COUNTY OF SAN JOAQUIN

DEPARTMENT OF PUBLIC WORKS
P.O. BOX 1810-1810 E. HAZELTON AVENUE
STOCKTON, CALIFORNIA 95201
(209) 468-3000
FAX # (209) 468-9324

Permit No: **PS-1600984**
Date Issued: 04/12/2016
Start Date: 04/13/2016
Exp. Date: 06/01/2016
Project No: PWP7110005
Quad: SW

ENCROACHMENT PERMIT

To: AM STEPHENS CONST
PO BOX 1867
LODI CA 95241

Encroachment Type:

ADDING AB TO LEVEE			

Location:
BACON ISLAND RD

In compliance with your request of **04/12/2016** , permission is hereby granted to do work in County right-of-way as shown on attached application and subject to all the terms, conditions and restrictions written below or printed as general or special provisions on any part of this form. See reverse side and attached sheet, if any.

Trench excavations for service connections will not be permitted within ten feet (10') of pavement centerline unless otherwise approved by the Director. Surface of trench patches shall match in kind and be smooth and even with that of abutting surface. Special attention shall be given to depth of utilities through roadside area in anticipation of future drainage facilities, road profile and/or frontage development. All underground utility facilities are to be established and accurately dimensioned on sketches from surveyed centerline of road right of way, or from right of way (border) lines.

Permittee shall call the Department of Public Works, Field Engineering Division (Permit Inspections) at (209)953-7421 at least forty-eight hours prior to beginning any work within the County right of way. All work performed under this permit shall conform to the rules and regulations pertaining to safety established by the California Division of Industrial Safety and Cal-OSHA.

The jobsite shall be kept in a safe condition at all times by the daily removal of any excess dirt or debris which might be a hazard to either pedestrian or automobile traffic. All necessary traffic convenience and warning devices and personnel shall be provided, placed and maintained by and at the sole expense of the Permittee in accordance with the latest edition of the CALTRANS Manual of Traffic Control.

After completion of the work permitted herein, all debris, lumber, barricades, or any excess material shall be removed and the jobsite left in a neat workmanlike manner. Immediately following completion of construction permitted herein, Permittee shall fill out and mail notice of completion (see attached post card) provided by Grantor.

Special Comments:

Traffic Control Per MUTCD**SEE ATTACHED SPECIAL CONDITIONS**

FORMS:

SS/WW, R-29		

Est. Permit Fee: $500.00

KRIS BALAJI, Director
Department of Public Works

By: _____
Permit Section

WHITE	-Permittee
GOLDENROD	-PWD Central File
YELLOW	-Field Inspection
PINK	-Permit Section

ENCROACHMENT PERMIT GENERAL PROVISIONS

13-1

1. This permit is issued under and subject to all laws and ordinances of agencies governing the encroachment herein permitted. See the following references:
   STREETS AND HIGHWAYS CODE
   1. Division 1, Chapter 3
   2. Division 2, Chapter 2, Section 942
   3. Division 2, Chapter 4, Section 1126
   4. Division 2, Chapter 5.5 and Chapter 6

   SAN JOAQUIN COUNTY ORDINANCES NUMBERED: 324, 441, 648, 662, 672, 695, 700, 860, 892, 3359, and 3675.

2. It is understood and agreed by the Permittee that the performance of any work under this permit shall constitute an acceptance of all the provisions contained herein and failure on the Permittee's part to comply with any provision will be cause for revocation of this permit. Except as otherwise provided for public agencies and franchise holders, this permit is revocable on five days notice.

3. All work shall be done subject to the supervision of and the satisfaction of the grantor. The Permittee shall at all times during the progress of the work keep the County Highway in as neat and clean condition as is possible and upon completion of the work authorized herein, shall leave the County Highway in a thoroughly neat, clean and usable condition.

4. The Permittee also agrees by the acceptance of this permit to properly maintain any encroachment structure placed by the Permittee on any part of the County Highway and to immediately repair any damage to any portion of the highway, which occurs as a result of the maintenance of the said encroachment structure, until such time as the Permittee may be relieved of the responsibility for such maintenance by the County of San Joaquin.

5. The Permittee also agrees by the acceptance of this permit to make, at its own expense, such repairs as may be deemed necessary by the County Department of Public Works.

6. It is further agreed by the Permittee that whenever construction, reconstruction or maintenance work upon the highway is necessary, the installation provided for herein shall, upon request of the County Department of Public Works, be immediately moved or removed by and at the sole expense of the Permittee.

7. No material used for fill or backfill in the construction of the encroachment shall be borrowed or taken from within the County right of way.

8. All work shall be planned and carried out with as little inconvenience as possible to the traveling public. No material shall be stacked within eight feet (8') of the edge of the pavement or traveled way unless otherwise provided herein. Adequate provision shall be made for the protection of the traveling public. Traffic control standards shall be utilized including barricades; approved signs and lights; and flagmen, as required by the particular work in progress.

9. The Permittee, by the acceptance of this permit, shall assume full responsibility for all liability for personal injury or damage to property which may arise out of the work herein permitted or which may arise out of the failure of the part of the Permittee to properly perform the work provided under this permit. In the event any claim of such liability is made against the County of San Joaquin or any department, official or employee thereof, the Permittee shall defend, indemnify, and hold each of them harmless for such claim.

10. All backfill material is to be moistened as necessary and thoroughly compacted with mechanical means. If required by the County Director of Public Works, such backfill shall consist of gravel or crushed rock. The Permittee shall maintain the surface over structures placed hereunder as may be necessary to insure the return of the roadway to a completely stable condition and until relieved of such responsibility by the County Department of Public Works. Wherever a gravel, crushed rock or asphalt surface is removed or damaged in the course of work related to the permitted encroachment, such material shall either be separately stored and replaced in the roadway as nearly as possible in its original state or shall be replaced in kind, and the roadway shall be left in at least as good a condition as it was before the commencement of operations of placing the encroachment structure.

11. Whenever it becomes necessary to secure permission from abutting property owners for the proposed work, such authority must be secured by the Permittee prior to starting work.

12. The current and future safety and convenience of the traveling public shall be given every consideration in the location and methods of construction utilized.

13. The Permittee is responsible for the preservation of survey monuments located within the area of work herein permitted. Prior to the start of construction, survey monuments that potentially may be disturbed shall be located and referenced by a Licensed Land Surveyor, and a Corner Record filed with the County Surveyor. Any Survey Monuments disturbed during the course of construction shall be reestablished by a Licensed Land Surveyor and another Corner Record filed with the County Surveyor. (Land Surveyors' Act Section 8771)

14. Prior to any excavation, the Permittee shall notify USA North (Underground Service Alert of Northern California and Nevada) at 811 or 800-227-2600 forty-eight (48) hours in advance.

APPLICATION FOR ENCROACHMENT PERMIT

RECEIVED
SAN JOAQUIN COUNTY
2016 MAR 21 AM 10: 59
DEPT. OF PUBLIC WORKS

PLEASE PRINT:

Date March 21, 2016

To: San Joaquin County
Department of Public Works

A.M. Stephens Const. Co., Inc
(Applicant Name)

P.O. Box 1967
(Mailing Address)

Lodi, California 95241
(City, State, Zip Code)

(209) 333-0186
(Area Code - Telephone Number)

John Edwards - john@amstephens.net (209) 992-1449

OFFICE USE ONLY

JOB #	41000S	REF #	
APN		CR #	
EXP. DATE	6/1/16		
VALID	4/13/16	TO	6/1/16
STREET	Bacon Island Rd		
AREA	Rehe	QUAD	SW
TYPE	AB Fill		
FORMS	SS WW		
NOTES			

DRIVEWAYS:
*
*
*

Sketch (Detailed plans may be submitted) See Attached *

The undersigned hereby applies for permission to excavate, construct and/or otherwise encroach on County Highway Right-of-Way on the North/South side of Bacon Island Bridge approximately 10,000 LF feet/mile — of Adding AB to Existing Levee Bacon Island Road, by performing the following work (description of work):

Work will commence on or about April 2016 for approximately 30 days.

I, the undersigned, certify that I am the owner of the respective property, or am qualified to represent the owner and agree to do the work described above in accordance with the rules and regulations of San Joaquin County and subject to inspection and approval.

Superintendent
Signature of Applicant - Title
John Edwards, Superintendent

March 21, 2016
Date

M:\CENTRAL\SERVICES\CLERICAL\PUB-SV.WK\MASTER.PS\ENCROACHMENT PERMIT APPLICATION.DOC (02/13)

SPECIAL CONDITIONS FOR ENCROACHMENT PERMIT

1. The Reclamation District shall be responsible for video recording of Bacon Island Road between Hwy 4 and Bacon Island Bridge prior to construction; providing the video to San Joaquin County Public Works and repairing any damage to Bacon Island Road after completion of project.

2. Ditch side slopes shall be placed at 2:1 max along County road sections.

3. Use CMS to Notify of Construction Zone.

4. Maintain traffic controls for all roads. Traffic control delays shall not exceed 15 minutes.

5. Access to all properties shall be maintained at all times except when work is occurring at the access point. Minimal delays will be allowed to provide access within the work zone area. Driveway access shall be fully restored at the end of each workday. Driveways disturbed by the contractor shall be replaced with in-kind or better materials.

6. Property owners shall be notified in writing, as approved by the County, 48 hours in advance of any impacts to their access.

7. All destroyed or obliterated pavement markings must be replaced in kind by the permittee. Typical pavement markings include but not limited to lane lines, centerlines, stop and stop ahead legends, limit lines, raised pavement markers and miscellaneous delineators.

8. The Permittee is responsible for the preservation of survey monuments located within the area of work herein permitted. Prior to the start of construction, survey monuments that potentially may be disturbed shall be located and referenced by a Licensed Land Surveyor, and a Corner Record filed with the County Surveyor. Any Survey Monuments disturbed during the course of construction shall be reestablished by a Licensed Land Surveyor and another Corner Record filed with the County Surveyor. (Land Surveyors' Act Section 8771)

9. Class II Aggregate Base shoulder backing is required from the edge of pavement, a minimum of 4-inches thick by 4-feet wide.

10. Contractor shall establish existing roadway and drainage grades within the construction area. Any repair to roadways and adjacent areas shall match existing grades. Any proposed grade changes shall receive prior approval from County.

11. Above ground vaults, panels and/or other similar facilities will be allowed within the right-of-way if located as far to the outside edge as possible. Utility vaults shall be located a minimum of 4'-0" from edge of pavement.

GENERAL PROVISIONS

GOVERNING INSTALLATION OF SUBSURFACE STRUCTURES AND PIPELINES WITHIN COUNTY ROAD-RIGHTS-OF-WAY

PUBLIC CONVENIENCE AND SAFETY:

A. Before obstructing any private driveway entrance or County road traveled way with a trench, spoil bank, equipment or other barrier permitted for any prolonged period of time, the Permittee shall notify the known users of the respective thoroughfare(s) involved, and shall provide access for vehicular and pedestrian traffic to and from the road.
   1. Unless otherwise permitted, all work shall be conducted in such a manner that no less than one lane of the existing County road traveled way will be maintained open to public traffic during working hours in a smooth and safe riding condition(s). Two lanes shall be open after working hours.
   2. In cases where road closure is permitted, the permission to close the road will be granted under the condition that the Permittee notify the following persons and/or agencies of the time, the period of closure, and the detour route at least twenty-four (24) hours prior to said road closure.
      a. The County of San Joaquin Public Works Department
      b. The County of San Joaquin Sheriff's Office
      c. The local postal service
      d. The local fire district
      e. The local school district
      f. The local residents involved

B. Should hazardous conditions relative to the installation operations warrant flagmen, as many capable flagmen as may be necessary shall be provided by the Permittee and stationed in advance of work to warn and direct traffic.

C. Lights, signs and barricades shall be furnished, erected and maintained by the Permittee for the adequate warning and convenience of the public, with particular attention to be taken in this regard after dark.

D. Any excess dirt and/or debris which might be a hazard to either automobile or pedestrian traffic, uncontrollable by lights, signs and barricades, shall be removed from the jobsite daily.

STRUCTURES:

A. Walls of structures shall be such quality and strength that they will resist all pressures and will not crack or be deformed in such a way as to create a hazard or maintenance problem at any time. Therefore, the minimum structural requirements for concrete pipe placed under county road rights-of-way shall conform to the following American Association of State Highway and transportation Officials (AASHTO) designations.
   1. For concrete pipe up to and including thirty-three inches (33") inside diameter, extra strength concrete conforming to AASHTO Designation M 170M.
   2. For concrete pipe thirty-six inches (36") inside diameter and larger, reinforced concrete pipe conforming to AASHTO Designation M 170M Class III.
   3. Plastic pipe conforming to AASHTO Designation M294.

B. All concrete pipe joints with County road rights-of-way shall be sealed against leakage and/or infiltration with rubber gasket in conformance with Section 65-1:06 of the California Standard Specifications, or with other methods as may be permitted under the Special Provisions.

C. Cast-in-place concrete pipe, vitrified clay pipe, spiral welded steel pipe, or corrugated aluminum alloy pipe shall not be installed within the County road rights-of-way unless specifically so stated in the Special Provisions, and only under the conditions as provided.

D. All structures to be buried within the County rights-of-way shall be set at such elevations as to allow minimum coverage of thirty inches (30") to the centerline of the roadways and twelve inches (12") at the bottoms of borrow ditches each side of the roadways. The depths of structures shall be established below a flat plane extending across the rights-of-way, no part of which shall extend above the elevations stated above; manholes, lampholes, valves, etc. not included. Future surface elevations shall be anticipated as nearly as possible and structure elevations shall be established for future adjustments accordingly.

E. The County hereby reserves the right to specify in the Special Provisions the gage and surface treatment of any galvanized corrugated metal pipe that is to be installed.

F. All longitudinal utility facilities are to be established (and dimensioned on sketches) from surveyed centerline of road right-of-way, not from right-of-way (border) lines.

EPAIRS OF THE COUNTY RIGHT-OF-WAY:

A. All excavations shall be backfilled and compacted immediately after work therein has been completed.

B. Trenched shall not be left open farther than 300 feet in advance of pipe laying operations, or 200 feet to the rear thereof, unless otherwise permitted by the Engineer.

C. Unless otherwise permitted under the Special Provisions, backfill shall be placed and mechanically compacted in such a manner that the relative compaction throughout the entire fill within the County road right-of-way shall conform to the percentages of compaction as shown on the Trench detail.

D. Backfill material shall be placed in horizontal uniform layers not to exceed in thickness, before compaction, 0.67 foot in the bedding region, one –foot where 90% compaction is required, and two-feet where 80% compaction is required.

E. No portion of the excavation(s) shall be compacted by ponding or jetting unless a maintenance bond is provided.

F. Gravel backfill material shall be utilized only where specifically so stated on the face of the permit. It shall be compacted by means of a high-frequency internal vibrator, the compactor to be a size and type approved by the Engineer. Points of compaction shall not be greater than 18" centers and to the full depth of the lift.

G. All pavements, curbs, gutters, sidewalks, borrow ditches, pipes, head walls, road signs, trees, shrubbery, and/or other permanent road facilities impaired by or as a result of construction operations at the construction site(s) occupied by materials and/or equipment, shall be restored immediately upon backfilling of the excavation to the original grades and cross sections, and to a condition as good as, or better than existing prior to construction.

H. All surfacing materials of roadways and driveway approaches cut or damaged by or as a result of construction operations, shall be replaced within ONE WEEK following the backfilling of excavation, weather permitting, with compacted layers of surfacing materials at least as thick as the existing, and no less than two inches (2") of asphalt concrete over six inches (6") of aggregate base, both as specified below.
   1. Asphalt Concrete: Combined mineral aggregate shall conform to the quality and gradation requirements for Type "B" one-half inch(1/2) maximum aggregate, coarse or medium gradation as specified in Section 39 of the California Standard Specifications. The bituminous binder to be mixed with mineral aggregate shall be paving asphalt having (Grade PG 64-10), unless otherwise directed by the Engineer. Placement of asphalt concrete surfacing shall conform to the applicable provisions of Section 39 of the California Standard Specifications.
   2. Aggregate Base: Combined mineral aggregates shall conform to the quality and the grading for three-quarter inch (3/4") maximum size aggregate Class 2 Aggregate Base specified in Section 26 of the California Standard Specifications.

I. Before acceptance of repairs to the County road rights-of-way, all unsightly and detrimental dirt, dust and/or debris shall be removed and the construction areas left in a neat and presentable condition(s).
   1. If necessary, County road traveled way and driveway pavements shall be washed with water to remove dirt and dust.
   2. Driveway approaches and field entrance pavements damaged by equipment or spoil banks shall be repaired as directed by the Engineer.

J. Upon request by the County, any settlement, sagging of surface, or cracking of pavement shall be repaired immediately by and at the sole expense of the Permittee for a period of one year following acceptance of the work.

SPECIAL PROVISIONS

Winter Weather Utility Work

1. **SUPERVISION:** The utility company (permittee) shall furnish full-time supervision of all work to insure compliance with the permit provision.

2. **START OF WORK:** No work within the County right-of-way shall be started until the utility company representative has made an evaluation of weather conditions and has determined the work can be accomplished under the provisions of the permit.

3. **CLEAN PAVEMENT:** Dirt and mud shall not be deposited on the pavement outside the area of work, and if inadvertently tracked onto the road travel way shall be removed immediately.

4. **DAILY RESTORATION:** Private driveways and road intersections shall be restored daily.

5. **WEATHER-TIGHT CONDITIONS:** All trenches shall be filled and compacted, ditches and other drainage facilities regarded and opened, and the entire work area restored to weather-tight condition prior to any rain.

OWNER
RECLAMATION DISTRICT 2028
343 EAST MAIN STREET, SUITE 815
STOCKTON, CA 95202
(209) 943-5551 FAX (209) 943-0251
ATTN: AL WARREN HOSLETT

CIVIL ENGINEER
MBK ENGINEERS
455 UNIVERSITY AVENUE, SUITE 100
SACRAMENTO, CA 95825
(916) 456-4400 FAX: (916) 456-0253
ATTN: NATE HERSHEY

GEOTECHNICAL ENGINEER
HULTGREN-TILLIS ENGINEERS
4085 NELSON AVE, SUITE A
CONCORD, CA 94520-1257
(925) 685-6300 FAX: (925) 685-6768
ATTN: KEVIN TILLIS

REHABILITATION PLAN
RECLAMATION DISTRICT 2028
BACON ISLAND HMP LEVEE MAINTENANCE PROJECT
SAN JOAQUIN COUNTY, CALIFORNIA
DWR PROJECT FUNDING AGREEMENT NO. BN-12-1.0

GENERAL NOTES

1. ALL GRADING, SITE PREPARATION, PLACING AND COMPACTION OF FILL TO BE DONE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND UNDER THE DIRECT SUPERVISION OF THE GEOTECHNICAL ENGINEER.

2. ALL CUT SLOPES SHALL BE ROUNDED TO MEET EXISTING GRADES AND BLEND WITH THE SURROUNDING TOPOGRAPHY.

3. ANY DEVIATION FROM APPROVED GRADING PLAN REQUIRES APPROVAL OF THE DISTRICT ENGINEER.

4. WHERE THE PLANS OR SPECIFICATIONS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FINEST QUALITY ARE TO BE USED.

5. LINES AND GRADES: ALL DISTANCES AND MEASUREMENTS ARE GIVEN AND WILL BE MADE IN A HORIZONTAL PLANE. GRADES ARE GIVEN FROM THE TOP OF HUBS OR NAILS UNLESS OTHERWISE NOTED.

6. BASIS OF BEARING: ALL BEARINGS ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE III. DISTANCES ARE GROUND.

7. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT, 800-642-2444, TWO WORKING DAYS (48 HOURS) PRIOR TO ANY EXCAVATION. THE U.S.A. AUTHORIZATION NUMBER WILL BE KEPT AT THE JOB SITE.

8. SHOULD IT APPEAR THAT THE WORK TO BE DONE, OR ANY MATTER RELATIVE THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT MBK ENGINEERS AT (916) 456-4400 FOR SUCH FURTHER EXPLANATION AS MAY BE NECESSARY.

9. THE CONTRACTOR SHALL COMPLY WITH ALL RULES, REGULATIONS AND PROCEDURES OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) FOR MUNICIPAL CONSTRUCTION AND INDUSTRIAL ACTIVITIES AS PROMULGATED BY THE CALIFORNIA STATE WATER RESOURCE CONTROL BOARD OR ANY OF ITS REGIONAL WATER QUALITY CONTROL BOARDS.

10. THE CIVIL ENGINEERING DESIGN SHOWN HEREON WAS PREPARED IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING AND/OR SURVEYING PRACTICES APPLICABLE ON THE DATE OF THE SIGNATURE BY THE ENGINEER. IF CONSTRUCTION OF THE IMPROVEMENTS SHOWN HEREON DOES NOT COMMENCE WITHIN EIGHT MONTHS FROM THE DATE OF SIGNATURE BY THE ENGINEER, THE PLANS MUST BE REVIEWED FOR CURRENT COMPLIANCE WITH GENERALLY ACCEPTED ENGINEERING AND/OR SURVEYING PRACTICES AND REISSUED BY THE ENGINEER PRIOR TO ANY WORK BEING PERFORMED.

11. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.

12. CONTRACTOR SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE STATE CONSTRUCTION SAFETY ORDERS. CONTRACTOR SHALL POST EMERGENCY TELEPHONE NUMBERS FOR RECLAMATION DISTRICT 2028, AMBULANCE, POLICE AND FIRE DEPARTMENTS.

13. CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION STAKING THAT MAY BE REQUIRED FOR THE PROJECT.

14. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ANY WORK PERFORMED BY THE CONTRACTOR BASED ON DRAWINGS WHICH HAVE NOT BEEN SIGNED AND SEALED BY THE ENGINEER, APPROVED BY THE DISTRICT, AND SPECIFICALLY NOTED AS "APPROVED FOR CONSTRUCTION" BY THE ENGINEER. ALL INFORMATION SHOWN ON PRELIMINARY DRAWINGS IS SUBJECT TO CORRECTION AND/OR CHANGE AND THE CONTRACTOR SHALL PERFORM ANY AND ALL IMPROVEMENTS AT THEIR OWN RISK.

15. THE DISTRICT SHALL BE RESPONSIBLE FOR OBTAINING ALL EASEMENTS, RIGHTS-OF-ENTRY, ETC. NECESSARY TO CONSTRUCT ANY WORK SHOWN HEREON.

16. OBSTRUCTIONS INDICATED ARE FOR INFORMATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION AND DEPTH WITH THE APPROPRIATE AGENCIES PRIOR TO CONSTRUCTION. NEITHER THE DISTRICT NOR THE ENGINEER ASSUMES RESPONSIBILITY THAT THE OBSTRUCTIONS INDICATED WILL BE THE OBSTRUCTIONS ENCOUNTERED. ALL EXISTING ELEVATIONS SHOWN ARE AS MEASURED IN THE FIELD UNLESS OTHERWISE NOTED.

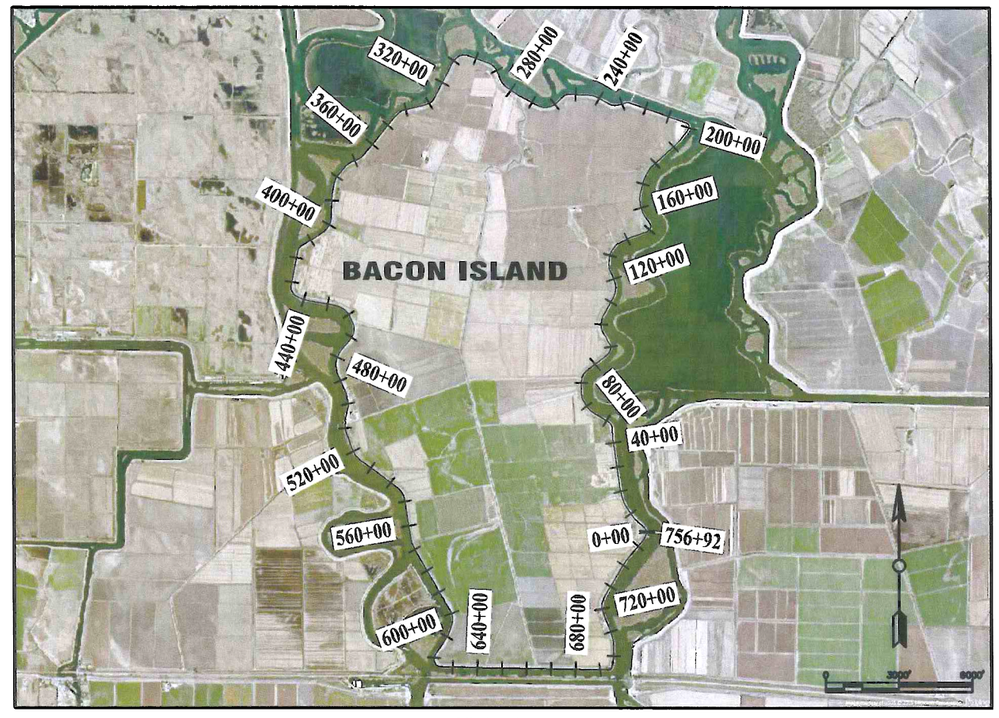
17. IF ARCHEOLOGIC MATERIALS ARE UNCOVERED DURING GRADING, TRENCHING OR OTHER EXCAVATION, EARTHWORK WITHIN 100 FEET OF THESE MATERIALS SHALL BE STOPPED UNTIL A PROFESSIONAL ARCHEOLOGIST WHO IS CERTIFIED BY THE SOCIETY OF CALIFORNIA ARCHAEOLOGY (SCA), AND/OR THE SOCIETY OF PROFESSIONAL ARCHAEOLOGY (SOPA) HAS HAD AN OPPORTUNITY TO EVALUATE THE SIGNIFICANCE OF THE FIND AND SUGGEST APPROPRIATE MITIGATION MEASURES, IF THEY ARE DEEMED NECESSARY.

18. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT WRITTEN AUTHORIZATION FROM MBK ENGINEERS.

19. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGGERS, OR OTHER DEVICES NECESSARY TO PROVIDE FOR PUBLIC SAFETY IN ACCORDANCE WITH DISTRICT, COUNTY AND CAL-OSHA SPECIFICATIONS.

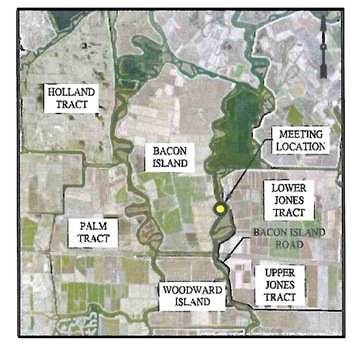
20. STRIPPINGS SHALL BE STOCKPILED IN THE DESIGNATED AREA(S) PER PLAN.

CALL BEFORE YOU DIG



SITE PLAN
SCALE: 1" = 6000'

VICINITY MAP
SCALE: N.T.S.



PRECONSTRUCTION MEETING LOCATION MAP
SCALE: N.T.S.

ESTIMATED EARTHWORK SUMMARY

	IMPORT FILL (TONS)	AGGREGATE BASE (TONS)
TOTAL	30,500	20,600

BENCHMARK

BENCHMARK "64 MDC"

LOCATED ONTHE EAST SIDE OF HOLLAND TRACT IN THE SACRAMENTO-SAN JOAQUIN DELTA, ABOUT 3,500 FEET NORTH OF THE MARINA BOAT LAUNCH AT THE SOUTHEAST CORNER OF THE ISLAND. THE MARK IS SET IN CONCRETE IN THE NORTHEAST ANCHOR OF A GUY WIRE FOR THE HIGH VOLTAGE TOWER.

ELEVATION = 2.22' (NGVD 29)

ABBREVIATIONS

AB	AGGREGATE BASE
APPROX.	APPROXIMATELY
CL	CENTERLINE
ELEV.	ELEVATION
EX.	EXISTING
EG	EXISTING GRADE
FG	FINISH GRADE
OH	OVERHEAD
PROP.	PROPOSED
UNO	UNLESS NOTED OTHERWISE

BASIS OF BEARINGS

ALL BEARINGS ARE BASED UPON THE CALIFORNIA COORDINATE SYSTEM, ZONE 3.

