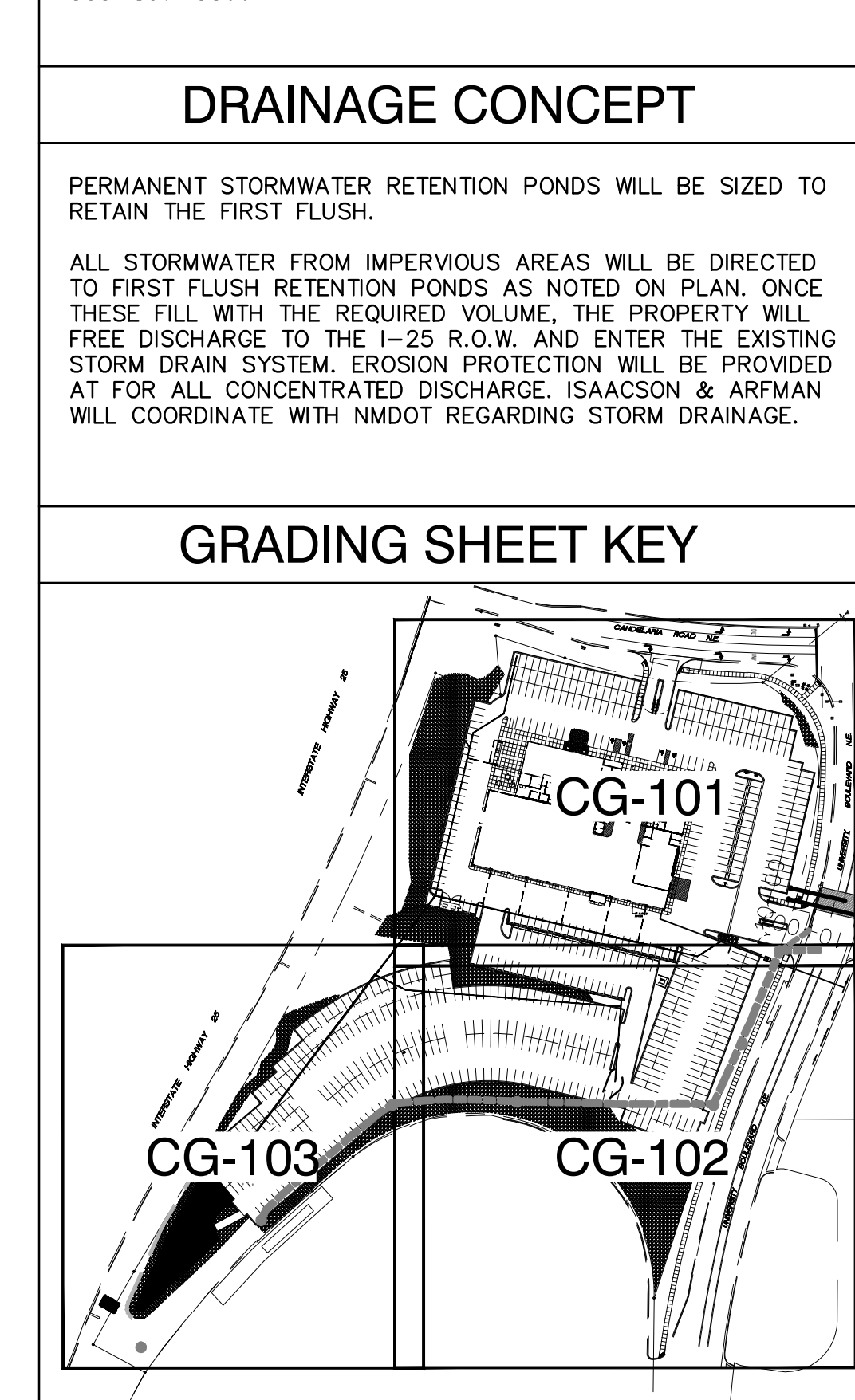
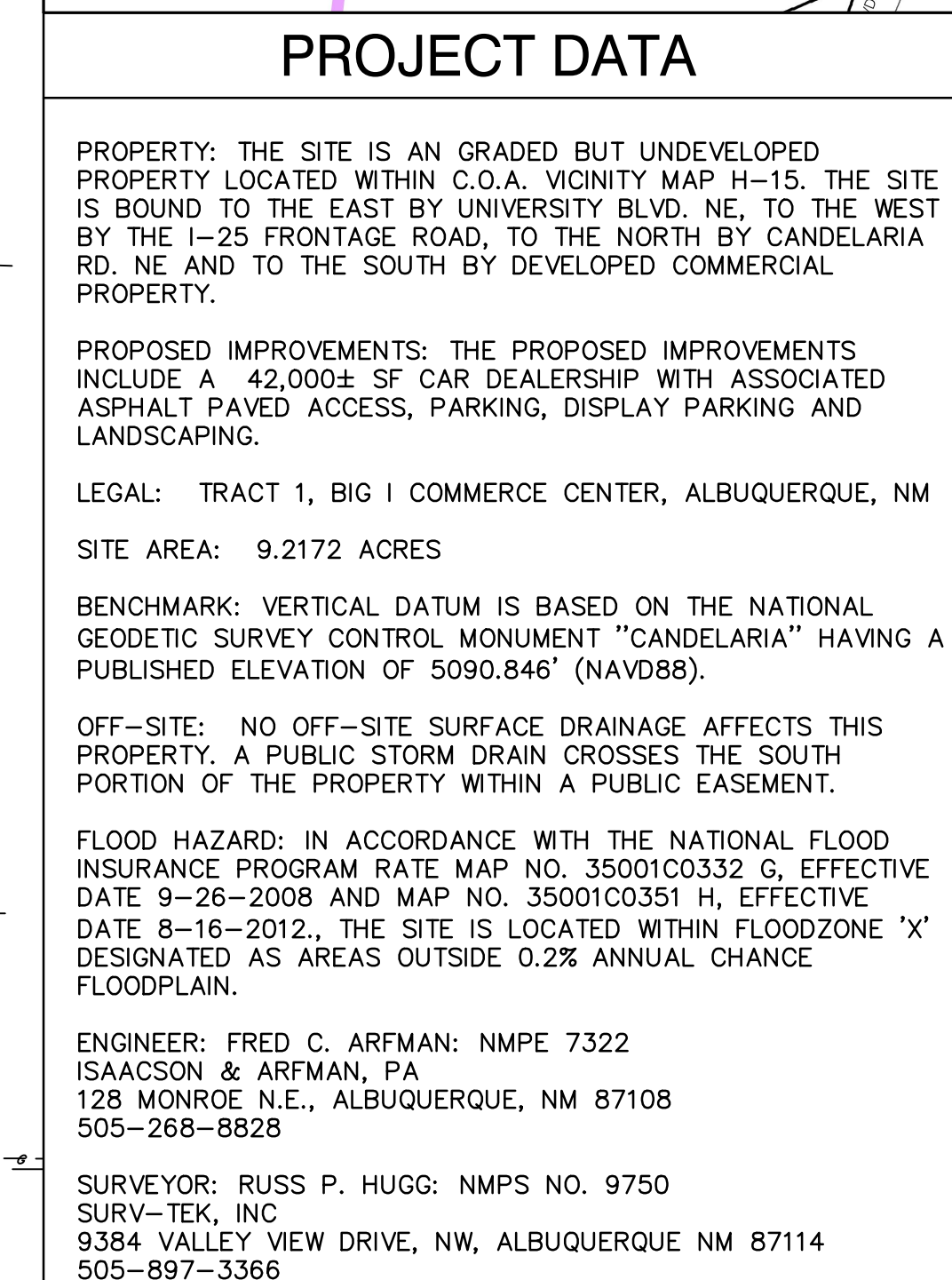
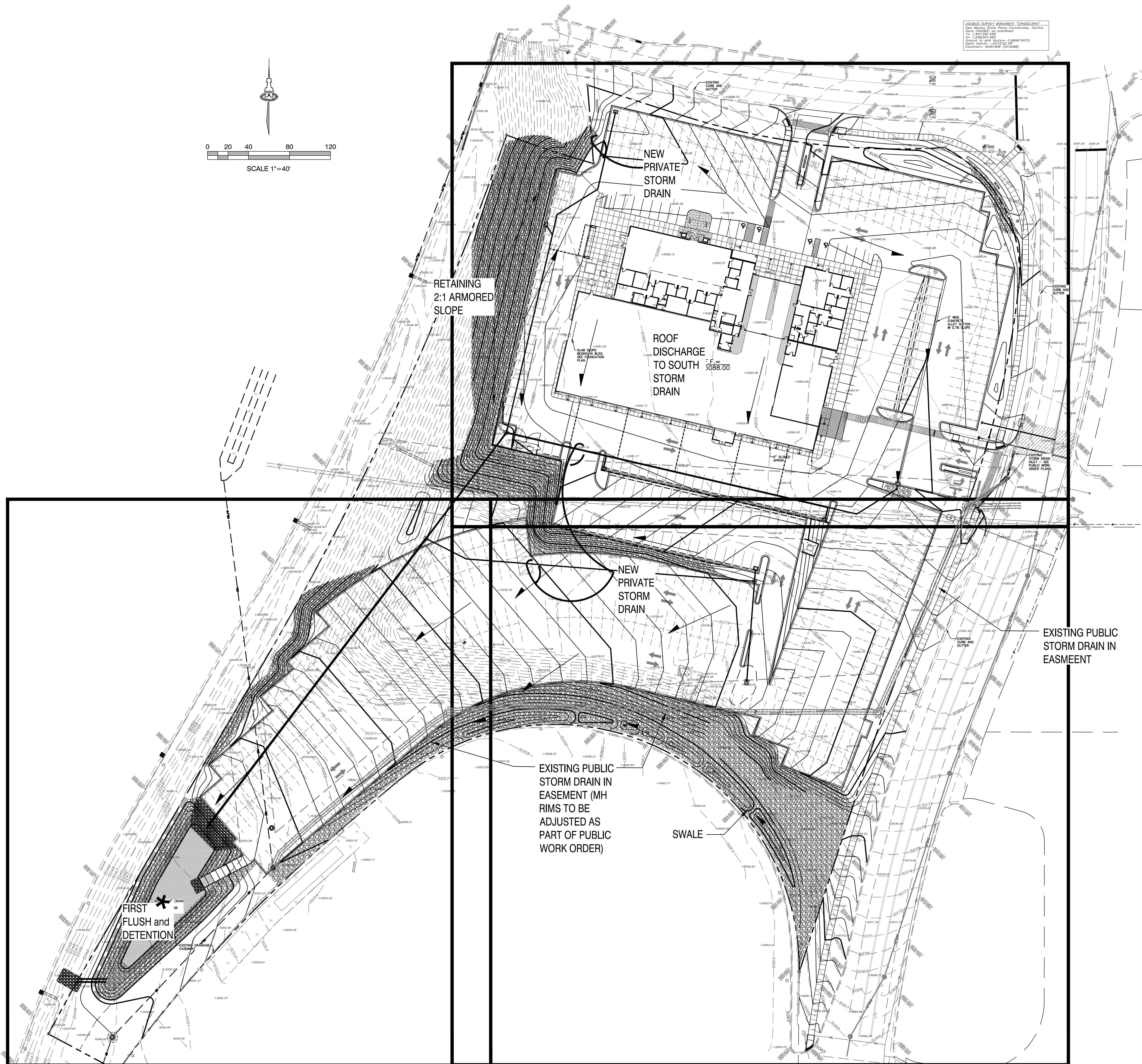
GENERAL
NOTES

