

<b>Location: Aughacasla, Co. Kerry</b>		<b>Unique ID: 230342</b> (from PFRA database)	
<b>Initial OPW Designation</b>	<b>APSR</b> <input type="checkbox"/>	<b>AFRR</b> <input checked="" type="checkbox"/>	<b>IRR</b> <input type="checkbox"/>
<b>Co-ordinates</b>	<b>Easting: 62750</b>	<b>Northing: 110500</b>	
<b>River / Catchment / Sub-catchment</b>	<b>Owencashla River &amp; Owennamallagh River / North Kerry Tralee Bay</b>		
<b>Type of Flooding / Flood Risk</b> (identify all that apply)	<b>Fluvial non-tidal</b> <input checked="" type="checkbox"/> <b>Fluvial tidal</b> <input type="checkbox"/> <b>Coastal</b> <input type="checkbox"/>		

<b>Stage 1: Desktop Review</b>	
<b>1.1 Flood History</b> (include review of Floodmaps.ie)	<p><b>River Flow Path</b></p> <p>The Owencashla and Owennamallagh rivers source at the Stadbally Mountains. Owencashla is sourced by Lough Slat and Lough Caum flows towards Tralee Bay west of Aughacasla.</p> <p><b>Flood event records</b></p> <p>There are no OPW flood records for the area.</p>
<b>1.2 Relevant information on flooding issues from OPW and LA staff</b>	<p><b>PFRA database comments (<i>in italics</i>):</b></p> <p><b><i>OPW comments</i></b> <i>Series of linked settlements, but some Wedges – Minor history – No LA support – Minor schemes for school? Risk is primarily fluvial – Maintain for Risk Review to confirm status.</i></p> <p><b><i>LA comments</i></b> <i>Don't feel there is a need for the risk review. Within ½ of the sea (LA2)</i></p> <p><b>Meeting / discussion summary comments:</b></p> <p><b>OPW comments</b></p> <ul style="list-style-type: none"> <li>This is a very busy spot for tourists and there may be caravan parks in the area.</li> <li>A collection of properties north of Owencashla River and Aughacasla Bridge were identified as potentially being at risk of flooding.</li> </ul> <p><b>LA comments</b></p> <ul style="list-style-type: none"> <li>Tidal – caravan park</li> <li>Possible flooding north of R560 near Deelis</li> <li>Last big flood was in August 2009. The road close to the caravan park was flooded and water was 3-4 feet deep at the entrance to the caravan park. Some caravans may have been flooded.</li> <li>August 2009 was a bad event but no houses flooded.</li> <li>Sluice becomes blocked – 200m east of caravan park (not on Owencashla River).</li> </ul>

<b>1.4 PFRA Data</b>			
<b>1.4.1 PFRA hazard mapping</b>	<b>PFRA mapping available in GIS layer:</b>		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	<b>PFRA mapping included on FRR map:</b>		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>1.4.2 Summary of Principal Receptors</b>	<b>Type</b>		<b>FRI score (if available)</b>
	Arch_Regional_Weighted_F_E		10
	Monument_LV_Weighted_F_E		50
	<b>Total</b>		<b>579.1</b>
<b>1.7 Stage 1 Evaluation</b>	<b>Aspect</b>	<b>Clearly APSR</b>	<b>Uncertain</b>
	<b>Flood History (1.1)</b>		<b>X</b>
	<b>OPW / LA Information (1.2)</b>		<b>X</b>
	<b>PFRA Evaluation (1.4)</b>		<b>X</b>
	<b>Overall Desktop Evaluation</b> (if any above aspect is uncertain then overall designation is uncertain)		<b>X</b>
<b>1.8 Proposed level of assessment for Stage 2 site visits</b>	<b>Level A Site Visit</b>		<b>X</b>
	<b>Level B Site Visit</b>		

