

OHIO DEPARTMENT OF TRANSPORTATION

FORT STEUBEN BRIDGE DEMOLITION PROJECT

DR. WASEEM KHALIFA, PH.D., P.E.
DISTRICT 11 BRIDGE ENGINEER

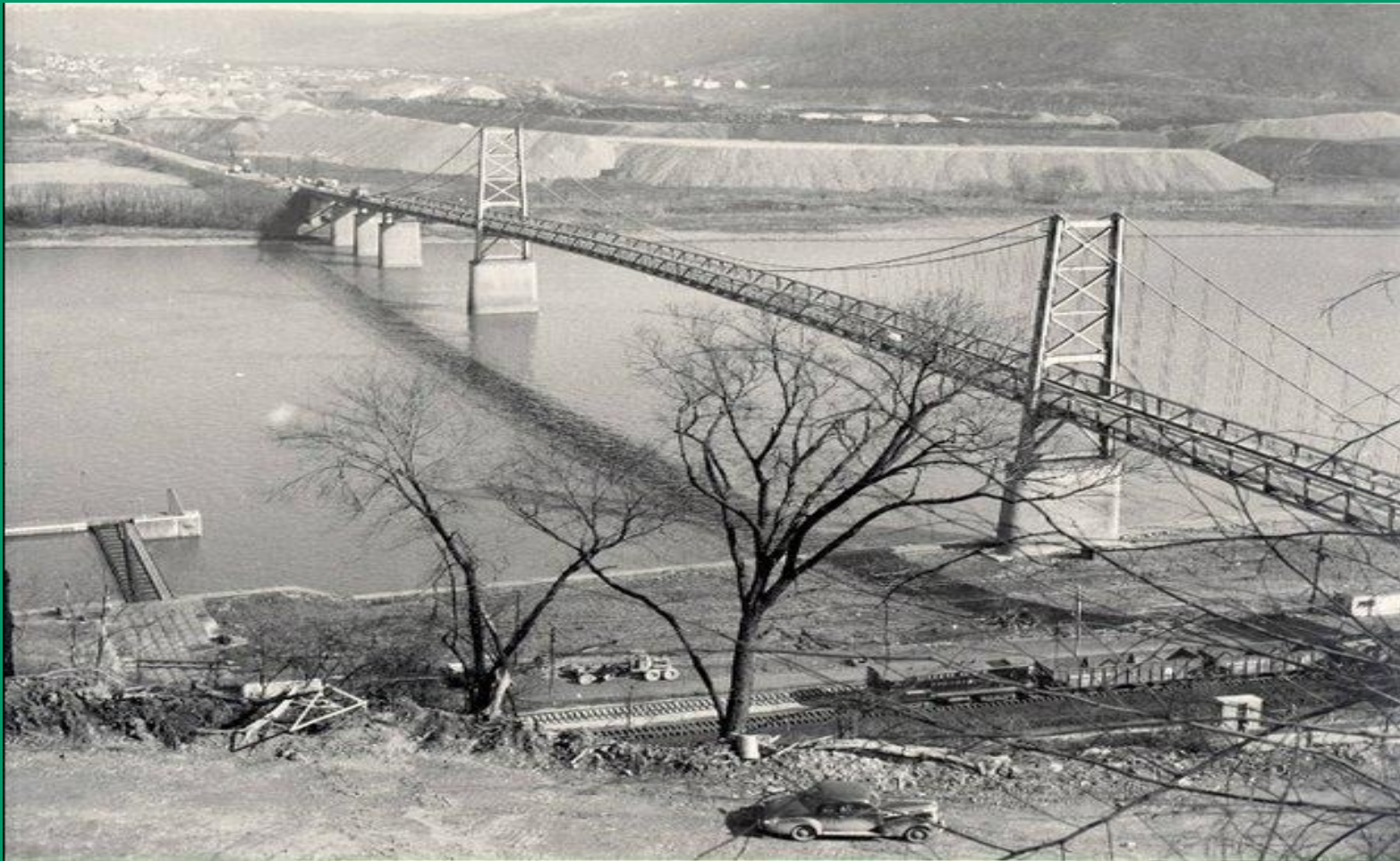


JOHN R. KASICH, GOVERNOR

JERRY WRAY, DIRECTOR

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FORT STEUBEN BRIDGE JEFFERSON COUNTY – 1928



FORT STEUBEN BRIDGE JEFFERSON COUNTY – 1928



FORT STEUBEN BRIDGE JEFFERSON COUNTY – 1928



FORT STEUBEN BRIDGE OPENED AS A TOLL BRIDGE IN 1928



FORT STEUBEN BRIDGE



FORT STEUBEN BRIDGE 2008



FORT STEUBEN BRIDGE REDUCED LOADS

- ❏ Structural Deficiencies led to Reduced Loads
- ❏ Loads were reduced further in 2005
- ❏ And again in 2008



