DRAINAGE PLAN & CALCULATIONS

I. INTRODUCTION AND EXECUTIVE SUMMARY

THIS PROJECT, LOCATED IN NORTHEAST ALBUQUERQUE, REPRESENTS NEW CONSTRUCTION AT A PORTION OF A DEVELOPED HIGH SCHOOL SITE WITHIN AN INFILL AREA. THE PROPOSED CAFETERIA BUILDING WITH SITE IMPROVEMENTS IS THE FOURTH AND FINAL PHASE OF A MAJOR REDEVELOPMENT AT DEL NORTE HIGH SCHOOL. IN ACCORDANCE WITH THE SITE MASTER DRAINAGE PLAN THAT WAS PREPARED TO SUPPORT THIS DEVELOPMENT, ALL RUNOFF WILL BE COLLECTED, CONVEYED AND CONTROLLED IN A RESPONSIBLE MANNER AND AT REDUCED PEAK RATES OF DISCHARGE.

THIS SUBMITTAL FOLLOWS THE INTENT OF THE APPROVED MASTER DRAINAGE PLAN FOR THE SITE AND IS MADE IN SUPPORT OF BUILDING PERMIT APPROVAL.

II. PROJECT DESCRIPTION:

AS SHOWN BY VICINITY MAP F-18, DEL NORTE HIGH SCHOOL IS LOCATED IN A DEVELOPED SECTION OF THE CITY OF ALBUQUERQUE'S NORTHEAST HEIGHTS AT THE NORTHEAST CORNER OF SAN MATEO BLVD NE AND MONTGOMERY BLVD NE. THE MAIN CAMPUS IS BORDERED BY MONTGOMERY BOULEVARD NE ON THE SOUTH, SAN MATEO BOULEVARD ON THE WEST, THE CITY OF ALBUQUERQUE GRANT LINE CHANNEL ON THE NORTH, BY WHISPERWOOD SUBDIVISION UNIT 2 AT THE NORTHERLY HALF AT THE EAST PROPERTY LINE, AND BY AN EXISTING APARTMENT COMPLEX AT THE SOUTH HALF OF THE EAST PROPERTY LINE. A PORTION OF APS PROPERTY LIES NORTH OF THE GRANT LINE CHANNEL WHICH SERVES AS THE DEL NORTE HIGH SCHOOL STUDENT PARKING LOT AND BUS DROP OFF AREA. THE SITE IS ZONED C-2.

AS SHOWN BY PANEL 139 OF 825 OF THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAPS, BERNALILLO COUNTY, NEW MEXICO, AND INCORPORATED AREAS, DATED SEPTEMBER 26, 2008, THE SITE DOES NOT LIE WITHIN A DESIGNATED FLOOD HAZARD ZONE.

III. BACKGROUND DOCUMENTS:

1) THE IMPROVEMENTS PROPOSED BY THIS PROJECT WERE SHOWN AND ACCOUNTED FOR IN THE DEL NORTE HIGH SCHOOL MASTER DRAINAGE REPORT PREPARED BY THIS OFFICE DATED 09/09/2009 AND REVISED 06/28/2010 (HYDROLOGY FILE F18/D054, NMPE 13676). THE MASTER DRAINAGE PLAN WAS SUBMITTED AS A GUIDE TO THE PROPOSED RECONSTRUCTION OF DEL NORTE HIGH SCHOOL WHICH WILL RESULT IN A NET DECREASE IN PEAK RATE AND VOLUME OF DISCHARGE LEAVING THE SITE WHILE IMPROVING THE MANNER OF DISCHARGE BY SIGNIFICANTLY REDUCING SURFACE DISCHARGE TO THE ADJACENT STREETS (MONTGOMERY AND SAN MATEO) WHILE DIVERTING SITE AREA FORMERLY DRAINING TO THE STREETS TO THE GRANT LINE CHANNEL WHICH IS BETTER SUITED TO ACCEPT AND CONVEY TO FLOWS. THE PROPOSED REDEVELOPMENT WILL SIGNIFICANTLY IMPROVE EXISTING CONDITIONS WHEREBY SITE RUNOFF FREELY DISCHARGES OVER THE FRONTING SIDEWALKS AND ALSO ENTERS THE GRANT LINE CHANNEL IN AN UNCONTROLLED OVERLAND FASHION.