<b>Stage 2: Site Inspection</b>		<b>Level A Assessment</b>		
<b>Date and Time of Inspection</b>		<b>Date: 24/05/11</b>		
		<b>Time: 09:15</b>		
<b>Names of inspection team (including OPW/LA staff if present)</b>		<b>Iain Blackwell</b>		
		<b>Kelly Kasperczyk</b>		
<b>2.1 Ground-truthing of Hazard Mapping</b>	<b>Fluvial non-tidal</b> <input checked="" type="checkbox"/> <b>Fluvial tidal</b> <input type="checkbox"/> <b>Coastal</b> <input type="checkbox"/> <b>Not available</b> <input type="checkbox"/>			
	Flood extents generally reflect the steep sided nature of the channels in the area. Some locations possibly show over-estimated flooding extents.			
<b>2.2 Spot check ground-truthing of selected receptor vulnerability</b>	<b>Receptor Type</b>	<b>Location description (if not obvious)</b>	<b>Exists?</b>	<b>Overall Vulnerability / Risk (L / M / H)</b>
<b>(also note any key receptors noted during visit that are not identified by PFRA)</b>	Residential	2 x houses on right bank of u/s and d/s side of Owennamallagh River bridge crossing (R560).		L
		2 x d/s of Owennamallagh River bridge crossing (R560) on left bank.		L
		1x new house on left bank of Owencashla River d/s of local road bridge.		M
<b>2.3 Local knowledge - on-site comments</b> <b>(OPW, LA and any info volunteered by local residents during visit)</b>	<b>Resident of 11 years</b> No knowledge of any flooding issues. Aware of high water in the mountain streams, as the area is so close to the coast, but he is not aware of any significant flooding problems. When queried about flooding at the caravan parks, he was not aware of such problems.			
<b>2.4 Comments on hydraulic constrictions (bridges, etc.) and conveyance routes</b>	None observed, but potential for blockage (overgrown vegetation) at R560 crossing of the Owennamallagh River.			

## 2.5 SVRS Assessment Matrix

### Weightings:

A - x1 - reasonable expectation of flooding

B - x2 - high expectation of flooding  
or flooding is tidal (any risk)

C - x5 - risk to life

Approx. Number	1 to 4				5 to 20				>20			
Weighting		A	B	C		A	B	C		A	B	C
Property (domestic)	10	X	X		100				200			
Property (small retail or business)	20				200				400			
Property (large retail or business)	50				500				1000			
Road or Rail Infrastructure	30	X			300				600			
Critical Infrastructure (local) [hospital, school, police/fire/ambulance station, substation, WTW/WWTW, gov bldg, other (specify)]	50				500				1000			
Critical Infrastructure (national importance)	250				1000				2000			
Cultural Heritage Site	20				200				400			
Environmental Designated Site	20				200				400			
Hazardous Substances Site	50				500				1000			
<b>Total SVRS</b>									<b>60</b>			

## 2.6 Defence Assets

### Formal and Informal Flood Defence Assets

(include effective and ineffective assets to inform asset survey and potential mitigation measures)

#### Open Channel Watercourses

Man-made river channel ☐ Flood relief channel ☐ Canal ☐  
Mill leat ☐ Drainage channels / back drains ☐

#### Bridges and Culvert crossings

Single Arch bridge ☒ Multi-Arch bridge ☒  
Single Span bridge ☐ Multi-Span bridge ☐  
Box culvert(s) ☐ Pipe culvert(s) ☐ Arch Culvert(s) ☐

#### Culverted Watercourses (culvert length is greater than just a crossing)

Box culvert(s) ☐ Pipe culvert(s) ☐ Arch Culvert(s) ☐ Irregular Culvert(s) ☐

#### Walls and Embankments

Embankment(s) ☐ Raised wall(s) ☐ Retaining wall(s) ☒

#### Control Structures – weirs, gates, dams

Fixed crest weir ☐ Adjustable weir ☐ Dam / Barrage ☐  
Sluice gates ☐ Lock gates ☐ Radial gates ☐