FORT STEUBEN BRIDGE

BRIDGE CLOSED

- 🕒 Bridge was closed to all traffic in January 2009



FORT STEUBEN BRIDGE PLAN DEVELOPMENT



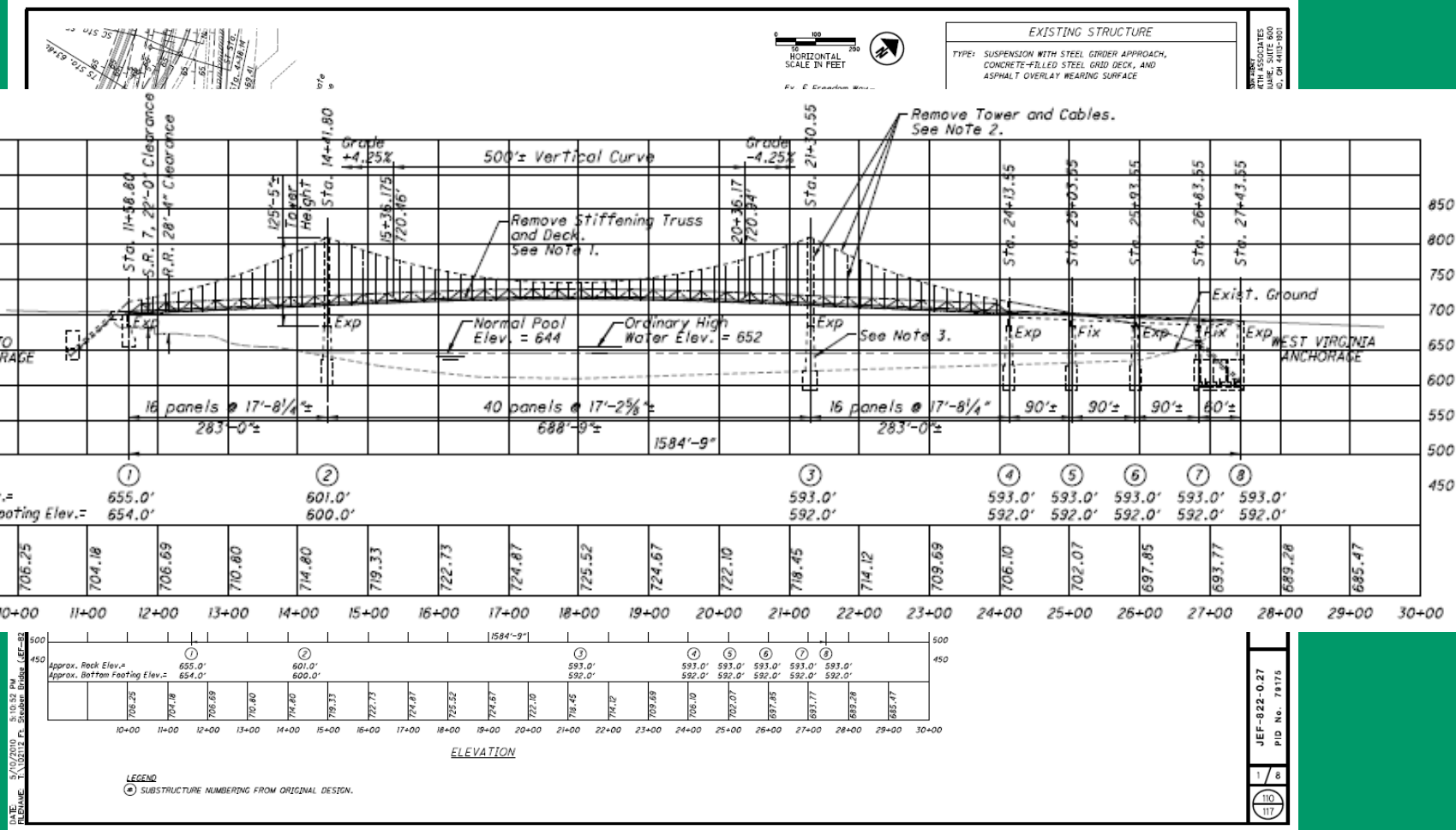
FORT STEUBEN BRIDGE PLAN DEVELOPMENT

- STAKE HOLDERS MEETINGS (1/29/08 & 2/20/08)
- CONTRACTOR MEETING (1/30/08)
- PUBLIC MEETING (3/19/08)
- Develop Demolition Plans
- Complete Environmental Documentation
- Coordination with West Virginia & City of Steubenville
- Railroad Coordination
- Public Involvement

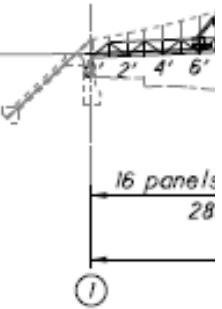
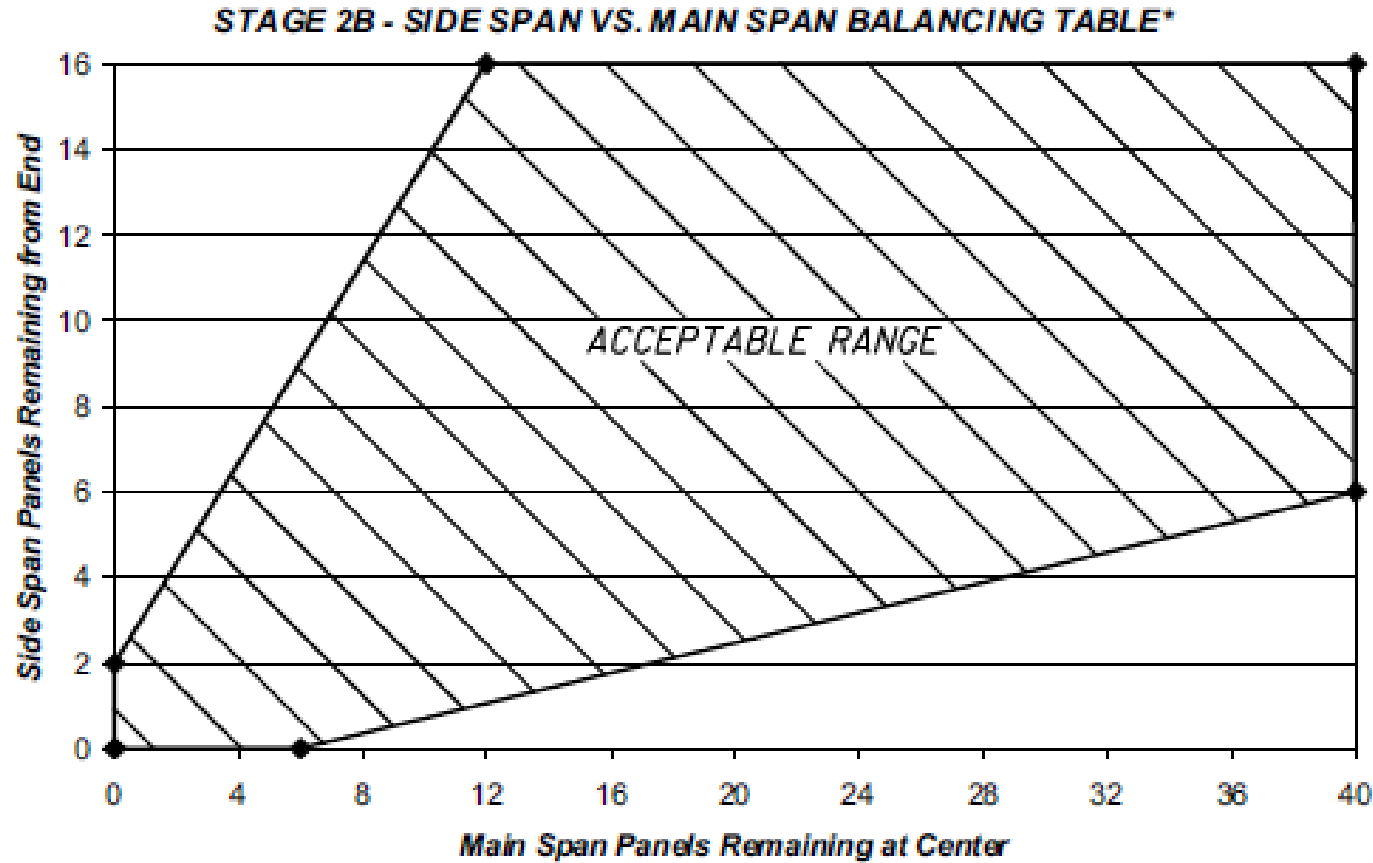
FORT STEUBEN BRIDGE PLAN DEVELOPMENT

- ❏ **IN-STREAM WORK RESTRICTION:**
 - ❏ **NO WORK SHALL TAKE PLACE BELOW THE ORDINARY HIGH WATER MARK OF THE OHIO RIVER FROM APRIL 15th TO JUNE 15th.**
 - ❏ **THE SIDEWALK CONCRETE, BRIDGE DECK PAVING, EXCESS STEEL MEMBERS AND SIMILAR MATERIALS SHALL BE REMOVED FROM EACH SPAN, PRIOR TO DROPPING THE SPAN INTO THE RIVER**
 - ❏ **IMMEDIATELY PRIOR TO THE DETONATION OF ANY UNDERWATER EXPLOSIVES, THE CONTRACTOR SHALL EXPLODE TWO OR THREE BLASTING CAPS TO FRIGHTEN FISH AWAY FROM THE DEMOLITION SITE**
 - ❏ **AFTER THE CHANNEL SPANS ARE DETONATED AND DROPPED INTO THE RIVER, THE CHANNEL SHALL BE PROMPTLY CLEARED AND SWEEPED WITHIN 24 HOURS.**

FORT STEUBEN BRIDGE PLAN & PROFILE



PROPOSED REMOVAL PLAN



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25
 CLEVELAND, OH 44110-9010