LEGEND

	REFERENCE LINE		EX. MAJOR CONTOUR
	EDGE OF LEVEE ROAD		EX. MINOR CONTOUR
	TOP OF DITCH		EX. VEGETATION
OH	OVERHEAD UTILITIES		EX. DRIPLINE
X	FENCE LINE	10	PROPOSED MAJOR CONTOUR
	UTILITY POLE		PROPOSED MINOR CONTOUR
x 100.0	SPOT ELEVATION		PROPOSED LEVEE HINGE

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 63107
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

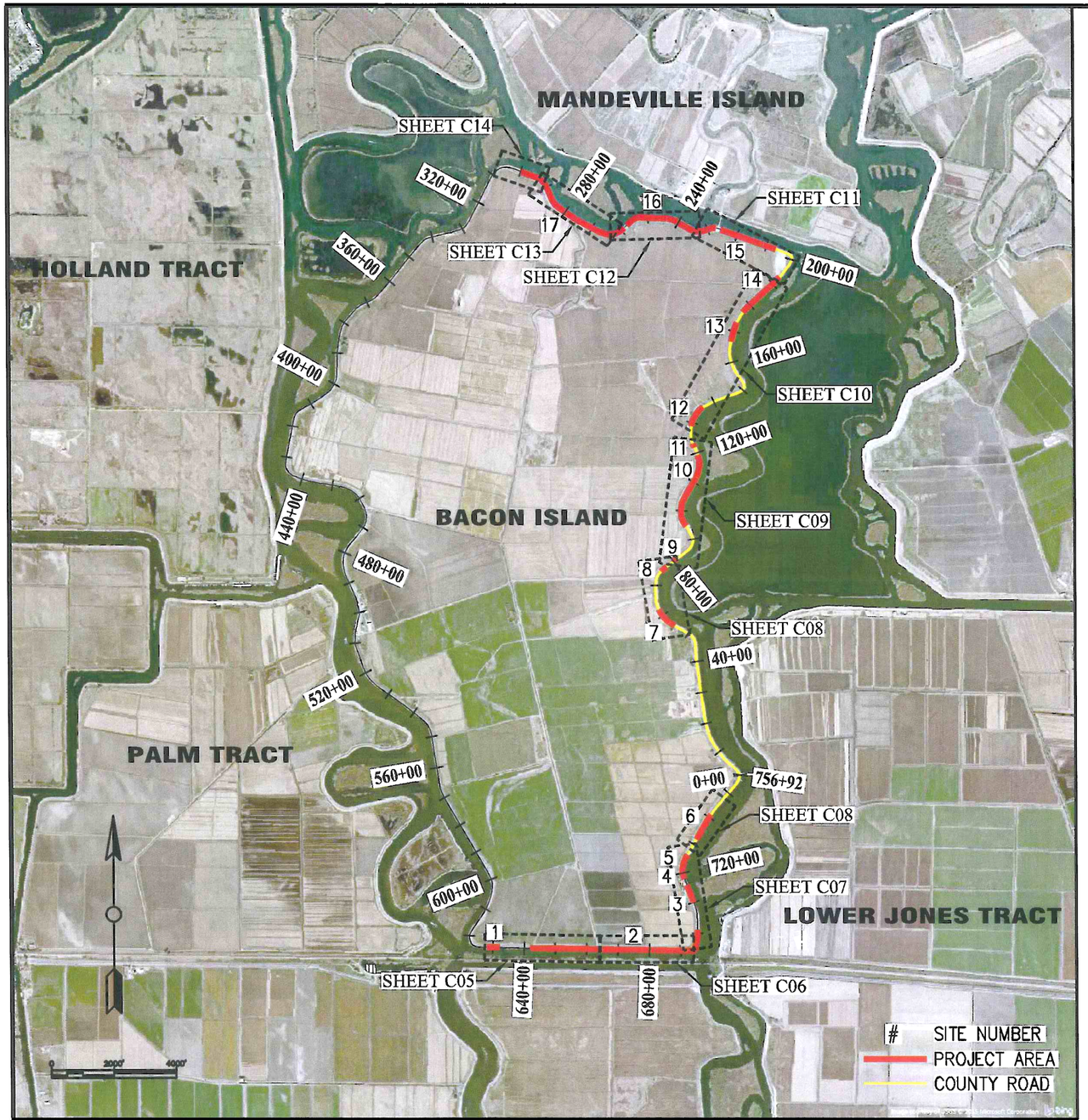
MBK ENGINEERS
455 University Avenue, Suite 100
Sacramento, California 95825
Phone: (916) 456-4400 • Fax: (916) 456-0253

NO.	DATE	REVISION
		PRELIMINARY BID SET

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

COVER SHEET AND NOTES

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C01 OF 38 SHEETS



SHEET INDEX AND SITE MAP

SCALE: 1" = 4000'

Site No.	Begin Sta	End Sta	Length (LF)	Fill Quantity (TN)	AB Quantity (TN)	Slope Fill	Typical Sections	CL Elev. (FT)
1	627+80	632+20	440	175	275	Yes	C	8.8
2	641+80	701+20	5,940	4,634	3,715	Yes	B, C	8.8 - 8.9
3	710+75	716+00	525	469	328	Yes	B, C	8.9
4	718+00	721+60	360	133	225	Yes	D	8.9
5	721+60	726+20	460	653	424	Yes	D	8.9
6	731+80	741+20	940	1,004	867	Yes	D	8.9
7	54+80	62+20	740	212	683	Yes	D	8.8
8	74+80	77+20	240	521	221	Yes	D	8.8
9	79+80	81+20	140	30	129	Yes	D	8.8
10	94+80	119+20	2,440	4,019	2,251	Yes	D	8.8
11	121+80	123+20	140	476	129	Yes	D	8.7
12	128+80	136+20	740	448	683	Yes	D	8.7
13	166+80	173+20	640	845	591	Yes	D	8.7
14	176+80	193+20	1,640	859	1,513	Yes	D	8.7
15	206+80	225+51	1,871	3,807	1,726	Yes	B, C	8.7
16	227+06	257+72	3,066	3,056	1,918	Yes	B, C	8.7 - 8.6
17	258+89	300+20	4,131	5,550	2,584	Yes	B, C	8.6

Design CL Elevations		
Begin Sta	End Sta	Elev. (FT)
0+00	120+00	8.8
120+00	250+00	8.7
250+00	390+50	8.6
390+50	541+25	8.7
541+25	643+75	8.8
643+75	745+68	8.9
745+68	756+36	8.8

NOTE: ALL ELEVATIONS ARE NGVD29

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 63107
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

MBK ENGINEERS
455 University Avenue, Suite 100
Sacramento, California 95825
Phone: (916) 456-4400 • Fax: (916) 456-0253

NO.	DATE	REVISION

PRELIMINARY BID SET

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

SHEET INDEX AND SITE MAP

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016

SHEET C02 OF 38 SHEETS

REFERENCE LINE - ALIGNMENT STATION COORDINATES				
POINT #	STATION	NORTHING	EASTING	DESCRIPTION
55	54+00	2177077.13	6262892.46	Ex. CL Offset = 0.00'
56	55+00	2177127.16	6262805.88	Ex. CL Offset = 0.00'
57	56+00	2177179.85	6262720.89	Ex. CL Offset = 0.00'
58	57+00	2177237.42	6262639.15	Ex. CL Offset = 0.00'
59	58+00	2177298.60	6262560.07	Ex. CL Offset = 0.00'
60	59+00	2177367.84	6262488.05	Ex. CL Offset = 0.00'
61	60+00	2177445.71	6262425.41	Ex. CL Offset = 0.00'
62	61+00	2177528.99	6262370.11	Ex. CL Offset = 0.00'
63	62+00	2177616.71	6262322.16	Ex. CL Offset = 0.00'
64	63+00	2177706.86	6262278.91	Ex. CL Offset = 0.00'
75	74+00	2178773.17	6262321.45	Ex. CL Offset = 0.00'
76	75+00	2178846.53	6262389.22	Ex. CL Offset = 0.00'
77	76+00	2178912.29	6262464.52	Ex. CL Offset = 0.00'
78	77+00	2178973.67	6262543.44	Ex. CL Offset = 0.00'
79	78+00	2179034.98	6262622.43	Ex. CL Offset = 0.00'
80	79+00	2179096.25	6262701.46	Ex. CL Offset = 0.00'
81	80+00	2179158.05	6262780.08	Ex. CL Offset = 0.00'
82	81+00	2179219.62	6262858.87	Ex. CL Offset = 0.00'
83	82+00	2179279.88	6262938.66	Ex. CL Offset = 0.00'
95	94+00	2180229.62	6263245.55	Ex. CL Offset = 0.00'
96	95+00	2180316.04	6263196.19	Ex. CL Offset = 0.00'
97	96+00	2180397.52	6263138.31	Ex. CL Offset = 0.00'
98	97+00	2180455.64	6263091.30	Ex. CL Offset = 0.00'
99	98+00	2180577.45	6263052.98	Ex. CL Offset = 0.00'
100	99+00	2180676.40	6263039.23	Ex. CL Offset = 0.00'
101	100+00	2180776.33	6263039.34	Ex. CL Offset = 0.00'
102	101+00	2180875.95	6263047.79	Ex. CL Offset = 0.00'
103	102+00	2180974.68	6263063.46	Ex. CL Offset = 0.00'
104	103+00	2181069.87	6263093.68	Ex. CL Offset = 0.00'
105	104+00	2181159.30	6263138.29	Ex. CL Offset = 0.00'
106	105+00	2181246.50	6263187.20	Ex. CL Offset = 0.00'
107	106+00	2181333.57	6263236.37	Ex. CL Offset = 0.00'
108	107+00	2181420.44	6263285.90	Ex. CL Offset = 0.00'
109	108+00	2181507.60	6263334.91	Ex. CL Offset = 0.00'
110	109+00	2181593.91	6263385.40	Ex. CL Offset = 0.00'
111	110+00	2181680.50	6263435.42	Ex. CL Offset = 0.00'
112	111+00	2181767.56	6263484.62	Ex. CL Offset = 0.00'
113	112+00	2181855.47	6263532.25	Ex. CL Offset = 0.00'
114	113+00	2181947.14	6263572.02	Ex. CL Offset = 0.00'
115	114+00	2182042.41	6263602.23	Ex. CL Offset = 0.00'
116	115+00	2182139.88	6263624.53	Ex. CL Offset = 0.00'
117	116+00	2182238.61	6263639.94	Ex. CL Offset = 0.00'
118	117+00	2182338.41	6263637.75	Ex. CL Offset = 0.00'
119	118+00	2182435.77	6263615.48	Ex. CL Offset = 0.00'
120	119+00	2182531.75	6263587.44	Ex. CL Offset = 0.00'
121	120+00	2182626.59	6263555.75	Ex. CL Offset = 0.00'
122	121+00	2182720.07	6263520.29	Ex. CL Offset = 0.00'
123	122+00	2182811.36	6263479.51	Ex. CL Offset = 0.00'
124	123+00	2182901.20	6263435.60	Ex. CL Offset = 0.00'
125	124+00	2182992.36	6263394.57	Ex. CL Offset = 0.00'
129	128+00	2183388.28	6263375.96	Ex. CL Offset = 0.00'
130	129+00	2183487.86	6263385.09	Ex. CL Offset = 0.00'
131	130+00	2183586.29	6263402.07	Ex. CL Offset = 0.00'
132	131+00	2183680.25	6263435.80	Ex. CL Offset = 0.00'
133	132+00	2183768.40	6263482.91	Ex. CL Offset = 0.00'
134	133+00	2183851.93	6263537.82	Ex. CL Offset = 0.00'
135	134+00	2183931.92	6263597.83	Ex. CL Offset = 0.00'
136	135+00	2184005.92	6263664.91	Ex. CL Offset = 0.00'
137	136+00	2184063.38	6263746.49	Ex. CL Offset = 0.00'
138	137+00	2184110.24	6263834.82	Ex. CL Offset = 0.00'
167	166+00	2186097.11	6264652.78	Ex. CL Offset = 0.00'
168	167+00	2186194.64	6264674.83	Ex. CL Offset = 0.00'
169	168+00	2186291.25	6264700.65	Ex. CL Offset = 0.00'
170	169+00	2186387.71	6264727.02	Ex. CL Offset = 0.00'
171	170+00	2186484.00	6264753.99	Ex. CL Offset = 0.00'
172	171+00	2186579.89	6264782.35	Ex. CL Offset = 0.00'
173	172+00	2186674.64	6264814.30	Ex. CL Offset = 0.00'
174	173+00	2186766.96	6264852.63	Ex. CL Offset = 0.00'
175	174+00	2186855.74	6264898.62	Ex. CL Offset = 0.00'
177	176+00	2187027.99	6265000.19	Ex. CL Offset = 0.00'
178	177+00	2187109.32	6265058.26	Ex. CL Offset = 0.00'
179	178+00	2187185.13	6265123.39	Ex. CL Offset = 0.00'
180	179+00	2187255.61	6265194.30	Ex. CL Offset = 0.00'
181	180+00	2187323.26	6265267.91	Ex. CL Offset = 0.00'
182	181+00	2187389.94	6265342.43	Ex. CL Offset = 0.00'
183	182+00	2187457.37	6265416.27	Ex. CL Offset = 0.00'
184	183+00	2187525.24	6265489.71	Ex. CL Offset = 0.00'
185	184+00	2187593.28	6265562.99	Ex. CL Offset = 0.00'
186	185+00	2187660.15	6265637.34	Ex. CL Offset = 0.00'
187	186+00	2187727.39	6265711.36	Ex. CL Offset = 0.00'
188	187+00	2187794.54	6265785.45	Ex. CL Offset = 0.00'
189	188+00	2187860.19	6265860.88	Ex. CL Offset = 0.00'
190	189+00	2187925.42	6265936.68	Ex. CL Offset = 0.00'
191	190+00	2187992.00	6266011.29	Ex. CL Offset = 0.00'
192	191+00	2188058.77	6266085.73	Ex. CL Offset = 0.00'
193	192+00	2188128.08	6266157.80	Ex. CL Offset = 0.00'
194	193+00	2188199.87	6266227.40	Ex. CL Offset = 0.00'
195	194+00	2188275.62	6266292.67	Ex. CL Offset = 0.00'
207	206+00	2189085.22	6266193.26	Ex. CL Offset = 0.00'
208	207+00	2189117.96	6266098.78	Ex. CL Offset = 0.00'
209	208+00	2189150.28	6266004.14	Ex. CL Offset = 0.00'
210	209+00	2189182.82	6265909.59	Ex. CL Offset = 0.00'
211	210+00	2189215.27	6265815.00	Ex. CL Offset = 0.00'
212	211+00	2189248.89	6265720.82	Ex. CL Offset = 0.00'
213	212+00	2189282.26	6265626.56	Ex. CL Offset = 0.00'
214	213+00	2189316.22	6265532.50	Ex. CL Offset = 0.00'
215	214+00	2189349.56	6265438.23	Ex. CL Offset = 0.00'
216	215+00	2189381.80	6265343.57	Ex. CL Offset = 0.00'
217	216+00	2189415.13	6265249.29	Ex. CL Offset = 0.00'
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219	218+00	2189482.10	6265060.84	Ex. CL Offset = 0.00'
220	219+00	2189515.30	6264966.51	Ex. CL Offset = 0.00'
221	220+00	2189548.41	6264872.15	Ex. CL Offset = 0.00'
222	221+00	2189581.60	6264777.82	Ex. CL Offset = 0.00'
223	222+00	2189615.72	6264683.83	Ex. CL Offset = 0.00'
224	223+00	2189648.18	6264589.24	Ex. CL Offset = 0.00'
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227	226+00	2189748.20	6264306.43	Ex. CL Offset = 0.00'
228	227+00	2189777.07	6264210.77	Ex. CL Offset = 0.00'
229	228+00	2189784.07	6264113.42	Ex. CL Offset = 0.00'
230	229+00	2189766.18	6264015.19	Ex. CL Offset = 0.00'
231	230+00	2189731.41	6263921.44	Ex. CL Offset = 0.00'
232	231+00	2189701.09	6263826.20	Ex. CL Offset = 0.00'
233	232+00	2189680.91	6263728.33	Ex. CL Offset = 0.00'
234	233+00	2189672.25	6263628.76	Ex. CL Offset = 0.00'
235	234+00	2189683.92	6263529.62	Ex. CL Offset = 0.00'
236	235+00	2189713.16	6263434.20	Ex. CL Offset = 0.00'
237	236+00	2189756.84	6263344.30	Ex. CL Offset = 0.00'
238	237+00	2189805.63	6263257.02	Ex. CL Offset = 0.00'
239	238+00	2189854.56	6263169.82	Ex. CL Offset = 0.00'
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243	242+00	2190042.22	6262817.14	Ex. CL Offset = 0.00'
244	243+00	2190066.66	6262720.27	Ex. CL Offset = 0.00'
245	244+00	2190079.66	6262621.14	Ex. CL Offset = 0.00'
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247	246+00	2190092.47	6262421.59	Ex. CL Offset = 0.00'
248	247+00	2190095.89	6262321.65	Ex. CL Offset = 0.00'
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259	258+00	2189845.10	6261317.33	Ex. CL Offset = 0.00'
260	259+00	2189777.27	6261243.88	Ex. CL Offset = 0.00'
261	260+00	2189714.86	6261165.81	Ex. CL Offset = 0.00'
262	261+00	2189660.54	6261081.93	Ex. CL Offset = 0.00'
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265	264+00	2189582.06	6260795.66	Ex. CL Offset = 0.00'
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267	266+00	2189610.21	6260598.44	Ex. CL Offset = 0.00'
268	267+00	2189643.91	6260504.35	Ex. CL Offset = 0.00'
269	268+00	2189687.62	6260414.46	Ex. CL Offset = 0.00'
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271	270+00	2189781.96	6260238.13	Ex. CL Offset = 0.00'
272	271+00	2189829.91	6260150.37	Ex. CL Offset = 0.00'
273	272+00	2189876.72	6260062.01	Ex. CL Offset = 0.00'
274	273+00	2189922.52	6259973.12	Ex. CL Offset = 0.00'
275	274+00	2189968.56	6259884.37	Ex. CL Offset = 0.00'
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287	286+00	2190707.69	6258962.94	Ex. CL Offset = 0.00'
288	287+00	2190798.66	6258921.43	Ex. CL Offset = 0.00'
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295	294+00	2191357.57	6258532.09	Ex. CL Offset = 0.00'
296	295+00	2191394.36	6258439.15	Ex. CL Offset = 0.00'
297	296+00	2191427.91	6258344.95	Ex. CL Offset = 0.00'
298	297+00	2191461.43	6258250.74	Ex. CL Offset = 0.00'
299	298+00	2191495.65	6258156.78	Ex. CL Offset = 0.00'
300	299+00	2191530.09	6258062.91	Ex. CL Offset = 0.00'
301	300+00	2191565.20	6257969.28	Ex. CL Offset = 0.00'
302	301+00	2191599.07	6257875.20	Ex. CL Offset = 0.00'
628	627+00	2166860.25	6256634.40	Ex. CL Offset = 0.00'
629	628+00	2166858.43	6256734.37	Ex. CL Offset = 0.00'
630	629+00	2166856.11	6256834.31	Ex. CL Offset = 0.00'
631	630+00	2166853.63	6256934.24	Ex. CL Offset = 0.00'
632	631+00	2166851.93	6257034.21	Ex. CL Offset = 0.00'
633	632+00	2166851.09	6257134.19	Ex. CL Offset = 0.00'
634	633+00	2166848.82	6257234.16	Ex. CL Offset = 0.00'
642	641+00	2166824.69	6258033.69	Ex. CL Offset = 0.00'
643	642+00	2166822.87	6258133.67	Ex. CL Offset = 0.00'
644	643+00	2166821.05	6258233.64	Ex. CL Offset = 0.00'
645	644+00	2166820.59	6258333.63	Ex. CL Offset = 0.00'
646	645+00	2166820.49	6258433.61	Ex. CL Offset = 0.00'
647	646+00	2166818.53	6258533.56	Ex. CL Offset = 0.00'
648	647+00	2166815.67	6258633.51	Ex. CL Offset = 0.00'
649	648+00	2166814.34	6258733.50	Ex. CL Offset = 0.00'
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651	650+00	2166815.42	6258933.46	Ex. CL Offset = 0.00'
652	651+00	2166814.23	6259033.42	Ex. CL Offset = 0.00'
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654	653+00	2166808.24	6259233.31	Ex. CL Offset = 0.00'
655	654+00	2166805.62	6259333.26	Ex. CL Offset = 0.00'
656	655+00	2166804.55	6259433.24	Ex. CL Offset = 0.00'
657	656+00	2166804.04	6259533.23	Ex. CL Offset = 0.00'
658	657+00	2166803.13	6259633.23	Ex. CL Offset = 0.00'
659	658+00	2166802.29	6259733.22	Ex. CL Offset = 0.00'
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668	667+00	2166784.83	6260632.95	Ex. CL Offset = 0.00'
669	668+00	2166784.12	6260732.93	Ex. CL Offset = 0.00'
670	669+00	2166781.25	6260832.88	Ex. CL Offset = 0.00'
671	670+00	2166779.23	6260932.86	Ex. CL Offset = 0.00'
672	671+00	2166777.73	6261032.85	Ex. CL Offset = 0.00'
673	672+00	2166776.45	6261132.83	Ex. CL Offset = 0.00'
674	673+00	2166777.88	6261232.81	Ex. CL Offset = 0.00'
675	674+00	2166780.38	6261332.77	Ex. CL Offset = 0.00'
676	675+00	2166779.60	6261432.76	Ex. CL Offset = 0.00'
677	676+00	2166777.35	6261532.73	Ex. CL Offset = 0.00'
678	677+00	2166772.80	6261632.62	Ex. CL Offset = 0.00'
679	678+00	2166771.21	6261732.60	Ex. CL Offset = 0.00'
680	679+00	2166768.39	6261832.55	Ex. CL Offset = 0.00'
681	680+00	2166765.01	6261932.49	Ex. CL Offset = 0.00'
682	681+00	2166763.76	6262032.48	Ex. CL Offset = 0.00'
683	682+00	2166762.21	6262132.46	Ex. CL Offset = 0.00'
684	683+00	2166761.76	6262232.43	Ex. CL Offset = 0.00'
685	684+00	2166760.36	6262332.41	Ex. CL Offset = 0.00'
686	685+00	2166757.55	6262432.36	Ex. CL Offset = 0.00'
687	686+00	2166754.48	6262532.30	Ex. CL Offset = 0.00'
688	687+00	2166752.25	6262632.27	Ex. CL Offset = 0.00'
689	688+00	2166749.99	6262732.23	Ex. CL Offset = 0.00'
690	689+00	2166748.83	6262832.22	Ex. CL Offset = 0.00'
691	690+00	2166747.09	6262932.15	Ex. CL Offset = 0.00'
692	691+00	2166745.49	6263032.03	Ex. CL Offset = 0.00'
693	692+00	2166743.18	6263131.97	Ex. CL Offset = 0.00'
694	693+00	2166739.97	6263231.92	Ex. CL Offset = 0.00'
695	694+00	2166747.81	6263330.89	Ex. CL Offset = 0.00'
696	695+00	2166813.51	6263402.06	Ex. CL Offset = 0.00'
697	696+00	2166910.71	6263425.12	Ex. CL Offset = 0.00'
698	697+00	2167007.69	6263449.51	Ex. CL Offset = 0.00'
699	698+00	2167104.88	6263472.98	Ex. CL Offset = 0.00'
700	699+00	2167204.48	6263481.19	Ex. CL Offset = 0.00'
701	700+00	2167304.36	6263485.17	Ex. CL Offset = 0.00'
702	701+00	2167404.36	6263485.98	Ex. CL Offset = 0.00'
703	702+00	2167504.36	6263486.10	Ex. CL Offset = 0.00'
710	709+00	2168195.32	6263403.64	Ex. CL Offset = 0.00'
711	710+00	2168289.97	6263371.38	Ex. CL Offset = 0.00'
712	711+00	2168384.90	6263340.41	Ex. CL Offset = 0.00'
713	712+00	2168476.74	6263302.82	Ex. CL Offset = 0.00'
714	713+00	2168569.60	6263265.79	Ex. CL Offset = 0.00'
715	714+00	2168662.61	6263229.07	Ex. CL Offset = 0.00'
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717	716+00	2168846.98	6263151.90	Ex. CL Offset = 0.00'
718	717+00	2168940.30	6263115.96	Ex. CL Offset = 0.00'
719	718+00	2169033.62	6263080.03	Ex. CL Offset = 0.00'
720	719+00	2169128.67	6263049.20	Ex. CL Offset = 0.00'
721	720+00	2169224.85	6263022.23	Ex. CL Offset = 0.00'
722	721+00	2169324.49	6263016.81	Ex. CL Offset = 0.00'
723	722+00	2169424.10	6263022.63	Ex. CL Offset = 0.00'
724	723+00	2169521.66	6263044.35	Ex. CL Offset = 0.00'
725	724+00	2169615.32	6263078.96	Ex. CL Offset = 0.00'
726	725+00	2169705.43	6263122.09	Ex. CL Offset = 0.00'
727	726+00	2169792.32	6263171.56	Ex. CL Offset = 0.00'
728	727+00	2169878.16	6263222.87	Ex. CL Offset = 0.00'
732	731+00	2170222.15	6263426.97	Ex. CL Offset = 0.00'
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746	745+00	2171394.52	6264186.75	Ex. CL Offset = 0.00'

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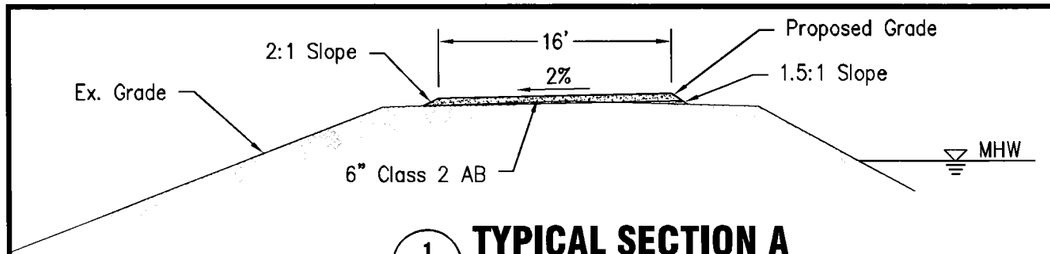
NO.	DATE	REVISION

PRELIMINARY BID SET

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

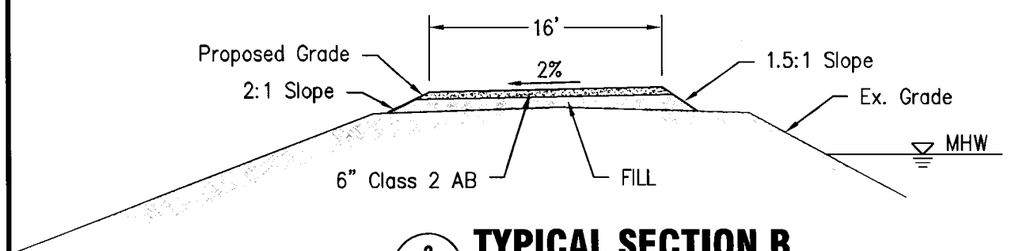
CENTERLINE REFERENCE SHEET

SCALE:	NO SCALE
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C03
OF	38 SHEETS



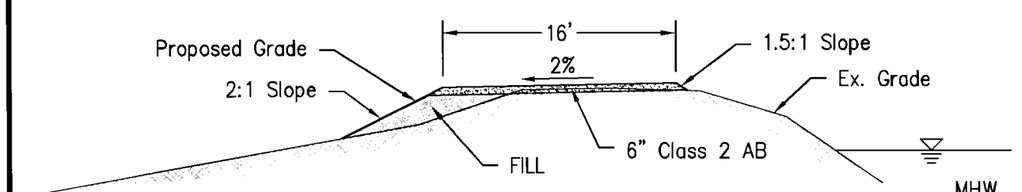
1 / C04 TYPIC AL SECTION A

SCALE: 1" = 10'



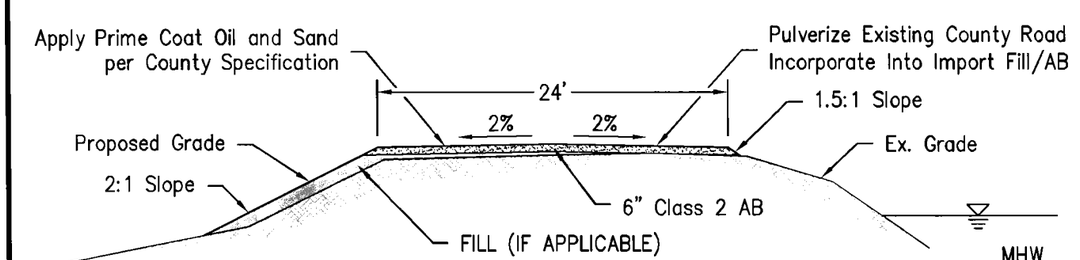
2 / C04 TYPICAL SECTION B

SCALE: 1" = 10'



3 / C04 TYPICAL SECTION C

SCALE: 1" = 10'

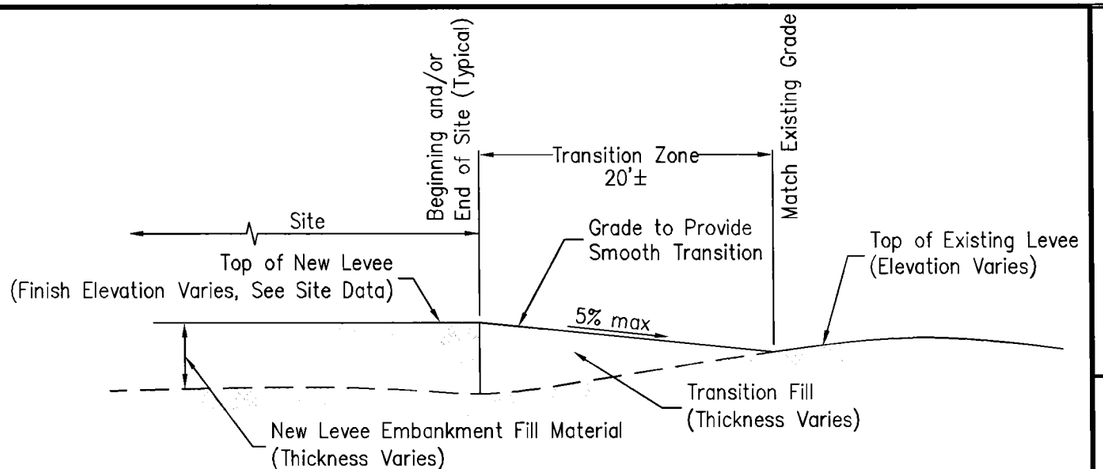


4 / C04 TYPICAL SECTION D

SCALE: 1" = 10'

NOTES:

1) Finish grade ℄ elevations are 0.5' above HMP elevations (NGVD 29).
2) All maintenance sites along county road shall adhere to San Joaquin County specifications.



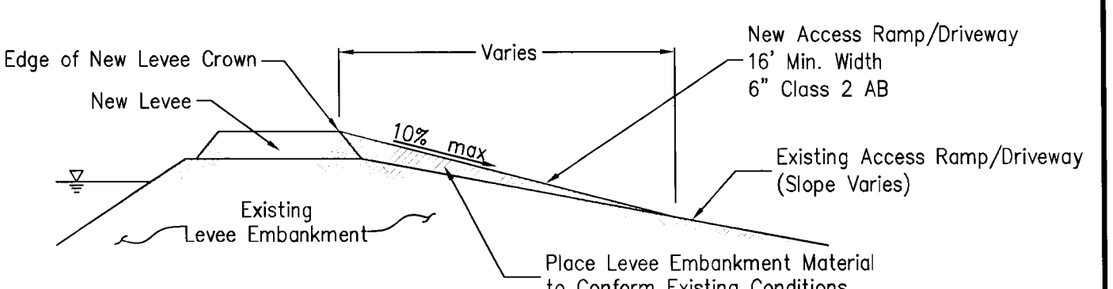
NOTES:

1) Grade to provide smooth transition between Existing and New Top of Levee.

2) Grade Transition Zone in accordance with Technical Specifications.

5 / C04 TRANSITION ZONE DETAIL

NO SCALE



NOTES:

1) Grade to provide uniform grade change between Levee Crown and Access Ramp/Driveway.

2) Grade Transition Zone in accordance with Technical Specifications.

