APPROVED AS RECORD DRAWINGS
DESIGN REVIEW SECTIONS
CITY CONSTRUCTION ENGINEER
DATE: 6/15/17

LOT L-1-B-1-A, BLOCK 11
PANORAMA HEIGHTS

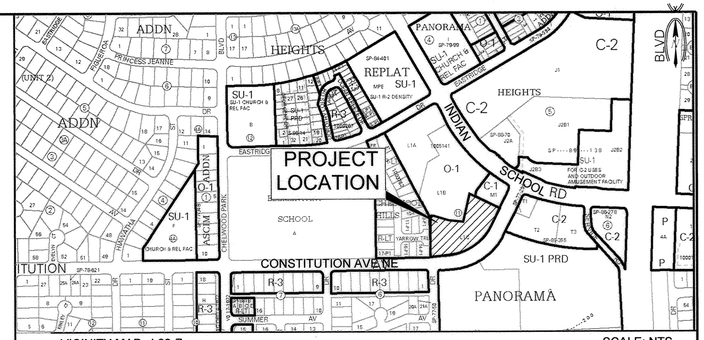
ALBUQUERQUE, NEW MEXICO

CONSTRUCTION PLANS
FOR
WATER & SANITARY SEWER IMPROVEMENTS

JULY 2015

DRAWING INDEX

SHEET TITLE	SHEET
COVER	1
TOPOGRAPHIC SURVEY	2
WATER & SANITARY SEWER SITE PLAN	3
EROSION AND SEDIMENT CONTROL	4-5



VICINITY MAP: J-22-Z SCALE: NTS

GENERAL NOTES:

1. CITY OF ALBUQUERQUE SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS AMENDED THROUGH UPDATE 8, AMENDMENT #1, WILL BE REFERRED TO HEREIN AS THE "STANDARD SPECIFICATIONS." 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 STANDARD SPECIFICATIONS
2. THREE WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) AND DETERMINE LOCATION OF EXISTING UTILITIES.
3. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR THE SURVEYOR SO THAT THE CONFLICT CAN BE RESOLVED WITHOUT DELAY.
4. ALL EXISTING SIGNS, MARKERS, DELINEATORS, ETC., WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED, STORED AND RE-SET BY THE CONTRACTOR.
5. THE CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) WORKING DAYS PRIOR TO STARTING WORK IN ORDER THAT THE ENGINEER MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. THE CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE ENGINEER AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE CITY SURVEYOR. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATIONS OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MARKER IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.
6. FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION THE CONTRACTOR SHALL SUBMIT TO THE CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (924-3400) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO SECTION 19 OF THE STANDARD SPECIFICATIONS.
7. ANY WORK OCCURRING WITHIN AN ARTERIAL ROADWAY REQUIRES 24 HOUR CONSTRUCTION.
8. ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
9. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED BY THE CONTRACTOR WITH HOT THERMOPLASTIC REFLECTORIZED PAVEMENT MARKING. ALL NEW STRIPING SHALL BE HOT THERMOPLASTIC REFLECTORIZED PAVEMENT MARKING.
10. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ANY DAMAGE TO EXISTING PAVEMENTS, SIGNAGE, PAVEMENT MARKINGS, CURB AND GUTTER, DRIVEPADS, WHEELCHAIR RAMPS AND SIDEWALKS DURING CONSTRUCTION, APART FROM THOSE SECTIONS INDICATED FOR REMOVAL ON THE PLANS AND SHALL REPAIR OR REPLACE PER THE STANDARD SPECIFICATIONS AT HIS OWN EXPENSE.
11. EXISTING UTILITY LINES AND PIPELINES SHOWN ON THESE DRAWINGS ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. UTILITIES MAY EXIST WHERE NONE ARE SHOWN. THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE OR TYPE OF EXISTING UTILITY LINES AND PIPELINES. THE CONTRACTOR IS FULLY RESPONSIBLE FOR DAMAGE CAUSED BY FAILURE TO LOCATE AND PRESERVE EXISTING UTILITY LINES AND PIPELINES.
12. THE CONTRACTOR SHALL SECURE A "TOPSOIL DISTURBANCE PERMIT" PRIOR TO BEGINNING CONSTRUCTION.
13. THE CONTRACTOR SHALL ASSIST THE ENGINEER/INSPECTOR IN THE RECORDING OF DATA ON ALL UTILITY LINES AND ACCESSORIES AS REQUIRED BY THE OWNERS FOR THE PREPARATION OF "RECORD DRAWINGS." THE CONTRACTOR SHALL NOT COVER UTILITY LINES AND ACCESSORIES UNTIL ALL DATA HAS BEEN RECORDED.
14. ALL CONSTRUCTION WITHIN CITY RIGHT-OF-WAY OR EASEMENTS MUST BE DONE FROM APPROVED WORK ORDER DOCUMENTS FROM THE CITY AND PREPARED BY BRASHER AND LORENZ, INC.
15. THE CONTRACTOR SHALL DETERMINE IN ADVANCE OF HIS CONSTRUCTION IF OVERHEAD UTILITY LINES, SUPPORT STRUCTURES, POLES, GUYS, ETC. ARE AN OBSTRUCTION TO CONSTRUCTION OPERATIONS. IF ANY OBSTRUCTION TO CONSTRUCTION OPERATIONS IS EVIDENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE APPROPRIATE UTILITY OWNER TO REMOVE OR SUPPORT THE UTILITY OBSTRUCTION. ANY COST ASSOCIATED WITH THIS EFFORT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
16. THE CONTRACTOR IS TO SUPPORT AND MAINTAIN THE INTEGRITY OF ALL UNDERGROUND TELEPHONE, ELECTRIC CABLES AND CABLE TELEVISION UTILITIES AT NO ADDITIONAL COST THE OWNER. CABLE IS TO BE SUPPORTED EVERY 15 FEET (MINIMUM). CONTRACTOR SHALL COORDINATE WITH AND MAKE NECESSARY PAYMENT (IF ANY) TO UTILITY OWNER FOR DE-ENERGIZATION OF CABLES OR SUPPORT OF CABLES BY THE UTILITY OWNER.
17. RCP SHALL BE INSTALLED SO THAT THE JOINT GAP AT THE HOME POSITION SHALL CONFORM TO THE APPROVED MANUFACTURES RECOMMENDATION. MANUFACTURER'S RECOMMENDED JOINT GAP TOLERANCES FOR EACH PIPE SIZE AND TYPE SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO PLACEMENT OF PIPE. RCP JOINTS SHALL NOT BE GROUTED UNLESS DIRECTED BY THE ENGINEER AFTER CITY APPROVAL.
18. ALL EXCAVATION, TRENCHING, AND SHORING ACTIVITIES MUST BE CARRIED-OUT IN ACCORDANCE WITH OSHA 29 CFR 1926.650 SUBPART P.
19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MONITORING ALL CONSTRUCTION SIGNAGE UNTIL THE PROJECT HAS BEEN ACCEPTED BY THE CITY OF ALBUQUERQUE.
20. OVERNIGHT PARKING OF CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS OR DESIGNATED TRAFFIC LANES. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIALS WITHIN THE PUBLIC RIGHT-OF-WAY.
21. CURB AND GUTTER, SIDEWALKS AND DRIVEPADS SHALL MATCH THE ELEVATIONS OF ABUTTING EXISTING. AREAS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE PROJECT ENGINEER. REMOVAL SHALL BE TO THE NEAREST JOINT. THE SUBGRADE PREP SHALL EXTEND ONE FOOT BEYOND THE FREE EDGE OF NEW CURB AND GUTTER, SIDEWALK AND DRIVEPAD.
23. CONTRACTOR TO TEST SUBGRADE R-VALUE PRIOR TO CONSTRUCTION. IN THE EVENT THE R-VALUE IS LESS THAN 50, REMOVE 2 FEET OF SUBGRADE MATERIAL AND IMPORT MATERIAL WITH R-VALUE GREATER THAN 50 OR CONTACT THE ENGINEER IMMEDIATELY SO THE PAVEMENT SECTION CAN BE MODIFIED.