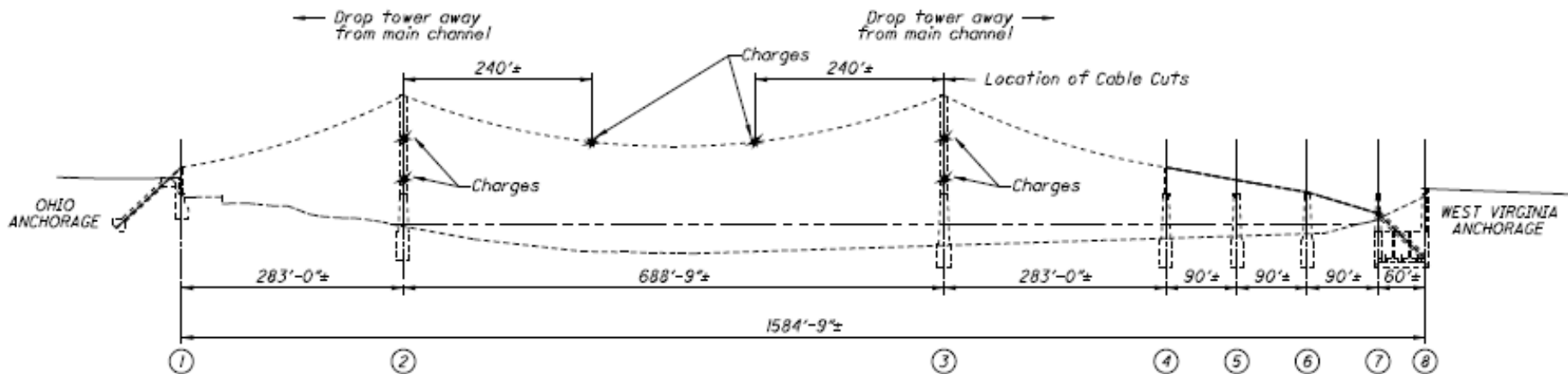


PID No. 78175

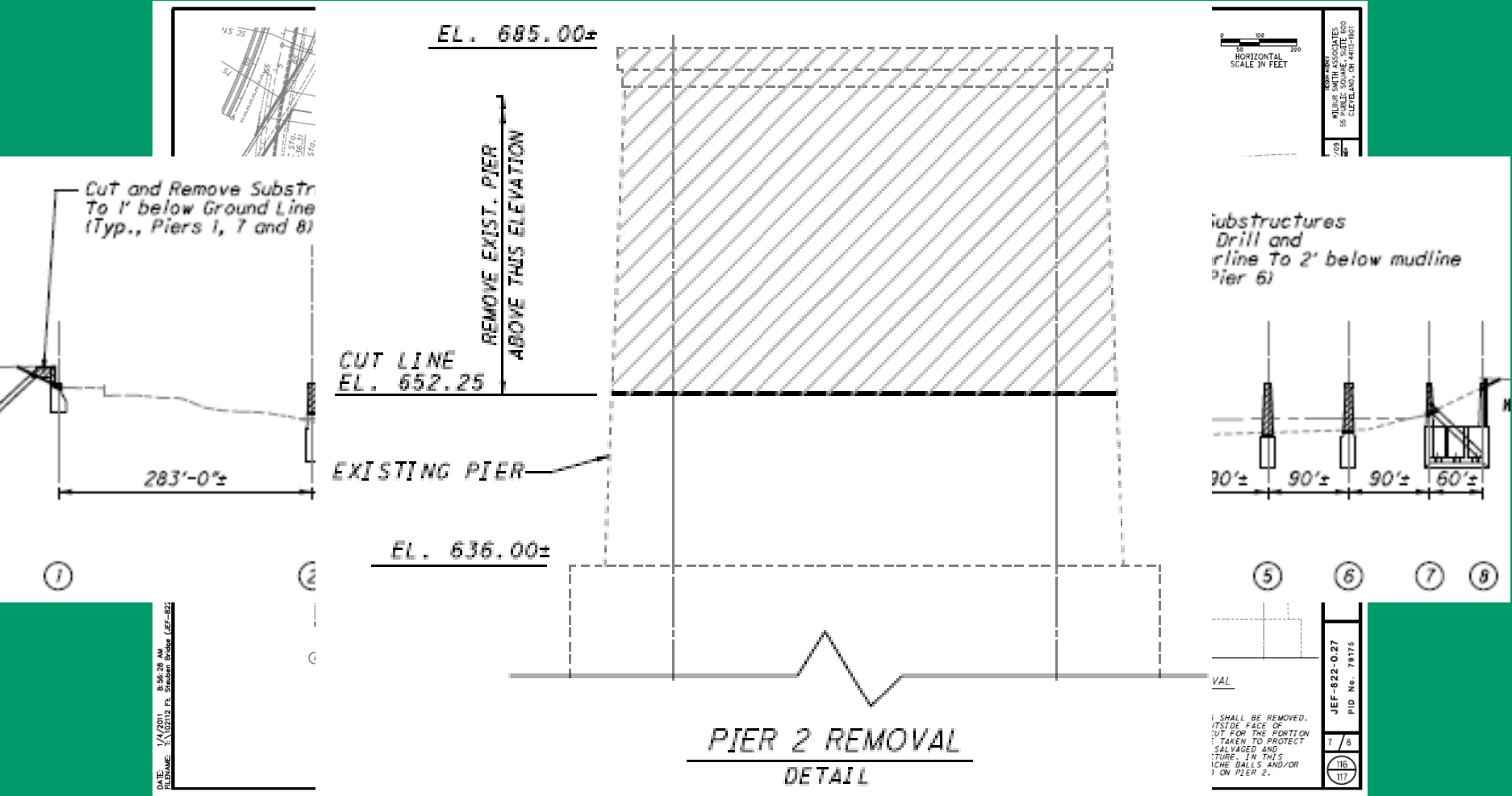


PROPOSED REMOVAL PLAN

STAGE 2C - REMOVE MAIN CABLE & TOWER



PROPOSED REMOVAL PLAN CONTINUED



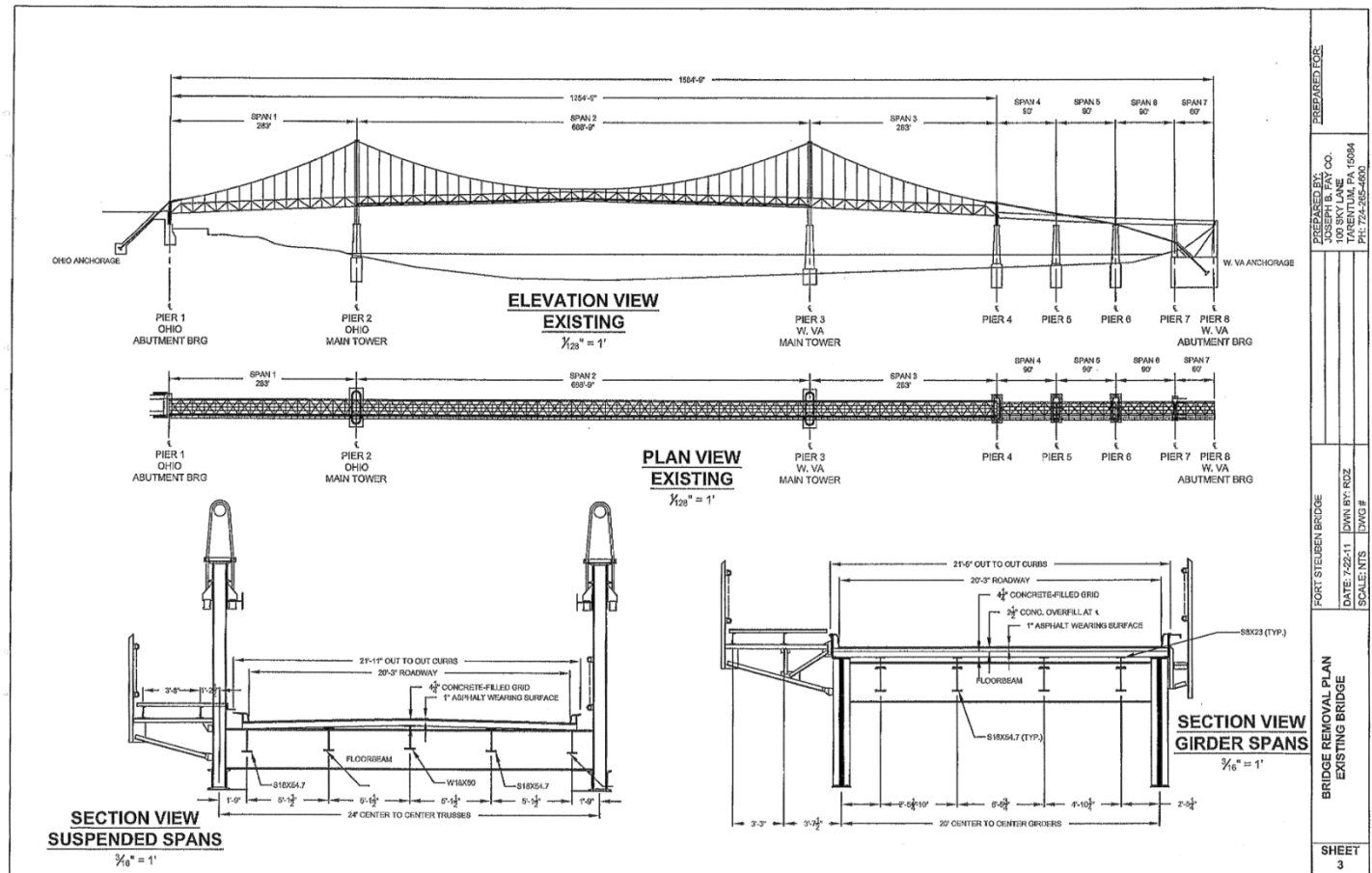
OBSERVATION DECK AT STEUBENVILLE MARINA



DEMOLITION CONTRACT

- 🕒 SUCCESSFUL BIDDER:
- 🕒 JOSEPH B. FAY COMPANY, FROM TARENTUM, PA
- 🕒 PROJECT COST: \$2,259,059

