



## Hunt Highway



CELESTE PEMBERTON, CFM, CPM | PINAL COUNTY
CARLOS SANCHEZ SORIA, PE | T.Y. LIN INTERNATIONAL



#### Agenda

- Design Concept Report
- Phase 1
- Phase 2
- Phase 3
- Phase 4
- Phase 5
- Questions



#### Design Concept Report

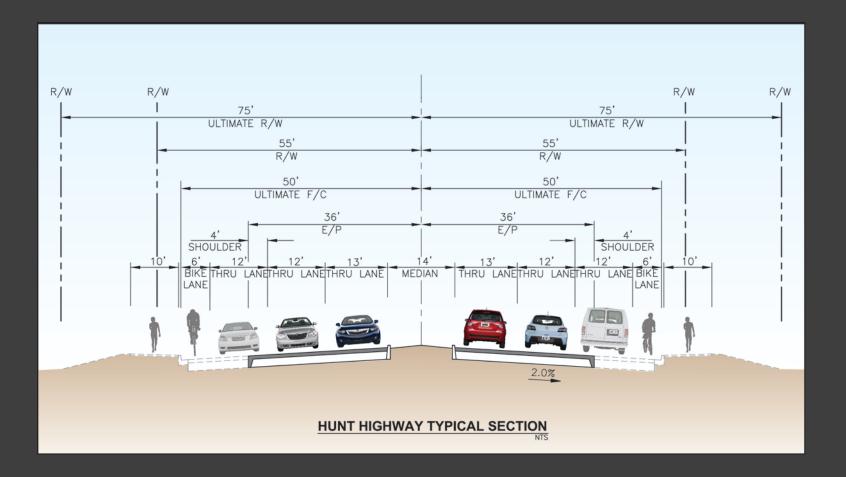
- 12.8 miles along Hunt Highway (Empire Blvd to Franklin Road)
- Explosive Growth 2003-2008
  - 5 Major Master Planned
     Communities
- Existing 2-lane facility, some areas of new development widened to 5-lanes
- 20,000+ on average vehicles per day
- Hunt Hwy is Pinal County's #1
   Transportation Priority





#### Design Concept Report

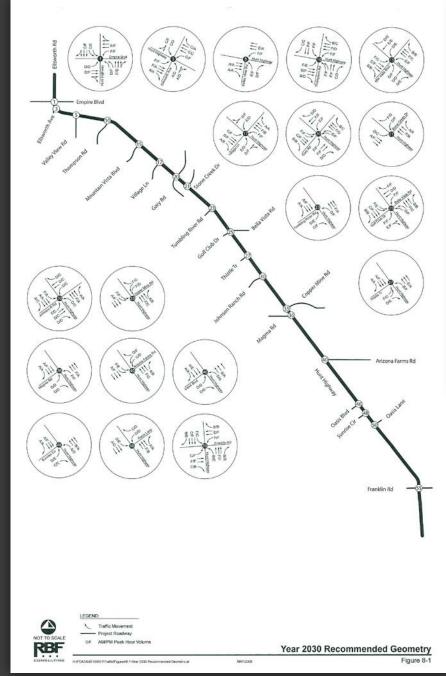
- 7-lane Ultimate Section
- 5-lane Interim Section