6 / C04 ACCESS RAMP DETAIL

NO SCALE

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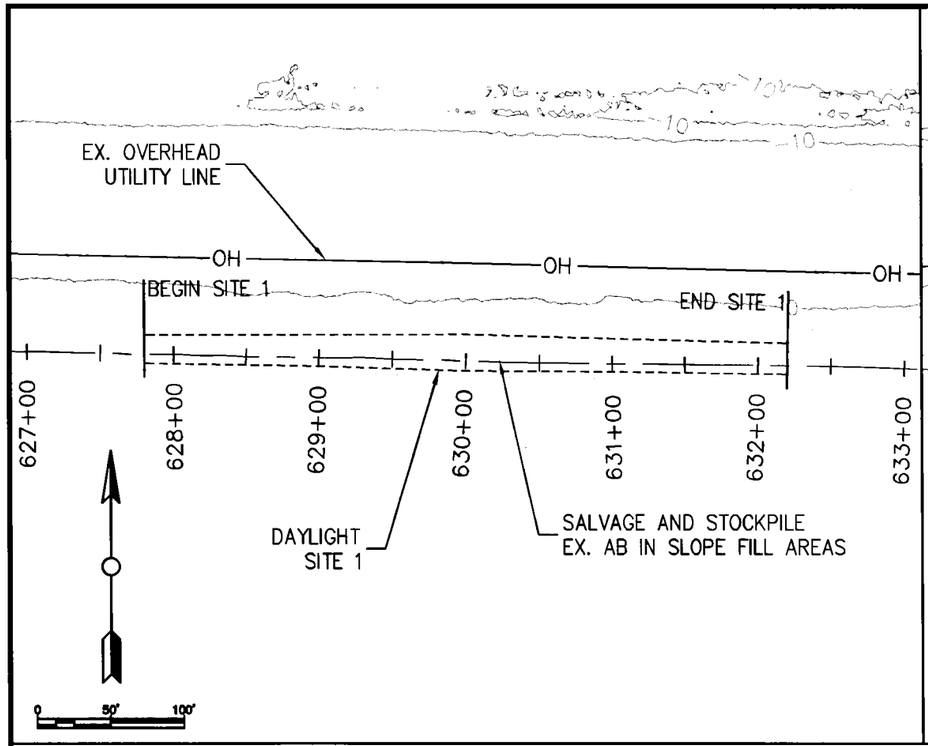
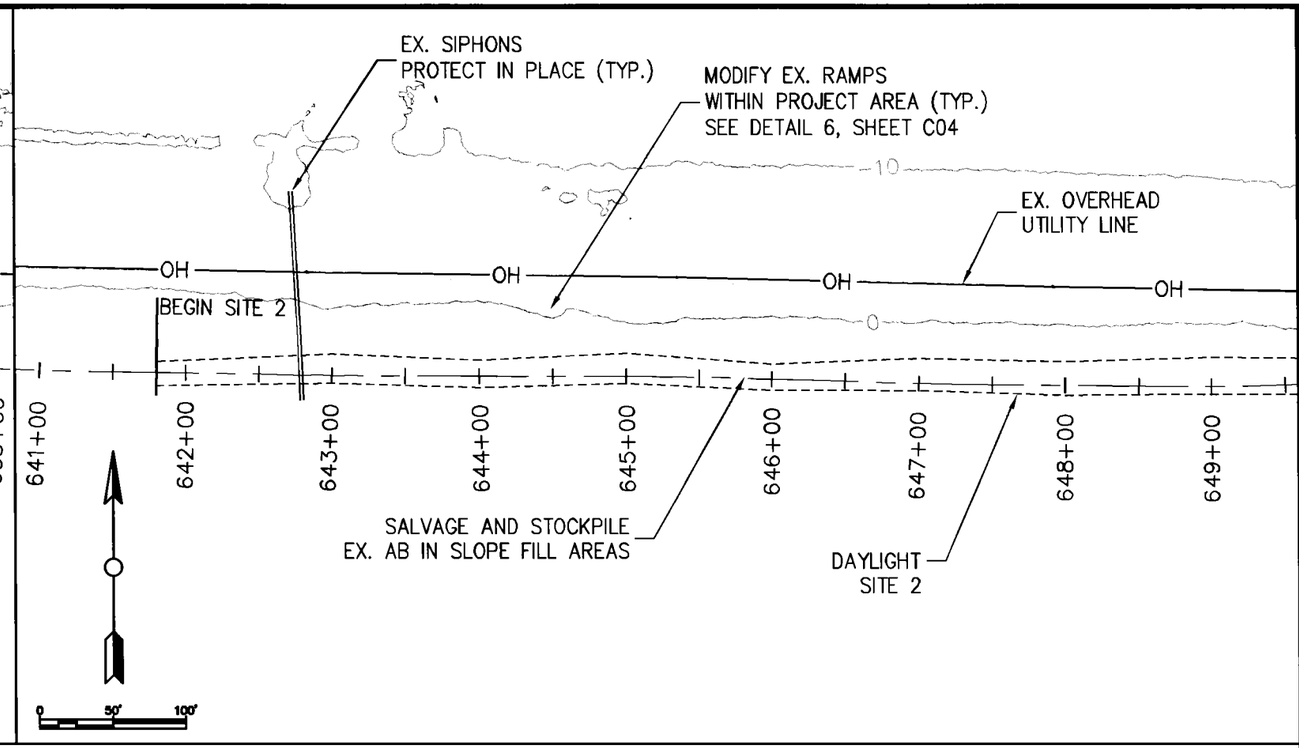
NO.	DATE	REVISION
		PRELIMINARY BID SET

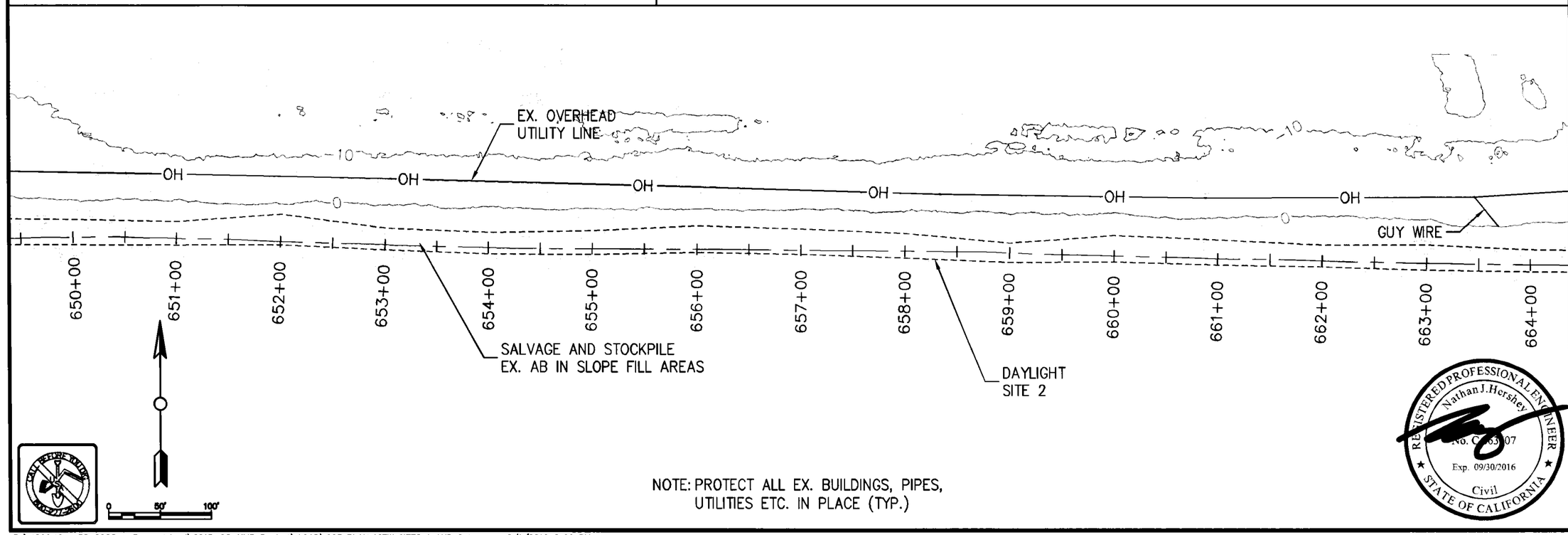
RECLAMATION DISTRICT NO. 2028
BACON ISLAND

DETAILS

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C04 OF 38 SHEETS







NOTE: PROTECT ALL EX. BUILDINGS, PIPES, UTILITIES ETC. IN PLACE (TYP.)

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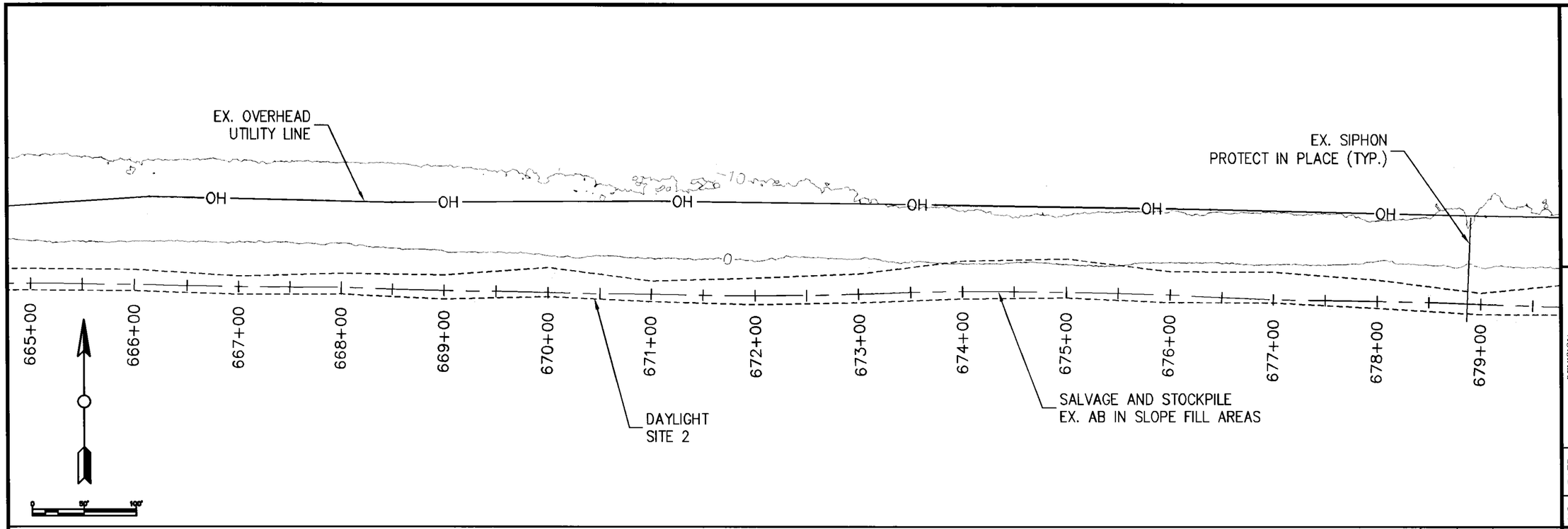
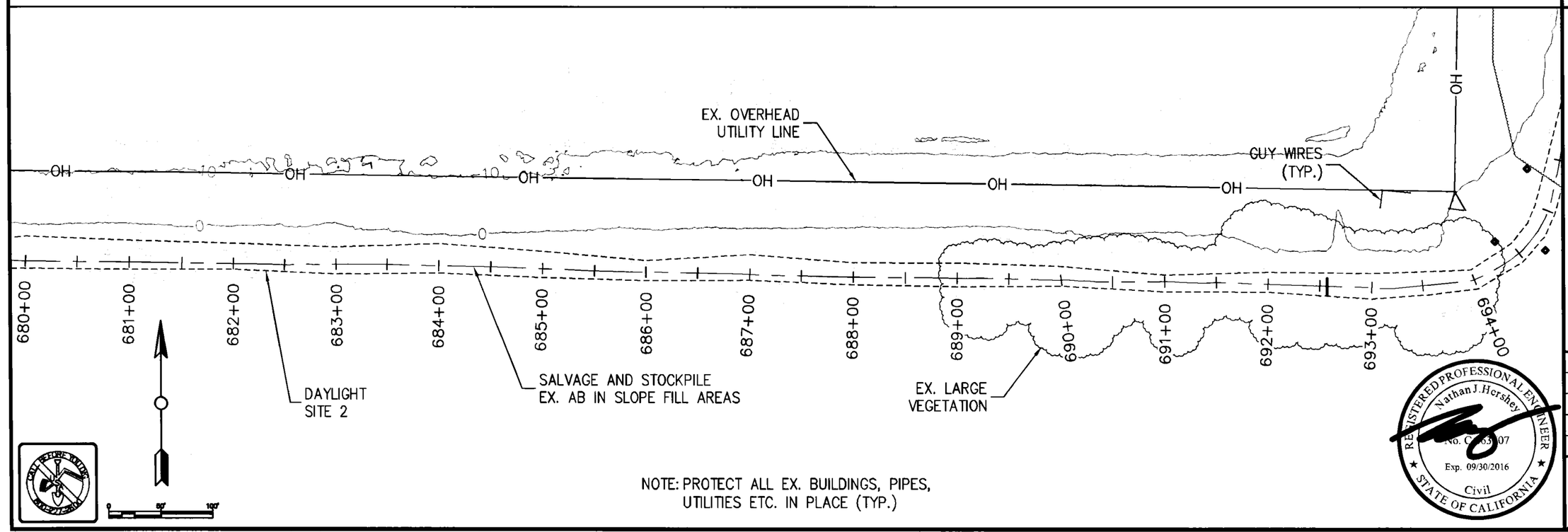
NO.	DATE	REVISION
		PRELIMINARY BID SET

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

PLAN VIEW SITES 1 AND 2

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C05 OF 38 SHEETS





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NO.	DATE	REVISION

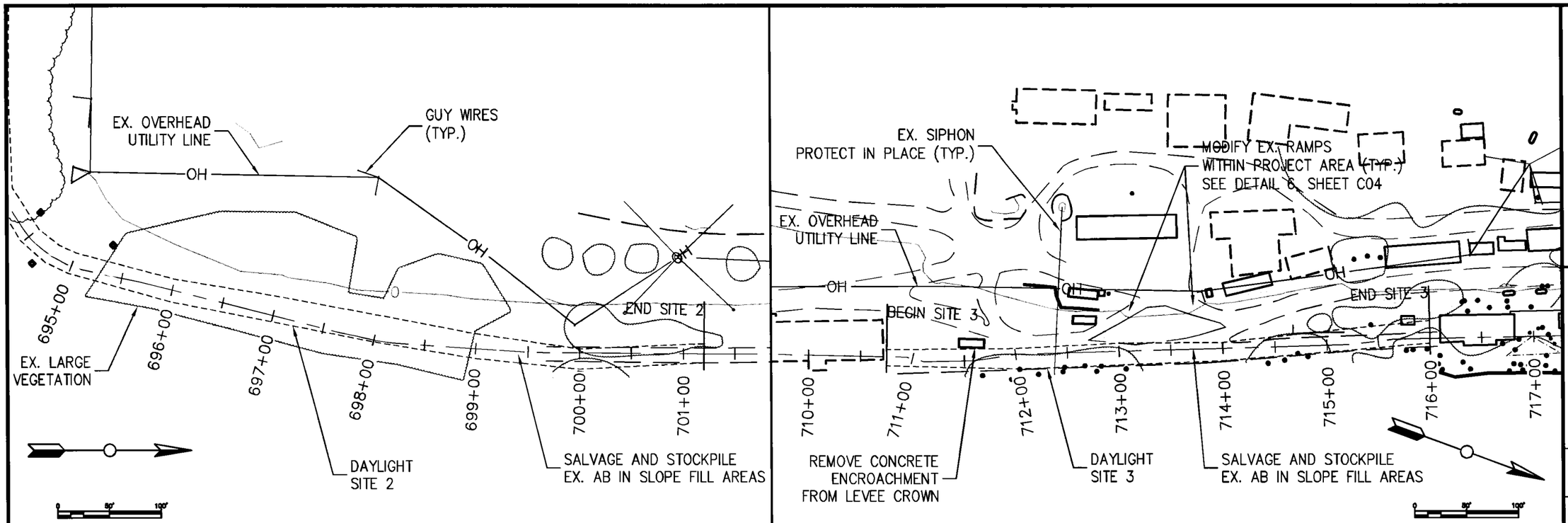
PRELIMINARY BID SET

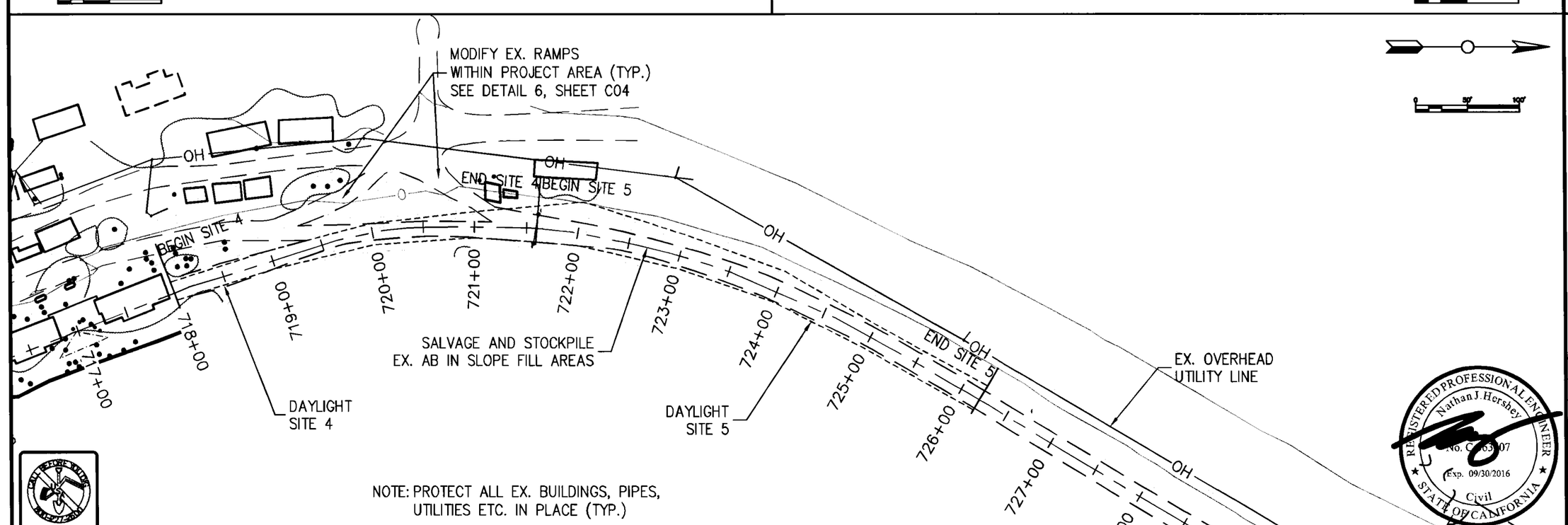
RECLAMATION DISTRICT NO. 2028
BACON ISLAND

PLAN VIEW SITE 2

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 63307
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C06 OF 38 SHEETS





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NO.	DATE	REVISION
		PRELIMINARY BID SET

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

PLAN VIEW SITES 2 TO 5

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hersbey
No. C 65307
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C07 OF 38 SHEETS

R:\4290.10 RD 2028 - Bacon Island\2015-02_HMP Project\ACAD\C07 PLAN VIEW SITES 2 TO 5.dwg 2/1/2016 2:37 PM janowiak

EX. SIPHON
PROTECT IN PLACE (TYP.)

MODIFY EX. RAMPS
WITHIN PROJECT AREA (TYP.)
SEE DETAIL 6, SHEET C04

EX. OVERHEAD
UTILITY LINE

BEGIN SITE 6

END SITE 6

730+00 731+00 732+00 733+00 734+00 735+00 736+00 737+00 738+00 739+00 740+00 741+00 742+00 743+00 744+00

EX. EDGE OF
ROADWAY

SALVAGE AND STOCKPILE
EX. AB IN SLOPE FILL AREAS

DAYLIGHT
SITE 6

NOTE: PROTECT ALL EX. BUILDINGS, PIPES,
UTILITIES ETC. IN PLACE (TYP.)

MODIFY EX. RAMPS
WITHIN PROJECT AREA (TYP.)
SEE DETAIL 6, SHEET C04

EX. OVERHEAD
UTILITY LINE

APPROXIMATE UNDERGROUND
TELEPHONE LINE
CONTRACTOR TO VERIFY EXACT
LOCATION PRIOR TO CONSTRUCTION
PROTECT IN PLACE (TYP.)

BEGIN SITE 7

END SITE 7

54+00 55+00 56+00 57+00 58+00 59+00 60+00 61+00 62+00

EX. EDGE OF
ROADWAY

SALVAGE AND STOCKPILE
EX. AB IN SLOPE FILL AREAS

DAYLIGHT
SITE 7

SALVAGE AND STOCKPILE
EX. AB IN SLOPE FILL AREAS

APPROXIMATE UNDERGROUND
TELEPHONE LINE
CONTRACTOR TO VERIFY EXACT
LOCATION PRIOR TO CONSTRUCTION
PROTECT IN PLACE (TYP.)

EX. SIPHON
PROTECT IN PLACE (TYP.)

EX. OVERHEAD
UTILITY LINE

BEGIN SITE 8

END SITE 8

72+00 73+00 74+00 75+00 76+00 77+00 78+00

EX. EDGE OF
ROADWAY

DAYLIGHT
SITE 8

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NO.	DATE	REVISION
		PRELIMINARY BID SET

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

PLAN VIEW SITES 6 TO 8

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C08 OF 38 SHEETS

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C063007
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

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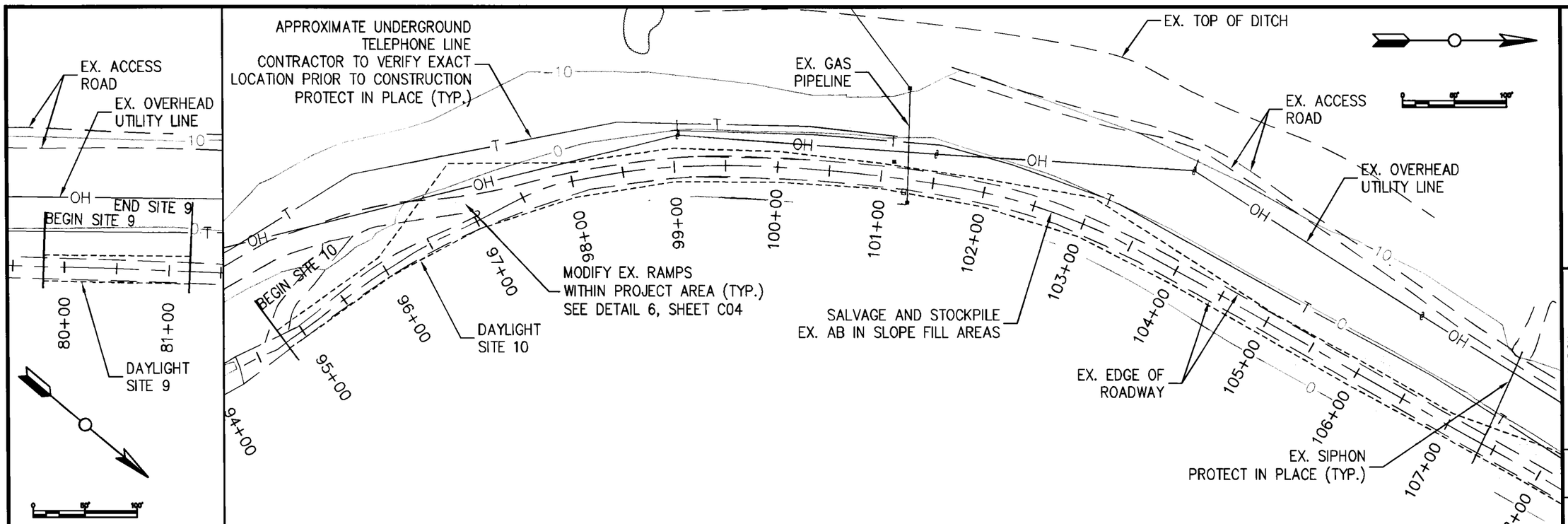

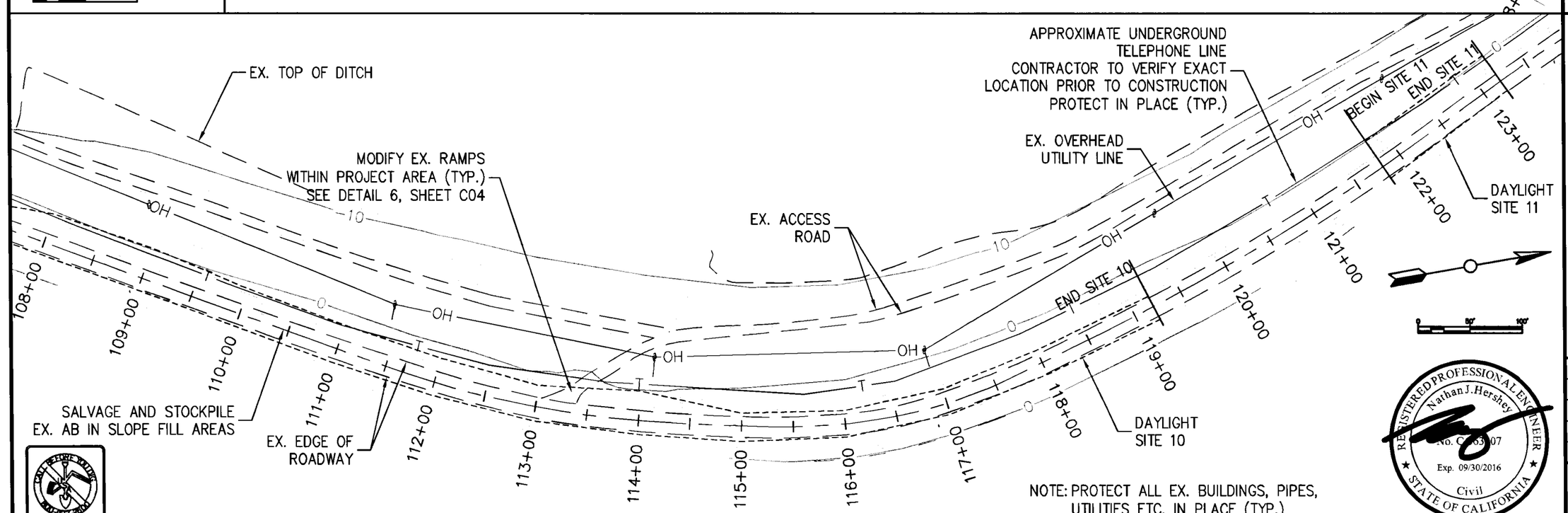

NOTE: PROTECT ALL EX. BUILDINGS, PIPES, UTILITIES ETC. IN PLACE (TYP.)

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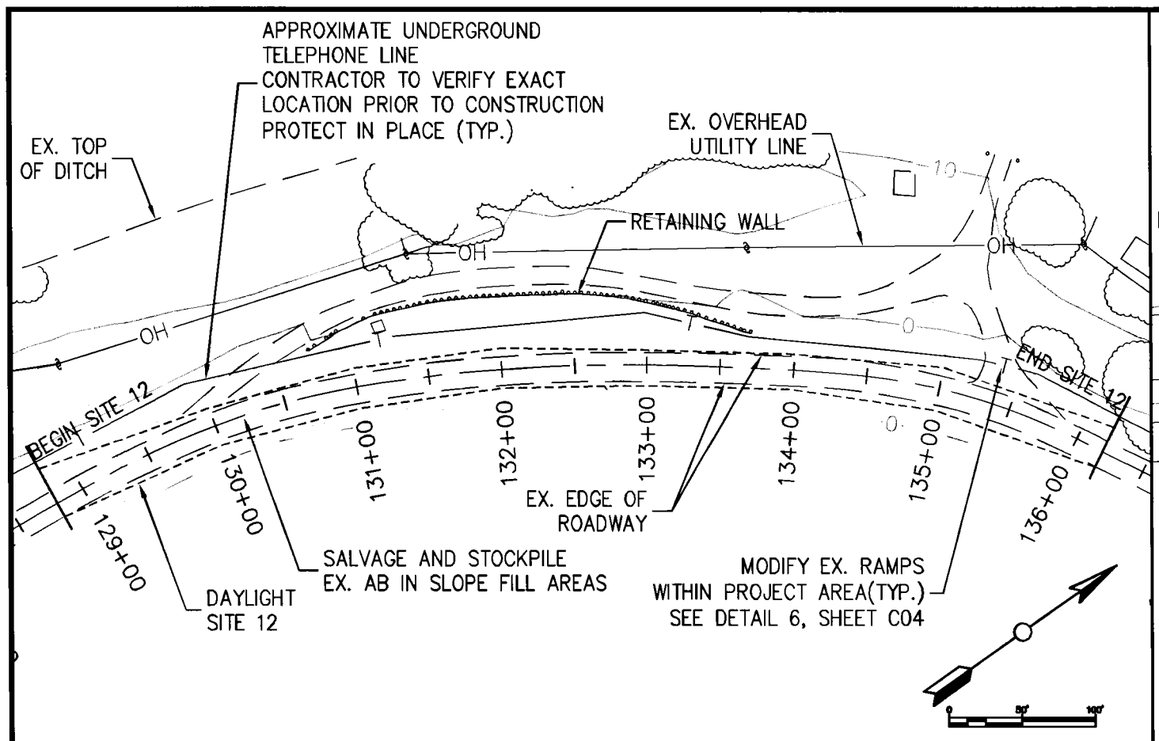
NO.	DATE	REVISION
		PRELIMINARY BID SET

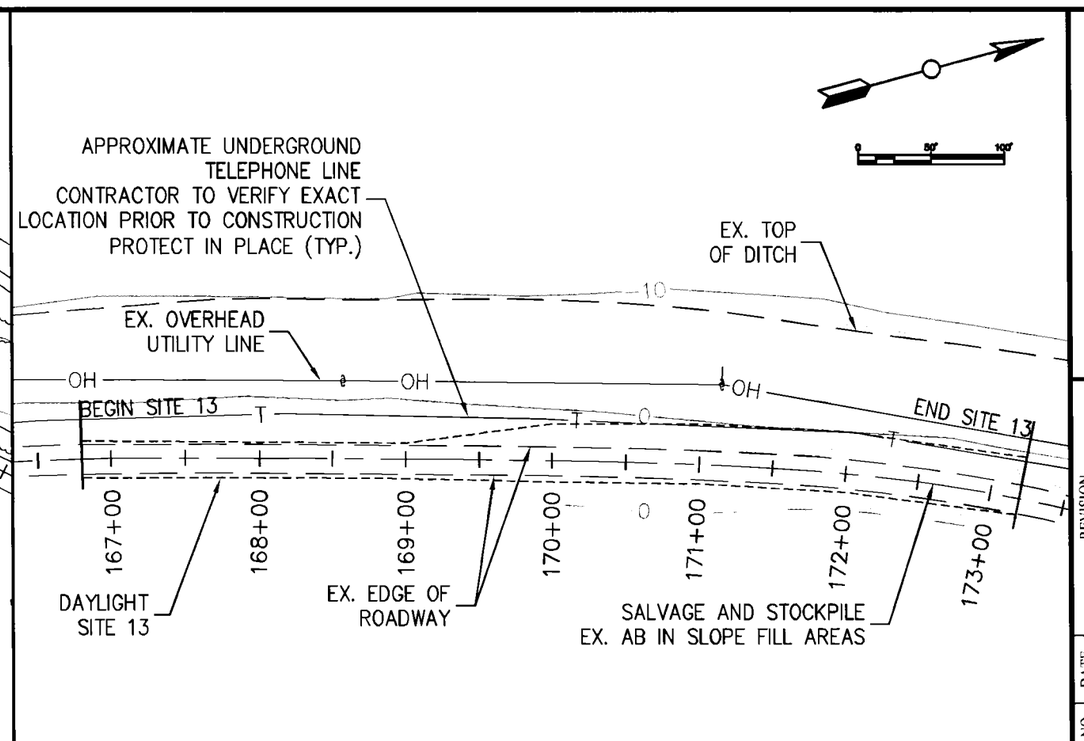
RECLAMATION DISTRICT NO. 2028
BACON ISLAND

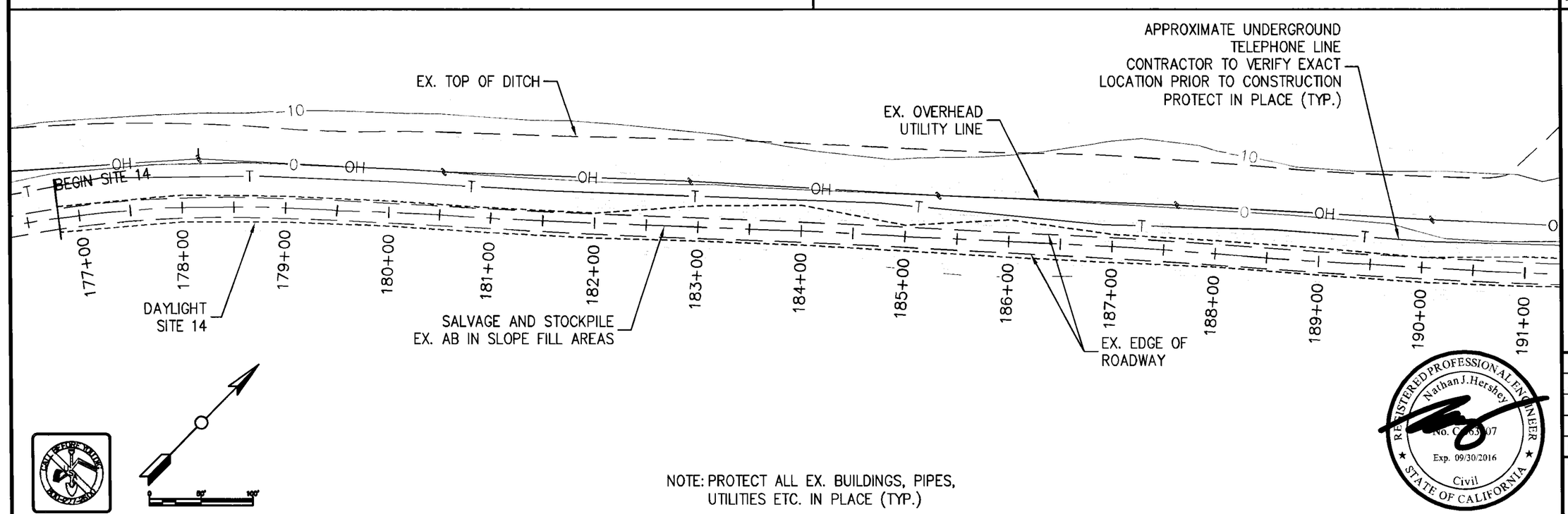
PLAN VIEW SITES 9 TO 11

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 63307
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C09 OF 38 SHEETS







NOTE: PROTECT ALL EX. BUILDINGS, PIPES, UTILITIES ETC. IN PLACE (TYP.)