2) GRADING AND DRAINAGE PLAN FOR NEW TECH HIGH SCHOOL, ENGINEER'S CERTIFICATION DATED 11/18/2010 (HYDROLOGY FILE F18/D054, NMPE 13676) PREPARED BY THIS OFFICE. THIS PLAN SUPPORTED THE FIRST PHASE OF DEL NORTE HIGH SCHOOL NEAR THE NORTHEAST CORNER OF THE SITE. ITS SITE IMPROVEMENTS INCLUDE A STORM DRAIN SYSTEM AND A WATER QUALITY RETENTION/DETENTION POND SERVING BASIN C.

3) GRADING AND DRAINAGE PLAN FOR DEL NORTE HIGH SCHOOL CLASSROOM AND MEDIA CENTER ADDITION, ENGINEER'S CERTIFICATION DATED 05/10/2012 (HYDROLOGY FILE F18/D054, NMPE 13676) PREPARED BY THIS OFFICE. THIS PLAN SUPPORTED THE SECOND PHASE OF CONSTRUCTION THAT INCLUDED A NEW PARKING LOT AT THE WEST END OF THE SITE AND A NEW CLASSROOM AND MEDIA CENTER BUILDING.

4) GRADING AND DRAINAGE PLAN FOR DEL NORTE HIGH SCHOOL INDUSTRIAL AND FINE ARTS BUILDING, ENGINEER'S STAMP DATED 02/20/2013 (HYDROLOGY FILE F18/D054, NMPE 13676) PREPARED BY THIS OFFICE. THIS PLAN SUPPORTED THE THIRD PHASE OF CONSTRUCTION THAT INCLUDES A NEW PARKING LOT AT THE SOUTH END OF THE SITE AND A NEW INDUSTRIAL AND FINE ARTS BUILDING NEAR THE EAST END OF THE SITE.

IV. EXISTING CONDITIONS:

AS DESCRIBED BY THE AFOREMENTIONED MASTER DRAINAGE PLAN, THE SITE IS CURRENTLY DEVELOPED AS A PUBLIC HIGH SCHOOL. THE PROPOSED IMPROVEMENTS LIE WITHIN BASINS A AND C AS IDENTIFIED BY THE MASTER DRAINAGE PLAN. BASIN A CURRENTLY DRAINS FREELY AS OVERLAND SURFACE RUNOFF OVER THE SIDEWALK TO MONTGOMERY BOULEVARD. BASIN C HAS MINIMAL TOPOGRAPHIC RELIEF, GRADUALLY DRAINING FROM SOUTHEAST TO NORTHWEST TO THE RECENTLY CONSTRUCTED STORM DRAIN AND RETENTION/DETENTION PONDING SYSTEM CONSTRUCTED WITH PHASE 1. THE EXISTING AND PRE-EXISTING PATTERNS ARE DESCRIBED IN MORE DETAIL IN THE AFOREMENTIONED MASTER DRAINAGE PLAN.

