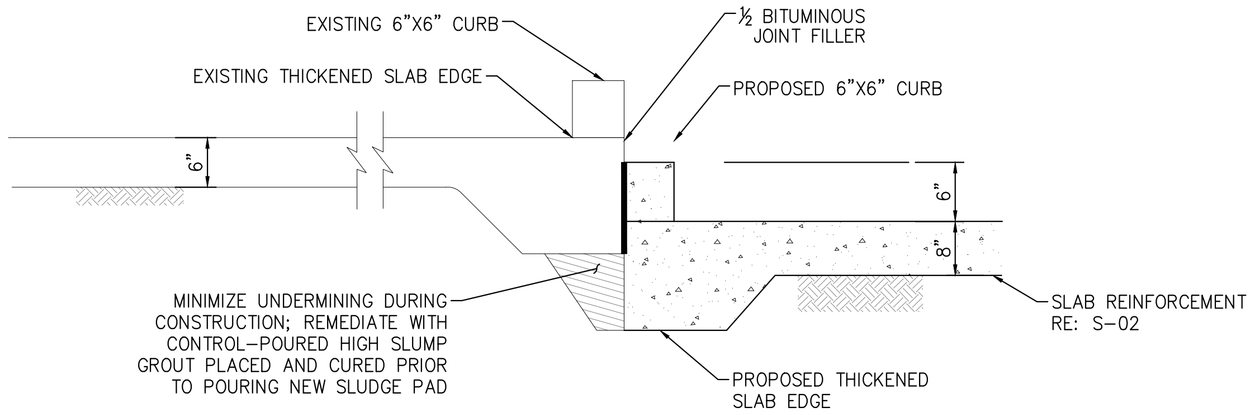
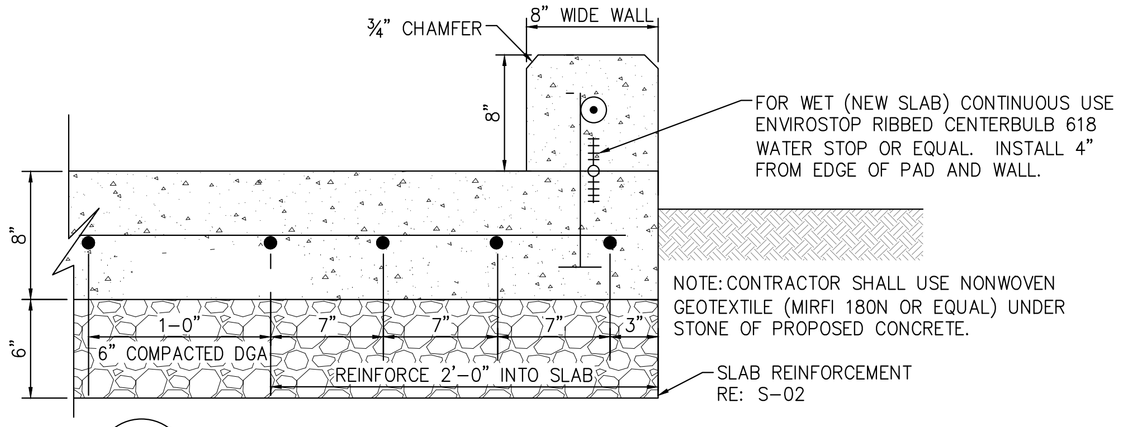