#### Design Concept Report (Traffic)

- Intersections
- Existing & Projected Volumes



		Drolost	ed 2020	Calar	data d			
Intersection	Movement	Projected 2030 Volume		Calculated Storage Length		Recommendations		
		AM Peak Hour	PM Peak Hour	AM Peak Hour		Number of Lanes	Storage Length (ft)	Comments
Hunt Highway/ Gary Rd	EB Left	510	384	225	175	2	250	Dual left-turns are recommended.
	WB Left	234	116	100	50	2	200	Dual left-turns are recommended.
	NB Left	294	146	250	125	1	250	
	SB Left	64	277	50	250	1	250	
Hunt Highway/	EB Left	40	117	50	100	1	160	
Stone Creek Dr	SB Left	29	200	25	175	1	175	
Hunt Highway/ Tumbling River Rd	WB Left	105	109	100	100	1	160	
	NB Left	189	140	175	125	1	160	
Hunt Highway/ Golf Club Dr	EB Left	237	297	100	125	2	250	Dual left-turns are recommended.
	WB Left	368	265	175	125	2	250	Dual left-turns are recommended.
	NB Left	241	74	200	75	1	200	
	SB Left	200	305	175	250	1	250	
	WB Left	80	56	75	50	1	160	
Hunt Highway/ Thistle Dr	NB Left	470	158	200	75	2	250	Dual left-turns are recommended.
	EB Left	54	0	50	0	1	160	
Hunt Highway/	WB Left	140	59	125	75	1	160	150
Johnson Ranch Rd	NB Left	298	161	250	150	1	250	
	SB Left	62	57	50	50	1	160	
Hunt Highway/ Copper Mine Rd	EB Left	214	614	100	250	2	250	Dual left-turns are recommended.
	SB Left	374	306	175	150	2	250	Dual left-turns are recommended.

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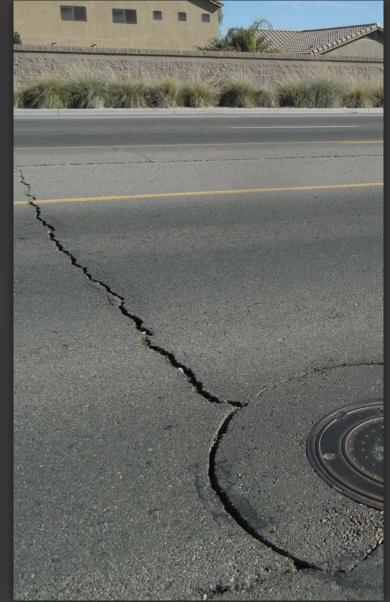


#### Design Concept Report (Pavement)

Existing Conditions









#### Design Concept Report (Drainage)

- Preliminary Analysis
- Size and Locations for Culvert Crossings



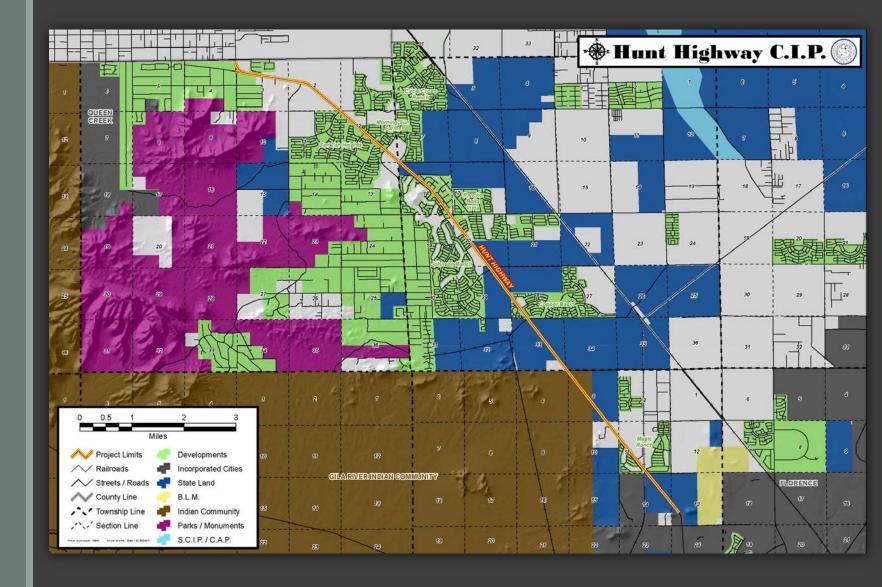
Table 9-6: Drainage Structures along Hunt Highway							
Location	Culvert No.	Quantity	Size	Type	New/Extension		
Sta 217+00	15	4	36"	Pipe	New		
Sta 237+50	14	2-Barrel	8' by 4'	Box Culvert	New		
Sta 271+50	-	3-Barrel	8' by 3'	Box Culvert	Extension		
Sta 304+50	-	3-Barrel	10' by 3'	Box Culvert	Extension		
Sta 324+50	-	1	36"	Pipe	Extension		
Sta 352+00	-	6-Barrel	8' by 4'	Box Culvert	Extension		
Sta 380+50	-	2-Barrel	8' by 4'	Box Culvert	Extension		
Sta 422+50	-	1	54"	Pipe	Extension		
Sta 477+50	13	3-Barrel	8' by 4'	Box Culvert	New		
Sta 512+00	12	3-Barrel	8' by 4'	Box Culvert	New		
Sta 533+00	-	1	54"	Pipe	Extension		
Sta 544+50	11	6-Barrel	8' by 4'	Box Culvert	New		
Sta 565+00	10	3-Barrel	8' by 4'	Box Culvert	New		
Sta 573+50	9	3-Barrel	8' by 4'	Box Culvert	New		
Sta 597+50	8	3-Barrel	8' by 4'	Box Culvert	New		
Sta 636+00	7	1-Barrel	8' by 4'	Box Culvert	New		
Sta 653+50	6	2	36"	Pipe	New		
Sta 659+50	5	3	36"	Pipe	New		
Sta 662+00	4	1-Barrel	10' by 4'	Box Culvert	New		
Sta 732+00	3	3-Barrel	8' by 4'	Box Culvert	New		
Sta 748+50	2	3-Barrel	8' by 4'	Box Culvert	New		
Sta 774+50	1	1-Barrel	8' by 4'	Box Culvert	New		