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Exp. 09/30/2016
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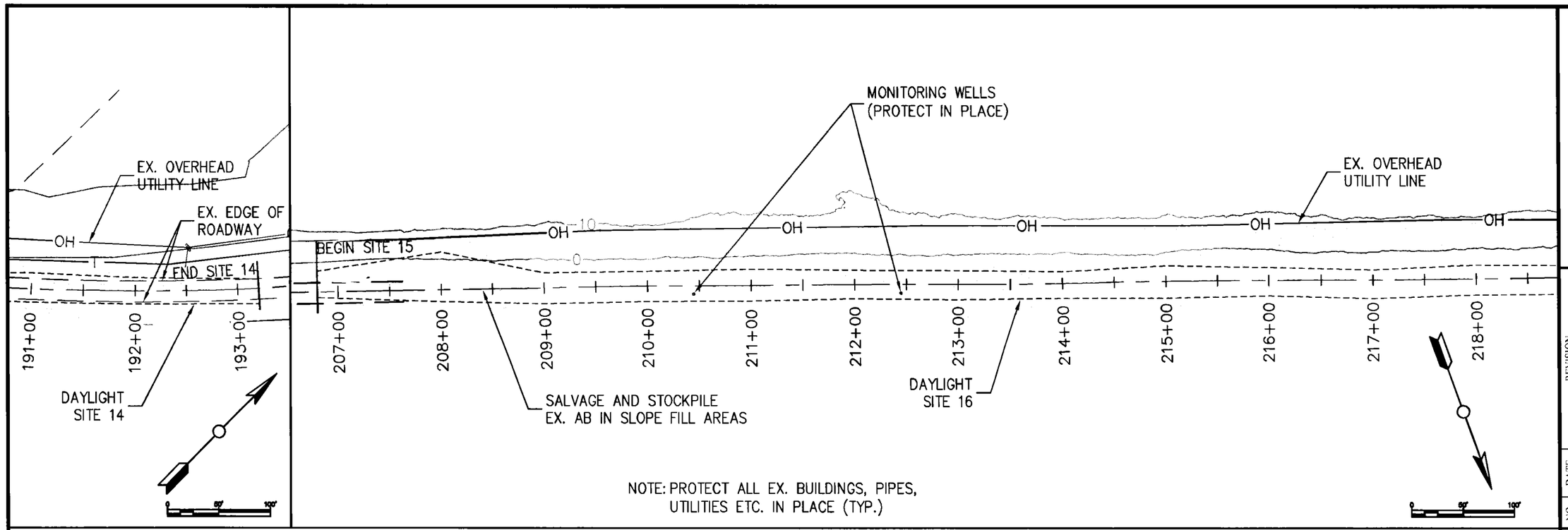
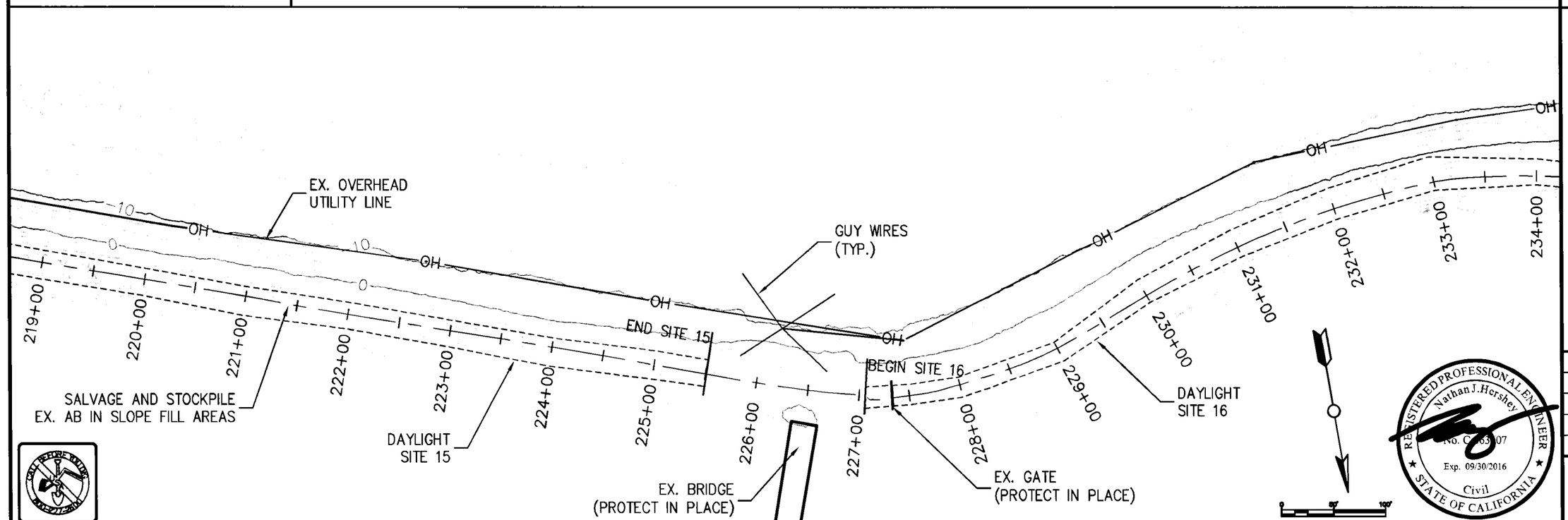
NO.	DATE	REVISION
		PRELIMINARY BID SET

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

PLAN VIEW SITES 12 TO 14

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C10 OF 38 SHEETS





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NO.	DATE	REVISION
		PRELIMINARY BID SET

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

PLAN VIEW SITES 14 TO 16

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 63507
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016

SHEET C11 OF 38 SHEETS

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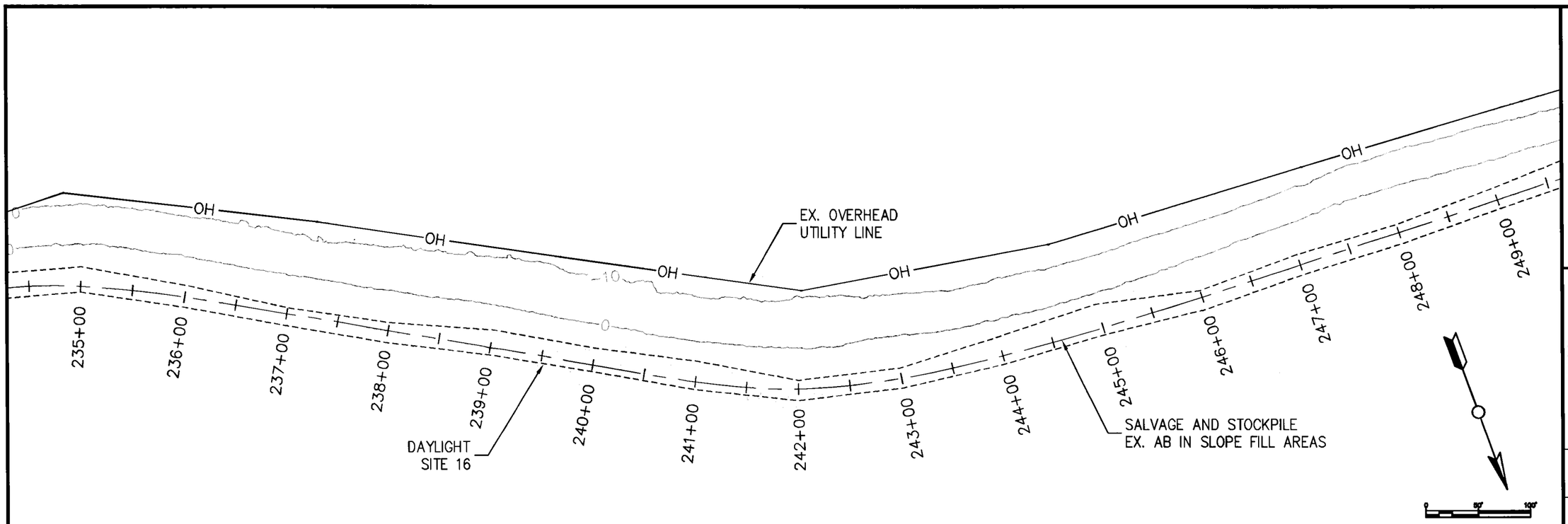

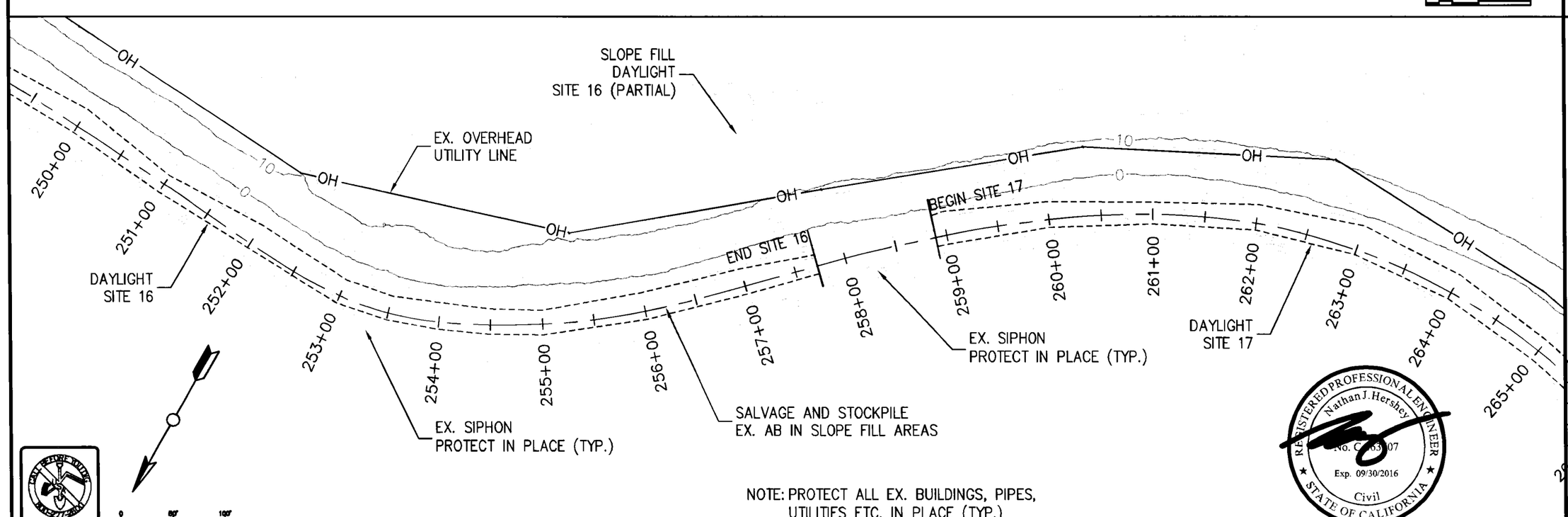

NOTE: PROTECT ALL EX. BUILDINGS, PIPES, UTILITIES ETC. IN PLACE (TYP.)

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
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Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

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NO.	DATE	REVISION
		PRELIMINARY BID SET

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

PLAN VIEW SITES 16 AND 17

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C12 OF 38 SHEETS

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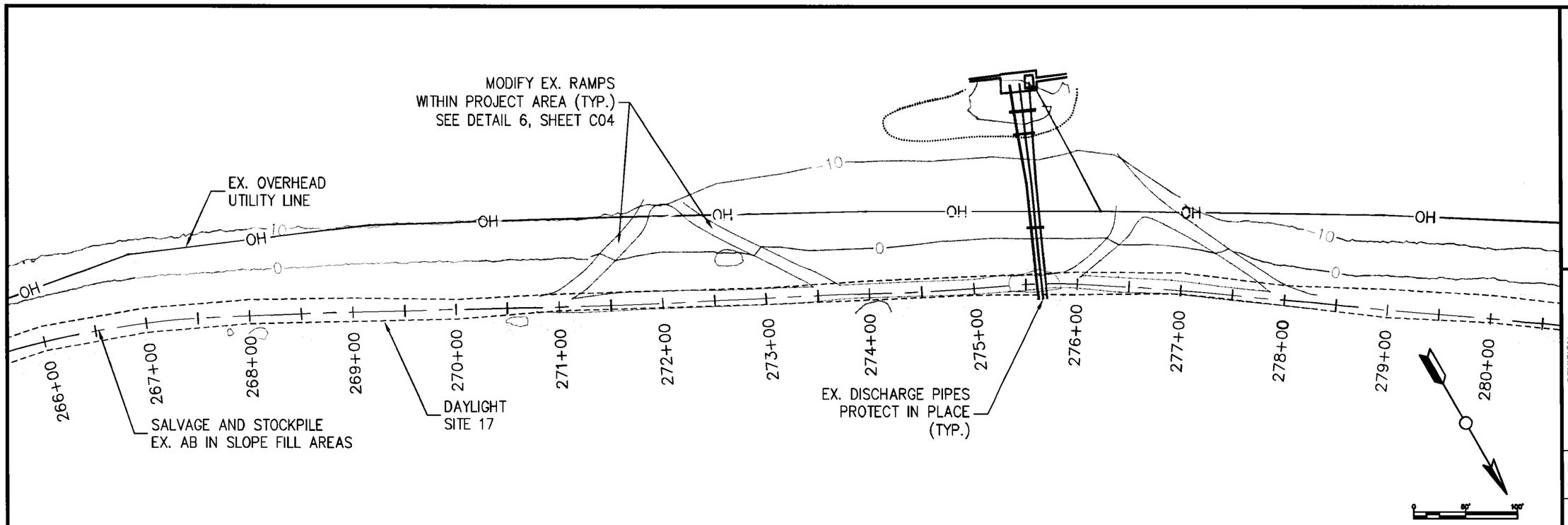

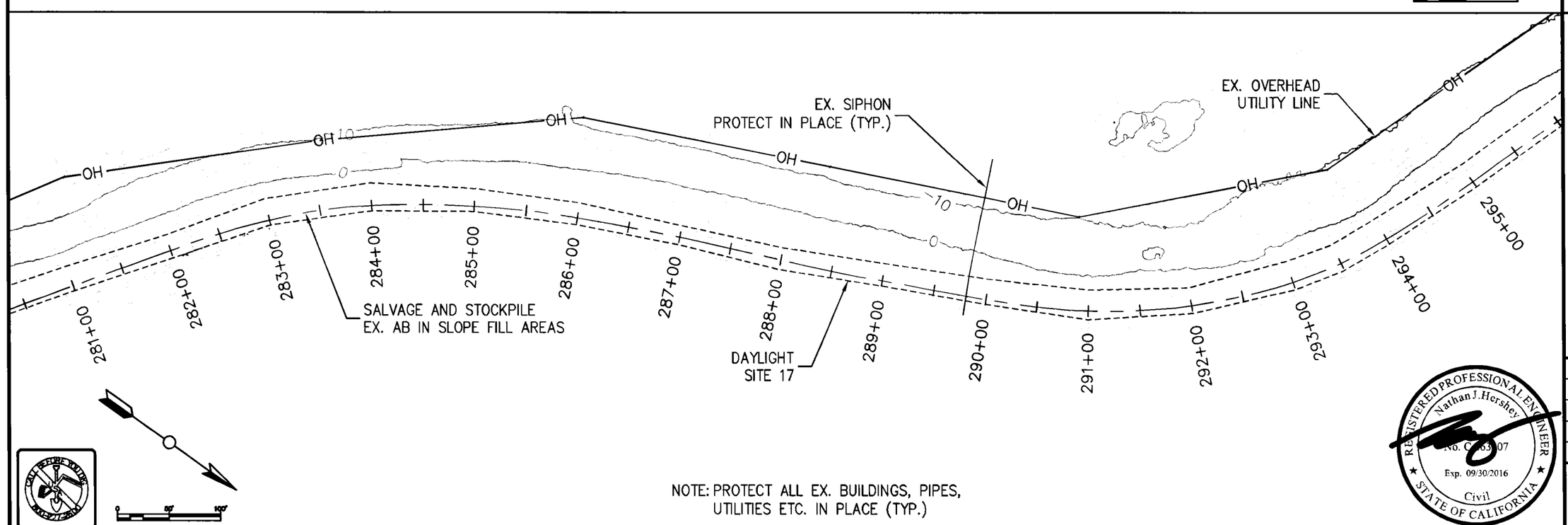

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NO.	DATE	REVISION
		PRELIMINARY BID SET

REGISTERED PROFESSIONAL ENGINEER
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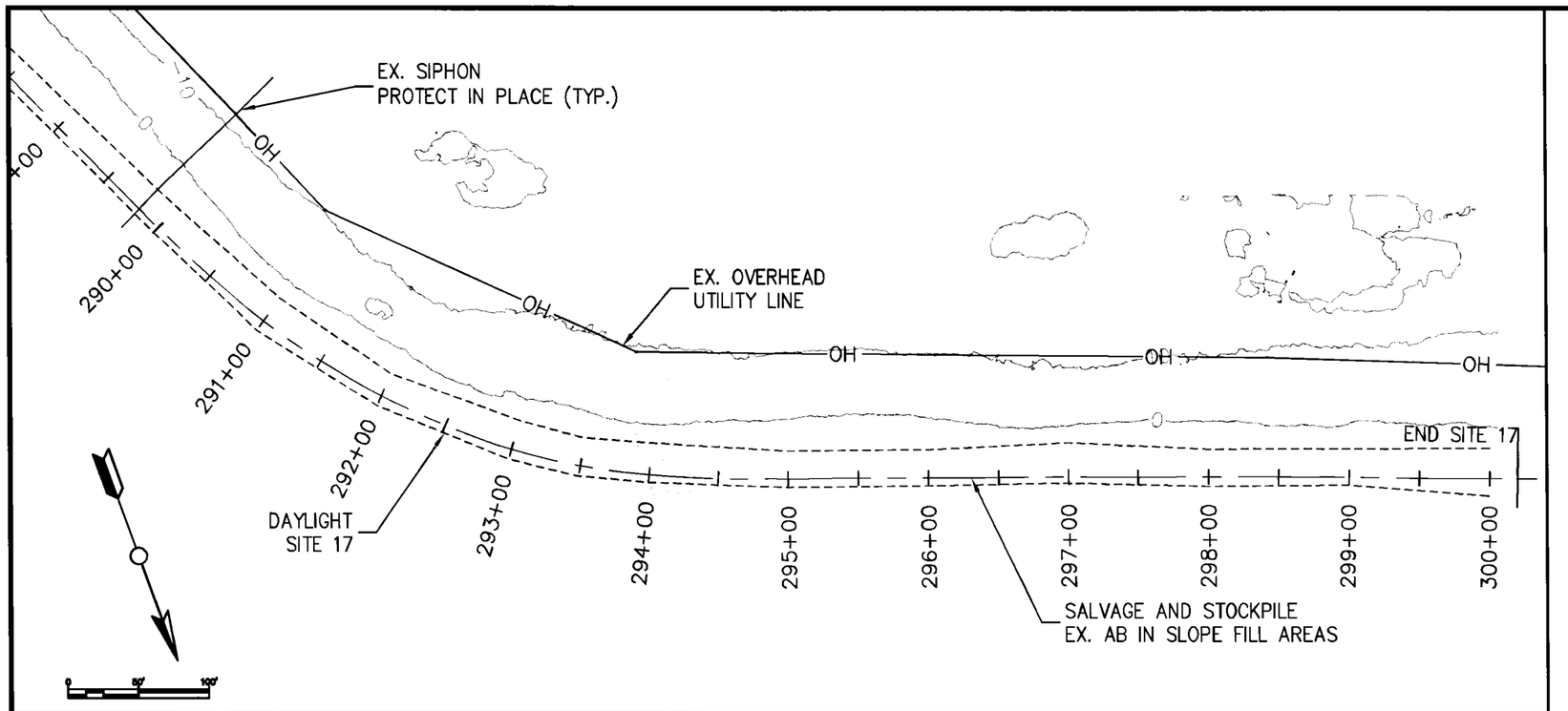
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

PLAN VIEW SITE 17

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016

SHEET C13 OF 38 SHEETS



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NO.	DATE	REVISION
		PRELIMINARY BID SET

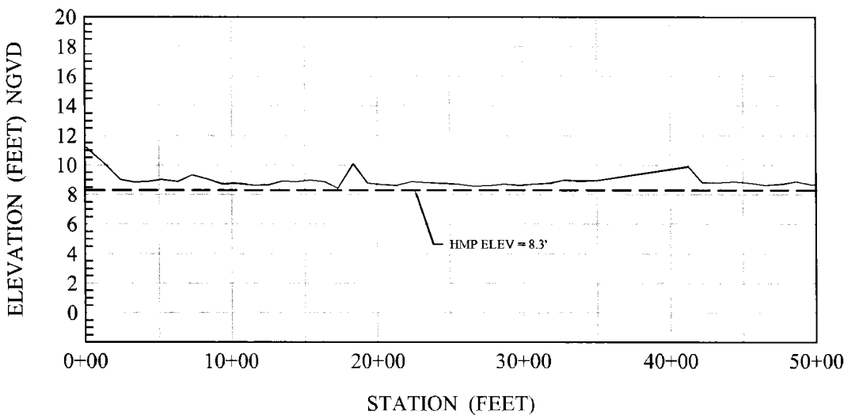
RECLAMATION DISTRICT NO. 2028
BACON ISLAND

PLAN VIEW SITE 17

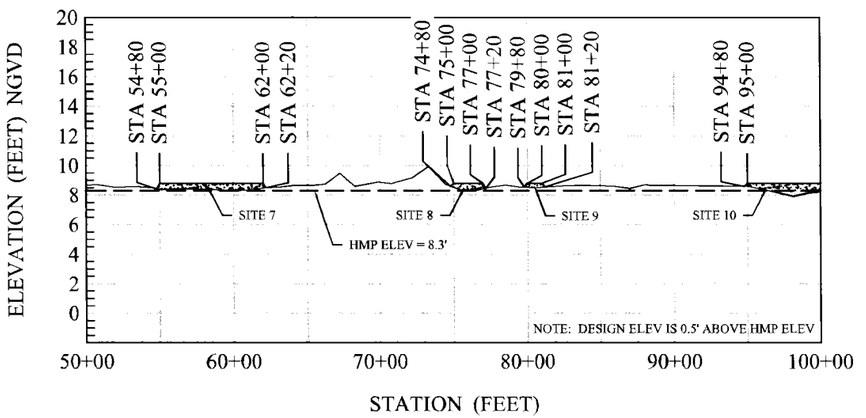
REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 63907
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C14 OF 38 SHEETS

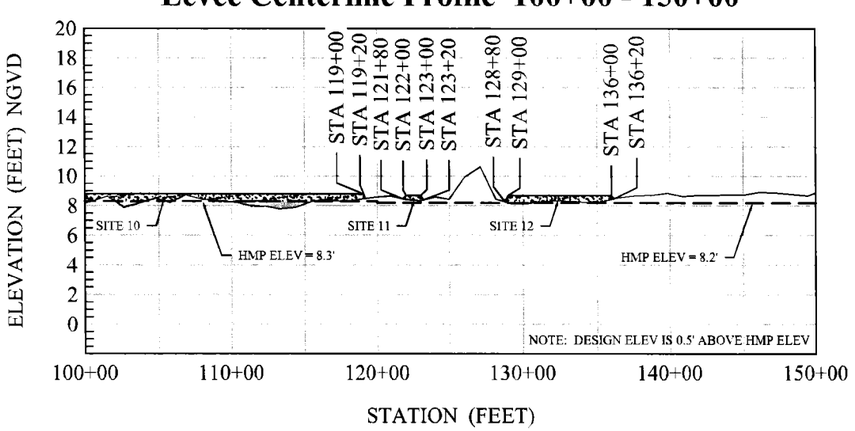
RD 2028 - Bacon Island
Levee Centerline Profile 0+00 - 50+00



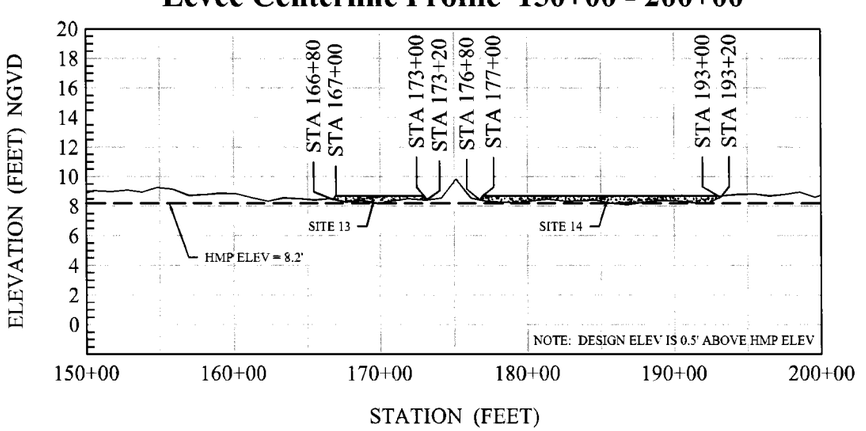
RD 2028 - Bacon Island
Levee Centerline Profile 50+00 - 100+00



RD 2028 - Bacon Island
Levee Centerline Profile 100+00 - 150+00



RD 2028 - Bacon Island
Levee Centerline Profile 150+00 - 200+00



SCALE: 1" = 1000' (H)
1" = 10' (V)

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 56307
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

MBK ENGINEERS
455 University Avenue, Suite 100
Sacramento, California 95825
Phone: (916) 456-4400 • Fax: (916) 456-0253

NO.	DATE	REVISION
		PRELIMINARY BID SET

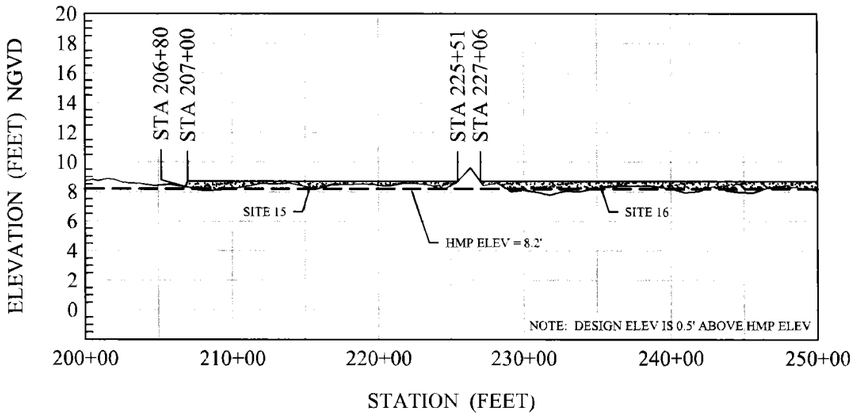
RECLAMATION DISTRICT NO. 2028
BACON ISLAND

PROFILE VIEW STA 0 TO 200

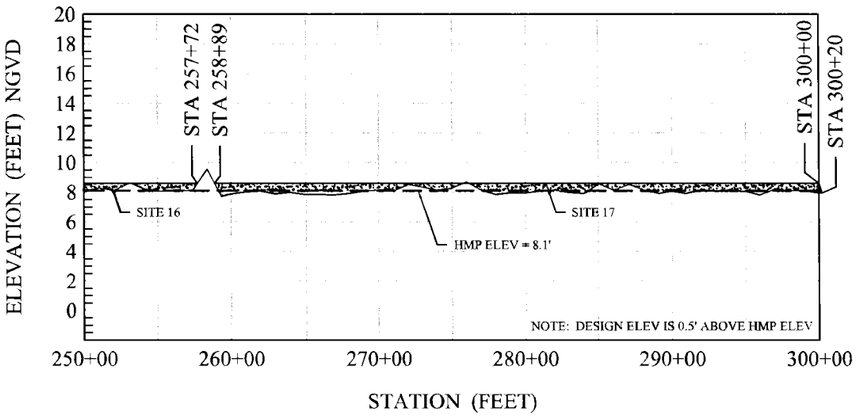
SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016

SHEET C15 OF 38 SHEETS

RD 2028 - Bacon Island
Levee Centerline Profile 200+00 - 250+00



RD 2028 - Bacon Island
Levee Centerline Profile 250+00 - 300+00



SCALE: 1" = 1000' (H)
1" = 10' (V)

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 63307
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

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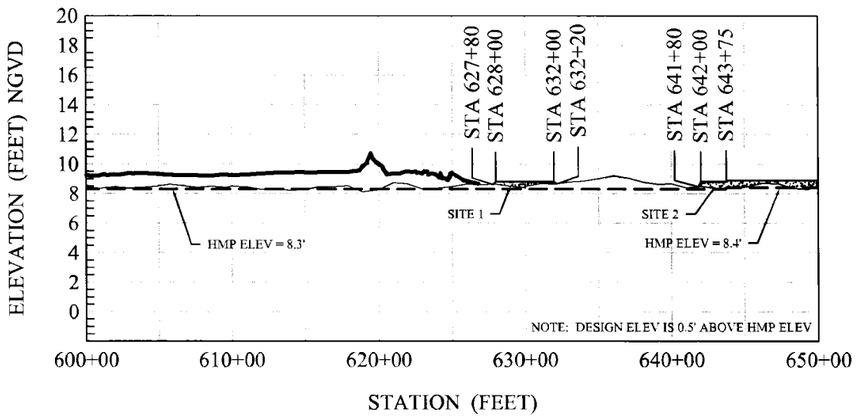
NO.	DATE	REVISION
		PRELIMINARY BID SET

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

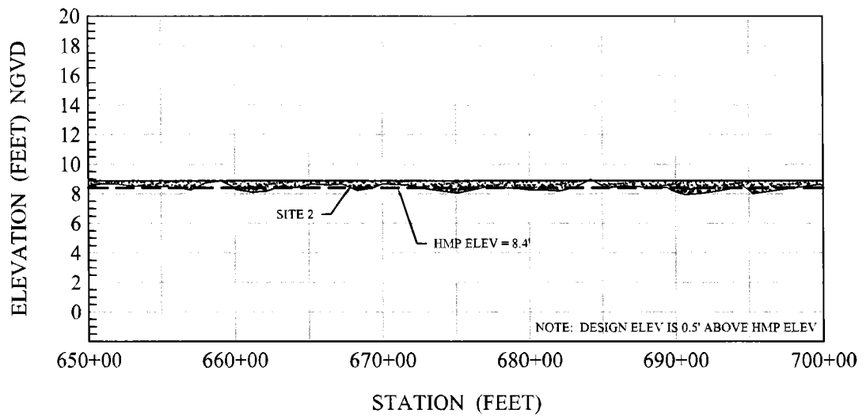
PROFILE VIEW STA 200 TO 300

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C16 OF 38 SHEETS

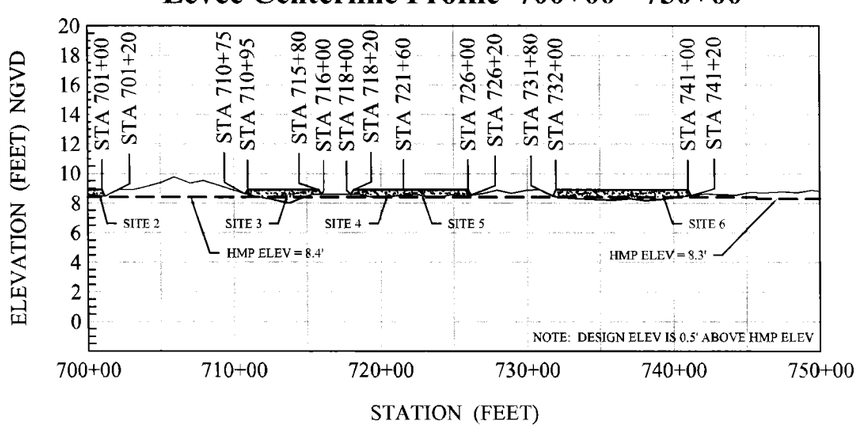
RD 2028 - Bacon Island
Levee Centerline Profile 600+00 - 650+00