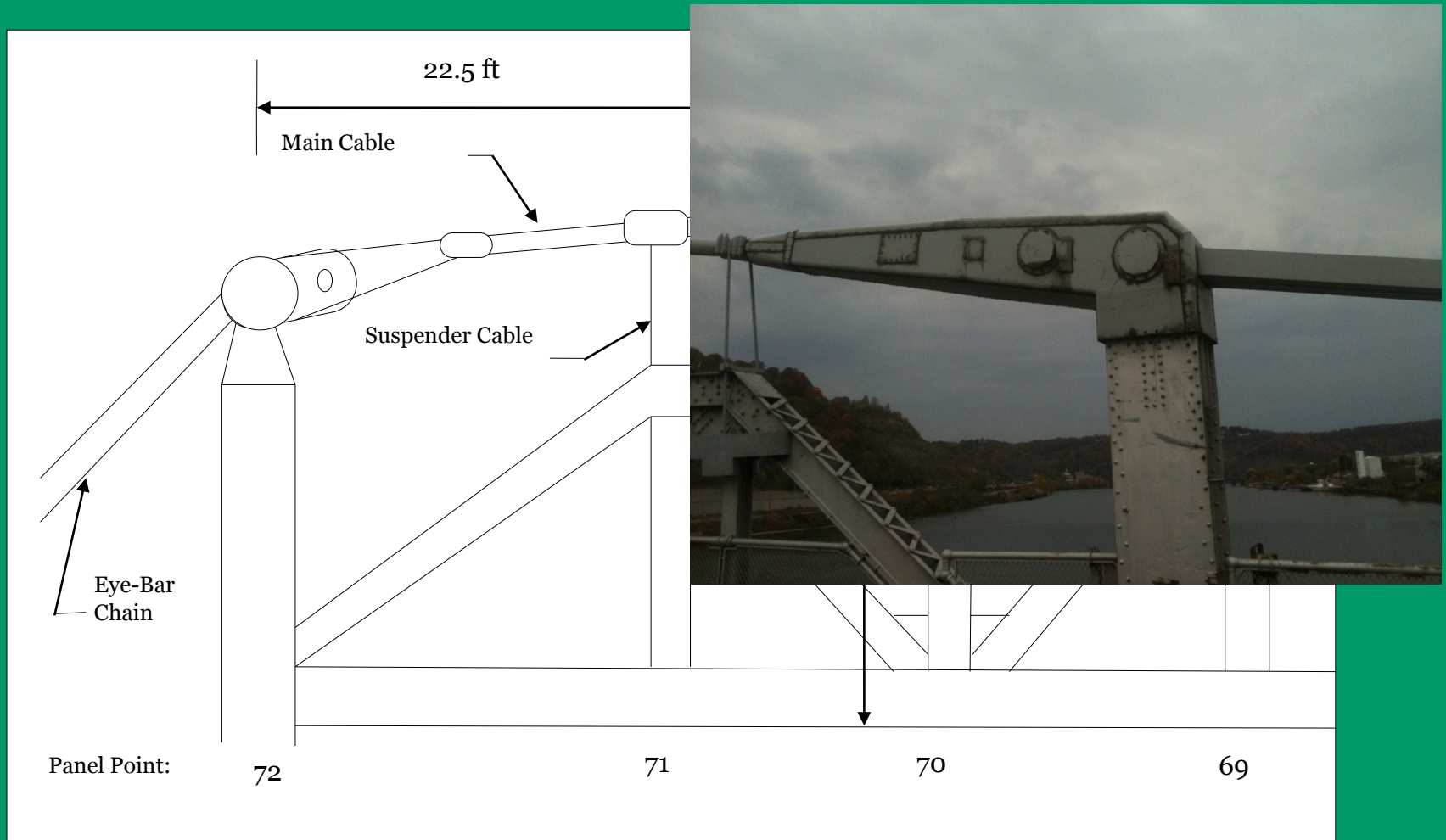
CONTRACTOR'S PROPOSED REMOVAL PLAN



NON-DESTRUCTIVE TESTING



NON-DESTRUCTIVE TESTING

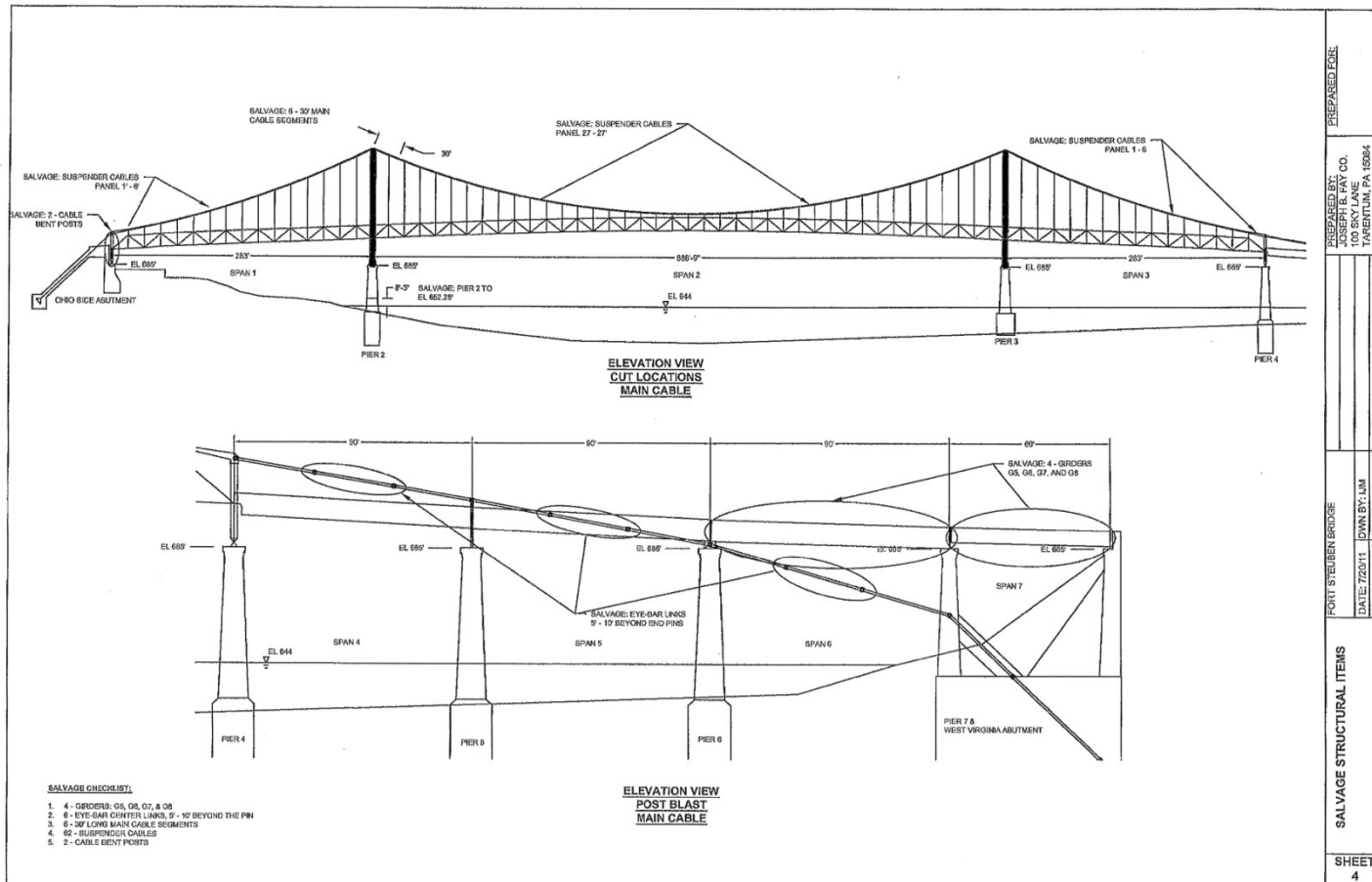


NON-DESTRUCTIVE TESTING



CONTRACTOR'S PROPOSED REMOVAL PLAN

STRUCTURAL ELEMENTS TO BE SALVAGED FOR RESEARCH



CONTRACTOR'S PROPOSED REMOVAL PLAN

PHASE 1 – DECK REMOVAL



CONTRACTOR'S PROPOSED REMOVAL PLAN

PHASE 1 – DECK REMOVAL

