

SACRAMENTO-SAN JOAQUIN DELTA ISLANDS & LEVEES, CA
CALFED LEVEE SYSTEM INTEGRITY PROGRAM
REQUEST FOR PROPOSALS
FOR DEVELOPMNT OF POTENTIAL INITIAL PROJECTS

PROJECT SUMMARY INFORMATION SHEET

Submitting Agency:

Reclamation District No. 563, Tyler Island

Project Name:

Special Projects Levee Proposal

Purpose of Project:

Provide increased flood protection for Reclamation District No. 563 (RD 563), and the community of Walnut Grove which lies partially within RD 563. The project will protect valuable infrastructure of State and Federal importance, protect and support the local economy, and protect thousands of acres of habitat for native species and migratory waterfowl including the endangered sandhill crane. The project will increase the reliability of the State and Federal water project by reinforcing and protecting the levees that act as the conduit for Sacramento River water that flows through Georgiana Slough and through the Delta Cross Channel to the North Fork of the Mokelumne River. If fully implemented, the project could provide opportunities for waterside berms that could be used to establish riparian habitat and corridors for threatened and endangered species.

Location of Project:

The District is located south of the town of Walnut Grove in Sacramento County. It is bounded on the west by Georgiana Slough, on the east and south by the North Fork of the Mokelumne River. The Northern boundary is a dry levee RD 563 from RD 554. (see attached map)

Problems Addressed By Project:

This project will provide increased flood protection for the town of Walnut Grove and approximately 9,000 acres of mixed use lands, including residential, commercial, light industrial and agricultural. The project will also provide a more reliable and safe conduit for State and Federal water project water in the Sacramento River to be transported to the San Joaquin River system via Georgiana Slough and the Delta Cross Channel. Additionally, variations of this project could protect and support increased habitat along the Mokelumne River that harbors multiple threatened and endangered species.

SACRAMENTO-SAN JOAQUIN DELTA ISLANDS & LEVEES, CA
CALFED LEVEE SYSTEM INTEGRITY PROGRAM
REQUEST FOR PROPOSALS
FOR DEVELOPMNT OF POTENTIAL INITIAL PROJECTS

Opportunities:

To Reduce Flood Damages:

The project would provide an increased level of flood protection for Walnut Grove (population 870) and 9,000 acres of mixed use lands.

Protect Water Supply/conveyance:

RD 563 levees provide the conduit to the State and Federal water project pumps by transporting Sacramento River water via Georgiana Slough and the Delta Cross Channel through the Mokelumne River system to the State and Federal pumping facilities located in the south Delta near the city of Tracy.

Ecosystem Restoration:

The interior of R. 563 provides wintering and breeding habitat for migratory waterfowl, including the endangered sandhill crane. All of the waterways surrounding the District harbor native as well as threatened and endangered species. If fully implemented, the project would protect the island interior and also provide opportunities to create habitat and habitat corridors along the waterside of the levees.

Project Description:

The scope of improvements includes raising and widening the RD 563 levee on the North Fork of the Mokelumne River, between District levee stations 20+00 to 380+00, to DWR's Bulletin 192-82 standard. The levee crown would be raised to 1.5 feet above the 300 year flood elevation in the North Fork of the Mokelumne River, as determined by the U.S. Army Corps of Engineers. Road surfacing will be 2 inches of asphalt concrete over 6 inches of aggregate base between levee stations 20+00 and 50+00, and between 180+00 and 380+00.

The District has developed two preliminary alternatives for the project. Alternative No. 1 improves the existing levee section to DWR's Bulletin 192-82 levee standard, and is estimated to cost \$20,500,000. Alternative No. 2 would involve a modified setback levee thus allowing a larger channel cross section and more opportunities for habitat restoration. Alternative No. 2 would require approximately twice the amount of import fill material, and is estimated to cost \$91,000,000. These estimated costs are for construction costs only and are based on 2006 prices. The estimates do not include associated environmental regulatory permitting and/or mitigation costs.

SACRAMENTO-SAN JOAQUIN DELTA ISLANDS & LEVEES, CA
CALFED LEVEE SYSTEM INTEGRITY PROGRAM
REQUEST FOR PROPOSALS
FOR DEVELOPMNT OF POTENTIAL INITIAL PROJECTS

Willingness & Ability to Cost Share

At this time, the District is limited in its ability to cost share. Until such time as the State of California or other agencies can assist in the cost share formula, and the true cost of the project is better known, RD 563 cannot commit to cost sharing.

Point of Contact & Agency Affiliation

Reclamation District Engineer:
Mr. Stephen K. Sinnock
Kjeldsen, Sinnock & Neudeck, Inc.
711 N. Pershing Avenue
Stockton, CA 95203
(209) 946-0268 phone
(209) 946-0296 fax
ssinnock@ksninc.com

Scoping & Screening Information

Project urgency

RD 563 flooded in 1986 as a result of levee overtopping and was very close to overtopping in 1997 and 1998. RD 563 levees protect the town of Walnut Grove, recreation resort facilities, several agricultural operations that include agricultural supply businesses, packing sheds as well as row crop, vineyard and orchard farming operations. There are 8,583 acres within the District and there is a population of 644 (1990 census). The levees also protect natural gas transmission pipelines of statewide importance, several producing gas wells as well as roads, electrical transmission lines, bridges and other critical transportation infrastructure. RD 563 levees protect large tracts of migratory waterfowl habitat including an important over wintering area for the endangered sandhill crane.

Anticipated changes in magnitude, frequency or duration of flood flows:

It is anticipated that the project will provide benefits to the North Delta region by reducing the threat of floods from levee overtopping.

How does project address flooding, ecosystem, water supply & quality:

This project would benefit flood control, ecosystem, water supply and quality.

SACRAMENTO-SAN JOAQUIN DELTA ISLANDS & LEVEES, CA
CALFED LEVEE SYSTEM INTEGRITY PROGRAM
REQUEST FOR PROPOSALS
FOR DEVELOPMNT OF POTENTIAL INITIAL PROJECTS

Who or what will benefit from the potential project:

The Federal, State and local stakeholders will all benefit as described above.

What is the likely federal, state & local agency support:

The District anticipates support from all of the stakeholder agencies as this project provides benefits to all of them.

Are there obstacles that may delay development and implementation of project:

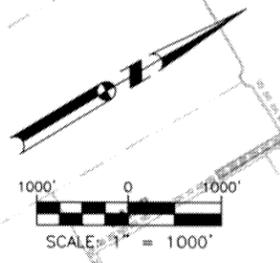
Obstacles include funding and environmental regulatory issues.