#### Design Concept Report (Right-of-Way)

- Private
- Arizona State Land Department
- United States Bureau of Reclamation





#### Design Concept Report (Utilities)

- Power (SRP Transmission and Distribution, WAPA)
- Johnson Utilities (Water, Sewer, Reclaimed Water)
- Telecommunication (Cox, Century Link and Mediacom)
- City of Mesa Gas
- New Magma Irrigation and Drainage District













#### Design Concept Report (Phasing)

- 6 Phases
- Construction Cost of \$68M (Interim 5-lane section)

Table ES-1: Hunt Highway Widening Programmed Phasing and Construction Costs

Phase No.	Limits of Phase	Interim Construction Cost	Ultimate Construction Cost	
1	Empire Boulevard to 1,200' East of Thompson Road	\$13.4 Million (Phase 1 CIP Engineer's Estimate)	\$4,491,043	
2	1,200' East of Thompson Road to Gary Road	\$4,142,646	\$7,828,144	
3	Gary Road to Bella Vista Road / Golf Club Drive	\$8,583,569	\$6,509,163	
4	Bella Vista Road / Golf Club Drive to East Magma Road	\$11,496,270	\$7,911,642	
5	East Magma Road to West of Union Pacific Railroad Crossing	\$21,061,195	\$9,782,070	
6	West of Union Pacific Railroad Crossing to Franklin Road	\$9,828,228	\$3,578,942	
	PROJECT TOTALS:	\$68,511,908	\$40,101,004	





### Hunt Highway Phase 1 Empire Boulevard to Thompson Road





- Budget & Funding Source
  - \$7.5 Million
  - Federal Funds
- Project Status
  - Construction Completed on August 2014





- Scope of Work
  - 5-lane, 2 Through, Median, 4.5' Paved Shoulders
  - Drainage Channel Design (Sonoqui Wash)
  - Traffic Signal at Thompson Road





- Project Challenges
  - Right-of-Way
    - 36 Properties
    - 13 Acres of Right-of-Way Acquisition
    - 8.5 Acres of Drainage Easements
    - Meetings with Each Property Owner





- Project Challenges
  - Drainage
    - Regional Drainage Solution Balancing:
      - Proposed Commercial and Residential Development
      - Existing Drainage Conditions
    - Empire Blvd Box Culvert
      - Prone to heavy sediment deposits
      - Downstream Sonoqui Wash not well defined during design