V. DEVELOPED CONDITIONS

THE PROPOSED IMPROVEMENTS INCLUDE A NEW CAFETERIA BUILDING WITH ASSOCIATED SITE PAVING AND LANDSCAPING IMPROVEMENTS. UPON CONCLUSION THE BUILDING CONSTRUCTION, A NEW SYNTHETIC TURF SOCCER FIELD WILL BE CONSTRUCTED. TWO NEW BUILDING AND ALL AREAS OF THE PROPOSED SITE WORK THAT LIE WITHIN MASTER DRAINAGE PLAN BASIN C WILL DISCHARGE ALL ROOF DRAINAGE DIRECTLY TO NEW STORM DRAINS THAT WILL BE EXTENDED FROM THE MASTER PLANNED STORM DRAINS CONSTRUCTED WITH PREVIOUS PHASES AND THAT EVENTUALLY OUTFALL TO THE GRANT LINE CHANNEL AFTER BEING ROUTED THROUGH THE EXISTING WATER QUALITY / DETENTION POND CONSTRUCTED WITH PHASE 1 THAT RETAIN A MAXIMUM OF 18" DEPTH OF RUNOFF. STORMWATER IN EXCESS OF THAT DEPTH DISCHARGES DIRECTLY TO THE GRANT LINE CHANNEL VIA CHANNEL PENETRATION CONSTRUCTED WITH PHASE 1. THE SOUTHERN PORTION OF THE PROPOSED PROJECT LIMITS LIE WITHIN MASTER DRAINAGE PLAN BASIN A AND WILL DRAIN TO NEW STORM DRAINS EXTENDED FROM MASTER PLANNED STORM DRAINS CONSTRUCTED WITH PREVIOUS PHASES AND THAT ARE ROUTED THROUGH WATER QUALITY PONDS BEFORE OVERFLOWING VIA SIDEWALK CULVERTS TO MONTGOMERY BOULEVARD NE.

VI. GRADING PLAN

THE GRADING PLAN ON SHEETS CG-101 SHOWS: 1) EXISTING GRADES INDICATED BY SPOT ELEVATIONS AND CONTOURS FROM THE TOPOGRAPHIC, BOUNDARY AND UTILITY SURVEY CONDUCTED BY THIS OFFICE DATED 06/30/2008 AND SUPPLEMENTED AND UPDATED 07/23/2009, 10/6/2009 AND 01/03/2011 (NYMPHS 11184), 2) PROPOSED GRADES INDICATED BY FLOOR ELEVATIONS, SPOT ELEVATIONS, NMPS, TOP OF CURB ELEVATIONS AND FLOWLINES, 3) THE LIMIT AND CHARACTER OF THE EXISTING IMPROVEMENTS AS SHOWN BY THE AFOREMENTIONED SURVEY, 4) THE LIMIT AND CHARACTER OF THE PROPOSED IMPROVEMENTS, AND 5) CONTINUITY BETWEEN PROPOSED AND EXISTING GRADES.

VII. CALCULATIONS

THIS PROJECT WAS IDENTIFIED BY THE REFERENCED MASTER DRAINAGE REPORT WHICH INCLUDED COMPREHENSIVE OVERALL DRAINAGE CALCULATIONS FOR THE OVERALL SITE OF WHICH THIS IS THE THIRD PHASE. AS SUCH, NEW CALCULATIONS FOR THIS SPECIFIC AREA ARE NOT PROVIDED HEREWITH. THE PROPOSED PROJECT WILL RESULT IN A RELATIVE MATCHING CONDITION IN IMPERVIOUS AREA WITH ALL DEVELOPED RUNOFF BEING INTERCEPTED DIRECTLY BY THE PROPOSED STORM DRAIN SYSTEM AND ROUTED THROUGH DETENTION / WATER QUALITY PONDS THAT WILL RETAIN AN 18" DEPTH OF RUNOFF FOR WATER QUALITY AND QUANTITY LEED REQUIREMENTS, THEREBY RESULTING IN A SIGNIFICANT DECREASE IN THE VOLUME AND PEAK RATE AND DISCHARGE FROM THIS AREA TO THE ADJACENT STREETS WHILE ALSO IMPROVING THE MANNER OF DISCHARGE.

VIII. CONCLUSIONS

THE PROPOSED CONTINUED DISCHARGE OF RUNOFF FROM THIS AREA OF THE SITE TO ADJACENT PUBLIC CITY STREETS AND A PUBLIC CITY DRAINAGE CHANNEL AT IS JUSTIFIED DUE TO THE FOLLOWING:

1) MODIFICATION TO AN EXISTING SITE WITHIN AN INFILL AREA
2) CONFORMANCE WITH MASTER DRAINAGE REPORT THAT SPECIFICALLY INCLUDED THIS DEVELOPMENT
3) IMPROVED MANNER OF DISCHARGE TO EXISTING OUTFALL
4) THERE ARE NO PUBLIC DRAINAGE EASEMENTS REQUIRED TO IMPLEMENT THIS PROJECT.

