# RECLAMATION DISTRICT NO. 900 SOUTH AREA DRAINAGE BASIN

PROJECT PLANS FOR CONSTRUCTION ON

## BLACKER DRAINAGE DITCH SLOPE MAINTENANCE PROJECT

YOLO COUNTY, CALIFORNIA

90% SUBMITTAL - FOR REVIEW ONLY

### OWNER:

RECLAMATION DISTRICT NO. 900 1420 MERKLEY AVENUE, SUITE 4 WEST SACRAMENTO, CALIFORNIA 95691 PHONE: (916) 371-1483

### PROJECT CONSULTANTS:

#### 1 CIVIL ENGINEE

MHM INCORPORATED (ATTN SEAN MINARD) 1204 E STREET, P.O. BOX B MARYSVILLE, CALIFORNIA 95901 PHONE: (530) 742-6485 FAY: (530) 742-6849

#### 2. LAND SURVEYORS:

MHM INCORPORATED (ATTN ROGER HANLIN)
1204 E STREET, P.O. BOX B
MARYSVILLE, CALIFORNIA 95901
PHONE: (530) 742-6485
FAX: (530) 742-5639

#### 4. ENIVORMENTAL:

WARRUS H. BOLE ASSOCIATES (ATTN MARCUS BOLE)

104 BROCK DRIVE
WHEATLAND, CALIFORNIA 95692
PHONE: (530) 633-0117
FAX: (530) 633-0119

811 CALL BEFORE YOU DIG 2 WORKING DAYS CALL "USA" TOLL FREE 1-800-227-2600



UNDERGROUND SERVICE ALERT THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES TWO (2) WORKING DAYS PRIOR

UTILITY	AGENCY	CONTACT	PHONE NUMBER
FIRE PROTECTION	CITY OF WEST SAC, FIRE DEPT.	RICK MARTINEZ	(916) 617-4600
GAS	PACIFIC GAS & ELECTRIC	DWAYNE LEMMOND	(916) 386-5068
ELECTRICITY	PACIFIC GAS & ELECTRIC	BRIAN SWEENEY	(916) 386-5117
WATER	CITY OF WEST SACRAMENTO	DENIX ANBIAH	(916) 617-4850
SEWER	CITY OF WEST SACRAMENTO	DENIX ANBIAH	(916) 617-4850
STORM DRAINAGE	RD 900	KENRIC JAMESON	(916) 371-1494
	UNDERGROUND SERVICE ALERT		(800) 227-2600

#### HORIZONTAL CONTROL INFORMATION

THE BEARINGS SHOWN HEREON ARE BASED UPON CALIFORNIA COORDINATES ZONE 2, NAD 83 DATUM (EPOCH 2011) AND ORIGINATE FROM NGS SURVEY CONTROL POINTS AC 69220 "HPO D C A 03 CH" (N 1970975.88, E 6681965.29) A CALTRANS BM DISC LOCATED WITHIN THE LANDSCAPE AREA BOUNDED BY EAST BOUND INTERTATE 80 AND THE ON/OFF RAMPS TO ENTERPRISE BLVD AND CONTROL POINT DH6510 "PALA" (N 196630.05, E 6693555.88) A CALTRANS BM DISK LOCATED IN THE CONCRETE SIDEWALK ON THE EAST SIDE OF LAKE WASHINGTON BLVD AT THE SOUTHERN END OF THE PALAMIDESSI BRIDGE OVER THE YOLO BARGE CANAL.

## VERTICAL CONTROL INFORMATION

ELEVATIONS ORIGINATE FROM NGS SURVEY CONTROL POINT DH6510 "PALA" (N 1966300.53, E 6693555.88) A CALTRANS BM DISK, WITH AN NGS PUBLISH NAVD(1988) ELEVATION OF 42.5.

APPROVED BY:	
RECLAMATION DISTRICT NO. 900 KENRIC JAMESON GENERAL MANAGER	DATE
SUBMITTED BY:	
PREPARED UNDER THE SUPERVISION OF	
MHM INCORPORATED	DATE
SEAN MINARD, P.E. R.C.E.# 52593 EXP. 12-31-16	

NOTE: THE CONTRACTOR SHALL POSSESS THE FOLLOWING CONTRACTOR LICENSE(S) AT THE TIME THIS CONTRACT IS AWARDED:

A. GENERAL ENGINEERING

**PWGR 16-00XX** 



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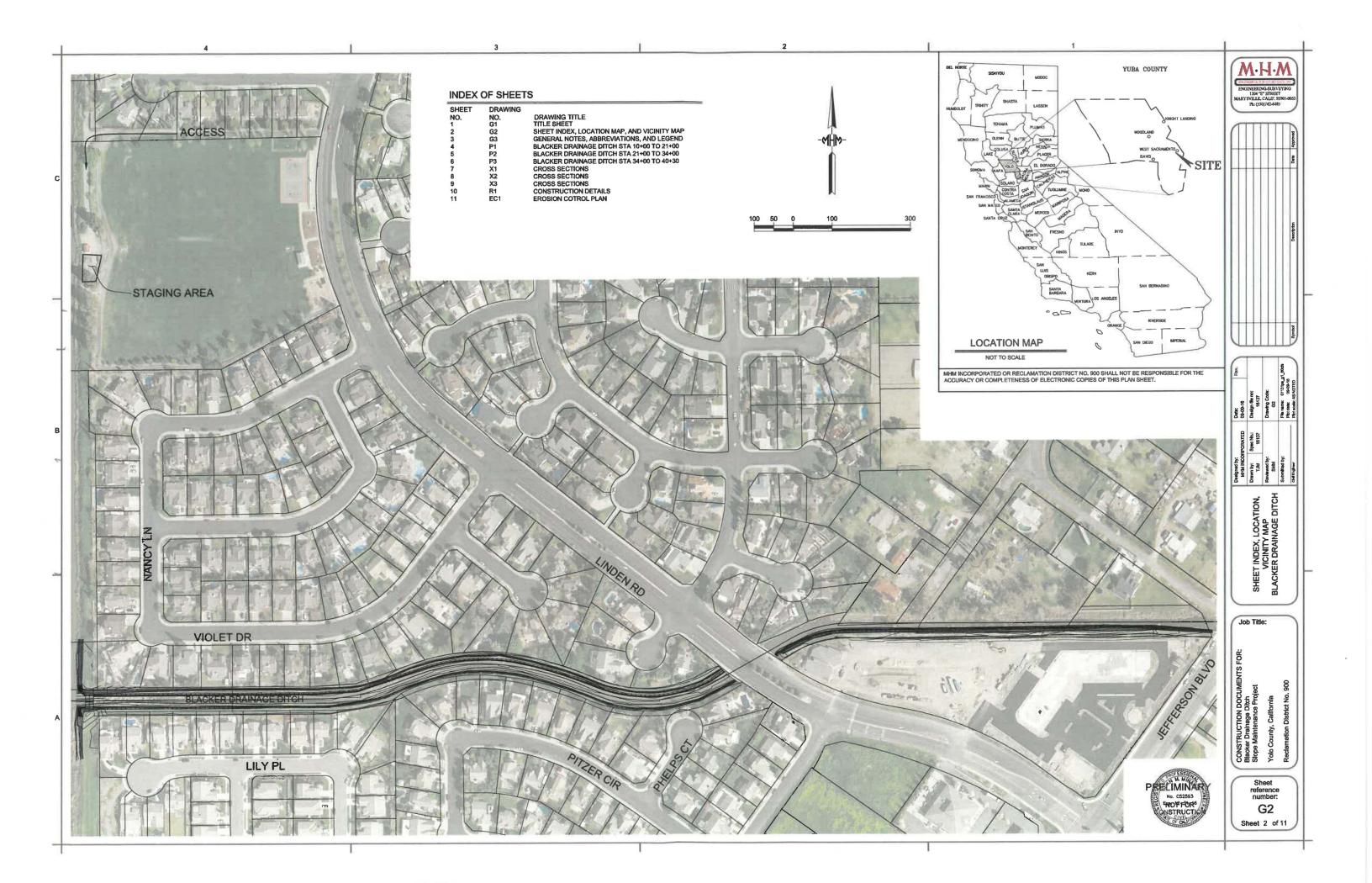
TITLE SHEET
BLACKER DRAINAGE

CONSTRUCTION DOCUMENTS F Slacker Drainage Ditch Slope Maintenance Project Yolo County, California

Sheet reference number:

G1
Sheet 1 of 11

DATE OF TOPOGRAPHIC SURVEY: 06-22-16 DATE OF PLANS: 09-09-16 DATE OF SPECIAL PROVISIONS: 09-09-16



THE CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB STRE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT TRALUMISM SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT WILL BE MADE TO APPLY CONTRUCUSLY AND NOT BE LUMBED TO NORMAL WORKING HOUSE, AND THE CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNITY AND HOLD CONSULTING BINGINEER AND RID SOL HARMLESS FROM ANY AND ALL LABILITY, REAL OR ALL SEAL, OR ALL SEAL OR ALL SEAL, OR ALL SEAL OR ALL SEAL, OR ALL SEAL OR CONSULTING ENGINEER AND RID SOL HARMLESS FROM ANY AND ALL EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE CONSULTING ENGINEER.