CN-101



ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico 87108
Ph. 505-268-8828 www.iacivil.com

2142 CN-101.dwg Mar 04,2017





MATCHLINE: SEE CG-102

KEYED NOTES

THESE NOTES ARE REFERENCED ON SHEETS CG-101, CG-102 AND CG-103. NOT ALL NOTES ARE USED ON EACH SHEET.

- SPOT ELEVATIONS WITHIN GUTTER AREA REPRESENT FLOWLINE UNLESS NOTED. ADD 0.5" TYPICAL FOR TOP OF CURB / TOP OF ADJACENT WALK ELEVATIONS.
- SEE PUBLIC WORK ORDER DRAWINGS FOR UTILITY CONSTRUCTION WITHIN R.O.W. (PUBLIC STORM, WATER AND SAS).
- CONSTRUCT PAVING, CURBS, WALKS AT ELEVATIONS SHOWN. SEE PAVING PLAN, PAVING DETAILS AND ARCHITECTURAL SITE DETAILS FOR ADDITIONAL INFORMATION. NOTE: PAVEMENT SLOPES AND CROSS-SLOPES VARY THROUGHOUT TO ACHIEVE ADA COMPLIANT PEDESTRIAN ACCESS, STREET STORMWATER CAPACITIES, PIPE COVERAGE, ETC. SEE LEGEND CONTOUR INCREMENTS PROVIDED TO CLARIFY DRAINAGE CONCEPT.
- SLOPES WITHIN HANDICAP PARKING AREAS TO BE ADA COMPLIANT. MAX. SLOPE = 2% IN ANY DIRECTION.
- CONSTRUCT ADA COMPLIANT ACCESS RAMP. 1:12 MAX. SLOPE, 2% MAX. CROSS-SLOPE.
- CONSTRUCT 2' WIDE CONCRETE ALLEY GUTTER. SEE PAVING DETAILS.
- GRADE TRANSITION (MAX. 2:1). PROVIDE ANGULAR ROCK (2" AVG. DIA.) ON ALL SIDE SLOPES $\geq 3:1$.
- CONSTRUCT FIRST FLUSH RETENTION BASIN AND DETENTION POND. INSTALL 6" AVG. DIA. ANGULAR ROCK EROSION CONTROL AT INLETS AND OUTLETS. INSTALL 2" AVG. DIA. SLOPE PROTECTION ON ALL SIDE SLOPES. SEE SHEET CG-501 FOR ADDITIONAL INFORMATION.
- CONSTRUCT 10' WIDE (BOTTOM WIDTH) CONCRETE 'U' SHAPED CHANNEL / MAINTENANCE ACCESS TO POND BOTTOM.
- EXTEND ROOF DISCHARGE DOWNSPOUTS BELOW GRADE TO STORM DRAIN SYSTEM USING WATERTIGHT FITTINGS AS REQUIRED.
- PROVIDE 2' WIDE X 6" HIGH (MIN.) OPENING THROUGH WALL AT FLOWLINE ELEVATION SHOWN TO PASS FLOW. WALL DESIGN BY OTHERS.
- PROVIDE 2' WIDE CURB OPENING TO PASS FLOW. INSTALL EROSION PROTECTION TO EXTENTS SHOWN. NOTE: TOP OF EROSION PROTECTION SHALL BE AT OR BELOW FLOWLINE.
- EXISTING LARGE DIAMETER PUBLIC / NMDOT STORM DRAIN MAINS (24"-84") PASS THROUGH THIS PROPERTY WITHIN A PUBLIC DRAINAGE EASEMENT. SEE STORM DRAIN PLANS (CG-501) FOR ADDITIONAL INFORMATION. EXISTING MANHOLES TO BE RAISED PROPERTY TO FINAL GRADES AS PART OF PUBLIC WORK ORDER.
- CONSTRUCT PRIVATE STORM DRAIN SYSTEM. SEE SHEETS CG-501 FOR SIZE / SLOPE / INLET / MATERIAL.
- CONSTRUCT RETAINING WALL(S) TO ACHIEVE GRADES SHOWN. FOR TIERED WALLS, 'TW' AND 'BW' REFLECT FINISH GRADE AT THE TOP AND BOTTOM OF THE RETAINED GRADE. CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR TO OBTAIN DESIGN PRIOR TO CONSTRUCTION (COLOR, MATERIAL, FOOTING, WEEPHOLES, GUARDRAILS, ADDITIONAL WALL HEIGHT ABOVE TOP OF RETAINING WALL ELEVATION, ETC.).
- EROSION CONTROL (MIN. 12" DEEP X 6" AVG. DIA. ANGULAR FACED ROCK) TO BE INSTALLED ON ALL SIDE SLOPES $\geq 3:1$ AND TO LIMITS SHOWN HATCHED. SEE GENERAL NOTES.
- OFF-SITE GRADING AND EROSION PROTECTION WITHIN THE NMDOT R/W TO BE LIMITED TO EXTENTS SHOWN.
- DEPRESS ALL LANDSCAPE AREAS TO RETAIN STORMWATER. 6" MIN. WATER HARVESTING BASIN.