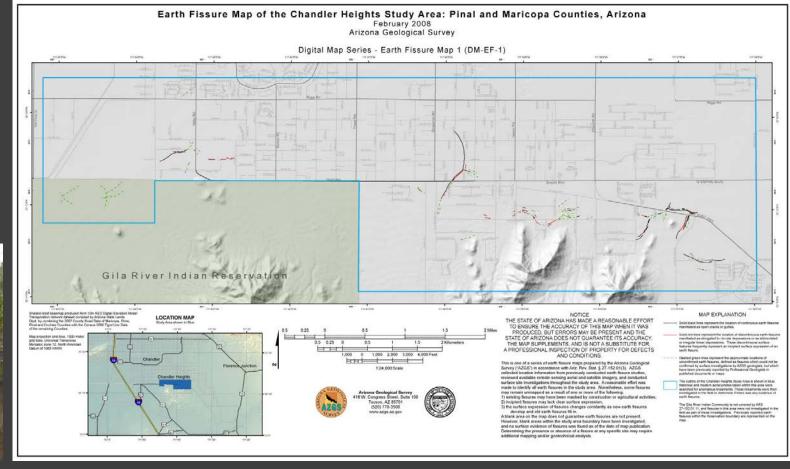




- Project Challenges
  - Earth Fissures
    - Mapping
    - Mitigation

















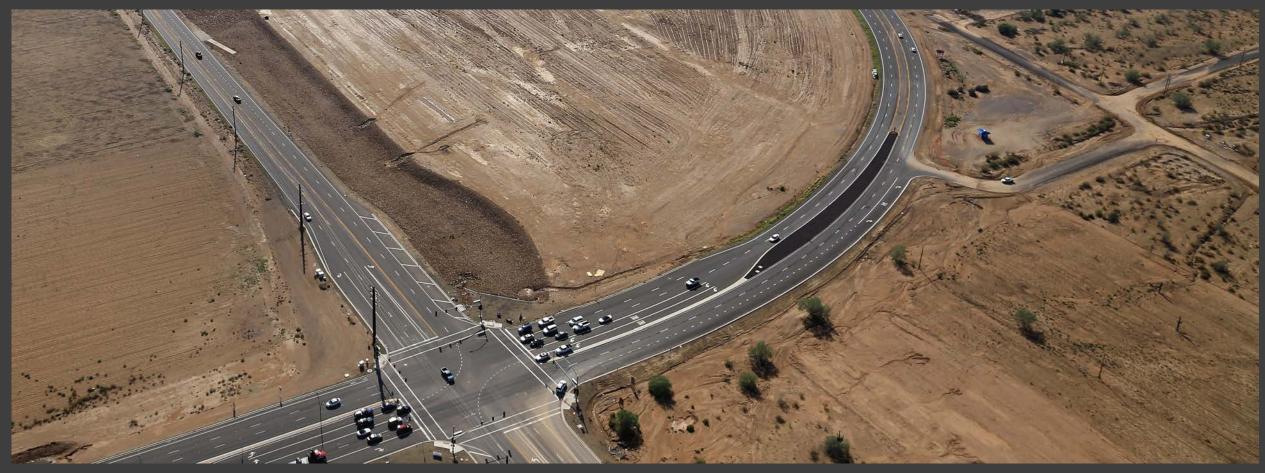






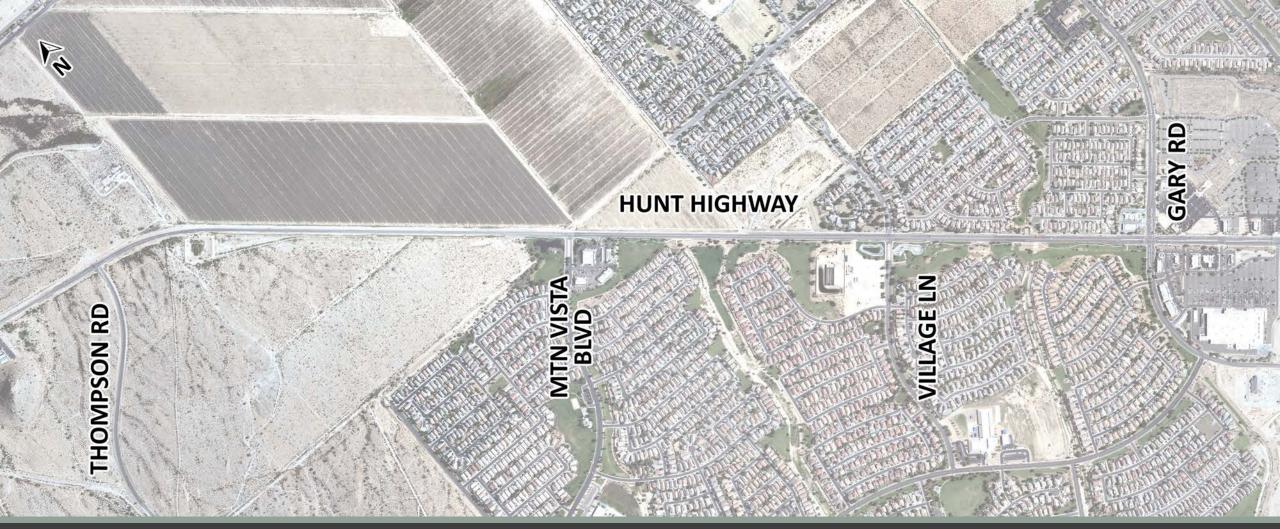














Hunt Highway Phase 2
Thompson Road to Gary Road



- Budget & Funding Source
  - \$5.5 Million
  - Transportation Excise Fund(half cent gas tax)
- Project Status
  - Construction Substantial Completion -September 2015
- Project Schedule
  - Design (18 months)
  - Bid Advertisement August 2014
  - Construction NTP December 2014 (9 months)



#### **HUNT HIGHWAY PHASE 2**

Fact Sheet

Project No:	6621166	PATTING SAL		
Project Location:	Thompson Road to Gary Road			
Project Length:	Project Length: 1.92 Miles		Caracasta A	
Proposed Improvements:	4 Lanes with paint median,	N. Wall		-
	tight turn Lanes at Mt Vista Blvd			
	& Village Lane, traffic signal at	-	<b>"多篇篇题</b> "	
	Village Lane, 2 box culverts,			
	improve Gary Rd intersection.			AND THE RESIDENCE OF THE PERSON OF THE PERSO