ALL MATERIALS, METHODS, AND WORKMANSHIP SHALL CONFORM WITH THE APPROPRIATE PROVISIONS OF THE SPECIFICATIONS ENTITLED "STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS," DATED MAY 2015, INSOFAR AS THE SAME MAY APPLY AND A LCOCROANCE WITH THE FOLLOWING SPECIAL PROVISIONS, ALL WORK IS SUBJECT TO THE APPROVAL OF THE DISTRICT ENGINEER OR HIS AUTHORIZED REPRESENTATIVE, CERTIFICATION FOR CONFORMANCE WITH CYPE AND DISTRICT SPECIFICATIONS WILL BE RECURRED FOR ALL MATERIALS USED ON THE PROJECT UNLESS SPECIFICALLY WAIVED BY THE DISTRICT ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING RD 900 FOR A PRE-CONSTRUCTION CONFERENCE 72-HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITIES. ALSO, CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE DISTRICT OFERATIONS MANAGER 484-HOURS PRIOR TO COMMENCING WORK AND 24-HOURS PRIOR TO RESUMPTION AFTER RITERRUPTION. REQUESTS FOR RISPECTION OF WORK AND 24-HOURS PRIOR TO RESUMPTION AFTER RITERRUPTION. REQUESTS FOR RISPECTION OF SHALL BE GIVEN 484-HOURS AND AVANCE, AND BE PERFORMED BY THE DISTRICT OF THEM ATTHERIZED REPRESENTATIVE. AND CONSTRUCTION WORK SHALL COMMENCE WITH. AFTER THE PRECONSTRUCTION CONFERENCE IS HELD AND THE DISTRICT ON AUTHORIZED REPRESENTATIVE APPROVES.

THE TYPES, LOCATIONS, SIZES, AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE PLANS WERRE OBTAINED FROM SOURCES OF VARYING RELABILITY, THE CONTRACTOR IS SHOWN ON THE SEPTIMENT OF SUCH UNDERGROUND UTILITIES, A REASONABLE EFFORT HAS BEEN MADE TO LOCATE ALL UNDERGROUND WORKS, HOWEVER, THE CONSULTING ENGINEER OA MESSABLE OR RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF ITS DELINEATION OF SUCH UNDERGROUND WORKS NOR FOR THE EXISTENCE OF OTHER BURSED OBJECTS WHICH MAY BE EDUCUNITIES BUT WHICH ARE NOT SHOWN ON THISE PLANS. IF NO ELEVATION IS SHOWN IN THE PLANS THE CONTRACTOR SHALL ASSUME THE ELEVATION TO BE UNMYOWN.

THE CONTRACTOR IS TO EXPOSE THE END OF EXISTING UTILITY LINES FOR THE SURVEYOR TO VERIFY LOCATION AND DEPTH OF WORKS PRIOR TO CONNECTION OF PROPOSED UTILITY. ALL COSTS FOR SUCH EXCAVATION SHALL BE INCLUDED IN PRIORS FOR VARIOUS ITEMS OF WORK.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPORTING ALL CONFLICTS, ERRORS, OMISSIONS, ETC. TO THE CONSULTING BIGGINEST IMMEDIATELY UPON DISCOVERY, IF SO DIRECTED BY THE ENGINEER OR DISTRICT OFFERITIONS MANAGER, THE CONTRACTOR SHALL STOP WORK UNIL MITIKATION CAMB EMADE, ANY COSTS INCURRED RESULTING FROM THE CONTRACTOR'S FAILURE TO STOP WORK AS DIRECTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR'S FAILURE TO STOP WORK AS DIRECTED.

THE CONTRACTOR SHALL AT ALL TIMES COORDINATE HIS WORK WITH THAT OF OTHERS ON THE SITE. THE CONTRACTOR SHALL HAVE A RESPONSIBLE PARTY, WHO SHALL HAVE THE AUTHORITY TO REPRESENT AND ACT FOR THE CONTRACTOR, ON THE JOB SITE DURBING ALL WORKING HOURS, CONTRACTOR SHALL ALSO HAVE A CONTRACT PERSON FOR NON-WORKING HOURS UNTIL ACCEPTANCE OF IMPROVEMENTS BY THE CITY.

THE CONTRACTOR SHALL HAVE A CURRENT BUSINESS LICENSE AND SHALL BE HELD RESPONSIBLE TO SEE THAT ALL SUBCONTRACTORS AND SUPPLIERS HAVE CURRENT BUSINESS LICENSES, THE WORK WILL NOT BE ACCEPTED FOR THE COMPLETION UNTIL SUBMITTAL OF A COMPLETE LIST WITH LICENSE NUMBERS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL CURRENTLY APPLICABLE SAFETY LAWIS OF ANY JURISDICTIONAL BODY. FOR INFORMATION, PLEASE CONTACT THE STATE INDUSTRIAL SAFETY DEPARTMENT (98-455-5918).

#### EARTHWORK:

- EARTHWORK:

  A) THE CONTRACTOR SHALL PROVIDE OBSERVATION AND TESTING FOR COMPACTION AND MATERIALS, A SOULS ENGINEER SHALL CERTIFY THAT THE VARIOUS ITEMS OF COMPACTION AND MATERIALS, HAVE BEEN ACCOMPLISHED.

  B) ALL COMPACTION TESTING SHALL BE PERFORMED BY THE SOILS ENGINEER IN ACCORDANCE WITH THE SPECIFICATIONS AND SHALL BE PAID FOR BY THE CONTRACTION, ALL TESTING SHALL BE CERTIFIED BY THE SOILS ENGINEER FOR THE PROJECT.

  SHALL BE REMOVED FROM THE STEEL IN SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE SHALL BED SHALL BE SHALL BE CONTRACTOR AND SHALL BE REMOVED FROM THE STIE IN BESS SPECIFIED OTHERWISE BY THE OWNER.

  SHALL BE REMOVED FROM THE SITE IN BESS SPECIFIED OTHERWISE BY THE OWNER.

  B) SUFFICIENT FOULPHIER SHALL BE ANALABLE TO PROVIDE MUD AND DIST CONTROL AT ALLTIMES DURING CONSTRUCTION DURING NON-WORKING HOURS A WATER TRUCK SHALL BE USED, WHEN REQUIRED, TO MAINTAIN ADEQUATE DUST CONTROL FOR SHALL BE KEPT CLEAN AND RETURNED TO ORIGINAL COMPITION IPON COMPACTION OF CONTRACT.

  FENCINES TO OR FROM THE PROJECT, IF REQUIRED, FOR REAY EQUIRED IT AND ATTEMPT SECURISES.

  CONSTRUCTION ROUTE PLAN FOR CONSTRUCTION TRAFFIC BE SUBMITTED TO THE COUNTY PRIOR TO CONSTRUCTION ROUTE PLAN FOR CONSTRUCTION TRAFFIC BE SUBMITTED TO THE COUNTY PRIOR TO CONSTRUCTION AREA FROM BY THE COMPACT FOR THE FOLLOWING ARE REQUIRED IF GRADING AND CLEARING IMPROVEMENTS

  FOR THE FORM AREA AFTER THE COMPLETION OF MERCONDERIST PRIOR TO COTORDER 15TH.