GRADING NOTE

PROPOSED SPOT AND CONTOUR ELEVATIONS 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.

LEGEND

	70	PROPOSED CONTOUR - 1' INCREMENT
	75.5	PROPOSED CONTOUR - 0.5' INCREMENT
	78.3	PROPOSED SPOT ELEVATION
		FLOW ARROW
		ROOF DISCHARGE LOCATION
	F.F.=XXXX.XX	FINISH FLOOR ELEVATION
	78.3±	EXISTING ELEVATION (±) TO MATCH. PROVIDE SMOOTH TRANSITION.
		ROCK EROSION CONTROL
		PERCOLATION TRENCH
	SD	PROPOSED STORM DRAIN
	FL=	FLOWLINE ELEVATION
	INV=	INVERT ELEVATION
		RETAINING WALL
		GRADE BREAK
		'FIRST FLUSH' RETENTION BASIN
	TW	HIGH SIDE GRADE (HO) / LOW SIDE GRADE (LG) @ RETAINING WALL. TRW TO BE MIN. 6" ABOVE HIGH SIDE GRADE. COORDINATE TRW AND GUARDRAIL(S) WITH ARCHITECT.
	W.S.EL.	POND WATER SURFACE ELEVATION



GALLES CHEVROLET
ALBUQUERQUE, NEW MEXICO
JAYNES CORPORATION

date:	AUGUST, 2016
drawn by:	V&A
checked by:	RRV
revisions:	
	NOV 22, 2016

GRADING &
DRAINAGE PLAN
(1 OF 3)
CG-101



ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico 87108
Ph. 505-268-8828 www.iacivil.com
2142 CG-101.dwg May 15, 2017

MATCHLINE: SEE CG-103

MATCHLINE: SEE CG-101



KEYED NOTES

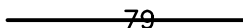
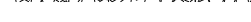
THESE NOTES ARE REFERENCED ON SHEETS CG-101, CG-102 AND CG-103. NOT ALL NOTES ARE USED ON EACH SHEET.

1. SPOT ELEVATIONS WITHIN GUTTER AREA REPRESENT FLOWLINE UNLESS NOTED. ADD 0.5' TYPICAL FOR TOP OF CURB / TOP OF ADJACENT WALK ELEVATIONS.
2. SEE PUBLIC WORK ORDER DRAWINGS FOR UTILITY CONSTRUCTION WITHIN R.O.W. (PUBLIC STORM, WATER AND SAS.)
3. CONSTRUCT PAVING, CURBS, WALKS AT ELEVATIONS SHOWN. SEE PAVING PLAN, PAVING DETAILS AND ARCHITECTURAL SITE DETAILS FOR ADDITIONAL INFORMATION. NOTE: PAVEMENT SLOPES AND CROSS-SLOPES VARY THROUGHOUT TO ACHIEVE ADA COMPLIANT PEDESTRIAN ACCESS. STREET STORMWATER CAPACITIES, PIPE COVERAGE, ETC. SEE LEGEND. CONTOUR INCREMENTS PROVIDED TO CLARIFY DRAINAGE CONCEPT.
4. SLOPES WITHIN HANDICAP PARKING AREAS TO BE ADA COMPLIANT. MAX. SLOPE = 2% IN ANY DIRECTION.
5. CONSTRUCT ADA COMPLIANT ACCESS RAMP: 1:12 MAX. SLOPE, 2% MAX. CROSS-SLOPE.
6. CONSTRUCT 2" WIDE CURB/CEMENT ALLEY GUTTER. SEE PAVING DETAILS.
7. GRADE TRANSITION (MAX. 2:1). PROVIDE ANGLER ROCK (2" AVG. DIA) ON ALL SIDE SLOPES $\geq 1:1$.
8. CONSTRUCT FIRST 6" AT DIA. ANGULAR ROCK EROSION CONTROL AT INLETS AND OUTLETS. INSTALL 2" AVG. DIA. SLOPE PROTECTION ON ALL SIDE SLOPES. SEE SHEET CG-501 FOR ADDITIONAL INFORMATION.
9. CONSTRUCT 10" WIDE (BOTTOM WIDTH) CURB/CEMENT 'U' SHAPED CHANNEL / MAINTENANCE ACCESS TO POND BOTTOM.
10. EXTEND ROCK DISCHARGE DOWNSPOUTS BELOW GRADE TO STORM DRAIN SYSTEM USING WATERTIGHT FITTINGS AS REQUIRED.
11. PROVIDE 2" WIDE X 6" HIGH (MIN.) OPENING THROUGH WALL AT FLOWLINE ELEVATION SHOWN TO PASS FLOW. WALL DESIGN BY OTHERS.
12. PROVIDE 2" WIDE CURB OPENING TO PASS FLOW. INSTALL EROSION PROTECTION TO EXTENTS SHOWN. NOTE: TOP OF EROSION PROTECTION SHALL BE AT OR BELOW FLOWLINE.
13. EXISTING LARGE DIAMETER PUBLIC / NMDOT STORM DRAIN MAINS (24"-84") PASS THROUGH THIS PROPERTY WITHIN A PUBLIC DRAINAGE EASEMENT. SEE STORM DRAIN PLANS (CG-501) FOR ADDITIONAL INFORMATION. EXISTING MANHOLES TO BE RAISED PROPORTION TO FINAL GRADES AS PART OF PUBLIC WORK ORDER.
14. CONSTRUCT PRIVATE STORM DRAIN SYSTEM. SEE SHEETS CG-501 FOR SIZE / SLOPE / INLET / MATERIAL.
15. CONSTRUCT RETAINING WALL (S) TO ACHIEVE GRADES SHOWN. FOR TIERED WALLS, "TW" AND "SW" REFLECT FINISH GRADE AT THE TOP AND BOTTOM OF THE RETAINED GRADE. CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR TO OBTAIN DESIGN PRIOR TO CONSTRUCTION (COLOR, MATERIAL, FOOTING, WEAP. AND QUANTITY). RETAINING WALL HEIGHT ABOVE TOP OF RETAINING WALL ELEVATION, ETC.).
16. EROSION CONTROL (MIN. 12" DEEP X 6" AVG. DIA. ANGULAR FACED ROCK) TO BE INSTALLED ON ALL SIDE SLOPES $\geq 1:1$ AND TO LIMITS SHOWN HATCHED. SEE GENERAL NOTES.
17. OFF-SITE SLOPE GRADING AND EROSION PROTECTION WITHIN THE NMDOT R/W TO BE LIMITED TO EXTENTS SHOWN.
18. DEPRESS ALL LANDSCAPE AREAS TO RETAIN STORMWATER. 6" MIN. WATER HARVESTING BASIN.