Funding Commitment:	\$5,500,000	The state of	CONTRACTOR OF THE	
		SA BURNE		
Status:	Under Construction - Substantial	KON SCHOOL	Markets III	THE PARTY OF THE P
	Completion			
Acquisitions:	Parcel	Type		Status
	509-02-026-0	DE / TCE		Complete
	509-02-063-0	TCE		Complete
	509-03-003-R	ROW		Complete
	509-02-027-0	ROW / DE		Complete
	509-94-520-C	TCE	22	Complete
	509-02-926-0	TCE / DE / RO ROW / TCE / F		Complete
	509-02-001-P	Complete		
	509-02-214-A	DE		Complete
	509-02-062-C	TCE		Complete
Utilities:	Owner	Conflicts	Resolved	Status
	Century Link	Yes	Yes	Relocated
	City of Mesa Gas	No	Yes	Relocated
	Cox Communications	Yes	Yes	Relocated
	Johnson Utilities	Yes	Yes	Relocated
	NMIDD	Yes	Yes	Approved
	Mediacom	Yes	Yes	Relocated
	SRP Distribution	No		
	SRP Transmission	No		
	SRP Line Asset Management	No		
Construction Cost (Est.):	\$4,965,000			
				Construction
Project Schedule:	60% 5/10/13	- 1	Final 5/25/14	NTP 12/1/14
rioject schedule.				
	3096 1009			lvertisement
	2/1/13 11/7/	13		1/20/14