  THE WORK AREA AFTER THE COMPLETION OF MERCONDERIST PRIOR TO COTORDER 15TH.

  ARE INCOMPLETED BY CONTROL BY THE DISTRICT.

  FOR SEAL OF ALL SANITARY SEVERE CONNECTION OF STEEPERS PARKES WITH SLOPES 2% OR GREATER

  TO SEDDIMENT SHALL LEAVE THE PROJECT AREA

  FRANCE GOTTERS AND POINTS TO DO RAIN PROVIDE FOR DRAINAGE OF IMPROVEMENTS

  ARE INCOMPLETED BY CONTROL THE PROJECT AREA

  FOR ADD GOTTERS AND POINTS TO DRAIN PROVIDE FOR DRAINAGE OF IMPROVEMENTS

  ARE INCOMPLETED BY CONTROL THE PROJECT AREA

  FOR ADD GOTTERS AND POINTS TO DRAIN SYSTEM AND CLEAN PEPED PER

  FROM SEAL OF ALL SANITARY SEVERE CONNE

#### LITH ITIES:

FOR TELEPHONE NUMBERS OF UTILITY AGENCIES. SEE COVER SHEET

A) ALL ABOVE UTILITIES ARE MEMBERS OF THE UNDERGROUND SERVICE ALERT (U.S.A.) ONE-CALL PROGRAM. THE CONTRACTOR OR ANY SUBCONTRACTOR FOR THIS PROJECT WILL BE RECUIRED TO PROGRAM THE CONTRACTOR OR ANY SUBCONTRACTOR FOR THIS PROJECT WILL BE RECUIRED TO THIS PROJECT OF THE CONTRACTOR OF THE COLL-FREE THIS PROJECT OF THE CONTRACTOR SHALL GOTTAM A PERMIT FROM THE DIVISION OF SAFETY (2422 ANDEN WAY, SUITE 56, SACRAMENTO, CA 916-620-6123) PRIOR TO BEGINNING OF CONSTRUCTION SITE AT LATTMES.

#### CONSTRUCTION STAKING:

- A) THE SURVEYOR FOR THIS PROJECT SMALL PROVIDE ONE (1) SET OF CONSTRUCTION STAKES FOR LINE AND GRADE UNLESS OTHERWISE REQUESTED BY COMMER. THE CONTRACTOR SMALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING MOMIMENTS AND OTHER SURVEY MARKERS DUENING CONSTRUCTION, ALL SUCH MONUMENTS OR MARKERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- B) IN THE EVENT OF A DISAGREEMENT OR DESTROYED STAKE OR MONUMENT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE SURVEYOR PRIOR TO ANY FURTHER CONSTRUCTION.
- C) THE CONTRACTOR SHALL GIVE THE SURVEYOR 48-HOURS WRITTEN NOTICE PRIOR TO EACH PHASE OF CONSTRUCTION STAKING OR IN THE EVENT OF NEEDED RESTAKING.
- D) PRIOR TO REQUESTING ACCEPTANCE OF IMPROVEMENTS, THE SURVEYOR FOR THIS PROJECT SHALL SET SURVEY MONUMENTS AS SPECIFIED IN THE IMPROVEMENT STANDARDS.
- E) (1) THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING MONUMENTS AND OTHER SURVEY MARKERS. (2) NO FINAL ACCEPTANCE OF THE CONSTRUCTION SHALL BE ISSUED UNTIL THE SURVEY MONUMENTS ARE IN PLACE AND THE CENTERLINE MONUMENT TIES ARE FURNISHED TO THE CITY ENGINEERS OFFICE.
- F) PRIOR TO COMMENCING WORK, DISTRICT INSPECTOR SHALL RECEIVE TWO COPIES OF CUT

#### EROSION CONTROL AND WINTERIZATION:

- A) IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PREVENT DISCHARGE OF SEDMENT FROM THE STIE TO ANY WATERCOURSE, DRAMAGE SYSTEM, OR ONTO ADJACENT PROPERTIES AND TO PREVENT DAMAGE BY EROSION OR DEPOSITION OF SEDMENT WHICH MAY RESULT FROM THE WORK.
- B) THE CONTRACTOR MUST COMPLY WITH ALL FEDERAL, STATE AND LOCAL GOVERNMENT LAWS AND REGULATIONS RELATING TO THE DISCHARGE OF STORM WATER RUNGEF ASSOCIATED WITH CONSTRUCTION ACTIVITIES WHETHER OR NOT THE REQUIRED WORKS OR METHODS ARE STATED ON THESE PLANS.
- C) THE CONTRACTOR SHALL CONDUCT INSPECTIONS OF THE SITE BEFORE AND AFTER STORM EVENTS AND ONCE EACH 24-HOUR PERIOD DURING EXTENDED STORM EVENTS TO DENTRY BIMP EFFECTIVELESS AND IMPLEMENT REPAIRS OR DESIGN CHANGES AS FEASIBLE DEPENDING UPON FIELD CONDITIONS.
- D) THE CONTRACTOR SHALL HAVE ON SITE AT ALL TIMES THE STORM WATER POLLUTION PREVIETION PLAN (SWPPP) FOR THE PROJECT. A COPY SHALL BE PROVIDED TO THE DISTRICT PRIOR TO START OF CONSTRUCTION.

## **GENERAL NOTES**

- A) CONSTRUCTION SHALL STOP IF CULTURAL RESOURCES ARE SUSPECTED, IT IS POSSIBLE THAT PREVIOUS ACTIVITIES HAVE OBSCURED SURFACE EVIDENCE OF CULTURAL RESOURCES, IF SIGNS OF AM ARCHEOLOGICAL SITE, SUCH AS ANY UNUSUAL AMOUNT OF STOKE BOINE, OR SHELL ARE UNCOVERED DURING GRADING OR OTHER CONSTRUCTION ACTIVITIES, WORK SHALL BE HAD WITHIN 10 (PEET OF THE FIND AND THE CONTRACTOR SHALL INOTIFY THE OWNER, A CUALIFIED ARCHEOLOGIST SHALL BE CONSULTED FOR AN ON-SITE EVALUATION, ADDITIONAL MITIGATION MAY REQUIRE THE ARCHEOLOGIST.
- B) CONTRACTOR SHALL SUBMIT SHOP DRAWINGS/MATERIALS LIST AND CONSTRUCTION METHODS TO DISTRICT FOR REVIEW IN ADVANCE OF CONSTRUCTION, THESE SHOP DRAWINGS SHALL INCLUDE ALL APPURTENANCES, MORIZONTAL AND VERTICAL ALIGNMENT CHANGES AND PIPE ENDS.
- C) THE COUNTY REQUIRES ENCROACHMENT PERMITS FOR ALL CONSTRUCTION DONE IN EXISTING RIGHT OF WAY INCLUDING, BUT NOT LIMITED TO, THE CONSTRUCTION OF WATER, SEVER, STORM DRAIN, STREET IMPROVEMENTS, AND DRY UTILITY CROSSINGS. THE ENCROACHMENT PERMITS SHALL BE ON ITEL WITH THE COUNTY PRIOR TO CONSTRUCTION.
- D) THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR FURNISHING, INSTALLING AND MAINTAINING ALL WARNING SIGNS AND DEVICES INCESSARY TO SAFEGUARD THE GENERAL PUBLIC AND THE WORK AND PROVIDE FOR THE PROPER AND SAFE ROUTING OF VEHICULAR AND PEDESTRIAN TRAFFIC DURING THE PERFORMANCE OF THE WORK.
- E) THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING RECORD DRAWINGS FOR ALL WORK THROUGHOUT THE COURSE OF CONSTRUCTION, SUCH DRAWINGS SHALL RECORD THE LOCATION AND GRADE OF ALL IMPROVEMENTS AND FILLS THAT ARE CONSTRUCTED AND COPIES SHALL BE DELYBRED TO ADD OAND THE DESKIN ENGINEER PRIOR TO THE ACCEPTANCE OF THE WORK. F) PRIOR TO START OF WORK THE CONTRACTOR SHALL HAVE APPROVED PLANS IN HIS POSSESSION AND SHALL GIVE THE DISTRICT 48 HOURS NOTICE. THE CONTRACTOR SHALL DESIGNATE A PERSON, WHO SHALL HAVE THE AUTHORITY TO REPRESENT AND ACT FOR THE CONTRACTOR, ON THE JOB SITE DURING ALL WORKING HOURS.
- G) THE CONTRACTOR SHALL CONSTRUCT ALL IMPROVEMENTS TO THE LINES AND GRADE SHOWN ON THESE PLANS, ANY DEVIATION FROM THE PLANS SHALL REQUIRE THE APPROVAL OF THE DESIGN ENGINEER.
- F) ALL GRADING SHALL CONFORM TO YOLO COUNTY STANDARDS AND THE REQUIRMENTS OF GRADING PERMIT PWGR 15-