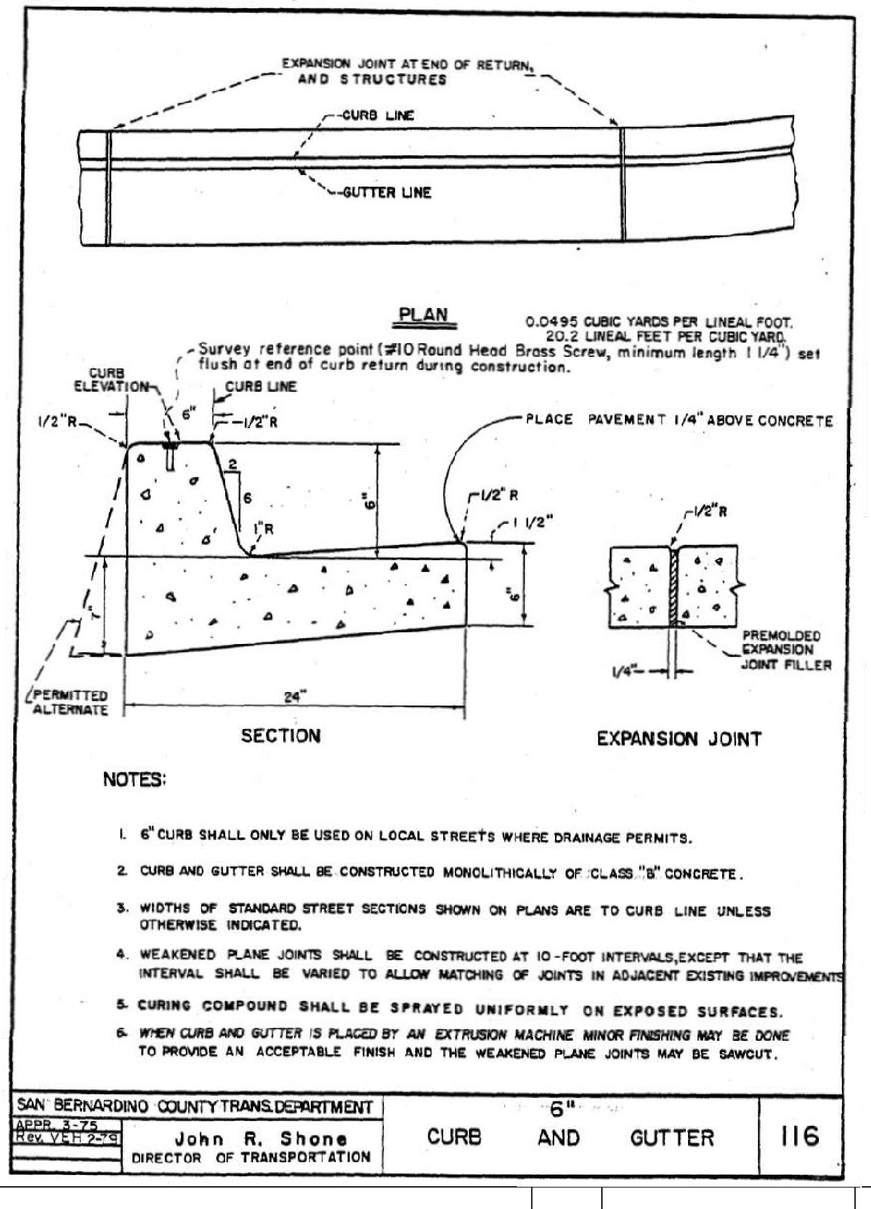
A C-04 **CROSS SECTION A - A**

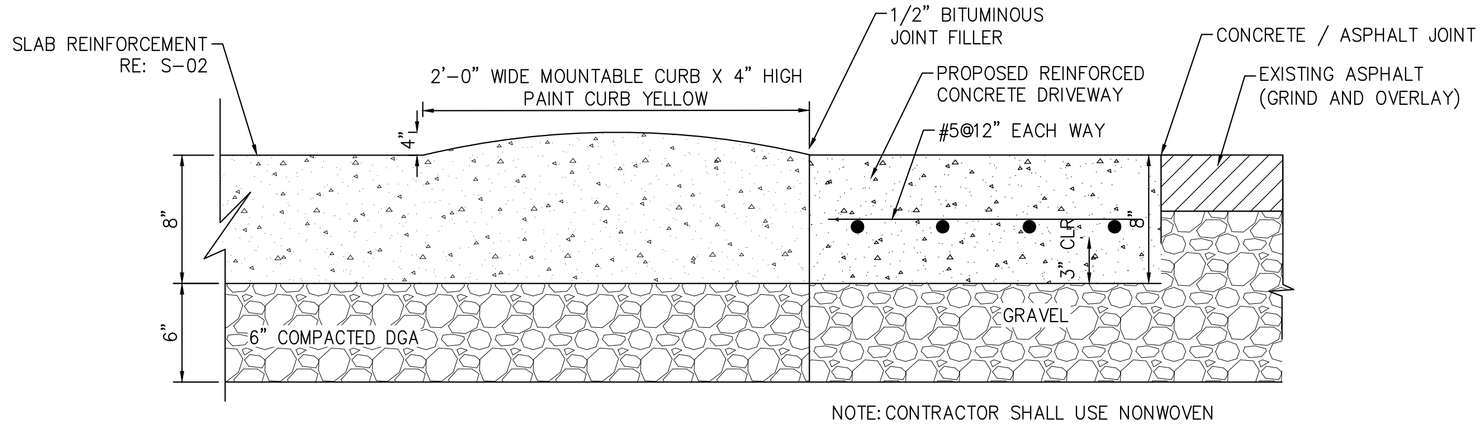
SCALE: NOT TO SCALE



C C-04 **CROSS SECTION C - C**

SCALE: NOT TO SCALE

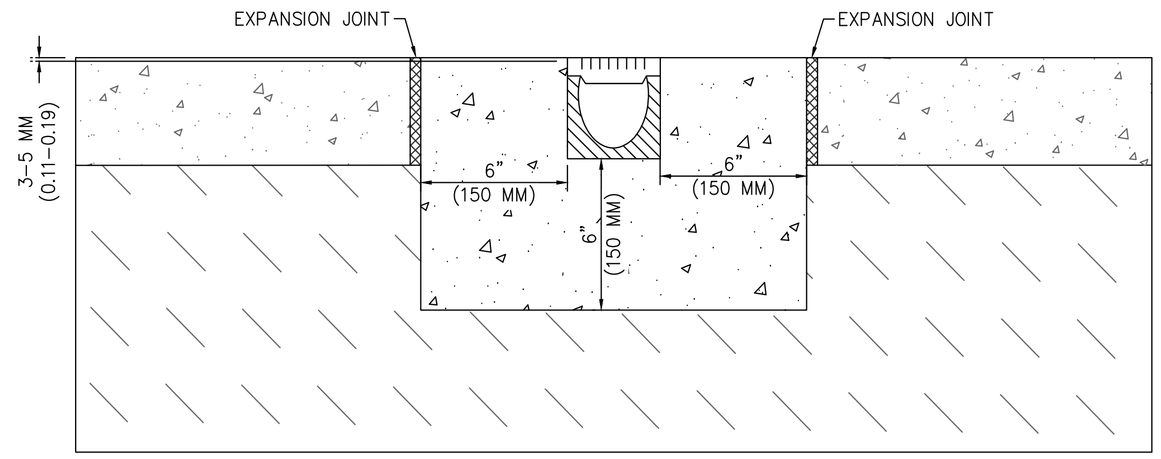




PROPOSED SLAB & CURB AT EXISTING ASPHALT

B C-04 **CROSS SECTION B - B**

SCALE: NOT TO SCALE



SECTION

SPECIFICATIONS:

FILCOTEN TEC-V NW100 – LOAD CLASS C

GENERAL:

THE SURFACE DRAINAGE SYSTEM SHALL BE FILCOTEN FIBER COMPOSITE NW100 CHANNEL SYSTEM WITH CONCRETED EDGE MADE OF GALVANIZED STEEL RAILS AS MANUFACTURED BY BG GRASPOINTNER, INC AND DISTRIBUTED BY HYDRO BG USA INC., A WHOLLY OWNED SUBSIDIARY.