Is your agency ready, willing and able to serve as non-federal sponsor:

Unknown at this time.



| SIPHON/DISCHARGE PIPE STATIONING | |
|----------------------------------|----------------|
| 1. 58+14 | 13. 329+68 |
| 2. 93+21 | 14. 343+98 (2) |
| 3. 111+33 | 15. 354+29 |
| 4. 120+59 | 16. 375+78 |
| 5. 156+96 (2) | 17. 398+62 |
| 6. 176+92 | 18. 407+42 |
| 7. 180+96 | 19. 462+58 |
| 8. 210+03 | 20. 464+18 |
| 9. 229+63 (2) | 21. 477+80 |
| 10. 256+71 | 22. 509+73 |
| 11. 291+03 | 23. 535+05 |
| 12. 316+96 | 24. 568+33 (2) |



K S N INC.
KJELDEN S INNOCK NEUDECK
 Consulting Engineers and Land Surveyors
 Post Office Box 844
 711 N. Pershing Avenue
 Stockton, CA 95201-0844
 Office: (209) 946-0268
 Faxes: (209) 946-0296
 E-mail: KSN@ksninc.com

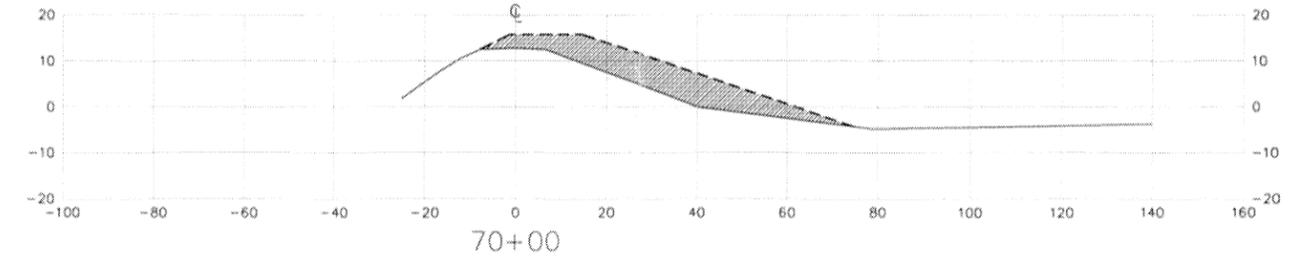
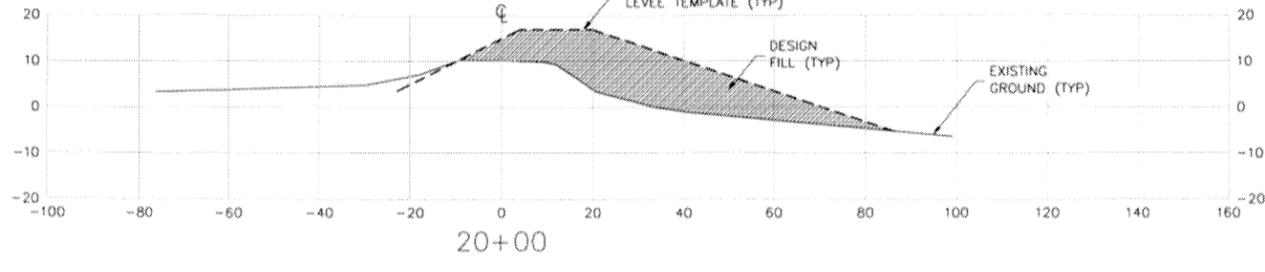
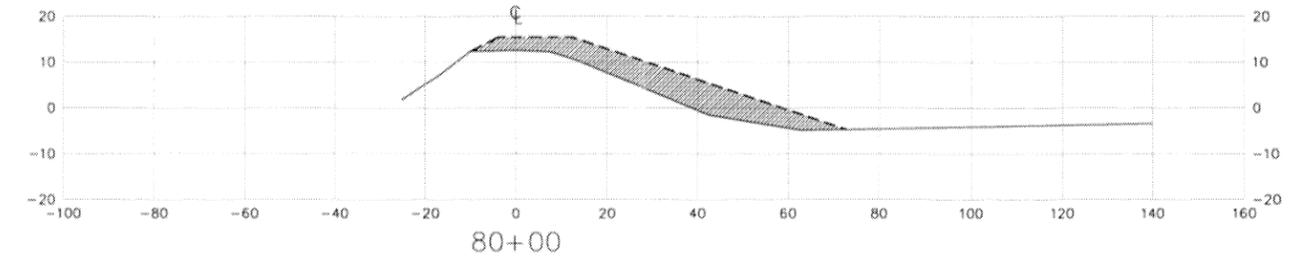
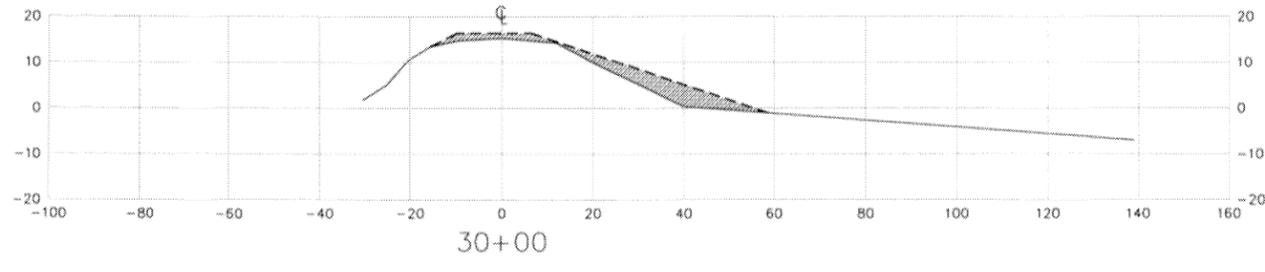
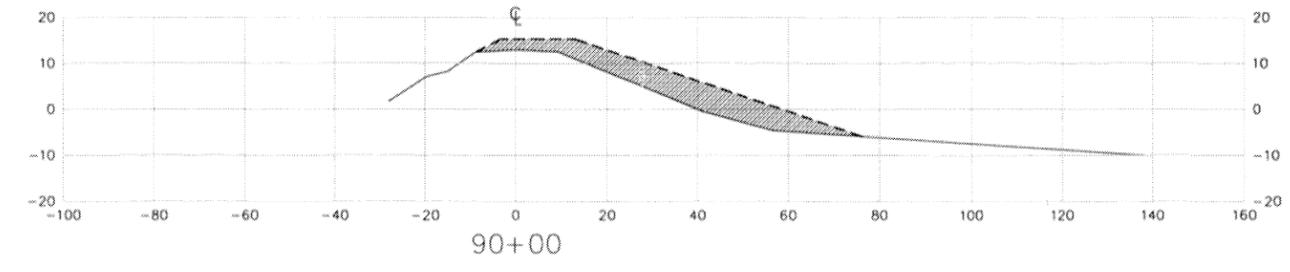
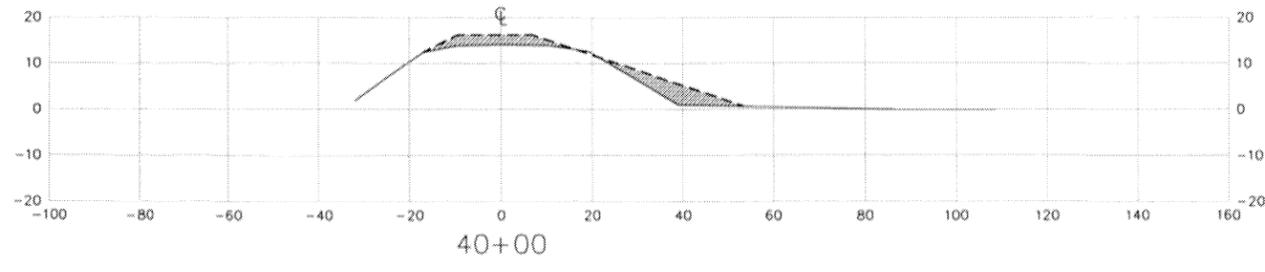
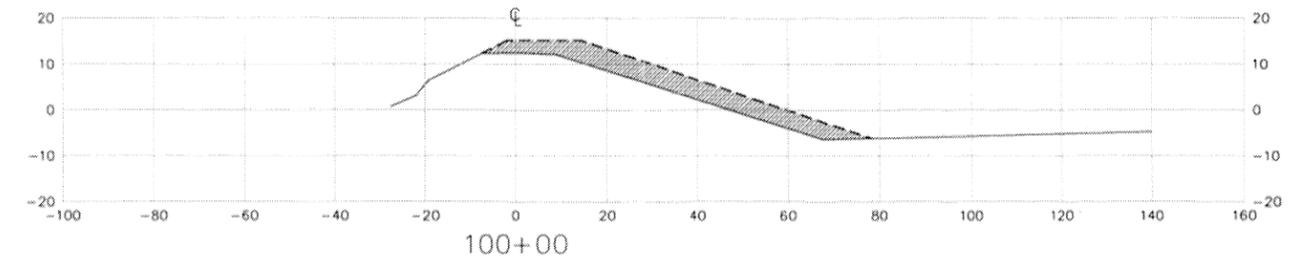
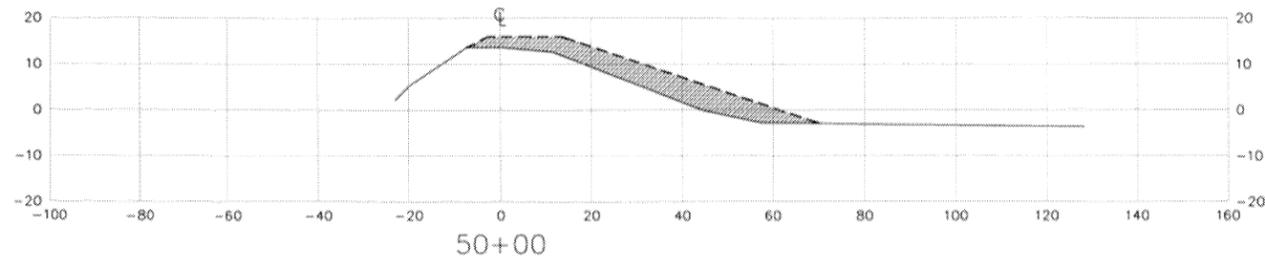
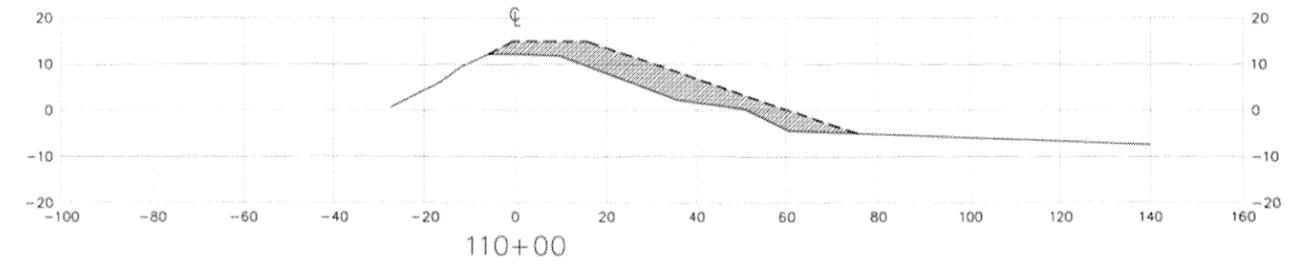
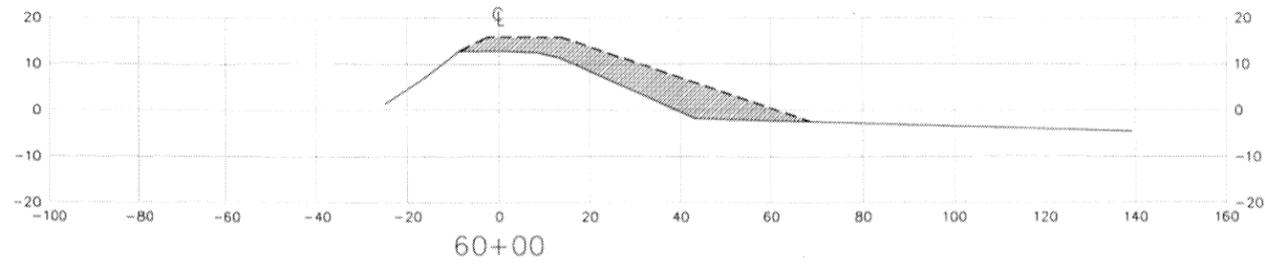
RECLAMATION DISTRICT NO. 563
 TYLER ISLAND
 SPECIAL PROJECT PROPOSAL
 BASE MAP