## LECENID

LEGEND		
	EXISTING	PROPOSED
SURVEY MONUMENT/BENCH MARK	<b>A</b>	<b>A</b>
UTILITY POLE	100	702
STREET LIGHT	o	⊶φ-
GUY WIRE AND ANCHOR	Ø—→	
CONSTRUCTION CENTERLINE		25
TOP OF CANAL EMBANKMENT	YYY	<b>T T T</b>
TOE OF CANAL		
STORM DRAIN	12'50>	12'80
SANITARY SEWER	(17°SS)	12°SS
WATER MAIN		(ew)
SEWER FORCE MAIN	53±W	20°FM
GAS MAIN	UG	
UNDERGROUND TELEPHONE		
OVERHEAD ELECTRIC	OE	
FENCE	- x x x	* × ×
SPOT ELEVATION	X (E) 25.0	* E.O
CONTOUR LINE	——————————————————————————————————————	
ASSESSOR'S PARCEL NO.	25-025-254	
PROPERTY LINE		
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IRRIGATION CONTROLLER	•	•
TRANSMISSION LINE TOWER	$\boxtimes$	
DITCH FLOWLINE		
WATER SERVICE		
SEWER SERVICE		
POSTAL CBU		
FIRE HYDRANT		<del></del>
WATER MAIN BLOW-OFF		
STORM DRAIN MANHOLE	<b>@</b>	<b>@</b>
DRAINAGE INLET		
HANDICAP RAMP		
SANITARY SEWER MANHOLE		•
CURB TRANSITION	-	
TRAFFIC CALMING DEVICE		7
MASONRY BLOCK WALL		٩

## **ABBREVIATIONS**

AD AC	AGGREGATE BASE ASPHALT CONCRETE
ADA	AMERICANS WITH DISABILITIES ACT
ADT	AVERAGE DAILY TRAFFIC COUNT ASSESSOR'S PARCEL NO.
apn ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ATT	AT&T COMMUNICATION
BC	BEGINNING OF CURVE
BÇR BM	BEGIN CURB RETURN BENCHMARK
BW	BARBED WIRE FENCE
CALTRANS	CALIFORNIA DEPARTMENT OF TRANSPORTATION OF
	CURB AND GUTTER
CIP	CAST-IN-PLACE CONSTRUCTION JOINT
CL	CENTERLINE
co	CITY ENGINEER
CVFPB	CORRUGATED METAL PIPE CENTRAL VALLEY FLOOD PROTECTION BOARD
CY	CUBIC YARD
D	DEPTH IN FEET
DI	DRAINAGE INLET
DIA DIP	DIAMETER DIA DUCTILE IRON PIPE
DWG	DRAWING
DWR	DEPARTMENT OF WATER RESOURCES
(E)	EXISTING
EC	END OF CURVE
ECR EF	END CURB RETURN EACH FACE
EL	ELEVATION
EP	ELEVATION EDGE OF PAVEMENT
ETW	EDGE OF TRAVELED WAY
ES EW	EDGE OF SHOULDER EACH WAY
FES	FLARED END SECTION
FG	FINISH GRADE
FL	FLOWLINE FORCE MAIN
FM G	GAS
GB GB	GRADE BREAK
HDPE	HIGH DENSITY POLYETHYLENE
HGL HP	HYDRAULIC GRADE LINE HINGE POINT
ID .	INSIDE DIAMETER
IN	INCH
INV	INVERT INV
IRR L	IRRIGATION LENGTH OF CURVE
LF	LINEAR FEET
LIP	LIP OF CURB AND GUTTER
(M)	MEASURED
MH	MAINTENANCE HÖLE NOT IN CONTRACT
OC .	ON CENTER
OD	OUTSIDE DIAMETER
og	ORIGINAL GROUND
OH PG	OVERHEAD PROFILE GRADE
PRC	POINT OF REVERSE CURVE
PCC	PORTLAND CEMENT CONCRETE
PG&E	PACIFIC GAS & ELECTRIC
PL DD	PROPERTY LINE
PP PUE	POWER POLE PUBLIC UTILITY EASEMENT
PVC	POLY VINYL CHLORIDE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE RCP
RCB RD 784	REINFORCED CONCRETE BOX RECLAMATION DISTRICT NO. 784
R/W	RIGHT-OF-WAY RW
s	SLOPE PROFILE S
SD	STORM DRAIN MAINTENANCE HOLE
SD MH SD JB	STORM DRAIN MAINTENANCE HOLE STORM DRAIN JUNCTION BOX
SG	SUBGRADE SG
SHT	SHEET
SMUD	SACRAMENTO MUNICIPAL UTILITY DISTRICT
SS SSMH	SANITARY SEWER SANITARY SEWER MAINTENANCE HOLE
STA	STATION
SWPPP	STORM WATER POLLUTION PREVENTION PLAN
t	PIPE WALL THICKNESS
TBDI TBC	TOP BACK OF CHER
TEC	TOP BACK OF CURB TEMPORARY CONSTRUCTION EASEMENT TURNOU
TOB	TOP OF BANK
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
UPRR VCP	UNION PACIFIC RAILROAD UPRR VITRIFIED CLAY PIPE
100	WATER MAIN
WM	
WM WM BO	WATER MAIN BLOW OFF
WM BO WSEL	WATER SURFACE
WM BO	