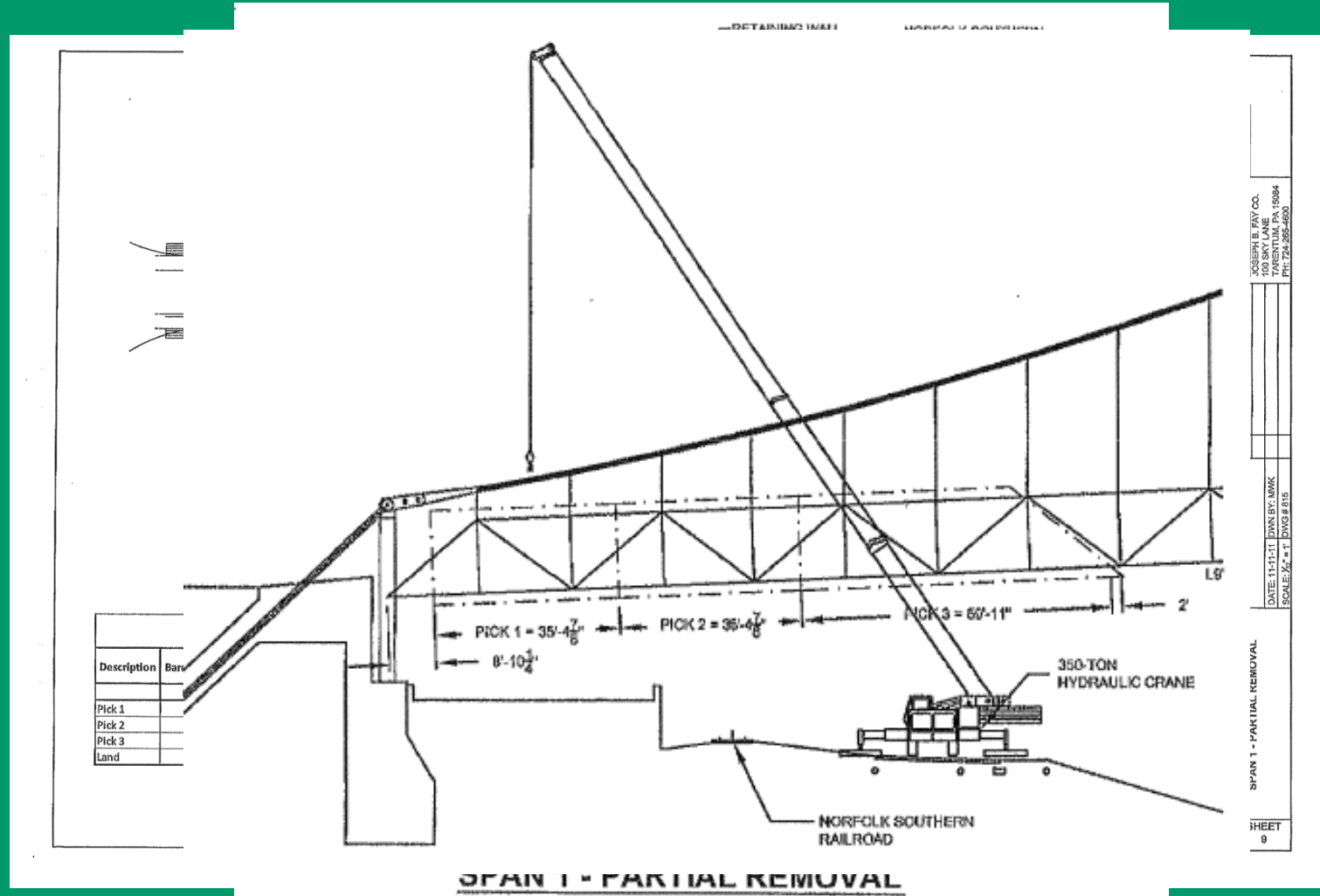


CONTRACTOR'S PROPOSED REMOVAL PLAN PHASE 1 – DECK REMOVAL



CONTRACTOR'S PROPOSED REMOVAL PLAN

PHASE 2 – TRUSS REMOVAL OVER RAILROAD



CONTRACTOR'S PROPOSED REMOVAL PLAN

PHASE 2 – TRUSS REMOVAL OVER RR (OHIO)



CONTRACTOR'S PROPOSED REMOVAL PLAN

PHASE 2 – TRUSS REMOVAL (WEST VIRGINIA)



CONTRACTOR'S PROPOSED REMOVAL PLAN

PHASE 2 – TRUSS REMOVAL (WEST VIRGINIA)