| Revisions | | | | |
|-----------|-------------|------|----|----------|
| No. | Description | Date | By | Appr. By |
| | | | | |
| | | | | |
| | | | | |

Design **JAM**
 Drawn **JAM**
 Check **SKS**

Scale
 1" = 1000'
 Original Drawing Scale
 0 1/4" 1/2"

Date **JAN. 2006**
 Sheet Number **1** Of **5**
 Project File No. **0675-0670**



K **KJELDSEN**
S **SINNOCK**
N **NEUDECK**
 INC. Consulting Engineers
 and Land Surveyors

Post Office Box 844
 711 N. Pershing Avenue
 Stockton, CA 95201-0844
 Office: (209) 946-0268
 Faxes: (209) 946-0296
 E-mail: KSN@ksninc.com

RECLAMATION DISTRICT NO. 563
 TYLER ISLAND
 SPECIAL PROJECT PROPOSAL
 LEVEE CROSS SECTIONS

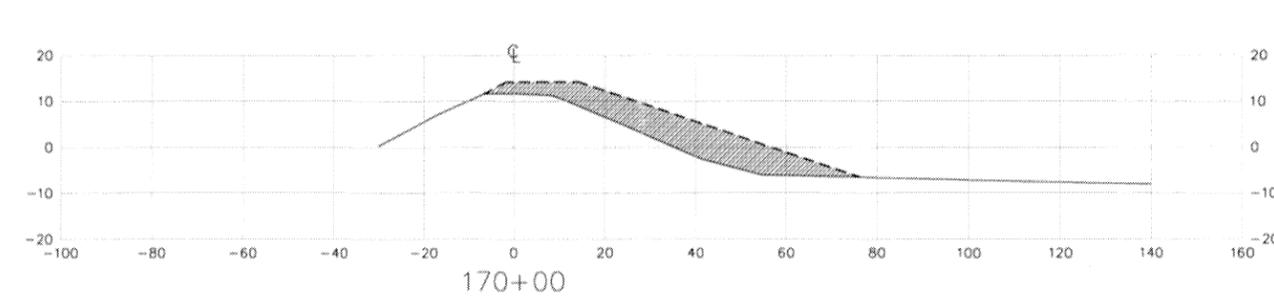
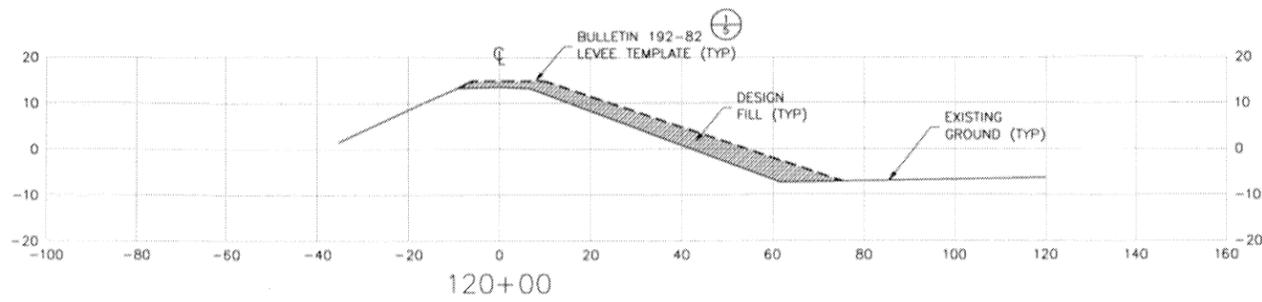
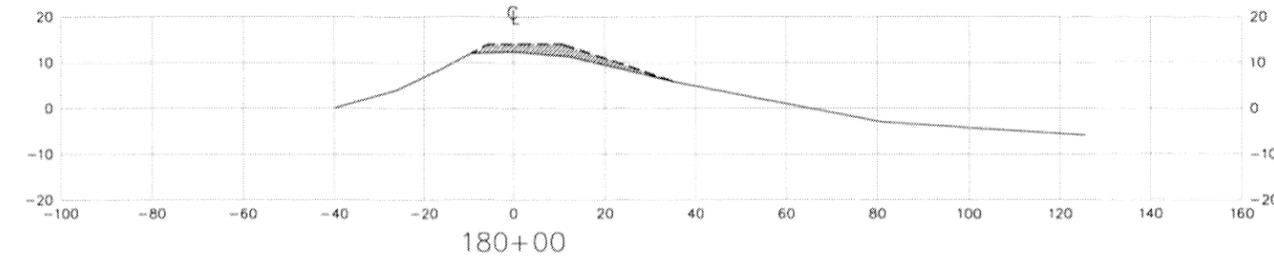
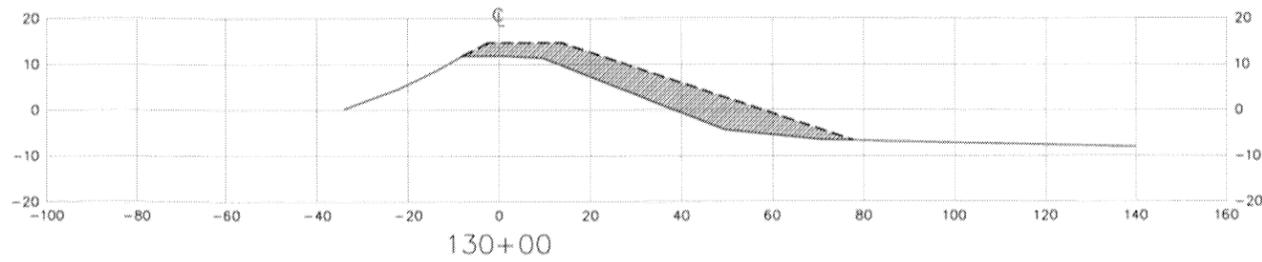
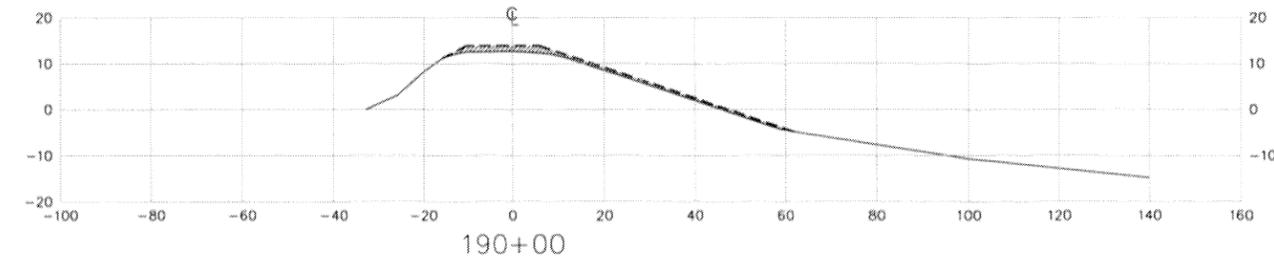
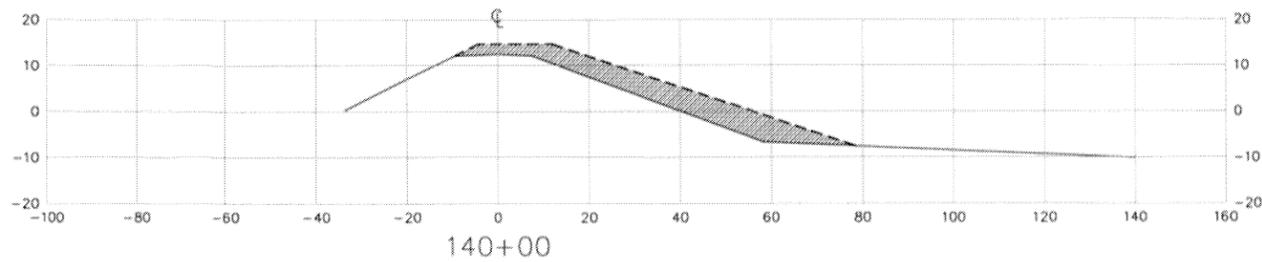
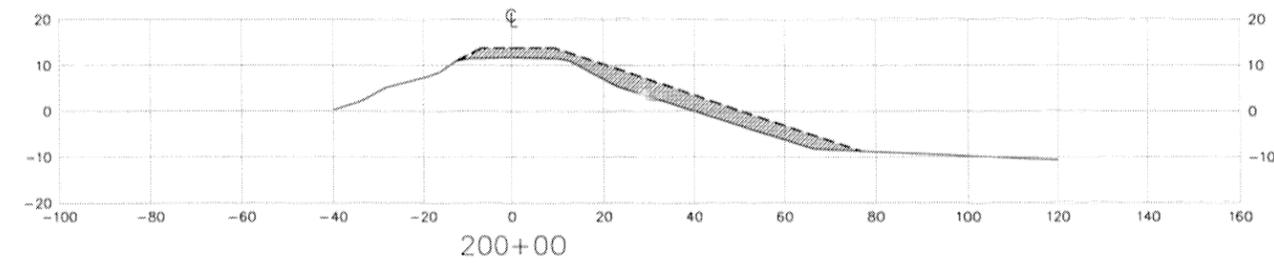
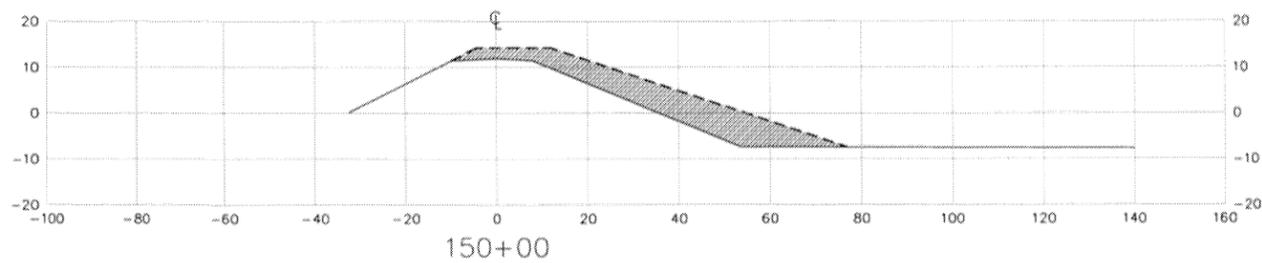
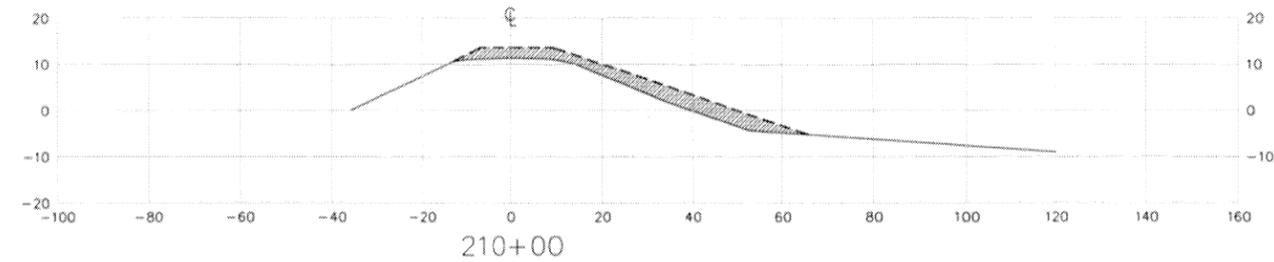
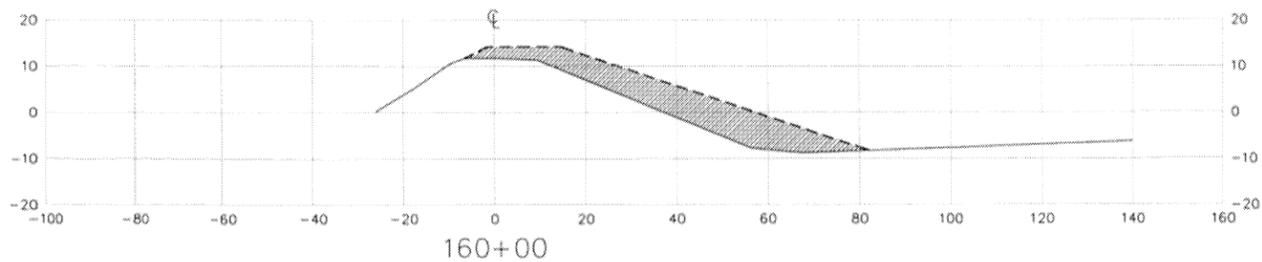
| Revisions | | | | |
|-----------|-------------|------|----|-----------|
| No. | Description | Date | By | Aprvd. By |
| | | | | |
| | | | | |
| | | | | |