September 2015



- Scope of Work
  - 5-lane Section
    - Widening
    - Mill & Overlay

- Two box Culvert Drainage Crossings
- New Traffic Signal at Village Lane
- Dedicated Right Turn Lanes









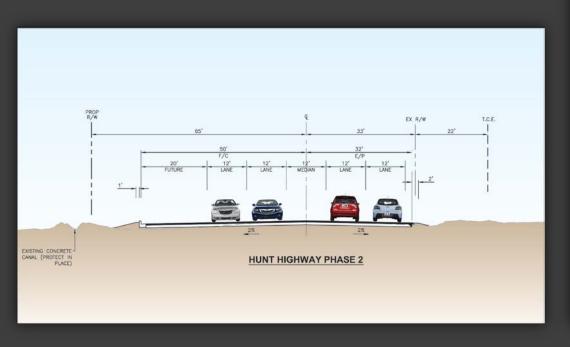
- Innovation
  - TriAx reinforced pavement section
    - Reduced AC and ABC
    - \$180k+ Savings
    - Higher Performance







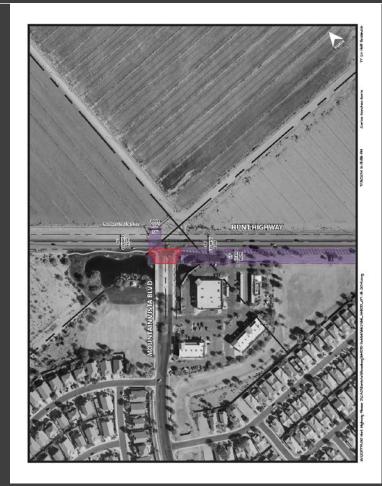
- Project Challenges
  - Coordination with Proposed Development

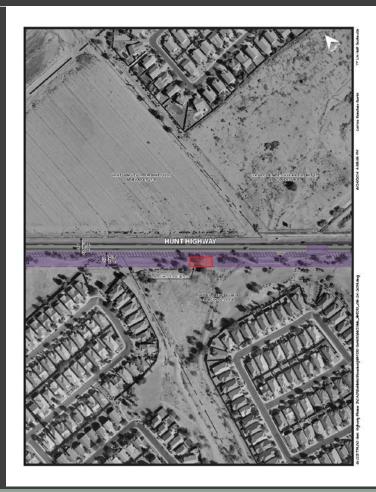






- Project Challenges
  - Bureau of Reclamation
  - Utility Crossing









Hunt Highway Phase 3



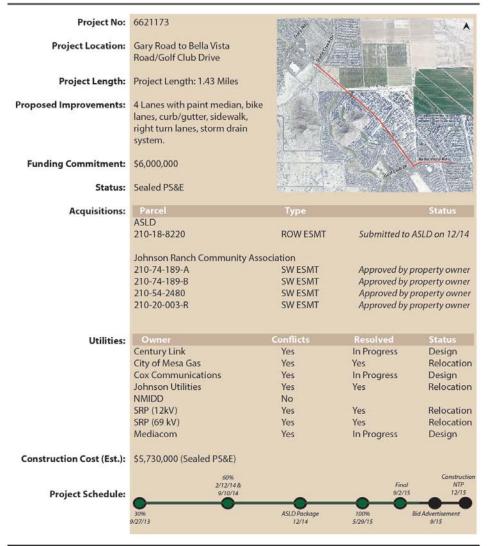


- Budget & Funding Source
  - \$6 Million
  - Bond
- Project Status
  - Design Finalized August 2015
  - Bid Advertisement October 2015