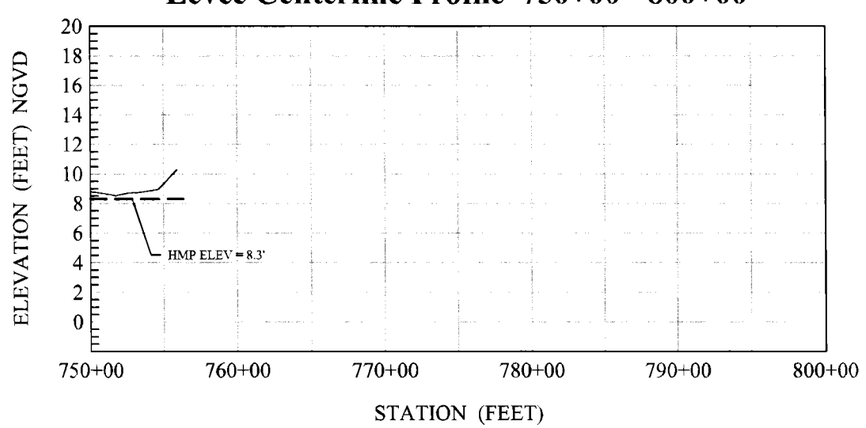
RD 2028 - Bacon Island
Levee Centerline Profile 650+00 - 700+00



RD 2028 - Bacon Island
Levee Centerline Profile 700+00 - 750+00



RD 2028 - Bacon Island
Levee Centerline Profile 750+00 - 800+00



SCALE: 1" = 1000' (H)
1" = 10' (V)

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 63907
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

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NO.	DATE	REVISION

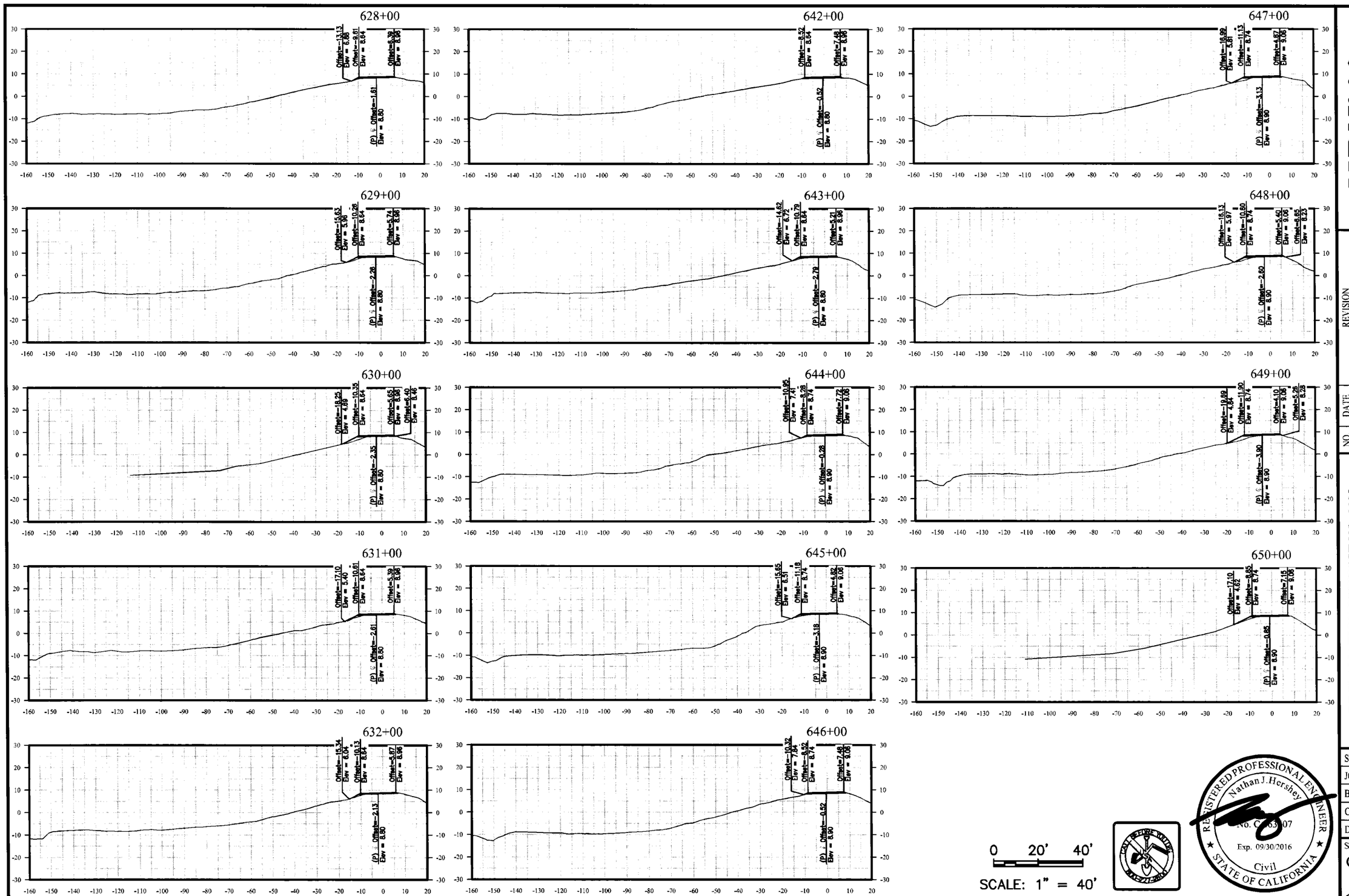
PRELIMINARY BID SET

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

PROFILE VIEW STA 600 TO END

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016

SHEET C17 OF 38 SHEETS



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NO.	DATE	REVISION
		PRELIMINARY BID SET

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

SECTION VIEW SITES 1 AND 2

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 63307
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C18 OF 38 SHEETS

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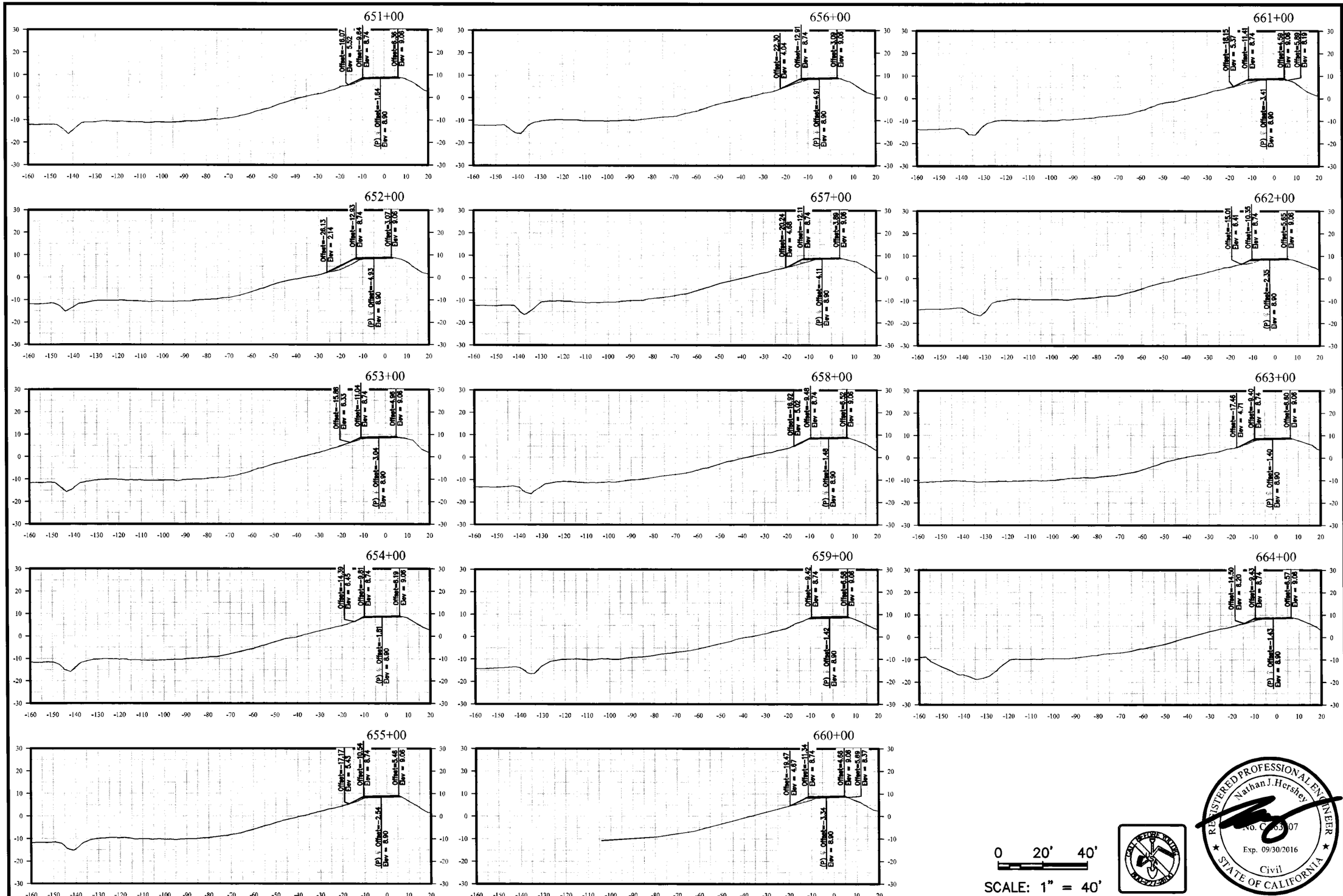

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NO.	DATE	REVISION
		PRELIMINARY BID SET

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 63307
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

SECTION VIEW SITE 2

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C19 OF 38 SHEETS

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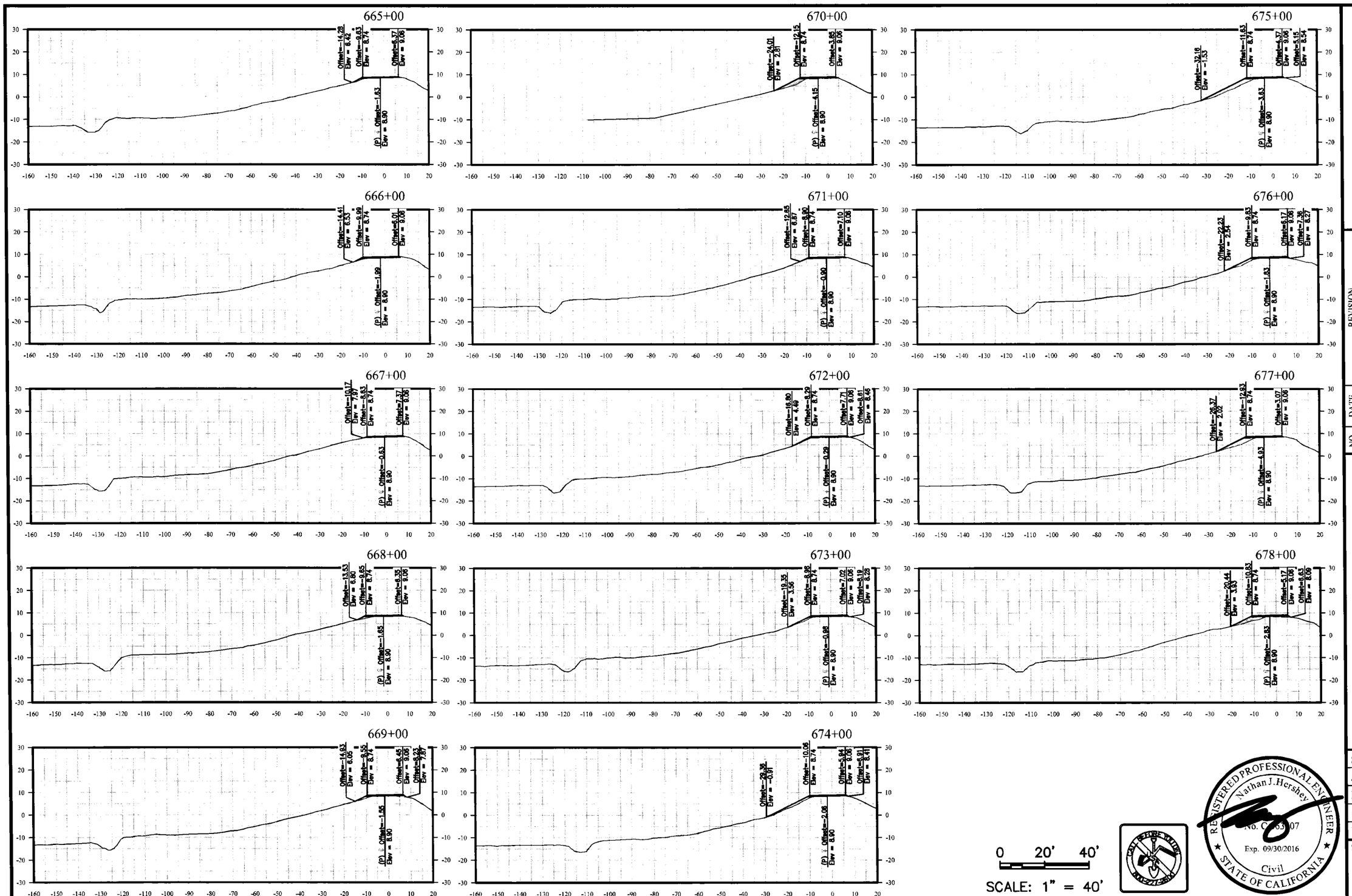

0 20' 40'

SCALE: 1" = 40'

MBK ENGINEERS
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Sacramento, California 95825
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NO.	DATE	REVISION

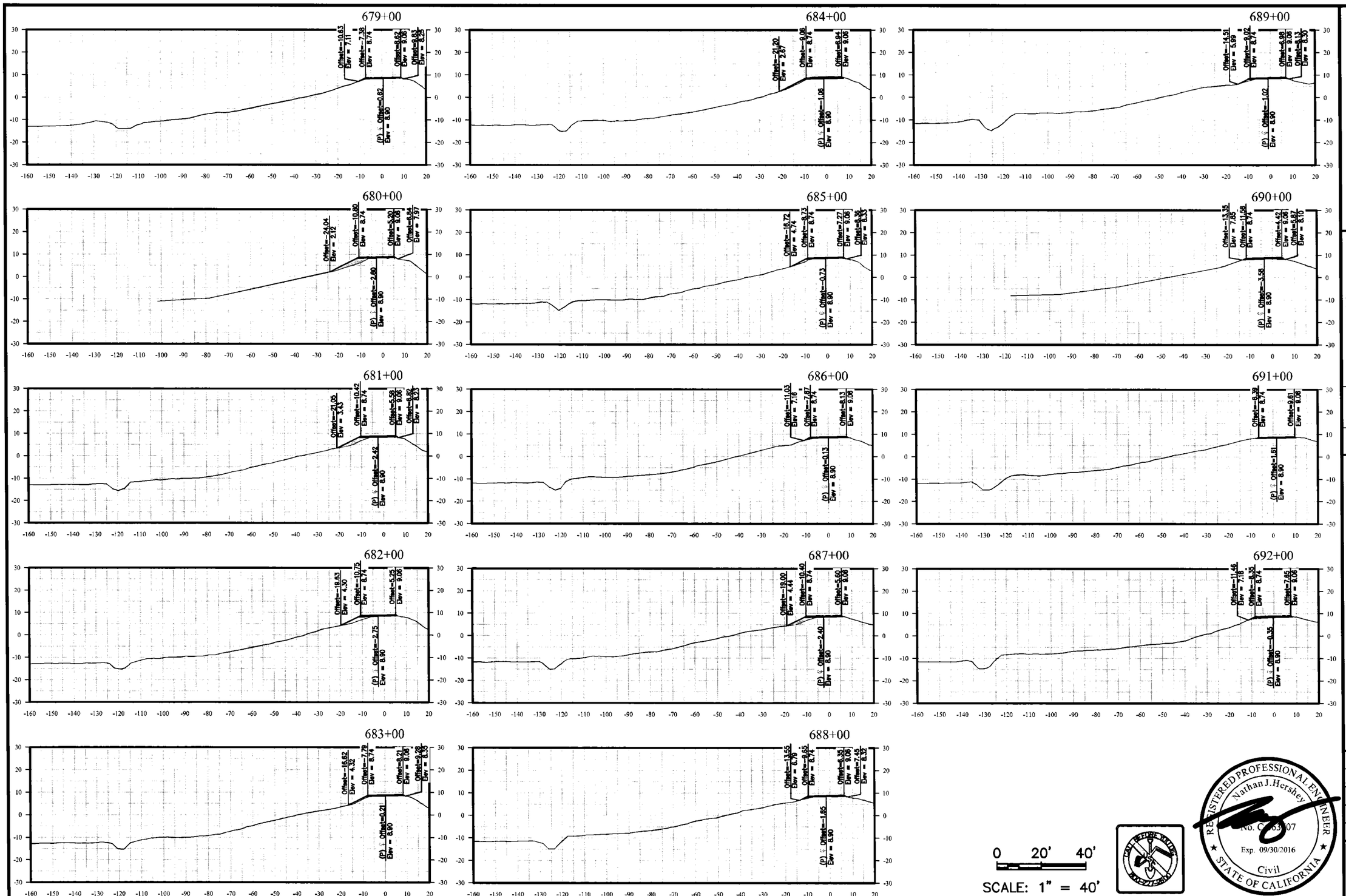
PRELIMINARY BID SET

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 53107
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

SECTION VIEW SITE 2

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C20 OF 38 SHEETS



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NO.	DATE	REVISION
		PRELIMINARY BID SET

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

SECTION VIEW SITE 2

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 63 07
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C21 OF 38 SHEETS

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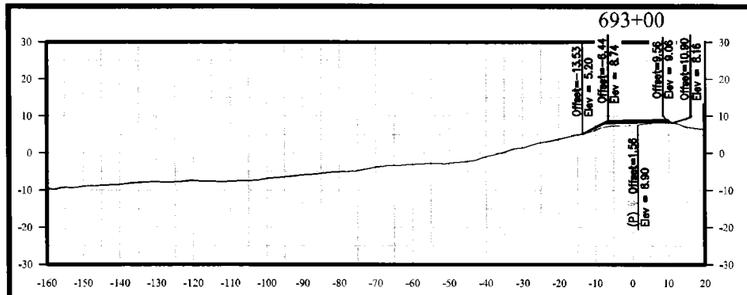

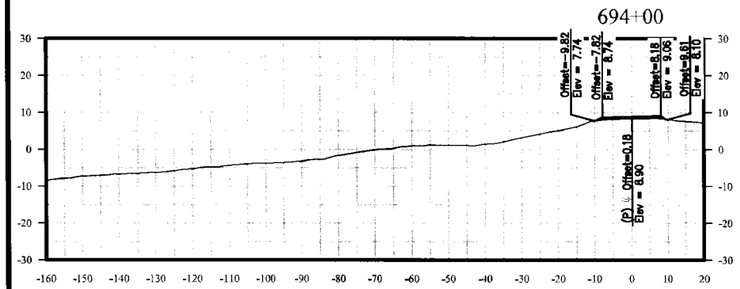

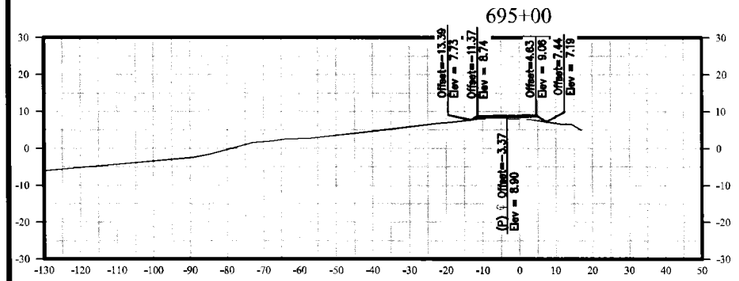

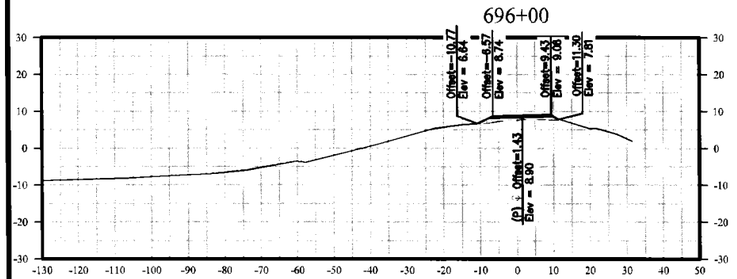

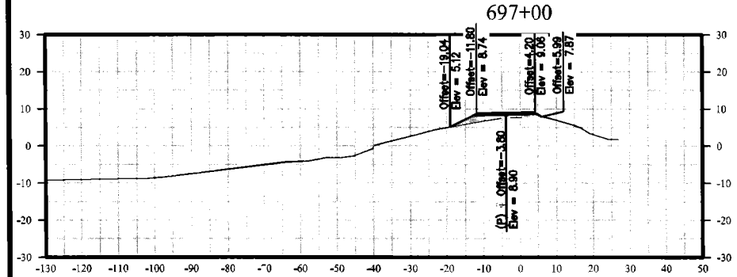

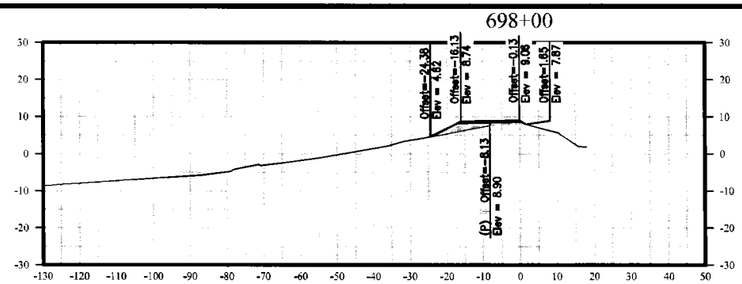

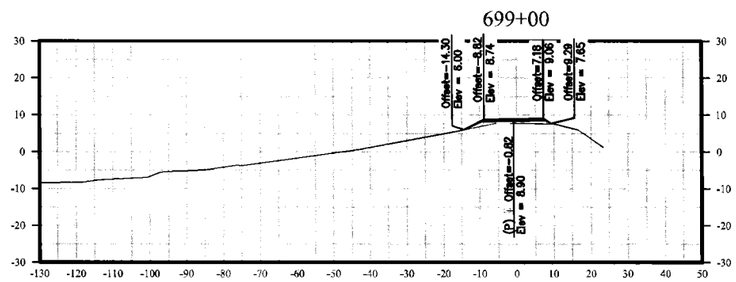

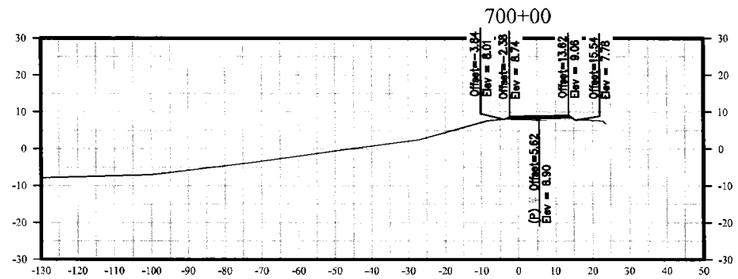

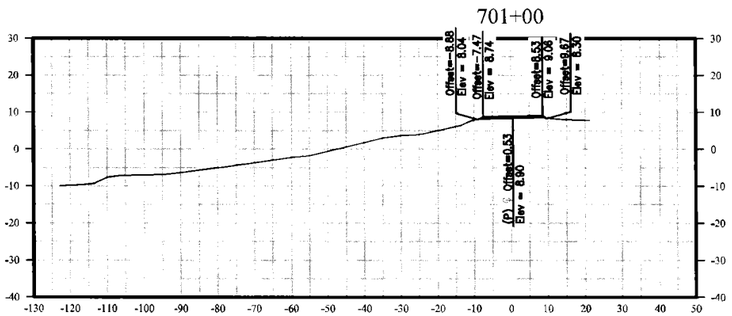

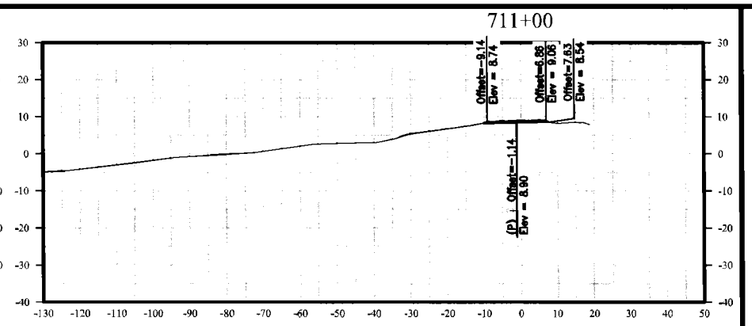

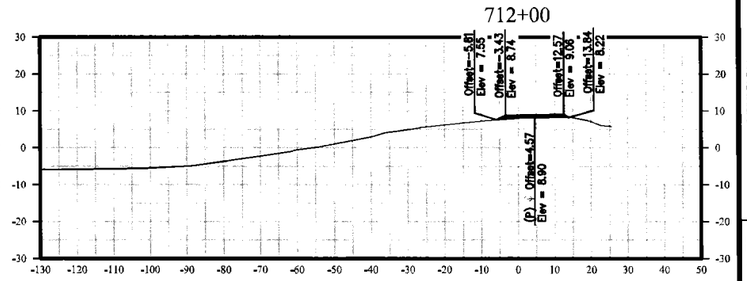

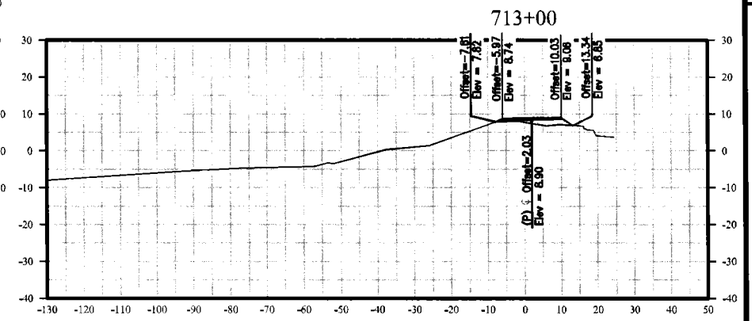

0 20' 40'

SCALE: 1" = 40'

MBK ENGINEERS
455 University Avenue, Suite 100
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Phone: (916) 456-4400 • Fax: (916) 456-0253

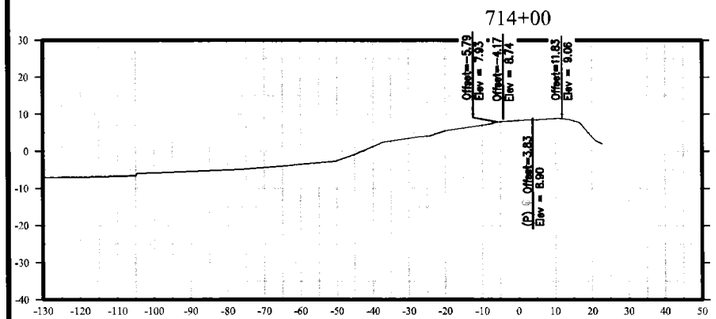
NO.	DATE	REVISION
		PRELIMINARY BID SET

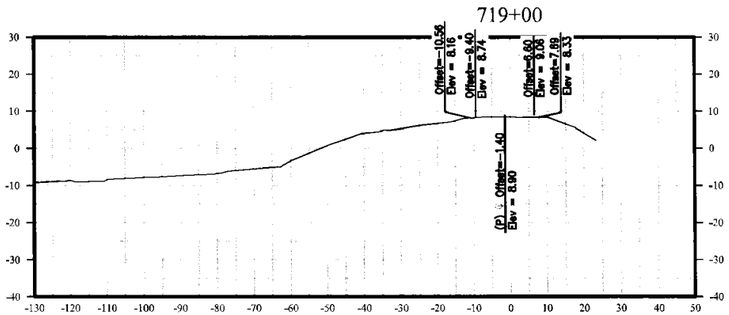
RECLAMATION DISTRICT NO. 2028
BACON ISLAND

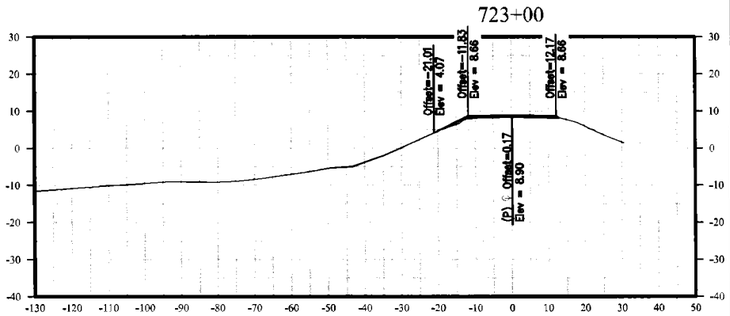
SECTION VIEW SITES 2 AND 3

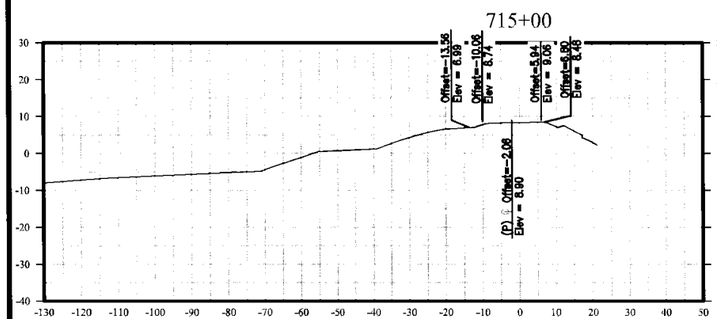
REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 65307
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

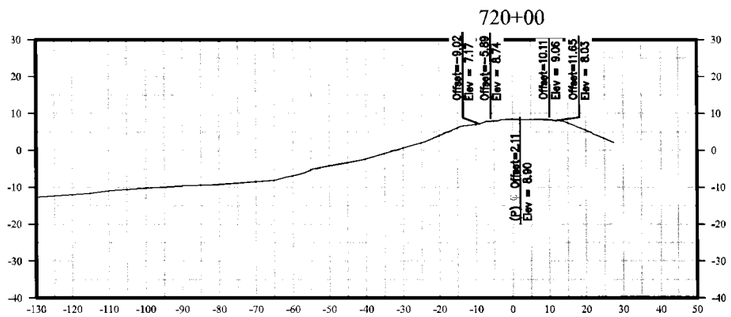
SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C22 OF 38 SHEETS