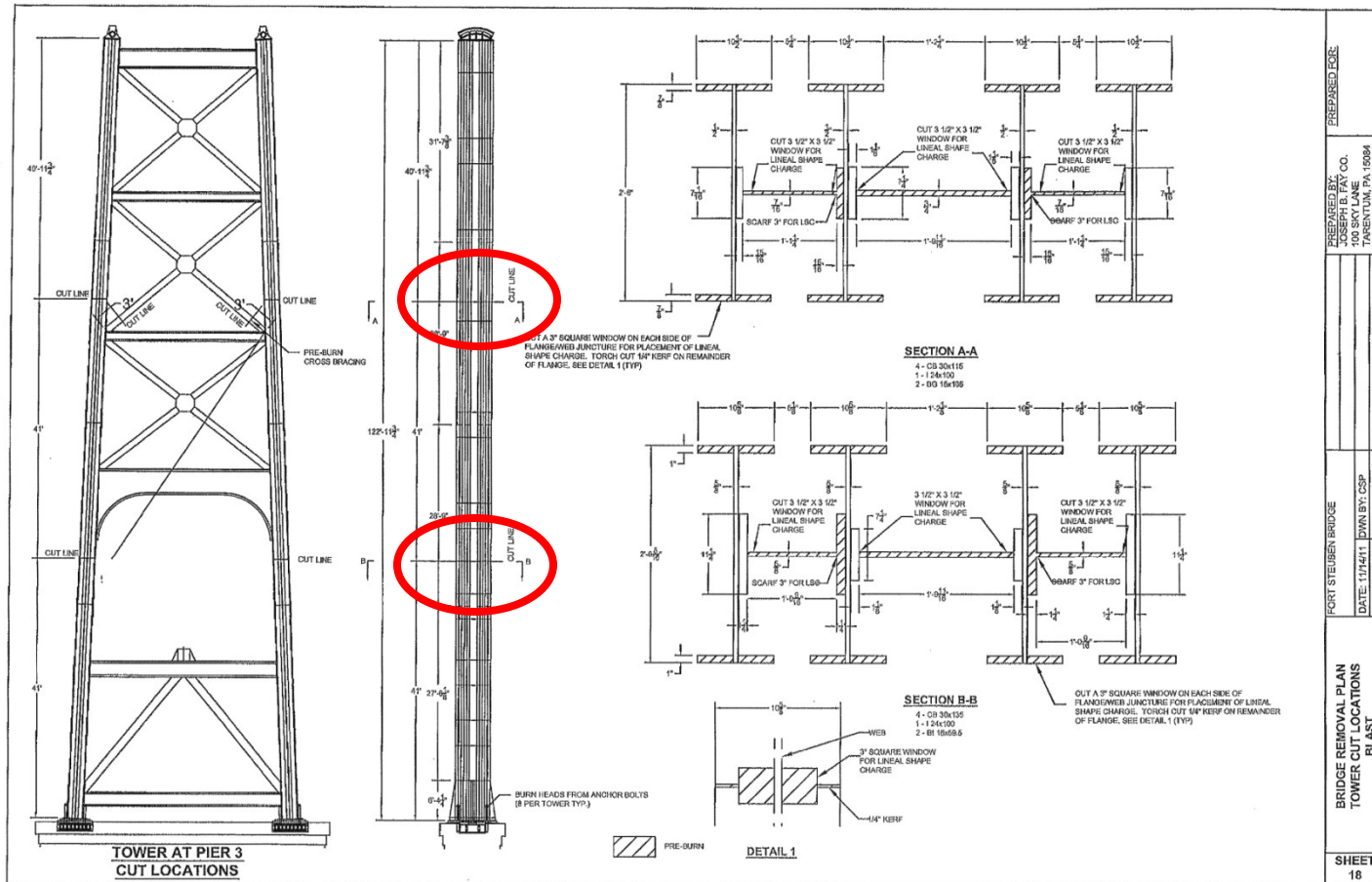
CONTRACTOR'S PROPOSED REMOVAL PLAN

PHASE 2 – DECK REMOVAL MAIN SPAN



CONTRACTOR'S PROPOSED REMOVAL PLAN

PHASE 3 – TOWER CUT LOCATIONS



CONTRACTOR'S PROPOSED REMOVAL PLAN

PHASE 3 – EXPLOSIVE PLACEMENT



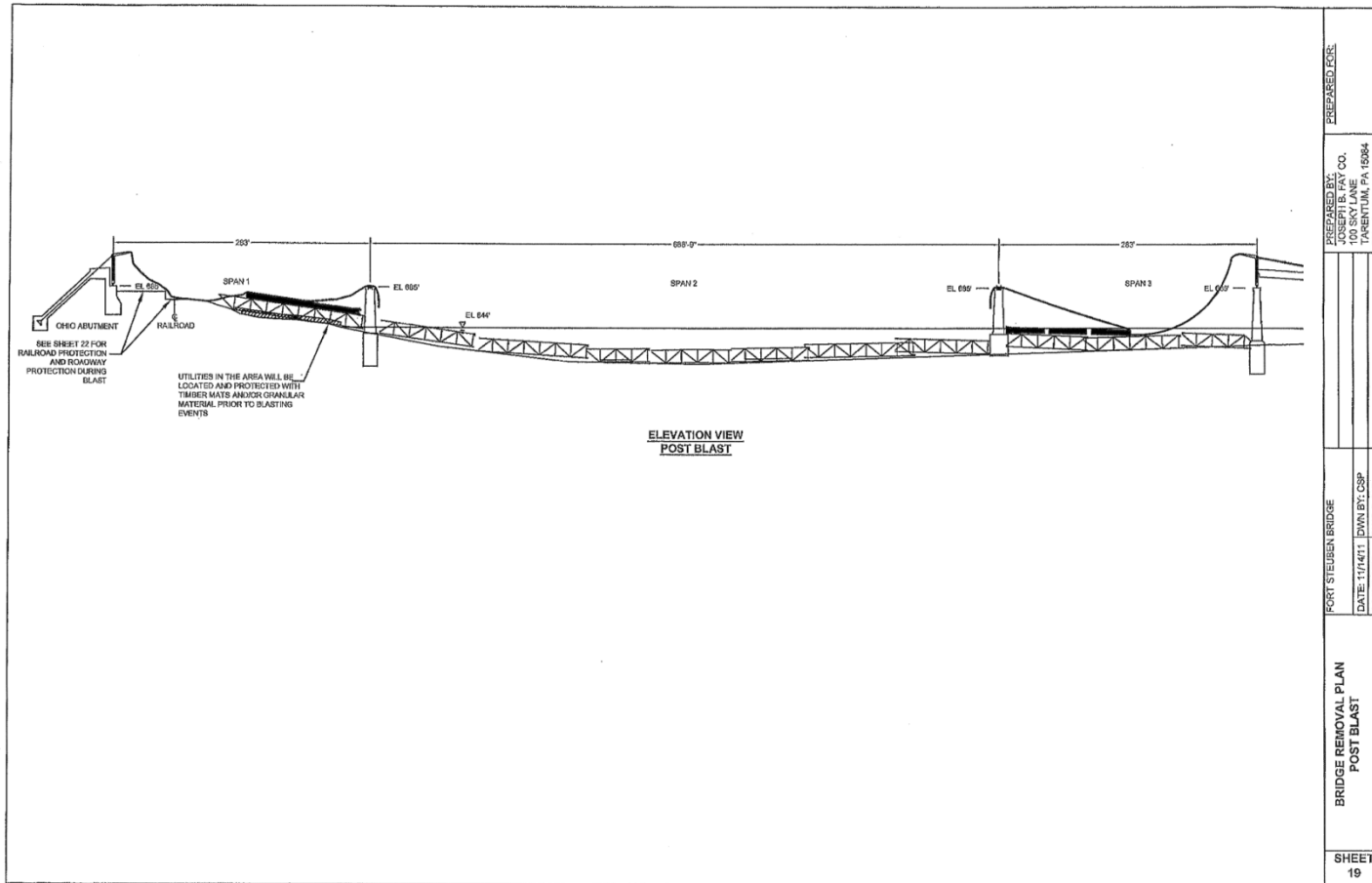
CONTRACTOR'S PROPOSED REMOVAL PLAN