ALSO REFER TO ARBREVIATIONS IN STATE STANDARDS PLAN - DRAWING A104





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	GENERAL NOTES,	ABBREVIATIONS AND LEGEND BLACKER DRAINAGE DITCH		

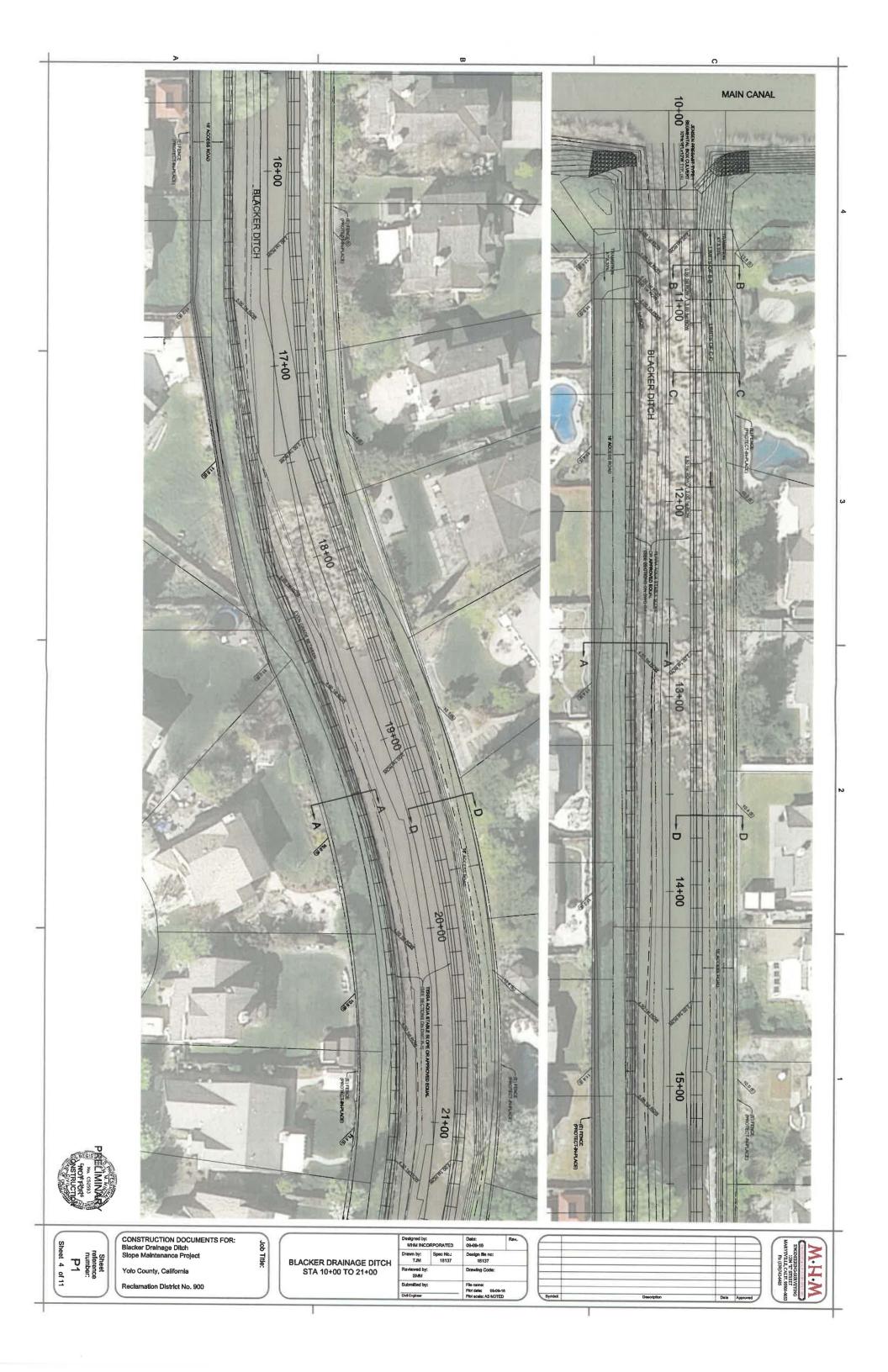
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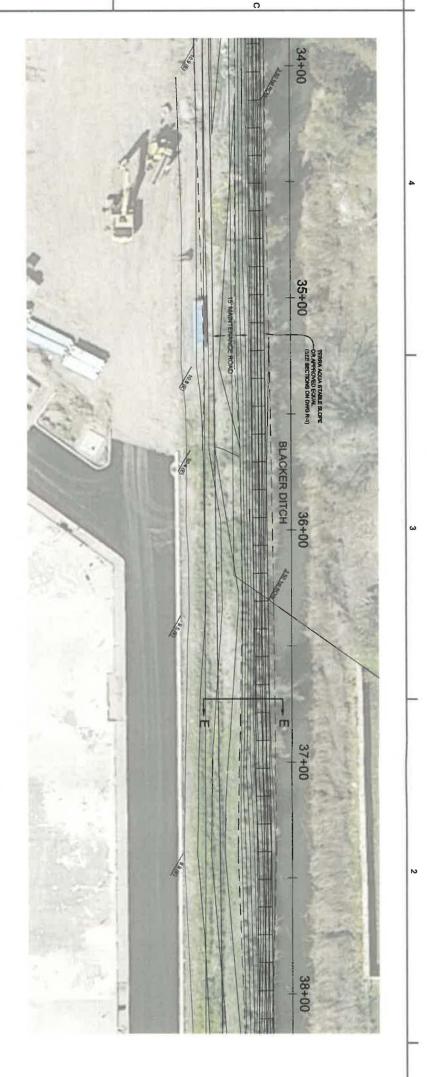
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BLACKER DITCH

BLACKER DITCH

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Sheet 6 of 11

CONSTRUCTION DOCUMENTS FOR: Blacker Drainage Ditch Slope Maintenance Project

Job Title:

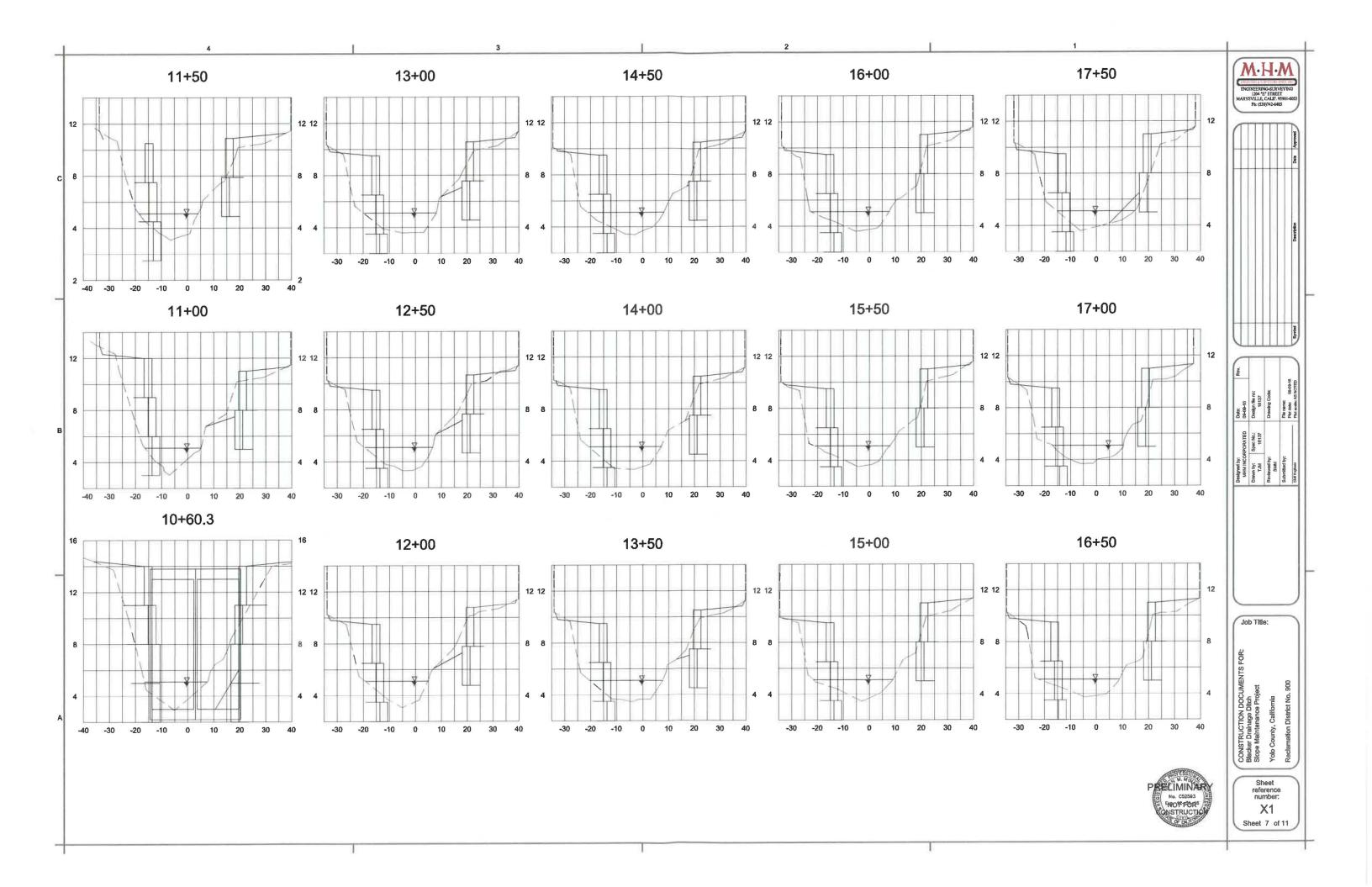
Yolo County, California

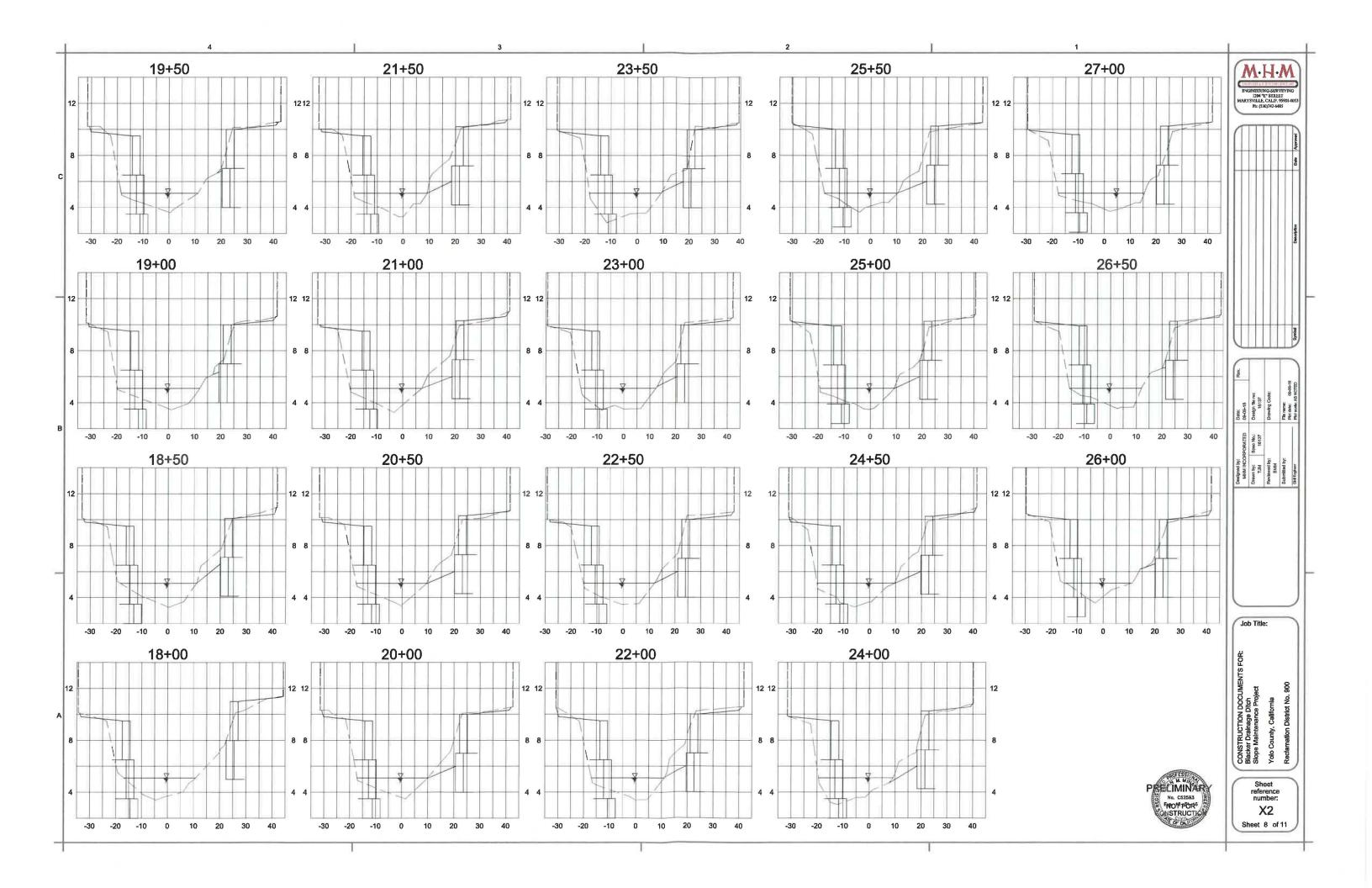
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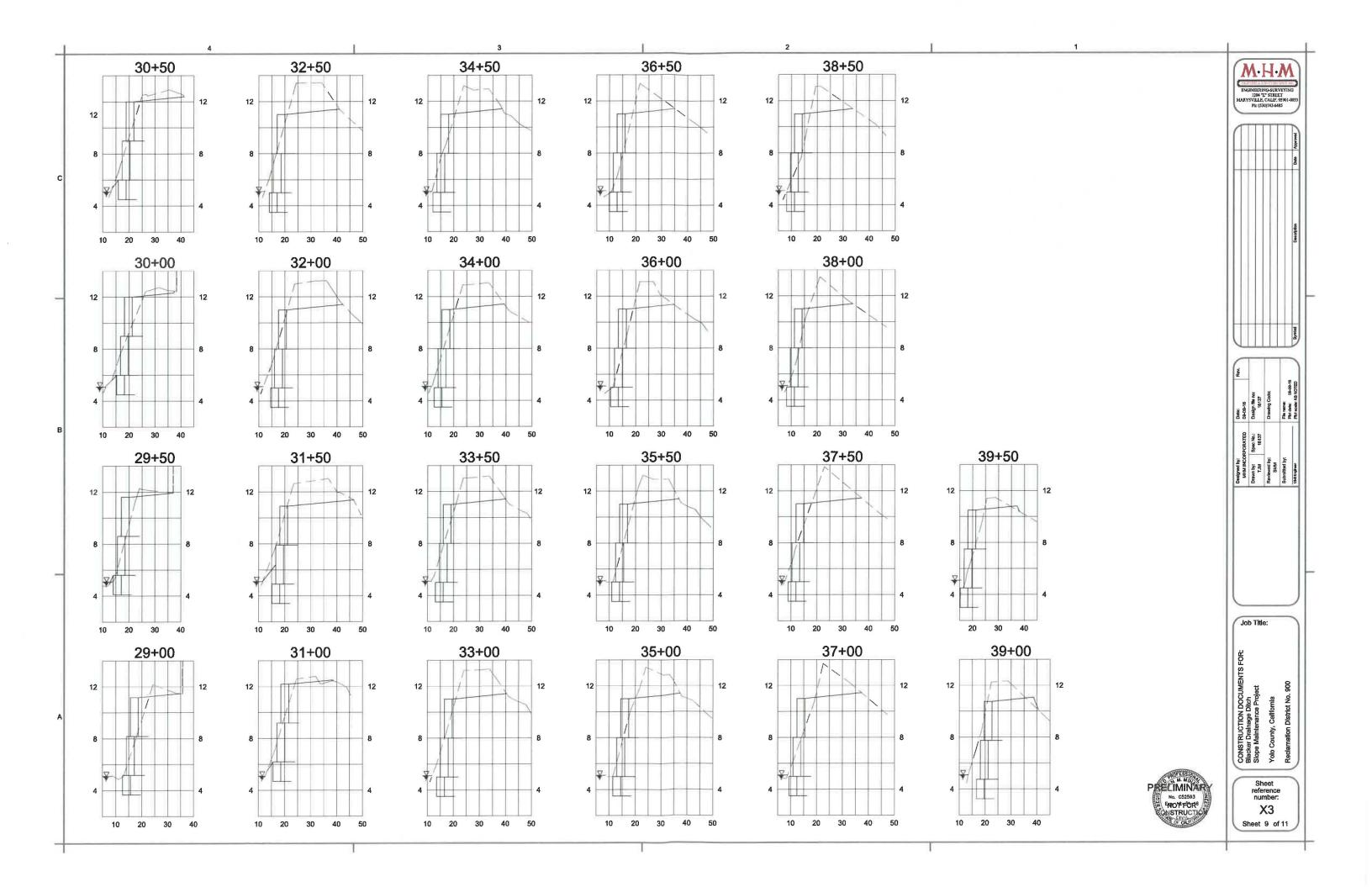
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- 1. NOTIFY THE ENGINEER OF ANY DISCREPANCIES FOUND BEFORE PROCEEDING WITH THE WORK
- 2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY SITE CONDITIONS NOT REFLECTED ON THE DRAWINGS; OF DISCREPANCIES IN MIN. DIMENSIONS INDICATED, SUCH AS GREATER RETAINED EARTH HEIGHTS, CONFLICT IN GRADES, EXTENTS OF BAD SOIL, HEIGHT OF GROUND WATER, DEPTHS OF FOUNDATIONS, ETC., AND ESPECIALLY OF UNCOVERED AND UNEXPECTED UTILITY LINES.
- 3. DIMENSIONS, LOCATIONS AND SIZES OF OPENINGS IN FLOORS AND WALLS SHALL BE COORDINATED BY THE CONTRACTOR WITH STRUCTURAL, MECHANICAL, AND ALL OTHER APPLICABLE DRAWINGS. ALL REQUIRED PENETRATIONS MAY NOT BE SHOWN ON STRUCTURAL DRAWINGS.
- 4. ALL WORK NOT DETAILED OR NOTED SHALL BE CONSTRUCTED IN ACCORDANCE WITH OTHER SIMILAR WORK SHOWN ON THE DRAWINGS AND ON TYPICAL DETAILS.
- 5. NO PIPES OR DUCTS SHALL BE PLACED IN SLABS OR WALLS UNLESS SPECIFICALLY DETAILED OR APPROVED BY THE
- DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION INCLUDING SHORING, FORMING, AND TEMPORARY
- 7. UNLESS OTHERWISE SHOWN, LOCATION OF ALL CONSTRUCTION JOINTS SHALL HAVE THE APPROVAL OF THE ENGINEER. IN FLUID RETAINING STRUCTURES, PVC WATERSTOPS SHALL BE PROVIDED IN ALL CONSTRUCTION JOINTS.