#### Storage

On-line storage (natural) ☐ On-line storage (artificial) ☐ Off-line storage ☐

	<b>Outfalls</b> Flapped outfall(s) into watercourse <input type="checkbox"/> Unflapped outfall(s) into watercourse <input type="checkbox"/> <i>i.e. from smaller watercourses, drains etc. into river / estuary / sea</i> Tidal flap(s) <input type="checkbox"/> Tidal sluice(s) <input type="checkbox"/> <i>i.e. from main watercourse into estuary / sea</i>  <b>Other</b> Pumping Station <input type="checkbox"/> Erosion Protection <input type="checkbox"/> Sand Dunes <input type="checkbox"/>  <b>Additional notes (if required):</b> Double and single arch bridges on Owenacashla Single arch bridge on Owennamallagh Retaining wall at new property on left bank of Owencasla River (d/s of R560)
<b>2.8 Initial Potential Mitigation Measures</b>	
<b>Non-structural measures</b>	Planning and Development control <input checked="" type="checkbox"/> Sustainable Urban Drainage Systems <input type="checkbox"/> Flood forecasting / warning <input type="checkbox"/> Change in Operating Procedures for water level control: <input type="checkbox"/> Public awareness campaign <input type="checkbox"/> Individual property protection <input checked="" type="checkbox"/> Land use management <input type="checkbox"/>
<b>Structural measures</b>	<b>Strategic development management for floodplain development:</b> <input type="checkbox"/> <i>(integration of measures into strategic development proposals)</i> <b>Storage:</b> On-line <input type="checkbox"/> Off-line <input type="checkbox"/> <b>Flow diversion:</b> Flood relief channel <input type="checkbox"/> Flood relief culvert <input type="checkbox"/> <b>Increase conveyance:</b> Bridge works <input type="checkbox"/> Channel works <input type="checkbox"/> Floodplain <input type="checkbox"/> <b>Flood defences:</b> Walls <input checked="" type="checkbox"/> Embankments <input type="checkbox"/> <b>Localised works:</b> Defence raising <input type="checkbox"/> In-fill gaps <input type="checkbox"/> Trash screen <input type="checkbox"/> <b>Maintenance works:</b> Culvert / channel clearance <input type="checkbox"/> Asset maintenance <input type="checkbox"/> <b>Relocation of properties:</b> <input type="checkbox"/> <b>Improve existing defences:</b> <input type="checkbox"/> (describe) <b>Other (describe):</b>

Outcomes				
PFRA Designation	APSR <input type="checkbox"/> not an APSR <input checked="" type="checkbox"/> IRR <input type="checkbox"/>		FRI Score: 579	
Site Ground-truthing of PFRA Assessment (hazard mapping and receptors)	High Confidence (good)	Uncertain	Low Confidence (poor)	Not available
		X		
Site Visit Review Score	60			
Recommended Designation	APSR <input type="checkbox"/> not an APSR <input checked="" type="checkbox"/> IRR <input type="checkbox"/>			

<p><b>Summary Comments (If required)</b></p>	<p>Small number of properties potentially at risk (as noted above). Other properties on banks of the rivers appear to be sufficiently elevated.</p> <p>Potential for the R560 to flood from the u/s right bank of the Owennamallagh River. Vegetation is overgrown at this bridge and could cause a restriction at the single arch bridge.</p> <p>Small private caravan park (5-6 caravans) behind sand dunes, approx 100 metres east of Owennamallagh River. Not considered at risk.</p> <p>Larger caravan park located further east, behind sand dunes. Not considered at risk; no streams/rivers in the vicinity.</p> <p>Coastal flood risk low due to presence of extensive sand dunes.</p>
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**Photo 1:** Coastal sand dunes looking east, small caravan park located behind sand dunes



**Photo 2:** Dunes protecting the low lying land from coastal flooding, caravan park at the western end of Aughacasla



**Photo 3:** Owennamallagh River u/s end of the study Area, single low lying property located along the right river bank



**Photo 4:** Looking south on the Owencashla River near the Crossing of the main road. Property is on right bank u/s of bridge