GENERAL NOTES

1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION – 1987, PUBLISHED BY THE NEW MEXICO CHAPTER AMERICAN PUBLIC WORKS ASSOCIATION. (REVISED 12/06)
2. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 260–1990, FOR DESIGNATION (LINE–SPOTTING) OF EXISTING PUBLIC UTILITIES AND EXISTING UTILITIES OWNED AND OPERATED BY ALBUQUERQUE PUBLIC SCHOOLS.
3. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFORE. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. 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. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
4. SHOULD A CONFLICT EXIST BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY FOR ALL PARTIES.
5. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION.
6. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING SAFETY AND HEALTH.
7. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT–OF–WAY OR ONTO PRIVATE PROPERTY.
8. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT–OF–WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
9. CONTRACTOR SHALL NOTIFY THE SURVEYOR NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE SURVEYOR MAY TAKE NECESSARY MEASURES TO ENSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE SURVEYOR AND SHALL NOTIFY THE SURVEYOR AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE SURVEYOR. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATION OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED.
10. ALL PAVEMENT MARKINGS AND TRAFFIC SIGNS SHALL COMPLY WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION, LATEST EDITION.
11. IF THE REMOVAL OF EXISTING CURB AND GUTTER, SIDEWALK, AND/OR PAVING IS REQUIRED, THE CONTRACTOR SHALL SAWCUT AND/OR REMOVE TO THE NEAREST JOINT. WHEN ABUTTING NEW PAVEMENT TO EXISTING, THE CONTRACTOR SHALL CUT BACK THE EXISTING PAVING TO A STRAIGHT LINE IN ORDER TO REMOVE ANY BROKEN OR CRACKED PAVEMENT. CURB AND GUTTER AND/OR PAVEMENT SHOWN AS EXISTING AND NOT TO BE REMOVED UNDER THIS CONTRACT AND WHICH IS DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
12. A DISPOSAL SITE FOR ALL EXCESS EXCAVATION MATERIAL (CONTAMINATED OR OTHERWISE), ASPHALTIC PAVING, CONCRETE PAVING, ETC. SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE REGULATIONS. ALL COSTS INCURRED IN OBTAINING A DISPOSAL SITE AND IN HAUL THERETO SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT SHALL BE MADE.
13. A BORROW SITE FOR IMPORT MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE REGULATIONS. ALL COSTS INCURRED IN OBTAINING A BORROW SITE AND IN HAUL THERETO SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT SHALL BE MADE.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAFELY OBTAINING THE REQUIRED COMPACTION. THE CONTRACTOR SHALL SELECT AND USE METHODS WHICH SHALL NOT BE INJURIOUS OR DAMAGING TO THE EXISTING FACILITIES AND STRUCTURES WHICH SURROUND THE WORK AREAS.
15. THE CONTRACTOR SHALL CONFINE HIS WORK WITHIN THE CONSTRUCTION LIMITS IN ORDER TO PRESERVE THE EXISTING IMPROVEMENTS AND SO AS NOT TO INTERFERE WITH THE OPERATIONS OF THE EXISTING FACILITIES.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING APPROPRIATE MEANS AND METHODS TO EXCAVATE AND TRENCH AND/OR INSTALL PIPE SO AS TO NOT EXCEED RIGHT–OF–WAY OR EASEMENT LIMITS, AND SO AS NOT TO INTERFERE WITH OTHER UTILITIES OR IMPROVEMENTS. THIS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING, SUPPORTING AND REPLACING, IF DAMAGED, ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION. THIS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
18. ALL DIMENSIONS AND RADII OF CURB, CURB RETURNS, AND WALLS ARE SHOWN TO THE FACE OF CURB AND/OR WALL.
19. THE CONTRACTOR SHALL NOTIFY THE OWNER 48 HOURS PRIOR TO STRIPING SO THAT LAYOUT CAN BE VERIFIED.
20. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INTERPRETATIONS IT MAKES WITHOUT FIRST CONTACTING THE ENGINEER AS REQUIRED ABOVE.
21. ALL FILL SHALL BE FREE FROM VEGETATION, DEBRIS, AND OTHER DELETERIOUS MATERIALS.
22. ALL FILL SHALL BE COMPACTED TO A MINIMUM OF 95% ASTM D–1557 UNLESS A GREATER COMPACTION REQUIREMENT IS OTHERWISE SPECIFIED.
23. REFER TO GEOTECHNICAL REPORT FOR EARTHWORK REQUIREMENTS AND PROCEDURES.
24. **CAUTION: THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR. ALL EXCAVATION, TRENCHING AND SHORING ACTIVITIES MUST BE CARRIED–OUT IN ACCORDANCE WITH OSHA 29 CFR 1926, SUBPART P–EXCAVATIONS.**
25. **THE CONTRACTOR SHALL SECURE ON BEHALF OF THE OWNER AND OPERATORS "FUGITIVE DUST CONTROL PERMIT" FROM THE CITY AND FILE A NOTICE OF INTENT (N.O.I.) WITH THE EPA PRIOR TO BEGINNING CONSTRUCTION. PLEASE REFER TO WWW.CABQ.GOV FOR FUGITIVE DUST PERMITTING REQUIREMENTS, APPLICATIONS, AND TECHNIQUES. PLEASE REFER TO OWNER PROVIDED SWPPP FOR THIS PROJECT.**