Design **JAM**
 Drawn **JAM**
 Check **SKS**

Scale
 HOR: 1"=20'
 VER: 1"=20'

Original Drawing Scale
 0 1/2" 1"

Date **JAN. 2006**
 Sheet Number **2** Of **5**
 Project File No. **0675-0670**



K KJELDSSEN
S SINNOCK
N NEUDECK
 INC. Consulting Engineers
 and Land Surveyors

Post Office Box 844
 711 N. Pershing Avenue
 Stockton, CA 95201-0844
 Office: (209) 946-0268
 Faxes: (209) 946-0296
 E-mail: KSN@ksninc.com

RECLAMATION DISTRICT NO. 563
 TYLER ISLAND
 SPECIAL PROJECT PROPOSAL
 LEVEE CROSS SECTIONS

| Revisions | | | | |
|-----------|-------------|------|----|----------|
| No. | Description | Date | By | Appr. By |
| | | | | |
| | | | | |
| | | | | |

Design
JAM
 Drawn
JAM
 Check
SKS

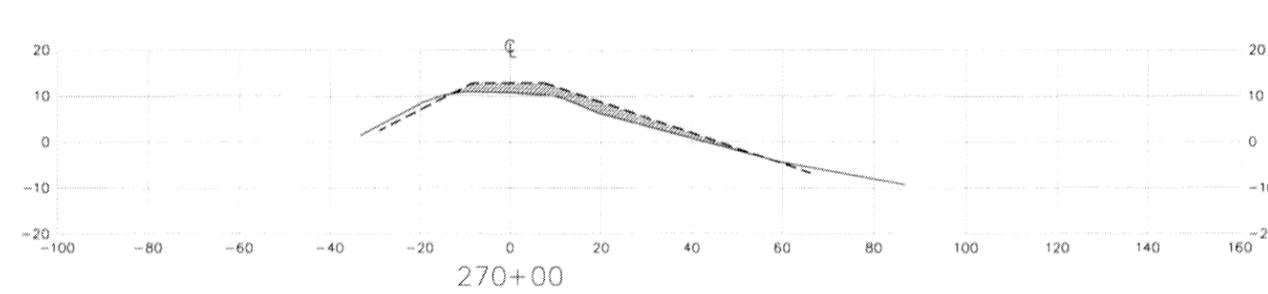
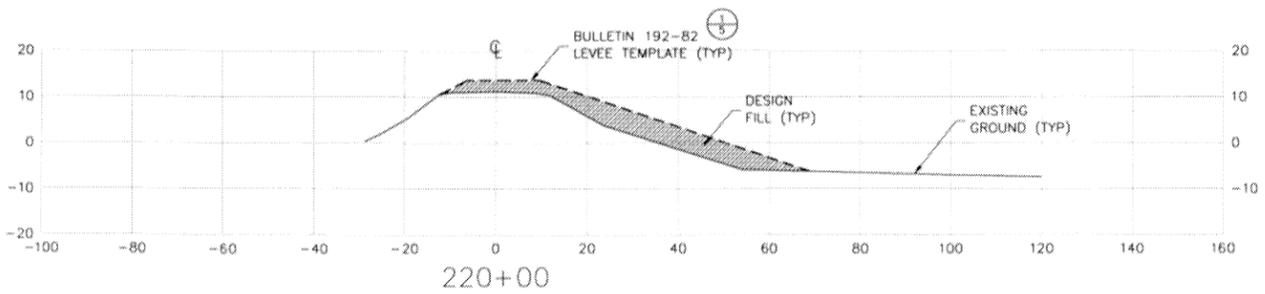
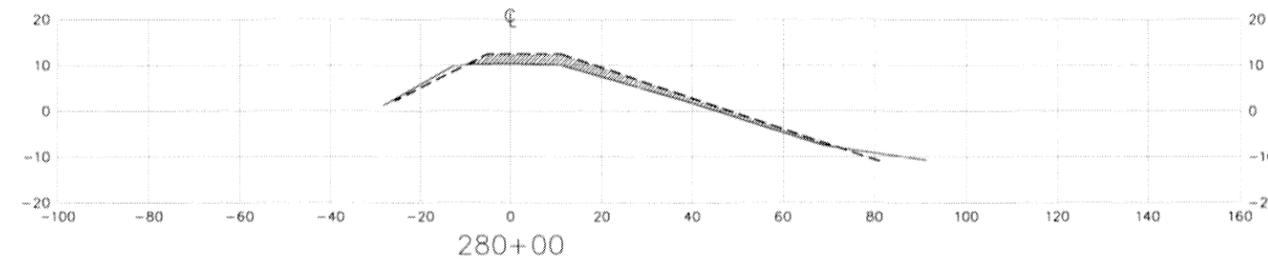
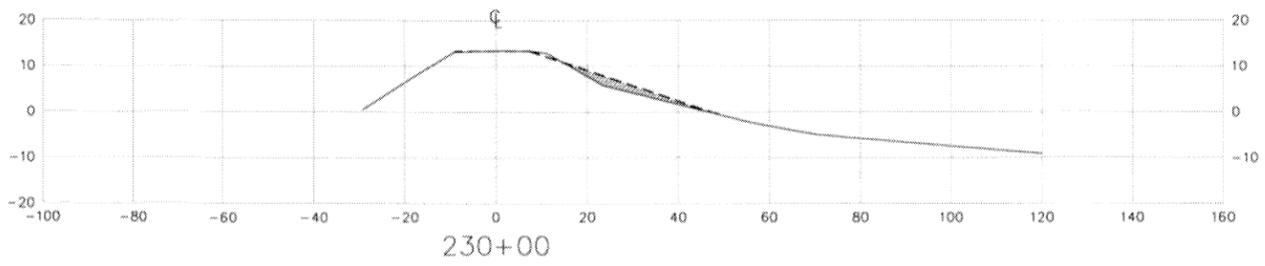
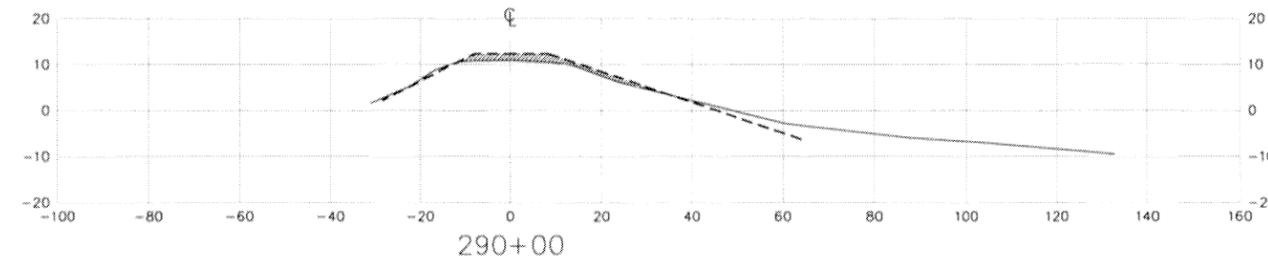
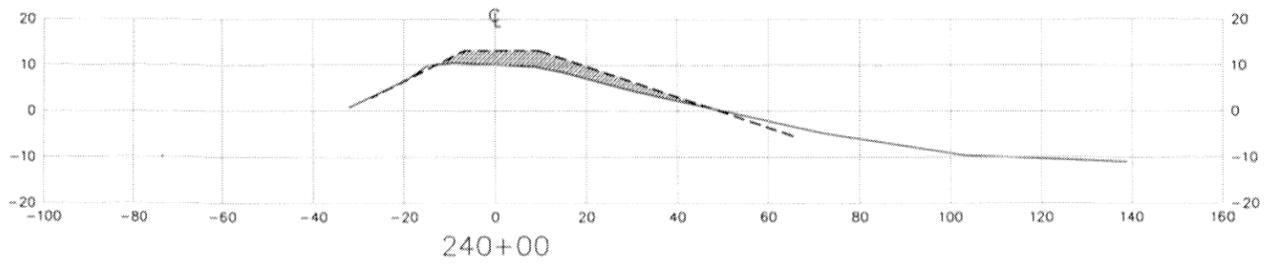
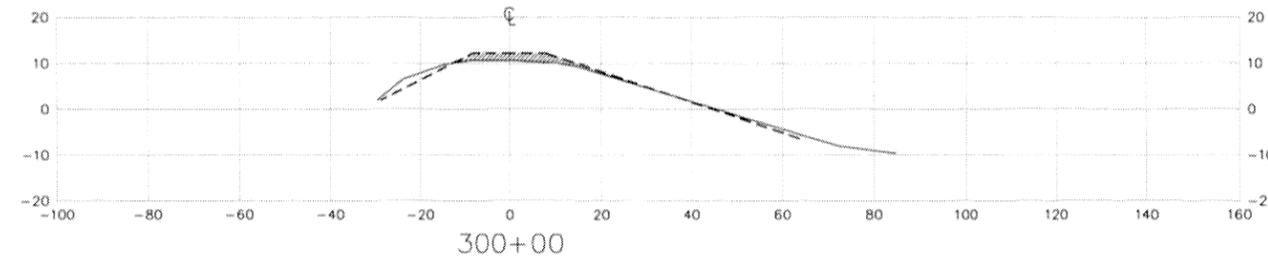
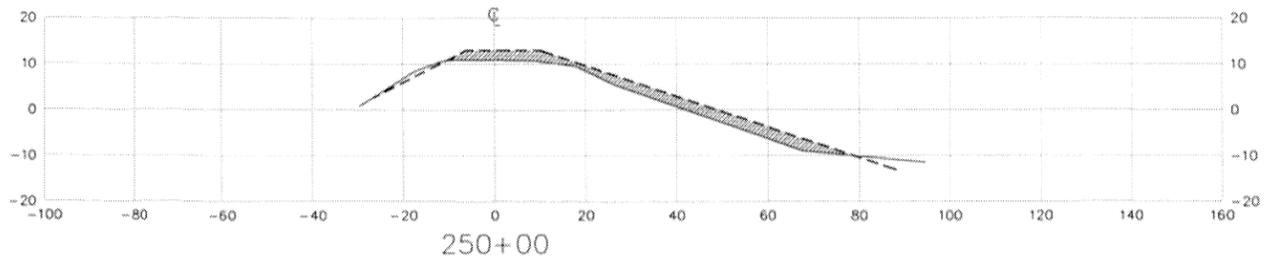
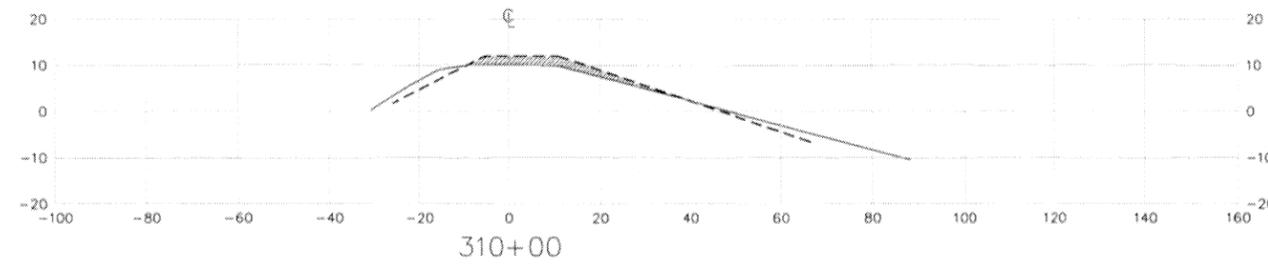
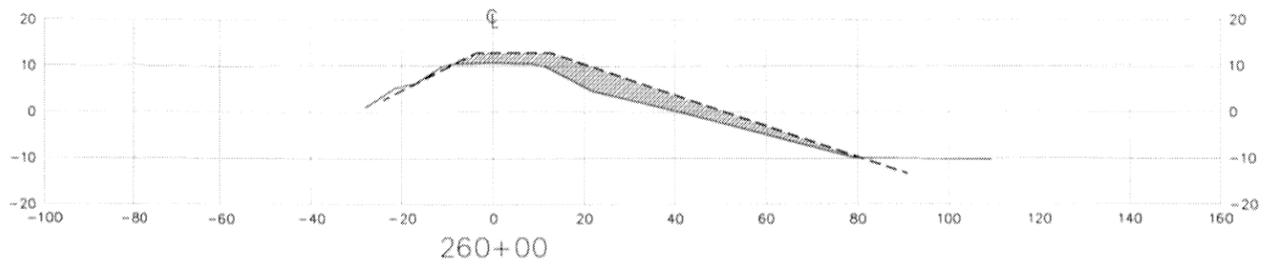
Scale
 HOR: 1"=20'
 VER: 1"=20'

Original Drawing Scale
 0 1/2" 1"