Surveyor's Certification

I, Robert J. Fierro, New Mexico Professional Surveyor No. 22909, do hereby certify that the "as-built" information shown on these drawings was obtained from field construction and "as-built" surveys performed by me or under my supervision, and that this "as-built" information is true and correct to the best of my knowledge and belief. I am not responsible for any of the design concepts, calculations, engineering, or intent of the record drawings.

Robert J. Fierro 10-12-16

Robert J. Fierro, N.M.P.S. No. 22909 — Date
Fierro & Company, LLC.
5508 Costa Uerde Rd. NW
Albuquerque, NM 87120

ROBERT J. FIERRO NEW MEXICO 22909 10-12-16 PROFESSIONAL SURVEYOR

CERTIFICATE OF SUBSTANTIAL COMPLIANCE

I RICHARD DOURTE, NMPE 10854, OF THE FIRM RHD ENGINEERING, LLC, HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE INFRASTRUCTURE INSTALLED AS A PART OF THIS PROJECT HAS BEEN INSPECTED BY ME OR A QUALIFIED PERSON UNDER MY DIRECT SUPERVISION AND HAS BEEN CONSTRUCTED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS APPROVED BY THE CITY AND ABCWUA ENGINEER AND THAT THE ORIGINAL DESIGN INTENT HAS BEEN MET, EXCEPT AS NOTED BY ME OR PERSONNEL UNDER MY DIRECTION. SURVEY BY ROBERT FIERRO NMPS # 22909

RICHARD R. DOURTE NEW MEXICO 10854 REGISTERED PROFESSIONAL ENGINEER 8-25-16

LORENZ DESIGN & CONSULTING, LLC
Civil Engineering | Construction Management
2501 Rio Grande Blvd NW, Suite A Albuquerque, New Mexico 87104
Ph: 505-888-6088 Fax: 505-242-6655

REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE

ENGINEER'S STAMP & SIGNATURE

DENNIS A. LORENZ NEW MEXICO 9547 REGISTERED PROFESSIONAL ENGINEER 8-24-16

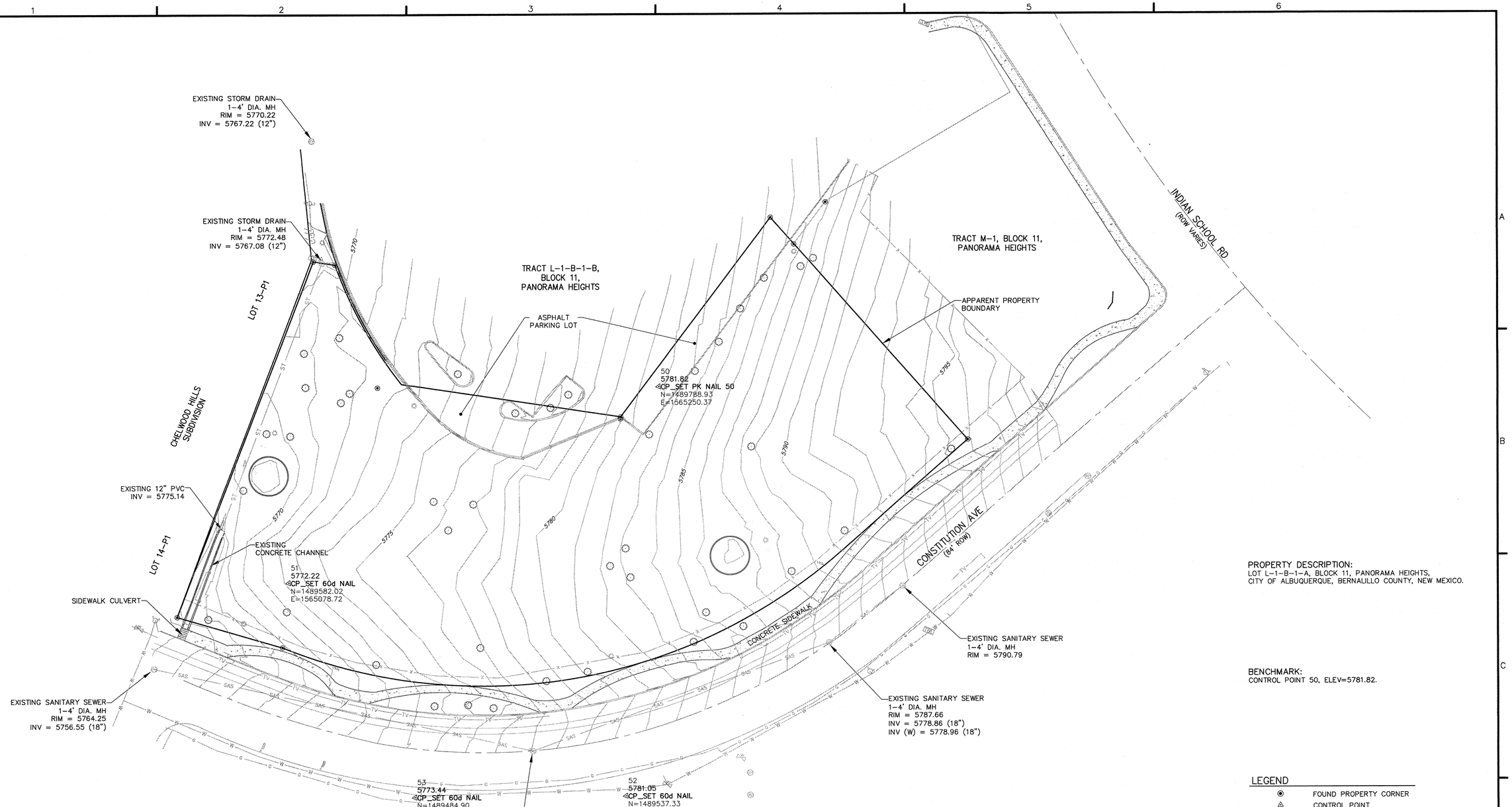
APPROVALS	ENGINEER	DATE
DRC Chair		6-29-16
Transportation		7-29-16
ABCWUA		7-29-16
Hydrology		7-29-16
CIP		
Constr. Mgmt.		
Constr. Coord.		

APPROVED FOR CONSTRUCTION

City Engineer 7/25/16 Date

City Project No. 783283

Zone Map No. J-22-Z Sheet 1 of 15



PROPERTY DESCRIPTION:
LOT L-1-B-1-A, BLOCK 11, PANORAMA HEIGHTS,
CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

BENCHMARK:
CONTROL POINT 50, ELEV=5781.82.

LEGEND

- FOUND PROPERTY CORNER
- CONTROL POINT
- SD MANHOLE
- SAS MANHOLE
- WATER METER
- WATER VALVE
- POWER POLE
- LIGHT POLE
- GUY WIRE
- SHRUB
- TREE
- GATE
- FENCE
- OVERHEAD ELECTRIC
- SANITARY SEWER
- STORM DRAIN
- WATERLINE
- GAS
- CATV

NOTE:
THIS IS NOT A BOUNDARY SURVEY

SURVEYOR'S CERTIFICATION
I, LYNN D. LANTZ, NEW MEXICO PROFESSIONAL SURVEYOR NO. 10856, DO HEREBY CERTIFY THAT THIS PLAT OF TOPOGRAPHIC SURVEY WAS PREPARED FROM FIELD NOTES OF AN ACTUAL GROUND SURVEY PERFORMED BY ME OR UNDER MY SUPERVISION; THAT IT ACCURATELY MEETS THE STANDARDS FOR LAND SURVEYS IN NEW MEXICO AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND PROFESSIONAL SURVEYORS.

LYNN D. LANTZ, N.M.P.S. No. 10856 — Date: NOV 2014

LYNN D. LANTZ STATE OF NEW MEXICO 10856 REGISTERED PROFESSIONAL SURVEYOR

0 15' 30'

SCALE:	1:30			
FIELD WORK BY:	SAH, LDL			
DRAWN BY:	OR			
CHECKED BY:	RJF, LDL			
NO.	DATE	BY	REVISION	

Fierro&Company
2929 COORS BLVD. N.W.
SUITE 307-B
ALBUQUERQUE, NEW MEXICO 87120
PH (505) 503-9546
www.fierrocompany.com