CONSTRUCTION NOTES:

1. 1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM 260–1990 FOR DESIGNATION (LINE–SPOTTING) OF EXISTING PUBLIC UTILITIES AND EXISTING UTILITIES OWNED AND OPERATED BY ALBUQUERQUE PUBLIC SCHOOLS.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INTERPRETATIONS IT MAKES WITHOUT FIRST CONTACTING THE ENGINEER AS REQUIRED ABOVE.
3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
4. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #7, AMENDMENT 1
5. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFORE. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. 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. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
6. THE DESIGN OF PLANTERS AND LANDSCAPED AREAS IS NOT PART OF THIS PLAN. ALL PLANTERS AND LANDSCAPED AREAS ADJACENT TO THE BUILDING(S) SHALL BE PROVIDED WITH POSITIVE DRAINAGE TO AVOID ANY PONDING ADJACENT TO THE STRUCTURE. FOR CONSTRUCTION DETAILS, REFER TO LANDSCAPING PLAN.
7. **THE CONTRACTOR SHALL SECURE ON BEHALF OF THE OWNER AND OPERATORS "FUGITIVE DUST CONTROL PERMIT" FROM THE CITY AND FILE A NOTICE OF INTENT (N.O.I.) WITH THE EPA PRIOR TO BEGINNING CONSTRUCTION. PLEASE REFER TO WWW.CABQ.GOV FOR FUGITIVE DUST PERMITTING REQUIREMENTS, APPLICATIONS, AND TECHNIQUES. PLEASE REFER TO OWNER PROVIDED SWPPP FOR THIS PROJECT.**

EROSION CONTROL MEASURES:

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT–OF–WAY OR ONTO PRIVATE PROPERTY.
2. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT–OF–WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
3. **THE CONTRACTOR SHALL SECURE ON BEHALF OF THE OWNER AND OPERATORS "FUGITIVE DUST CONTROL PERMIT" FROM THE CITY AND FILE A NOTICE OF INTENT (N.O.I.) WITH THE EPA PRIOR TO BEGINNING CONSTRUCTION. PLEASE REFER TO WWW.CABQ.GOV FOR FUGITIVE DUST PERMITTING REQUIREMENTS, APPLICATIONS, AND TECHNIQUES. PLEASE REFER TO OWNER PROVIDED SWPPP FOR THIS PROJECT.**

WATER, SANITARY SEWER AND GAS CONSTRUCTION NOTES:

1. FOR ALL WATER LINES 4" TO 12", WATER MAIN SHALL BE PVC C–900 DR18 PIPE OR AS APPROVED BY THE WATER AUTHORITY. DUCTILE IRON IS AN ACCEPTABLE PIPE MATERIAL IN LIEU OF PVC.
2. WATER LINE SERVICES AND FITTINGS SMALLER THAN 4" SHALL BE OF A MATERIAL APPROVED BY THE CITY OF ALBUQUERQUE BUILDING DEPARTMENT.
3. WATER LINE SHALL HAVE A MINIMUM COVER OF 3'–0" (FINISHED GRADE TO TOP OF PIPE) FOR ALL LINES 12" OR SMALLER; 4'–0" MINIMUM COVER FOR LINES 14" OR LARGER. EXTRA DEPTH TRENCHING, IF REQUIRED, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
4. NEW WATER AND NATURAL GAS INSTALLATIONS SHALL INCLUDE INSULATED 12 GAUGE COPPER TRACER WIRE INSTALLED CONTINUOUSLY ALONG THE PIPE WITH WATER–PROOF SPLICE BOXES AT JUNCTIONS AND TEES. TRACER WIRE SHALL BE ACCESSIBLE AT ALL VALVES, SERVICES, AND RISERS. TRACER WIRE SHALL BE CONSIDERED INCIDENTAL TO UTILITY INSTALLATION, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
5. IN ACCORDANCE WITH SECTION 801 OF THE "STANDARD SPECIFICATIONS", METALIZED DETECTABLE WARNING TAPE SHALL BE INSTALLED 18" ABOVE ALL PVC PIPE INSTALLED ON THIS PROJECT.
6. JOINT RESTRAINT SHALL BE CONSIDERED INCIDENTAL TO WATER LINE CONSTRUCTION THEREFORE NO SEPARATE PAYMENT WILL BE MADE.
7. JOINT RESTRAINT SHALL BE PROVIDED ON ALL JOINTS OF FIRE LINES FROM TEE TO BUILDING INCLUDING THE TEE.
8. FOR THE PURPOSES OF THIS PROJECT, ALL RESTRAINED JOINTS AND JOINT RESTRAINT SHALL BE MECHANICALLY RESTRAINED. JOINT RESTRAINT LENGTHS SPECIFIED HEREON ARE THE LENGTHS TO BE RESTRAINED EACH SIDE OF THE FITTING.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING APPROPRIATE MEANS AND METHODS TO EXCAVATE AND TRENCH AND INSTALL PIPE SO AS TO NOT EXCEED RIGHT–OF–WAY OR EASEMENT LIMITS, AND SO AS NOT TO INTERFERE WITH OTHER UTILITIES. THIS SHALL BE CONSIDERED INCIDENTAL TO TRENCHING, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING, SUPPORTING AND REPLACING, IF DAMAGED, ALL OTHER UTILITIES ENCOUNTERED DURING CONSTRUCTION. THIS SHALL BE CONSIDERED INCIDENTAL TO TRENCHING, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
11. ALL SEWER PIPE SHALL BE PVC (SDR–35).
12. GAS LINES, FITTINGS AND APPURTENANCES SHALL BE OF TYPE AND MATERIAL AS SPECIFIED BY THE PLUMBING ENGINEER.

EXPANDED LEGEND (APPLIES TO ALL CIVIL SHEETS)