GRADING NOTE

PROPOSED SPOT AND CONTOUR ELEVATIONS 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.

LEGEND

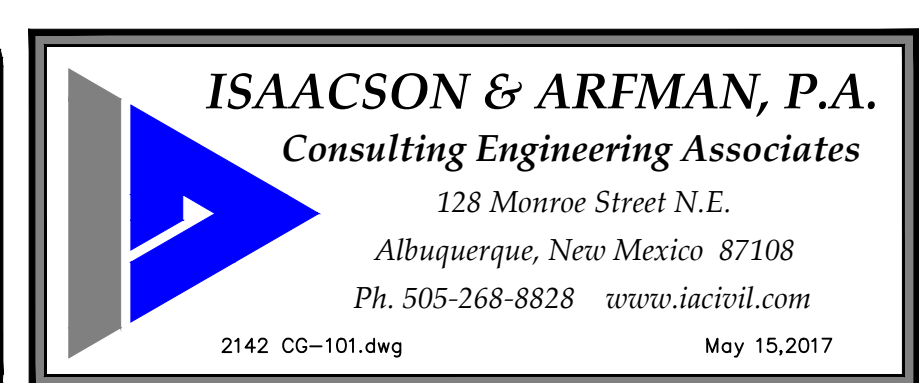
	PROPOSED CONTOUR - 1' INCREMENT
	PROPOSED CONTOUR - 0.5' INCREMENT
	PROPOSED SPOT ELEVATION
	FLOW ARROW
	ROOF DISCHARGE LOCATION
F.F. = XXXX.XX	FINISH FLOOR ELEVATION
	EXISTING ELEVATION (±) TO MATCH. PROVIDE SMOOTH TRANSITION.
	ROCK EROSION CONTROL
	PERCOLATION TRENCH
	PROPOSED STORM DRAIN
FL =	FLOWLINE ELEVATION
INV =	INVERT ELEVATION
	RETAINING WALL
	GRADE BREAK
	FIRST FLUSH* RETENTION BASIN
	HIGH SIDE GRADE (HG) / LOW SIDE GRADE (LG) @ RETAINING WALL. TRW TO BE MIN. 6" ABOVE HIGH SIDE GRADE. COORDINATE TRW AND GUARDRAIL(S) WITH ARCHITECT.
W.S.E.L.	POND WATER SURFACE ELEVATION

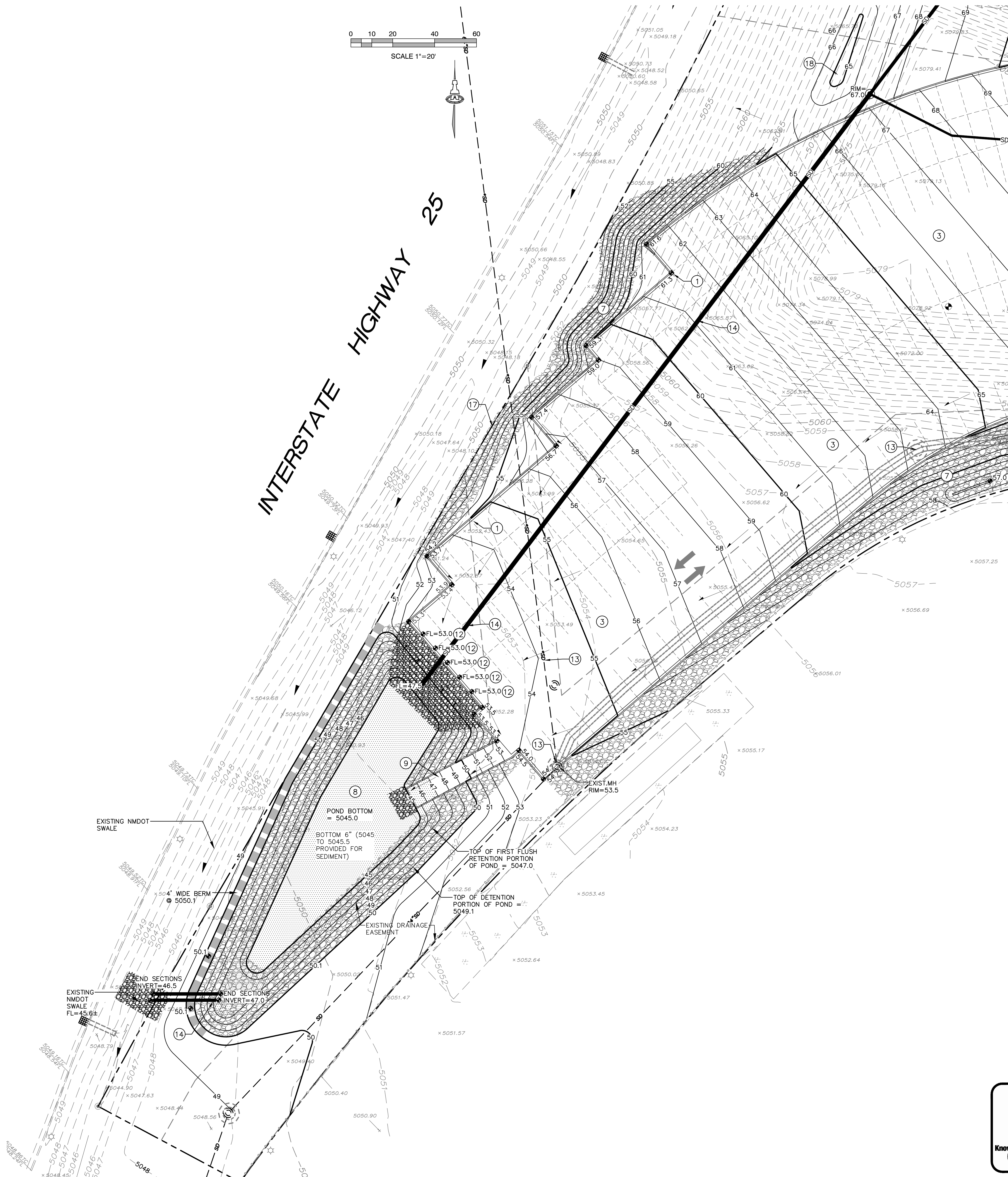


**GALLES CHEVROLET
ALBUQUERQUE, NEW MEXICO**
JAYNES CORPORATION

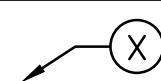
GRADING &
DRAINAGE PLAN
(2 OF 3)
CG-102

project no. 16-013





MATCHLINE: SEE CG-102



KEYED NOTES

THESE NOTES ARE REFERENCED ON SHEETS CG-101, CG-102 AND CG-103. NOT ALL NOTES ARE USED ON EACH SHEET.