SUB-CONSULTANT:
Compass Land Surveying LLC

13101 CONSTITUTION
ALBUQUERQUE, NM 87112

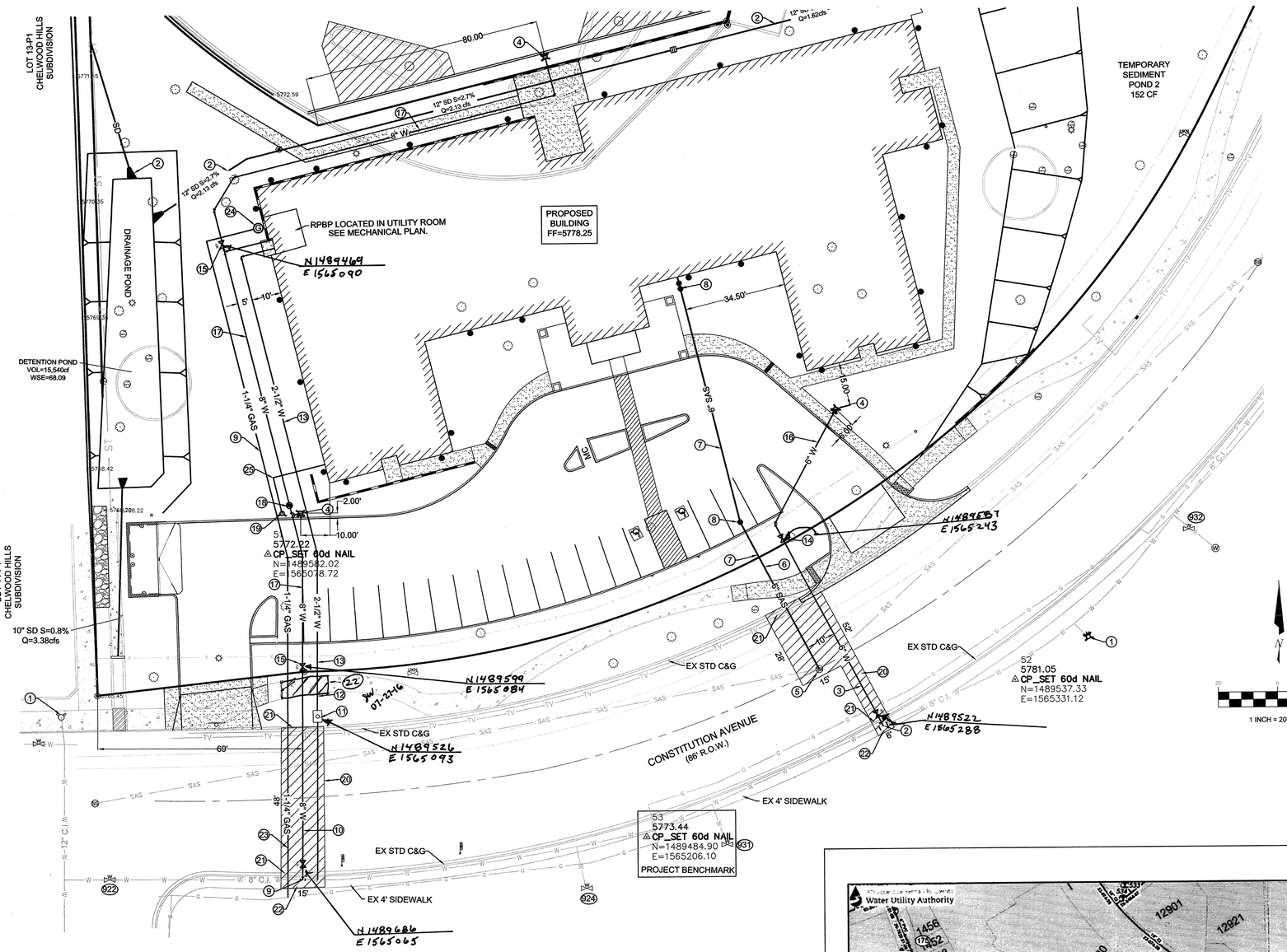
PANORAMA HEIGHTS

TRACT L-1-B-1-A
TOPOGRAPHIC SURVEY

SHEET	1 OF 1
DWG	142-47_TOPO EXHIBIT
DATE	NOV 2014
PROJ	142-47

Sheet 2

\\Seagate-400\ED\Public\PROJECTS\SURVEYING\14204700\CADD\SHEETS\142-47_TOPO PLAT.dwg11/11/2014 9:02:59 AM



LEGEND

ITEM	EXISTING	PROPOSED
WATERLINE	6"W	6" W
SANITARY SEWER	8"SAS	8" SAS
STORM SEWER	36"SD	24" SD
FIRE HYDRANT		
VALVE		
WATER SERVICE (SINGLE)		
WATER SERVICE (DOUBLE)		
MANHOLE		
SEWER SERVICE		
POWER POLE (GUYED)	PP	PP
DROP INLET		
OVERHEAD ELEC	OHE	
UNDERGROUND TEL CABLE	TC	
UNDERGROUND ELEC, GAS,TV	UGE UGT GAS	
TEL. PEDESTAL	TEL	
RIGHT OF WAY		
EASEMENT LINE		
PROPERTY LINE		
CENTERLINE		
WATER VALVE NO.	932	