AL	AREA LIGHT	ODR	OVERHEAD DOOR
AP	ASPHALT PATH	OF	OVERFLOW
ARD	ASPHALT RUNDOWN	OHC(1)	OVERHEAD COMMUNICATION (# OF LINES)
ASB	ATHLETIC STORAGE BUILDING	OHE(1)	OVERHEAD ELECTRIC (# OF LINES)
ASPH	ASPHALT	OHM	OVERHEAD ELECTRIC MAST
ASV	ANTI–SIPHON VALVE	PB	PARKING BUMPER
AT	ANNOUNCER'S TOWER	PBN	PLASTIC BENCH
AW	ART WORK/STATUE	PGE	PLAYGROUND EQUIPMENT
BB	BREAKER BOX	PI	PAINTED ISLAND
BBG	BASKETBALL GOAL	PIV	POST INDICATOR VALVE
BLCH	BLEACHERS	PLT	PLANTER
BLDG	BUILDING	PP	PORTABLE PIER
BOH	BUILDING OVERHANG	PRVV	PRESSURE REDUCING VALVE IN VAULT
BR	BIKE RACK	PS	PARKING STRIPE
BRDG	BRIDGE	PT	PICNIC TABLE
BS	BACKSTOP	PV	POLE VAULT
BSC	BUILDING SUPPORT COLUMN (CONCRETE MASONRY UNIT)	RCP	REINFORCED CONCRETE PIPE
C	COMMUNICATION	RD	ROOF DRAIN
C&G	CURB AND GUTTER	RDSB	ROOF DRAIN WITH SPLASH BOX
C/FRD	COMMUNICATION FROM RECORD DRAWING	RND	ROUND DRAIN
C/PM	COMMUNICATION BY PAINT MARK	RPB	ROW OF PARKING BUMPERS
CB	CONCRETE BENCH	RRT	RAILROAD TIE
CBC	CONCRETE BUILDING COLUMN	RSG	ROUND STORM GRATE
CBS	CONCRETE BASE	RWF	ROCK WATERFALL
CC	CONCRETE CURB	SAS	SANITARY SEWER
CCHN	CONCRETE CHANNEL	SAS/FRD	SANITARY SEWER FROM RECORD DRAWING
CGP	CONCRETE GUARD POST	SAS/PM	SANITARY SEWER BY PAINT MARK
CH	CONCRETE WITH HOPPER	SC	STEEL COVER
CHW	CONCRETE HEADWALL	SCB	SPRINKLER CONTROL BOX
CI	CONCRETE ISLAND	SCO	STORM DRAIN CLEANOUT
CIP	CONCRETE PIPE	SCT	SPRINKLER CONTROL TIMER
CL	CENTERLINE	SCV	SPRINKLER CONTROL VALVE
CLD	CENTERLINE OF DOOR	SD/FRD	STORM DRAIN FROM RECORD DRAWING
CLDD	CENTERLINE OF DOUBLE DOOR	SDI	STORM DRAIN INLET
CLEE	CHAINLINK ELECTRIC ENCLOSURE	SDP	SERVICE DROP POLE
CLF	CHAINLINK FENCE	SGP	STEEL GUARD POST
CLGD	CENTERLINE OF GARAGE DOOR	SGPR	STEEL GUARD POST WITH METAL RAIL
CMS	CONCRETE MOW STRIP	SH	SPEED HUMP
CMU	CONCRETE MASONRY UNIT	SHR	STEEL HANDRAIL
CMU/NF	CONCRETE MASONRY UNIT WITH NET FENCE	SP	STEEL POLE
CNC	CANOPY COLUMN	SPCM	SERVICE DROP POLE WITH CAMERA
CNP	CANOPY	SSV	SMALL SPRINKLER VALVE
CO	SANITARY SEWER CLEANOUT	STD	STANDARD
COMM	COMMUNICATION	STRG	STORAGE
CONC	CONCRETE	SV	SPRINKLER VALVE
CP	CONCRETE PIPE	SVB	SPRINKLER VALVE BOX
CPB	CONCRETE PEDESTRIAN BRIDGE	SVP	SEWER VENT PIPE
CR	CONCRETE RAMP	SW	SIDEWALK
CRD	CONCRETE RUNDOWN	SWC	SIDEWALK CULVERT
CRW	CONCRETE RETAINING WALL	SWNG	SWING SET
CRW/CLF	CONCRETE RETAINING WALL WITH CHAINLINK FENCE	TA	TOP OF ASPHALT
CS	CONCRETE STEPS	TC	TOP OF CURB
CSW	CONCRETE SIDEWALK	TCB	TELEPHONE CABINET
CTC	CONCRETE TRASH CAN	TCC	TRAFFIC CONTROL CABINET
CTVR	CABLE TELEVISION RISER	TCND	TELEPHONE CONDUIT
CV	COMMUNICATION VAULT	TCO	TOP OF CONCRETE
CW	CONCRETE WALL	TELE	TELEPHONE