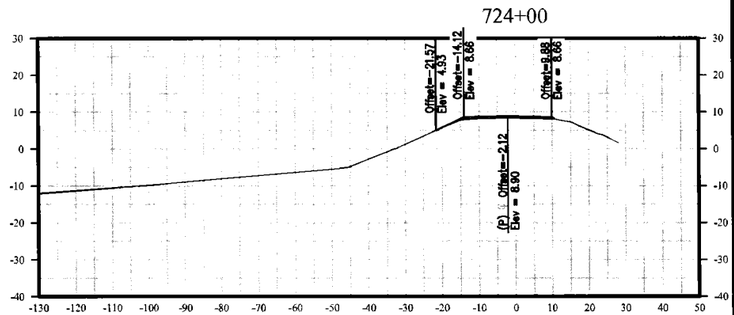


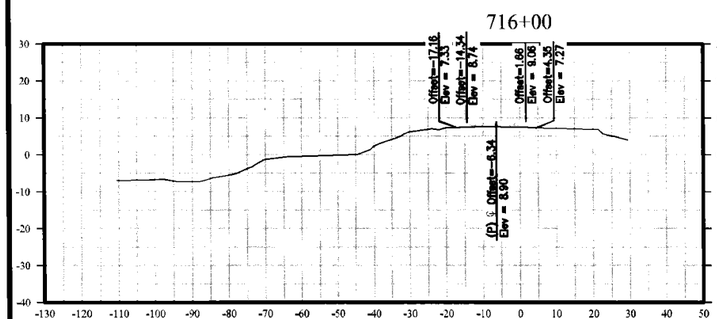


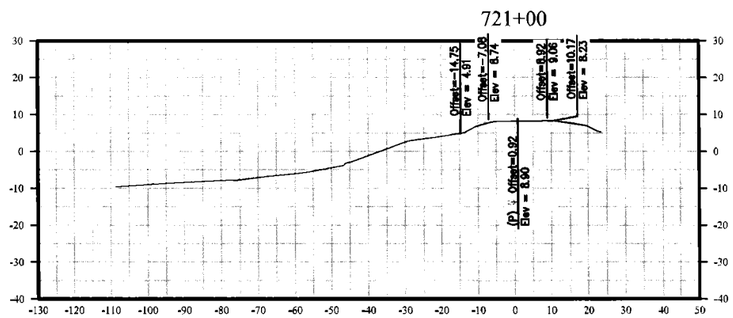


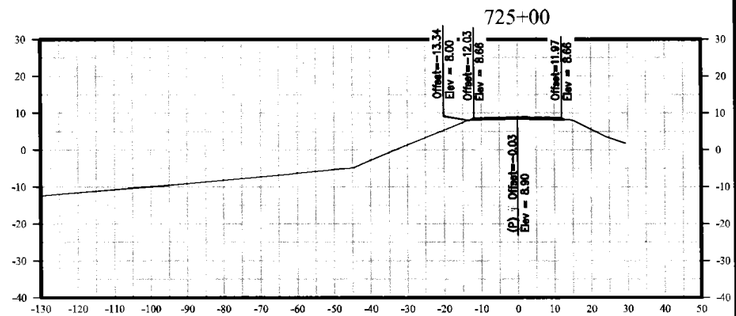


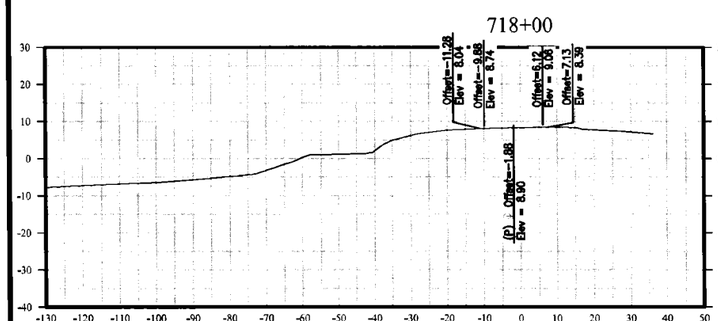


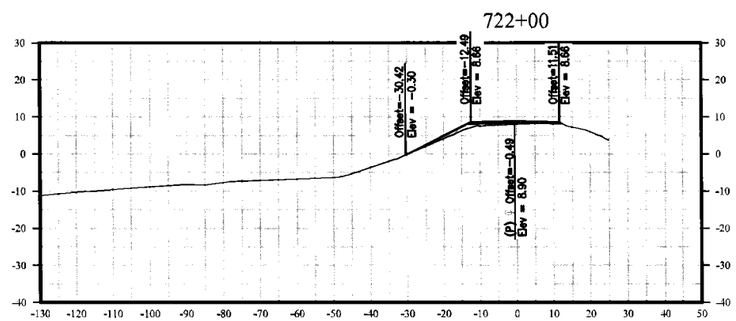












0 20' 40'

SCALE: 1" = 40'

MBK ENGINEERS
455 University Avenue, Suite 100
Sacramento, California 95825
Phone: (916) 456-4400 • Fax: (916) 456-0253

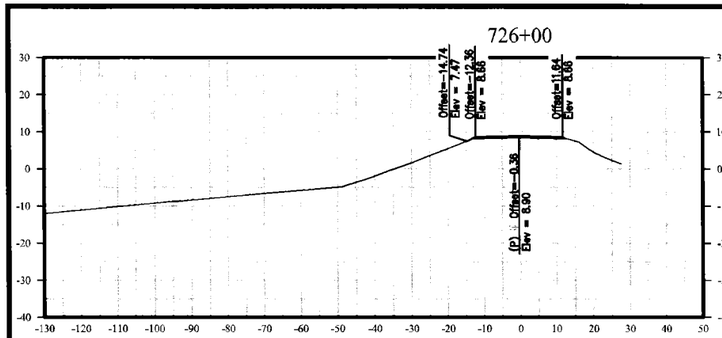
NO.	DATE	REVISION
		PRELIMINARY BID SET

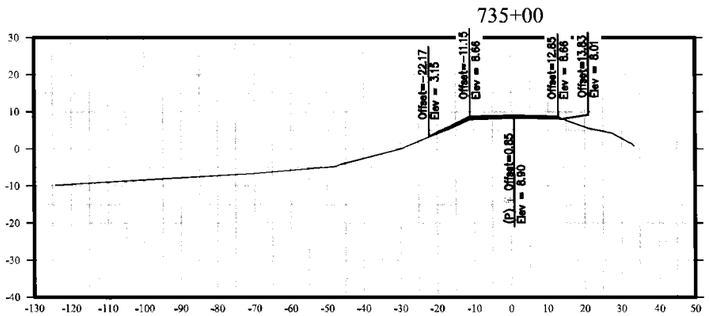
RECLAMATION DISTRICT NO. 2028
BACON ISLAND

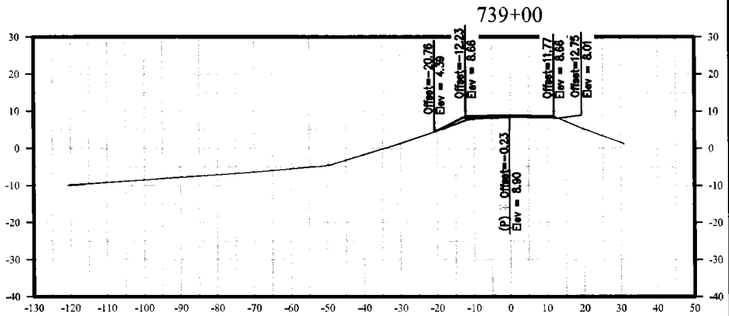
SECTION VIEW SITES 3 TO 5

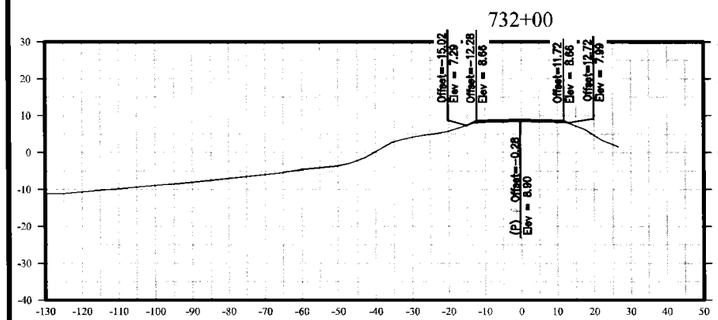
REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 53 07
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

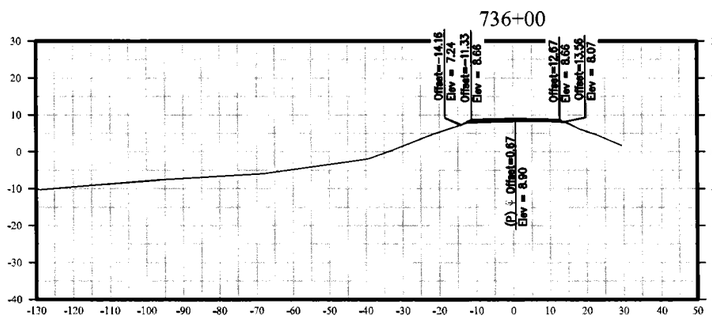
SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C23 OF 38 SHEETS

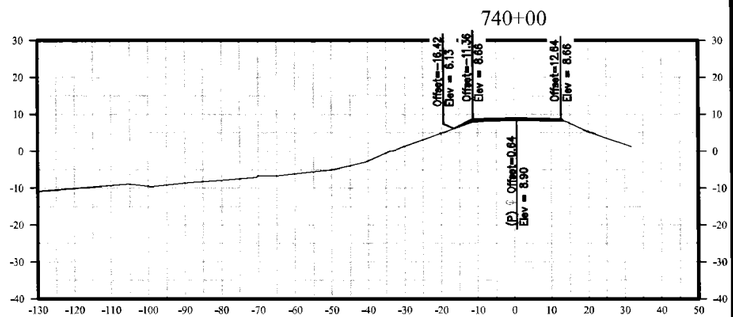


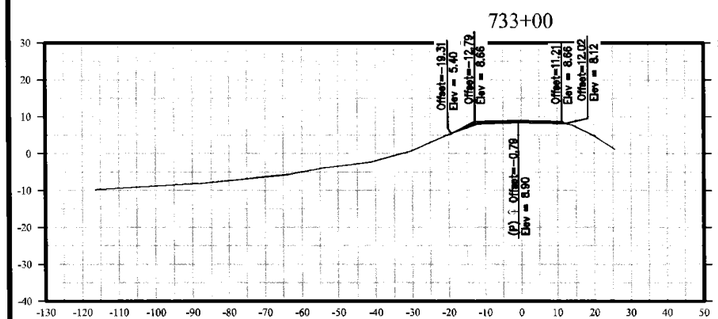


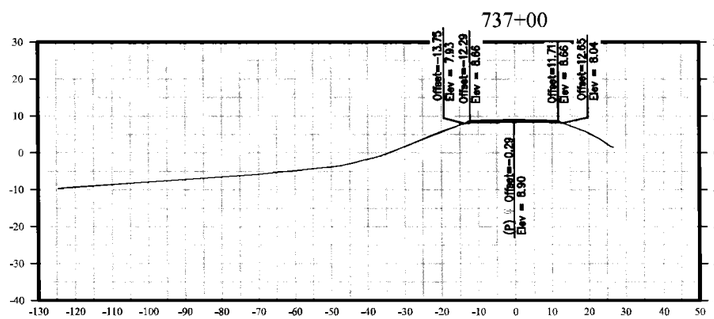


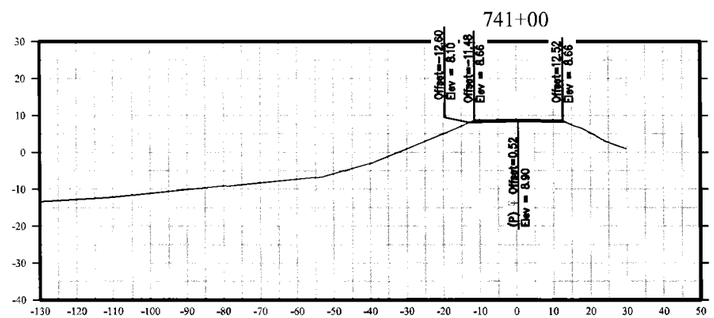


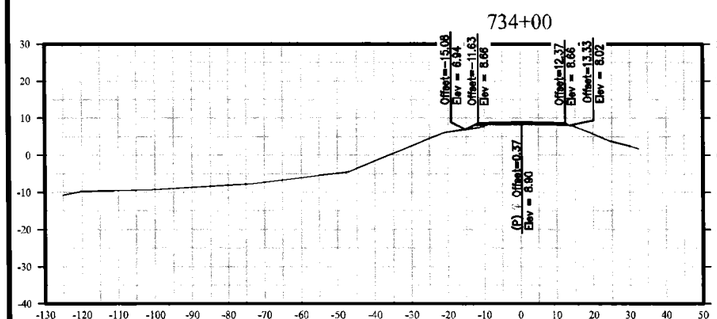


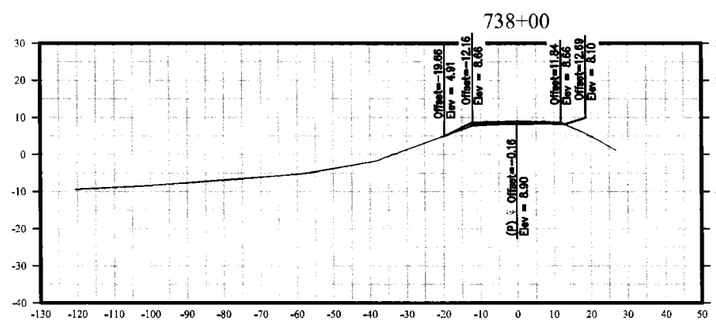












0 20' 40'

SCALE: 1" = 40'

MBK ENGINEERS
455 University Avenue, Suite 100
Sacramento, California 95825
Phone: (916) 456-4400 • Fax: (916) 456-0253

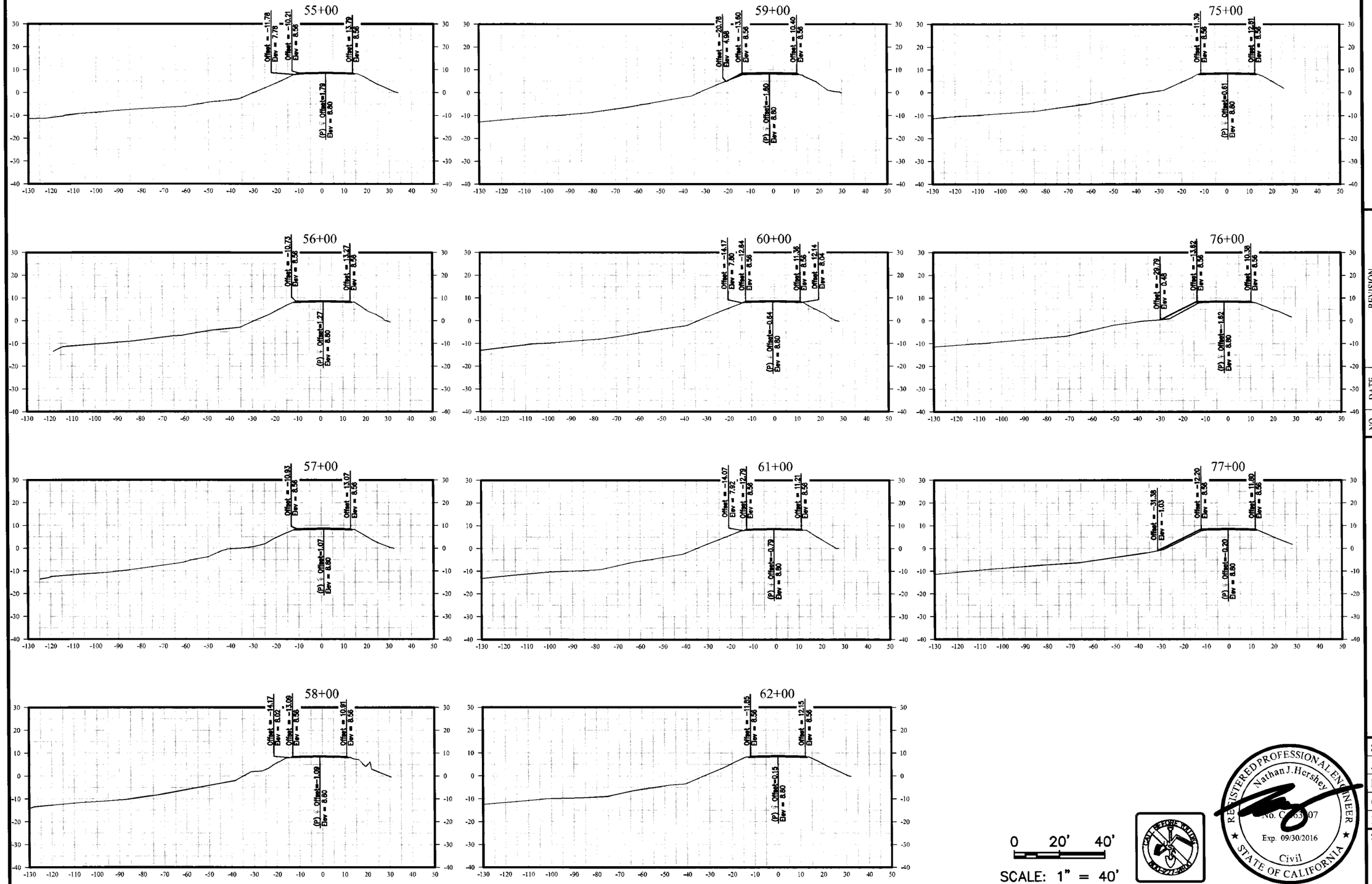
NO.	DATE	REVISION
		PRELIMINARY BID SET

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

SECTION VIEW SITES 5 AND 6

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 63907
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C24 OF 38 SHEETS



0 20' 40'

SCALE: 1" = 40'

MBK ENGINEERS
455 University Avenue, Suite 100
Sacramento, California 95825
Phone: (916) 456-4400 • Fax: (916) 456-0253

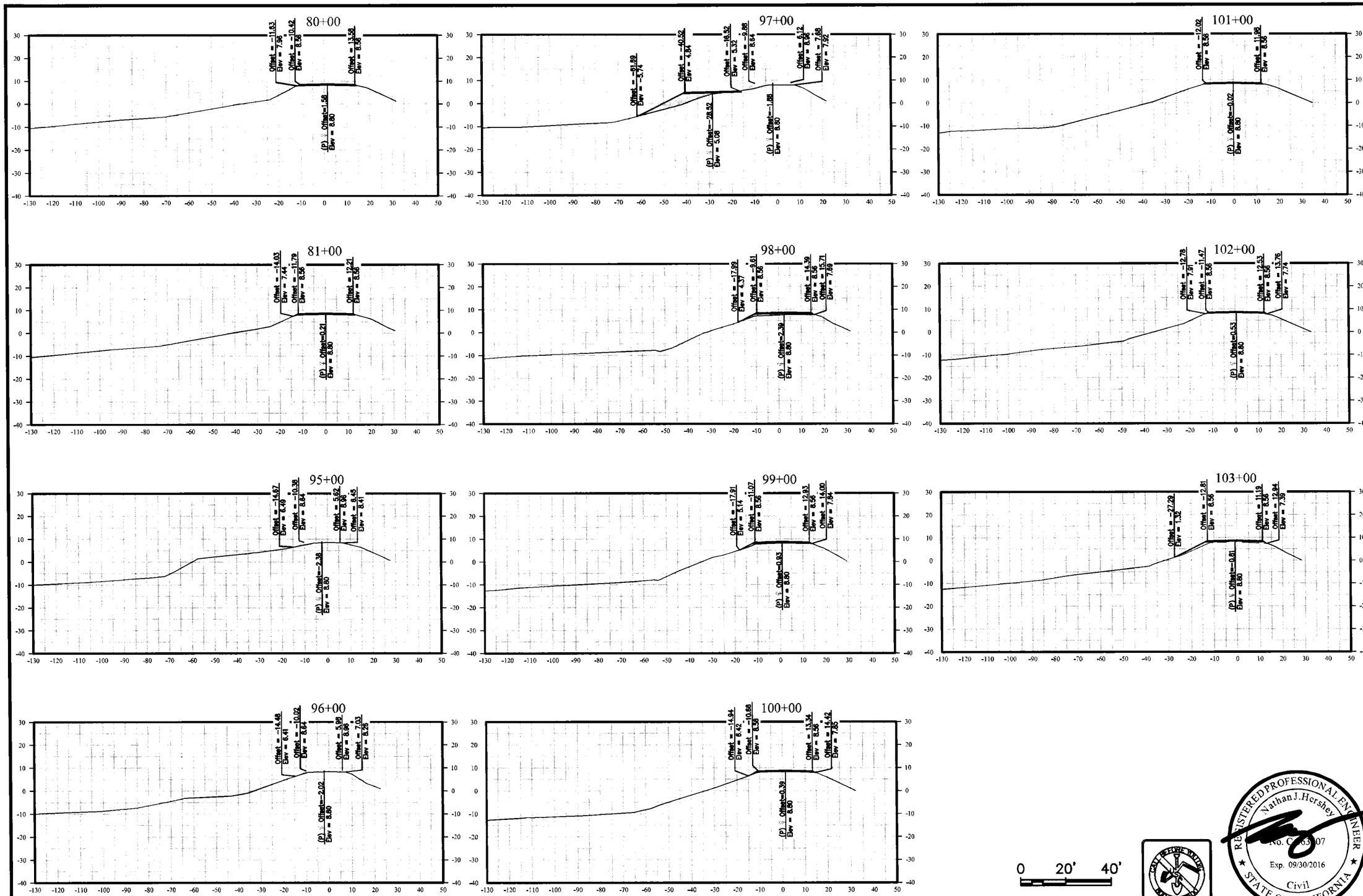
NO.	DATE	REVISION
		PRELIMINARY BID SET

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

SECTION VIEW SITES 7 AND 8

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 65307
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C25 OF 38 SHEETS



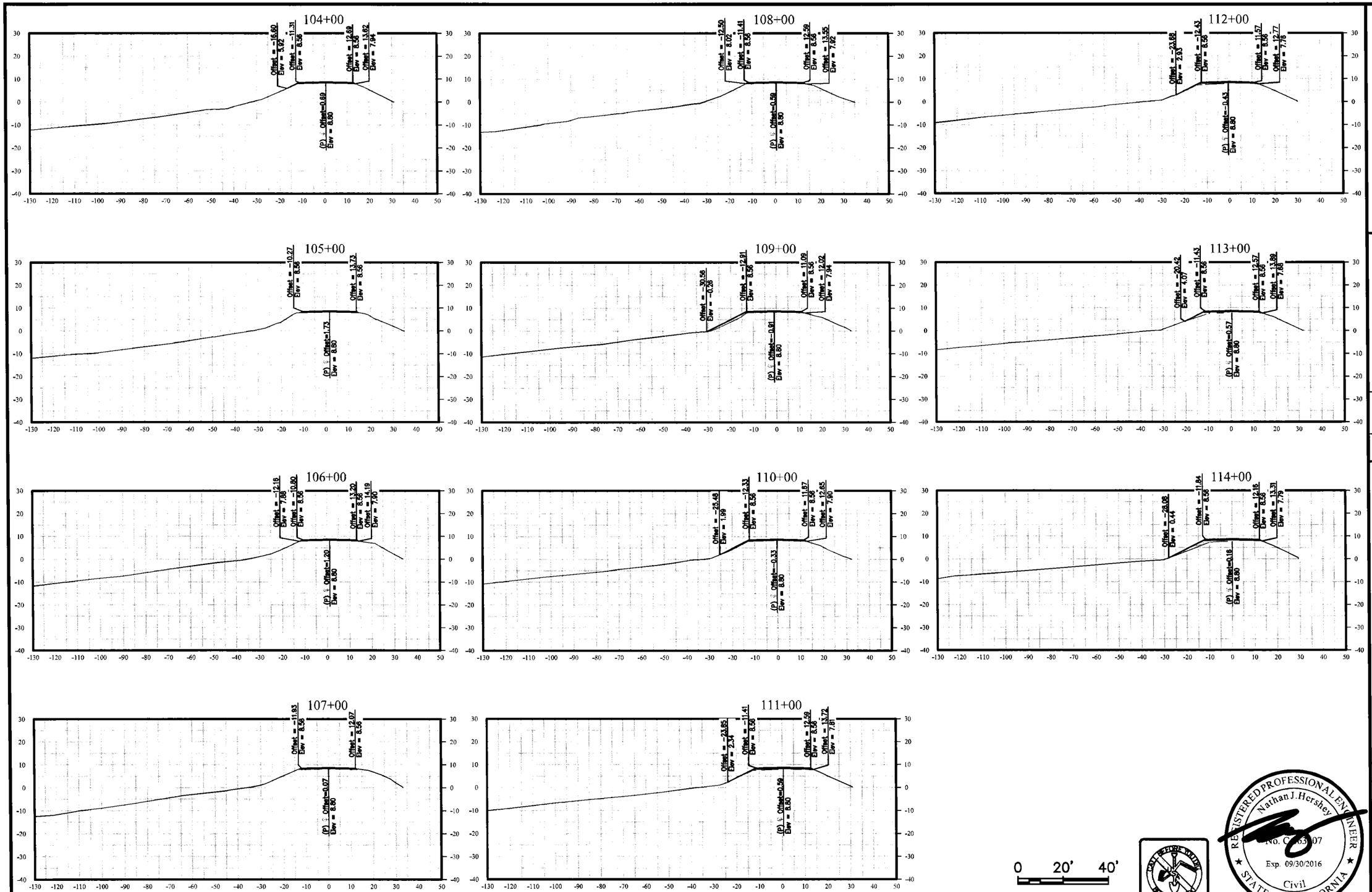
MBK ENGINEERS
455 University Avenue, Suite 100
Sacramento, California 95825
Phone: (916) 456-4400 • Fax: (916) 456-0253

NO.	DATE	REVISION
		PRELIMINARY BID SET

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

SECTION VIEW SITES 9 AND 10

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C26 OF 38 SHEETS



0 20' 40'

SCALE: 1" = 40'

MBK ENGINEERS
455 University Avenue, Suite 100
Sacramento, California 95825
Phone: (916) 456-4400 • Fax: (916) 456-0253

NO.	DATE	REVISION
		PRELIMINARY BID SET

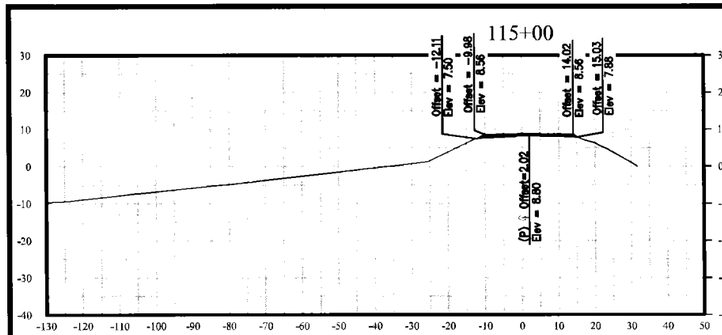
RECLAMATION DISTRICT NO. 2028
BACON ISLAND

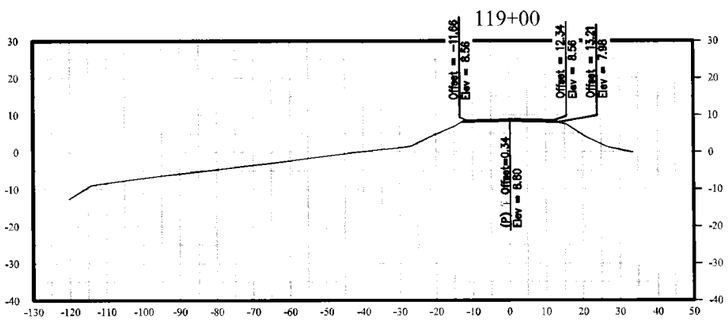
SECTION VIEW SITE 10

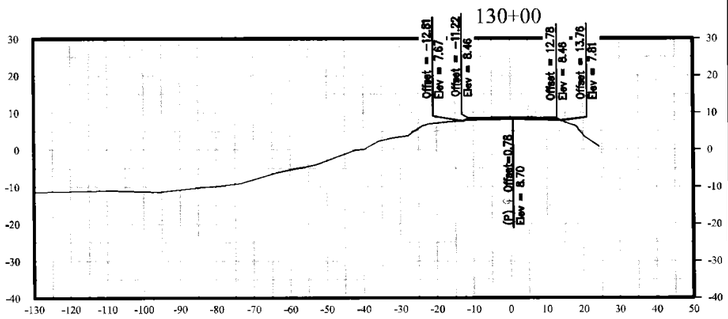
REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 65307
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

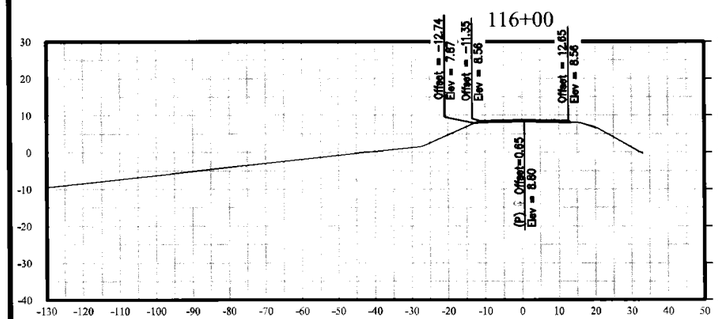
SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016

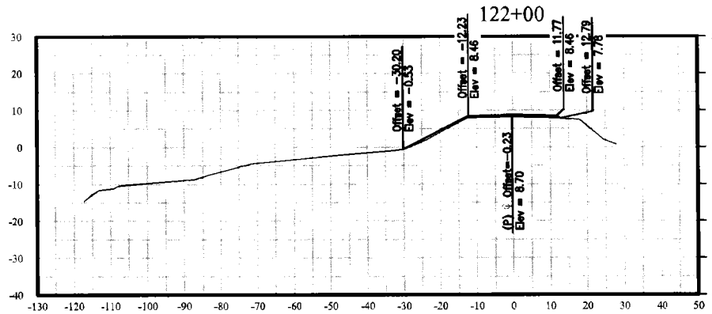
SHEET C27 OF 38 SHEETS

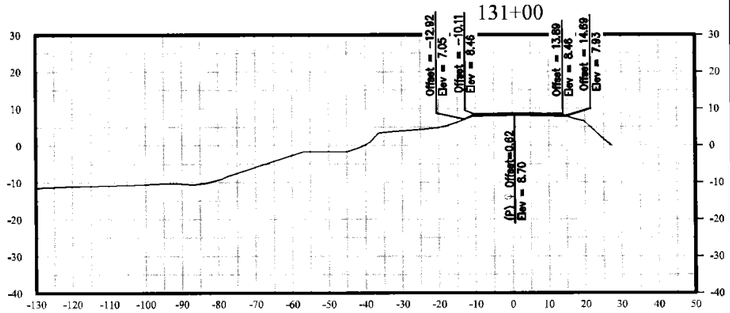


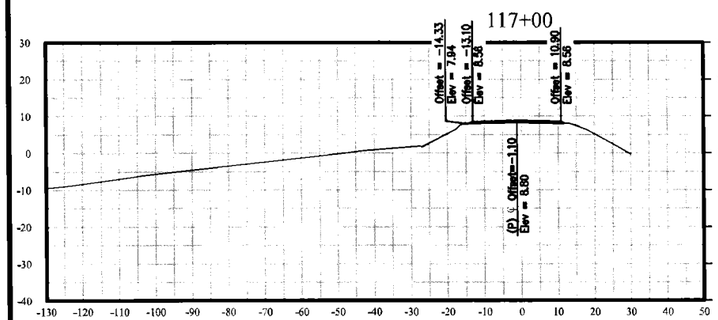


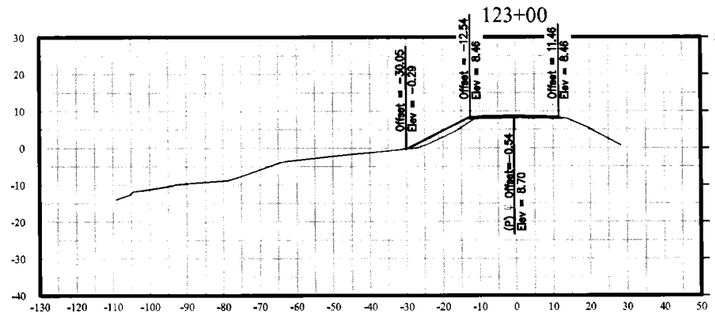


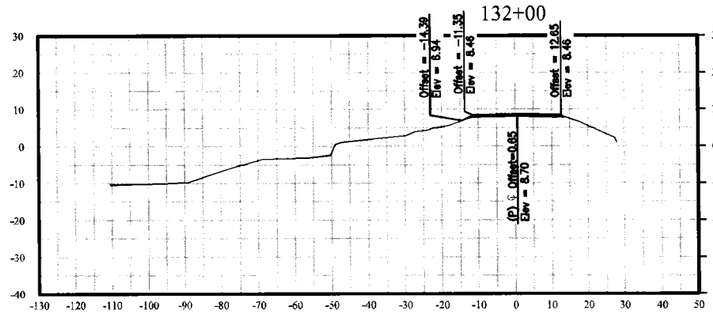


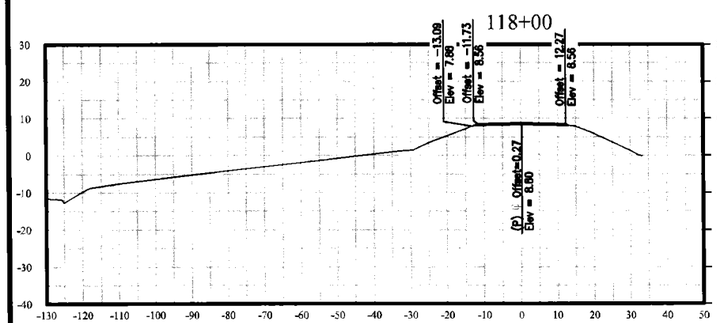


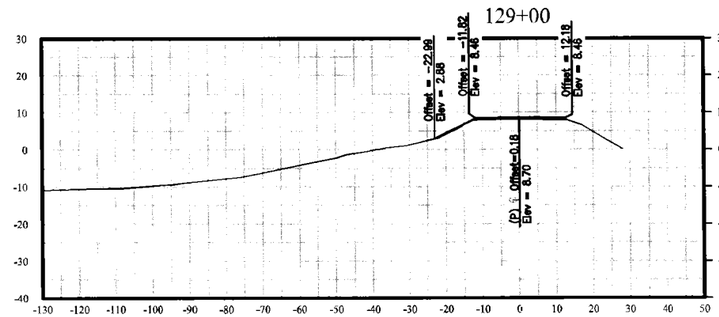












0 20' 40'