Date
 JAN. 2006

Sheet Number
3 Of 5

Project File No.
 0675-0670



K S N INC. KJELDSSEN SINNOCK NEUDECK
 Consulting Engineers and Land Surveyors
 Post Office Box 844
 711 N. Pershing Avenue
 Stockton, CA 95201-0844
 Office: (209) 946-0268
 Faxes: (209) 946-0296
 E-mail: KSN@ksninc.com

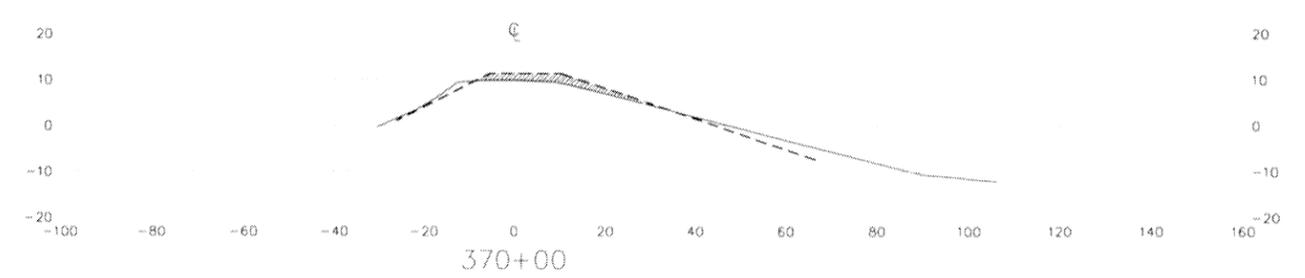
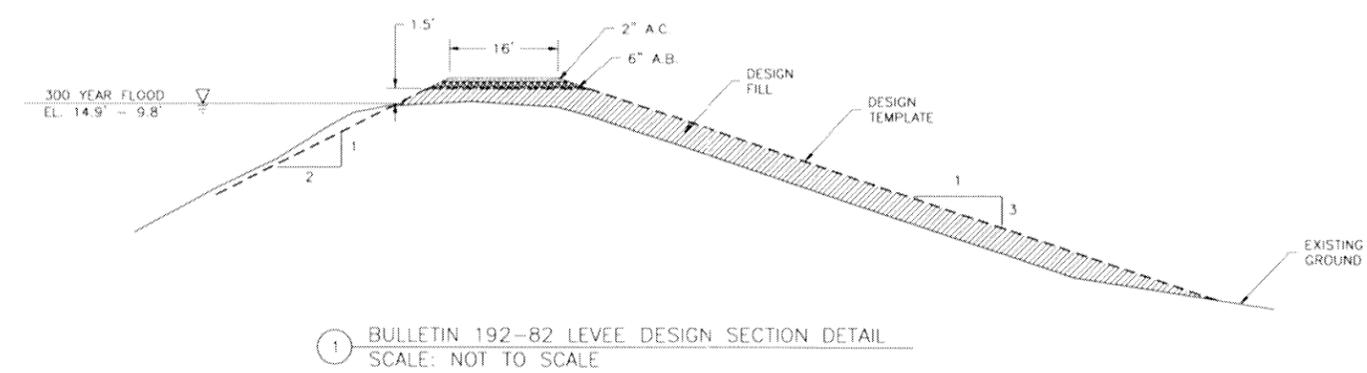
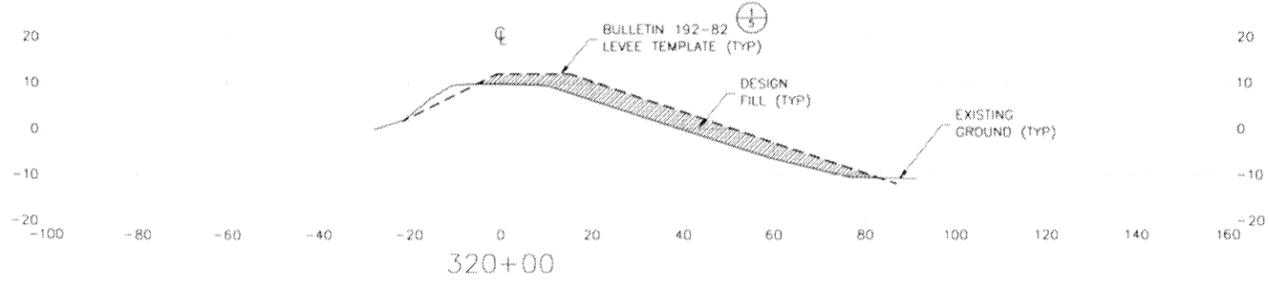
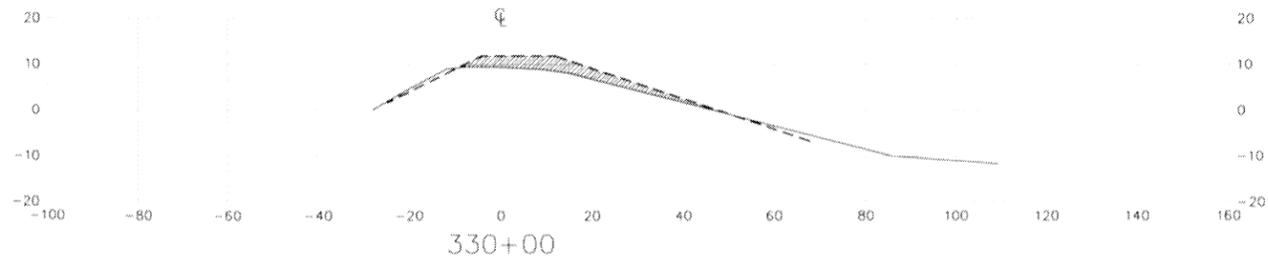
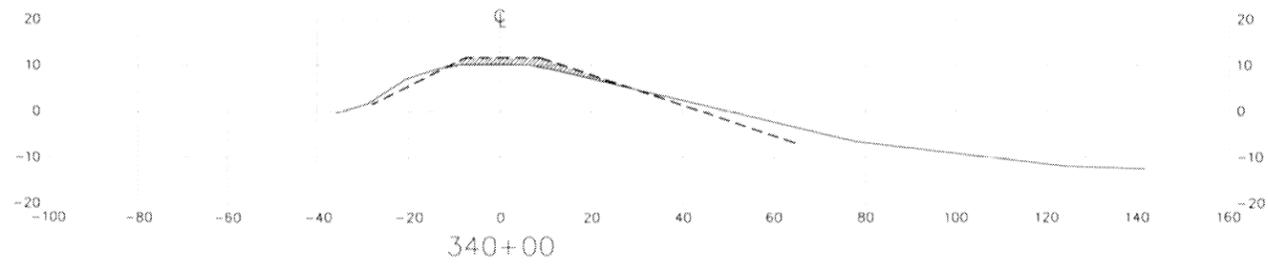
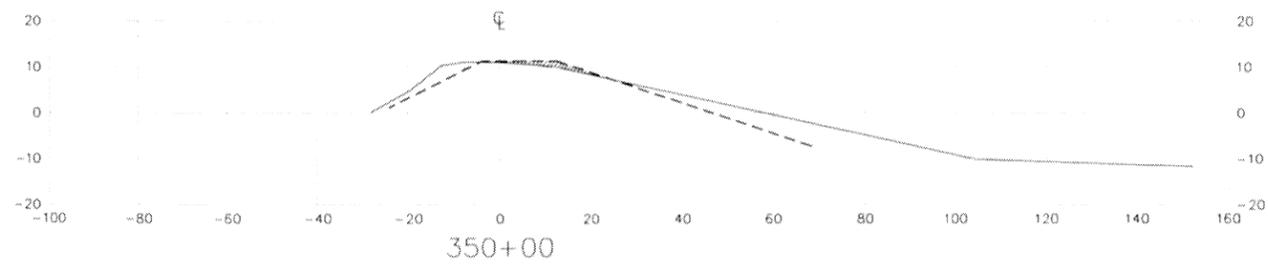
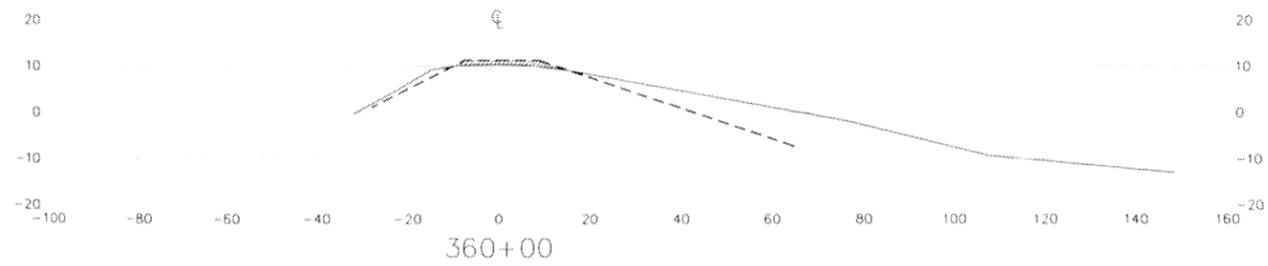
RECLAMATION DISTRICT NO. 563
 TYLER ISLAND
 SPECIAL PROJECT PROPOSAL
 LEVEE CROSS SECTIONS