MATERIALS:

CHANNELS SHALL BE MANUFACTURED FROM FILCOTEN FIBER COMPOSITE WITH CONCRETED EDGE MADE OF GALVANIZED STEEL RAILS
MINIMUM PROPERTIES OF FILCOTEN FIBER COMPOSITE WILL BE AS FOLLOWS:

COMPRESSIVE STRENGTH:	11,700 PSI
FLEXURAL STRENGTH:	1,700 PSI
FREE OF RELEASE AGENTS:	YES
WATER ABSORPTION SUFFICIENT FOR ADHESION WITH CONCRETE SURFACES:	YES
NON FLAMMABLE:	YES
U/V RESISTANT:	YES
RECYCLABLE 100%:	YES
DILUTE ACID AND ALKALI RESISTANT:	YES
FROST THAW SALT TESTED AS PER EN1433 WITH A TEST TEMPERATURE UP TO -40°C(-40°F):	YES
MATERIAL FREE OF VOC, BIOCIDES, HEAVY METALS:	YES

THE SYSTEM SHALL BE 4" (100MM) NORMAL INTERNAL WIDTH WITH 5.31" (135MM UP TO 185MM) OVERALL WIDTH AND A BUILT-IN SLOPE OF 0.5% AND STEPPED SLOPE SYSTEM. ALL CHANNELS ARE EQUIPPED WITH INTERLOCKING CONNECTION MALE/FEMALE AND SEALANT JOINT.

THE COMPLETE DRAINAGE SYSTEM SHALL BE BY HYDRO BG USA, INC. ANY DEVIATION OR PARTIAL SYSTEM DESIGN AND/OR IMPROPER INSTALLATION WILL VOID ANY AND ALL WARRANTIES PROVIDED BY HYDRO BG USA, INC.

CHANNEL SHALL WITHSTAND LOADING TO PROPER LOAD CLASS AS OUTLINED BY EN 1433. GRATE TYPE SHALL BE APPROPRIATE TO MEET THE SYSTEM LOAD CLASS SPECIFIED AND INTENDED APPLICATION. GRATES SHALL BE SECURED USING 4-POINT BOLTING LOCKING SYSTEM. CHANNEL AND GRATE SHALL BE CERTIFIED TO MEET THE SPECIFIED EN 1433 LOAD CLASS. THE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.

NOTES:

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWING.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY.
4. ALL INFORMATION CONTAINED HEREON WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED. BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.

1 C-05 **FILCOTEN TRENCH DRAIN**

FILCOTEN TEC V 100 GALVANIZED STEEL RAIL CLASS C CONCRETE PAVEMENT

"NOT FOR BID"

K:\RIV_WATER\195658108 – Lytle Creek Screw Press\4-Design\CAD\PlanSheets\9-10 GRADING AND PAVING PLAN.dwg 12/21/2020 1:05 PM

Kimley»Horn

REV.	DATE	DESCRIPTION	APP.
			KPK DESIGNED
			RKR DRAWN
			KPD CHECKED

COUNTY OF SAN BERNARDINO
DEPARTMENT OF PUBLIC WORKS - SPECIAL DISTRICTS
222 WEST HOSPITALITY LANE, 2ND FLOOR
SAN BERNARDINO, CA 92415-0450
909-386-8800

REGISTERED PROFESSIONAL ENGINEER SAMUEL LAKE MCWHORTER No 61288 Exp 6/30/21 CIVIL STATE OF CALIFORNIA
Samuel Lake McWhorter

APPROVED	2/28/2021 DATE
PROJECT ENGINEER	12/28/20 DATE
RECOMMENDED	DATE

LYTLE CREEK NORTH
CSA 70 GH SCREW PRESS
SLUDGE DEWATERING

GRADING AND PAVING DETAILS

DRAWING NUMBER C-05
SHEET 10 OF 26
SCALE:
DATE: DEC 2020

SEE PHOTO DETAIL 1 SHEET C-03

INSTALL: 6" DI 45° ELB

FIELD VERIFY LOCATION AND DEPTH OF UNDERGROUND ELECTRICAL CONDUITS PRIOR TO CONSTRUCTION. (TYP)

CONST: 6" DI WAS PIPING

INSTALL: 6"x6" DI TEE

INSTALL: 6" DI PLUG VALVE

INSTALL: 12"x6" DI REDUCER AND CONNECT TO EXISTING 12" DI WAS PIPING. CONTRACTOR TO FIELD VERIFY 12" WAS PIPE LOCATION PRIOR TO CONSTRUCTION.