- SPOT ELEVATIONS WITHIN GUTTER AREA REPRESENT FLOWLINE UNLESS NOTED. ADD 0.5' TYPICAL FOR TOP OF CURB / TOP OF ADJACENT WALK ELEVATIONS.
- SEE PUBLIC WORK ORDER DRAWINGS FOR UTILITY CONSTRUCTION WITHIN R.O.W. (PUBLIC STORM, WATER AND SAS.)
- CONSTRUCT PAVING, CURBS, WALKS AT ELEVATIONS SHOWN. SEE PAVING PLAN, PAVING DETAILS AND ARCHITECTURAL SITE DETAILS FOR ADDITIONAL INFORMATION. NOTE: PAVEMENT SLOPES AND CROSS-SLOPES VARY THROUGHOUT TO ACHIEVE ADA COMPLIANT PEDESTRIAN ACCESS, STREET STORMWATER CAPACITIES, PIPE COVERAGE, ETC. SEE LEGEND CONTOUR INCREMENTS PROVIDED TO CLARIFY DRAINAGE CONCEPT.
- SLOPES WITHIN HANDICAP PARKING AREAS TO BE ADA COMPLIANT. MAX. SLOPE = 2% IN ANY DIRECTION.
- CONSTRUCT ADA COMPLIANT ACCESS RAMP: 1:12 MAX. SLOPE, 2% MAX. CROSS-SLOPE.
- CONSTRUCT 2' WIDE CONCRETE ALLEY GUTTER. SEE PAVING DETAILS.
- GRADE TRANSITION (MAX. 2:1). PROVIDE ANGULAR ROCK (2" AVG. DIA.) ON ALL SIDE SLOPES $\geq$ 3:1.
- CONSTRUCT FIRST FLUSH RETENTION BASIN AND DETENTION POND. INSTALL 6" AVG. DIA. ANGULAR ROCK EROSION CONTROL AT INLETS AND OUTLETS. INSTALL 2" AVG. DIA. SLOPE PROTECTION ON ALL SIDE SLOPES. SEE SHEET CG-501 FOR ADDITIONAL INFORMATION.
- CONSTRUCT 10' WIDE (BOTTOM WIDTH) CONCRETE 'U' SHAPED CHANNEL / MAINTENANCE ACCESS TO POND BOTTOM.
- EXTEND ROOF DISCHARGE DOWNSPOUTS BELOW GRADE TO STORM DRAIN SYSTEM USING WATERTIGHT FITTINGS AS REQUIRED.
- PROVIDE 2' WIDE X 6" HIGH (MIN.) OPENING THROUGH WALL AT FLOWLINE ELEVATION SHOWN TO PASS FLOW. WALL DESIGN BY OTHERS.
- PROVIDE 2' WIDE CURB OPENING TO PASS FLOW. INSTALL EROSION PROTECTION TO EXTENTS SHOWN. NOTE: TOP OF EROSION PROTECTION SHALL BE AT OR BELOW FLOWLINE.
- EXISTING LARGE DIAMETER PUBLIC / NMDOT STORM DRAIN MAINS (24"-84") PASS THROUGH THIS PROPERTY WITHIN A PUBLIC DRAINAGE EASEMENT. SEE STORM DRAIN PLANS (CG-501) FOR ADDITIONAL INFORMATION. EXISTING MANHOLES TO BE RAISED PROPERTY TO FINAL GRADES AS PART OF PUBLIC WORK ORDER.
- CONSTRUCT PRIVATE STORM DRAIN SYSTEM. SEE SHEETS CG-501 FOR SIZE / SLOPE / INLET / MATERIAL.
- CONSTRUCT RETAINING WALL(S) TO ACHIEVE GRADES SHOWN. FOR TIERED WALLS, 'TW' AND 'BW' REFLECT FINISH GRADE AT THE TOP AND BOTTOM OF THE RETAINED GRADE. CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR TO OBTAIN DESIGN PRIOR TO CONSTRUCTION (COLOR, MATERIAL, FOOTING, WEEPHOLES, GUARDRAILS, ADDITIONAL WALL HEIGHT ABOVE TOP OF RETAINING WALL ELEVATION, ETC.)
- EROSION CONTROL (MIN. 12" DEEP X 6" AVG. DIA. ANGULAR FACED ROCK) TO BE INSTALLED ON ALL SIDE SLOPES $\geq$ 3:1 AND TO LIMITS SHOWN HATCHED. SEE GENERAL NOTES.
- OFF-SITE GRADING AND EROSION PROTECTION WITHIN THE NMDOT R/W TO BE LIMITED TO EXTENTS SHOWN.
- DEPRESS ALL LANDSCAPE AREAS TO RETAIN STORMWATER. 6" MIN. WATER HARVESTING BASIN.

GRADING NOTE

PROPOSED SPOT AND CONTOUR ELEVATIONS 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.

LEGEND

	PROPOSED CONTOUR - 1' INCREMENT
	PROPOSED CONTOUR - 0.5' INCREMENT
	PROPOSED SPOT ELEVATION
	FLOW ARROW
	ROOF DISCHARGE LOCATION
F.F.=XXXX.XX	
	FINISH FLOOR ELEVATION
	EXISTING ELEVATION ($\pm$) TO MATCH. PROVIDE SMOOTH TRANSITION.
	ROCK EROSION CONTROL
	PERCOLATION TRENCH
	PROPOSED STORM DRAIN
	FLOWLINE ELEVATION
	INVERT ELEVATION
	RETAINING WALL
	GRADE BREAK
	'FIRST FLUSH' RETENTION BASIN
	HIGH SIDE GRADE (HG) / LOW SIDE GRADE (LG) $\otimes$ RETAINING WALL. TRW TO BE MIN. 6" ABOVE HIGH SIDE GRADE. COORDINATE TRW AND GUARDRAIL(S) WITH ARCHITECT.
	POND WATER SURFACE ELEVATION