GENERAL NOTES FOR UTILITIES

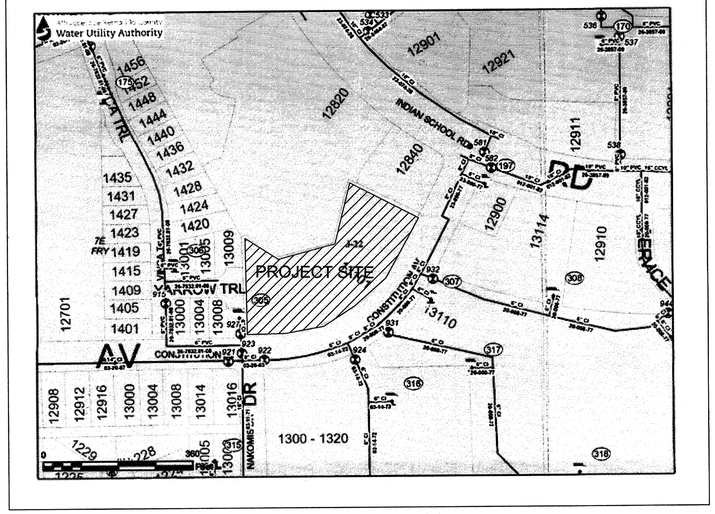
1. ALL WATER AND SANITARY SEWER SERVICE EXTENSIONS WILL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL STANDARDS AND CRITERIA.
2. ALL PRIVATE WATER AND SANITARY SEWER DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE UNIFORM PLUMBING CODE, 2009 EDITION.
3. THIS PLAN DOES NOT SPECIFY FIRE PROTECTION CRITERIA.
4. ALL DRY UTILITY SERVICE EXTENSIONS WILL BE DESIGNED AND CONSTRUCTED BY THE SERVICE PROVIDERS.

KEYED NOTES

1. EXISTING FIRE HYDRANT
2. CONNECT 6-INCH WATER TO EXIST 8-INCH WATER PER COA STD DWG 2301:
   INSTALL: 1-6" X 8 " TEE
   1-8" TRANSITION COUPLING
   1-6" GATE VALVE AND VALVE BOX
   CONCRETE BLOCKING
   RESTRAINED JOINTS
3. CONSTRUCT 6-INCH WATERLINE.
4. FIRE HYDRANT PRIVATE - NIC..
5. CONSTRUCT SANITARY SEWER CONNECTION TO EXISTING SANITARY SEWER MANHOLE PER COA STD DWG 2118. (AW 07-27-16)
6. CONSTRUCT 6-INCH PRIVATE SANITARY SEWER. S= 2% slope
7. 6-INCH SANITARY SEWER YARD LINE - PRIVATE - NIC.
8. CLEANOUT PER CODE. TYPICAL. PRIVATE - NIC.
9. CONNECT 8-INCH WATER TO EXIST 8-INCH WATER PER COA STD DWG 2301:
   INSTALL: 1-8" X 8 " TEE
   1-8" GATE VALVE AND VALVE BOX
   1-8" TRANSITION COUPLING
   CONCRETE BLOCKING
   RESTRAINED JOINTS
10. CONSTRUCT 8-INCH WATERLINE.
11. CONSTRUCT 1-1/2-INCH METERED WATER SERVICE PER COA STD DWGS 2361 & 2363.
12. CONSTRUCT 1-1/2-INCH WATER LINE PER COA STD DWGS 2363 & 2367.
13. 2-1/2 INCH PRIVATE DOMESTIC WATERLINE - NIC.
14. PRIVATE 6-INCH GATE VALVE AND VALVE BOX - NIC.
15. PRIVATE 8-INCH GATE VALVE AND VALVE BOX - NIC.
16. 6-INCH WATERLINE (FIRE PROTECTION) PRIVATE - NIC.
17. 8-INCH WATERLINE (FIRE PROTECTION) PRIVATE - NIC.
18. POST INDICATOR VALVE - PRIVATE - NIC.
19. FIRE DEPARTMENT CONNECTION. COORDINATE LOCATION WITH FIRE MARSHALL - PRIVATE - NIC.
20. REMOVE AND REPLACE EXISTING ASPHALT PAVEMENT TO LIMITS SHOWN PER COA STD DWG 2465 - COLLECTOR STREET.
21. REMOVE AND REPLACE EXISTING STANDARD CURB AND GUTTER PER COA STD DWG 2415A
22. REMOVE AND REPLACE EXISTING 4' SIDEWALK PER COA STD DWG 2430.
23. NEW 1-1/4 INCH GAS BY NEW MEXICO GAS CO.
24. NEW GAS METER BY NEW MEXICO GAS CO.
25. PRIVATE FIRE BOOSTER LINE - PRIVATE NIC..

WATER SHUT OFF PLAN

1. THE CONTRACTOR SHALL COORDINATE WITH THE WATER AUTHORITY SEVEN (7) WORKING DAYS IN ADVANCE OF PERFORMING WORK THAT WILL AFFECT THE PUBLIC WATER OR SANITARY SEWER INFRASTRUCTURE. WORK REQUIRING SHUTOFF OF WELL COLLECTORS, TRANSMISSION LINES, OR FACILITIES MUST BE COORDINATED WITH THE WATER AUTHORITY 14 DAYS IN ADVANCE OF PERFORMING SUCH WORK. ONLY WATER AUTHORITY CREWS ARE AUTHORIZED TO OPERATE PUBLIC VALVES. SHUTOFF REQUESTS MUST BE MADE AT HTTP://ABCWUA.ORG/CONTENT/VIEW/46
2. CONNECTION OF THE NEW 6-INCH AND 8-INCH WATERLINES TO THE EXISTING 8-INCH WATERLINE WILL REQUIRE A NON-PRESSURIZED CONNECTION. VALVE NOS. 922, 924, 931, 307, 581, AND 582 MUST BE CLOSED BY WATER AUTHORITY PERSONNEL TO MAKE THIS CONNECTION (SEE ATTACHED MAP).