SCALE: 1" = 40'

MBK ENGINEERS
455 University Avenue, Suite 100
Sacramento, California 95825
Phone: (916) 456-4400 • Fax: (916) 456-0253

NO.	DATE	REVISION

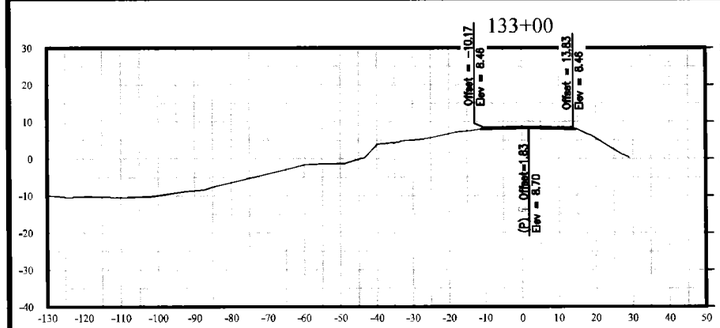
PRELIMINARY BID SET

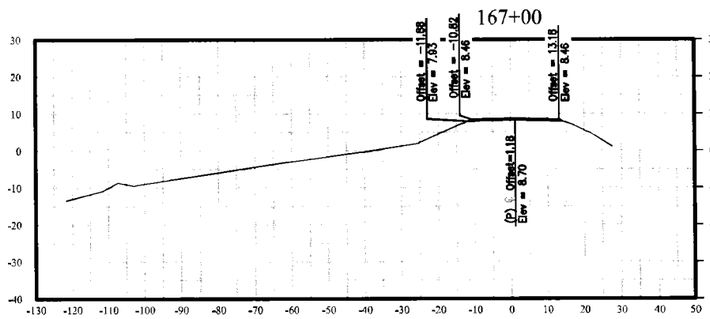
REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C063007
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

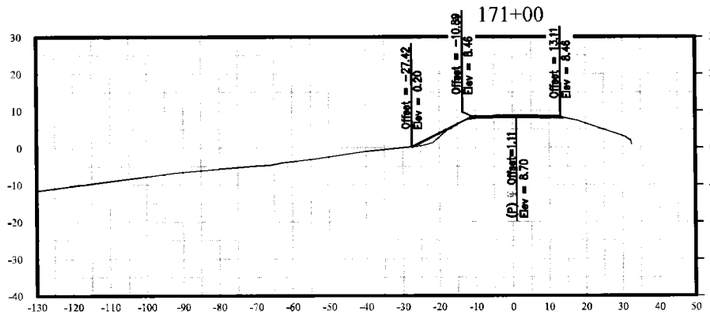
RECLAMATION DISTRICT NO. 2028
BACON ISLAND

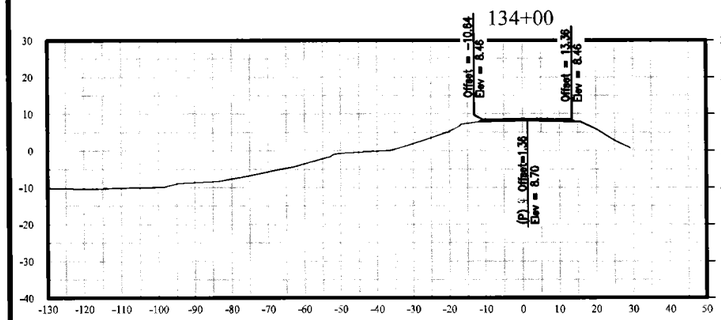
SECTION VIEW SITES 10 TO 12

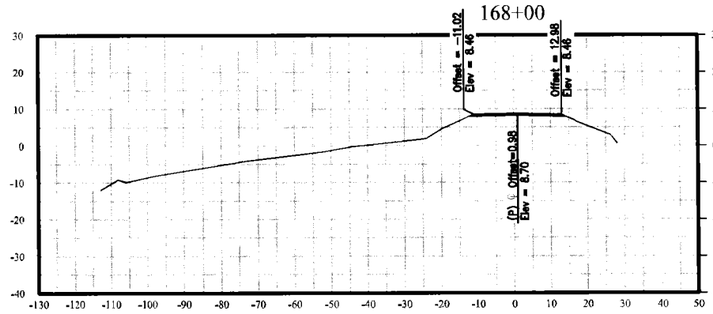
SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C28 OF 38 SHEETS

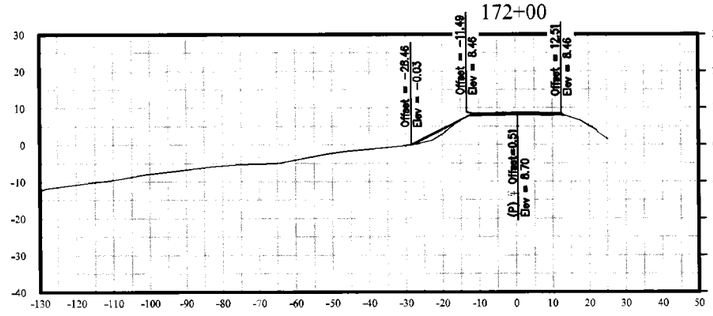


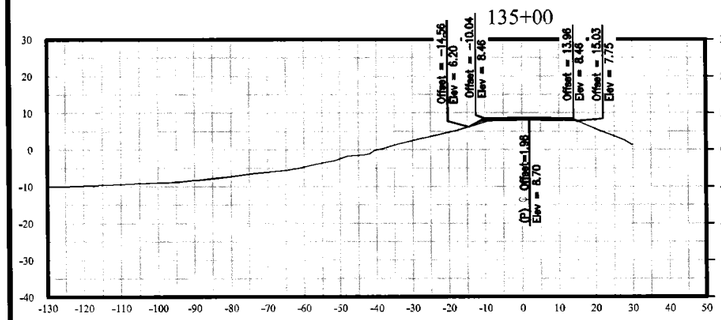


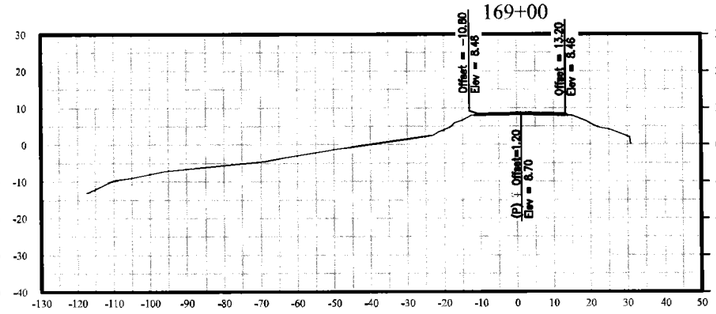


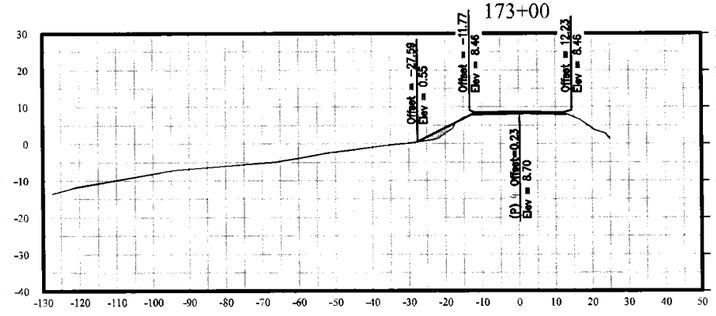


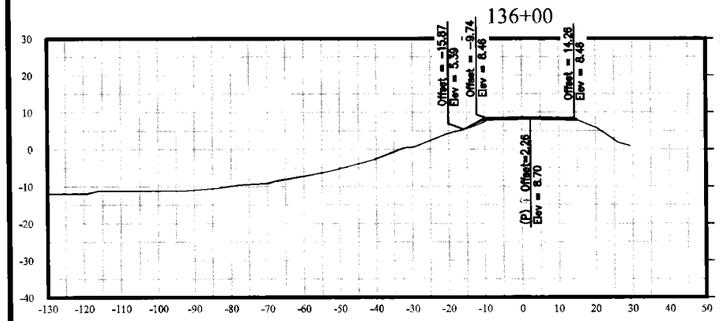


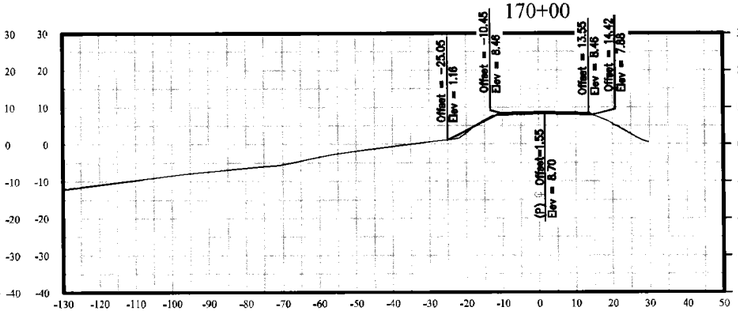












0 20' 40'

SCALE: 1" = 40'

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 63107
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

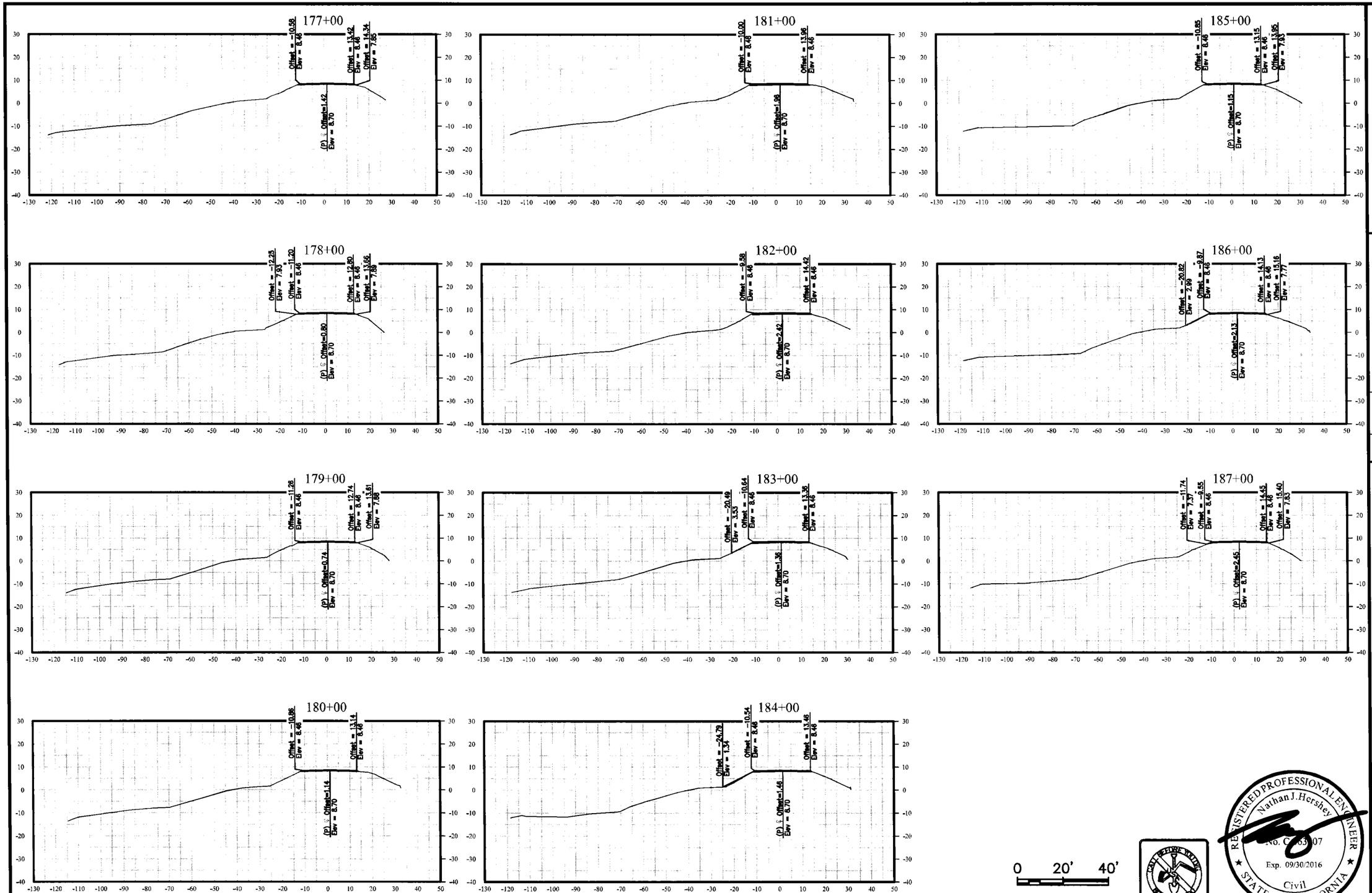
MBK ENGINEERS
455 University Avenue, Suite 100
Sacramento, California 95825
Phone: (916) 456-4400 • Fax: (916) 456-0253

NO.	DATE	REVISION
		PRELIMINARY BID SET

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

SECTION VIEW SITES 12 AND 13

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C29 OF 38 SHEETS



0 20' 40'

SCALE: 1" = 40'

MBK ENGINEERS
455 University Avenue, Suite 100
Sacramento, California 95825
Phone: (916) 456-4400 • Fax: (916) 456-0253

NO.	DATE	REVISION

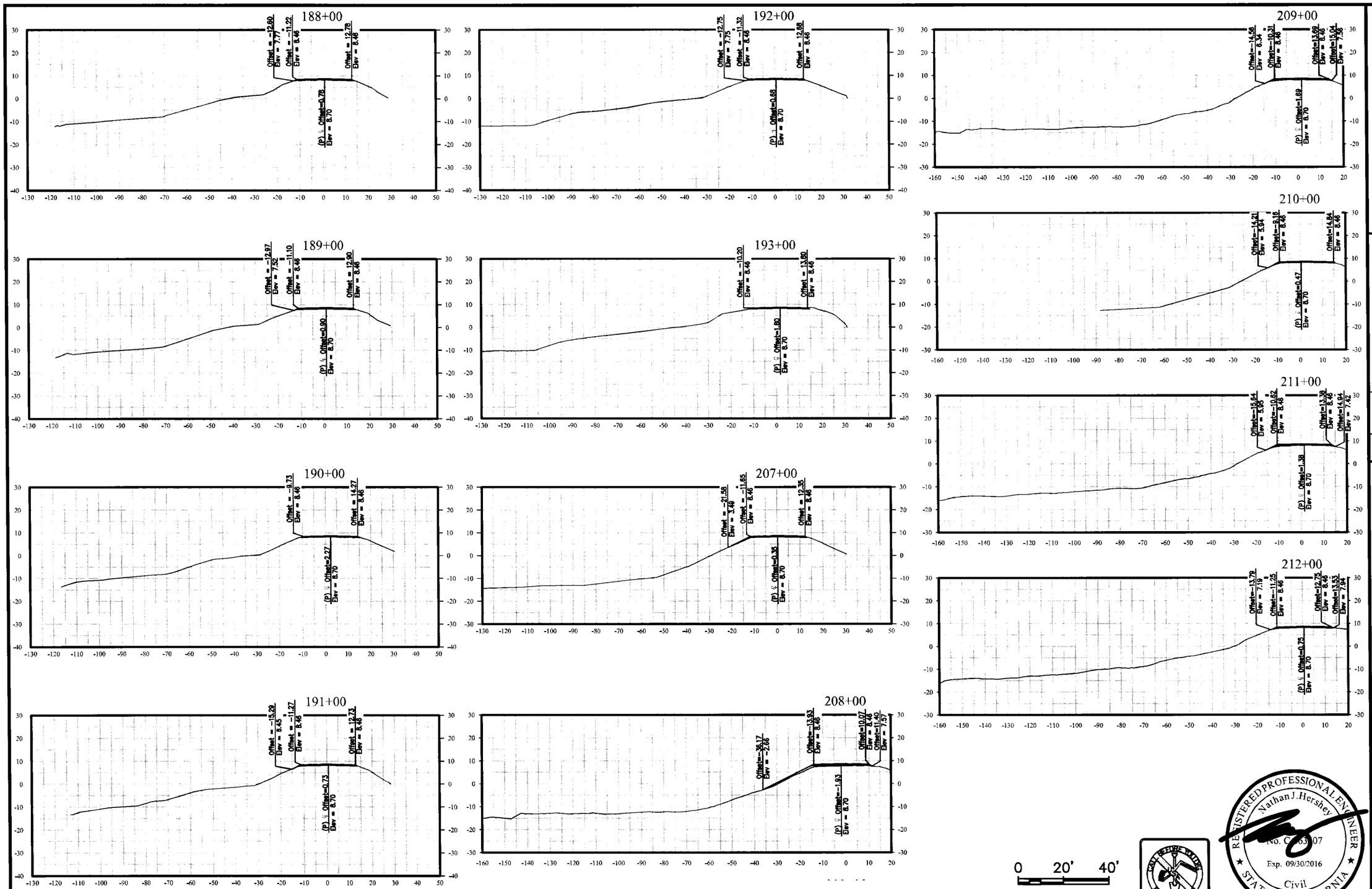
PRELIMINARY BID SET

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

SECTION VIEW SITE 14

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C30 OF 38 SHEETS

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 33307
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA



0 20' 40'

SCALE: 1" = 40'

MBK ENGINEERS
455 University Avenue, Suite 100
Sacramento, California 95825
Phone: (916) 456-4400 • Fax: (916) 456-0253

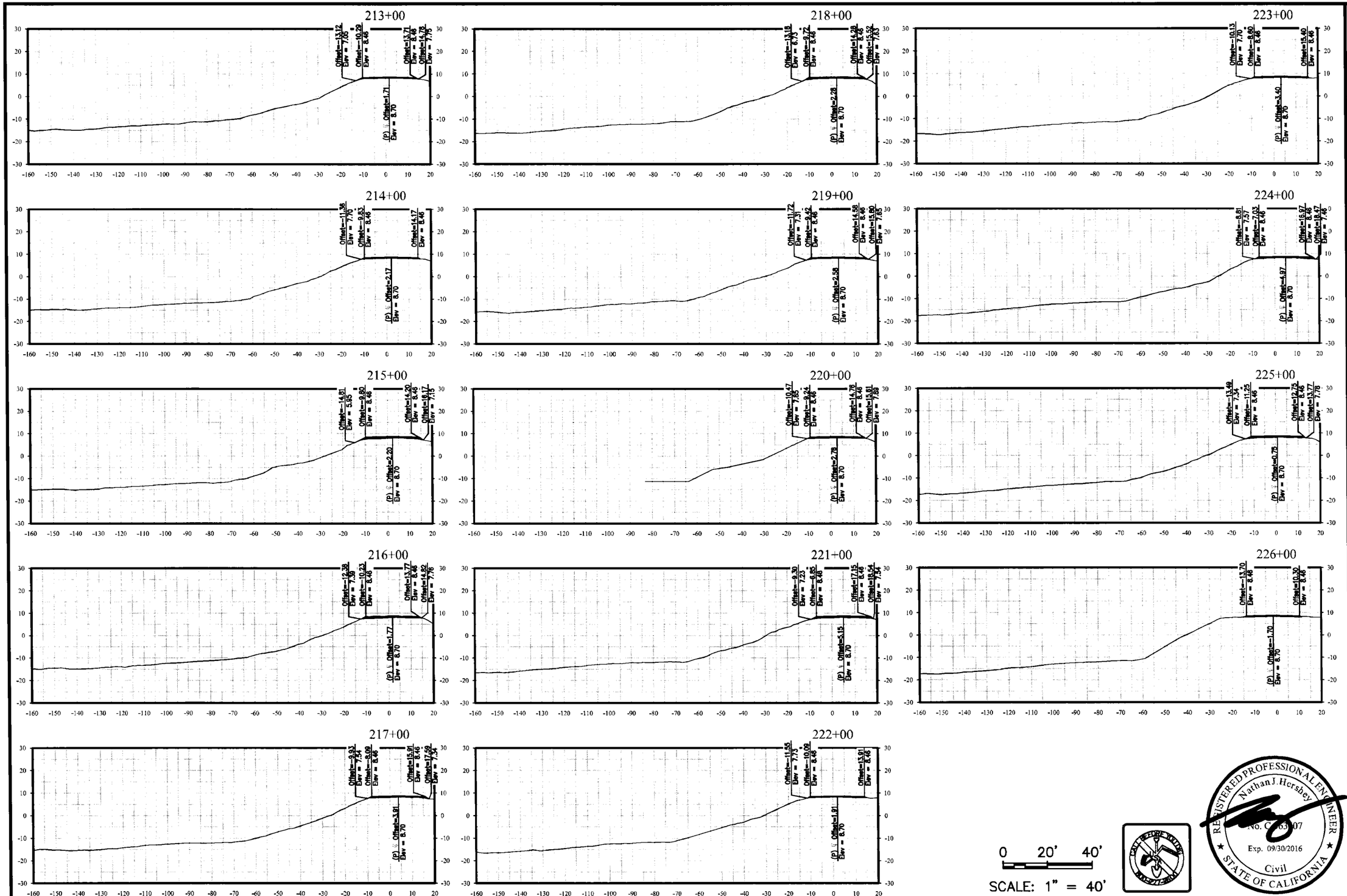
NO.	DATE	REVISION
		PRELIMINARY BID SET

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

SECTION VIEW SITES 14 AND 15

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 33307
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C31 OF 38 SHEETS



MBK ENGINEERS
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Sacramento, California 95825
Phone: (916) 456-4400 • Fax: (916) 456-0253

NO.	DATE	REVISION
		PRELIMINARY BID SET

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

SECTION VIEW SITE 15

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C32 OF 38 SHEETS

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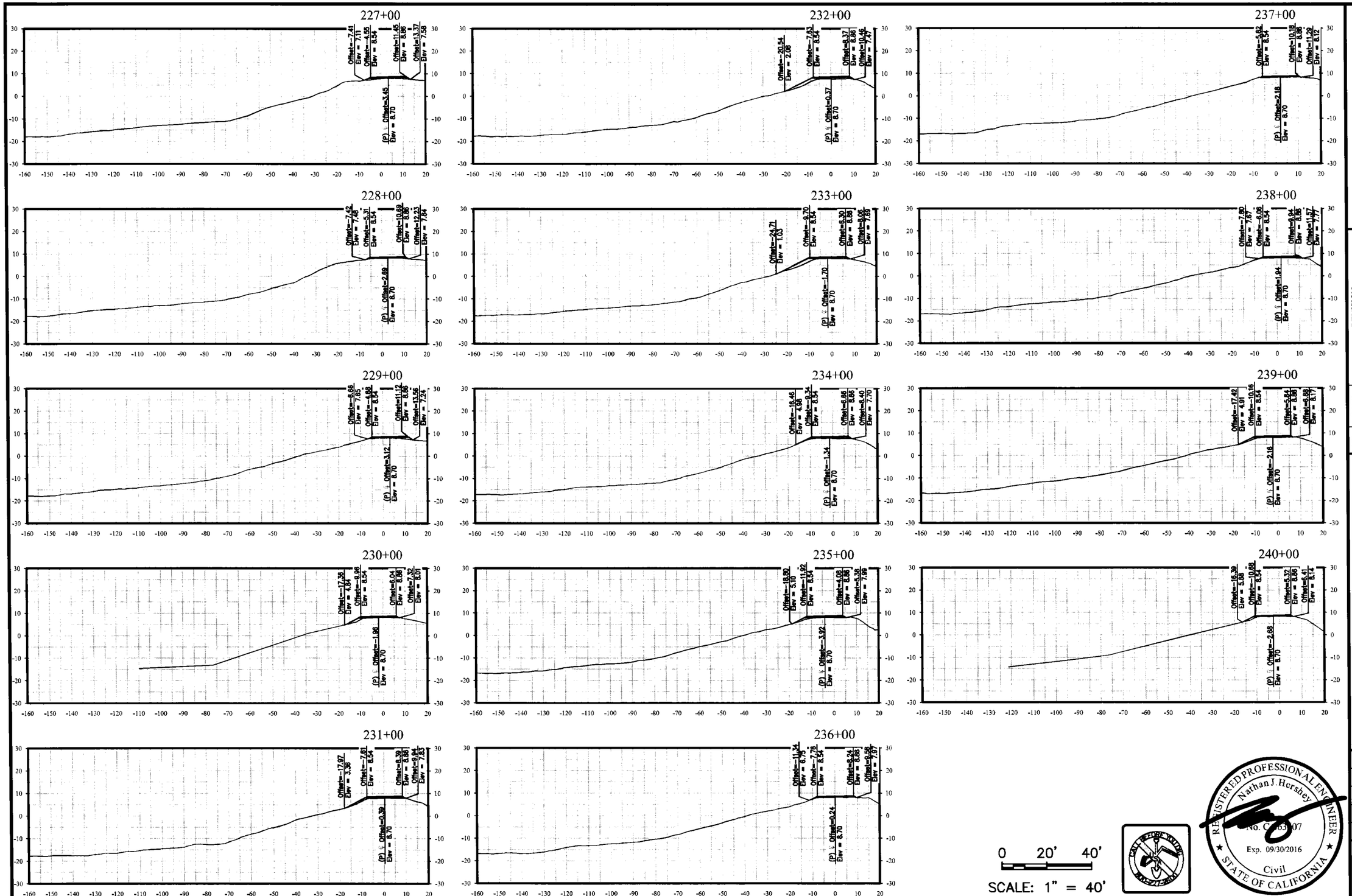


0 20' 40'

SCALE: 1" = 40'

MBK ENGINEERS
455 University Avenue, Suite 100
Sacramento, California 95825
Phone: (916) 456-4400 • Fax: (916) 456-0253

NO.	DATE	REVISION
		PRELIMINARY BID SET

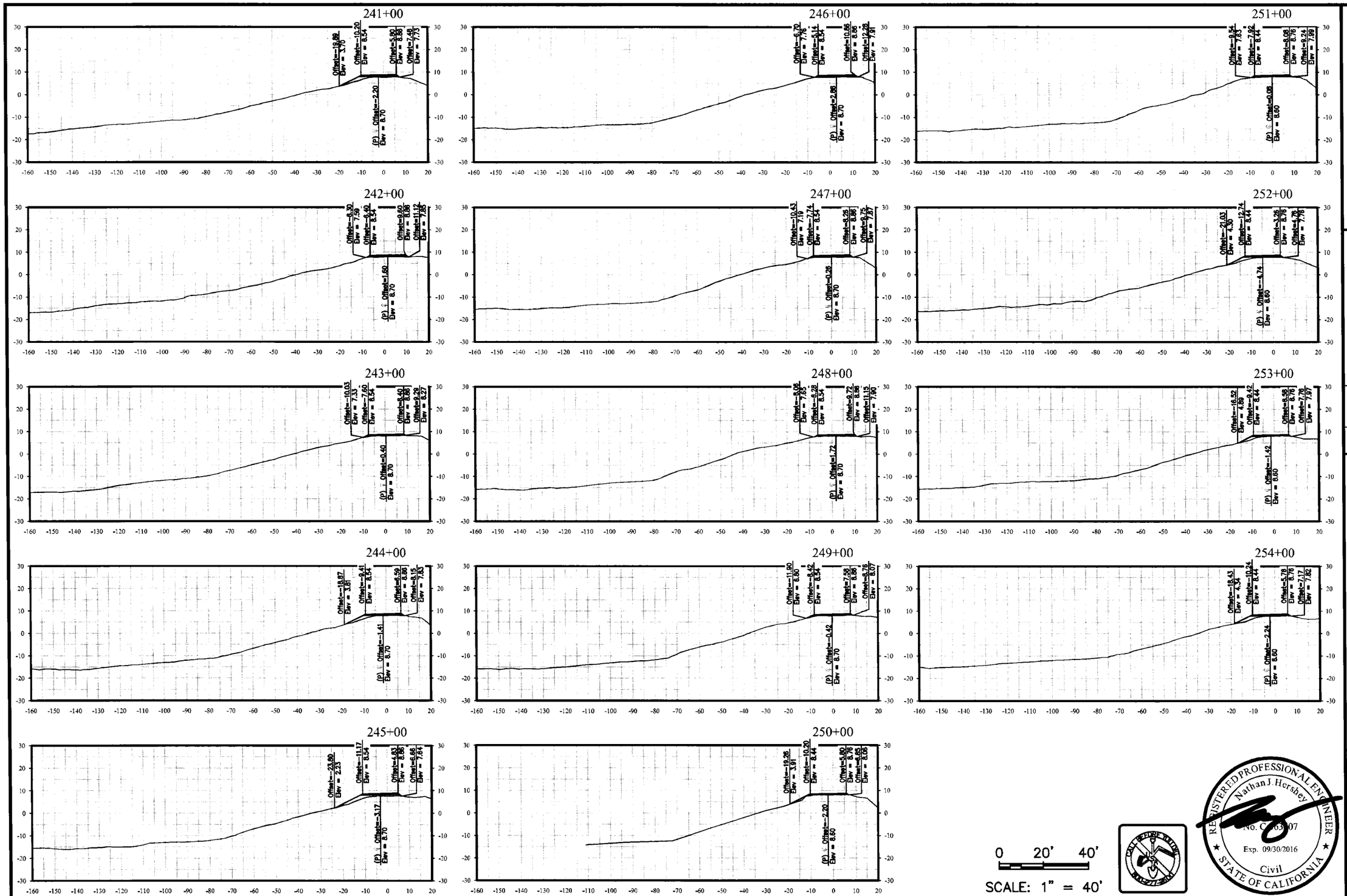
RECLAMATION DISTRICT NO. 2028
BACON ISLAND

SECTION VIEW SITE 16

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hersbey
No. C 65307
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C33 OF 38 SHEETS

R:\4290.10 RD 2028 - Bacon Island\2015-02_HMP Project\ACAD\C33 SECTION VIEW SITE 16.dwg 2/1/2016 2:49 PM janowiak



MBK ENGINEERS
455 University Avenue, Suite 100
Sacramento, California 95825
Phone: (916) 456-4400 • Fax: (916) 456-0253