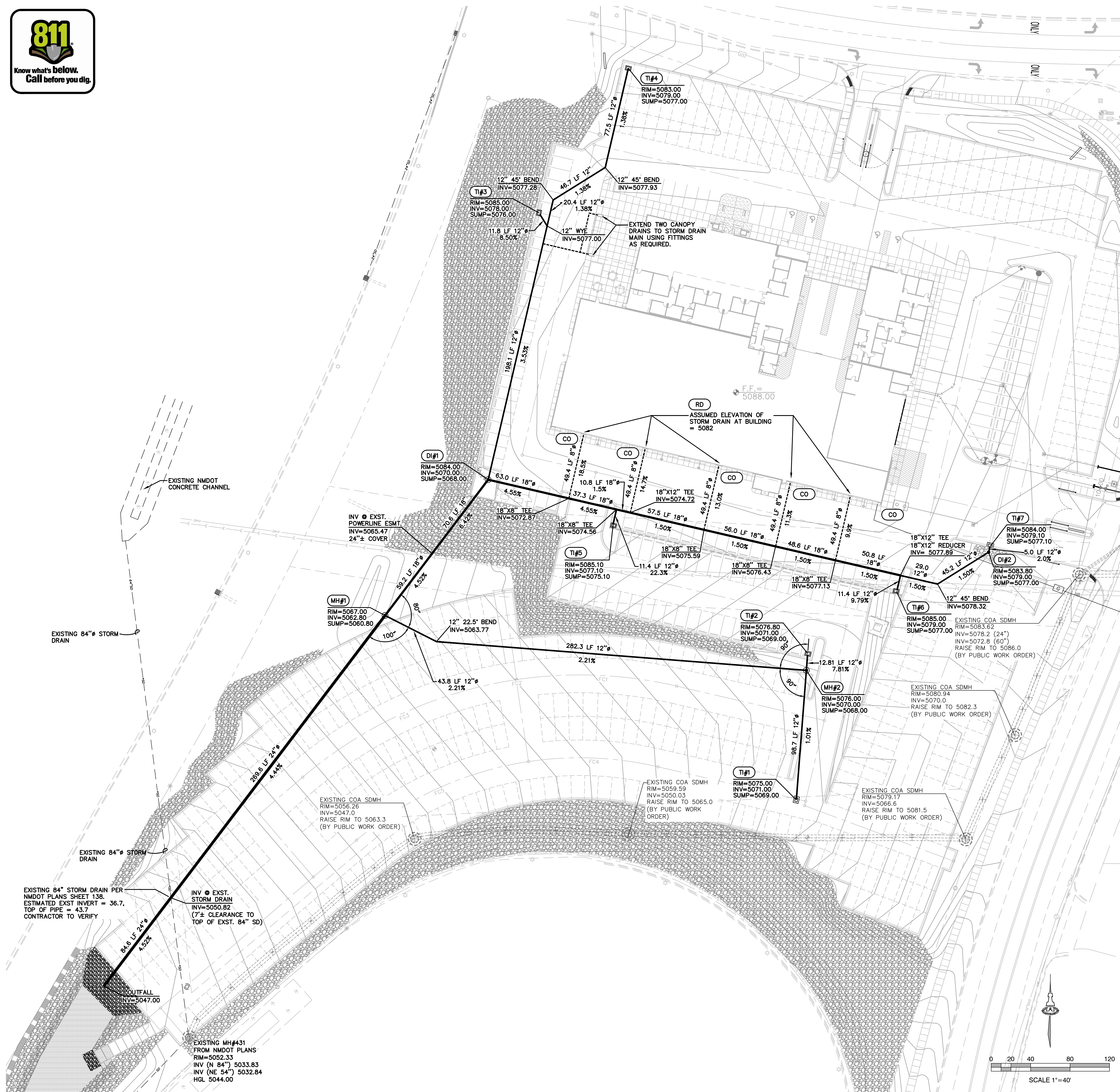


GALLES CHEVROLET
ALBUQUERQUE, NEW MEXICO
JAYNES CORPORATION

date: AUGUST, 2016
drawn by: V&A
checked by: RRV
revisions:
NOV 22, 2016
GRADING &
DRAINAGE PLAN
(3 OF 3)
CG-103

VIGIL & ASSOCIATES
ARCHITECTURAL GROUP, P.C.
WWW.VIGILARCHITECTS.COM



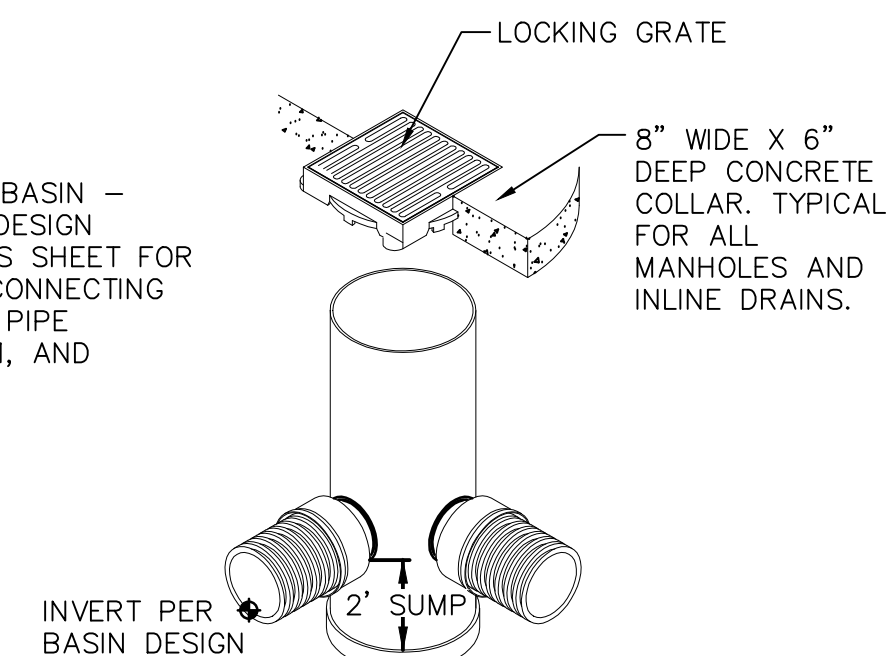


- A. ALL PRIVATE STORM DRAIN LINES AND FITTINGS SHALL BE THE FOLLOWING MATERIAL:
- < 12" DIA. SHALL BE EITHER ADS N-12 WT PIPE OR PVC SCHD 40.
 - = 12" DIA. SHALL BE EITHER ADS MEGA GREEN WT PIPE OR PVC SCHD 40.
 - > 12" DIA. SHALL BE ADS MEGA GREEN WT PIPE.
- B. INSTALL ALL STORM DRAIN INLETS AND PIPE PER MANUFACTURER'S SPECIFICATIONS.
- C. STORM DRAIN SYSTEM WILL REQUIRE REGULAR MAINTENANCE TO ENSURE PROPER FUNCTIONING DURING STORM EVENTS. ENGINEER RECOMMENDS THAT OWNER PUT IN PLACE INSPECTION AND MAINTENANCE REQUIREMENTS SCHEDULED TO OCCUR MONTHLY AND AFTER EACH STORM EVENT.

STORM DRAIN GENERAL NOTES

SCALE: N.T.S.

NYLOPLAST BASIN - SEE BASIN DESIGN DETAILS THIS SHEET FOR DIAMETER, CONNECTING PIPE SIZES, PIPE ANGLES, RIM, AND INVERT.



ADS NYLOPLAST BASIN MANHOLES GENERAL DESIGN INFORMATION

SCALE: N.T.S.

- CO** ADS INLINE DRAIN CLEANOUT
- 8" ADS INLINE DRAIN WITH 8" OUT
 - 8" TEE
 - LOCKING SOLID GRATE (H-20 TRAFFIC RATED)
 - 8" WIDE X 6" DEEP CONCRETE COLLAR
- TI#** TRAFFIC RATED INLETS SHALL BE CONSTRUCTED WITH:
- 18" DIAMETER ADS NYLOPLAST ROAD / HIGHWAY STRUCTURE AT RIM / SINGLE PIPE INVERT SHOWN ON PLAN
 - 2' SUMP
 - 2'X3' ADS ROAD / HIGHWAY GRATE
 - 12" WIDE X 6" DEEP CONCRETE COLLAR
- MH#** MANHOLES (MH) SHALL BE CONSTRUCTED WITH:
- ADS NYLOPLAST BASIN (SEE INDIVIDUAL BASIN DESIGNS THIS SHEET)
 - 2' SUMP
 - LOCKING SOLID COVER (UNLESS NOTED)
 - 8" WIDE X 6" DEEP CONCRETE COLLAR
 - SEE BASIN DESIGN THIS SHEET FOR DIMENSIONS
- DI#** DOMED INLETS (DI) SHALL BE CONSTRUCTED WITH:
- 24" ADS NYLOPLAST BASIN 2' SUMP
 - LOCKING DOMED GRATE
 - 8" WIDE X 6" DEEP CONCRETE COLLAR
 - SEE BASIN DESIGN THIS SHEET FOR DIMENSIONS
- RD** ROOF DRAIN DISCHARGE PIPE. SEE PLUMBING PLAN FOR DIAMETER AND SPECIFIC LOCATIONS. INSTALL CLEANOUT AND EXTEND TO SITE STORM DRAIN USING WATERTIGHT FITTINGS AS REQUIRED. (TYP)