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Robert J. Fierro 10-12-16
Robert J. Fierro, N.M.P.S. No. 22909 Date
Fierro & Company, LLC.
5508 Costa Uerde Rd. NW
Albuquerque, NM 87120

ROBERT J. FIERRO NEW MEXICO 22909 10-12-16 PROFESSIONAL SURVEYOR

RICHARD H. DOURTE NEW MEXICO 10854 REGISTERED PROFESSIONAL ENGINEER 8-25-16

CERTIFICATE OF SUBSTANTIAL COMPLIANCE

I RICHARD DOURTE, NMPE 10854, OF THE FIRM RHD ENGINEERING, LLC, HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE INFRASTRUCTURE INSTALLED AS A PART OF THIS PROJECT HAS BEEN INSPECTED BY ME OR A QUALIFIED PERSON UNDER MY DIRECT SUPERVISION AND HAS BEEN CONSTRUCTED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS APPROVED BY THE CITY AND ABCWUA ENGINEER AND THAT THE ORIGINAL DESIGN INTENT HAS BEEN MET, EXCEPT AS NOTED BY ME OR PERSONNEL UNDER MY DIRECTION. SURVEY BY ROBERT FIERRO NMPS # 22909

AS BUILT INFORMATION
CONTRACTOR TLC, INC. DATE 8-2016
STAKED BY FIERRO & CO DATE 8-25-16
INSPECTORS
ACCEPTANCE BY R. Dourte DATE 8-25-16
FIELD
VERIFICATION BY R. Dourte DATE 8-25-16
REVISIONS
CORRECTED BY R. Dourte DATE 8-25-16
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
CONTROL POINT 53
A SET 60 P NAIL
N 1,489,484.90
E 1,565,206.10
ELEVATION 5773.44 FEET MSLD
NAVD 1988

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

ENGINEER'S SEAL
CHARLES A. LORENZ NEW MEXICO 9647 REGISTERED PROFESSIONAL ENGINEER 10-26-16

NO.	REMARKS	BY	DATE
	DESIGN	DAL	5/26/2016
	REVISIONS	DAL	5/26/2016
	REMARKS	DAL	5/26/2016

DESIGNED BY DAL
DRAWN BY DAL
CHECKED BY DAL

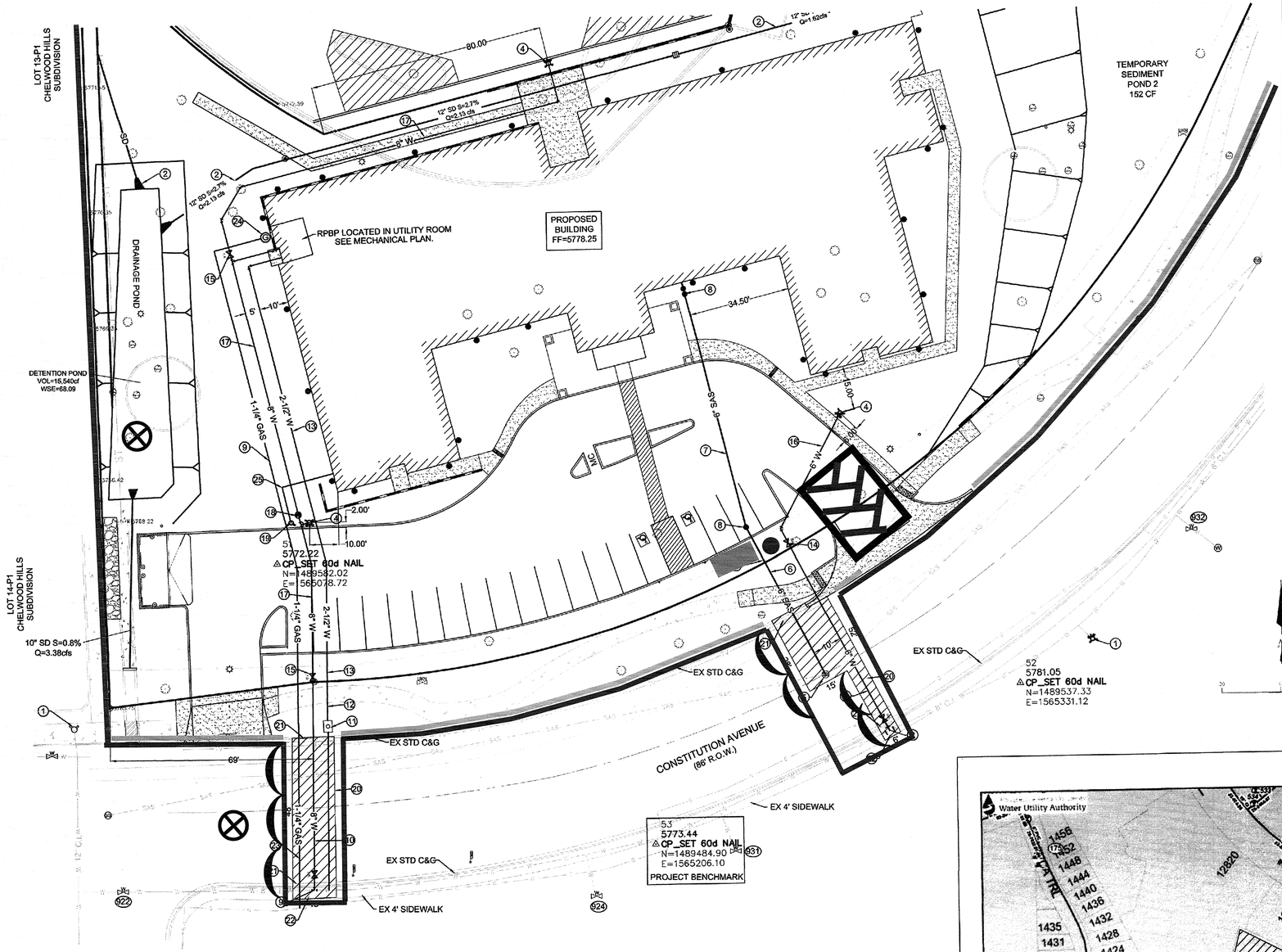
LORENZ DESIGN & CONSULTING, LLC
Civil Engineering | Construction Management
2501 Rio Grande Blvd NW, Suite A
Albuquerque, New Mexico 87104
Ph: 505-888-6088 Fax: 505-242-6655