PHASE 3 – CABLE PRE CUTTING



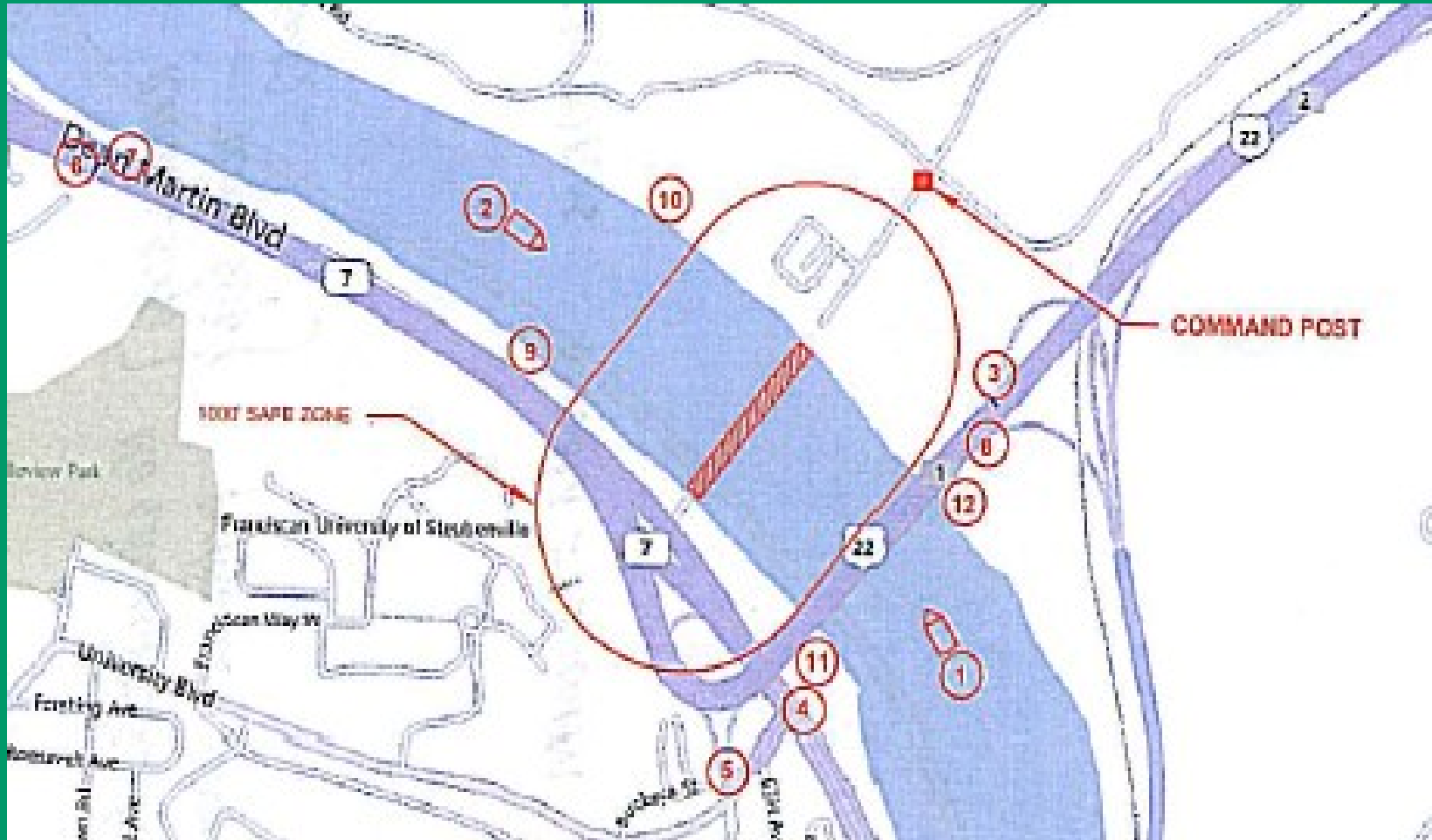
CONTRACTOR'S PROPOSED REMOVAL PLAN

PHASE 4 – Post Blast Condition



CONTRACTOR'S PROPOSED REMOVAL PLAN

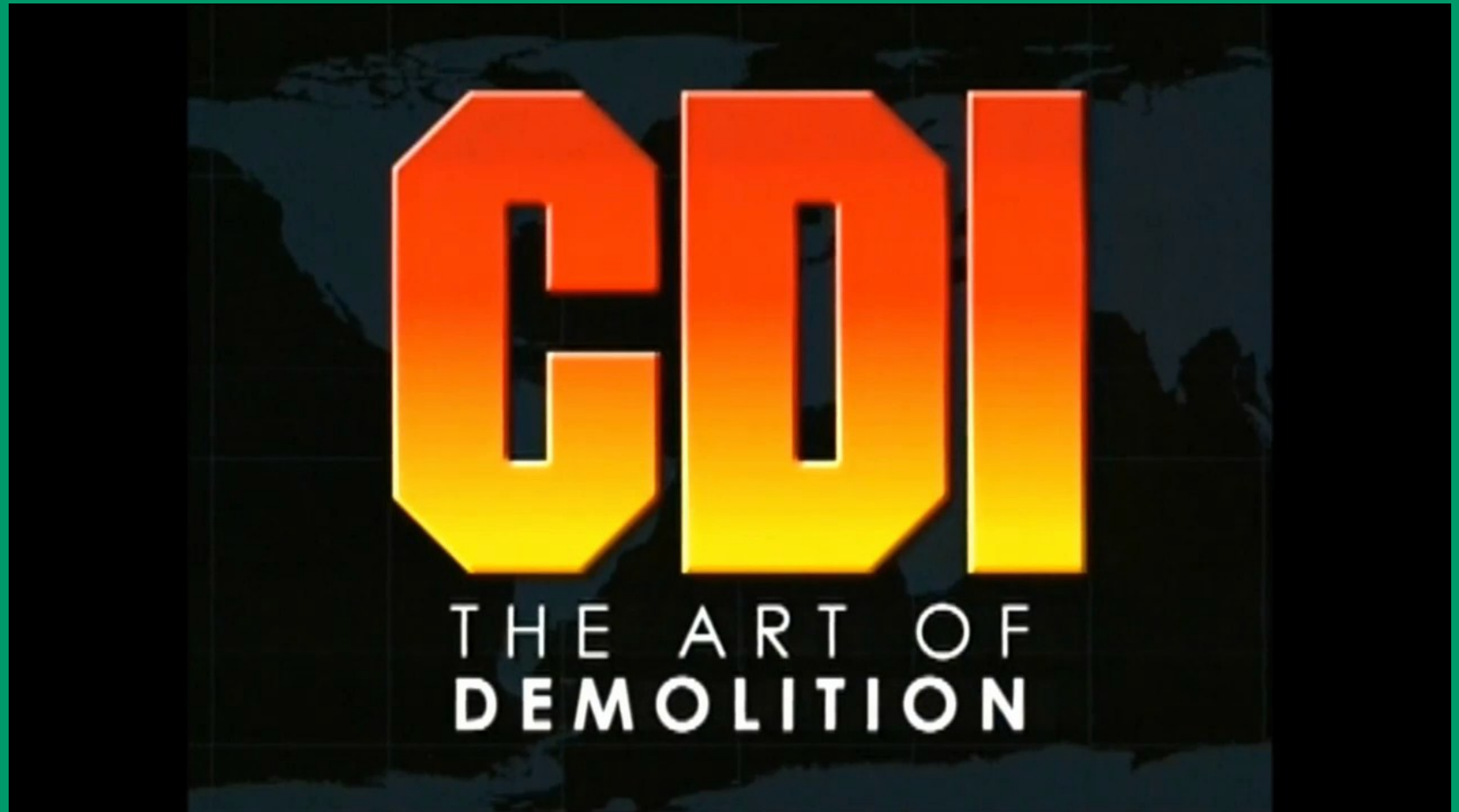
BLAST ZONE CONTROL PLAN



BLASTING OPERATION



CONTROLLED DEMOLITION, INC.