EXISTING 1.5" PLANT WATER

CONST: 6" DI WAS PIPING

INSTALL: 6"x6" DI TEE

EXISTING DRAIN PIPING (TYP). FIELD VERIFY LOCATION AND DEPTH PRIOR TO CONSTRUCTION.

INSTALL: 6" DI 90° ELB

CONST: 6" DI WAS PIPING

NEW CONCRETE

EXISTING 12" WAS

EXISTING 12" WAS RETURN

INSTALL: 6" DI 45° ELB AND CONNECT TO EXISTING 6" DI WAS PIPING

INSTALL: 6" DI 45° ELB

PROPOSED 4" DRAIN LINE. SEE M-01 FOR CONNECTION DETAILS.

INSTALL 6" PLUG VALVE

MOUNTABLE CURB

SEE SHEET M-01 FOR CONNECTION DETAILS

6"X6" CONCRETE CURB

PROPOSED 1.5" PLANT WATER. SEE SHEET M-01

AERATED SLUDGE HOLDING TANK #1

AERATED SLUDGE HOLDING TANK #2

PROPOSED SCREW PRESS. SEE SHEET M-01 FOR DETAILS.

PROPOSED ROLLOFF CONCRETE PAD WITH TRENCH DRAIN. SEE SHEET C-04 AND C-05 FOR DETAILS.

CONST: 6" DI WAS PIPING

PROPOSED 1.5" POTABLE WATER. SEE SHEET M-01

PROPOSED CANOPY SEE STRUCTURAL SHEETS

RELOCATE EXISTING POLYMER INJECTION AND STATIC MIXER. SEE SHEET C-08 FOR CONNECTION DETAILS

SEE SHEET C-08 FOR CONNECTION DETAILS TO EXISTING SLUDGE DRYING BEDS.

PROPOSED 6" DI WAS PIPING TO SLUDGE FEED PUMP. SEE SHEET C-08 FOR DETAILS

EXISTING POLYMER FEED BUILDING TO REMAIN

SEE PHOTO DETAIL 4 SHEET C-08

EXISTING 6" WAS LINE

"NOT FOR BID"

NORTH

GRAPHIC SCALE IN FEET
0 2.5 5 10

SCALE 1" = 5'

NOTE:

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL CROSSINGS AND CONNECTING UTILITIES REQUIRED TO COMPLETE THE WORK. UTILITY INVESTIGATION SHALL BE COMPLETED BY HAND OR HYDRO-VAC METHODS. CONTRACTOR TO PROVIDE SCALED, DETAILED, UTILITY CONFLICT FIELD NOTES AS CONDITION PRECEDENT TO PAYMENT FOR MOBILIZATION ACTIVITIES. PAY ITEMS FOR PIPELINE ADJUSTMENTS ARE INCLUDED IN THE BID FORMS IF REQUIRED IN THE ENGINEER'S SOLE OPINION.

K:\RIV_WATER\105068108 - Lytle Creek Screw Press\4-Design\CAD\PlanSheets\11 PROPOSED YARD PIPING.dwg 12/21/2020 3:04 PM

Kimley»Horn

REV.	DATE	DESCRIPTION	APP.
			KPK DESIGNED
			RKR DRAWN
			KPD CHECKED

COUNTY OF SAN BERNARDINO
DEPARTMENT OF PUBLIC WORKS - SPECIAL DISTRICTS
222 WEST HOSPITALITY LANE, 2ND FLOOR
SAN BERNARDINO, CA 92415-0450
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Samuel Lake McWhorter

APPROVED	2/28/2021 DATE
PROJECT ENGINEER	12/28/20 DATE
RECOMMENDED	DATE

LYTLE CREEK NORTH
CSA 70 GH SCREW PRESS SLUDGE DEWATERING

PROPOSED YARD PIPING

DRAWING NUMBER	C-06
SHEET	11 OF 26
SCALE:	1" = 5'
DATE:	DEC 2020