#### TERRA AQUA STABLE SLOPE

1. THE GABION BASKET FACING SHALL BE FILLED WITH HARD, DURABLE STONE FILL VARYING IN DIMENSIONS FROM 4-8 IN DIAMETER. THE ROCK SHALL NOT EXCEED 50 % WEAR AS DETERMINED BY AASHTO DESIGNATION: T96. THE ROCK SHALL NOT EXCEED 12% WEIGHTED LOSS AFTER FIVE CYCLES OF THE SODIUM SULFATE SOUNDNESS OF AGGREGATE TEST

1. UNITS SHALL BE ASSEMBLED AND ERECTED ACCORDING TO MANUFACTURER'S INSTRUCTIONS AND PROJECT SPECIFICATIONS. UNITS ARE SUPPLIED FOLDED FLAT AND PACKED IN BUNDLES. SINGLE UNITS SHALL BE REMOVED FROM THE BUNDLE, UNFOLDED ON A HARD FLAT SURFACE, AND HAVE ALL KINKS AND BENDS WORKED OUT BEFORE ASSEMBLY. THE REINFORCEMENT PANELS MAY 9E LEFT FOLDED UP UNTIL THE BEAKETS ARE PLACED IN POSITION. THE UNIT SHALL THEN BE ASSEMBLED INDIVIDUALLY BY ERECTING THE FRONT AND BACK, ENDS AND DIAPHRAGMS, ENSURING THAT ALL CREASES ARE IN THE CORRECT POSITION AND THE TOPS OF ALL SIDES SATISFACTORILY.

2. THE FOUR CORNERS OF THE UNIT SHALL BE CONNECTED FIRST FOLLOWED BY THE EDGE WIRES OF INTERNAL

2. THE POUR COMPLEX OF THE UNIT STARL BE CONNECTION AND THE DIAPHRAGMS TO SIDE CONNECTION SHOULD BE ACCOMPLISHED BY USING LACING WIRE OR APPROVED INTERLOCKING FASTENERS.

3. ACCEPTABLE LACING WIRE IS DESCRIBED IN MANUFACTURER MATERIAL, RECOMMENDED PROCEDURE TO APPLY LACING WIRE CONSISTS OF CUTTING A SUFFICIENT LENGTH OF LACING WIRE, APPROXIMATELY 4.5 - 5 LONG. SECURE ONE END OF THE WIRE BY LOOPING AND TWISTING, THEN PROCEED TO LACE WITH ALTERNATING SINGLE AND DOUBLE LOOPS AT APPROXIMATELY 5' INTERVALS, THEN SECURELY FASTEN THE OTHER END OF THE LACING WIRE. THIS PROCEDURE SHALL DEVELOP A JOINT STRENGTH OF 1200 LBS / FT FOR PVC AND 1400 LBS / FT FOR GALVANIZED GABIONS. 4. THE INSTALLATION OF RECOMMENDED FASTENERS SHOULD BE CARRIED OUT IN ACCORDANCE WITH THE CONTRACT

SPECIFICATIONS, ACCEPTABLE FASTENERS FOR JOINING PVC COATED UNITS SHALL BE FORMED FROM 0.120 INCH MINIMUM DIAMETER STAINLESS STEEL WIRE HAVING HIGH TENSILE STRENGTH AND SHALL CONFORM TO ASTM A313, TYPE 302, CLASS 1. FASTENERS SHALL PRODUCE A FOUR-WIRE SELVEDGE JOINT OF 1200 LBS / FT FOR PVC AND 1400 LBS / FT FOR GALVANIZED GABIONS, WHILE REMAINING LOCKED OR OVERLAPPED A MINIMUM OF 1 INCH.

1. THE ASSEMBLED UNITS ARE CARRIED TO THE JOB SITE AND PLACED IN THEIR PROPER LOCATION. FOR STRUCTURAL INTEGRITY, THE ADJOINING EMPTY UNITS MUST BE SECURELY JOINED TOGETHER USING THE SAME CONNECTING PROCEDURES DESCRIBED IN SECTION 1, PARAGRAPHS 3 AND 4 ALONG WITH THE VERTICAL EDGES AND THE TOP EDGE OF THEIR CONTRACT SURFACES IN ORDER TO OBTAIN A MONOLITHIC STRUCTURE, AN APPROVED CORNER CLOSURE TOOLS SHALL BE USED TO ADJOIN ADJACENT GABIONS TO INSURE A TIGHT NEAT SEAM AND MINIMIZE GABION WIRE JOINT

DEPURMATION.

2. THE REINFORCEMENT PANELS ARE THEN UNFOLDED ONTO THE COMPACTED BACKFILL IT IS NOT NECESSARY TO ATTACH THE REINFORCEMENT PANELS TO EACH OTHER WITH LACING WIRE OR FASTENERS EXCEPT AT ONE POINT APPROXIMATELY 3 BEHIND THE BACK PANEL FOR ALIGNMENT PURPOSES.

3. AFTER THE LOWER TIER OF UNITS IS FILLED, CLOSED AND THE BACKFILL COMPACTED, THE NEXT TIER OF UNITS IS PLACED ON TOP AND SHALL BE CONNECTED TO THE LOWER TIER ALONG THE FRONT EDGE OF THE CONTACT SURFACE, USING THE SAME CONNECTING PROCEDURE DESCRIBED IN SECTION 2, PARAGRAPHS 3 AND 4.

## 4. FILLING

1. UNITS SHALL BE FILLED WITH STONE AS DESCRIBED IN BASKET FILL SECTION 1.

2. UNITS MAY BE FILLED BY ALMOST ANY TYPE OF EARTH HANDLING EQUIPMENT. SOME MANUAL STONE ADJUSTMENT DURING THE FILLING OPERATION IS REQUIRED TO MINIMIZE VOIDS. IT IS ALSO RECOMMENDED THAT THE STONE AGAINST THE EXPOSED FACES OF THE UNITS BE HAND-STACKED TO GIVE A NEAT, COMPACT AND ATTRACTIVE APPEARANCE. CARE SHALL BE TAKEN WHEN PLACING FILL MATERIAL TO ASSURE THAT THE SHEATHING OF THE PVC COATED UNITS WILL NOT BE BROKEN OR DAMAGED. THE STONE SHOULD NOT BE DUMPED FROM A HEIGHT GREATER THAN 2' - 3' ABOVE THE TOP OF

THE GARDON UNITS.
3. THE INDIVIDUAL CELLS OF THE UNITS IN ANY ROW SHALL BE FILLED IN STAGES SO THAT LOCAL DEFORMATION MAY BE AVOIDED. THAT IS, AT NO TIME SHALL ANY CELL BE FILLED TO A DEPTH EXCEEDING 1 MORE THAN AN ADJOINING CELL. IT IS ALSO RECOMMENDED TO SLIGHTLY OVERFILL THE GABION ON APPROXIMATELY 2" - 4" ABOVE THE TOP OF THE GABION

4. WELL-PACKED FILLING OF UNITS WITHOUT UNDUE BULGING, AND SECURE LACING AND/OR FASTENING, IS ESSENTIAL IN ALL STRUCTURES.