#### **HUNT HIGHWAY PHASE 3**

Fact Sheet



September 2015

1 of 2



- Scope of Work
  - 5-lane section
    - Widening
    - Mill & Overlay

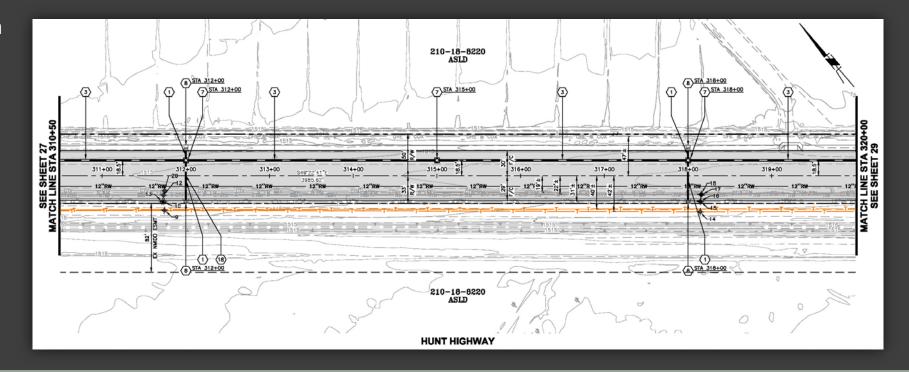
- Bicycle and Pedestrian Facilities
- Storm Drain System (on-sites)
- Dedicated right turn lanes







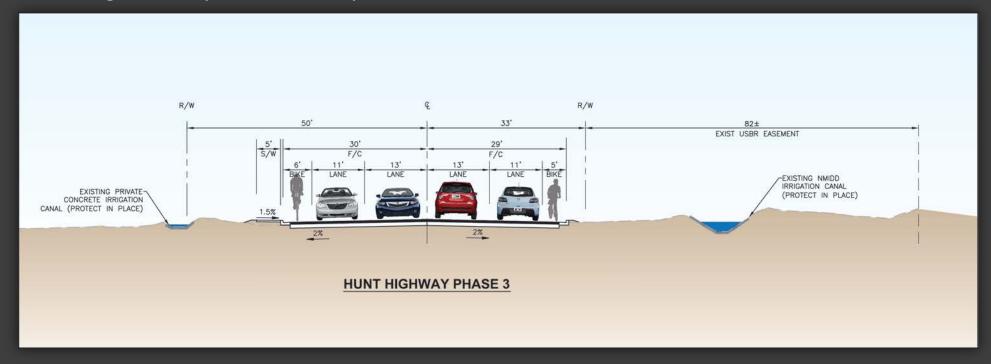
- Project Challenges
  - Utility Coordination
    - 80+ Potholes
    - Telecommunication
    - Water, Sewer and Reclaimed Water
    - SRP Transmission





- Project Challenges
  - Arizona State Land
    - Right-of-Way Easement Acquisition

- Bureau of Reclamation
  - Modifications to cross-section





- Project Challenges
  - Drainage
    - On-site storm drain system

















Hunt Highway Phase 4
Bella Vista Road to Magma Road



- Budget & Funding Source
  - \$8 Million
  - Bonds
- Project Status
  - Under Design
    - 60% Documents November 2015
- Project Schedule
  - Design Complete Summer of 2016
  - Construction Anticipated FY 2016-2017



#### **HUNT HIGHWAY PHASE 4**

Fact Sheet

Project No: 6621174 Project Location: Bella Vista Road/Golf Club Drive to Magma Road Project Length: Project Length: 2.35 Miles Proposed Improvements: 4 lanes with striped median, curb/gutter, sidewalk along Copper Basin, right turn lanes, storm drain system. Funding Commitment: \$8,000,000 Status: 30% PS&E **Acquisitions:** ASLD 210-20-7000 **ROW ESMT** Submitted to ASLD on 12/14 210-27-7000 Submitted to ASLD on 12/14 **Utilities:** Century Link Need potholes City of Mesa Gas Need potholes Cox Communications Need potholes Johnson Utilities Need potholes NMIDD Design Design Mediacom Need potholes Construction Cost (Est.): \$7,600,000 (30% PS&E) ASLD Package 12/14 Project Schedule:

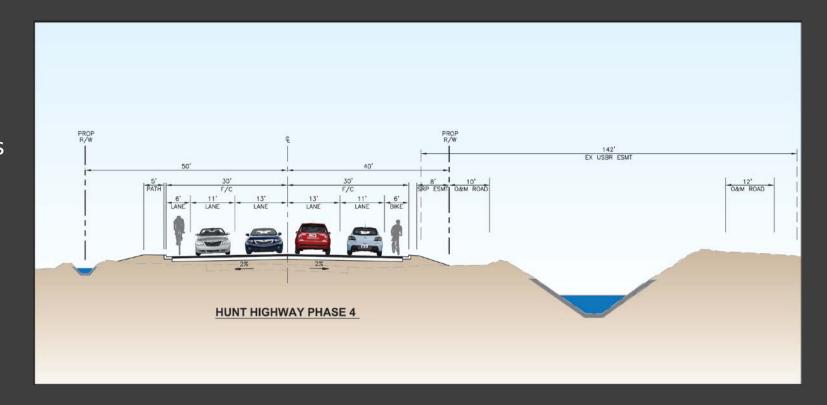
September 2015

1 of 2

3/11/16



- Scope of Work
  - 4-lane/5-lane Sections
  - 2 Box Culvert Drainage Crossings
  - Two New Traffic Signals
  - Dedicated Right Turn Lanes





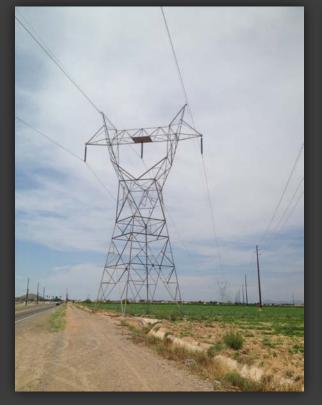
- Project Challenges
  - Offsite Drainage
    - Gantzel Channel (Flood Control)
    - Box Culvert Crossings





- Project Challenges
  - Utilities
    - New Magma Irrigation and Drainage District
    - WAPA
    - SRP Conversion









- Project Challenges
  - ASLD







Hunt Highway Phase 5
Magma Road to Arizona Farms Road

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#### Phase 5 Magma Rd to Arizona Farms Rd

- Budget & Funding Source
  - \$5 Million
  - Bond
- Project Status
  - Under Design
    - 30% Documents due on Spring 2016
- Project Schedule
  - Design complete by Spring of 2017
  - Construction anticipated FY 2017-2018







# Phase 5 Magma Rd to Arizona Farms Rd

- Scope of Work
  - 5-lane Section
  - Arizona Farms Re-Alignment



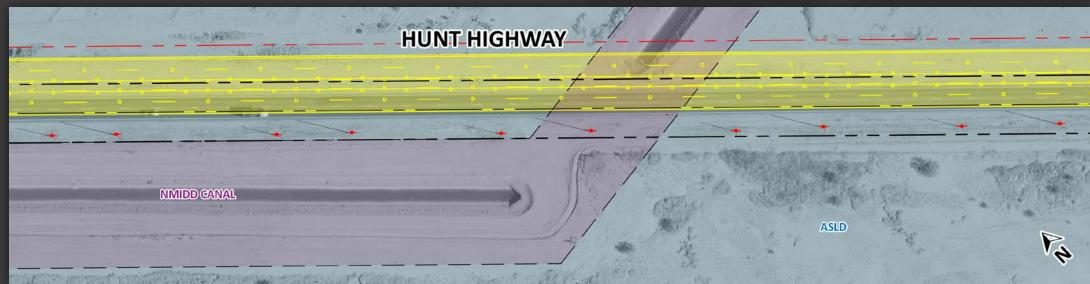


#### Phase 5 Magma Rd to Arizona Farms Rd

- Project Challenges
  - Utility Coordination
    - SRP Conversion
    - NMIDD Siphon Extension









#### Phase 5 Magma Rd to Arizona Farms Rd

- Project Challenges
  - Relocate Existing Intersection







## Hunt Highway Corridor Empire Blvd to Arizona Farms Road





## Hunt Highway

THANK YOU FOR SAN TAN VALLEY

QUESTIONS