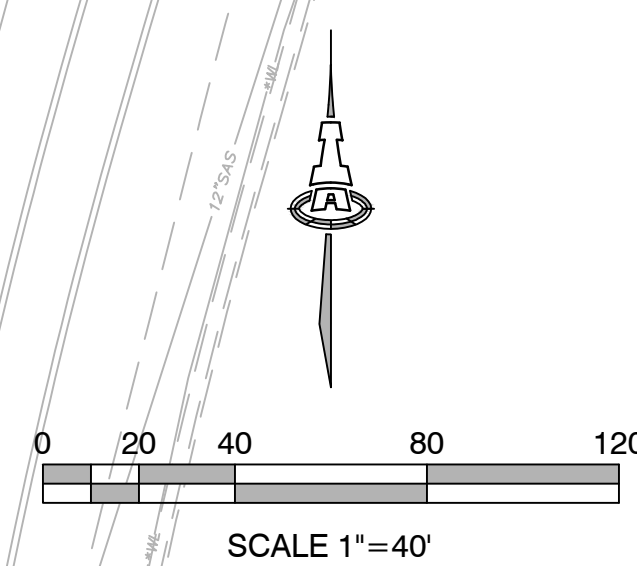
LEGEND

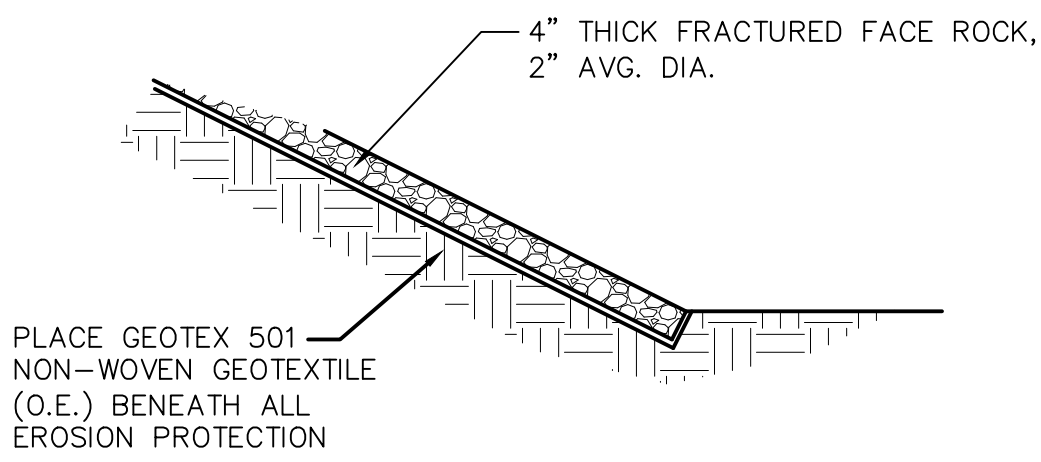
PUBLIC STORM DRAIN

EXISTING LARGE DIAMETER COA AND NMDOT STORM DRAIN MAINS (24"-84") PASS THROUGH THIS PROPERTY WITHIN PUBLIC DRAINAGE EASEMENTS. EXISTING MANHOLES ARE TO BE RAISED TO FINAL GRADES AS PART OF SEPARATE PUBLIC WORK ORDER.



date:	AUGUST, 2016
drawn by:	V&A
checked by:	RRV
revisions:	
	NOV 22, 2016

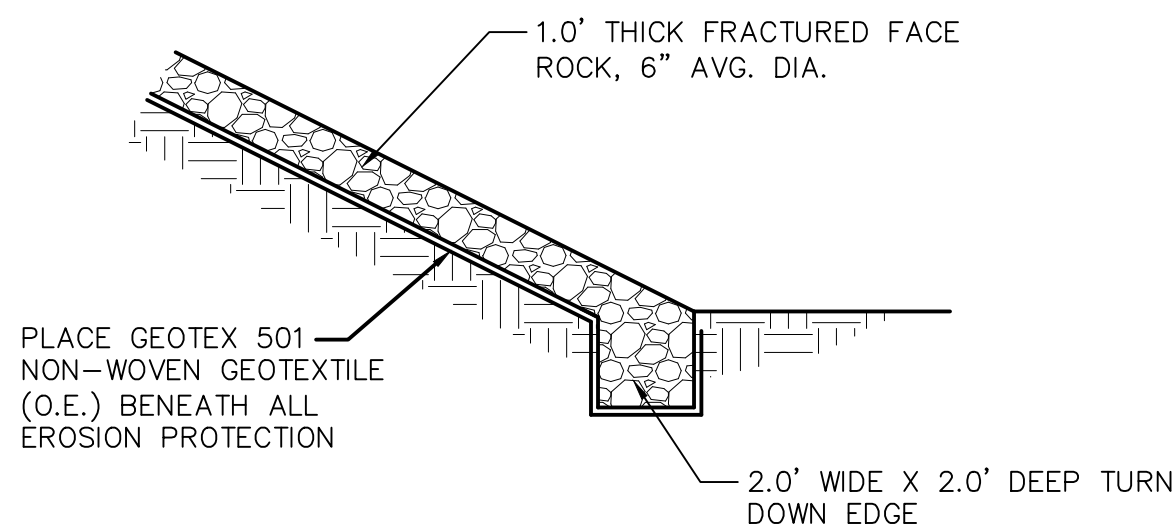




TYPE 'A' EROSION PROTECTION

SIDE SLOPES BETWEEN 4:1 AND 3:1

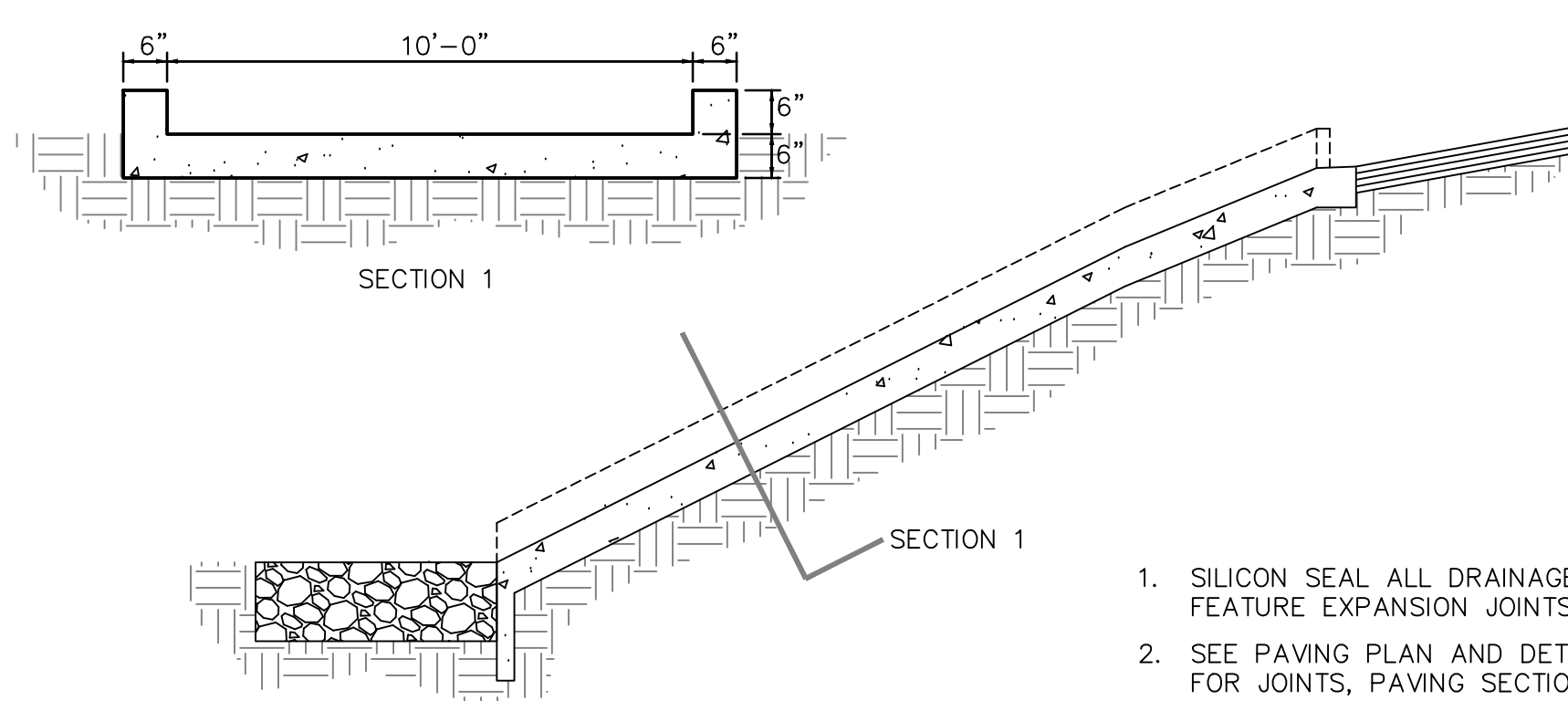
SCALE: N.T.S.