1. FILTER FABRIC SHALL BE PLACED SO AS TO COMPLETELY COVER THE BACK OF THE UNIT WITH 1' OF EXCESS MATERIAL TO BE FOLDED TOWARD THE BACKFILL AT BOTH THE TOP AND BOTTOM ALONG THE REINFORCEMENT PANELS. THE FABRIC SHALL BE ATTACHED TO THE TOP OF THE BACK PANEL WITH EITHER LACING WIRE OR APPROVED FASTENERS EVERY 18 INCHES, THE TYPE OF FABRIC WILL BE DEPENDENT UPON THE FILL MATERIAL FURNISHED. THE FABRIC SHALL BE SELECTED BASED UPON GRADATION SAMPLES AND APPROVED BY THE DESIGN ENGINEER.

1. INTERNAL CONNECTING WIRES ARE USED TO PREVENT THE FRONT FACE OF THE UNITS FROM BULGING AS ADDITIONAL ROWS OR LAYERS ARE PLACED ON TOP OF THE EXISTING LAYERS.
2. 3' HIGH UNITS SHALL BE FILLED IN THREE LAYERS 1' AT A TIME. AFTER THE PLACEMENT OF EACH LAYER, TWO

CONNECTING WIRES SHALL BE PLACED TO CONNECT THE EXPOSED FACE OF A CELL TO THE OPPOSITE SIDE OF THE CELL, THE WIRE SHALL BE LOOPED AROUND TWO MESH OPENINGS AND THE ENDS OF THE WIRES SHALL BE SECURELY TWISTED TO PREVENT ITS LOOSENING, AN EXPOSED FRONT FACE IS ANY SIDE OF A CELL THAT WILL BE EXPOSED OR UNSUPPORTED AFTER THE STRUCTURE IS COMPLETED.

3. 1.5' HIGH UNITS SHALL BE FILLED IN TWO LAYERS 9" AT A TIME, AFTER THE PLACEMENT OF EACH LAYER TWO CONNECTING WIRES SHALL BE PLACED TO CONNECT THE EXPOSED FACE OF A CELL TO THE OPPOSITE SIDE OF THE CELL LITHE WIRE SHALL E LOOPED AROUND TWO MESH OPENINGS AND THE ENDS OF THE WIRE SHALL BE TWISTED TO PREVENT

1. THE LID SHALL BE STRETCHED TIGHT OVER THE FILLING OF THE STONE UNTIL THE LID MEETS THE PERIMETER EDGES OF THE UNIT. THIS OPERATION SHALL BE ACCOMPLISHED BY USING AN APPROVED LID CLOSING TOOL. THE LID SHALL THEN BE TIGHTLY FASTENED ALONG ALL EDGES, ENDS AND TOPS OF THE DIAPHRAGMS IN THE SAME MANNER AS DESCRIBED IN SECTION 2, PARAGRAPHS 3 AND 4.

2. UPON COMPLETION, THE STRUCTURE SHALL BE CHECKED AND ALL ENDS OF WIRE SHALL BE FOLDED INTO THE STRUCTURE, WELL-PACKED FILLING WITHOUT UNDUE BULGING AND SECURE LACING AND/OR FASTENING IS ESSENTIAL IN ALL STRUCTURES. ALL TERRA AQUA GABION MATERIAL IS MANUFACTURED ACCORDING TO ASTM A975-97 GUIDELINES FOR

#### CONCRETE

- REFER TO STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ALL MOLDS, GROOVES, ETC., TO BE CAST IN CONCRETE.
- 2. REFER TO STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR THE LOCATION OF SLEEVES, INSERTS, ETC..., IN CONCRETE.
- 3. ALL REINFORCING BARS, ANCHOR BOLTS AND INSERTS SHALL BE WELL SECURED PRIOR TO POURING CONCRETE.
- 4. ALL EXPOSED CONCRETE EDGES SHALL HAVE 3/4" CHAMFER.
- 5. NO PLACEMENT OF CONCRETE UNTIL STEEL & FORMS HAVE BEEN APPROVED BY ENGINEER.

#### SOIL & FOUNDATIONS

1. NO CONCRETE OR REBAR SHALL BE PLACED IN ANY FOUNDATION UNTIL THE EXCAVATION HAS BEEN APPROVED BY THE ENGINEER.

2. ALL SLEEVES THROUGH FOUNDATION WALLS AND UNDER FOOTINGS SHALL BE INSTALLED PRIOR TO THE FOUNDATION PLACEMENT

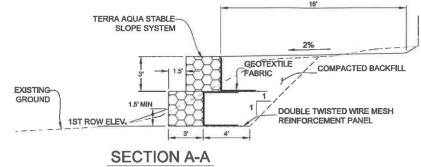
3. BACKFILLING AND COMPACTING AGAINST BELOW GRADE WALLS SHALL NOT TAKE PLACE UNTIL ALL CONCRETE INCLUDING TOP DECK SLABS AND BEAMS HAS BEEN PLACED, ALLOWED TO CURE A MINIMUM OF 7-DAYS, AND REACHED AT LEAST 75 % OF THE

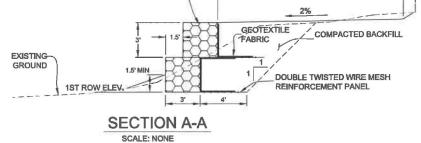
#### SPECIAL INSPECTION

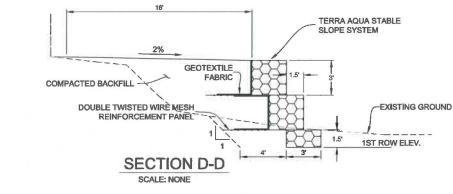
1. SPECIAL INSPECTION AS SPECIFIED BY SECTION 1701 OF THE UBC, REFERENCED EDITION IS REQUIRED FOR:

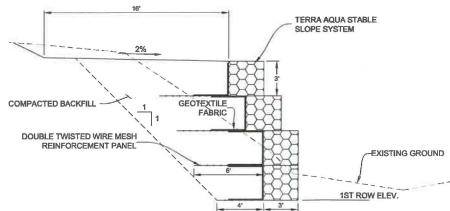
- A. ALL CONCRETE WORK
- B. ALL ANCHOR BOLT INSTALLATIONS INTO CONCRETE.
- C. ALL WELDING OF ALUM., AND STEEL

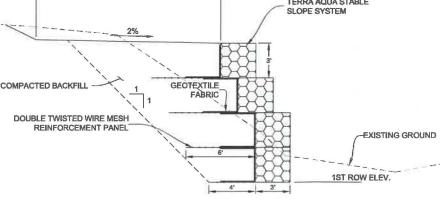
PROVIDE SMOOTH TRANSITIONS BETWEEN ALL 1ST ROW GRADE ELEVATION CHANGES

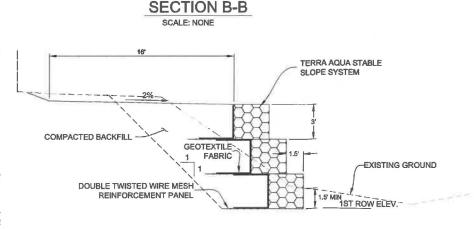




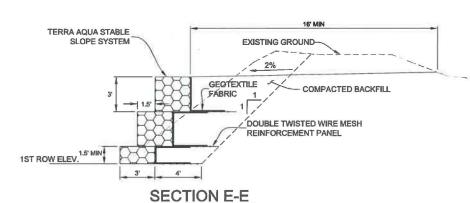


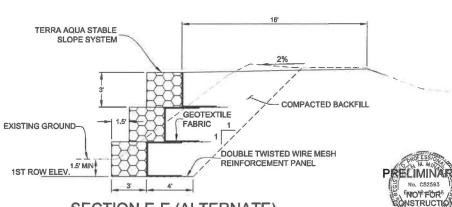






SECTION C-C SCALE: NONE





SECTION E-E (ALTERNATE) SCALE: NONE

SCALE: NONE

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Sheet

Job Title:

reference number: R1 Sheet 10 of 11