NO.	DATE	REVISION
		PRELIMINARY BID SET

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

SECTION VIEW SITE 16

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hersbey
No. C 63507
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C34 OF 38 SHEETS

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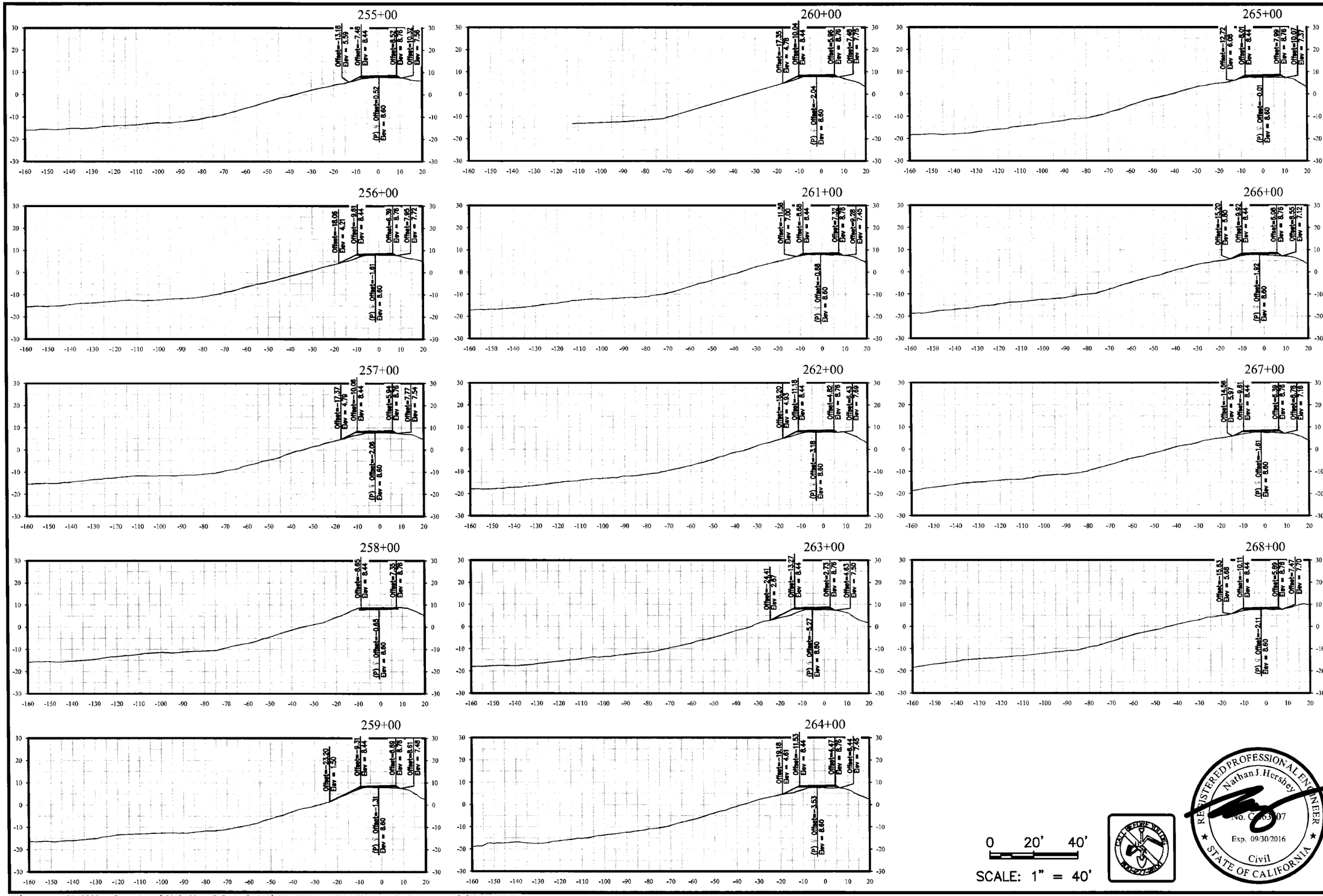


0 20' 40'

SCALE: 1" = 40'

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 63307
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

MBK ENGINEERS
455 University Avenue, Suite 100
Sacramento, California 95825
Phone: (916) 456-4400 • Fax: (916) 456-0253

NO.	DATE	REVISION

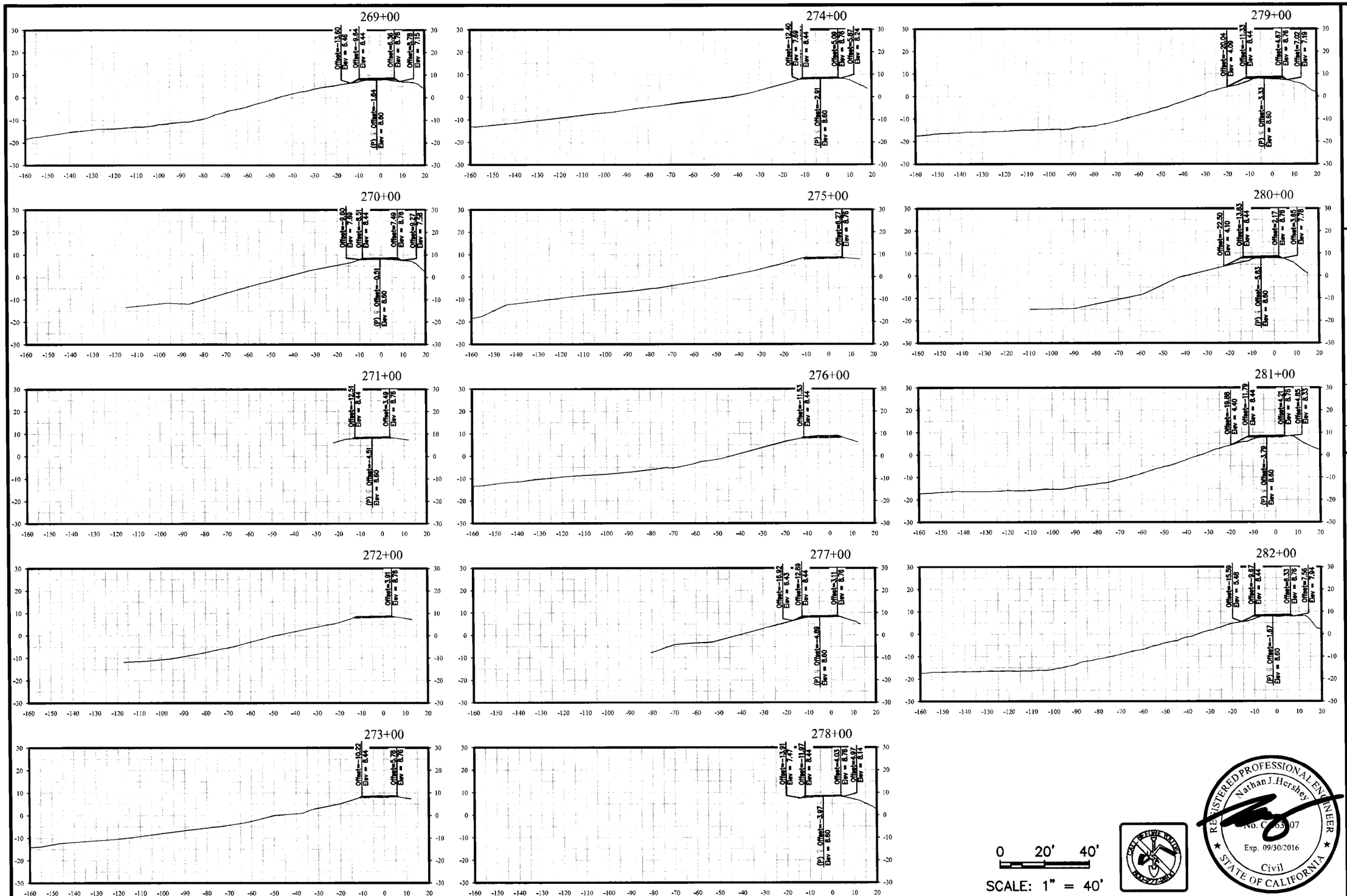
PRELIMINARY BID SET

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

SECTION VIEW SITES 16 AND 17

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016

SHEET C35 OF 38 SHEETS



MBK ENGINEERS
455 University Avenue, Suite 100
Sacramento, California 95825
Phone: (916) 456-4400 • Fax: (916) 456-0253

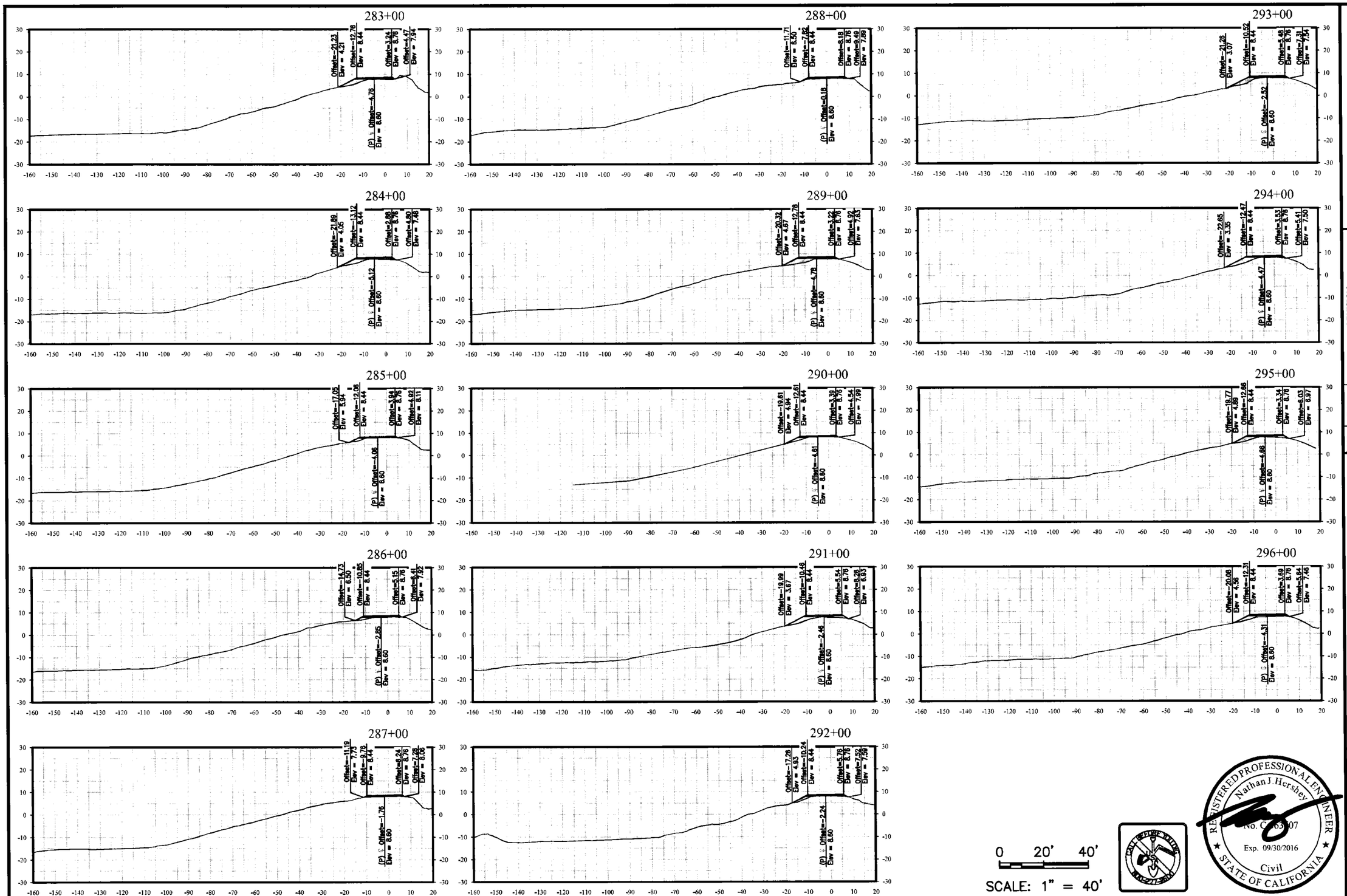
NO.	DATE	REVISION
		PRELIMINARY BID SET

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 63007
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

SECTION VIEW SITE 17

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C36 OF 38 SHEETS



MBK ENGINEERS
455 University Avenue, Suite 100
Sacramento, California 95825
Phone: (916) 456-4400 • Fax: (916) 456-0253

NO.	DATE	REVISION
		PRELIMINARY BID SET

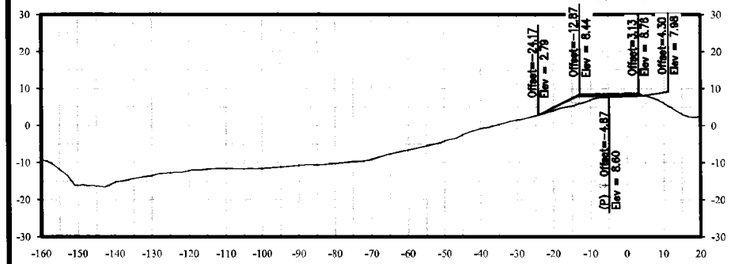
REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hersbey
No. C 65307
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

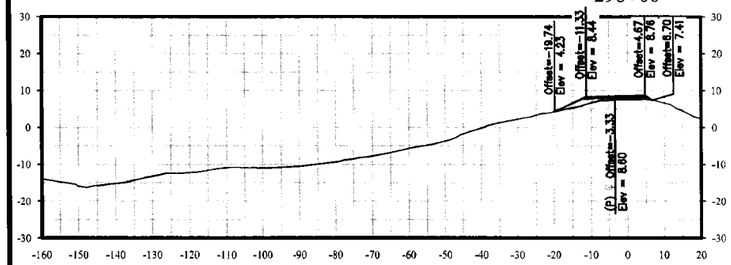
SECTION VIEW SITE 17

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C37 OF 38 SHEETS

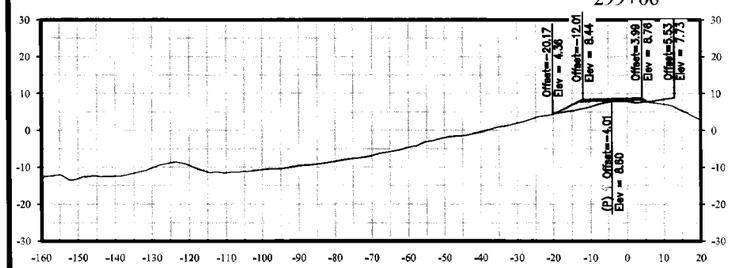
297+00



298+00



299+00



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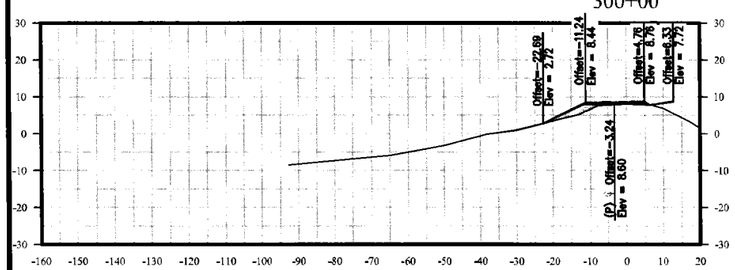


0 20' 40'

SCALE: 1" = 40'

REGISTERED PROFESSIONAL ENGINEER
Nathan J. Hershey
No. C 63307
Exp. 09/30/2016
Civil
STATE OF CALIFORNIA

MBK ENGINEERS
455 University Avenue, Suite 100
Sacramento, California 95825
Phone: (916) 456-4400 • Fax: (916) 456-0253

NO.	DATE	REVISION

PRELIMINARY
BID SET

RECLAMATION DISTRICT NO. 2028
BACON ISLAND

SECTION VIEW SITE 17

SCALE:	AS NOTED
JOB NO:	4290-12
BY:	BJ/AR
CHK:	NH
DATE:	02/01/2016
SHEET	C38 OF 38 SHEETS

COVER PAGE

Work Location: S. Bacon Island Rd.
San Joaquin Co., Sta 710 - 741, 54 - 226
Contractor: AM Stephens
Contact: John Edwards
Phone: 209-992-1449
Email:
Working Hours: TBD

-Notes-

1) All excavations shall be fenced, backfilled or plated after hours.
2) Must provide dust control during construction.
3) Maintain access or notify all affected driveways to residents, business & emergency vehicles at all times.
4) Maintain 10' travel lanes at all times.
5) All set-ups & devices will be in accordance with Cal M.U.T.C.D. standards.
6) All excavations within 18' of the travel lane, deeper and wider than one foot, having less than 4:1 slope require barrier rail with reflectors (as per M.U.T.C.D. standards.)
7) Shall maintain access to bus stops.
8) Contractor to provide a safe pedestrial route at all times.
9) Flagger may be needed for more work area -- if so, flagmen ahead signs will be added.
10) No parking sings to be placed 24 hours in advance.

Recommended Advance Warning Sign Spacing

Road Type	Distance Between Signs A	B	C
Urban (low Speed) - 25 mph or less	100 ft	100 ft	100 ft
Urban(high Speed)-more than 25 mph to 40 mph	250 ft	250 ft	250 ft
Urban (high Speed) - more than 40 mph	350 ft	350 ft	350 ft
Rural	500 ft	500 ft	500 ft
Expressway/Freeway	1,000 ft	1,500 ft	2,640 ft

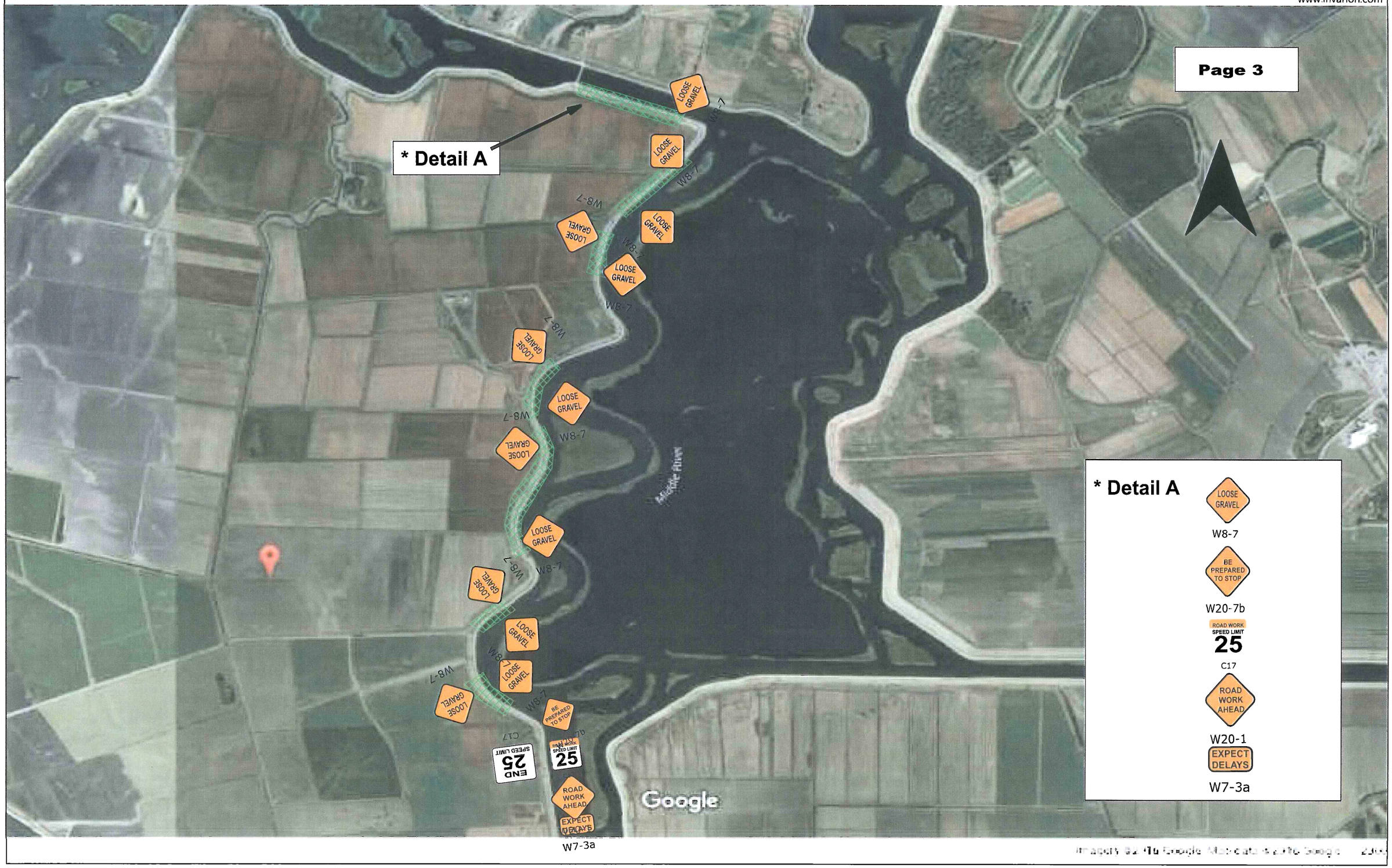
Cone Taper Spacing

Speed MPH	Min. Merging Taper	Buffer Space	Max. Device Tangent	Spacing Taper
25>	125'	155'	50	25
30	180'	200'	60	30
35	245'	250'	70	35
40	320'	305'	80	40
45	540'	360'	90	45
50	600'	425'	100	50
55	660'	495'	110	55
60	720'	570'	120	60
65	780'	645'	130	65
70	840'	730'	140	70

All plans must be checked and approved by the government agency, or agencies, having jurisdiction over the roadways shown on this plan prior to the plan being put in effect. All plans are intended to conform to the Manual on Uniform Traffic Control Devices. The customer/contractor is responsible for ascertaining additional agency requirements for work hours allowed, noise abatement, and other rules and regulations.
The temporary traffic controls must be installed per the agency approved plan to be effective. Field changes, other than minor adjustments, must be authorized in writing by a representative of the governmental agency, or agencies, having jurisdiction over the roadway.
Plan implementation and device placement should be performed by experienced/trained personnel. Temporary traffic controls must be monitored and maintained by the customer/contractor to remain effective. Monitoring and maintenance frequency is dictated by field conditions, but not less than daily. Farwest Safety, INC has no control over, or responsibility for, traffic control plan implementation and inspections performed by others. Users agree to indemnify Farwest Safety, INC for claims made regarding failure to install, maintain or remove controls per approved traffic control plans.

FARWEST Safety INC.
Farwest Safety, INC.
226 N. Main St.
Lodi, CA 95240
Phone: 209-339-8085
Fax: 209-339-9876
Email: estimating@farwestsafety.com
Author: Jeremy Myers
Date Drawn: March 21, 2016

Page 2
EXPECT DELAYS
ROAD WORK AHEAD
ROAD WORK SPEED LIMIT 25
END 25 SPEED LIMIT
BE PREPARED TO STOP
LOOSE GRAVEL
LOOSE GRAVEL
LOOSE GRAVEL
BE PREPARED TO STOP
ROAD WORK SPEED LIMIT 25
END 25 SPEED LIMIT
ROAD WORK AHEAD
EXPECT DELAYS
Middle River
Middle River
Middle River
Middle River
Middle River
CCRS Farms
Bullfrog Marina
Google


Page 3
* Detail A
LOOSE GRAVEL
W8-7
BE PREPARED TO STOP
W20-7b
ROAD WORK SPEED LIMIT 25
C17
END SPEED LIMIT 25
ROAD WORK AHEAD
W20-1
EXPECT DELAYS
W7-3a
Google

COUNTY OF SAN JOAQUIN

DEPARTMENT OF PUBLIC WORKS
P.0. BOX 1810-1810 E. HAZELTON AVENUE
STOCKTON, CALIFORNIA 95201
(209) 468-3000
FAX # (209) 468-9324

Permit No: **PS-1600984**
Date Issued: 04/12/2016
Start Date: 04/13/2016
Exp. Date: 06/01/2016
Project No: PWP7110005
Quad: SW

ENCROACHMENT PERMIT

RIDER # 1
Date 4/29/16

To: AM STEPHENS CONST
PO BOX 1867
LODI CA 95241

Encroachment Type:

ADDING AB TO LEVEE			

Location:
BACON ISLAND RD

In compliance with your request of **04/12/2016** , permission is hereby granted to do work in County right-of-way as shown on attached application and subject to all the terms, conditions and restrictions written below or printed as general or special provisions on any part of this form. See reverse side and attached sheet, if any.

Trench excavations for service connections will not be permitted within ten feet (10') of pavement centerline unless otherwise approved by the Director. Surface of trench patches shall match in kind and be smooth and even with that of abutting surface. Special attention shall be given to depth of utilities through roadside area in anticipation of future drainage facilities, road profile and/or frontage development. All underground utility facilities are to be established and accurately dimensioned on sketches from surveyed centerline of road right of way, or from right of way (border) lines.

Permittee shall call the Department of Public Works, Field Engineering Division (Permit Inspections) at (209)953-7421 at least forty-eight hours prior to beginning any work within the County right of way. All work performed under this permit shall conform to the rules and regulations pertaining to safety established by the California Division of Industrial Safety and Cal-OSHA.

The jobsite shall be kept in a safe condition at all times by the daily removal of any excess dirt or debris which might be a hazard to either pedestrian or automobile traffic. All necessary traffic convenience and warning devices and personnel shall be provided, placed and maintained by and at the sole expense of the Permittee in accordance with the latest edition of the CALTRANS Manual of Traffic Control.

After completion of the work permitted herein, all debris, lumber, barricades, or any excess material shall be removed and the jobsite left in a neat workmanlike manner. Immediately following completion of construction permitted herein, Permittee shall fill out and mail notice of completion (see attached post card) provided by Grantor.

Special Comments:

Traffic Control Per MUTCD****See Attached REVISED "Special Conditions"****

FORMS:

SS/WW, R-29		

Est. Permit Fee: $500.00

KRIS BALAJI, Director
Department of Public Works

By: _____
Permit Section

WHITE	-Permittee
GOLDENROD	-PWD Central File
YELLOW	-Field Inspection
PINK	-Permit Section

ENCROACHMENT PERMIT GENERAL PROVISIONS

13-1

1. This permit is issued under and subject to all laws and ordinances of agencies governing the encroachment herein permitted. See the following references:
   STREETS AND HIGHWAYS CODE
   1. Division 1, Chapter 3
   2. Division 2, Chapter 2, Section 942
   3. Division 2, Chapter 4, Section 1126
   4. Division 2, Chapter 5.5 and Chapter 6

   SAN JOAQUIN COUNTY ORDINANCES NUMBERED: 324, 441, 648, 662, 672, 695, 700, 860, 892, 3359, and 3675.

2. It is understood and agreed by the Permittee that the performance of any work under this permit shall constitute an acceptance of all the provisions contained herein and failure on the Permittee's part to comply with any provision will be cause for revocation of this permit. Except as otherwise provided for public agencies and franchise holders, this permit is revocable on five days notice.

3. All work shall be done subject to the supervision of and the satisfaction of the grantor. The Permittee shall at all times during the progress of the work keep the County Highway in as neat and clean condition as is possible and upon completion of the work authorized herein, shall leave the County Highway in a thoroughly neat, clean and usable condition.

4. The Permittee also agrees by the acceptance of this permit to properly maintain any encroachment structure placed by the Permittee on any part of the County Highway and to immediately repair any damage to any portion of the highway, which occurs as a result of the maintenance of the said encroachment structure, until such time as the Permittee may be relieved of the responsibility for such maintenance by the County of San Joaquin.

5. The Permittee also agrees by the acceptance of this permit to make, at its own expense, such repairs as may be deemed necessary by the County Department of Public Works.

6. It is further agreed by the Permittee that whenever construction, reconstruction or maintenance work upon the highway is necessary, the installation provided for herein shall, upon request of the County Department of Public Works, be immediately moved or removed by and at the sole expense of the Permittee.

7. No material used for fill or backfill in the construction of the encroachment shall be borrowed or taken from within the County right of way.

8. All work shall be planned and carried out with as little inconvenience as possible to the traveling public. No material shall be stacked within eight feet (8') of the edge of the pavement or traveled way unless otherwise provided herein. Adequate provision shall be made for the protection of the traveling public. Traffic control standards shall be utilized including barricades; approved signs and lights; and flagmen, as required by the particular work in progress.

9. The Permittee, by the acceptance of this permit, shall assume full responsibility for all liability for personal injury or damage to property which may arise out of the work herein permitted or which may arise out of the failure of the part of the Permittee to properly perform the work provided under this permit. In the event any claim of such liability is made against the County of San Joaquin or any department, official or employee thereof, the Permittee shall defend, indemnify, and hold each of them harmless for such claim.

10. All backfill material is to be moistened as necessary and thoroughly compacted with mechanical means. If required by the County Director of Public Works, such backfill shall consist of gravel or crushed rock. The Permittee shall maintain the surface over structures placed hereunder as may be necessary to insure the return of the roadway to a completely stable condition and until relieved of such responsibility by the County Department of Public Works. Wherever a gravel, crushed rock or asphalt surface is removed or damaged in the course of work related to the permitted encroachment, such material shall either be separately stored and replaced in the roadway as nearly as possible in its original state or shall be replaced in kind, and the roadway shall be left in at least as good a condition as it was before the commencement of operations of placing the encroachment structure.

11. Whenever it becomes necessary to secure permission from abutting property owners for the proposed work, such authority must be secured by the Permittee prior to starting work.

12. The current and future safety and convenience of the traveling public shall be given every consideration in the location and methods of construction utilized.

13. The Permittee is responsible for the preservation of survey monuments located within the area of work herein permitted. Prior to the start of construction, survey monuments that potentially may be disturbed shall be located and referenced by a Licensed Land Surveyor, and a Corner Record filed with the County Surveyor. Any Survey Monuments disturbed during the course of construction shall be reestablished by a Licensed Land Surveyor and another Corner Record filed with the County Surveyor. (Land Surveyors' Act Section 8771)

14. Prior to any excavation, the Permittee shall notify USA North (Underground Service Alert of Northern California and Nevada) at 811 or 800-227-2600 forty-eight (48) hours in advance.

REVISED
SPECIAL CONDITIONS FOR
ENCROACHMENT PERMIT

1. The Contractor shall adhere to posted speed limits and shall comply with all applicable laws while using Bacon Island Road between Highway 4 and the Bacon Island Bridge throughout the duration of the project. This segment of Bacon Island Road will be designated a construction zone while materials are delivered to the project areas on Bacon Island.

2. Ditch side slopes shall be placed at 2:1 max along County road sections.

3. Use CMS to Notify of Construction Zone.

4. Maintain traffic controls for all roads. Traffic control delays shall not exceed 15 minutes.

5. Access to all properties shall be maintained at all times except when work is occurring at the access point. Minimal delays will be allowed to provide access within the work zone area. Driveway access shall be fully restored at the end of each workday. Driveways disturbed by the contractor shall be replaced with in-kind or better materials.

6. Property owners shall be notified in writing, as approved by the County, 48 hours in advance of any impacts to their access.

7. The Permittee is responsible for the preservation of survey monuments located within the area of work herein permitted. Prior to the start of construction, survey monuments that potentially may be disturbed shall be located and referenced by a Licensed Land Surveyor, and a Corner Record filed with the County Surveyor. Any Survey Monuments disturbed during the course of construction shall be reestablished by a Licensed Land Surveyor and another Corner Record filed with the County Surveyor. (Land Surveyors' Act Section 8771)

8. Contractor shall establish existing roadway and drainage grades within the construction area. Any repair to roadways and adjacent areas shall match existing grades. Any proposed grade changes shall receive prior approval from County.

9. Above ground vaults, panels and/or other similar facilities will be allowed within the right-of-way if located as far to the outside edge as possible. Utility vaults shall be located a minimum of 4'-0" from edge of pavement.