| Revisions | | | | |
|-----------|-------------|------|----|------------|
| No. | Description | Date | By | Appr'd. By |
| | | | | |
| | | | | |
| | | | | |

Design
JAM
 Drawn
JAM
 Check
SKS

Scale
 HOR: 1"=20'
 VER: 1"=20'
 Original Drawing Scale
 0 1/2" 1"

Date
JAN. 2006
 Sheet Number
4 of 5
 Project File No.
0675-0670



K S N KJELDSSEN SINNOCK NEUDECK INC.
 Consulting Engineers and Land Surveyors
 Post Office Box 844
 711 N. Pershing Avenue
 Stockton, CA 95201-0844
 Office: (209) 946-0268
 Faxes: (209) 946-0296
 E-mail: KSN@ksninc.com

RECLAMATION DISTRICT NO. 563
 TYLER ISLAND
 SPECIAL PROJECT PROPOSAL
 LEVEE CROSS SECTIONS

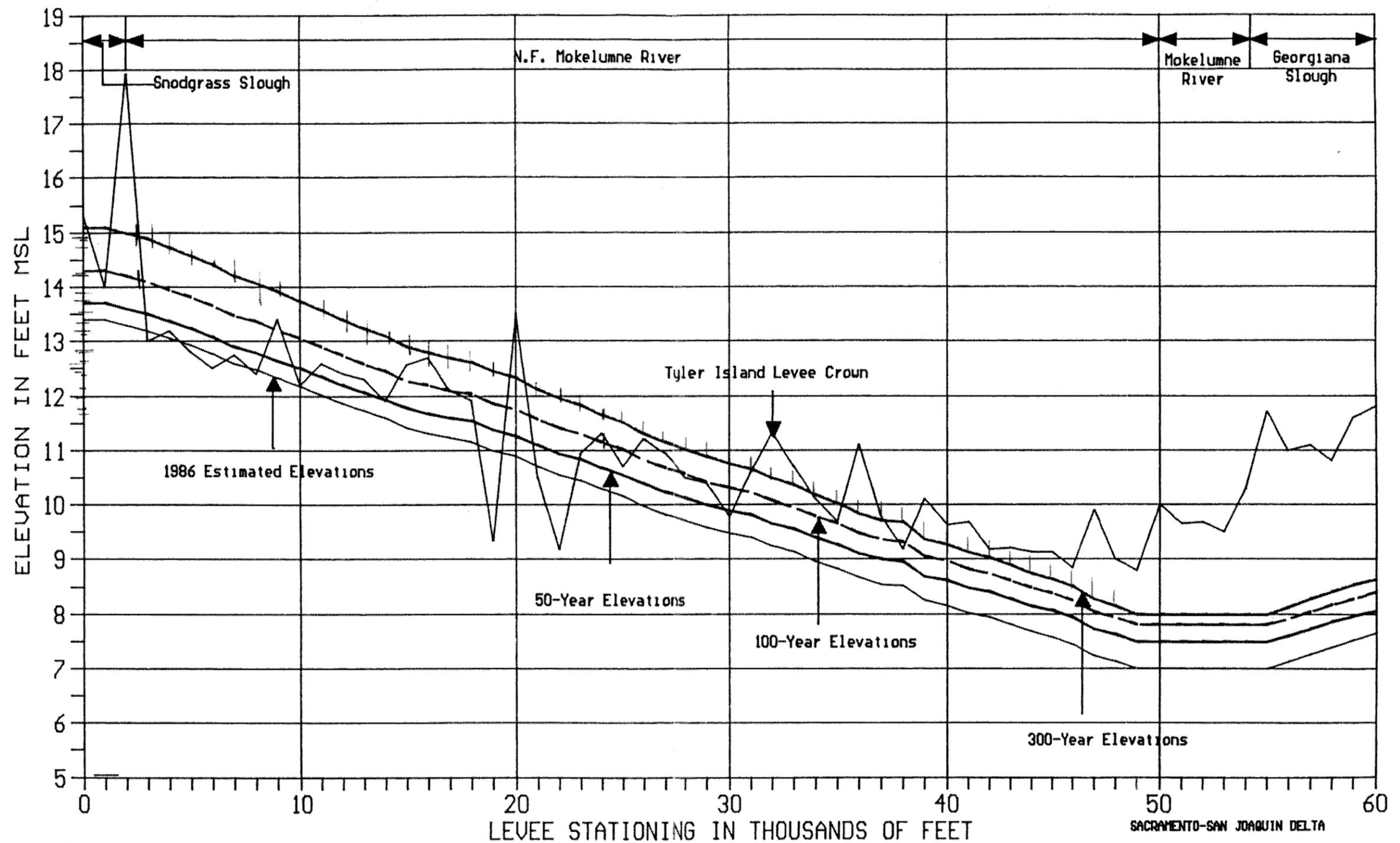
| Revisions | | | |
|-----------|-------------|------|----|
| No. | Description | Date | By |
| | | | |
| | | | |
| | | | |

Design: JAM
 Drawn: JAM
 Check: SKS

Scale:
 HOR: 1"=20'
 VER: 1"=20'

Original Drawing Scale:
 0 1/2" 1"

Date: JAN. 2006
 Sheet Number: 5 of 5
 Project File No.: 0675-0670



NOTE:
 The 50-, 100-, and 300-year water-surface elevation plots are not profiles; they are derived from frequency curves of recorded annual maximum stages at gaged locations. The stages result from storms of different origins which do not have the same frequency at all locations, and from tides of varying magnitudes that seldom reach their maximum stages concurrently with the peak flows. See explanation in text in section, "Maximum Water-Surface Elevations". The 1986 plot is a connection of highwater marks and gaged recordings and represents the maximum stages of that flood.

RECLAMATION DISTRICT 563

MAXIMUM WATER SURFACE ELEVATIONS
 TYLER ISLAND

CORPS OF ENGINEERS, SACRAMENTO CALIFORNIA
 FEBRUARY 1992

CHART 68 SHEET 1 OF 2