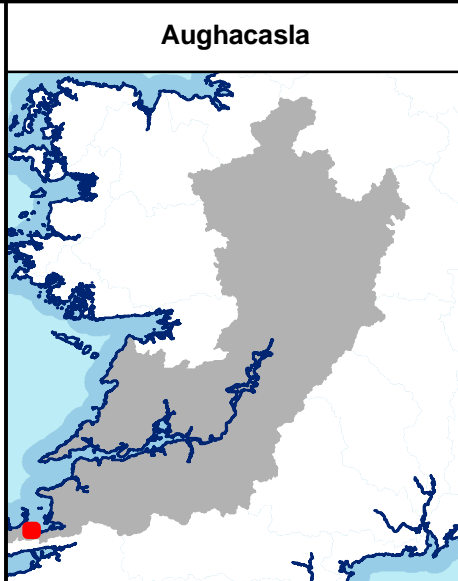
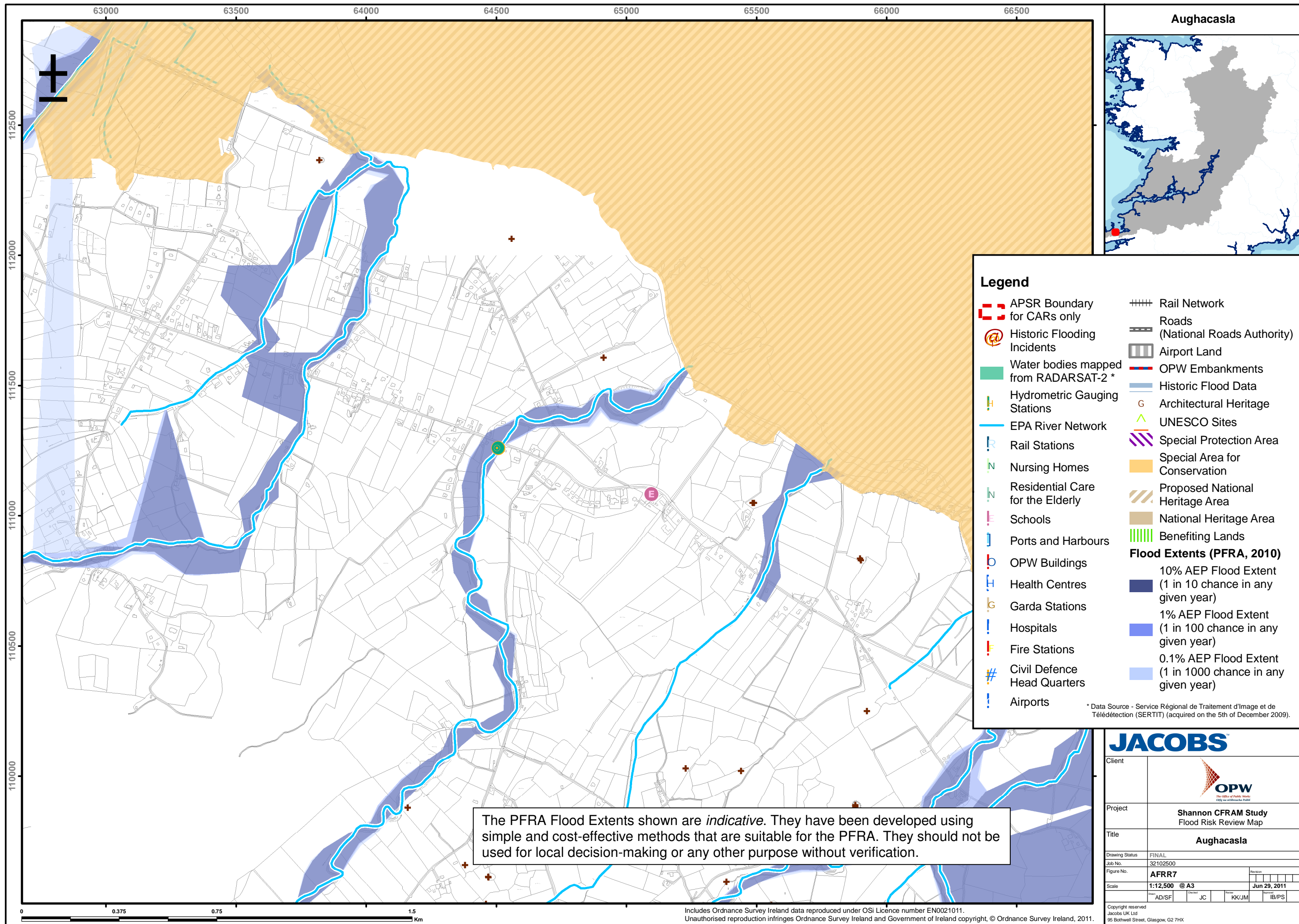


**Photo 5:** Low lying property d/s side of bridge on the left bank




**Photo 6:** D/s of the Owencashla River looking u/s to the double arch bridge





The PFRA Flood Extents shown are *indicative*. They have been developed using simple and cost-effective methods that are suitable for the PFRA. They should not be used for local decision-making or any other purpose without verification.

<b>JACOBS</b>	
Client	
Project	<b>Shannon CFRAM Study</b> Flood Risk Review Map
Title	<b>Aughacaslá</b>
Drawing Status	FINAL
Job No.	32102500
Figure No.	<b>AFRR7</b>
Scale	1:12,500 @ A3
Date	Jun 29, 2011
Drawn	AD/SF
Checked	JC
Reviewed	KK/JM
Approved	IB/PS
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