CONTRACTOR'S PROPOSED REMOVAL PLAN

PHASE 4 – Post BLAST



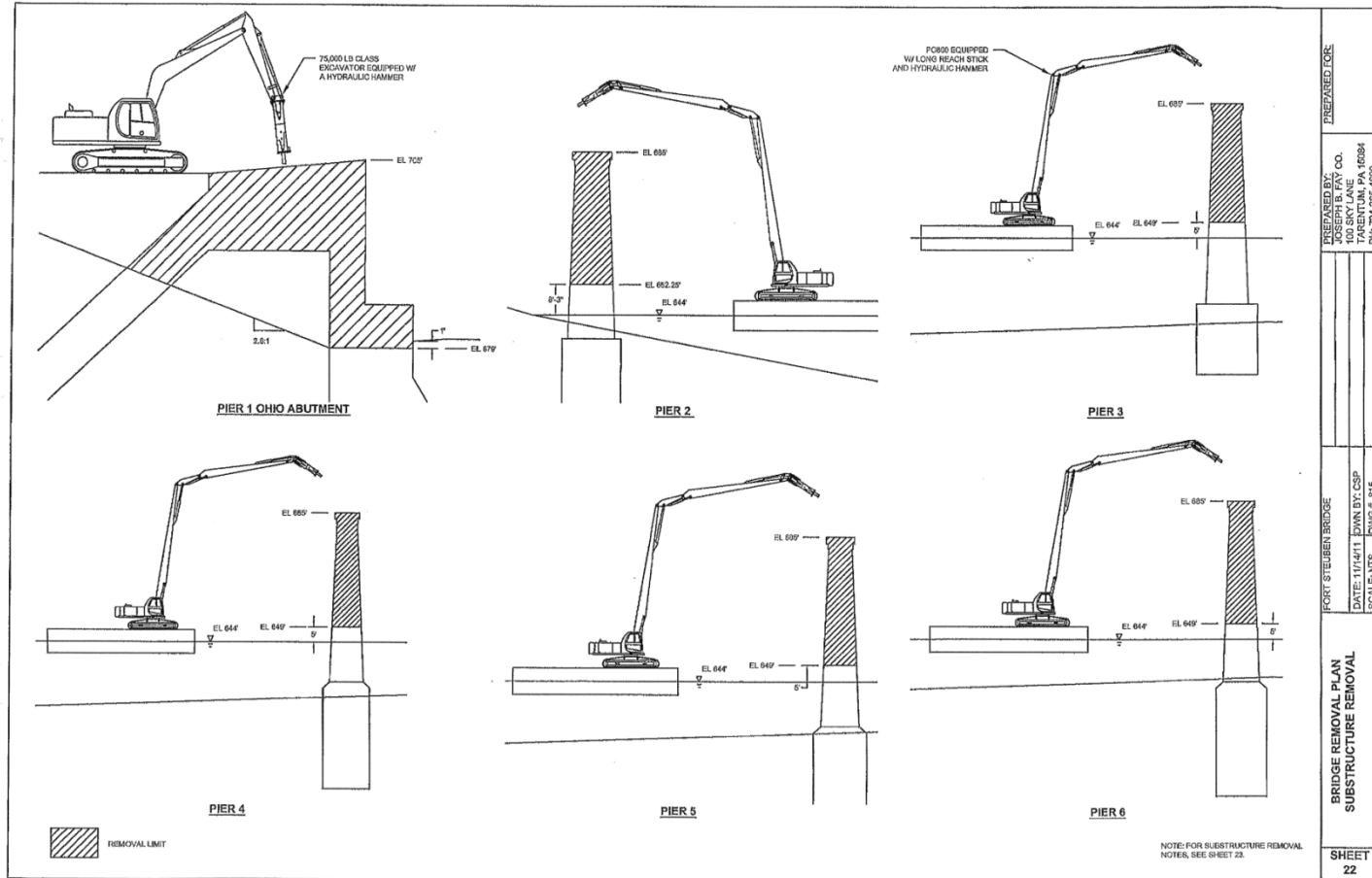
CONTRACTOR'S PROPOSED REMOVAL PLAN

PHASE 4 – POST BLAST



CONTRACTOR'S PROPOSED REMOVAL PLAN

PHASE 5 – SUBSTRUCTURE REMOVAL

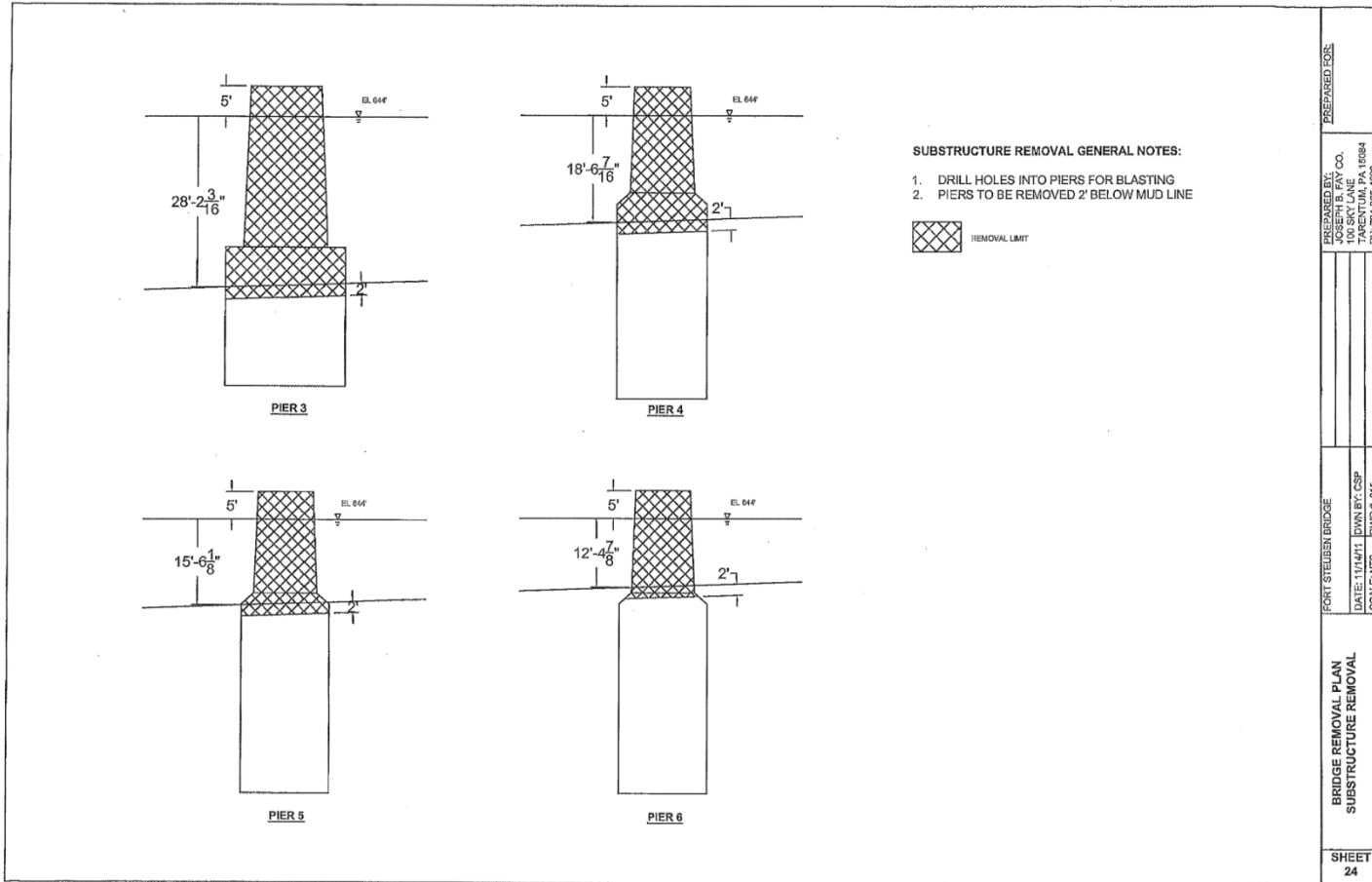


PREPARED FOR:	
PREPARED BY:	CONTRACTOR'S PROPOSED REMOVAL PLAN
103 SKY LANE	BRIDGE REMOVAL PLAN
TARENTUM, PA 16884	SUBSTRUCTURE REMOVAL
PH: 724-395-4800	
PORT STEUBEN BRIDGE	
DATE: 11/14/11	DATE: 11/14/11
SCALE: NTS	SCALE: NTS
DWG # 815	DWG # 815
SHEET 22	



CONTRACTOR'S PROPOSED REMOVAL PLAN

PHASE 5 – SUBSTRUCTURE REMOVAL



CONTRACTOR'S PROPOSED REMOVAL PLAN

PHASE 5 – SUBSTRUCTURE REMOVAL



OBSERVATION DECK STEUBENVILLE MARINA



CURRENT LANDSCAPE



WEST VIRGINIA



OHIO DEPARTMENT OF TRANSPORTATION

FORT STEUBEN BRIDGE DEMOLITION PROJECT

QUESTIONS?



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