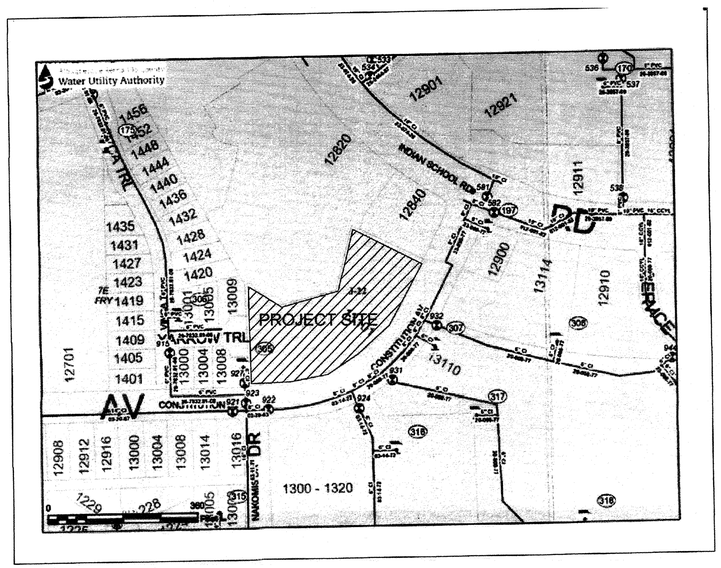
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: LOT L-1-B-1-A, BLOCK 11, PANORAMA HEIGHTS WATER & SANITARY SEWER SITE PLAN

Design Review Committee	City Engineer Approval	Mo./Day/Yr	Mo./Day/Yr
APPROVED JUN 24 2016 DESIGN REVIEW COMMITTEE	APPROVED JUL 25 2016 CITY ENGINEER		

City Project No. 783283 | Zone Map No. J-22-Z | Sheet 3 of 3





Note:

- When doing work in the City ROW (sidewalk, storm drain, drive pads) avoid dirt from getting into the street. If dirt is present in the street, the street should be swept every few days or the same day if rain is imminent.
- If stock piling dirt in the street and rain is forcasted, place wattles along the down slope side of the pile.

Inspections Plus, Inc.

Engineer Stamp

DAVID SOULE
NEW MEXICO
14522
REGISTERED PROFESSIONAL ENGINEER

6/3/16

Legend

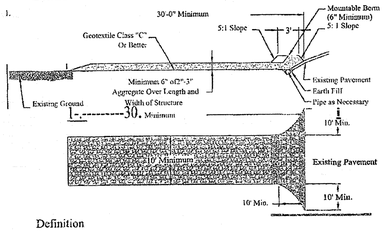
Erosion Sediment Control Plan

- PB — Project Perimeter
- DA — Disturbed Area
- Flow
- Outfall
- Pond
- Preserved Vegetation
- Stabilized Construction Entrance
- Staging Area
- TR — Trash Receptacle
- Chemical Toilet
- S — Posting Sign
- Concrete Washout
- BW — Block Wall
- PS — Proposed Storm Inlet
- Construction Trailer
- ( ) — Inlet Protection
- SF — Silt Fence
- Wattle

Bella Vista Assisted Living
Offsite ECP Plan

Sheet 4

Stabilized Construction Entrance for Small Sites



Definition

A stabilized layer of aggregate that is underlain with Geotextile Class "C" (See Standards for Geotextile). Stabilized entrances are located at any point where traffic enters or leaves a construction site.

Purpose

The purpose of the stabilized construction entrance is to reduce tracking of sediment onto streets or public rights-of-way and provide a stable area for entrance or exit from the construction site.

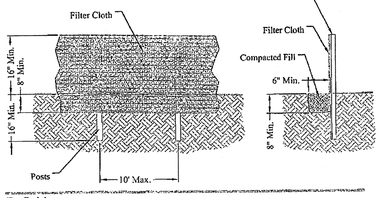
Conditions where the Practice Applies

1. Stabilized construction entrances shall be located at points of construction ingress and egress.
2. For single family residences, the entrance should be located at the permanent driveway.
3. Stabilized construction entrances should not be used on existing pavement.

Design Criteria

2. Length - Minimum of 30'-0" (10'-0" for single residence lot).
1. Width - Minimum of 10'-0", should be flared at the existing road to provide a turning radius.
2. Geotextile Class "C" shall be placed over the exiting ground prior to placing stone. The Plan approval authority may not require geotextile fabric for single family residence.
3. Stone-crushed aggregate 2"-3" (See Standards for Geotextile and Rock). Recycled concrete equivalent may be used also. The rock should be placed at least 6" deep over the length and width of the entrance.
4. Surface Water - All the surface water flowing to or diverted toward construction entrances shall be piped under the entrance to maintain positive drainage. Pipe installed under the construction entrance shall be protected with a mountable berm. The pipe shall be sized according to the drainage, with the minimum diameter being 6".
6. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

Silt Fence



Definition

A temporary barrier of Geotextile Class "F" used to intercept sediment laden runoff from small drainage areas.

Purpose

The purpose of silt fence is to reduce runoff where velocity and allow the deposition of transported sediment to occur. Limits imposed by ultraviolet light on the stability of the fabric will dictate the maximum period that the silt fence may be used.

1. Silt fence provides a barrier that can collect and hold debris and soil, preventing the material from entering critical areas, streams, streets, etc.
2. Silt fence can be used where the installation of a dike would destroy sensitive areas; woods, wetlands, etc.