TYPE 'B' EROSION PROTECTION

SLOPES > 3:1, RUNDOWNS, OVERFLOW WEIRS, OUTFALL STRUCTURES, NMDOT R/W

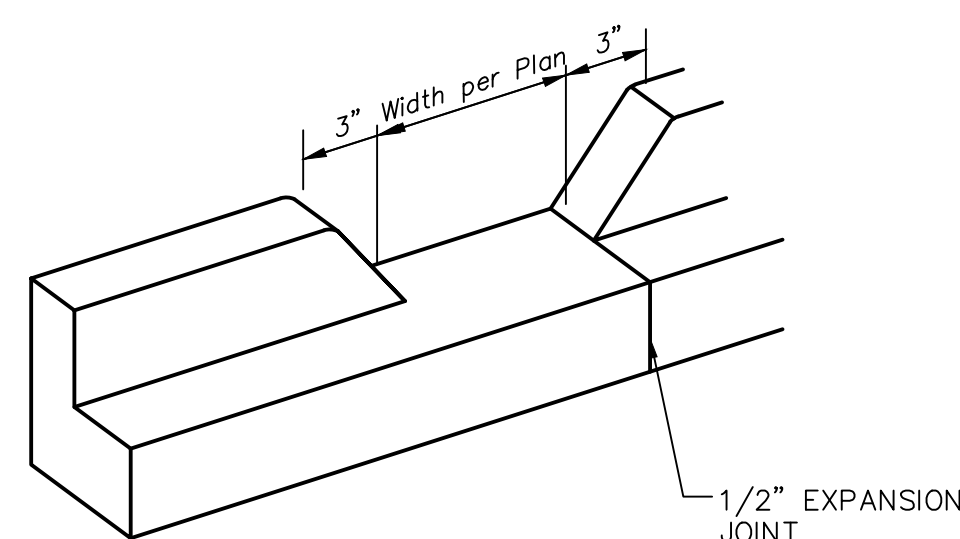
SCALE: N.T.S.



POND RUNDOWN / MAINTENANCE RAMP

SEE PAVING PLAN

N.T.S.

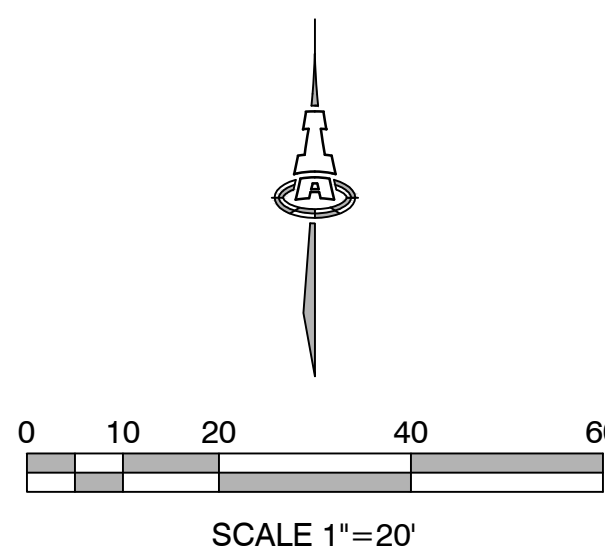
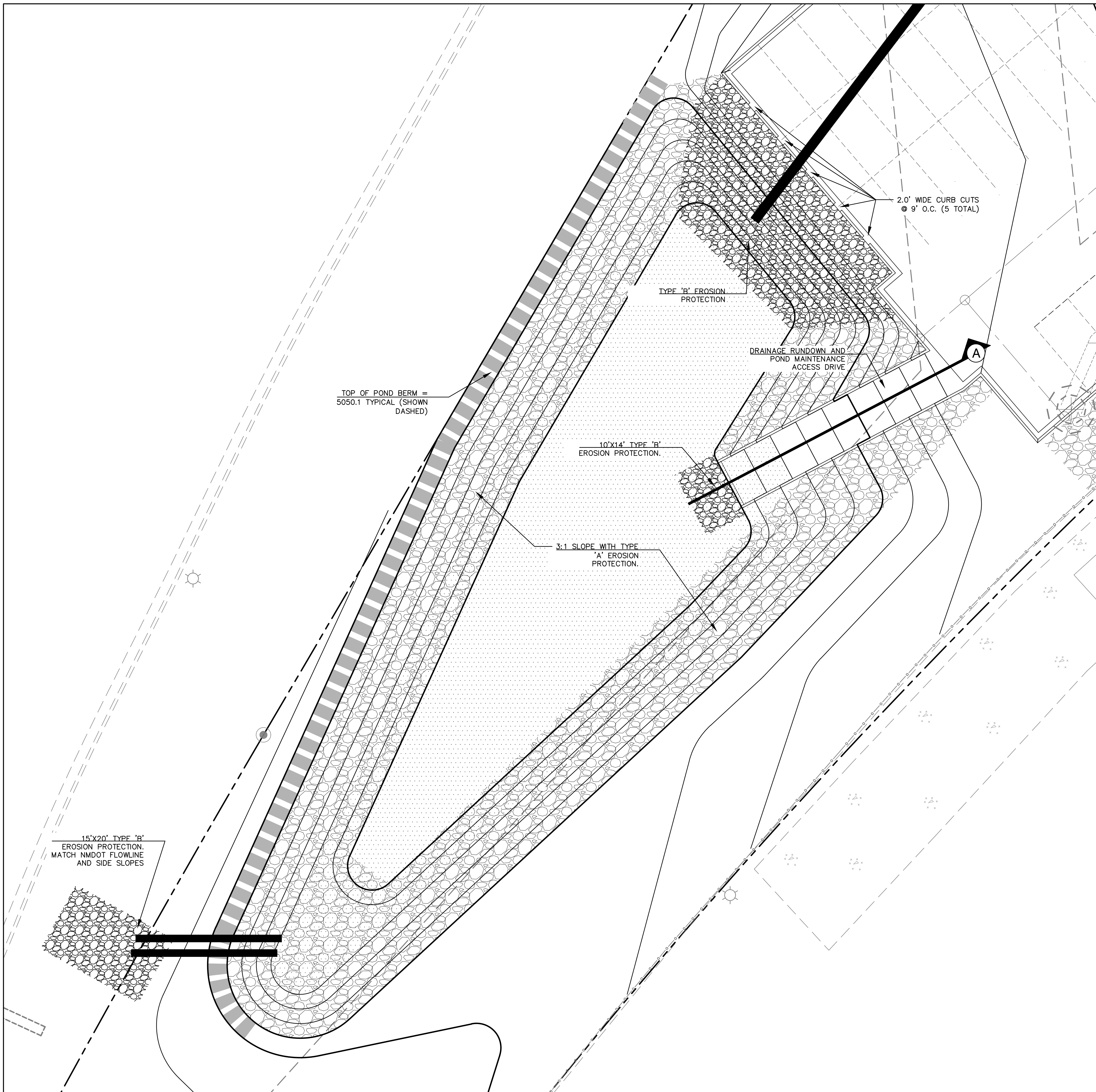


GENERAL NOTES

- EDGES NOT SPECIFICALLY DIMENSIONED SHALL BE SHAPED WITH A 3/8" EDGING TOOL.

CURB OPENING

SCALE: N.T.S.



GALLES CHEVROLET
ALBUQUERQUE, NEW MEXICO
JAYNES CORPORATION

date: AUGUST, 2016
drawn by: V&A
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NOV 22, 2016

MAIN POND
DESIGN

CG-502

project no. 16-013