Conditions where the Practice Applies

Silt Fence is limited to intercepting sheet flow runoff from limited distances according to slope. It provides filtering and velocity dissipation to promote gravity settling of sediment.

Design Criteria

Wood or Steel Posts may be used in certain instances. Silt fence should be placed as close to the contour as possible. No section of silt fence should exceed a grade of 5 percent for a distance more than 50 feet. Where ends of the geotextile fabric come together, the ends shall be overlapped, folded, and stapled to prevent sediment bypass.

* If wood post are to be used they must meet the following specifications:

1 ½" X 1 ½" minimum square posts, or 1 ¾" minimum diameter round post

* If metal posts are to be used they must be standard "T" or "U" post weighing not less than 1 lb. per linear foot.

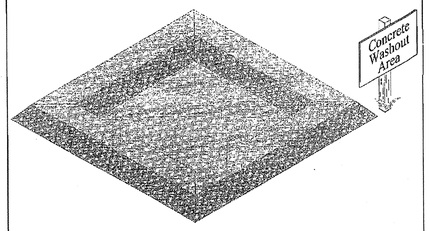
The length of the flow contributing to silt fence shall conform to the following limitations.

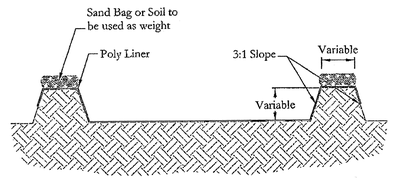
Slope (%)	Slope Steepness	Slope Length (Ft.) (Maximum)	Silt Fence Length (Ft.) (Maximum)
2	0-50:1	Unlimited	Unlimited
2-10	50:1-10:1	125	1,000
10-20	10:1-5:1	100	750
20-33	5:1-3:1	60	500
33-50	3:1-2:1	40	250
50 +	> 2:1	20	125

4

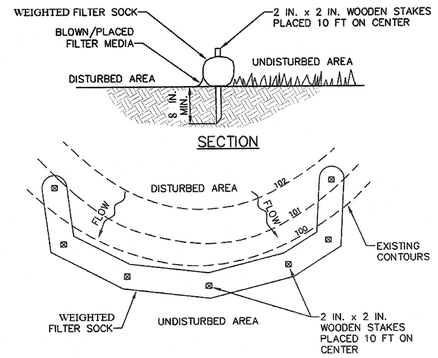
Concrete Washout Area

For use in High Water Table Areas





51



NOTES:

Weighted filter socks may be used on impervious surfaces without stakes.

Traffic shall not be permitted to cross the weighted filter socks.

Accumulated sediment shall be removed when it reaches ½ the above ground height of the barrier and deposed in the manner described elsewhere in the plan.

Weighted filter socks shall be inspected weekly and after each rain event. Damaged socks shall be repaired according to manufacture's specifications or replaced within 24 hours of inspection.

Biodegradable weighted filter socks shall be replaced after 6 months; photodegradable socks after 1 year. Polypropylene socks shall be replaced according to manufacturer's recommendations.

Upon stabilization of the area tributary to the sock, stakes shall be removed. The sock may be left in place and vegetated or removed. In the latter case the mesh shall be cut open and the mulch spread as a soil supplement if applicable.

STANDARD CONSTRUCTION DETAIL
WEIGHTED FILTER SOCK

Erosion Control Notes

1. All perimeter erosion and sediment control measures shall be installed prior to the execution of any grading work and maintained by the grading contractor for the duration of the grading project. Failure to install and maintain erosion control is a violation of State Law and subject to fine.
2. The appropriate erosion control devise(s) shall be installed prior to the inception of any land disturbing activity and shall be properly maintained for construction activities.
3. All Erosion Control devices and their installation shall meet the standards prescribed in the current guidelines for storm water management for construction activities.
4. Sediment collected behind the sediment filters and silt fences shall be removed when sediment reaches one third the height of the barrier.
5. Sediment filters and silt fences shall be inspected and maintained no less than weekly or within 24 hours of a rainfall event of 0.5 inches or more. Maintenance shall include but not be limited to sediment removal, barrier repair and / or replacement.
6. Construction Site Entrance: The contractor shall construct as a minimum one stabilized construction entrance at the location shown on the plans. If additional ingress and egress to the construction site is required, the contractor shall coordinate with the construction manager the location of these additional stabilized construction entrances. Usage of non-stabilized for ingress and egress will not be permitted. The stabilized entrances shall be maintained in a condition which will prevent tracking or flowing of sediment onto public right-of-way and paved driving lanes. This may require periodic top dressing with additional stone as conditions warrant. Repair of the entrances or cleaning of the right-of-way and paved driving lanes that have been soiled shall be performed by the contractor at his own expense satisfactory to the construction manager. When necessary, vehicle wheels and tires shall be cleaned to remove sediment prior to entering onto public right-of-way and public streets. When washing is required, it shall be done on an area stabilized with crushed stone.
7. The contractor shall at his own expense, periodically water the site to control dust.
8. Sedimentation and erosion control measures shall be removed following construction or upon permanent stabilization of the disturbed and graded areas, whichever occurs last.
9. All disturbed areas that are not to be paved shall be re-seeded unless noted otherwise.
10. The contractor shall keep the site clean at all times and control dust resulting from the earthwork operation. The contractor shall not track mud onto the public streets.

Inspections Plus, Inc.

Engineer Stamp

DAVID SOLLE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER

6/3/16

Inspections Plus Inc.
Erosion Control Plan
Standard Details

Project:

Bella Vista Assisted Living
Offsite ECP

Sheet 5